

# First Looks at Foreign Protocols

8 June 2007

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<sup>1</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/1stLooks.tex,v 1.4 2007-06-05 07:37:32-07 Hamilton Exp  
Hamilton \$

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## 1 Foreign Protocol Discovery with a DMS Sprite2

On 29MAY07 an examination was made of the various serial protocols that the Dedicated Micro Systems (DMS) Sprite 2 could produce.

The GlassKeyboard used to control the non-existent domes was the one that is downloadable from a Sprite 2 over an EtherNet connection. The version used was: `NetVu ObserVer V1.6.3`, with a date of 2006. Since there was no connection to real equipment, some of the data collection attempts totally failed and others probably had messages sent that would not be sent if it was a normal installation.

The simulated keyboard as generated by NetVu OvserVer for the Sprite 2 is shown in Figure 1, page 6.

The Sprite 2 was at IP address `192.168.1.101` when on my machine.

The primary purpose of this exercise was to get a “first look” at non-Pelco protocols. And to see what the Sprite 2 does to good old Pelco P Protocol.

Several attempts were made to change the dome address using the Sprite 2’s internal software and there were no successes. The address for P Protocol stayed at `1 (0x00)` in the address, through many tries. So the assumption is that all of these commands went to the equivalent address for the other competitors’ Protocols.

When testing was complete, it was discovered that it was possible to send presets with the GlassKeyboard. Due to the timing of this discovery, none were send during the protocol discovery exersize.

There are several mentions of a “Hello Message”. This is the initial set of messages sent by the Sprite 2 when it starts to talk to a PTZ, or other, unit. Usually these tell the unit to stop doing whatever they are currently doing and get into a known state. (This assumption is based on what is sent when starting to work on P Protocol.)

In the included data line captures, an attempt has been made to put a blank line infront of each change in testing. This is to break the test captures down into logical steps that match the test sheet (Figure 2, page 7). Each time that I changed from one key to the next an appreciable amount of time ocured. Thus there is usually a gap of over a second at the start of the key push and this was used to identify probable “button down” events. With some of the simulations, the button down had no effect, but the button up did. The records that I kept were not detailed enough to identify these situations.

It appears that for motion commands, the Sprite 2 starts out by sending “stop”, or equivalent, commands. Then it sends out the required command followed by a double stop command. For the non-motion commands it usually does not send as many commands, which includes not usually sending the stop commands.

The captured data was saved is in Table 1, page 4.

The protocols that are built in to the Sprite 2, as listed on the Sprite 2 internal menu system are:

1. AD-Matrix, Section 1.1, page 9.
2. AD-168Matrix, Section 1.2, page 10.
3. BBV-Matrix, Section 1.3, page 10.
4. BBV-RS485, Section 1.4, page 11.
5. Dennard, Section 1.5, page 14.
6. DM-Serial, Section 1.6, page 17.
7. Ernitec, Section 1.7, page 19.
8. JCL, Section 1.8, page 23.

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<sup>2</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/ProtoTst.inc,v 1.7 2007-06-05 08:37:22-07 Hamilton Exp  
Hamilton \$

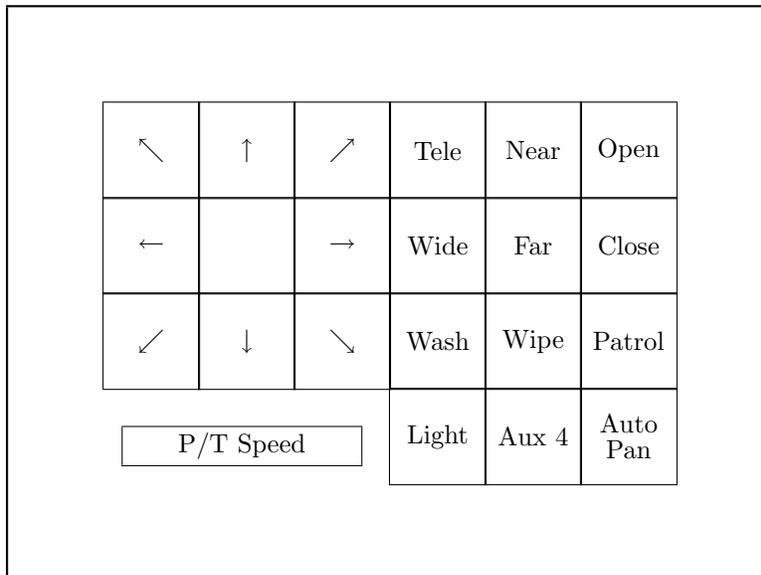
|            |            |           |               |
|------------|------------|-----------|---------------|
| 05/29/2007 | 07:21 AM   | 51,435    | 29may07a.txt  |
| 05/29/2007 | 08:37 AM   | 66,743    | 29may07aa.txt |
| 05/29/2007 | 07:36 AM   | 36,512    | 29may07b.txt  |
| 05/29/2007 | 10:03 AM   | 40,616    | 29may07bb.txt |
| 05/29/2007 | 07:41 AM   | 28,041    | 29may07c.txt  |
| 05/29/2007 | 10:09 AM   | 28,781    | 29may07cc.txt |
| 05/29/2007 | 07:47 AM   | 9,895     | 29may07d.txt  |
| 05/29/2007 | 07:55 AM   | 15,915    | 29may07e.txt  |
| 05/29/2007 | 08:00 AM   | 29,374    | 29may07f.txt  |
| 05/29/2007 | 08:05 AM   | 32,298    | 29may07g.txt  |
| 05/29/2007 | 08:19 AM   | 28,428    | 29may07h.txt  |
| 05/29/2007 | 08:22 AM   | 181,424   | 29may07i.txt  |
| 05/29/2007 | 08:40 AM   | 37,286    | 29may07k.txt  |
| 05/29/2007 | 08:53 AM   | 41,285    | 29may07o.txt  |
| 05/29/2007 | 08:57 AM   | 33,717    | 29may07p.txt  |
| 05/29/2007 | 09:04 AM   | 34,706    | 29may07q.txt  |
| 05/29/2007 | 09:16 AM   | 19,054    | 29may07r.txt  |
| 05/29/2007 | 09:19 AM   | 2,198,469 | 29may07s.txt  |
| 05/29/2007 | 09:33 AM   | 33,760    | 29may07t.txt  |
| 05/29/2007 | 09:40 AM   | 215,867   | 29may07u.txt  |
| 05/29/2007 | 09:58 AM   | 198,409   | 29may07v.txt  |
|            | 21 File(s) | 3,362,015 | bytes         |

Table 1: Capture files from 29MAY07

9. Kalatel, Section 1.9, page 26.
10. MarkMercer, Section 1.10, page 28.
11. Pelco-P, Section 1.13, page 53.
12. Panasonic-WV-CS600, Section 1.11, page 31.
13. Panasonic-WV-CS850, Section 1.12, page 43.
14. Philips, Section 1.14, page 61.
15. Philips-232, Section 1.15, page 67.
16. Samsung, Section 1.16, page 67.
17. Sensormatic, Section 1.17, page 72.
18. Ultrack, Section 1.18, page 75.
19. Vantage, Section 1.19, page 78.
20. VCL, Section 1.20, page 80.
21. VCL-Matrix, Section 1.21, page 87.
22. Vista, Section 1.22, page 87.

In the Sprite 2 menu system the order of the protocols is: Pelco-P, Philips, Samsung, Sensormatic, Ultrack, Vantage, VCL, Vista, DM-Serial, Philips-232, AD-Matrix, AD-168Matrix, BBV-Matrix, VCL-Matrix, BBV-RS485, Dennard, Ernitec, JCL, Kalatel, MarkMercer, Panasonic-WV-CS600, Panasonic-WV-CS850, and then they repeat.

A sample data acquisition sheet is shown in Figure 2, page 7. The “improved” data acquisition sheet is shown in Figure 3, page 8.



\$RCSfile: SkeyBord.inc,v \$

Figure 1: Simulated keyboard for the Sprite 2

Test Number: \_\_\_\_\_  
Protocol: Sample  
Baud Rate: 9600

|            |  |
|------------|--|
| Action     |  |
| Up         |  |
| Up Right   |  |
| Right      |  |
| Down Right |  |
| Down       |  |
| Down Left  |  |
| Left       |  |
| Up Left    |  |
| Up         |  |
| Tele       |  |
| Wide       |  |
| Wash       |  |
| Unk 1      |  |
| Near       |  |
| Far        |  |
| Wipe       |  |
| Aux 4      |  |
| Open Iris  |  |
| Close Iris |  |
| Unk 2      |  |
| Unk 3      |  |

Figure 2: Sample of first try at getting protocol data

Test Number: \_\_\_\_\_

Protocol: Sample

Baud Rate: 9600

| Key        | Down, 2 sec |        |    | Down, 25 sec |        |    | Toggle |
|------------|-------------|--------|----|--------------|--------|----|--------|
|            | Action      | Repeat | Up | Action       | Repeat | Up |        |
| Up         |             |        |    |              |        |    |        |
| Up Right   |             |        |    |              |        |    |        |
| Right      |             |        |    |              |        |    |        |
| Down Right |             |        |    |              |        |    |        |
| Down       |             |        |    |              |        |    |        |
| Down Left  |             |        |    |              |        |    |        |
| Left       |             |        |    |              |        |    |        |
| Up Left    |             |        |    |              |        |    |        |
| Up         |             |        |    |              |        |    |        |
| Tele       |             |        |    |              |        |    |        |
| Wide       |             |        |    |              |        |    |        |
| Wash       |             |        |    |              |        |    |        |
| Light      |             |        |    |              |        |    |        |
| Near       |             |        |    |              |        |    |        |
| Far        |             |        |    |              |        |    |        |
| Wipe       |             |        |    |              |        |    |        |
| Aux 4      |             |        |    |              |        |    |        |
| Open Iris  |             |        |    |              |        |    |        |
| Close Iris |             |        |    |              |        |    |        |
| Patrol     |             |        |    |              |        |    |        |
| Auto Scan  |             |        |    |              |        |    |        |

1. Hello message? \_\_\_\_\_. If so wait at least 5 sec until proceeding.
2. Hello message length: \_\_\_\_\_
3. Polling? \_\_\_\_\_
4. Power cycle to get to next protocol? \_\_\_\_\_
5. Did "nothing" happen? \_\_\_\_\_
6. Parity if other than none: \_\_\_\_\_

Figure 3: Sample of second try at getting protocol data

## 1.1 AD-Matrix

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 1200
2. Parity: None
3. Hello Message Length: Unknown
4. Hello Message last few bytes: —
5. Is the protocol a Polling Protocol?: Yes (0x30)
6. Name of the data capture file: 29MAY07K.txt
7. Special: Had to select a new protocol and power cycle to get the Sprite 2 to stop sending the Poll character.

### 1.1.1 k.out

```

1  $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2  $Header: d:/GeneralInformation/1stLooks/RCS/K.out,v 1.1 2007-05-30 06:56:02-07 Hamilton Exp Hamilton $
3  FTS capture buffer (5/29/2007 8:40:38 AM)
4  Event 1 (5/29/2007 8:37:37.398356 AM) through
5  Event 863 (5/29/2007 8:40:26.250071 AM)
6
7      1,      1: DTE      3   96.576641  0.000000 30
8      1,      2: DTE      4   96.659921  0.083280 30
9      1,      3: DTE      5   96.744085  0.084164 30
10     1,      4: DTE      6   96.828253  0.084168 30
11     1,      5: DTE      7   96.912420  0.084167 30
12     1,      6: DTE      8   96.996533  0.084113 30
13     1,      7: DTE      9   97.079868  0.083335 30
14
15     1,     849: DTE     851  167.842708  0.084166 30
16     1,     850: DTE     852  167.926875  0.084167 30
17     1,     851: DTE     853  168.011041  0.084166 30
18     1,     852: DTE     854  168.095156  0.084115 30
19     1,     853: DTE     855  168.179324  0.084168 30
20     1,     854: DTE     856  168.263491  0.084167 30
21     1,     855: DTE     857  168.347654  0.084163 30
22     1,     856: DTE     858  168.430935  0.083281 30
23     1,     857: DTE     859  168.515101  0.084166 30
24     1,     858: DTE     860  168.599270  0.084169 30
25     1,     859: DTE     861  168.683498  0.084228 30
26     1,     860: DTE     862  168.767552  0.084054 30
27     1,     861: DTE     863  168.851715  0.084163 30
28
29 There were a total of      861 bytes transferred
30
31 There were a total of      0 DCE bytes transferred
32 The first DCE byte came in at 0.000000 seconds from the start of data collection
33 The last DCE byte was at 0.000000 seconds from the start of data collection
34
35 There were a total of      861 DTE bytes transferred
36 The first DTE byte came in at 96.576641 seconds from the start of data collection
37 The last DTE byte was at 168.851715 seconds from the start of data collection
38

```

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<sup>3</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/ADMatrix.inc,v 1.1 2007-06-05 08:28:25-07 Hamilton Exp Hamilton \$

## 1.2 AD-168Matrix

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 1200
2. Parity: None
3. Hello Message Length: Unknown
4. Hello Message last few bytes: —
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07L.txt File is non-existent.
7. Special: Nothing ever came out of the Sprite 2.

## 1.3 BBV-Matrix

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: Unknown
4. Hello Message last few bytes: —
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07M.txt File is non-existent.
7. Special: Nothing ever came out of the Sprite 2.

---

<sup>4</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/AD168Mtx.inc,v 1.1 2007-06-05 08:28:16-07 Hamilton Exp  
Hamilton \$

<sup>5</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/BBVMtrx.inc,v 1.1 2007-06-05 08:29:16-07 Hamilton Exp  
Hamilton \$

## 1.4 BBV-RS485

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: 64
4. Hello Message last few bytes: 0x00 0xBF 0x0F
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY070.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 8
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0xB0
  - 7.4 Unique last byte: 0xBF as the next to last byte.
  - 7.5 Checksum: XOR of all bytes in message, is the last byte.
  - 7.6 Device address: Byte 2.
  - 7.7 Is similar to P Protocol

### 1.4.1 o.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/0.out,v 1.3 2007-05-31 08:02:23-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 8:53:08 AM)
4 Event 1 (5/29/2007 8:43:31.597640 AM) through
5 Event 956 (5/29/2007 8:52:48.813066 AM)
6
7 1, 1: DTE 5 433.779955 0.000000 b0 00 00 00 00 00 bf 0f
8 1, 9: DTE 13 433.789321 0.001249 b0 00 00 00 04 00 bf 0b
9 1, 17: DTE 21 433.798696 0.001147 b0 00 00 04 04 00 bf 0f
10 1, 25: DTE 29 433.807975 0.001154 b0 00 00 00 00 00 bf 0f
11 1, 33: DTE 37 433.817238 0.001146 b0 00 00 00 04 00 bf 0b
12 1, 41: DTE 45 433.826501 0.001250 b0 00 00 04 04 00 bf 0f
13 1, 49: DTE 53 433.835668 0.001147 b0 00 00 00 00 00 bf 0f
14 1, 57: DTE 61 433.880765 0.036973 b0 00 00 00 00 00 bf 0f
15
16 1, 65: DTE 69 458.008893 24.120002 b0 00 00 25 00 01 bf 2b
17 1, 73: DTE 77 458.206776 0.189764 b0 00 00 00 00 00 bf 0f
18 1, 81: DTE 85 458.216252 0.001146 b0 00 00 00 00 22 bf 2d
19 1, 89: DTE 93 458.225724 0.001146 b0 00 00 08 00 22 bf 25
20 1, 97: DTE 101 459.320246 1.086396 b0 00 00 25 00 01 bf 2b
21 1, 105: DTE 109 459.518651 0.190458 b0 00 00 00 00 00 bf 0f
22 1, 113: DTE 117 459.527918 0.001147 b0 00 00 00 00 00 bf 0f
23
24 1, 121: DTE 125 461.541344 2.005204 b0 00 00 25 00 01 bf 2b
25 1, 129: DTE 133 461.744020 0.194553 b0 00 00 00 00 00 bf 0f
26 1, 137: DTE 141 461.753393 0.001146 b0 00 00 00 00 22 bf 2d
27 1, 145: DTE 149 461.762662 0.001145 b0 00 00 08 00 22 bf 25
28 1, 153: DTE 157 461.771830 0.001145 b0 00 00 08 22 22 bf 07

```

---

<sup>6</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/BBVRS485.inc,v 1.1 2007-06-05 08:29:03-07 Hamilton Exp Hamilton \$

|     |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
|-----|----|------|-----|-----|------------|----------|----|----|----|----|----|----|----|----|
| 29  | 1, | 161: | DTE | 165 | 461.781095 | 0.001147 | b0 | 00 | 00 | 0a | 22 | 22 | bf | 05 |
| 30  | 1, | 169: | DTE | 173 | 463.950856 | 2.161534 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 31  | 1, | 177: | DTE | 181 | 464.151448 | 0.192470 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 32  | 1, | 185: | DTE | 189 | 464.160718 | 0.001149 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 33  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 34  | 1, | 193: | DTE | 197 | 466.368909 | 2.200069 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 35  | 1, | 201: | DTE | 205 | 466.583770 | 0.206845 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 36  | 1, | 209: | DTE | 213 | 466.593032 | 0.001145 | b0 | 00 | 00 | 00 | 22 | 00 | bf | 2d |
| 37  | 1, | 217: | DTE | 221 | 466.602200 | 0.001147 | b0 | 00 | 00 | 02 | 22 | 00 | bf | 2f |
| 38  | 1, | 225: | DTE | 229 | 468.601363 | 1.991143 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 39  | 1, | 233: | DTE | 237 | 468.809351 | 0.199762 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 40  | 1, | 241: | DTE | 245 | 468.818731 | 0.001259 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 41  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 42  | 1, | 249: | DTE | 253 | 470.719882 | 1.893035 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 43  | 1, | 257: | DTE | 261 | 470.942343 | 0.214449 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 44  | 1, | 265: | DTE | 269 | 470.951925 | 0.001147 | b0 | 00 | 00 | 00 | 00 | 22 | bf | 2d |
| 45  | 1, | 273: | DTE | 277 | 470.961293 | 0.001146 | b0 | 00 | 00 | 10 | 00 | 22 | bf | 3d |
| 46  | 1, | 281: | DTE | 285 | 470.970461 | 0.001149 | b0 | 00 | 00 | 10 | 22 | 22 | bf | 1f |
| 47  | 1, | 289: | DTE | 293 | 470.979730 | 0.001250 | b0 | 00 | 00 | 12 | 22 | 22 | bf | 1d |
| 48  | 1, | 297: | DTE | 301 | 472.814197 | 1.826446 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 49  | 1, | 305: | DTE | 309 | 473.016076 | 0.193723 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 50  | 1, | 313: | DTE | 317 | 473.025342 | 0.001147 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 51  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 52  | 1, | 321: | DTE | 325 | 475.305084 | 2.271618 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 53  | 1, | 329: | DTE | 333 | 475.510260 | 0.197055 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 54  | 1, | 337: | DTE | 341 | 475.519631 | 0.001145 | b0 | 00 | 00 | 00 | 00 | 22 | bf | 2d |
| 55  | 1, | 345: | DTE | 349 | 475.529000 | 0.001250 | b0 | 00 | 00 | 10 | 00 | 22 | bf | 3d |
| 56  | 1, | 353: | DTE | 357 | 476.943885 | 1.406761 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 57  | 1, | 361: | DTE | 365 | 477.145420 | 0.193419 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 58  | 1, | 369: | DTE | 373 | 477.154787 | 0.001146 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 59  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 60  | 1, | 377: | DTE | 381 | 479.001052 | 1.838252 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 61  | 1, | 385: | DTE | 389 | 479.211541 | 0.202367 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 62  | 1, | 393: | DTE | 397 | 479.220808 | 0.001146 | b0 | 00 | 00 | 00 | 00 | 22 | bf | 2d |
| 63  | 1, | 401: | DTE | 405 | 479.230183 | 0.001147 | b0 | 00 | 00 | 10 | 00 | 22 | bf | 3d |
| 64  | 1, | 409: | DTE | 413 | 479.239448 | 0.001147 | b0 | 00 | 00 | 10 | 22 | 22 | bf | 1f |
| 65  | 1, | 417: | DTE | 421 | 479.248821 | 0.001249 | b0 | 00 | 00 | 14 | 22 | 22 | bf | 1b |
| 66  | 1, | 425: | DTE | 429 | 481.002921 | 1.745974 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 67  | 1, | 433: | DTE | 437 | 481.200075 | 0.189139 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 68  | 1, | 441: | DTE | 445 | 481.209447 | 0.001146 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 69  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 70  | 1, | 449: | DTE | 453 | 482.961150 | 1.743579 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 71  | 1, | 457: | DTE | 461 | 483.168513 | 0.199243 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 72  | 1, | 465: | DTE | 469 | 483.177883 | 0.001145 | b0 | 00 | 00 | 00 | 22 | 00 | bf | 2d |
| 73  | 1, | 473: | DTE | 477 | 483.187051 | 0.001146 | b0 | 00 | 00 | 04 | 22 | 00 | bf | 29 |
| 74  | 1, | 481: | DTE | 485 | 485.036233 | 1.841064 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 75  | 1, | 489: | DTE | 493 | 485.236826 | 0.192575 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 76  | 1, | 497: | DTE | 501 | 485.246093 | 0.001147 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 77  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 78  | 1, | 505: | DTE | 509 | 487.040054 | 1.785838 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 79  | 1, | 513: | DTE | 517 | 487.240049 | 0.191848 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 80  | 1, | 521: | DTE | 525 | 487.249522 | 0.001146 | b0 | 00 | 00 | 00 | 00 | 22 | bf | 2d |
| 81  | 1, | 529: | DTE | 533 | 487.258898 | 0.001146 | b0 | 00 | 00 | 08 | 00 | 22 | bf | 25 |
| 82  | 1, | 537: | DTE | 541 | 487.268273 | 0.001147 | b0 | 00 | 00 | 08 | 22 | 22 | bf | 07 |
| 83  | 1, | 545: | DTE | 549 | 487.277535 | 0.001141 | b0 | 00 | 00 | 0c | 22 | 22 | bf | 03 |
| 84  | 1, | 553: | DTE | 557 | 489.344924 | 2.059325 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 85  | 1, | 561: | DTE | 565 | 489.544161 | 0.191117 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 86  | 1, | 569: | DTE | 573 | 489.553429 | 0.001146 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 87  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 88  | 1, | 577: | DTE | 581 | 491.544467 | 1.983025 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 89  | 1, | 585: | DTE | 589 | 491.743080 | 0.190492 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 90  | 1, | 593: | DTE | 597 | 491.752556 | 0.001137 | b0 | 00 | 00 | 00 | 00 | 22 | bf | 2d |
| 91  | 1, | 601: | DTE | 605 | 491.761819 | 0.001139 | b0 | 00 | 00 | 08 | 00 | 22 | bf | 25 |
| 92  | 1, | 609: | DTE | 613 | 494.109471 | 2.339421 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 93  | 1, | 617: | DTE | 621 | 494.306939 | 0.189345 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 94  | 1, | 625: | DTE | 629 | 494.316210 | 0.001244 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |
| 95  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 96  | 1, | 633: | DTE | 637 | 496.432017 | 2.107790 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 97  | 1, | 641: | DTE | 645 | 496.644067 | 0.203825 | b0 | 00 | 00 | 20 | 00 | 00 | bf | 2f |
| 98  |    |      |     |     |            |          |    |    |    |    |    |    |    |    |
| 99  | 1, | 649: | DTE | 653 | 498.446073 | 1.793989 | b0 | 00 | 00 | 25 | 00 | 01 | bf | 2b |
| 100 | 1, | 657: | DTE | 661 | 498.644580 | 0.190289 | b0 | 00 | 00 | 00 | 00 | 00 | bf | 0f |

```

101
102      1,      665: DTE      669      500.765492      2.112894 b0 00 00 25 00 01 bf 2b
103      1,      673: DTE      677      500.963167      0.189657 b0 00 00 40 00 00 bf 4f
104
105      1,      681: DTE      685      502.933583      1.962294 b0 00 00 25 00 01 bf 2b
106      1,      689: DTE      693      503.131885      0.190291 b0 00 00 00 00 00 bf 0f
107
108      1,      697: DTE      701      505.100322      1.960316 b0 00 00 25 00 01 bf 2b
109      1,      705: DTE      709      505.300819      0.192279 b0 00 00 09 00 03 bf 05
110
111      1,      713: DTE      717      506.973772      1.664847 b0 00 00 25 00 01 bf 2b
112      1,      721: DTE      725      507.173609      0.191723 b0 00 00 0b 00 03 bf 07
113
114      1,      729: DTE      733      511.430762      4.249111 b0 00 00 25 00 01 bf 2b
115      1,      737: DTE      741      511.631041      0.192055 b0 00 00 09 00 01 bf 07
116
117      1,      745: DTE      749      518.512551      6.873388 b0 00 00 25 00 01 bf 2b
118      1,      753: DTE      757      518.727829      0.207157 b0 00 01 00 00 00 bf 0e
119
120      1,      761: DTE      765      520.897494      2.161550 b0 00 00 25 00 01 bf 2b
121      1,      769: DTE      773      521.096826      0.191227 b0 00 00 00 00 00 bf 0f
122
123      1,      777: DTE      781      523.733174      2.628233 b0 00 00 25 00 01 bf 2b
124      1,      785: DTE      789      523.931786      0.190492 b0 00 02 00 00 00 bf 0d
125
126      1,      793: DTE      797      526.000309      2.060567 b0 00 00 25 00 01 bf 2b
127      1,      801: DTE      805      526.230067      0.221638 b0 00 00 00 00 00 bf 0f
128
129      1,      809: DTE      813      528.271929      2.033747 b0 00 00 25 00 01 bf 2b
130      1,      817: DTE      821      528.469180      0.189138 b0 00 00 09 00 02 bf 04
131
132      1,      825: DTE      829      530.905880      2.428467 b0 00 00 25 00 01 bf 2b
133      1,      833: DTE      837      531.103658      0.189859 b0 00 00 0b 00 02 bf 06
134
135      1,      841: DTE      845      535.430780      4.318999 b0 00 00 25 00 01 bf 2b
136      1,      849: DTE      853      535.631266      0.192636 b0 00 00 07 00 63 bf 6b
137
138      1,      857: DTE      861      539.130603      3.491111 b0 00 00 25 00 01 bf 2b
139      1,      865: DTE      869      539.337549      0.198929 b0 00 04 00 00 00 bf 0b
140
141      1,      873: DTE      877      541.500849      2.155282 b0 00 00 25 00 01 bf 2b
142      1,      881: DTE      885      541.701338      0.192367 b0 00 00 00 00 00 bf 0f
143
144      1,      889: DTE      893      544.709195      2.999736 b0 00 00 25 00 01 bf 2b
145      1,      897: DTE      901      544.907287      0.189971 b0 00 08 00 00 00 bf 07
146
147      1,      905: DTE      909      546.868746      1.953441 b0 00 00 25 00 01 bf 2b
148      1,      913: DTE      917      547.070691      0.193616 b0 00 00 00 00 00 bf 0f
149
150      1,      921: DTE      925      551.812852      4.734144 b0 00 00 25 00 01 bf 2b
151      1,      929: DTE      933      552.013859      0.192892 b0 00 00 07 00 61 bf 69
152
153      1,      937: DTE      941      557.001399      4.979424 b0 00 00 25 00 01 bf 2b
154      1,      945: DTE      949      557.207294      0.197886 b0 00 00 07 00 63 bf 6b
155
156 There were a total of          952 bytes transferred
157
158 There were a total of              0 DCE bytes transferred
159 The first DCE byte came in at 0.000000 seconds from the start of data collection
160 The last DCE byte was at 0.000000 seconds from the start of data collection
161
162 There were a total of          952 DTE bytes transferred
163 The first DTE byte came in at 433.779955 seconds from the start of data collection
164 The last DTE byte was at 557.215426 seconds from the start of data collection
165

```

## 1.5 Dennard

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: 64
4. Hello Message last few bytes: 0x00 0x9D 0x03
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07P.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 7, 8
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0x02
  - 7.4 Unique last byte: 0x03
  - 7.5 Checksum: XOR not including the first or last byte (0x02 or 0x03)
  - 7.6 Device address: Byte 3

### 1.5.1 p.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/P.out,v 1.3 2007-05-31 08:02:23-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 8:57:25 AM)
4 Event 1 (5/29/2007 8:54:48.351554 AM) through
5 Event 780 (5/29/2007 8:57:00.550721 AM)
6
7 1, 1: DTE 1 0.000000 0.000000 02 49 01 04 00 00 4c 03
8 1, 9: DTE 9 0.039575 0.031622 02 4a 01 05 00 00 4e 03
9 1, 17: DTE 17 0.064044 0.016452 02 4b 01 04 00 00 4e 03
10 1, 25: DTE 25 0.101537 0.029368 02 4c 01 05 00 00 48 03
11 1, 33: DTE 33 0.165075 0.055413 02 4d 01 04 00 00 48 03
12 1, 41: DTE 41 0.184336 0.011243 02 4e 01 05 00 00 4a 03
13 1, 49: DTE 49 0.265369 0.073013 02 4f 01 04 00 00 4a 03
14 1, 57: DTE 57 0.314046 0.040661 02 49 01 05 00 00 4d 03
15
16 1, 65: DTE 65 21.750269 21.427931 02 4a 01 04 00 00 4f 03
17 1, 73: DTE 73 21.770265 0.011666 02 4b 01 05 00 00 4f 03
18 1, 81: DTE 81 21.790675 0.012291 02 4c 01 04 00 40 09 03
19
20 1, 89: DTE 89 24.231957 2.433054 02 4d 01 04 00 00 48 03
21 1, 97: DTE 97 24.249346 0.009270 02 4e 01 05 00 00 4a 03
22 1, 105: DTE 105 24.271529 0.014059 02 4f 01 04 00 00 4a 03
23 1, 113: DTE 113 24.289547 0.009791 02 49 01 05 00 00 4d 03
24
25 1, 121: DTE 121 27.232722 2.934945 02 4a 01 04 00 00 4f 03
26 1, 129: DTE 129 27.249593 0.008745 02 4b 01 05 00 00 4f 03
27 1, 137: DTE 137 27.270009 0.012396 02 4c 01 04 00 40 09 03
28 1, 145: DTE 145 27.289793 0.011556 02 4d 01 04 c0 40 c8 03
29
30 1, 153: DTE 153 29.754094 2.456279 02 4e 01 04 00 00 4b 03

```

---

```

7$Header: d:/GeneralInformation/1stLooks/RCS/Dennard.inc,v 1.1 2007-06-05 08:29:24-07 Hamilton Exp
Hamilton $

```

|     |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
|-----|----|------|-----|-----|-----------|----------|----|----|----|----|----|----|----|----|
| 31  | 1, | 161: | DTE | 161 | 29.773762 | 0.011547 | 02 | 4f | 01 | 05 | 00 | 00 | 4b | 03 |
| 32  | 1, | 169: | DTE | 169 | 29.793875 | 0.011980 | 02 | 49 | 01 | 04 | 00 | 00 | 4c | 03 |
| 33  | 1, | 177: | DTE | 177 | 29.815014 | 0.013119 | 02 | 4a | 01 | 05 | 00 | 00 | 4e | 03 |
| 34  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 35  | 1, | 185: | DTE | 185 | 31.894275 | 2.071137 | 02 | 4b | 01 | 04 | 00 | 00 | 4e | 03 |
| 36  | 1, | 193: | DTE | 193 | 31.912182 | 0.009689 | 02 | 4c | 01 | 05 | 00 | 00 | 48 | 03 |
| 37  | 1, | 201: | DTE | 201 | 31.932702 | 0.012396 | 02 | 4d | 01 | 04 | c0 | 00 | 88 | 03 |
| 38  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 39  | 1, | 209: | DTE | 209 | 34.229105 | 2.288285 | 02 | 4e | 01 | 04 | 00 | 00 | 4b | 03 |
| 40  | 1, | 217: | DTE | 217 | 34.246081 | 0.008855 | 02 | 4f | 01 | 05 | 00 | 00 | 4b | 03 |
| 41  | 1, | 225: | DTE | 225 | 34.266386 | 0.012180 | 02 | 49 | 01 | 04 | 00 | 00 | 4c | 03 |
| 42  | 1, | 233: | DTE | 233 | 34.296284 | 0.021567 | 02 | 4a | 01 | 05 | 00 | 00 | 4e | 03 |
| 43  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 44  | 1, | 241: | DTE | 241 | 36.940758 | 2.636351 | 02 | 4b | 01 | 04 | 00 | 00 | 4e | 03 |
| 45  | 1, | 249: | DTE | 249 | 36.962458 | 0.013476 | 02 | 4c | 01 | 05 | 00 | 00 | 48 | 03 |
| 46  | 1, | 257: | DTE | 257 | 36.981162 | 0.010519 | 02 | 4d | 01 | 04 | 00 | c0 | 88 | 03 |
| 47  | 1, | 265: | DTE | 265 | 37.001782 | 0.012494 | 02 | 4e | 01 | 04 | c0 | c0 | 4b | 03 |
| 48  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 49  | 1, | 273: | DTE | 273 | 39.044272 | 2.034261 | 02 | 4f | 01 | 04 | 00 | 00 | 4a | 03 |
| 50  | 1, | 281: | DTE | 281 | 39.064375 | 0.012087 | 02 | 49 | 01 | 05 | 00 | 00 | 4d | 03 |
| 51  | 1, | 289: | DTE | 289 | 39.092181 | 0.019684 | 02 | 4a | 01 | 04 | 00 | 00 | 4f | 03 |
| 52  | 1, | 297: | DTE | 297 | 39.114365 | 0.014062 | 02 | 4b | 01 | 05 | 00 | 00 | 4f | 03 |
| 53  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 54  | 1, | 305: | DTE | 305 | 41.473574 | 2.351084 | 02 | 4c | 01 | 04 | 00 | 00 | 49 | 03 |
| 55  | 1, | 313: | DTE | 313 | 41.493397 | 0.011702 | 02 | 4d | 01 | 05 | 00 | 00 | 49 | 03 |
| 56  | 1, | 321: | DTE | 321 | 41.514500 | 0.012811 | 02 | 4e | 01 | 04 | 00 | c0 | 8b | 03 |
| 57  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 58  | 1, | 329: | DTE | 329 | 43.902662 | 2.380140 | 02 | 4f | 01 | 04 | 00 | 00 | 4a | 03 |
| 59  | 1, | 337: | DTE | 337 | 43.923595 | 0.012918 | 02 | 49 | 01 | 05 | 00 | 00 | 4d | 03 |
| 60  | 1, | 345: | DTE | 345 | 43.942756 | 0.011037 | 02 | 4a | 01 | 04 | 00 | 00 | 4f | 03 |
| 61  | 1, | 353: | DTE | 353 | 43.962861 | 0.011980 | 02 | 4b | 01 | 05 | 00 | 00 | 4f | 03 |
| 62  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 63  | 1, | 361: | DTE | 361 | 46.231665 | 2.260702 | 02 | 4c | 01 | 04 | 00 | 00 | 49 | 03 |
| 64  | 1, | 369: | DTE | 369 | 46.257807 | 0.018127 | 02 | 4d | 01 | 05 | 00 | 00 | 49 | 03 |
| 65  | 1, | 377: | DTE | 377 | 46.276760 | 0.010933 | 02 | 4e | 01 | 04 | 00 | c0 | 8b | 03 |
| 66  | 1, | 385: | DTE | 385 | 46.297176 | 0.012293 | 02 | 4f | 01 | 04 | 40 | c0 | ca | 03 |
| 67  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 68  | 1, | 393: | DTE | 393 | 48.893116 | 2.587920 | 02 | 49 | 01 | 04 | 00 | 00 | 4c | 03 |
| 69  | 1, | 401: | DTE | 401 | 48.910927 | 0.009795 | 02 | 4a | 01 | 05 | 00 | 00 | 4e | 03 |
| 70  | 1, | 409: | DTE | 409 | 48.931752 | 0.012703 | 02 | 4b | 01 | 04 | 00 | 00 | 4e | 03 |
| 71  | 1, | 417: | DTE | 417 | 48.959043 | 0.019272 | 02 | 4c | 01 | 05 | 00 | 00 | 48 | 03 |
| 72  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 73  | 1, | 425: | DTE | 425 | 51.034443 | 2.067283 | 02 | 4d | 01 | 04 | 00 | 00 | 48 | 03 |
| 74  | 1, | 433: | DTE | 433 | 51.057973 | 0.015521 | 02 | 4e | 01 | 05 | 00 | 00 | 4a | 03 |
| 75  | 1, | 441: | DTE | 441 | 51.074643 | 0.008545 | 02 | 4f | 01 | 04 | 40 | 00 | 0a | 03 |
| 76  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 77  | 1, | 449: | DTE | 449 | 53.333655 | 2.250689 | 02 | 49 | 01 | 04 | 00 | 00 | 4c | 03 |
| 78  | 1, | 457: | DTE | 457 | 53.353650 | 0.011875 | 02 | 4a | 01 | 05 | 00 | 00 | 4e | 03 |
| 79  | 1, | 465: | DTE | 465 | 53.376351 | 0.014576 | 02 | 4b | 01 | 04 | 00 | 00 | 4e | 03 |
| 80  | 1, | 473: | DTE | 473 | 53.395101 | 0.010625 | 02 | 4c | 01 | 05 | 00 | 00 | 48 | 03 |
| 81  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 82  | 1, | 481: | DTE | 481 | 55.728587 | 2.325360 | 02 | 4d | 01 | 04 | 00 | 00 | 48 | 03 |
| 83  | 1, | 489: | DTE | 489 | 55.754306 | 0.017604 | 02 | 4e | 01 | 05 | 00 | 00 | 4a | 03 |
| 84  | 1, | 497: | DTE | 497 | 55.777530 | 0.015203 | 02 | 4f | 01 | 04 | 00 | 40 | 0a | 03 |
| 85  | 1, | 505: | DTE | 505 | 55.797633 | 0.011979 | 02 | 49 | 01 | 04 | 40 | 40 | 4c | 03 |
| 86  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 87  | 1, | 513: | DTE | 513 | 58.327129 | 2.521475 | 02 | 4a | 01 | 04 | 00 | 00 | 4f | 03 |
| 88  | 1, | 521: | DTE | 521 | 58.346708 | 0.011458 | 02 | 4b | 01 | 05 | 00 | 00 | 4f | 03 |
| 89  | 1, | 529: | DTE | 529 | 58.375660 | 0.020835 | 02 | 4c | 01 | 04 | 00 | 00 | 49 | 03 |
| 90  | 1, | 537: | DTE | 537 | 58.396799 | 0.013016 | 02 | 4d | 01 | 05 | 00 | 00 | 49 | 03 |
| 91  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 92  | 1, | 545: | DTE | 545 | 61.426216 | 3.021188 | 02 | 4e | 01 | 04 | 00 | 00 | 4b | 03 |
| 93  | 1, | 553: | DTE | 553 | 61.453810 | 0.019473 | 02 | 4f | 01 | 05 | 00 | 00 | 4b | 03 |
| 94  | 1, | 561: | DTE | 561 | 61.471975 | 0.010032 | 02 | 49 | 01 | 04 | 00 | 40 | 0c | 03 |
| 95  |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 96  | 1, | 569: | DTE | 569 | 64.286801 | 2.806637 | 02 | 4a | 01 | 04 | 00 | 00 | 4f | 03 |
| 97  | 1, | 577: | DTE | 577 | 64.306693 | 0.011772 | 02 | 4b | 01 | 05 | 00 | 00 | 4f | 03 |
| 98  | 1, | 585: | DTE | 585 | 64.327562 | 0.012851 | 02 | 4c | 01 | 04 | 00 | 00 | 49 | 03 |
| 99  | 1, | 593: | DTE | 593 | 64.354909 | 0.019056 | 02 | 4d | 01 | 05 | 00 | 00 | 49 | 03 |
| 100 |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 101 | 1, | 601: | DTE | 601 | 68.121405 | 3.758372 | 02 | 4e | 01 | 05 | 00 | c8 | 82 | 03 |
| 102 |    |      |     |     |           |          |    |    |    |    |    |    |    |    |

```

103     1,    609: DTE   609    69.824559  1.695147 02 4f 01 05 00 c8 83 03
104     1,    617: DTE   617    70.045880  0.213096 02 49 01 05 00 00 4d 03
105
106     1,    625: DTE   625    71.986609  1.932609 02 4a 01 05 00 38 76 03
107
108     1,    633: DTE   633    74.667539  2.672705 02 4b 01 05 00 38 77 03
109     1,    641: DTE   641    74.886770  0.211117 02 4c 01 05 00 00 48 03
110
111     1,    649: DTE   649    77.023310  2.128418 02 4d 01 33 05 7a 03
112
113     1,    656: DTE   656    78.952895  1.922614 02 4e 01 33 06 7a 03
114
115     1,    663: DTE   663    83.255849  4.295980 02 4f 01 33 0a 77 03
116
117     1,    670: DTE   670    92.128704  8.865775 02 49 01 05 c8 00 85 03
118
119     1,    678: DTE   678    93.839576  1.702752 02 4a 01 05 c8 00 86 03
120     1,    686: DTE   686    94.056522  0.208826 02 4b 01 05 00 00 4f 03
121
122     1,    694: DTE   694    96.322406  2.257770 02 4c 01 05 38 00 70 03
123
124     1,    702: DTE   702    98.887204  2.556676 02 4d 01 05 38 00 71 03
125     1,    710: DTE   710    99.113109  0.217888 02 4e 01 05 00 00 4a 03
126
127     1,    718: DTE   718   102.085340  2.964111 02 4f 01 33 1b 83 7e 03
128
129     1,    726: DTE   726   104.429442  2.336085 02 49 01 33 04 7f 03
130
131     1,    733: DTE   733   110.156236  5.719819 02 4a 01 04 00 00 4f 03
132     1,    741: DTE   741   110.173419  0.009062 02 4b 01 05 00 00 4f 03
133
134     1,    749: DTE   749   128.059204  17.877780 02 4c 01 04 00 00 49 03
135     1,    757: DTE   757   128.078471  0.011145 02 4d 01 05 00 00 49 03
136
137     1,    765: DTE   765   132.171373  4.084673 02 4e 01 04 00 00 4b 03
138     1,    773: DTE   773   132.191042  0.011562 02 4f 01 05 00 00 4b 03
139
140 There were a total of      780 bytes transferred
141
142 There were a total of          0 DCE bytes transferred
143 The first DCE byte came in at 0.000000 seconds from the start of data collection
144 The last DCE byte was at 0.000000 seconds from the start of data collection
145
146 There were a total of      780 DTE bytes transferred
147 The first DTE byte came in at 0.000000 seconds from the start of data collection
148 The last DTE byte was at 132.199167 seconds from the start of data collection
149

```

## 1.6 DM-Serial

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: Unknown
4. Hello Message last few bytes: —
5. Is the protocol a Polling Protocol?: Yes. (02A) During the testing there was no indication of any “real data” being sent. This was probably due to the Sprite 2 never receiving any replies.
6. Name of the data capture file: 29MAY07I.txt
7. Special: Sprite 2 never stopped sending polls (0x2A) and I had to select a new protocol and power cycle the system to get it to stop.
8. Protocol Characteristics:
  - 8.1 Message Length(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
  - 8.2 ISO Level 1: \_\_\_\_\_.
  - 8.3 Unique first byte: \_\_\_\_\_.
  - 8.4 Unique last byte: \_\_\_\_\_.
  - 8.5 Checksum: \_\_\_\_\_.
  - 8.6 Device address: \_\_\_\_\_.

### 1.6.1 i.out

```

1  $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2  $Header: d:/GeneralInformation/1stLooks/RCS/I.out,v 1.1 2007-05-30 06:55:51-07 Hamilton Exp Hamilton $
3  FTS capture buffer (5/29/2007 8:22:50 AM)
4  Event 1 (5/29/2007 8:20:41.228534 AM) through
5  Event 4,215 (5/29/2007 8:22:39.277868 AM)
6
7      1,      1: DTE      1      0.000000  0.000000 2a
8      1,      2: DTE      2      0.027377  0.027377 2a
9      1,      3: DTE      3      0.055393  0.028016 2a
10     1,      4: DTE      4      0.083414  0.028021 2a
11
12     1,    4207: DTE    4207    117.825205  0.028018 2a
13     1,    4208: DTE    4208    117.853263  0.028058 2a
14     1,    4209: DTE    4209    117.881236  0.027973 2a
15     1,    4210: DTE    4210    117.909084  0.027848 2a
16     1,    4211: DTE    4211    117.937272  0.028188 2a
17     1,    4212: DTE    4212    117.965288  0.028016 2a
18     1,    4213: DTE    4213    117.993299  0.028011 2a
19     1,    4214: DTE    4214    118.021320  0.028021 2a
20     1,    4215: DTE    4215    118.049334  0.028014 2a
21
22  There were a total of      4215 bytes transferred
23
24  There were a total of          0 DCE bytes transferred

```

---

```

$Header: d:/GeneralInformation/1stLooks/RCS/DMSerial.inc,v 1.1 2007-06-05 08:29:29-07 Hamilton Exp
Hamilton $

```

25 The first DCE byte came in at 0.000000 seconds from the start of data collection  
26 The last DCE byte was at 0.000000 seconds from the start of data collection  
27  
28 There were a total of 4215 DTE bytes transferred  
29 The first DTE byte came in at 0.000000 seconds from the start of data collection  
30 The last DTE byte was at 118.049334 seconds from the start of data collection  
31

## 1.7 Ernitec

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 2400
2. Parity: None
3. Hello Message Length: 11
4. Hello Message last few bytes: 0x00 0x00 0x03
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07Q.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 5, 6
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0x02
  - 7.4 Unique last byte: 0x03
  - 7.5 Checksum: Sum of the full message.
  - 7.6 Device address: Byte 2

### 1.7.1 q.out

```

1  $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2  $Header: d:/GeneralInformation/1stLooks/RCS/Q.out,v 1.3 2007-05-31 08:02:24-07 Hamilton Exp Hamilton $
3  FTS capture buffer (5/29/2007 9:04:32 AM)
4  Event 1 (5/29/2007 8:57:45.452399 AM) through
5  Event 803 (5/29/2007 9:04:14.869181 AM)
6
7      1,      1: DTE      3      80.541176      0.000000 02 00 01 00 00 03
8      1,      7: DTE      9      80.693482      0.131224 02 00 01 00 00 03
9
10     1,     13: DTE     15     267.133026 186.418548 02 00 05 77 7e
11     1,     18: DTE     20     267.431724      0.282060 02 00 01 00 00 03
12     1,     24: DTE     26     267.531694      0.079142 02 00 0e 00 80 90
13     1,     30: DTE     32     267.632530      0.080003 02 00 01 04 00 07
14
15     1,     36: DTE     38     268.657767      1.004015 02 00 01 04 00 07
16
17     1,     42: DTE     44     269.683443      1.004848 02 00 01 04 00 07
18     1,     48: DTE     50     270.311672      0.607401 02 00 05 77 7e
19     1,     53: DTE     55     270.612036      0.283703 02 00 01 00 00 03
20     1,     59: DTE     61     270.716199      0.082918 02 00 01 00 00 03
21
22     1,     65: DTE     67     273.006671      2.269222 02 00 05 77 7e
23     1,     70: DTE     72     273.306618      0.282868 02 00 01 00 00 03
24     1,     76: DTE     78     273.406592      0.079146 02 00 0e 00 80 90
25     1,     82: DTE     84     273.506589      0.079166 02 00 01 04 00 07
26     1,     88: DTE     90     273.606981      0.079170 02 00 0e 80 80 10
27     1,     94: DTE     96     273.706953      0.078724 02 00 01 05 00 08
28
29     1,    100: DTE    102     274.731800      1.004014 02 00 01 05 00 08
30     1,    106: DTE    108     275.223805      0.471303 02 00 05 77 7e

```

---

<sup>9</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Ernitec.inc,v 1.1 2007-06-05 08:29:40-07 Hamilton Exp Hamilton \$

|     |    |      |     |     |            |          |    |    |    |    |    |    |
|-----|----|------|-----|-----|------------|----------|----|----|----|----|----|----|
| 31  | 1, | 111: | DTE | 113 | 275.530419 | 0.289951 | 02 | 00 | 01 | 00 | 00 | 03 |
| 32  | 1, | 117: | DTE | 119 | 275.630418 | 0.078752 | 02 | 00 | 01 | 00 | 00 | 03 |
| 33  |    |      |     |     |            |          |    |    |    |    |    |    |
| 34  | 1, | 123: | DTE | 125 | 277.438496 | 1.787274 | 02 | 00 | 05 | 77 | 7e |    |
| 35  | 1, | 128: | DTE | 130 | 277.738829 | 0.283895 | 02 | 00 | 01 | 00 | 00 | 03 |
| 36  | 1, | 134: | DTE | 136 | 277.838637 | 0.078587 | 02 | 00 | 0e | 80 | 80 | 10 |
| 37  | 1, | 140: | DTE | 142 | 277.939190 | 0.079558 | 02 | 00 | 01 | 01 | 00 | 04 |
| 38  |    |      |     |     |            |          |    |    |    |    |    |    |
| 39  | 1, | 146: | DTE | 148 | 278.964039 | 1.004015 | 02 | 00 | 01 | 01 | 00 | 04 |
| 40  | 1, | 152: | DTE | 154 | 279.879751 | 0.894885 | 02 | 00 | 05 | 77 | 7e |    |
| 41  | 1, | 157: | DTE | 159 | 280.178021 | 0.281229 | 02 | 00 | 01 | 00 | 00 | 03 |
| 42  | 1, | 163: | DTE | 165 | 280.277992 | 0.078724 | 02 | 00 | 01 | 00 | 00 | 03 |
| 43  |    |      |     |     |            |          |    |    |    |    |    |    |
| 44  | 1, | 169: | DTE | 171 | 282.508880 | 2.210055 | 02 | 00 | 05 | 77 | 7e |    |
| 45  | 1, | 174: | DTE | 176 | 282.807188 | 0.281645 | 02 | 00 | 01 | 00 | 00 | 03 |
| 46  | 1, | 180: | DTE | 182 | 282.914243 | 0.085835 | 02 | 00 | 0e | 80 | 80 | 10 |
| 47  | 1, | 186: | DTE | 188 | 283.012551 | 0.077476 | 02 | 00 | 01 | 08 | 00 | 0b |
| 48  | 1, | 192: | DTE | 194 | 283.113382 | 0.079167 | 02 | 00 | 0e | 80 | 80 | 10 |
| 49  | 1, | 198: | DTE | 200 | 283.213774 | 0.079560 | 02 | 00 | 01 | 09 | 00 | 0c |
| 50  |    |      |     |     |            |          |    |    |    |    |    |    |
| 51  | 1, | 204: | DTE | 206 | 284.238620 | 1.004007 | 02 | 00 | 01 | 09 | 00 | 0c |
| 52  | 1, | 210: | DTE | 212 | 285.030155 | 0.770708 | 02 | 00 | 05 | 77 | 7e |    |
| 53  | 1, | 215: | DTE | 217 | 285.337612 | 0.290795 | 02 | 00 | 01 | 00 | 00 | 03 |
| 54  | 1, | 221: | DTE | 223 | 285.436743 | 0.078310 | 02 | 00 | 01 | 00 | 00 | 03 |
| 55  |    |      |     |     |            |          |    |    |    |    |    |    |
| 56  | 1, | 227: | DTE | 229 | 286.972760 | 1.514863 | 02 | 00 | 05 | 77 | 7e |    |
| 57  | 1, | 232: | DTE | 234 | 287.269791 | 0.280370 | 02 | 00 | 01 | 00 | 00 | 03 |
| 58  | 1, | 238: | DTE | 240 | 287.370203 | 0.079672 | 02 | 00 | 0e | 80 | 80 | 10 |
| 59  | 1, | 244: | DTE | 246 | 287.470178 | 0.078726 | 02 | 00 | 01 | 08 | 00 | 0b |
| 60  |    |      |     |     |            |          |    |    |    |    |    |    |
| 61  | 1, | 250: | DTE | 252 | 288.495440 | 1.004598 | 02 | 00 | 01 | 08 | 00 | 0b |
| 62  |    |      |     |     |            |          |    |    |    |    |    |    |
| 63  | 1, | 256: | DTE | 258 | 289.521092 | 1.004822 | 02 | 00 | 01 | 08 | 00 | 0b |
| 64  | 1, | 262: | DTE | 264 | 289.799397 | 0.257061 | 02 | 00 | 05 | 77 | 7e |    |
| 65  | 1, | 267: | DTE | 269 | 290.099761 | 0.283283 | 02 | 00 | 01 | 00 | 00 | 03 |
| 66  | 1, | 273: | DTE | 275 | 290.199733 | 0.078725 | 02 | 00 | 01 | 00 | 00 | 03 |
| 67  |    |      |     |     |            |          |    |    |    |    |    |    |
| 68  | 1, | 279: | DTE | 281 | 291.795751 | 1.574769 | 02 | 00 | 05 | 77 | 7e |    |
| 69  | 1, | 284: | DTE | 286 | 292.104865 | 0.292060 | 02 | 00 | 01 | 00 | 00 | 03 |
| 70  | 1, | 290: | DTE | 292 | 292.208197 | 0.082100 | 02 | 00 | 0e | 80 | 80 | 10 |
| 71  | 1, | 296: | DTE | 298 | 292.308143 | 0.079140 | 02 | 00 | 01 | 08 | 00 | 0b |
| 72  | 1, | 302: | DTE | 304 | 292.425230 | 0.095836 | 02 | 00 | 0e | 80 | 80 | 10 |
| 73  | 1, | 308: | DTE | 310 | 292.528535 | 0.082058 | 02 | 00 | 01 | 0a | 00 | 0d |
| 74  |    |      |     |     |            |          |    |    |    |    |    |    |
| 75  | 1, | 314: | DTE | 316 | 293.554216 | 1.004850 | 02 | 00 | 01 | 0a | 00 | 0d |
| 76  |    |      |     |     |            |          |    |    |    |    |    |    |
| 77  | 1, | 320: | DTE | 322 | 294.579448 | 1.004405 | 02 | 00 | 01 | 0a | 00 | 0d |
| 78  |    |      |     |     |            |          |    |    |    |    |    |    |
| 79  | 1, | 326: | DTE | 328 | 295.605126 | 1.004873 | 02 | 00 | 01 | 0a | 00 | 0d |
| 80  | 1, | 332: | DTE | 334 | 296.238771 | 0.612401 | 02 | 00 | 05 | 77 | 7e |    |
| 81  | 1, | 337: | DTE | 339 | 296.540384 | 0.284534 | 02 | 00 | 01 | 00 | 00 | 03 |
| 82  | 1, | 343: | DTE | 345 | 296.640385 | 0.079169 | 02 | 00 | 01 | 00 | 00 | 03 |
| 83  |    |      |     |     |            |          |    |    |    |    |    |    |
| 84  | 1, | 349: | DTE | 351 | 299.295383 | 2.634168 | 02 | 00 | 05 | 77 | 7e |    |
| 85  | 1, | 354: | DTE | 356 | 299.595331 | 0.282893 | 02 | 00 | 01 | 00 | 00 | 03 |
| 86  | 1, | 360: | DTE | 362 | 299.696973 | 0.080811 | 02 | 00 | 0e | 80 | 80 | 10 |
| 87  | 1, | 366: | DTE | 368 | 299.801942 | 0.084140 | 02 | 00 | 01 | 02 | 00 | 05 |
| 88  |    |      |     |     |            |          |    |    |    |    |    |    |
| 89  | 1, | 372: | DTE | 374 | 300.826791 | 1.004014 | 02 | 00 | 01 | 02 | 00 | 05 |
| 90  |    |      |     |     |            |          |    |    |    |    |    |    |
| 91  | 1, | 378: | DTE | 380 | 301.852051 | 1.004432 | 02 | 00 | 01 | 02 | 00 | 05 |
| 92  |    |      |     |     |            |          |    |    |    |    |    |    |
| 93  | 1, | 384: | DTE | 386 | 302.877560 | 1.004845 | 02 | 00 | 01 | 02 | 00 | 05 |
| 94  | 1, | 390: | DTE | 392 | 303.072924 | 0.174367 | 02 | 00 | 05 | 77 | 7e |    |
| 95  | 1, | 395: | DTE | 397 | 303.371815 | 0.281643 | 02 | 00 | 01 | 00 | 00 | 03 |
| 96  | 1, | 401: | DTE | 403 | 303.472205 | 0.079587 | 02 | 00 | 01 | 00 | 00 | 03 |
| 97  |    |      |     |     |            |          |    |    |    |    |    |    |
| 98  | 1, | 407: | DTE | 409 | 306.762518 | 3.269482 | 02 | 00 | 05 | 77 | 7e |    |
| 99  | 1, | 412: | DTE | 414 | 307.062881 | 0.283701 | 02 | 00 | 01 | 00 | 00 | 03 |
| 100 | 1, | 418: | DTE | 420 | 307.163939 | 0.079813 | 02 | 00 | 0e | 80 | 80 | 10 |
| 101 | 1, | 424: | DTE | 426 | 307.264522 | 0.079172 | 02 | 00 | 01 | 04 | 00 | 07 |
| 102 | 1, | 430: | DTE | 432 | 307.366159 | 0.080810 | 02 | 00 | 0e | 80 | 80 | 10 |

|     |    |      |     |     |            |          |    |    |    |    |    |    |
|-----|----|------|-----|-----|------------|----------|----|----|----|----|----|----|
| 103 | 1, | 436: | DTE | 438 | 307.465745 | 0.078753 | 02 | 00 | 01 | 06 | 00 | 09 |
| 104 |    |      |     |     |            |          |    |    |    |    |    |    |
| 105 | 1, | 442: | DTE | 444 | 308.491397 | 1.004847 | 02 | 00 | 01 | 06 | 00 | 09 |
| 106 | 1, | 448: | DTE | 450 | 309.396266 | 0.883623 | 02 | 00 | 05 | 77 | 7e |    |
| 107 | 1, | 453: | DTE | 455 | 309.697464 | 0.284534 | 02 | 00 | 01 | 00 | 00 | 03 |
| 108 | 1, | 459: | DTE | 461 | 309.797434 | 0.079142 | 02 | 00 | 01 | 00 | 00 | 03 |
| 109 |    |      |     |     |            |          |    |    |    |    |    |    |
| 110 | 1, | 465: | DTE | 467 | 312.497852 | 2.679169 | 02 | 00 | 05 | 77 | 7e |    |
| 111 | 1, | 470: | DTE | 472 | 312.799049 | 0.284533 | 02 | 00 | 01 | 00 | 00 | 03 |
| 112 | 1, | 476: | DTE | 478 | 312.897609 | 0.077313 | 02 | 00 | 0e | 80 | 80 | 10 |
| 113 | 1, | 482: | DTE | 484 | 312.998187 | 0.079166 | 02 | 00 | 01 | 04 | 00 | 07 |
| 114 |    |      |     |     |            |          |    |    |    |    |    |    |
| 115 | 1, | 488: | DTE | 490 | 314.023009 | 1.003988 | 02 | 00 | 01 | 04 | 00 | 07 |
| 116 |    |      |     |     |            |          |    |    |    |    |    |    |
| 117 | 1, | 494: | DTE | 496 | 315.048686 | 1.004847 | 02 | 00 | 01 | 04 | 00 | 07 |
| 118 | 1, | 500: | DTE | 502 | 315.321549 | 0.252034 | 02 | 00 | 05 | 77 | 7e |    |
| 119 | 1, | 505: | DTE | 507 | 315.622357 | 0.284144 | 02 | 00 | 01 | 00 | 00 | 03 |
| 120 | 1, | 511: | DTE | 513 | 315.722328 | 0.079165 | 02 | 00 | 01 | 00 | 00 | 03 |
| 121 |    |      |     |     |            |          |    |    |    |    |    |    |
| 122 | 1, | 517: | DTE | 519 | 317.857410 | 2.114250 | 02 | 00 | 05 | 77 | 7e |    |
| 123 | 1, | 522: | DTE | 524 | 318.156940 | 0.282868 | 02 | 00 | 01 | 20 | 00 | 23 |
| 124 |    |      |     |     |            |          |    |    |    |    |    |    |
| 125 | 1, | 528: | DTE | 530 | 320.193294 | 2.015524 | 02 | 00 | 05 | 77 | 7e |    |
| 126 | 1, | 533: | DTE | 535 | 320.490741 | 0.280810 | 02 | 00 | 01 | 00 | 00 | 03 |
| 127 |    |      |     |     |            |          |    |    |    |    |    |    |
| 128 | 1, | 539: | DTE | 541 | 323.991416 | 3.479846 | 02 | 00 | 05 | 77 | 7e |    |
| 129 | 1, | 544: | DTE | 546 | 324.291782 | 0.283702 | 02 | 00 | 01 | 10 | 00 | 13 |
| 130 |    |      |     |     |            |          |    |    |    |    |    |    |
| 131 | 1, | 550: | DTE | 552 | 327.005115 | 2.692503 | 02 | 00 | 05 | 77 | 7e |    |
| 132 | 1, | 555: | DTE | 557 | 327.307146 | 0.285369 | 02 | 00 | 01 | 00 | 00 | 03 |
| 133 |    |      |     |     |            |          |    |    |    |    |    |    |
| 134 | 1, | 561: | DTE | 563 | 329.859645 | 2.531254 | 02 | 00 | 05 | 77 | 7e |    |
| 135 | 1, | 566: | DTE | 568 | 330.161676 | 0.285369 | 02 | 00 | 0d | 02 | 01 | 12 |
| 136 |    |      |     |     |            |          |    |    |    |    |    |    |
| 137 | 1, | 572: | DTE | 574 | 332.318420 | 2.135499 | 02 | 00 | 05 | 77 | 7e |    |
| 138 | 1, | 577: | DTE | 579 | 332.621701 | 0.286136 | 02 | 00 | 0d | 02 | 00 | 11 |
| 139 |    |      |     |     |            |          |    |    |    |    |    |    |
| 140 | 1, | 583: | DTE | 585 | 336.207375 | 3.564846 | 02 | 00 | 05 | 77 | 7e |    |
| 141 | 1, | 588: | DTE | 590 | 336.512350 | 0.287893 | 02 | 00 | 0d | 04 | 01 | 14 |
| 142 |    |      |     |     |            |          |    |    |    |    |    |    |
| 143 | 1, | 594: | DTE | 596 | 340.093027 | 3.559457 | 02 | 00 | 05 | 77 | 7e |    |
| 144 | 1, | 599: | DTE | 601 | 340.393806 | 0.284118 | 02 | 00 | 01 | 40 | 00 | 43 |
| 145 |    |      |     |     |            |          |    |    |    |    |    |    |
| 146 | 1, | 605: | DTE | 607 | 341.418651 | 1.004014 | 02 | 00 | 01 | 40 | 00 | 43 |
| 147 |    |      |     |     |            |          |    |    |    |    |    |    |
| 148 | 1, | 611: | DTE | 613 | 342.443885 | 1.004016 | 02 | 00 | 01 | 40 | 00 | 43 |
| 149 |    |      |     |     |            |          |    |    |    |    |    |    |
| 150 | 1, | 617: | DTE | 619 | 343.468728 | 1.004014 | 02 | 00 | 01 | 40 | 00 | 43 |
| 151 | 1, | 623: | DTE | 625 | 343.552032 | 0.062058 | 02 | 00 | 05 | 77 | 7e |    |
| 152 | 1, | 628: | DTE | 630 | 343.894482 | 0.325785 | 02 | 00 | 01 | 00 | 00 | 03 |
| 153 |    |      |     |     |            |          |    |    |    |    |    |    |
| 154 | 1, | 634: | DTE | 636 | 346.254118 | 2.338389 | 02 | 00 | 05 | 77 | 7e |    |
| 155 | 1, | 639: | DTE | 641 | 346.554482 | 0.283285 | 02 | 00 | 01 | 80 | 00 | 83 |
| 156 |    |      |     |     |            |          |    |    |    |    |    |    |
| 157 | 1, | 645: | DTE | 647 | 347.579575 | 1.004265 | 02 | 00 | 01 | 80 | 00 | 83 |
| 158 |    |      |     |     |            |          |    |    |    |    |    |    |
| 159 | 1, | 651: | DTE | 653 | 348.604891 | 1.004319 | 02 | 00 | 01 | 80 | 00 | 83 |
| 160 | 1, | 657: | DTE | 659 | 349.413622 | 0.787817 | 02 | 00 | 05 | 77 | 7e |    |
| 161 | 1, | 662: | DTE | 664 | 349.718986 | 0.288728 | 02 | 00 | 01 | 00 | 00 | 03 |
| 162 |    |      |     |     |            |          |    |    |    |    |    |    |
| 163 | 1, | 668: | DTE | 670 | 352.230071 | 2.489828 | 02 | 00 | 05 | 77 | 7e |    |
| 164 | 1, | 673: | DTE | 675 | 352.529349 | 0.282034 | 02 | 00 | 0d | 03 | 01 | 13 |
| 165 |    |      |     |     |            |          |    |    |    |    |    |    |
| 166 | 1, | 679: | DTE | 681 | 354.797616 | 2.247020 | 02 | 00 | 05 | 77 | 7e |    |
| 167 | 1, | 684: | DTE | 686 | 355.098603 | 0.284206 | 02 | 00 | 0d | 03 | 00 | 12 |
| 168 |    |      |     |     |            |          |    |    |    |    |    |    |
| 169 | 1, | 690: | DTE | 692 | 361.150910 | 6.031536 | 02 | 00 | 05 | 77 | 7e |    |
| 170 | 1, | 695: | DTE | 697 | 361.449607 | 0.281618 | 02 | 00 | 0f | 03 | 00 | 14 |
| 171 |    |      |     |     |            |          |    |    |    |    |    |    |
| 172 | 1, | 701: | DTE | 703 | 365.150258 | 3.679405 | 02 | 00 | 05 | 77 | 7e |    |
| 173 |    |      |     |     |            |          |    |    |    |    |    |    |
| 174 | 1, | 706: | DTE | 708 | 368.092289 | 2.925369 | 02 | 00 | 05 | 77 | 7e |    |

```

175 1, 711: DTE 713 368.391400 0.282449 02 00 01 00 00 03
176
177 1, 717: DTE 719 372.020827 3.608594 02 00 05 77 7e
178
179 1, 722: DTE 724 374.983692 2.945785 02 00 05 77 7e
180 1, 727: DTE 729 375.287389 0.286619 02 00 01 00 00 03
181
182 1, 733: DTE 735 381.295599 5.986964 02 00 05 77 7e
183 1, 738: DTE 740 381.593454 0.281200 02 00 01 06 00 09
184 1, 744: DTE 746 381.693036 0.078334 02 00 0e 10 80 a0
185
186 1, 750: DTE 752 382.995329 1.281045 02 00 0e 00 80 90
187 1, 756: DTE 758 383.095299 0.079140 02 00 01 00 00 03
188 1, 762: DTE 764 383.696281 0.580149 02 00 02 65 69
189
190 1, 767: DTE 769 386.990510 3.277565 02 00 05 77 7e
191 1, 772: DTE 774 387.288376 0.281369 02 00 01 06 00 09
192 1, 778: DTE 780 387.387540 0.078336 02 00 0e 10 80 a0
193
194 1, 784: DTE 786 388.689833 1.281460 02 00 0e 00 80 90
195 1, 790: DTE 792 388.796482 0.085401 02 00 01 00 00 03
196 1, 796: DTE 798 389.395980 0.578677 02 00 0f 03 00 14
197
198 There were a total of      801 bytes transferred
199
200 There were a total of      0 DCE bytes transferred
201 The first DCE byte came in at 0.000000 seconds from the start of data collection
202 The last DCE byte was at 0.000000 seconds from the start of data collection
203
204 There were a total of      801 DTE bytes transferred
205 The first DTE byte came in at 80.541176 seconds from the start of data collection
206 The last DTE byte was at 389.416782 seconds from the start of data collection
207

```

## 1.8 JCL

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: Even
3. Hello Message Length: 25
4. Hello Message last few bytes: 0x82 0x45 0x0F
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07R.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 6, 7
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0xB1
  - 7.4 Unique last byte: \_\_\_\_\_.
  - 7.5 Checksum: \_\_\_\_\_.
  - 7.6 Device address: \_\_\_\_\_.

### 1.8.1 r.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/R.out,v 1.3 2007-05-31 08:02:24-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 9:16:07 AM)
4 Event 1 (5/29/2007 9:13:23.277796 AM) through
5 Event 439 (5/29/2007 9:15:38.334316 AM)
6
7 1, 1: DTE 1 0.000000 0.000000 b1 01 01 82 45 0f
8 1, 7: DTE 7 0.017074 0.010833 b1 01 01 83 42 26 00
9 1, 14: DTE 14 0.052276 0.027598 b1 01 01 83 42 19 00
10 1, 21: DTE 21 0.139139 0.079363 b1 01 01 82 45 0f
11
12 1, 27: DTE 27 25.141605 24.996009 b1 01 01 82 45 0f
13 1, 33: DTE 33 25.149095 0.001249 b1 01 01 83 45 03 18
14
15 1, 40: DTE 40 27.012451 1.855856 b1 01 01 82 45 0f
16 1, 46: DTE 46 27.019946 0.001250 b1 01 01 82 45 0f
17
18 1, 52: DTE 52 29.606824 2.580634 b1 01 01 82 45 0f
19 1, 58: DTE 58 29.614320 0.001241 b1 01 01 83 45 03 18
20 1, 65: DTE 65 29.623080 0.001259 b1 01 01 83 45 00 18
21
22 1, 72: DTE 72 32.341596 2.711026 b1 01 01 82 45 0f
23 1, 78: DTE 78 32.349091 0.001250 b1 01 01 82 45 0f
24
25 1, 84: DTE 84 34.847137 2.491796 b1 01 01 82 45 0f
26 1, 90: DTE 90 34.854838 0.001249 b1 01 01 83 45 00 18
27
28 1, 97: DTE 97 37.504578 2.642239 b1 01 01 82 45 0f
29 1, 103: DTE 103 37.512123 0.001250 b1 01 01 82 45 0f
30
31 1, 109: DTE 109 39.207999 1.689632 b1 01 01 82 45 0f

```

<sup>10</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/JCL.inc,v 1.1 2007-06-05 08:29:44-07 Hamilton Exp Hamilton \$

|     |    |      |     |     |            |          |    |    |    |    |    |    |    |
|-----|----|------|-----|-----|------------|----------|----|----|----|----|----|----|----|
| 32  | 1, | 115: | DTE | 115 | 39.215494  | 0.001249 | b1 | 01 | 01 | 83 | 45 | 04 | 18 |
| 33  | 1, | 122: | DTE | 122 | 39.224244  | 0.001250 | b1 | 01 | 01 | 83 | 45 | 00 | 18 |
| 34  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 35  | 1, | 129: | DTE | 129 | 41.421603  | 2.189865 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 36  | 1, | 135: | DTE | 135 | 41.429101  | 0.001250 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 37  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 38  | 1, | 141: | DTE | 141 | 43.850692  | 2.415347 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 39  | 1, | 147: | DTE | 147 | 43.858292  | 0.001250 | b1 | 01 | 01 | 83 | 45 | 04 | 18 |
| 40  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 41  | 1, | 154: | DTE | 154 | 46.275308  | 2.409516 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 42  | 1, | 160: | DTE | 160 | 46.282908  | 0.001252 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 43  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 44  | 1, | 166: | DTE | 166 | 48.493288  | 2.204130 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 45  | 1, | 172: | DTE | 172 | 48.501298  | 0.001250 | b1 | 01 | 01 | 83 | 45 | 04 | 18 |
| 46  | 1, | 179: | DTE | 179 | 48.510049  | 0.001253 | b1 | 01 | 01 | 83 | 45 | 01 | 18 |
| 47  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 48  | 1, | 186: | DTE | 186 | 50.842598  | 2.325051 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 49  | 1, | 192: | DTE | 192 | 50.850196  | 0.001249 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 50  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 51  | 1, | 198: | DTE | 198 | 52.950798  | 2.094351 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 52  | 1, | 204: | DTE | 204 | 52.958503  | 0.001250 | b1 | 01 | 01 | 83 | 45 | 01 | 18 |
| 53  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 54  | 1, | 211: | DTE | 211 | 55.911049  | 2.945046 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 55  | 1, | 217: | DTE | 217 | 55.918658  | 0.001250 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 56  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 57  | 1, | 223: | DTE | 223 | 58.230165  | 2.305263 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 58  | 1, | 229: | DTE | 229 | 58.243079  | 0.006564 | b1 | 01 | 01 | 83 | 45 | 03 | 18 |
| 59  | 1, | 236: | DTE | 236 | 58.251821  | 0.001243 | b1 | 01 | 01 | 83 | 45 | 01 | 18 |
| 60  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 61  | 1, | 243: | DTE | 243 | 61.029403  | 2.770082 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 62  | 1, | 249: | DTE | 249 | 61.037003  | 0.001251 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 63  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 64  | 1, | 255: | DTE | 255 | 64.060170  | 3.016919 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 65  | 1, | 261: | DTE | 261 | 64.067873  | 0.001251 | b1 | 01 | 01 | 83 | 45 | 03 | 18 |
| 66  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 67  | 1, | 268: | DTE | 268 | 66.483847  | 2.408473 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 68  | 1, | 274: | DTE | 274 | 66.491551  | 0.001354 | b1 | 01 | 01 | 82 | 45 | 0f |    |
| 69  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 70  | 1, | 280: | DTE | 280 | 70.154717  | 3.656818 | b1 | 01 | 01 | 83 | 45 | 0c | 01 |
| 71  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 72  | 1, | 287: | DTE | 287 | 72.411131  | 2.248918 | b1 | 01 | 01 | 83 | 45 | 0c | 01 |
| 73  | 1, | 294: | DTE | 294 | 72.613951  | 0.195228 | b1 | 01 | 01 | 82 | 45 | 0e |    |
| 74  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 75  | 1, | 300: | DTE | 300 | 75.173186  | 2.552820 | b1 | 01 | 01 | 83 | 45 | 0d | 01 |
| 76  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 77  | 1, | 307: | DTE | 307 | 77.372154  | 2.191472 | b1 | 01 | 01 | 83 | 45 | 0d | 01 |
| 78  | 1, | 314: | DTE | 314 | 77.575196  | 0.195491 | b1 | 01 | 01 | 82 | 45 | 0e |    |
| 79  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 80  | 1, | 320: | DTE | 320 | 81.359591  | 3.778044 | b1 | 01 | 01 | 83 | 45 | 19 | 01 |
| 81  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 82  | 1, | 327: | DTE | 327 | 83.740669  | 2.373479 | b1 | 01 | 01 | 83 | 45 | 19 | 00 |
| 83  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 84  | 1, | 334: | DTE | 334 | 89.472985  | 5.724611 | b1 | 01 | 01 | 83 | 45 | 1b | 00 |
| 85  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 86  | 1, | 341: | DTE | 341 | 93.283518  | 3.802835 | b1 | 01 | 01 | 83 | 45 | 0a | 01 |
| 87  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 88  | 1, | 348: | DTE | 348 | 95.581693  | 2.290680 | b1 | 01 | 01 | 83 | 45 | 0a | 01 |
| 89  | 1, | 355: | DTE | 355 | 95.782598  | 0.193408 | b1 | 01 | 01 | 82 | 45 | 0b |    |
| 90  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 91  | 1, | 361: | DTE | 361 | 98.648913  | 2.859963 | b1 | 01 | 01 | 83 | 45 | 09 | 01 |
| 92  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 93  | 1, | 368: | DTE | 368 | 101.147779 | 2.491376 | b1 | 01 | 01 | 83 | 45 | 09 | 01 |
| 94  | 1, | 375: | DTE | 375 | 101.347024 | 0.191645 | b1 | 01 | 01 | 82 | 45 | 0b |    |
| 95  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 96  | 1, | 381: | DTE | 381 | 104.081685 | 2.728421 | b1 | 01 | 01 | 83 | 45 | 1a | 01 |
| 97  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 98  | 1, | 388: | DTE | 388 | 107.336795 | 3.247511 | b1 | 01 | 01 | 83 | 45 | 1a | 00 |
| 99  |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 100 | 1, | 395: | DTE | 395 | 112.485762 | 5.141369 | b1 | 01 | 01 | 83 | 42 | 19 | 00 |
| 101 |    |      |     |     |            |          |    |    |    |    |    |    |    |
| 102 | 1, | 402: | DTE | 402 | 114.922039 | 2.428786 | b1 | 01 | 01 | 82 | 45 | 06 |    |
| 103 |    |      |     |     |            |          |    |    |    |    |    |    |    |

```
104      1,      408: DTE      408      118.070294      3.141905 b1 01 01 82 45 08
105
106      1,      414: DTE      414      121.051477      2.974847 b1 01 01 82 45 07
107
108      1,      420: DTE      420      124.465720      3.408005 b1 01 01 82 45 08
109
110      1,      426: DTE      426      129.178817      4.706747 b1 01 01 83 42 26 00
111
112      1,      433: DTE      433      135.049030      5.862708 b1 01 01 83 42 19 00
113
114 There were a total of      439 bytes transferred
115
116 There were a total of      0 DCE bytes transferred
117 The first DCE byte came in at 0.000000 seconds from the start of data collection
118 The last DCE byte was at 0.000000 seconds from the start of data collection
119
120 There were a total of      439 DTE bytes transferred
121 The first DTE byte came in at 0.000000 seconds from the start of data collection
122 The last DTE byte was at 135.056520 seconds from the start of data collection
123
```

## 1.9 Kalatel

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 4800
2. Parity: None
3. Hello Message Length: Unknown due to the quantity of data sent.
4. Hello Message last few bytes: —
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07S.txt
7. Special: Kalatel sends data continuously, which makes it difficult to find the start of each command. There are interpreted breakout of the data available.
8. Protocol Characteristics:
  - 8.1 Message Length(s): 3, 6, 9, 12, . . . .
  - 8.2 ISO Level 1: \_\_\_\_\_.
  - 8.3 Unique first byte: \_\_\_\_\_.
  - 8.4 Unique last byte: \_\_\_\_\_.
  - 8.5 Checksum: \_\_\_\_\_.
  - 8.6 Device address: \_\_\_\_\_.

### 1.9.1 s.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/S.out,v 1.2 2007-05-30 08:08:27-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 9:19:42 AM)
4 Event 1 (5/29/2007 9:16:31.465789 AM) through
5 Event 51,123 (5/29/2007 9:19:27.760681 AM)
6
7 1, 1: DTE 4 58.664291 0.000000 00
8 1, 2: DTE 5 58.666580 0.002289 80
9 1, 3: DTE 6 58.668872 0.002292 00
10 1, 4: DTE 7 58.671162 0.002290 00
11 1, 5: DTE 8 58.673456 0.002294 80
12 1, 6: DTE 9 58.675746 0.002290 00
13 1, 7: DTE 10 58.677872 0.002126 00
14 1, 8: DTE 11 58.680331 0.002459 80
15 1, 9: DTE 12 58.682621 0.002290 00
16 1, 10: DTE 13 58.684911 0.002290 00
17 1, 11: DTE 14 58.687205 0.002294 80
18 1, 12: DTE 15 58.689497 0.002292 00
19 1, 13: DTE 16 58.691788 0.002291 00
20
21 1, 51113: DTE 51116 176.278863 0.002117 80
22 1, 51114: DTE 51117 176.281159 0.002296 00
23 1, 51115: DTE 51118 176.283449 0.002290 00
24 1, 51116: DTE 51119 176.285739 0.002290 80
25 1, 51117: DTE 51120 176.288030 0.002291 00
26 1, 51118: DTE 51121 176.290321 0.002291 00

```

<sup>11</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Kalatel.inc,v 1.1 2007-06-05 08:29:49-07 Hamilton Exp Hamilton \$

```
27      1, 51119: DTE 51122 176.292613 0.002292 80
28      1, 51120: DTE 51123 176.294892 0.002279 00
29
30 There were a total of 51120 bytes transferred
31
32 There were a total of 0 DCE bytes transferred
33 The first DCE byte came in at 0.000000 seconds from the start of data collection
34 The last DCE byte was at 0.000000 seconds from the start of data collection
35
36 There were a total of 51120 DTE bytes transferred
37 The first DTE byte came in at 58.664291 seconds from the start of data collection
38 The last DTE byte was at 176.294892 seconds from the start of data collection
39
```

## 1.10 Mark Mercer

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: 26
4. Hello Message last few bytes: 0x31 0x3A 0x5D
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07T.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 6, 8, 11
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 5B
  - 7.4 Unique last byte: 5D
  - 7.5 Checksum: None
  - 7.6 Device address: Bytes 3, 4
  - 7.7 ASCII for data capture line 111:

```
[ @ 0 1 T R 2 5 U 2 5 ]
5B 40 30 31 54 52 32 35 55 32 35 5D
```

### 1.10.1 t.out

```
1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/T.out,v 1.3 2007-05-31 08:02:24-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 9:33:52 AM)
4 Event 1 (5/29/2007 9:29:51.403350 AM) through
5 Event 781 (5/29/2007 9:33:32.288320 AM)
6
7 1, 1: DTE 1 0.000000 0.000000 5b 40 30 31 2a 5d
8 1, 7: DTE 7 0.078739 0.073018 5b 40 30 30 31 58 38 5d
9 1, 15: DTE 15 0.129869 0.043121 5b 40 30 31 2a 5d
10 1, 21: DTE 21 0.240066 0.104367 5b 40 30 31 2a 5d
11
12 1, 27: DTE 27 104.133340 103.887451 5b 40 30 31 2a 5d
13 1, 33: DTE 33 104.362571 0.223403 5b 40 30 31 2a 5d
14 1, 39: DTE 39 104.389026 0.020625 5b 40 30 31 2a 5d
15 1, 45: DTE 45 104.415268 0.020409 5b 40 30 31 54 55 32 35 5d
16
17 1, 54: DTE 54 107.494472 3.070037 5b 40 30 31 54 55 32 35 5d
18 1, 63: DTE 63 107.725162 0.221536 5b 40 30 31 2a 5d
19 1, 69: DTE 69 107.749942 0.019048 5b 40 30 31 2a 5d
20
21 1, 75: DTE 75 110.265902 2.510127 5b 40 30 31 2a 5d
22 1, 81: DTE 81 110.493883 0.222151 5b 40 30 31 2a 5d
23 1, 87: DTE 87 110.525539 0.025931 5b 40 30 31 2a 5d
24 1, 93: DTE 93 110.549393 0.018124 5b 40 30 31 54 55 32 35 5d

```

---

```
12$Header: d:/GeneralInformation/1stLooks/RCS/MarkMerc.inc,v 1.1 2007-06-05 08:29:57-07 Hamilton Exp
Hamilton $
```

|    |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
|----|----|------|-----|-----|------------|----------|----|----|----|----|----|----|----|----|-------------|
| 25 | 1, | 102: | DTE | 102 | 110.579389 | 0.020724 | 5b | 40 | 30 | 31 | 54 | 55 | 32 | 35 | 5d          |
| 26 | 1, | 111: | DTE | 111 | 110.604381 | 0.015827 | 5b | 40 | 30 | 31 | 54 | 52 | 32 | 35 | 55 32 35 5d |
| 27 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 28 | 1, | 123: | DTE | 123 | 113.366447 | 2.749255 | 5b | 40 | 30 | 31 | 54 | 52 | 32 | 35 | 55 32 35 5d |
| 29 | 1, | 135: | DTE | 135 | 113.594846 | 0.215734 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 30 | 1, | 141: | DTE | 141 | 113.620674 | 0.019999 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 31 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 32 | 1, | 147: | DTE | 147 | 115.402580 | 1.776079 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 33 | 1, | 153: | DTE | 153 | 115.628061 | 0.219653 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 34 | 1, | 159: | DTE | 159 | 115.659516 | 0.025522 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 35 | 1, | 165: | DTE | 165 | 115.682738 | 0.017397 | 5b | 40 | 30 | 31 | 54 | 52 | 32 | 35 | 5d          |
| 36 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 37 | 1, | 174: | DTE | 174 | 118.211712 | 2.519809 | 5b | 40 | 30 | 31 | 54 | 52 | 32 | 35 | 5d          |
| 38 | 1, | 183: | DTE | 183 | 118.437299 | 0.216425 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 39 | 1, | 189: | DTE | 189 | 118.497288 | 0.054162 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 40 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 41 | 1, | 195: | DTE | 195 | 121.078443 | 2.575324 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 42 | 1, | 201: | DTE | 201 | 121.309340 | 0.225173 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 43 | 1, | 207: | DTE | 207 | 121.337455 | 0.022284 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 44 | 1, | 213: | DTE | 213 | 121.362456 | 0.019169 | 5b | 40 | 30 | 31 | 54 | 44 | 32 | 35 | 5d          |
| 45 | 1, | 222: | DTE | 222 | 121.396305 | 0.024579 | 5b | 40 | 30 | 31 | 54 | 44 | 32 | 35 | 5d          |
| 46 | 1, | 231: | DTE | 231 | 121.425359 | 0.019889 | 5b | 40 | 30 | 31 | 54 | 52 | 32 | 35 | 44 32 35 5d |
| 47 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 48 | 1, | 243: | DTE | 243 | 124.102750 | 2.664474 | 5b | 40 | 30 | 31 | 54 | 52 | 32 | 35 | 44 32 35 5d |
| 49 | 1, | 255: | DTE | 255 | 124.330317 | 0.214972 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 50 | 1, | 261: | DTE | 261 | 124.352390 | 0.016348 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 51 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 52 | 1, | 267: | DTE | 267 | 126.491220 | 2.132998 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 53 | 1, | 273: | DTE | 273 | 126.729931 | 0.232986 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 54 | 1, | 279: | DTE | 279 | 126.763879 | 0.028224 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 55 | 1, | 285: | DTE | 285 | 126.786484 | 0.016875 | 5b | 40 | 30 | 31 | 54 | 44 | 32 | 35 | 5d          |
| 56 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 57 | 1, | 294: | DTE | 294 | 129.447521 | 2.651872 | 5b | 40 | 30 | 31 | 54 | 44 | 32 | 35 | 5d          |
| 58 | 1, | 303: | DTE | 303 | 129.680294 | 0.223513 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 59 | 1, | 309: | DTE | 309 | 129.706534 | 0.020514 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 60 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 61 | 1, | 315: | DTE | 315 | 132.376947 | 2.664580 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 62 | 1, | 321: | DTE | 321 | 132.601283 | 0.218507 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 63 | 1, | 327: | DTE | 327 | 132.628780 | 0.021835 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 64 | 1, | 333: | DTE | 333 | 132.651272 | 0.016772 | 5b | 40 | 30 | 31 | 54 | 44 | 32 | 35 | 5d          |
| 65 | 1, | 342: | DTE | 342 | 132.680223 | 0.019472 | 5b | 40 | 30 | 31 | 54 | 44 | 32 | 35 | 5d          |
| 66 | 1, | 351: | DTE | 351 | 132.706473 | 0.017141 | 5b | 40 | 30 | 31 | 54 | 4c | 32 | 35 | 44 32 35 5d |
| 67 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 68 | 1, | 363: | DTE | 363 | 135.848686 | 3.129303 | 5b | 40 | 30 | 31 | 54 | 4c | 32 | 35 | 44 32 35 5d |
| 69 | 1, | 375: | DTE | 375 | 136.072499 | 0.211057 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 70 | 1, | 381: | DTE | 381 | 136.097078 | 0.018854 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 71 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 72 | 1, | 387: | DTE | 387 | 139.231059 | 3.128259 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 73 | 1, | 393: | DTE | 393 | 139.458206 | 0.221422 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 74 | 1, | 399: | DTE | 399 | 139.494759 | 0.030720 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 75 | 1, | 405: | DTE | 405 | 139.517779 | 0.017291 | 5b | 40 | 30 | 31 | 54 | 4c | 32 | 35 | 5d          |
| 76 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 77 | 1, | 414: | DTE | 414 | 142.298591 | 2.771443 | 5b | 40 | 30 | 31 | 54 | 4c | 32 | 35 | 5d          |
| 78 | 1, | 423: | DTE | 423 | 142.527614 | 0.219930 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 79 | 1, | 429: | DTE | 429 | 142.558331 | 0.024994 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 80 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 81 | 1, | 435: | DTE | 435 | 145.031174 | 2.467009 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 82 | 1, | 441: | DTE | 441 | 145.260614 | 0.223722 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 83 | 1, | 447: | DTE | 447 | 145.292066 | 0.025622 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 84 | 1, | 453: | DTE | 453 | 145.317314 | 0.019418 | 5b | 40 | 30 | 31 | 54 | 55 | 32 | 35 | 5d          |
| 85 | 1, | 462: | DTE | 462 | 145.342575 | 0.015937 | 5b | 40 | 30 | 31 | 54 | 55 | 32 | 35 | 5d          |
| 86 | 1, | 471: | DTE | 471 | 145.379131 | 0.027181 | 5b | 40 | 30 | 31 | 54 | 4c | 32 | 35 | 55 32 35 5d |
| 87 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 88 | 1, | 483: | DTE | 483 | 148.110574 | 2.718631 | 5b | 40 | 30 | 31 | 54 | 4c | 32 | 35 | 55 32 35 5d |
| 89 | 1, | 495: | DTE | 495 | 148.332832 | 0.209345 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 90 | 1, | 501: | DTE | 501 | 148.358135 | 0.019474 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 91 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |
| 92 | 1, | 507: | DTE | 507 | 151.164876 | 2.801012 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 93 | 1, | 513: | DTE | 513 | 151.395675 | 0.225074 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 94 | 1, | 519: | DTE | 519 | 151.428063 | 0.026565 | 5b | 40 | 30 | 31 | 2a | 5d |    |    |             |
| 95 | 1, | 525: | DTE | 525 | 151.458368 | 0.024531 | 5b | 40 | 30 | 31 | 54 | 55 | 32 | 35 | 5d          |
| 96 |    |      |     |     |            |          |    |    |    |    |    |    |    |    |             |

```

97      1,      534: DTE   534  153.527831  2.060193 5b 40 30 31 54 55 32 35 5d
98      1,      543: DTE   543  153.751548  0.214406 5b 40 30 31 2a 5d
99      1,      549: DTE   549  153.776642  0.019432 5b 40 30 31 2a 5d
100
101     1,      555: DTE   555  156.982388  3.199913 5b 40 30 31 2a 5d
102     1,      561: DTE   561  157.207452  0.219243 5b 40 30 31 54 49 31 35 5d
103
104     1,      570: DTE   570  159.553434  2.336869 5b 40 30 31 54 49 31 35 5d
105     1,      579: DTE   579  159.796830  0.234241 5b 40 30 31 2a 5d
106
107     1,      585: DTE   585  162.056884  2.254333 5b 40 30 31 2a 5d
108     1,      591: DTE   591  162.296324  0.233612 5b 40 30 31 54 4f 31 35 5d
109
110     1,      600: DTE   600  165.116923  2.811437 5b 40 30 31 54 4f 31 35 5d
111     1,      609: DTE   609  165.340882  0.214701 5b 40 30 31 2a 5d
112
113     1,      615: DTE   615  168.426075  3.079363 5b 40 30 31 2a 5d
114
115     1,      621: DTE   621  171.168969  2.737170 5b 40 30 31 2a 5d
116
117     1,      627: DTE   627  178.846910  7.672113 5b 40 30 31 2a 5d
118     1,      633: DTE   633  179.069268  0.216535 5b 40 30 31 58 32 5d
119
120     1,      640: DTE   640  181.708529  2.632287 5b 40 30 31 2a 5d
121     1,      646: DTE   646  181.934642  0.220283 5b 40 30 31 54 4e 5d
122
123     1,      653: DTE   653  184.181262  2.239644 5b 40 30 31 54 4e 5d
124     1,      660: DTE   660  184.402892  0.214758 5b 40 30 31 2a 5d
125
126     1,      666: DTE   666  186.126263  1.717544 5b 40 30 31 2a 5d
127     1,      672: DTE   672  186.351438  0.219346 5b 40 30 31 54 46 5d
128
129     1,      679: DTE   679  189.029654  2.671351 5b 40 30 31 54 46 5d
130     1,      686: DTE   686  189.251079  0.214450 5b 40 30 31 2a 5d
131
132     1,      692: DTE   692  191.935960  2.679058 5b 40 30 31 2a 5d
133
134     1,      698: DTE   698  194.068114  2.126324 5b 40 30 31 2a 5d
135
136     1,      704: DTE   704  200.246505  6.172457 5b 40 30 31 2a 5d
137
138     1,      710: DTE   710  202.580302  2.327968 5b 40 30 31 2a 5d
139     1,      716: DTE   716  202.838275  0.252147 5b 40 30 31 54 45 5d
140
141     1,      723: DTE   723  205.772910  2.927661 5b 40 30 31 54 45 5d
142     1,      730: DTE   730  205.999230  0.219347 5b 40 30 31 2a 5d
143
144     1,      736: DTE   736  207.620324  1.615370 5b 40 30 31 2a 5d
145     1,      742: DTE   742  207.872992  0.246945 5b 40 30 31 54 43 5d
146
147     1,      749: DTE   749  210.791170  2.911306 5b 40 30 31 54 43 5d
148     1,      756: DTE   756  211.028429  0.230389 5b 40 30 31 2a 5d
149
150     1,      762: DTE   762  216.042313  5.008062 5b 40 30 31 2a 5d
151     1,      768: DTE   768  216.297475  0.249500 5b 40 30 31 58 50 31 5d
152
153     1,      776: DTE   776  220.879141  4.573549 5b 40 30 31 2a 5d
154
155 There were a total of      781 bytes transferred
156
157 There were a total of          0 DCE bytes transferred
158 The first DCE byte came in at 0.000000 seconds from the start of data collection
159 The last DCE byte was at 0.000000 seconds from the start of data collection
160
161 There were a total of      781 DTE bytes transferred
162 The first DTE byte came in at 0.000000 seconds from the start of data collection
163 The last DTE byte was at 220.884970 seconds from the start of data collection
164

```

## 1.11 Panasonic-WV-CS600

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 19200
2. Parity: None
3. Hello Message Length: 172
4. Hello Message last few bytes: 0x30 0x34 0x03
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07V.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
  - 7.2 ISO Level 1: RS-485, 2 and 4 wire versions.
  - 7.3 Unique first byte: 0x02
  - 7.4 Unique last byte: 0x03
  - 7.5 Checksum: No
  - 7.6 Device address: Bytes 4, 5
8. When this data capture was done, the DCE/DTE lines were reversed from the “normal” connection.
9. A translation of the raw file is included after the main capture file. The translation software only translates type “GC7” commands. It ignores all other command types.
10. A TXB-P485 is in development to support this protocol.

### 1.11.1 u.out

```

1  $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2  $Header: d:/GeneralInformation/1stLooks/RCS/U.out,v 1.3 2007-05-31 08:02:24-07 Hamilton Exp Hamilton $
3  FTS capture buffer (5/29/2007 9:40:03 AM)
4  Event 1 (5/29/2007 9:34:08.768741 AM) through
5  Event 5,016 (5/29/2007 9:39:33.743755 AM)
6
7      1,      1: DTE      3  152.796212  0.000000 02 41 44 5a 5a 3a 52 4f 4e 3a 37 03
8      1,     13: DTE     15  152.844483  0.041808 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32
30 30 30 03
9      1,     39: DTE     41  152.906507  0.046923 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03
10     1,     57: DTE     59  152.945351  0.028590 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03
11     1,     75: DTE     77  152.966754  0.010990 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 34 39 31 03
12     1,     93: DTE     95  152.993936  0.016874 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 33 30 31 03
13     1,    111: DTE    113  153.102408  0.098212 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32
30 30 30 03
14     1,    137: DTE    139  153.129748  0.012031 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03
15     1,    155: DTE    157  153.151517  0.011354 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03
16
17     1,    173: DTE    175  188.048539  34.886661 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03
18     1,    191: DTE    193  188.070824  0.011976 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03

```

---

```

13$Header: d:/GeneralInformation/1stLooks/RCS/Pana600.inc,v 1.4 2007-06-06 09:34:30-07 Hamilton Exp
Hamilton $

```

|             |    |       |     |      |            |          |   |
|-------------|----|-------|-----|------|------------|----------|---|
| 19          | 1, | 209:  | DTE | 211  | 188.296259 | 0.215005 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 30 30 30 03 |    |       |     |      |            |          |   |
| 20          | 1, | 235:  | DTE | 237  | 188.315264 | 0.003844 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 21          | 1, | 253:  | DTE | 255  | 188.335780 | 0.009996 | 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03             |
| 22          | 1, | 271:  | DTE | 273  | 188.355674 | 0.009528 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 23          | 1, | 297:  | DTE | 299  | 188.375723 | 0.004999 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 41 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 24          |    |       |     |      |            |          |   |
| 25          | 1, | 323:  | DTE | 325  | 189.391814 | 1.001091 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 41 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 26          |    |       |     |      |            |          |   |
| 27          | 1, | 349:  | DTE | 351  | 190.407331 | 1.000262 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 41 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 28          |    |       |     |      |            |          |   |
| 29          | 1, | 375:  | DTE | 377  | 191.422845 | 1.000261 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 41 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 30          | 1, | 401:  | DTE | 403  | 192.240840 | 0.802742 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 31          | 1, | 419:  | DTE | 421  | 192.262550 | 0.011198 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 32          | 1, | 437:  | DTE | 439  | 192.507620 | 0.234974 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 33          | 1, | 463:  | DTE | 465  | 192.530841 | 0.008229 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 34          | 1, | 481:  | DTE | 483  | 192.552294 | 0.010623 | 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03             |
| 35          | 1, | 499:  | DTE | 501  | 192.572810 | 0.010152 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 36          | 1, | 525:  | DTE | 527  | 192.592342 | 0.004609 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 37          | 1, | 543:  | DTE | 545  | 192.613841 | 0.011190 | 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03             |
| 38          |    |       |     |      |            |          |   |
| 39          | 1, | 561:  | DTE | 563  | 195.450379 | 2.825857 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 40          | 1, | 579:  | DTE | 581  | 195.472348 | 0.011404 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 41          | 1, | 597:  | DTE | 599  | 195.697731 | 0.215072 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 42          | 1, | 623:  | DTE | 625  | 195.730433 | 0.017134 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 43          | 1, | 641:  | DTE | 643  | 195.747668 | 0.006873 | 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03             |
| 44          | 1, | 659:  | DTE | 661  | 195.768656 | 0.010626 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 45          | 1, | 685:  | DTE | 687  | 195.794330 | 0.010574 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 41 3a 32 30 32 32 |
| 30 34 30 03 |    |       |     |      |            |          |   |
| 46          | 1, | 711:  | DTE | 713  | 195.830573 | 0.021195 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 41 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 47          | 1, | 737:  | DTE | 739  | 195.848590 | 0.002917 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 42 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 48          |    |       |     |      |            |          |   |
| 49          | 1, | 763:  | DTE | 765  | 196.864525 | 1.000729 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 42 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 50          | 1, | 789:  | DTE | 791  | 197.848326 | 0.968600 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 51          | 1, | 807:  | DTE | 809  | 197.866497 | 0.007866 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 52          | 1, | 825:  | DTE | 827  | 198.096569 | 0.219712 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 53          | 1, | 851:  | DTE | 853  | 198.116718 | 0.004947 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 54          | 1, | 869:  | DTE | 871  | 198.141820 | 0.014637 | 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03             |
| 55          | 1, | 887:  | DTE | 889  | 198.164884 | 0.012653 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 56          | 1, | 913:  | DTE | 915  | 198.197017 | 0.016768 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 57          | 1, | 931:  | DTE | 933  | 198.216858 | 0.009636 | 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03             |
| 58          |    |       |     |      |            |          |   |
| 59          | 1, | 949:  | DTE | 951  | 200.603720 | 2.376449 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 60          | 1, | 967:  | DTE | 969  | 200.622977 | 0.008797 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 61          | 1, | 985:  | DTE | 987  | 200.846962 | 0.213680 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 62          | 1, | 1011: | DTE | 1013 | 200.866642 | 0.004479 | 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03             |
| 63          | 1, | 1029: | DTE | 1031 | 200.890805 | 0.014115 | 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03             |
| 64          | 1, | 1047: | DTE | 1049 | 200.911791 | 0.010625 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 65          | 1, | 1073: | DTE | 1075 | 200.950276 | 0.023488 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 43 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 66          |    |       |     |      |            |          |   |
| 67          | 1, | 1099: | DTE | 1101 | 201.966001 | 1.000677 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 43 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |
| 68          |    |       |     |      |            |          |   |
| 69          | 1, | 1125: | DTE | 1127 | 202.981515 | 1.000275 | 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 43 3a 32 30 32 32 |
| 34 34 30 03 |    |       |     |      |            |          |   |



|     |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
|-----|----|-------|-----|------|------------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| 123 | 1, | 2113: | DTE | 2115 | 218.537413 | 2.074623 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 124 | 1, | 2131: | DTE | 2133 | 218.565829 | 0.018319 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 125 | 1, | 2149: | DTE | 2151 | 218.786957 | 0.210701 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 126 | 1, | 2175: | DTE | 2177 | 218.811842 | 0.009632 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 127 | 1, | 2193: | DTE | 2195 | 218.831735 | 0.009633 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |    |    |    |    |  |
| 128 | 1, | 2211: | DTE | 2213 | 218.851836 | 0.009737 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 129 | 1, | 2237: | DTE | 2239 | 218.872873 | 0.005934 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 45 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 130 | 1, | 2263: | DTE | 2265 | 218.899955 | 0.011925 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 45 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 131 | 1, | 2289: | DTE | 2291 | 218.932866 | 0.017551 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 46 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 132 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 133 | 1, | 2315: | DTE | 2317 | 219.948856 | 1.000837 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 46 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 134 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 135 | 1, | 2341: | DTE | 2343 | 220.964317 | 1.000262 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 46 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 136 | 1, | 2367: | DTE | 2369 | 220.997013 | 0.017444 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 137 | 1, | 2385: | DTE | 2387 | 221.015031 | 0.007549 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 138 | 1, | 2403: | DTE | 2405 | 221.240936 | 0.215438 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 139 | 1, | 2429: | DTE | 2431 | 221.268960 | 0.012666 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 140 | 1, | 2447: | DTE | 2449 | 221.300142 | 0.020785 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |    |    |    |    |  |
| 141 | 1, | 2465: | DTE | 2467 | 221.325658 | 0.015048 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 142 | 1, | 2491: | DTE | 2493 | 221.345760 | 0.005000 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 143 | 1, | 2509: | DTE | 2511 | 221.371330 | 0.015361 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |    |    |    |    |  |
| 144 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 145 | 1, | 2527: | DTE | 2529 | 224.663734 | 3.282094 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 146 | 1, | 2545: | DTE | 2547 | 224.685589 | 0.011715 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 147 | 1, | 2563: | DTE | 2565 | 224.906915 | 0.210961 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 148 | 1, | 2589: | DTE | 2591 | 224.934822 | 0.012707 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 149 | 1, | 2607: | DTE | 2609 | 224.952161 | 0.006767 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |    |    |    |    |  |
| 150 | 1, | 2625: | DTE | 2627 | 224.972783 | 0.010152 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 151 | 1, | 2651: | DTE | 2653 | 224.994812 | 0.006820 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 38 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 152 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 153 | 1, | 2677: | DTE | 2679 | 226.010852 | 1.000836 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 38 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 154 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 155 | 1, | 2703: | DTE | 2705 | 227.027263 | 1.001051 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 38 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 156 | 1, | 2729: | DTE | 2731 | 227.688229 | 0.645671 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 157 | 1, | 2747: | DTE | 2749 | 227.706982 | 0.008018 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 158 | 1, | 2765: | DTE | 2767 | 227.937679 | 0.220333 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 159 | 1, | 2791: | DTE | 2793 | 227.965536 | 0.012708 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 160 | 1, | 2809: | DTE | 2811 | 227.986731 | 0.010886 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |    |    |    |    |  |
| 161 | 1, | 2827: | DTE | 2829 | 228.008030 | 0.010990 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 162 | 1, | 2853: | DTE | 2855 | 228.038440 | 0.015361 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 163 | 1, | 2871: | DTE | 2873 | 228.068230 | 0.019489 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |    |    |    |    |  |
| 164 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 165 | 1, | 2889: | DTE | 2891 | 231.073996 | 2.995511 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 166 | 1, | 2907: | DTE | 2909 | 231.101649 | 0.017082 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 167 | 1, | 2925: | DTE | 2927 | 231.322709 | 0.210752 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 34 | 3a | 32 | 30 | 32 | 32 |  |
| 34  | 34 | 30    | 03  |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 168 | 1, | 2951: | DTE | 2953 | 231.347392 | 0.009741 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |    |    |    |    |  |
| 169 | 1, | 2969: | DTE | 2971 | 231.370252 | 0.012720 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |    |    |    |    |  |
| 170 | 1, | 2987: | DTE | 2989 | 231.388060 | 0.007343 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 46 | 3a | 32 | 30 | 32 | 31 | 33 | 36 | 3  |    |    |    |    |    |  |



|     |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|----|-------|-----|------|------------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 235 | 1, | 4043: | DTE | 4045 | 262.204018 | 0.214707 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 31 | 36 | 31 | 03 |
| 236 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 237 | 1, | 4061: | DTE | 4063 | 267.439587 | 5.225312 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 238 | 1, | 4079: | DTE | 4081 | 267.458278 | 0.008654 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 239 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 240 | 1, | 4097: | DTE | 4099 | 271.308710 | 3.840329 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 241 | 1, | 4115: | DTE | 4117 | 271.336512 | 0.017230 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 242 | 1, | 4133: | DTE | 4135 | 271.555494 | 0.208618 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 45 | 03 |
| 243 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 244 | 1, | 4151: | DTE | 4153 | 272.566633 | 1.001095 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 45 | 03 |
| 245 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 246 | 1, | 4169: | DTE | 4171 | 273.577148 | 1.000367 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 45 | 03 |
| 247 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 248 | 1, | 4187: | DTE | 4189 | 274.587663 | 1.000424 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 45 | 03 |
| 249 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 250 | 1, | 4205: | DTE | 4207 | 275.598125 | 1.000261 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 45 | 03 |
| 251 | 1, | 4223: | DTE | 4225 | 276.182201 | 0.573818 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 45 | 03 |
| 252 | 1, | 4241: | DTE | 4243 | 276.208702 | 0.016197 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 45 | 03 |
| 253 | 1, | 4259: | DTE | 4261 | 276.433980 | 0.215175 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 45 | 03 |
| 254 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 255 | 1, | 4277: | DTE | 4279 | 280.515880 | 4.071643 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 256 | 1, | 4295: | DTE | 4297 | 280.542099 | 0.016117 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 257 | 1, | 4313: | DTE | 4315 | 280.760530 | 0.208150 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 41 | 03 |
| 258 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 259 | 1, | 4331: | DTE | 4333 | 281.771204 | 1.000418 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 41 | 03 |
| 260 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 261 | 1, | 4349: | DTE | 4351 | 282.782655 | 1.001095 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 41 | 03 |
| 262 | 1, | 4367: | DTE | 4369 | 283.712088 | 0.919182 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 41 | 03 |
| 263 | 1, | 4385: | DTE | 4387 | 283.741293 | 0.018950 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 41 | 03 |
| 264 | 1, | 4403: | DTE | 4405 | 283.986628 | 0.235240 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 265 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 266 | 1, | 4421: | DTE | 4423 | 287.263188 | 3.266255 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 267 | 1, | 4439: | DTE | 4441 | 287.286355 | 0.013069 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 268 | 1, | 4457: | DTE | 4459 | 287.506741 | 0.210021 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 31 | 36 | 32 | 03 |
| 269 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 270 | 1, | 4475: | DTE | 4477 | 289.893859 | 2.376757 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 271 | 1, | 4493: | DTE | 4495 | 289.916038 | 0.011768 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 272 | 1, | 4511: | DTE | 4513 | 290.142986 | 0.216739 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 31 | 36 | 33 | 03 |
| 273 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 274 | 1, | 4529: | DTE | 4531 | 296.389851 | 6.236453 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 275 | 1, | 4547: | DTE | 4549 | 296.412137 | 0.011981 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 276 | 1, | 4565: | DTE | 4567 | 296.638043 | 0.215326 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 33 | 30 | 31 | 03 |
| 277 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 278 | 1, | 4583: | DTE | 4585 | 301.924591 | 5.276296 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 279 | 1, | 4601: | DTE | 4603 | 301.945729 | 0.010822 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 280 | 1, | 4619: | DTE | 4621 | 302.185590 | 0.229444 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 32 | 03 |
| 281 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 282 | 1, | 4637: | DTE | 4639 | 303.196690 | 1.000844 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 32 | 03 |
| 283 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 284 | 1, | 4655: | DTE | 4657 | 304.207194 | 1.000385 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 32 | 03 |
| 285 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 286 | 1, | 4673: | DTE | 4675 | 305.217658 | 1.000208 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 32 | 03 |
| 287 | 1, | 4691: | DTE | 4693 | 305.921712 | 0.693748 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 288 | 1, | 4709: | DTE | 4711 | 305.945298 | 0.013174 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 289 | 1, | 4727: | DTE | 4729 | 306.162973 | 0.207519 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 290 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 291 | 1, | 4745: | DTE | 4747 | 308.884946 | 2.711715 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 292 | 1, | 4763: | DTE | 4765 | 308.910919 | 0.015793 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 293 | 1, | 4781: | DTE | 4783 | 309.144320 | 0.223145 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 33 | 03 |
| 294 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 295 | 1, | 4799: | DTE | 4801 | 310.155100 | 1.000366 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 33 | 03 |
| 296 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 297 | 1, | 4817: | DTE | 4819 | 311.165612 | 1.000261 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 33 | 03 |
| 298 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 299 | 1, | 4835: | DTE | 4837 | 312.176078 | 1.000157 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 33 | 03 |
| 300 | 1, | 4853: | DTE | 4855 | 312.556223 | 0.369892 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 301 | 1, | 4871: | DTE | 4873 | 312.580237 | 0.013552 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 302 | 1, | 4889: | DTE | 4891 | 312.807174 | 0.216870 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 303 |    |       |     |      |            |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 304 | 1, | 4907: | DTE | 4909 | 318.054874 | 5.237394 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 305 | 1, | 4925: | DTE | 4927 | 318.080233 | 0.014999 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 32 | 30 | 32 | 31 | 32 | 32 | 34 | 03 |
| 306 | 1, | 4943: | DTE | 4945 | 318.313687 | 0.223300 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 |    |    |    |    |    |    |    |    |    |

```
307
308     1,   4961: DTE  4963   324.725578   6.401688 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03
309     1,   4979: DTE  4981   324.746665   0.010727 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03
310     1,   4997: DTE  4999   324.964861   0.207885 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 33 30 31 03
311
312 There were a total of      5014 bytes transferred
313
314 There were a total of          0 DCE bytes transferred
315 The first DCE byte came in at 0.000000 seconds from the start of data collection
316 The last DCE byte was at 0.000000 seconds from the start of data collection
317
318 There were a total of      5014 DTE bytes transferred
319 The first DTE byte came in at 152.796212 seconds from the start of data collection
320 The last DTE byte was at 324.975014 seconds from the start of data collection
321
```

## 1.11.2 u.bl

```

1 $Header: d:/GeneralInformation/1stLooks/RCS/U.bl,v 1.3 2007-06-08 09:32:13-07 Hamilton Exp Hamilton $
2
3 Hello
4 1: DCE 0.000000 02 41 44 5a 5a 3a 52 4f 4e 3a 37 03: ADZZ:RON:7: All call, disable replies, alarms and ACKs
5 2: DCE 0.048271 AD01;GCF:2021364:2022000: ----- Pan stop(v), Tilt stop(v)
6 3: DCE 0.110295 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
7 4: DCE 0.149139 AD01;GCF:0021004: Iris Stop
8 5: DCE 0.170542 AD01;GCF:2021491: Patrol Stop
9 6: DCE 0.197724 AD01;GCF:2021301: Auto Pan Off
10 7: DCE 0.306196 AD01;GCF:2021364:2022000: ----- Pan stop(v), Tilt stop(v)
11 8: DCE 0.333536 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
12 9: DCE 0.355305 AD01;GCF:0021004: Iris Stop
13
14 Up
15 10: DCE 35.252327 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
16 11: DCE 35.274612 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
17 12: DCE 35.500047 AD01;GCF:2021364:2022000: ----- Pan stop(v), Tilt stop(v)
18 13: DCE 35.519052 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
19 14: DCE 35.539568 AD01;GCF:0021004: Iris Stop
20 15: DCE 35.559462 AD01;GCF:2021364:2022040: ----- Pan stop(v), Tilt stop(v), Tilt 4
21 16: DCE 35.579511 AD01;GCF:202136A:2022040: ----- Tilt up(v), Tilt 4
22 17: DCE 36.595602 AD01;GCF:202136A:2022040: ----- Tilt up(v), Tilt 4
23 18: DCE 37.611119 AD01;GCF:202136A:2022040: ----- Tilt up(v), Tilt 4
24 19: DCE 38.626633 AD01;GCF:202136A:2022040: ----- Tilt up(v), Tilt 4
25 20: DCE 39.444628 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
26 21: DCE 39.466338 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
27 22: DCE 39.711408 AD01;GCF:2021364:2022040: ----- Pan stop(v), Tilt stop(v), Tilt 4
28 23: DCE 39.734629 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
29 24: DCE 39.756082 AD01;GCF:0021004: Iris Stop
30 25: DCE 39.776598 AD01;GCF:2021364:2022040: ----- Pan stop(v), Tilt stop(v), Tilt 4
31 26: DCE 39.796130 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
32 27: DCE 39.817629 AD01;GCF:0021004: Iris Stop
33
34 Up, Right
35 28: DCE 42.654167 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
36 29: DCE 42.676136 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
37 30: DCE 42.901519 AD01;GCF:2021364:2022040: ----- Pan stop(v), Tilt stop(v), Tilt 4
38 31: DCE 42.934221 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
39 32: DCE 42.951456 AD01;GCF:0021004: Iris Stop
40 33: DCE 42.972444 AD01;GCF:2021364:2022040: ----- Pan stop(v), Tilt stop(v), Tilt 4
41 34: DCE 42.998118 AD01;GCF:202136A:2022040: ----- Tilt up(v), Tilt 4
42 35: DCE 43.034361 AD01;GCF:202136A:2022440: ----- Tilt up(v), Tilt 4
43 36: DCE 43.052378 AD01;GCF:202136B:2022440: ----- Pan right(v), Tilt up(v), Pan 4, Tilt 4
44 37: DCE 44.068313 AD01;GCF:202136B:2022440: ----- Pan right(v), Tilt up(v), Pan 4, Tilt 4
45 38: DCE 45.052114 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
46 39: DCE 45.070285 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
47 40: DCE 45.300357 AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4
48 41: DCE 45.320506 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
49 42: DCE 45.345608 AD01;GCF:0021004: Iris Stop
50 43: DCE 45.368672 AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4
51 44: DCE 45.400805 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
52 45: DCE 45.420646 AD01;GCF:0021004: Iris Stop
53
54 Right
55 46: DCE 47.807508 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
56 47: DCE 47.826765 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
57 48: DCE 48.050750 AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4
58 49: DCE 48.074030 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
59 50: DCE 48.094593 AD01;GCF:0021004: Iris Stop
60 51: DCE 48.115579 AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4
61 52: DCE 48.154064 AD01;GCF:202136C:2022440: ----- Pan right(v), Pan 4, Tilt 4
62 53: DCE 49.169789 AD01;GCF:202136C:2022440: ----- Pan right(v), Pan 4, Tilt 4
63 54: DCE 50.185303 AD01;GCF:202136C:2022440: ----- Pan right(v), Pan 4, Tilt 4
64 55: DCE 51.200820 AD01;GCF:202136C:2022440: ----- Pan right(v), Pan 4, Tilt 4
65 56: DCE 51.386364 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
66 57: DCE 51.407134 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)
67 58: DCE 51.631372 AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4
68 59: DCE 51.651264 AD01;GCF:2021224: Zoom stop(f) + Focus stop(f)

```

|     |             |           |   |
|-----|-------------|-----------|---|
| 69  | 60: DCE     | 51.710631 | AD01;GC7:0021004: Iris Stop   |
| 70  | 61: DCE     | 51.736665 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 71  | 62: DCE     | 51.756505 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 72  | 63: DCE     | 51.776398 | AD01;GC7:0021004: Iris Stop   |
| 73  |             |           |   |
| 74  | Right, Down |           |   |
| 75  | 64: DCE     | 54.080617 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 76  | 65: DCE     | 54.102998 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 77  | 66: DCE     | 54.320898 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 78  | 67: DCE     | 54.345778 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 79  | 68: DCE     | 54.368066 | AD01;GC7:0021004: Iris Stop   |
| 80  | 69: DCE     | 54.386658 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 81  | 70: DCE     | 54.407071 | AD01;GCF:202136E:2022440: ----- Tilt down(v), Pan 4, Tilt 4               |
| 82  | 71: DCE     | 54.436858 | AD01;GCF:202136E:2022440: ----- Tilt down(v), Pan 4, Tilt 4               |
| 83  | 72: DCE     | 54.456283 | AD01;GCF:202136D:2022440: ----- Pan right(v), Tilt down(v), Pan 4, Tilt 4 |
| 84  | 73: DCE     | 55.471905 | AD01;GCF:202136D:2022440: ----- Pan right(v), Tilt down(v), Pan 4, Tilt 4 |
| 85  | 74: DCE     | 56.487367 | AD01;GCF:202136D:2022440: ----- Pan right(v), Tilt down(v), Pan 4, Tilt 4 |
| 86  | 75: DCE     | 57.421126 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 87  | 76: DCE     | 57.443098 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 88  | 77: DCE     | 57.662388 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 89  | 78: DCE     | 57.686340 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 90  | 79: DCE     | 57.706337 | AD01;GC7:0021004: Iris Stop   |
| 91  | 80: DCE     | 57.736435 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 92  | 81: DCE     | 57.756483 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 93  | 82: DCE     | 57.776793 | AD01;GC7:0021004: Iris Stop   |
| 94  |             |           |   |
| 95  | Down        |           |   |
| 96  | 83: DCE     | 60.165789 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 97  | 84: DCE     | 60.185522 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 98  | 85: DCE     | 60.407207 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 99  | 86: DCE     | 60.426003 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 100 | 87: DCE     | 60.445843 | AD01;GC7:0021004: Iris Stop   |
| 101 | 88: DCE     | 60.470685 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 102 | 89: DCE     | 60.491827 | AD01;GCF:202136E:2022440: ----- Tilt down(v), Pan 4, Tilt 4               |
| 103 | 90: DCE     | 61.507867 | AD01;GCF:202136E:2022440: ----- Tilt down(v), Pan 4, Tilt 4               |
| 104 | 91: DCE     | 62.523331 | AD01;GCF:202136E:2022440: ----- Tilt down(v), Pan 4, Tilt 4               |
| 105 | 92: DCE     | 63.278262 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 106 | 93: DCE     | 63.304188 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 107 | 94: DCE     | 63.528481 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 108 | 95: DCE     | 63.546389 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 109 | 96: DCE     | 63.570449 | AD01;GC7:0021004: Iris Stop   |
| 110 | 97: DCE     | 63.605288 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 111 | 98: DCE     | 63.636157 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 112 | 99: DCE     | 63.656322 | AD01;GC7:0021004: Iris Stop   |
| 113 |             |           |   |
| 114 | Left, Down  |           |   |
| 115 | 100: DCE    | 65.741201 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 116 | 101: DCE    | 65.769617 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 117 | 102: DCE    | 65.990745 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 118 | 103: DCE    | 66.015630 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 119 | 104: DCE    | 66.035523 | AD01;GC7:0021004: Iris Stop   |
| 120 | 105: DCE    | 66.055624 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 121 | 106: DCE    | 66.076661 | AD01;GCF:202136E:2022440: ----- Tilt down(v), Pan 4, Tilt 4               |
| 122 | 107: DCE    | 66.103743 | AD01;GCF:202136E:2022440: ----- Tilt down(v), Pan 4, Tilt 4               |
| 123 | 108: DCE    | 66.136654 | AD01;GCF:202136F:2022440: ----- Pan left(v), Tilt down(v), Pan 4, Tilt 4  |
| 124 | 109: DCE    | 67.152644 | AD01;GCF:202136F:2022440: ----- Pan left(v), Tilt down(v), Pan 4, Tilt 4  |
| 125 | 110: DCE    | 68.168105 | AD01;GCF:202136F:2022440: ----- Pan left(v), Tilt down(v), Pan 4, Tilt 4  |
| 126 | 111: DCE    | 68.200801 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 127 | 112: DCE    | 68.218819 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 128 | 113: DCE    | 68.444724 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 129 | 114: DCE    | 68.472748 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 130 | 115: DCE    | 68.503930 | AD01;GC7:0021004: Iris Stop   |
| 131 | 116: DCE    | 68.529446 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 132 | 117: DCE    | 68.549548 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 133 | 118: DCE    | 68.575118 | AD01;GC7:0021004: Iris Stop   |
| 134 |             |           |   |
| 135 | Left        |           |   |
| 136 | 119: DCE    | 71.867522 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 137 | 120: DCE    | 71.889377 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 138 | 121: DCE    | 72.110703 | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4  |
| 139 | 122: DCE    | 72.138610 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                            |
| 140 | 123: DCE    | 72.155949 | AD01;GC7:0021004: Iris Stop   |

|     |          |            |  |
|-----|----------|------------|--|
| 141 | 124: DCE | 72.176571  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 142 | 125: DCE | 72.198600  | AD01;GCF:2021368:2022440: ----- Pan left(v), Tilt up(v), Pan 4, Tilt 4   |
| 143 | 126: DCE | 73.214640  | AD01;GCF:2021368:2022440: ----- Pan left(v), Tilt up(v), Pan 4, Tilt 4   |
| 144 | 127: DCE | 74.231051  | AD01;GCF:2021368:2022440: ----- Pan left(v), Tilt up(v), Pan 4, Tilt 4   |
| 145 | 128: DCE | 74.892017  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 146 | 129: DCE | 74.910770  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 147 | 130: DCE | 75.141467  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 148 | 131: DCE | 75.169324  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 149 | 132: DCE | 75.190519  | AD01;GC7:0021004: Iris Stop  |
| 150 | 133: DCE | 75.211818  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 151 | 134: DCE | 75.242228  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 152 |          |            |  |
| 153 | Left, Up |            |  |
| 154 | 135: DCE | 75.272018  | AD01;GC7:0021004: Iris Stop  |
| 155 | 136: DCE | 78.277784  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 156 | 137: DCE | 78.305437  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 157 | 138: DCE | 78.526497  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 158 | 139: DCE | 78.551180  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 159 | 140: DCE | 78.574040  | AD01;GC7:0021004: Iris Stop  |
| 160 | 141: DCE | 78.591848  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 161 | 142: DCE | 78.612575  | AD01;GCF:202136A:2022440: ----- Tilt up(v), Pan 4, Tilt 4                |
| 162 | 143: DCE | 78.640120  | AD01;GCF:202136A:2022440: ----- Tilt up(v), Pan 4, Tilt 4                |
| 163 | 144: DCE | 78.673607  | AD01;GCF:2021369:2022440: ----- Pan left(v), Tilt up(v), Pan 4, Tilt 4   |
| 164 | 145: DCE | 79.689750  | AD01;GCF:2021369:2022440: ----- Pan left(v), Tilt up(v), Pan 4, Tilt 4   |
| 165 | 146: DCE | 80.705264  | AD01;GCF:2021369:2022440: ----- Pan left(v), Tilt up(v), Pan 4, Tilt 4   |
| 166 | 147: DCE | 81.359326  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 167 | 148: DCE | 81.381151  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 168 | 149: DCE | 81.607307  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 169 | 150: DCE | 81.626467  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 170 | 151: DCE | 81.646359  | AD01;GC7:0021004: Iris Stop  |
| 171 | 152: DCE | 81.674063  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 172 | 153: DCE | 81.692082  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 173 | 154: DCE | 81.712601  | AD01;GC7:0021004: Iris Stop  |
| 174 |          |            |  |
| 175 | Up       |            |  |
| 176 | 155: DCE | 84.678016  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 177 | 156: DCE | 84.696602  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 178 | 157: DCE | 84.942297  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 179 | 158: DCE | 84.974108  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 180 | 159: DCE | 84.991918  | AD01;GC7:0021004: Iris Stop  |
| 181 | 160: DCE | 85.013685  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 182 | 161: DCE | 85.041078  | AD01;GCF:202136A:2022440: ----- Tilt up(v), Tilt stop(v), Pan 4, Tilt 4  |
| 183 | 162: DCE | 86.056909  | AD01;GCF:202136A:2022440: ----- Tilt up(v), Tilt stop(v), Pan 4, Tilt 4  |
| 184 | 163: DCE | 87.072371  | AD01;GCF:202136A:2022440: ----- Tilt up(v), Tilt stop(v), Pan 4, Tilt 4  |
| 185 | 164: DCE | 87.808088  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 186 | 165: DCE | 87.827298  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 187 | 166: DCE | 88.052527  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 188 | 167: DCE | 88.072258  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 189 | 168: DCE | 88.092359  | AD01;GC7:0021004: Iris Stop  |
| 190 | 169: DCE | 88.113711  | AD01;GCF:2021364:2022440: ----- Pan stop(v), Tilt stop(v), Pan 4, Tilt 4 |
| 191 | 170: DCE | 88.140477  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 192 | 171: DCE | 88.157663  | AD01;GC7:0021004: Iris Stop  |
| 193 |          |            |  |
| 194 | Tele     |            |  |
| 195 | 172: DCE | 91.548354  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 196 | 173: DCE | 91.568212  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 197 | 174: DCE | 91.788491  | AD01;GC7:2021228: Zoom tele(f)   |
| 198 | 175: DCE | 92.799214  | AD01;GC7:2021228: Zoom tele(f)   |
| 199 | 176: DCE | 93.809512  | AD01;GC7:2021228: Zoom tele(f)   |
| 200 | 177: DCE | 94.736769  | AD01;GC7:2021228: Zoom tele(f)   |
| 201 | 178: DCE | 94.759364  | AD01;GC7:2021228: Zoom tele(f)   |
| 202 | 179: DCE | 94.978920  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 203 |          |            |  |
| 204 | Wide     |            |  |
| 205 | 180: DCE | 98.082638  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 206 | 181: DCE | 98.104142  | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |
| 207 | 182: DCE | 98.324475  | AD01;GC7:202122C: Zoom wide(f)   |
| 208 | 183: DCE | 99.335409  | AD01;GC7:202122C: Zoom wide(f)   |
| 209 | 184: DCE | 100.345923 | AD01;GC7:202122C: Zoom wide(f)   |
| 210 | 185: DCE | 101.121840 | AD01;GC7:202122C: Zoom wide(f)   |
| 211 | 186: DCE | 101.142043 | AD01;GC7:202122C: Zoom wide(f)   |
| 212 | 187: DCE | 101.360075 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)                           |

|     |          |            |  |  |
|-----|----------|------------|--|--|
| 213 |          |            |  |  |
| 214 | 188: DCE | 105.880872 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 215 | 189: DCE | 105.907784 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 216 | 190: DCE | 106.127654 | AD01;GC7:2021160: AUX 1 On                     |  |
| 217 |          |            |  |  |
| 218 | 191: DCE | 109.162065 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 219 | 192: DCE | 109.182571 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 220 | 193: DCE | 109.407806 | AD01;GC7:2021161: AUX 1 Off                    |  |
| 221 |          |            |  |  |
| 222 | 194: DCE | 114.643375 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 223 | 195: DCE | 114.662066 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 224 |          |            |  |  |
| 225 | Near     |            |  |  |
| 226 | 196: DCE | 118.512498 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 227 | 197: DCE | 118.540300 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 228 | 198: DCE | 118.759282 | AD01;GC7:202122E: Focus near(f)                |  |
| 229 | 199: DCE | 119.770421 | AD01;GC7:202122E: Focus near(f)                |  |
| 230 | 200: DCE | 120.780936 | AD01;GC7:202122E: Focus near(f)                |  |
| 231 | 201: DCE | 121.791451 | AD01;GC7:202122E: Focus near(f)                |  |
| 232 | 202: DCE | 122.801913 | AD01;GC7:202122E: Focus near(f)                |  |
| 233 | 203: DCE | 123.385989 | AD01;GC7:202122E: Focus near(f)                |  |
| 234 | 204: DCE | 123.412490 | AD01;GC7:202122E: Focus near(f)                |  |
| 235 | 205: DCE | 123.637768 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 236 |          |            |  |  |
| 237 | Far      |            |  |  |
| 238 | 206: DCE | 127.719668 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 239 | 207: DCE | 127.745887 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 240 | 208: DCE | 127.964318 | AD01;GC7:202122A: Focus far(f)                 |  |
| 241 | 209: DCE | 128.974992 | AD01;GC7:202122A: Focus far(f)                 |  |
| 242 | 210: DCE | 129.986443 | AD01;GC7:202122A: Focus far(f)                 |  |
| 243 | 211: DCE | 130.915876 | AD01;GC7:202122A: Focus far(f)                 |  |
| 244 | 212: DCE | 130.945081 | AD01;GC7:202122A: Focus far(f)                 |  |
| 245 | 213: DCE | 131.190416 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 246 |          |            |  |  |
| 247 | 214: DCE | 134.466976 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 248 | 215: DCE | 134.490143 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 249 | 216: DCE | 134.710529 | AD01;GC7:2021162: AUX 2 On                     |  |
| 250 |          |            |  |  |
| 251 | 217: DCE | 137.097647 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 252 | 218: DCE | 137.119826 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 253 | 219: DCE | 137.346774 | AD01;GC7:2021163: AUX 2 Off                    |  |
| 254 |          |            |  |  |
| 255 | 220: DCE | 143.593639 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 256 | 221: DCE | 143.615925 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 257 | 222: DCE | 143.841831 | AD01;GC7:2021301: Auto Pan Off                 |  |
| 258 |          |            |  |  |
| 259 | 223: DCE | 149.128379 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 260 | 224: DCE | 149.149517 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 261 | 225: DCE | 149.389378 | AD01;GC7:0021002: Iris Open                    |  |
| 262 | 226: DCE | 150.400478 | AD01;GC7:0021002: Iris Open                    |  |
| 263 | 227: DCE | 151.410982 | AD01;GC7:0021002: Iris Open                    |  |
| 264 | 228: DCE | 152.421446 | AD01;GC7:0021002: Iris Open                    |  |
| 265 | 229: DCE | 153.125500 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 266 | 230: DCE | 153.149086 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 267 | 231: DCE | 153.366761 | AD01;GC7:0021004: Iris Stop                    |  |
| 268 |          |            |  |  |
| 269 | 232: DCE | 156.088734 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 270 | 233: DCE | 156.114707 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 271 | 234: DCE | 156.348108 | AD01;GC7:0021003: Iris Close                   |  |
| 272 | 235: DCE | 157.358888 | AD01;GC7:0021003: Iris Close                   |  |
| 273 | 236: DCE | 158.369400 | AD01;GC7:0021003: Iris Close                   |  |
| 274 | 237: DCE | 159.379866 | AD01;GC7:0021003: Iris Close                   |  |
| 275 | 238: DCE | 159.760011 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 276 | 239: DCE | 159.784025 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 277 | 240: DCE | 160.010962 | AD01;GC7:0021004: Iris Stop                    |  |
| 278 |          |            |  |  |
| 279 | 241: DCE | 165.258662 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 280 | 242: DCE | 165.284021 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 281 | 243: DCE | 165.517475 | AD01;GC7:2021491: Patrol Stop                  |  |
| 282 |          |            |  |  |
| 283 | 244: DCE | 171.929366 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |
| 284 | 245: DCE | 171.950453 | AD01;GC7:2021224: Zoom stop(f) + Focus stop(f) |  |

285 246: DCE 172.168649 AD01;GC7:2021301: Auto Pan Off

## 1.12 Panasonic-WV-CS850

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 19200
2. Parity: None
3. Hello Message Length: 218
4. Hello Message last few bytes: 0x30 0x30 0x34 0x03
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07V.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
  - 7.2 ISO Level 1: RS-485, 2 and 4 wire versions.
  - 7.3 Unique first byte: 0x02
  - 7.4 Unique last byte: 0x03
  - 7.5 Checksum: No
  - 7.6 Device address: Bytes 4, 5
8. When this data capture was done, the DCE/DTE lines were reversed from the “normal” connection.
9. A translation of the raw file is included after the main capture file.
10. A TXB-P485 is in development to support this protocol.

### 1.12.1 v.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/V.out,v 1.3 2007-05-31 08:02:24-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 9:58:32 AM)
4 Event 1 (5/29/2007 9:54:22.981226 AM) through
5 Event 4,610 (5/29/2007 9:57:20.922921 AM)
6
7      1,      1: DTE      1      0.000000  0.000000 02 41 44 5a 5a 3a 52 4f 4e 3a 37 03
8      1,     13: DTE     13      0.019631  0.013123 02 41 44 30 31 3b 47 43 46 3a 32 30 32 31 33 36 34 3a 32 30 32 32
30 30 30 03
9      1,     39: DTE     39      0.038015  0.003288 02 41 44 30 31 3b 47 43 37 3a 32 30 32 31 32 32 34 03
10     1,     57: DTE     57      0.058171  0.009795 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03
11     1,     75: DTE     75      0.122689  0.054107 02 41 44 30 31 3b 47 43 37 3a 39 30 32 38 31 30 30 03
12     1,     93: DTE     93      0.170078  0.037079 02 41 44 30 31 3b 47 43 37 3a 39 30 33 34 30 30 38 03
13     1,    111: DTE    111      0.190229  0.009427 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03
14     1,    129: DTE    129      0.209602  0.009165 02 41 44 30 31 3b 47 43 37 3a 39 30 33 30 30 41 35 03
15     1,    147: DTE    147      0.240639  0.020872 02 41 44 30 31 3b 47 43 37 3a 39 30 33 30 30 34 31 03
16     1,    165: DTE    165      0.326612  0.075560 02 41 44 30 31 3b 47 43 37 3a 39 30 32 38 31 30 30 03
17     1,    183: DTE    183      0.357286  0.020467 02 41 44 30 31 3b 47 43 37 3a 39 30 33 34 30 30 38 03
18     1,    201: DTE    201      0.389728  0.022185 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03
19
20     1,    219: DTE    219     36.307829  35.907836 02 41 44 30 31 3b 47 43 37 3a 39 30 32 38 31 30 30 03
21     1,    237: DTE    237     36.337417  0.019060 02 41 44 30 31 3b 47 43 37 3a 39 30 33 34 30 30 39 03

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14$Header: d:/GeneralInformation/1stLooks/RCS/Pana850.inc,v 1.3 2007-06-06 09:34:30-07 Hamilton Exp
Hamilton $

```

|    |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|-------|-----|------|-----------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 22 | 1, | 255:  | DTE | 255  | 36.561644 | 0.213868 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 30 | 30 | 03 |
| 23 | 1, | 273:  | DTE | 273  | 36.579199 | 0.007186 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 24 | 1, | 291:  | DTE | 291  | 36.599406 | 0.009946 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 25 | 1, | 309:  | DTE | 309  | 36.622839 | 0.013230 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 30 | 38 | 03 |
| 26 | 1, | 327:  | DTE | 327  | 36.644607 | 0.011563 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 41 | 30 | 38 | 03 |
| 27 | 1, | 345:  | DTE | 345  | 36.698038 | 0.043122 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 41 | 30 | 38 | 03 |
| 28 | 1, | 363:  | DTE | 363  | 36.723188 | 0.014800 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 29 | 1, | 381:  | DTE | 381  | 36.957109 | 0.223405 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 30 | 38 | 03 |
| 30 | 1, | 399:  | DTE | 399  | 36.974970 | 0.007490 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 31 | 1, | 417:  | DTE | 417  | 36.994804 | 0.009576 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 32 | 1, | 435:  | DTE | 435  | 37.015174 | 0.009897 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 30 | 38 | 03 |
| 33 | 1, | 453:  | DTE | 453  | 37.035274 | 0.009740 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 34 | 1, | 471:  | DTE | 471  | 37.057978 | 0.012291 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 35 |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 36 | 1, | 489:  | DTE | 489  | 39.926480 | 2.857930 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 30 | 38 | 03 |
| 37 | 1, | 507:  | DTE | 507  | 39.955432 | 0.018489 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 38 | 1, | 525:  | DTE | 525  | 40.175660 | 0.209970 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 30 | 38 | 03 |
| 39 | 1, | 543:  | DTE | 543  | 40.202409 | 0.016339 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 40 | 1, | 561:  | DTE | 561  | 40.226219 | 0.012914 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 41 | 1, | 579:  | DTE | 579  | 40.255645 | 0.019269 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 30 | 38 | 03 |
| 42 | 1, | 597:  | DTE | 597  | 40.275587 | 0.009478 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 41 | 30 | 38 | 03 |
| 43 | 1, | 615:  | DTE | 615  | 40.300585 | 0.014739 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 41 | 38 | 38 | 03 |
| 44 | 1, | 633:  | DTE | 633  | 40.324641 | 0.013747 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 42 | 38 | 38 | 03 |
| 45 |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 46 | 1, | 651:  | DTE | 651  | 41.335527 | 1.000364 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 42 | 38 | 38 | 03 |
| 47 |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 48 | 1, | 669:  | DTE | 669  | 42.346041 | 1.000209 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 42 | 38 | 38 | 03 |
| 49 |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 50 | 1, | 687:  | DTE | 687  | 43.356567 | 1.000271 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 42 | 38 | 38 | 03 |
| 51 | 1, | 705:  | DTE | 705  | 43.571260 | 0.204486 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 42 | 38 | 38 | 03 |
| 52 | 1, | 723:  | DTE | 723  | 43.591502 | 0.009775 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 53 | 1, | 741:  | DTE | 741  | 43.823150 | 0.221323 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 54 | 1, | 759:  | DTE | 759  | 43.841319 | 0.007913 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 55 | 1, | 777:  | DTE | 777  | 43.896205 | 0.044573 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 56 | 1, | 795:  | DTE | 795  | 43.922037 | 0.015521 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 57 | 1, | 813:  | DTE | 813  | 43.941511 | 0.009008 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 58 | 1, | 831:  | DTE | 831  | 43.966664 | 0.014737 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 59 |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 60 | 1, | 849:  | DTE | 849  | 46.404717 | 2.427741 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 61 | 1, | 867:  | DTE | 867  | 46.426008 | 0.010881 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 62 | 1, | 885:  | DTE | 885  | 46.653580 | 0.217259 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 63 | 1, | 903:  | DTE | 903  | 46.671500 | 0.007663 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 64 | 1, | 921:  | DTE | 921  | 46.691126 | 0.009215 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 65 | 1, | 939:  | DTE | 939  | 46.720391 | 0.018946 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 66 | 1, | 957:  | DTE | 957  | 46.741595 | 0.010996 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 43 | 38 | 38 | 03 |
| 67 |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 68 | 1, | 975:  | DTE | 975  | 47.752681 | 1.000768 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 43 | 38 | 38 | 03 |
| 69 |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 70 | 1, | 993:  | DTE | 993  | 48.763193 | 1.000200 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 43 | 38 | 38 | 03 |
| 71 | 1, | 1011: | DTE | 1011 | 49.372105 | 0.598659 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 43 | 38 | 38 | 03 |
| 72 | 1, | 1029: | DTE | 1029 | 49.390899 | 0.008329 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 73 | 1, | 1047: | DTE | 1047 | 49.611288 | 0.210129 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 74 | 1, | 1065: | DTE | 1065 | 49.631433 | 0.009737 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 75 | 1, | 1083: | DTE | 1083 | 49.655335 | 0.013485 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 76 | 1, | 1101: | DTE | 1101 | 49.676531 | 0.010769 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 77 | 1, | 1119: | DTE | 1119 | 49.705435 | 0.018540 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 78 | 1, | 1137: | DTE | 1137 | 49.726149 | 0.010346 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 79 |    |       |     |      |           |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 80 | 1, | 1155: | DTE | 1155 | 51.172911 | 1.436129 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 81 | 1, | 1173: | DTE | 1173 | 51.196707 | 0.013490 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 82 | 1, | 1191: | DTE | 1191 | 51.420998 | 0.214191 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 83 | 1, | 1209: | DTE | 1209 | 51.439323 | 0.007968 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 33 | 34 | 30 | 30 | 39 | 03 |
| 84 | 1, | 1227: | DTE | 1227 | 51.459944 | 0.010209 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 30 | 30 | 32 | 31 | 30 | 30 | 34 | 03 |
| 85 | 1, | 1245: | DTE | 1245 | 51.487182 | 0.016981 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 31 | 38 | 38 | 03 |
| 86 | 1, | 1263: | DTE | 1263 | 51.504314 | 0.006667 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 45 | 38 | 38 | 03 |
| 87 | 1, | 1281: | DTE | 1281 | 51.537484 | 0.022809 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 45 | 38 | 38 | 03 |
| 88 | 1, | 1299: | DTE | 1299 | 51.560190 | 0.012498 | 02 | 41 | 44 | 30 | 31 | 3b | 47 | 43 | 37 | 3a | 39 | 30 | 32 | 38 | 44 | 38 |    |    |







```

310 1, 4377: DTE 4377 157.417116 0.209607 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 33 03
311
312 1, 4395: DTE 4395 158.427996 1.000626 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 33 03
313
314 1, 4413: DTE 4413 159.438512 1.000417 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 33 03
315
316 1, 4431: DTE 4431 160.449027 1.000262 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 33 03
317 1, 4449: DTE 4449 161.201041 0.741759 02 41 44 30 31 3b 47 43 37 3a 39 30 32 38 31 38 38 03
318 1, 4467: DTE 4467 161.229940 0.018435 02 41 44 30 31 3b 47 43 37 3a 39 30 33 34 30 30 39 03
319 1, 4485: DTE 4485 161.449022 0.208825 02 41 44 30 31 3b 47 43 37 3a 30 30 32 31 30 30 34 03
320
321 1, 4503: DTE 4503 168.969645 7.510314 02 41 44 30 31 3b 47 43 37 3a 39 30 32 38 31 38 38 03
322 1, 4521: DTE 4521 168.997707 0.017009 02 41 44 30 31 3b 47 43 37 3a 39 30 33 34 30 30 39 03
323 1, 4539: DTE 4539 169.232050 0.224030 02 41 44 30 31 3b 47 43 37 3a 39 30 33 30 30 41 34 03
324
325 1, 4557: DTE 4557 177.683978 8.441571 02 41 44 30 31 3b 47 43 37 3a 39 30 32 38 31 38 38 03
326 1, 4575: DTE 4575 177.701419 0.007246 02 41 44 30 31 3b 47 43 37 3a 39 30 33 34 30 30 39 03
327 1, 4593: DTE 4593 177.931280 0.219365 02 41 44 30 31 3b 47 43 37 3a 39 30 33 30 30 34 30 03
328
329 There were a total of 4610 bytes transferred
330
331 There were a total of 0 DCE bytes transferred
332 The first DCE byte came in at 0.000000 seconds from the start of data collection
333 The last DCE byte was at 0.000000 seconds from the start of data collection
334
335 There were a total of 4610 DTE bytes transferred
336 The first DTE byte came in at 0.000000 seconds from the start of data collection
337 The last DTE byte was at 177.941695 seconds from the start of data collection
338

```

## 1.12.2 v.bl

```

1  $Header: d:/GeneralInformation/1stLooks/RCS/v.bl,v 1.3 2007-06-08 09:32:14-07 Hamilton Exp Hamilton $
2
3  1: DCE      0.000000 02 41 44 5a 5a 3a 52 4f 4e 3a 37 03: ADZZ:RON:7: All call, disable ACKs, Alarms and
Responses
4  2: DCE      0.019631 AD01;GCF:2021364:2022000: ----- Pan stop(v), Tilt stop(v)
5  3: DCE      0.038015 AD01;GC7:2021224: Zoom stop(f) + Focus stop(f)
6  4: DCE      0.058171 AD01;GC7:0021004: Iris Stop
7  5: DCE      0.122689 AD01;GC7:9028100: Zoom Stop,           Motion Stop,           P=0,  T=0
8  6: DCE      0.170078 AD01;GC7:9034008: Focus Speed Med, Near, Stop
9  7: DCE      0.190229 AD01;GC7:0021004: Iris Stop
10 8: DCE      0.209602 AD01;GC7:90300A5: Patrol - Stop
11 9: DCE      0.240639 AD01;GC7:9030041: Auto - Pan Off
12 10: DCE     0.326612 AD01;GC7:9028100: Zoom Stop,           Motion Stop,           P=0,  T=0
13 11: DCE     0.357286 AD01;GC7:9034008: Focus Speed Med, Near, Stop
14 12: DCE     0.389728 AD01;GC7:0021004: Iris Stop
15
16 13: DCE     36.307829 AD01;GC7:9028100: Zoom Stop,           Motion Stop,           P=0,  T=0
17 14: DCE     36.337417 AD01;GC7:9034009: Focus Speed Med, Near, Start
18 15: DCE     36.561644 AD01;GC7:9028100: Zoom Stop,           Motion Stop,           P=0,  T=0
19 16: DCE     36.579199 AD01;GC7:9034009: Focus Speed Med, Near, Start
20 17: DCE     36.599406 AD01;GC7:0021004: Iris Stop
21 18: DCE     36.622839 AD01;GC7:9028108: Zoom Stop,           Motion Stop,           P=0,  T=8
22 19: DCE     36.644607 AD01;GC7:9028108: Zoom Stop,           Motion Up,             P=0,  T=8
23 20: DCE     36.698038 AD01;GC7:9028A08: Zoom Stop,           Motion Up,             P=0,  T=8
24 21: DCE     36.723188 AD01;GC7:9034009: Focus Speed Med, Near, Start
25 22: DCE     36.957109 AD01;GC7:9028108: Zoom Stop,           Motion Stop,           P=0,  T=8
26 23: DCE     36.974970 AD01;GC7:9034009: Focus Speed Med, Near, Start
27 24: DCE     36.994804 AD01;GC7:0021004: Iris Stop
28 25: DCE     37.015174 AD01;GC7:9028108: Zoom Stop,           Motion Stop,           P=0,  T=8
29 26: DCE     37.035274 AD01;GC7:9034009: Focus Speed Med, Near, Start
30 27: DCE     37.057978 AD01;GC7:0021004: Iris Stop
31
32 28: DCE     39.926480 AD01;GC7:9028108: Zoom Stop,           Motion Stop,           P=0,  T=8
33 29: DCE     39.955432 AD01;GC7:9034009: Focus Speed Med, Near, Start
34 30: DCE     40.175660 AD01;GC7:9028108: Zoom Stop,           Motion Stop,           P=0,  T=8
35 31: DCE     40.202409 AD01;GC7:9034009: Focus Speed Med, Near, Start
36 32: DCE     40.226219 AD01;GC7:0021004: Iris Stop
37 33: DCE     40.255645 AD01;GC7:9028108: Zoom Stop,           Motion Stop,           P=0,  T=8
38 34: DCE     40.275587 AD01;GC7:9028A08: Zoom Stop,           Motion Up,             P=0,  T=8
39 35: DCE     40.300585 AD01;GC7:9028A88: Zoom Stop,           Motion Up,             P=8,  T=8
40 36: DCE     40.324641 AD01;GC7:9028B88: Zoom Stop,           Motion Right + Up,    P=8,  T=8
41 37: DCE     41.335527 AD01;GC7:9028B88: Zoom Stop,           Motion Right + Up,    P=8,  T=8
42 38: DCE     42.346041 AD01;GC7:9028B88: Zoom Stop,           Motion Right + Up,    P=8,  T=8
43 39: DCE     43.356567 AD01;GC7:9028B88: Zoom Stop,           Motion Right + Up,    P=8,  T=8
44 40: DCE     43.571260 AD01;GC7:9028B88: Zoom Stop,           Motion Right + Up,    P=8,  T=8
45 41: DCE     43.591502 AD01;GC7:9034009: Focus Speed Med, Near, Start
46 42: DCE     43.823150 AD01;GC7:9028188: Zoom Stop,           Motion Stop,           P=8,  T=8
47 43: DCE     43.841319 AD01;GC7:9034009: Focus Speed Med, Near, Start
48 44: DCE     43.896205 AD01;GC7:0021004: Iris Stop
49 45: DCE     43.922037 AD01;GC7:9028188: Zoom Stop,           Motion Stop,           P=8,  T=8
50 46: DCE     43.941511 AD01;GC7:9034009: Focus Speed Med, Near, Start
51 47: DCE     43.966664 AD01;GC7:0021004: Iris Stop
52
53 48: DCE     46.404717 AD01;GC7:9028188: Zoom Stop,           Motion Stop,           P=8,  T=8
54 49: DCE     46.426008 AD01;GC7:9034009: Focus Speed Med, Near, Start
55 50: DCE     46.653580 AD01;GC7:9028188: Zoom Stop,           Motion Stop,           P=8,  T=8
56 51: DCE     46.671500 AD01;GC7:9034009: Focus Speed Med, Near, Start
57 52: DCE     46.691126 AD01;GC7:0021004: Iris Stop
58 53: DCE     46.720391 AD01;GC7:9028188: Zoom Stop,           Motion Stop,           P=8,  T=8
59 54: DCE     46.741595 AD01;GC7:9028C88: Zoom Stop,           Motion Right,         P=8,  T=8
60 55: DCE     47.752681 AD01;GC7:9028C88: Zoom Stop,           Motion Right,         P=8,  T=8
61 56: DCE     48.763193 AD01;GC7:9028C88: Zoom Stop,           Motion Right,         P=8,  T=8
62 57: DCE     49.372105 AD01;GC7:9028C88: Zoom Stop,           Motion Right,         P=8,  T=8
63 58: DCE     49.390899 AD01;GC7:9034009: Focus Speed Med, Near, Start
64 59: DCE     49.611288 AD01;GC7:9028188: Zoom Stop,           Motion Stop,           P=8,  T=8
65 60: DCE     49.631433 AD01;GC7:9034009: Focus Speed Med, Near, Start
66 61: DCE     49.655335 AD01;GC7:0021004: Iris Stop
67 62: DCE     49.676531 AD01;GC7:9028188: Zoom Stop,           Motion Stop,           P=8,  T=8

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|     |          |           |  |                      |          |
|-----|----------|-----------|--|----------------------|----------|
| 68  | 63: DCE  | 49.705435 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 69  | 64: DCE  | 49.726149 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 70  |          |           |  |                      |          |
| 71  | 65: DCE  | 51.172911 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 72  | 66: DCE  | 51.196707 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 73  | 67: DCE  | 51.420998 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 74  | 68: DCE  | 51.439323 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 75  | 69: DCE  | 51.459944 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 76  | 70: DCE  | 51.487182 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 77  | 71: DCE  | 51.504314 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 78  | 72: DCE  | 51.537484 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 79  | 73: DCE  | 51.560190 | AD01;GC7:9028D88: Zoom Stop,                   | Motion Right + Down, | P=8, T=8 |
| 80  | 74: DCE  | 52.571071 | AD01;GC7:9028D88: Zoom Stop,                   | Motion Right + Down, | P=8, T=8 |
| 81  | 75: DCE  | 53.581459 | AD01;GC7:9028D88: Zoom Stop,                   | Motion Right + Down, | P=8, T=8 |
| 82  | 76: DCE  | 54.592050 | AD01;GC7:9028D88: Zoom Stop,                   | Motion Right + Down, | P=8, T=8 |
| 83  | 77: DCE  | 54.647354 | AD01;GC7:9028D88: Zoom Stop,                   | Motion Right + Down, | P=8, T=8 |
| 84  | 78: DCE  | 54.669798 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 85  | 79: DCE  | 54.897471 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 86  | 80: DCE  | 54.921474 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 87  | 81: DCE  | 54.940167 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 88  | 82: DCE  | 54.961051 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 89  | 83: DCE  | 54.986620 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 90  | 84: DCE  | 55.005054 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 91  |          |           |  |                      |          |
| 92  | 85: DCE  | 57.732436 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 93  | 86: DCE  | 57.756957 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 94  | 87: DCE  | 57.975886 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 95  | 88: DCE  | 58.000302 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 96  | 89: DCE  | 58.022118 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 97  | 90: DCE  | 58.040714 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 98  | 91: DCE  | 58.071441 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 99  | 92: DCE  | 59.082270 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 100 | 93: DCE  | 60.092735 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 101 | 94: DCE  | 61.103250 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 102 | 95: DCE  | 61.559063 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 103 | 96: DCE  | 61.585774 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 104 | 97: DCE  | 61.807096 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 105 | 98: DCE  | 61.826464 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 106 | 99: DCE  | 61.855311 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 107 | 100: DCE | 61.881037 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 108 | 101: DCE | 61.901919 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 109 | 102: DCE | 61.924990 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 110 |          |           |  |                      |          |
| 111 | 103: DCE | 64.136360 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 112 | 104: DCE | 64.159949 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 113 | 105: DCE | 64.382101 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 114 | 106: DCE | 64.401052 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 115 | 107: DCE | 64.422404 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 116 | 108: DCE | 64.441315 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 117 | 109: DCE | 64.461720 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 118 | 110: DCE | 64.488331 | AD01;GC7:9028E88: Zoom Stop,                   | Motion Down,         | P=8, T=8 |
| 119 | 111: DCE | 64.506349 | AD01;GC7:9028F88: Zoom Stop,                   | Motion Left + Down,  | P=8, T=8 |
| 120 | 112: DCE | 65.517440 | AD01;GC7:9028F88: Zoom Stop,                   | Motion Left + Down,  | P=8, T=8 |
| 121 | 113: DCE | 66.527905 | AD01;GC7:9028F88: Zoom Stop,                   | Motion Left + Down,  | P=8, T=8 |
| 122 | 114: DCE | 67.538419 | AD01;GC7:9028F88: Zoom Stop,                   | Motion Left + Down,  | P=8, T=8 |
| 123 | 115: DCE | 68.333396 | AD01;GC7:9028F88: Zoom Stop,                   | Motion Left + Down,  | P=8, T=8 |
| 124 | 116: DCE | 68.357399 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 125 | 117: DCE | 68.590747 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 126 | 118: DCE | 68.607881 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 127 | 119: DCE | 68.627877 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 128 | 120: DCE | 68.656465 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 129 | 121: DCE | 68.694687 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 130 | 122: DCE | 68.713590 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 131 |          |           |  |                      |          |
| 132 | 123: DCE | 70.962297 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 133 | 124: DCE | 70.981875 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 134 | 125: DCE | 71.202519 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 135 | 126: DCE | 71.225063 | AD01;GC7:9034009: Focus Speed Med, Near, Start |                      |          |
| 136 | 127: DCE | 71.242455 | AD01;GC7:0021004: Iris Stop                    |                      |          |
| 137 | 128: DCE | 71.267662 | AD01;GC7:9028188: Zoom Stop,                   | Motion Stop,         | P=8, T=8 |
| 138 | 129: DCE | 71.289897 | AD01;GC7:9028888: Zoom Stop,                   | Motion Left,         | P=8, T=8 |
| 139 | 130: DCE | 72.300731 | AD01;GC7:9028888: Zoom Stop,                   | Motion Left,         | P=8, T=8 |

|     |          |            |                                    |                      |          |
|-----|----------|------------|------------------------------------|----------------------|----------|
| 140 | 131: DCE | 73.311245  | AD01;GC7:9028888: Zoom Stop,       | Motion Left,         | P=8, T=8 |
| 141 | 132: DCE | 74.321763  | AD01;GC7:9028888: Zoom Stop,       | Motion Left,         | P=8, T=8 |
| 142 | 133: DCE | 74.493763  | AD01;GC7:9028888: Zoom Stop,       | Motion Left,         | P=8, T=8 |
| 143 | 134: DCE | 74.523664  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 144 | 135: DCE | 74.743568  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 145 | 136: DCE | 74.763238  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 146 | 137: DCE | 74.790328  | AD01;GC7:0021004: Iris Stop        |                      |          |
| 147 | 138: DCE | 74.808555  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 148 | 139: DCE | 74.828499  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 149 | 140: DCE | 74.856515  | AD01;GC7:0021004: Iris Stop        |                      |          |
| 150 |          |            |                                    |                      |          |
| 151 | 141: DCE | 77.290764  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 152 | 142: DCE | 77.323615  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 153 | 143: DCE | 77.543068  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 154 | 144: DCE | 77.563739  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 155 | 145: DCE | 77.583214  | AD01;GC7:0021004: Iris Stop        |                      |          |
| 156 | 146: DCE | 77.603160  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 157 | 147: DCE | 77.627221  | AD01;GC7:9028A88: Zoom Stop,       | Motion Up,           | P=8, T=8 |
| 158 | 148: DCE | 77.657162  | AD01;GC7:9028A88: Zoom Stop,       | Motion Up,           | P=8, T=8 |
| 159 | 149: DCE | 77.689866  | AD01;GC7:9028988: Zoom Stop,       | Motion Left + Up,    | P=8, T=8 |
| 160 | 150: DCE | 78.700903  | AD01;GC7:9028988: Zoom Stop,       | Motion Left + Up,    | P=8, T=8 |
| 161 | 151: DCE | 79.711366  | AD01;GC7:9028988: Zoom Stop,       | Motion Left + Up,    | P=8, T=8 |
| 162 | 152: DCE | 80.721882  | AD01;GC7:9028988: Zoom Stop,       | Motion Left + Up,    | P=8, T=8 |
| 163 | 153: DCE | 80.754685  | AD01;GC7:9028988: Zoom Stop,       | Motion Left + Up,    | P=8, T=8 |
| 164 | 154: DCE | 80.773432  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 165 | 155: DCE | 80.993872  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 166 | 156: DCE | 81.024487  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 167 | 157: DCE | 81.043753  | AD01;GC7:0021004: Iris Stop        |                      |          |
| 168 | 158: DCE | 81.064108  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 169 | 159: DCE | 81.083798  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 170 | 160: DCE | 81.103901  | AD01;GC7:0021004: Iris Stop        |                      |          |
| 171 |          |            |                                    |                      |          |
| 172 | 161: DCE | 83.067966  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 173 | 162: DCE | 83.087280  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 174 | 163: DCE | 83.307770  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 175 | 164: DCE | 83.327712  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 176 | 165: DCE | 83.357968  | AD01;GC7:0021004: Iris Stop        |                      |          |
| 177 | 166: DCE | 83.378644  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 178 | 167: DCE | 83.397858  | AD01;GC7:9028A88: Zoom Stop,       | Motion Up,           | P=8, T=8 |
| 179 | 168: DCE | 84.408688  | AD01;GC7:9028A88: Zoom Stop,       | Motion Up,           | P=8, T=8 |
| 180 | 169: DCE | 85.419206  | AD01;GC7:9028A88: Zoom Stop,       | Motion Up,           | P=8, T=8 |
| 181 | 170: DCE | 86.429667  | AD01;GC7:9028A88: Zoom Stop,       | Motion Up,           | P=8, T=8 |
| 182 | 171: DCE | 87.441174  | AD01;GC7:9028A88: Zoom Stop,       | Motion Up,           | P=8, T=8 |
| 183 | 172: DCE | 88.266769  | AD01;GC7:9028A88: Zoom Stop,       | Motion Up,           | P=8, T=8 |
| 184 | 173: DCE | 88.286085  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 185 | 174: DCE | 88.506312  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 186 | 175: DCE | 88.526259  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 187 | 176: DCE | 88.557085  | AD01;GC7:0021004: Iris Stop        |                      |          |
| 188 | 177: DCE | 88.576561  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 189 | 178: DCE | 88.596455  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 190 | 179: DCE | 88.616448  | AD01;GC7:0021004: Iris Stop        |                      |          |
| 191 |          |            |                                    |                      |          |
| 192 | 180: DCE | 90.869688  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 193 | 181: DCE | 90.892231  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 194 | 182: DCE | 91.119488  | AD01;GC7:9021188: Zoom Tele,       | Medium, Motion Stop, | P=8, T=8 |
| 195 | 183: DCE | 92.130475  | AD01;GC7:9021188: Zoom Tele,       | Medium, Motion Stop, | P=8, T=8 |
| 196 | 184: DCE | 93.140988  | AD01;GC7:9021188: Zoom Tele,       | Medium, Motion Stop, | P=8, T=8 |
| 197 | 185: DCE | 94.009916  | AD01;GC7:9021188: Zoom Tele,       | Medium, Motion Stop, | P=8, T=8 |
| 198 | 186: DCE | 94.030792  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 199 | 187: DCE | 94.256908  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 200 |          |            |                                    |                      |          |
| 201 | 188: DCE | 97.905999  | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 202 | 189: DCE | 97.927044  | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 203 | 190: DCE | 98.157687  | AD01;GC7:9025188: Zoom Wide,       | Medium, Motion Stop, | P=8, T=8 |
| 204 | 191: DCE | 99.168933  | AD01;GC7:9025188: Zoom Wide,       | Medium, Motion Stop, | P=8, T=8 |
| 205 | 192: DCE | 100.179447 | AD01;GC7:9025188: Zoom Wide,       | Medium, Motion Stop, | P=8, T=8 |
| 206 | 193: DCE | 101.189921 | AD01;GC7:9025188: Zoom Wide,       | Medium, Motion Stop, | P=8, T=8 |
| 207 | 194: DCE | 102.200425 | AD01;GC7:9025188: Zoom Wide,       | Medium, Motion Stop, | P=8, T=8 |
| 208 | 195: DCE | 102.370242 | AD01;GC7:9025188: Zoom Wide,       | Medium, Motion Stop, | P=8, T=8 |
| 209 | 196: DCE | 102.390339 | AD01;GC7:9034009: Focus Speed Med, | Near, Start          |          |
| 210 | 197: DCE | 102.610830 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop,         | P=8, T=8 |
| 211 |          |            |                                    |                      |          |

|     |          |            |                                    |              |          |
|-----|----------|------------|------------------------------------|--------------|----------|
| 212 | 198: DCE | 105.463446 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 213 | 199: DCE | 105.484843 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 214 | 200: DCE | 105.705544 | AD01;GC7:2021160: AUX 1 On         |              |          |
| 215 |          |            |                                    |              |          |
| 216 | 201: DCE | 108.874254 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 217 | 202: DCE | 108.897007 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 218 | 203: DCE | 109.116246 | AD01;GC7:2021161: AUX 1 Off        |              |          |
| 219 | 204: DCE | 115.427686 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 220 | 205: DCE | 115.458299 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 221 |          |            |                                    |              |          |
| 222 | 206: DCE | 119.026268 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 223 | 207: DCE | 119.061580 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 224 | 208: DCE | 119.290298 | AD01;GC7:9034001: Focus Speed Min, | Near, Start  |          |
| 225 | 209: DCE | 120.301282 | AD01;GC7:9034001: Focus Speed Min, | Near, Start  |          |
| 226 | 210: DCE | 121.312788 | AD01;GC7:9034001: Focus Speed Min, | Near, Start  |          |
| 227 | 211: DCE | 122.323352 | AD01;GC7:9034001: Focus Speed Min, | Near, Start  |          |
| 228 | 212: DCE | 122.728965 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 229 | 213: DCE | 122.760260 | AD01;GC7:9034001: Focus Speed Min, | Near, Start  |          |
| 230 | 214: DCE | 122.979342 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 231 |          |            |                                    |              |          |
| 232 | 215: DCE | 126.793784 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 233 | 216: DCE | 126.825024 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 234 | 217: DCE | 127.046141 | AD01;GC7:9034005: Focus Speed Low, | Near, Start  |          |
| 235 | 218: DCE | 128.057124 | AD01;GC7:9034005: Focus Speed Low, | Near, Start  |          |
| 236 | 219: DCE | 129.067694 | AD01;GC7:9034005: Focus Speed Low, | Near, Start  |          |
| 237 | 220: DCE | 130.078104 | AD01;GC7:9034005: Focus Speed Low, | Near, Start  |          |
| 238 | 221: DCE | 131.088618 | AD01;GC7:9034005: Focus Speed Low, | Near, Start  |          |
| 239 | 222: DCE | 131.205424 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 240 | 223: DCE | 131.226615 | AD01;GC7:9034005: Focus Speed Low, | Near, Start  |          |
| 241 | 224: DCE | 131.460433 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 242 |          |            |                                    |              |          |
| 243 | 225: DCE | 134.802606 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 244 | 226: DCE | 134.825203 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 245 | 227: DCE | 135.044705 | AD01;GC7:2021162: AUX 2 On         |              |          |
| 246 | 228: DCE | 139.029328 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 247 | 229: DCE | 139.052758 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 248 | 230: DCE | 139.271579 | AD01;GC7:2021163: AUX 2 Off        |              |          |
| 249 |          |            |                                    |              |          |
| 250 | 231: DCE | 147.365130 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 251 | 232: DCE | 147.387881 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 252 | 233: DCE | 147.605560 | AD01;GC7:9030040: Auto - Pan On    |              |          |
| 253 | 234: DCE | 150.576491 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 254 | 235: DCE | 150.596118 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 255 | 236: DCE | 150.831921 | AD01;GC7:0021002: Iris Open        |              |          |
| 256 | 237: DCE | 151.842680 | AD01;GC7:0021002: Iris Open        |              |          |
| 257 | 238: DCE | 152.853264 | AD01;GC7:0021002: Iris Open        |              |          |
| 258 | 239: DCE | 153.766138 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 259 | 240: DCE | 153.796284 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 260 | 241: DCE | 154.016407 | AD01;GC7:0021004: Iris Stop        |              |          |
| 261 |          |            |                                    |              |          |
| 262 | 242: DCE | 157.177052 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 263 | 243: DCE | 157.197043 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 264 | 244: DCE | 157.417116 | AD01;GC7:0021003: Iris Close       |              |          |
| 265 | 245: DCE | 158.427996 | AD01;GC7:0021003: Iris Close       |              |          |
| 266 | 246: DCE | 159.438512 | AD01;GC7:0021003: Iris Close       |              |          |
| 267 | 247: DCE | 160.449027 | AD01;GC7:0021003: Iris Close       |              |          |
| 268 | 248: DCE | 161.201041 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 269 | 249: DCE | 161.229940 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 270 | 250: DCE | 161.449022 | AD01;GC7:0021004: Iris Stop        |              |          |
| 271 |          |            |                                    |              |          |
| 272 | 251: DCE | 168.969645 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 273 | 252: DCE | 168.997707 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 274 | 253: DCE | 169.232050 | AD01;GC7:9030044: Patrol - Play    |              |          |
| 275 |          |            |                                    |              |          |
| 276 | 254: DCE | 177.683978 | AD01;GC7:9028188: Zoom Stop,       | Motion Stop, | P=8, T=8 |
| 277 | 255: DCE | 177.701419 | AD01;GC7:9034009: Focus Speed Med, | Near, Start  |          |
| 278 | 256: DCE | 177.931280 | AD01;GC7:9030040: Auto - Pan On    |              |          |

## 1.13 Pelco-P

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 4800
2. Parity: None
3. Hello Message Length: 32
4. Hello Message last few bytes: 0x00 0xAF 0x0F
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07A.txt and 29MAY07AA.txt
7. Protocol Characteristics:
  - 7.1 Message Length: 8 bytes.
  - 7.2 ISO Level 1: RS-422.
  - 7.3 Unique first byte: 0xA0
  - 7.4 Unique last byte: 0xAF
  - 7.5 Checksum: XOR of full message.
  - 7.6 Device address: Byte 2
8. Other: This data capture was the reason that the serial protocol outputs of the Sprite 2 were captured. In the P Protocol commands being sent note the following:
  - 8.1 In the Hello message the following commands are sent:
    - 8.1.1. Stop motion
    - 8.1.2. Pattern Stop
    - 8.1.3. Scan Stop (Preset 96)
  - 8.2 Then before each motion command the following commands are sent:
    - 8.2.1. Set Zoom Speed to 1
    - 8.2.2. Set Focus Speed to 1
    - 8.2.3. Stop motion, twice
    - 8.2.4. The actual motion command always has both pan and tilt speeds set, even when motion is only happening on one axis.

---

<sup>15</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Pelco-P.inc,v 1.1 2007-06-05 08:30:19-07 Hamilton Exp  
Hamilton \$

## 1.13.1 a.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/A.out,v 1.2 2007-05-31 08:02:22-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 7:21:07 AM)
4 Event 1 (5/29/2007 7:19:24.793614 AM) through
5 Event 1,192 (5/29/2007 7:20:27.593772 AM)
6
7
8 1, 1: DTE 1 0.000000 0.000000 a0 00 00 25 00 01 af 2b
9 1, 9: DTE 9 0.031246 0.016459 a0 00 00 27 00 01 af 29
10 1, 17: DTE 17 0.250585 0.204768 a0 00 00 00 31 31 af 0f
11 1, 25: DTE 25 0.276623 0.011251 a0 00 00 00 31 31 af 0f
12 1, 33: DTE 33 0.295568 0.004167 a0 00 00 08 31 31 af 07
13 1, 41: DTE 41 0.316195 0.006044 a0 00 00 25 00 01 af 2b
14 1, 49: DTE 49 0.335569 0.004574 a0 00 00 27 00 01 af 29
15 1, 57: DTE 57 0.563865 0.213712 a0 00 00 00 31 31 af 0f
16 1, 65: DTE 65 0.598031 0.019377 a0 00 00 00 31 31 af 0f
17
18 1, 73: DTE 73 2.276094 1.663453 a0 00 00 25 00 01 af 2b
19 1, 81: DTE 81 2.293798 0.002918 a0 00 00 27 00 01 af 29
20 1, 89: DTE 89 2.534188 0.225600 a0 00 00 00 31 31 af 0f
21 1, 97: DTE 97 2.563965 0.014999 a0 00 00 00 31 31 af 0f
22 1, 105: DTE 105 2.584161 0.005417 a0 00 00 08 31 31 af 07
23 1, 113: DTE 113 2.609786 0.010833 a0 00 00 08 31 31 af 07
24 1, 121: DTE 121 2.629787 0.005314 a0 00 00 0a 31 31 af 05
25 1, 129: DTE 129 2.649983 0.005482 a0 00 00 25 00 01 af 2b
26 1, 137: DTE 137 2.674148 0.009363 a0 00 00 27 00 01 af 29
27 1, 145: DTE 145 2.897030 0.208156 a0 00 00 00 31 31 af 0f
28 1, 153: DTE 153 2.915985 0.004168 a0 00 00 00 31 31 af 0f
29 1, 161: DTE 161 3.791470 0.860695 a0 00 00 25 00 01 af 2b
30 1, 169: DTE 169 3.814174 0.008003 a0 00 00 27 00 01 af 29
31 1, 177: DTE 177 4.036507 0.207750 a0 00 00 00 31 31 af 0f
32 1, 185: DTE 185 4.063510 0.012084 a0 00 00 00 31 31 af 0f
33 1, 193: DTE 193 4.082468 0.004166 a0 00 00 02 31 31 af 0d
34 1, 201: DTE 201 4.102885 0.005624 a0 00 00 25 00 01 af 2b
35 1, 209: DTE 209 4.121621 0.003955 a0 00 00 27 00 01 af 29
36 1, 217: DTE 217 4.342225 0.205810 a0 00 00 00 31 31 af 0f
37 1, 225: DTE 225 4.363873 0.006847 a0 00 00 00 31 31 af 0f
38 1, 233: DTE 233 5.248132 0.869465 a0 00 00 25 00 01 af 2b
39 1, 241: DTE 241 5.269566 0.006669 a0 00 00 27 00 01 af 29
40 1, 249: DTE 249 5.489750 0.205395 a0 00 00 00 31 31 af 0f
41 1, 257: DTE 257 5.509150 0.004792 a0 00 00 00 31 31 af 0f
42 1, 265: DTE 265 5.529734 0.005625 a0 00 00 10 31 31 af 1f
43 1, 273: DTE 273 5.550150 0.005626 a0 00 00 10 31 31 af 1f
44 1, 281: DTE 281 5.572650 0.007708 a0 00 00 12 31 31 af 1d
45 1, 289: DTE 289 5.598261 0.010833 a0 00 00 25 00 01 af 2b
46 1, 297: DTE 297 5.629723 0.016668 a0 00 00 27 00 01 af 29
47 1, 305: DTE 305 5.862808 0.218294 a0 00 00 00 31 31 af 0f
48 1, 313: DTE 313 5.896348 0.018750 a0 00 00 00 31 31 af 0f
49 1, 321: DTE 321 6.747876 0.836958 a0 00 00 25 00 01 af 2b
50 1, 329: DTE 329 6.765997 0.003334 a0 00 00 27 00 01 af 29
51 1, 337: DTE 337 6.991796 0.211005 a0 00 00 00 31 31 af 0f
52 1, 345: DTE 345 7.014081 0.007708 a0 00 00 00 31 31 af 0f
53 1, 353: DTE 353 7.033040 0.004166 a0 00 00 10 31 31 af 1f
54 1, 361: DTE 361 7.066986 0.019155 a0 00 00 25 00 01 af 2b
55 1, 369: DTE 369 7.096986 0.015209 a0 00 00 27 00 01 af 29
56 1, 377: DTE 377 7.321232 0.209454 a0 00 00 00 31 31 af 0f
57 1, 385: DTE 385 7.342146 0.006033 a0 00 00 00 31 31 af 0f
58
59 1, 393: DTE 393 9.301429 1.944483 a0 00 00 25 00 01 af 2b
60 1, 401: DTE 401 9.322884 0.006667 a0 00 00 27 00 01 af 29
61 1, 409: DTE 409 9.540764 0.203311 a0 00 00 00 31 31 af 0f
62 1, 417: DTE 417 9.564093 0.008541 a0 00 00 00 31 31 af 0f
63 1, 425: DTE 425 9.586998 0.008331 a0 00 00 10 31 31 af 1f
64 1, 433: DTE 433 9.606165 0.004584 a0 00 00 10 31 31 af 1f
65 1, 441: DTE 441 9.630123 0.009168 a0 00 00 14 31 31 af 1b
66 1, 449: DTE 449 9.655748 0.011180 a0 00 00 25 00 01 af 2b
67 1, 457: DTE 457 9.676361 0.005834 a0 00 00 27 00 01 af 29
68 1, 465: DTE 465 9.897586 0.206435 a0 00 00 00 31 31 af 0f

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|     |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
|-----|----|------|-----|-----|-----------|-----------|----|----|----|----|----|----|----|----|
| 69  | 1, | 473: | DTE | 473 | 9.916528  | 0.004167  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 70  |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 71  | 1, | 481: | DTE | 481 | 11.315270 | 1.383949  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 72  | 1, | 489: | DTE | 489 | 11.333600 | 0.003542  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 73  | 1, | 497: | DTE | 497 | 11.563563 | 0.215172  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 74  | 1, | 505: | DTE | 505 | 11.584393 | 0.006041  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 75  | 1, | 513: | DTE | 513 | 11.604394 | 0.005000  | a0 | 00 | 00 | 04 | 31 | 31 | af | 0b |
| 76  | 1, | 521: | DTE | 521 | 11.632093 | 0.012922  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 77  | 1, | 529: | DTE | 529 | 11.650006 | 0.003335  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 78  | 1, | 537: | DTE | 537 | 11.877470 | 0.212881  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 79  | 1, | 545: | DTE | 545 | 11.897684 | 0.005427  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 80  |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 81  | 1, | 553: | DTE | 553 | 13.568669 | 1.656204  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 82  | 1, | 561: | DTE | 561 | 13.587609 | 0.004167  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 83  | 1, | 569: | DTE | 569 | 13.809252 | 0.206228  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 84  | 1, | 577: | DTE | 577 | 13.828194 | 0.004167  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 85  | 1, | 585: | DTE | 585 | 13.847986 | 0.005209  | a0 | 00 | 00 | 08 | 31 | 31 | af | 07 |
| 86  | 1, | 593: | DTE | 593 | 13.868611 | 0.006042  | a0 | 00 | 00 | 08 | 31 | 31 | af | 07 |
| 87  | 1, | 601: | DTE | 601 | 13.897361 | 0.013958  | a0 | 00 | 00 | 0c | 31 | 31 | af | 03 |
| 88  | 1, | 609: | DTE | 609 | 13.930690 | 0.018551  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 89  | 1, | 617: | DTE | 617 | 13.948388 | 0.002915  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 90  | 1, | 625: | DTE | 625 | 14.168980 | 0.205800  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 91  | 1, | 633: | DTE | 633 | 14.197726 | 0.013960  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 92  |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 93  | 1, | 641: | DTE | 641 | 15.236316 | 1.023799  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 94  | 1, | 649: | DTE | 649 | 15.263180 | 0.012082  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 95  | 1, | 657: | DTE | 657 | 15.486062 | 0.208090  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 96  | 1, | 665: | DTE | 665 | 15.544799 | 0.043950  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 97  | 1, | 673: | DTE | 673 | 15.566045 | 0.006666  | a0 | 00 | 00 | 08 | 31 | 31 | af | 07 |
| 98  | 1, | 681: | DTE | 681 | 15.597296 | 0.016668  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 99  | 1, | 689: | DTE | 689 | 15.617074 | 0.004988  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 100 | 1, | 697: | DTE | 697 | 15.846427 | 0.214770  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 101 | 1, | 705: | DTE | 705 | 15.866410 | 0.005208  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 102 |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 103 | 1, | 713: | DTE | 713 | 25.944809 | 10.063606 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 104 | 1, | 721: | DTE | 721 | 25.963555 | 0.003959  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 105 | 1, | 729: | DTE | 729 | 26.183935 | 0.205602  | a0 | 00 | 00 | 20 | 31 | 31 | af | 2f |
| 106 | 1, | 737: | DTE | 737 | 26.215377 | 0.016653  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 107 | 1, | 745: | DTE | 745 | 26.233711 | 0.003542  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 108 | 1, | 753: | DTE | 753 | 26.464092 | 0.215646  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 109 |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 110 | 1, | 761: | DTE | 761 | 28.072804 | 1.593506  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 111 | 1, | 769: | DTE | 769 | 28.098412 | 0.010821  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 112 | 1, | 777: | DTE | 777 | 28.317347 | 0.204144  | a0 | 00 | 00 | 40 | 31 | 31 | af | 4f |
| 113 | 1, | 785: | DTE | 785 | 28.348579 | 0.016652  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 114 | 1, | 793: | DTE | 793 | 28.367331 | 0.003959  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 115 | 1, | 801: | DTE | 801 | 28.607712 | 0.225173  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 116 |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 117 | 1, | 809: | DTE | 809 | 30.636970 | 2.014471  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 118 | 1, | 817: | DTE | 817 | 30.665090 | 0.013333  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 119 | 1, | 825: | DTE | 825 | 30.895470 | 0.215588  | a0 | 00 | 00 | 09 | 00 | 02 | af | 04 |
| 120 | 1, | 833: | DTE | 833 | 30.916925 | 0.006874  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 121 | 1, | 841: | DTE | 841 | 30.936718 | 0.005000  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 122 | 1, | 849: | DTE | 849 | 31.165016 | 0.213517  | a0 | 00 | 00 | 0b | 00 | 02 | af | 06 |
| 123 |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 124 | 1, | 857: | DTE | 857 | 34.210562 | 3.030758  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 125 | 1, | 865: | DTE | 865 | 34.233266 | 0.007917  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 126 | 1, | 873: | DTE | 873 | 34.452619 | 0.204562  | a0 | 00 | 00 | 0b | 00 | 03 | af | 07 |
| 127 |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 128 | 1, | 881: | DTE | 881 | 42.378216 | 7.910823  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 129 | 1, | 889: | DTE | 889 | 42.396753 | 0.003958  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 130 | 1, | 897: | DTE | 897 | 42.617343 | 0.205656  | a0 | 00 | 02 | 00 | 31 | 31 | af | 0d |
| 131 | 1, | 905: | DTE | 905 | 42.637547 | 0.005616  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 132 | 1, | 913: | DTE | 913 | 42.665464 | 0.013292  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 133 | 1, | 921: | DTE | 921 | 42.893554 | 0.213298  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 134 |    |      |     |     |           |           |    |    |    |    |    |    |    |    |
| 135 | 1, | 929: | DTE | 929 | 44.669308 | 1.760968  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 136 | 1, | 937: | DTE | 937 | 44.699722 | 0.015834  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 137 | 1, | 945: | DTE | 945 | 44.932811 | 0.218298  | a0 | 00 | 01 | 00 | 31 | 31 | af | 0e |
| 138 | 1, | 953: | DTE | 953 | 44.965361 | 0.017555  | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 139 | 1, | 961: | DTE | 961 | 44.985085 | 0.005000  | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 140 | 1, | 969: | DTE | 969 | 45.232758 | 0.232882  | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |

```

141
142 1, 977: DTE 977 47.098916 1.851371 a0 00 00 25 00 01 af 2b
143 1, 985: DTE 985 47.118721 0.005016 a0 00 00 27 00 01 af 29
144 1, 993: DTE 993 47.339710 0.206214 a0 00 00 09 00 01 af 07
145 1, 1001: DTE 1001 47.360124 0.005625 a0 00 00 25 00 01 af 2b
146 1, 1009: DTE 1009 47.379916 0.005001 a0 00 00 27 00 01 af 29
147 1, 1017: DTE 1017 47.599882 0.205176 a0 00 00 0b 00 01 af 05
148
149 1, 1025: DTE 1025 49.065063 1.450396 a0 00 00 25 00 01 af 2b
150 1, 1033: DTE 1033 49.100685 0.020836 a0 00 00 27 00 01 af 29
151 1, 1041: DTE 1041 49.331939 0.216463 a0 00 00 07 00 60 af 68
152
153 1, 1049: DTE 1049 55.873563 6.526669 a0 00 00 25 00 01 af 2b
154 1, 1057: DTE 1057 55.893350 0.005209 a0 00 00 27 00 01 af 29
155 1, 1065: DTE 1065 56.114566 0.205814 a0 00 04 00 31 31 af 0b
156 1, 1073: DTE 1073 56.134145 0.004793 a0 00 00 25 00 01 af 2b
157 1, 1081: DTE 1081 56.153923 0.005000 a0 00 00 27 00 01 af 29
158 1, 1089: DTE 1089 56.374318 0.205812 a0 00 00 00 31 31 af 0f
159
160 1, 1097: DTE 1097 57.970932 1.581840 a0 00 00 25 00 01 af 2b
161 1, 1105: DTE 1105 58.001970 0.016252 a0 00 00 27 00 01 af 29
162 1, 1113: DTE 1113 58.235269 0.218509 a0 00 08 00 31 31 af 07
163 1, 1121: DTE 1121 58.252764 0.002709 a0 00 00 25 00 01 af 2b
164 1, 1129: DTE 1129 58.273168 0.005834 a0 00 00 27 00 01 af 29
165 1, 1137: DTE 1137 58.500231 0.212272 a0 00 00 00 31 31 af 0f
166
167 1, 1145: DTE 1145 60.468652 1.953807 a0 00 00 25 00 01 af 2b
168 1, 1153: DTE 1153 60.486356 0.002913 a0 00 00 27 00 01 af 29
169 1, 1161: DTE 1161 60.707794 0.206645 a0 00 00 21 00 00 af 2e
170
171 1, 1169: DTE 1169 62.547284 1.824716 a0 00 00 25 00 01 af 2b
172 1, 1177: DTE 1177 62.564620 0.002547 a0 00 00 27 00 01 af 29
173 1, 1185: DTE 1185 62.785370 0.206006 a0 00 00 07 00 60 af 68
174
175 There were a total of 1192 bytes transferred
176
177 There were a total of 0 DCE bytes transferred
178 The first DCE byte came in at 0.000000 seconds from the start of data collection
179 The last DCE byte was at 0.000000 seconds from the start of data collection
180
181 There were a total of 1192 DTE bytes transferred
182 The first DTE byte came in at 0.000000 seconds from the start of data collection
183 The last DTE byte was at 62.800158 seconds from the start of data collection
184

```

## 1.13.2 aa.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/AA.out,v 1.3 2007-05-31 08:02:22-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 8:37:08 AM)
4 Event 1 (5/29/2007 8:29:41.716618 AM) through
5 Event 1,548 (5/29/2007 8:36:44.528155 AM)
6
7 Hello
8 1,      1: DTE      5 248.296950 0.000000 a0 00 00 00 00 af 0f
9      1,      9: DTE     13 248.318962 0.007017 a0 00 00 21 00 af 2e
10     1,     17: DTE     21 248.343185 0.009378 a0 00 00 07 00 af 68
11     1,     25: DTE     29 248.415674 0.057492 a0 00 00 00 00 af 0f
12 Up
13     1,     33: DTE     37 290.508328 42.078075 a0 00 00 25 00 af 2b
14     1,     41: DTE     45 290.543938 0.021045 a0 00 00 27 00 af 29
15     1,     49: DTE     53 290.775776 0.217049 a0 00 00 00 00 af 0f
16     1,     57: DTE     61 290.808688 0.018292 a0 00 00 00 31 af 3e
17     1,     65: DTE     69 290.830096 0.006617 a0 00 00 08 00 af 36
18     1,     73: DTE     77 291.646895 0.801972 a0 00 00 08 00 af 36
19     1,     81: DTE     85 292.463223 0.801929 a0 00 00 08 00 af 36
20     1,     89: DTE     93 293.157272 0.679484 a0 00 00 25 00 af 2b
21     1,     97: DTE    101 293.180185 0.008126 a0 00 00 27 00 af 29
22     1,    105: DTE    109 293.407649 0.212673 a0 00 00 00 31 af 3e
23     1,    113: DTE    117 293.429777 0.007549 a0 00 00 00 31 af 3e
24 Up-Right
25     1,    121: DTE    125 295.849966 2.405445 a0 00 00 25 00 af 2b
26     1,    129: DTE    133 295.875795 0.011249 a0 00 00 27 00 af 29
27     1,    137: DTE    141 296.098886 0.208508 a0 00 00 00 31 af 3e
28     1,    145: DTE    149 296.119133 0.005461 a0 00 00 00 31 af 3e
29     1,    153: DTE    157 296.142840 0.008542 a0 00 00 08 00 af 36
30     1,    161: DTE    165 296.170743 0.013114 a0 00 00 08 31 af 07
31     1,    169: DTE    173 296.189911 0.004376 a0 00 00 0a 31 af 05
32     1,    177: DTE    181 297.006450 0.801748 a0 00 00 0a 31 af 05
33     1,    185: DTE    189 297.822780 0.801728 a0 00 00 0a 31 af 05
34     1,    193: DTE    197 298.639316 0.801958 a0 00 00 0a 31 af 05
35     1,    201: DTE    205 299.155070 0.501176 a0 00 00 25 00 af 2b
36     1,    209: DTE    213 299.175885 0.006041 a0 00 00 27 00 af 29
37     1,    217: DTE    221 299.414184 0.223298 a0 00 00 00 31 af 0f
38     1,    225: DTE    229 299.441888 0.012917 a0 00 00 00 31 af 0f
39 Right
40     1,    233: DTE    237 301.910874 2.454404 a0 00 00 25 00 af 2b
41     1,    241: DTE    245 301.935249 0.009795 a0 00 00 27 00 af 29
42     1,    249: DTE    253 302.154378 0.204351 a0 00 00 00 31 af 0f
43     1,    257: DTE    261 302.175624 0.006458 a0 00 00 00 31 af 0f
44     1,    265: DTE    269 302.207279 0.016876 a0 00 00 02 31 af 0d
45     1,    273: DTE    277 303.024443 0.802375 a0 00 00 02 31 af 0d
46     1,    281: DTE    285 303.840771 0.801749 a0 00 00 02 31 af 0d
47     1,    289: DTE    293 304.657099 0.801750 a0 00 00 02 31 af 0d
48     1,    297: DTE    301 305.473634 0.801748 a0 00 00 02 31 af 0d
49     1,    305: DTE    309 305.640274 0.152060 a0 00 00 25 00 af 2b
50     1,    313: DTE    317 305.660161 0.005264 a0 00 00 27 00 af 29
51     1,    321: DTE    325 305.881069 0.206172 a0 00 00 00 31 af 0f
52     1,    329: DTE    333 305.908357 0.012500 a0 00 00 00 31 af 0f
53 Right-Down
54     1,    337: DTE    341 307.670782 1.747425 a0 00 00 25 00 af 2b
55     1,    345: DTE    349 307.693487 0.008125 a0 00 00 27 00 af 29
56     1,    353: DTE    357 307.914284 0.206005 a0 00 00 00 31 af 0f
57     1,    361: DTE    365 307.942409 0.013336 a0 00 00 00 31 af 0f
58     1,    369: DTE    373 307.966573 0.009376 a0 00 00 10 31 af 1f
59     1,    377: DTE    381 307.984694 0.003343 a0 00 00 10 31 af 1f
60     1,    385: DTE    389 308.009475 0.009999 a0 00 00 12 31 af 1d
61     1,    393: DTE    397 308.826225 0.801958 a0 00 00 12 31 af 1d
62     1,    401: DTE    405 309.642554 0.801751 a0 00 00 12 31 af 1d
63     1,    409: DTE    413 310.459089 0.801948 a0 00 00 12 31 af 1d
64     1,    417: DTE    421 311.276458 0.802581 a0 00 00 12 31 af 1d
65     1,    425: DTE    429 311.377277 0.086240 a0 00 00 25 00 af 2b
66     1,    433: DTE    437 311.408303 0.016238 a0 00 00 27 00 af 29
67     1,    441: DTE    445 311.635996 0.212902 a0 00 00 00 31 af 0f
68     1,    449: DTE    453 311.660972 0.010195 a0 00 00 00 31 af 0f

```



|     |        |       |     |      |            |          |    |    |    |    |    |    |    |    |
|-----|--------|-------|-----|------|------------|----------|----|----|----|----|----|----|----|----|
| 141 | 1,     | 993:  | DTE | 997  | 343.309878 | 0.011666 | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 142 |        |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 143 | Tele   |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 144 | 1,     | 1001: | DTE | 1005 | 348.223045 | 4.898387 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 145 | 1,     | 1009: | DTE | 1013 | 348.242207 | 0.004374 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 146 | 1,     | 1017: | DTE | 1021 | 348.474046 | 0.217211 | a0 | 00 | 00 | 20 | 31 | 31 | af | 2f |
| 147 | 1,     | 1025: | DTE | 1029 | 352.409047 | 3.920213 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 148 | 1,     | 1033: | DTE | 1037 | 352.442376 | 0.018335 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 149 | 1,     | 1041: | DTE | 1045 | 352.664006 | 0.206841 | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 150 | Wide   |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 151 | 1,     | 1049: | DTE | 1053 | 355.205310 | 2.526724 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 152 | 1,     | 1057: | DTE | 1061 | 355.254417 | 0.034153 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 153 | 1,     | 1065: | DTE | 1069 | 355.479604 | 0.209979 | a0 | 00 | 00 | 40 | 31 | 31 | af | 4f |
| 154 | 1,     | 1073: | DTE | 1077 | 357.985867 | 2.491488 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 155 | 1,     | 1081: | DTE | 1085 | 358.010657 | 0.010003 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 156 | 1,     | 1089: | DTE | 1093 | 358.233119 | 0.207478 | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 157 | Wash   |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 158 | 1,     | 1097: | DTE | 1101 | 361.143066 | 2.895159 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 159 | 1,     | 1105: | DTE | 1109 | 361.173686 | 0.016041 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 160 | 1,     | 1113: | DTE | 1117 | 361.403234 | 0.214757 | a0 | 00 | 00 | 09 | 00 | 02 | af | 04 |
| 161 | 1,     | 1121: | DTE | 1125 | 363.610383 | 2.192570 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 162 | 1,     | 1129: | DTE | 1133 | 363.641420 | 0.016041 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 163 | 1,     | 1137: | DTE | 1141 | 363.872843 | 0.216645 | a0 | 00 | 00 | 0b | 00 | 02 | af | 06 |
| 164 | Lights |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 165 | 1,     | 1145: | DTE | 1149 | 369.359262 | 5.471631 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 166 | 1,     | 1153: | DTE | 1157 | 369.378617 | 0.004581 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 167 | 1,     | 1161: | DTE | 1165 | 369.607750 | 0.214341 | a0 | 00 | 00 | 09 | 00 | 03 | af | 05 |
| 168 |        |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 169 | Near   |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 170 | 1,     | 1169: | DTE | 1173 | 373.789791 | 4.166629 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 171 | 1,     | 1177: | DTE | 1181 | 373.809788 | 0.005209 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 172 | 1,     | 1185: | DTE | 1189 | 374.041003 | 0.215962 | a0 | 00 | 02 | 00 | 31 | 31 | af | 0d |
| 173 | 1,     | 1193: | DTE | 1197 | 374.857747 | 0.801957 | a0 | 00 | 02 | 00 | 31 | 31 | af | 0d |
| 174 | 1,     | 1201: | DTE | 1205 | 375.674076 | 0.801750 | a0 | 00 | 02 | 00 | 31 | 31 | af | 0d |
| 175 | 1,     | 1209: | DTE | 1213 | 376.490403 | 0.801748 | a0 | 00 | 02 | 00 | 31 | 31 | af | 0d |
| 176 | 1,     | 1217: | DTE | 1221 | 377.306940 | 0.801958 | a0 | 00 | 02 | 00 | 31 | 31 | af | 0d |
| 177 | 1,     | 1225: | DTE | 1229 | 378.123266 | 0.801748 | a0 | 00 | 02 | 00 | 31 | 31 | af | 0d |
| 178 | 1,     | 1233: | DTE | 1237 | 378.342809 | 0.204964 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 179 | 1,     | 1241: | DTE | 1245 | 378.374890 | 0.017291 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 180 | 1,     | 1249: | DTE | 1253 | 378.592981 | 0.203300 | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 181 | Far    |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 182 | 1,     | 1257: | DTE | 1261 | 381.189243 | 2.581475 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 183 | 1,     | 1265: | DTE | 1269 | 381.208181 | 0.004164 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 184 | 1,     | 1273: | DTE | 1277 | 381.433367 | 0.210185 | a0 | 00 | 01 | 00 | 31 | 31 | af | 0e |
| 185 | 1,     | 1281: | DTE | 1285 | 382.250323 | 0.802179 | a0 | 00 | 01 | 00 | 31 | 31 | af | 0e |
| 186 | 1,     | 1289: | DTE | 1293 | 383.066650 | 0.801761 | a0 | 00 | 01 | 00 | 31 | 31 | af | 0e |
| 187 | 1,     | 1297: | DTE | 1301 | 383.883186 | 0.801969 | a0 | 00 | 01 | 00 | 31 | 31 | af | 0e |
| 188 | 1,     | 1305: | DTE | 1309 | 384.615569 | 0.717816 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 189 | 1,     | 1313: | DTE | 1317 | 384.637218 | 0.007084 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 190 | 1,     | 1321: | DTE | 1325 | 384.858029 | 0.206019 | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 191 | Wipe   |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 192 | 1,     | 1329: | DTE | 1333 | 387.561349 | 2.688547 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 193 | 1,     | 1337: | DTE | 1341 | 387.587373 | 0.011251 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 194 | 1,     | 1345: | DTE | 1349 | 387.808809 | 0.206644 | a0 | 00 | 00 | 09 | 00 | 01 | af | 07 |
| 195 | 1,     | 1353: | DTE | 1357 | 390.672714 | 2.849131 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 196 | 1,     | 1361: | DTE | 1365 | 390.693126 | 0.005623 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 197 | 1,     | 1369: | DTE | 1373 | 390.913092 | 0.205173 | a0 | 00 | 00 | 0b | 00 | 01 | af | 05 |
| 198 | Aux 4  |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 199 | 1,     | 1377: | DTE | 1381 | 395.941257 | 5.013169 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 200 | 1,     | 1385: | DTE | 1389 | 395.963332 | 0.007499 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 201 | 1,     | 1393: | DTE | 1397 | 396.187464 | 0.209353 | a0 | 00 | 00 | 07 | 00 | 63 | af | 6b |
| 202 |        |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 203 | Open   |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 204 | 1,     | 1401: | DTE | 1405 | 399.639208 | 3.436956 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 205 | 1,     | 1409: | DTE | 1413 | 399.658149 | 0.004166 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 206 | 1,     | 1417: | DTE | 1421 | 399.879585 | 0.206437 | a0 | 00 | 04 | 00 | 31 | 31 | af | 0b |
| 207 | 1,     | 1425: | DTE | 1429 | 403.214467 | 3.320107 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 208 | 1,     | 1433: | DTE | 1437 | 403.234255 | 0.005001 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |
| 209 | 1,     | 1441: | DTE | 1445 | 403.454011 | 0.204769 | a0 | 00 | 00 | 00 | 31 | 31 | af | 0f |
| 210 | Close  |       |     |      |            |          |    |    |    |    |    |    |    |    |
| 211 | 1,     | 1449: | DTE | 1453 | 405.753646 | 2.284848 | a0 | 00 | 00 | 25 | 00 | 01 | af | 2b |
| 212 | 1,     | 1457: | DTE | 1461 | 405.780505 | 0.012250 | a0 | 00 | 00 | 27 | 00 | 01 | af | 29 |

```
213     1, 1465: DTE 1469 406.008398 0.213095 a0 00 08 00 31 31 af 07
214     1, 1473: DTE 1477 409.031874 3.008702 a0 00 00 25 00 01 af 2b
215     1, 1481: DTE 1485 409.053314 0.006667 a0 00 00 27 00 01 af 29
216     1, 1489: DTE 1493 409.282070 0.213464 a0 00 00 00 31 31 af 0f
217 Patrol
218     1, 1497: DTE 1501 414.492249 5.195224 a0 00 00 25 00 01 af 2b
219     1, 1505: DTE 1509 414.512440 0.005625 a0 00 00 27 00 01 af 29
220     1, 1513: DTE 1517 414.744084 0.216853 a0 00 00 23 00 01 af 2d
221 Auto Scan
222     1, 1521: DTE 1525 422.547623 7.788348 a0 00 00 25 00 01 af 2b
223     1, 1529: DTE 1533 422.578245 0.015834 a0 00 00 27 00 01 af 29
224     1, 1537: DTE 1541 422.796758 0.203945 a0 00 00 07 00 63 af 6b
225
226 There were a total of      1544 bytes transferred
227
228 There were a total of          0 DCE bytes transferred
229 The first DCE byte came in at 0.000000 seconds from the start of data collection
230 The last DCE byte was at 0.000000 seconds from the start of data collection
231
232 There were a total of      1544 DTE bytes transferred
233 The first DTE byte came in at 248.296950 seconds from the start of data collection
234 The last DTE byte was at 422.811537 seconds from the start of data collection
235
```

## 1.14 Philips

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: 47
4. Hello Message last few bytes: 0x00 0xD0 0x0C
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07B.txt and 29MAY07BB.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 7 or 8 bytes.
  - 7.2 ISO Level 1: RS-422.
  - 7.3 Unique first byte: Either 0x87 or 0x86. The first byte is indicated by having its most significant bit set. The other seven bits indicate the length of the message.
  - 7.4 Unique last byte: No
  - 7.5 Checksum: This is the last byte and is the arithmetic sum of all bytes considered as 7-bit values. I.e. the most significant bit on the first byte is not considered.
  - 7.6 Device address: Bytes 2 and 3, as 7-bit values giving a upper range of 16K units.
8. A correct Philips protocol document is available, which is on file here at Pelco, that describes this protocol in detail.
9. A TXB (TXB-B) that implements this protocol is available, **however** it does not run on RS-422 lines. Instead it is based on Philips' (Burle's, Bosch's) implementation over a 32 Kbps Manchester coded communications link.

### 1.14.1 b.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/B.out,v 1.2 2007-05-31 08:02:22-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 7:36:05 AM)
4 Event 1 (5/29/2007 7:34:45.009956 AM) through
5 Event 845 (5/29/2007 7:35:28.505284 AM)
6
7 1, 1: DTE 1 0.000000 0.000000 87 00 00 05 00 00 00 0c
8 1, 9: DTE 9 0.215173 0.207156 87 00 00 05 00 00 00 0c
9 1, 17: DTE 17 0.235164 0.011869 87 00 00 05 08 00 00 14
10 1, 25: DTE 25 0.279637 0.036244 87 00 00 05 08 00 08 1c
11 1, 33: DTE 33 0.293283 0.005522 87 00 00 05 08 00 08 1c
12 1, 41: DTE 41 0.519289 0.217834 87 00 00 05 00 00 00 0c
13 1, 49: DTE 49 0.536368 0.009062 87 00 00 05 00 00 00 0c
14 1, 57: DTE 57 1.238240 0.693746 87 00 00 05 00 00 00 0c
15 1, 65: DTE 65 1.457888 0.211527 87 00 00 05 00 00 00 0c
16 1, 73: DTE 73 1.483823 0.017917 87 00 00 05 08 00 00 14
17 1, 81: DTE 81 1.497356 0.005408 87 00 00 05 08 00 08 1c

```

---

<sup>16</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Philips.inc,v 1.1 2007-06-05 08:30:35-07 Hamilton Exp Hamilton \$

|    |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
|----|----|------|-----|-----|-----------|----------|----|----|----|----|----|----|----|----|
| 18 | 1, | 89:  | DTE | 89  | 1.519545  | 0.014063 | 87 | 00 | 00 | 05 | 08 | 40 | 08 | 5c |
| 19 | 1, | 97:  | DTE | 97  | 1.537455  | 0.009785 | 87 | 00 | 00 | 05 | 08 | 40 | 09 | 5d |
| 20 | 1, | 105: | DTE | 105 | 1.557768  | 0.012189 | 87 | 00 | 00 | 05 | 08 | 40 | 09 | 5d |
| 21 | 1, | 113: | DTE | 113 | 1.783669  | 0.217882 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 22 | 1, | 121: | DTE | 121 | 1.797938  | 0.006148 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 23 | 1, | 129: | DTE | 129 | 2.596872  | 0.790810 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 24 | 1, | 137: | DTE | 137 | 2.818506  | 0.213616 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 25 | 1, | 145: | DTE | 145 | 2.836267  | 0.009639 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 26 | 1, | 153: | DTE | 153 | 2.854539  | 0.010105 | 87 | 00 | 00 | 05 | 00 | 40 | 01 | 4d |
| 27 | 1, | 161: | DTE | 161 | 2.883491  | 0.020825 | 87 | 00 | 00 | 05 | 00 | 40 | 01 | 4d |
| 28 | 1, | 169: | DTE | 169 | 3.101377  | 0.209762 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 29 | 1, | 177: | DTE | 177 | 3.120541  | 0.011042 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 30 |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 31 | 1, | 185: | DTE | 185 | 4.137778  | 1.009224 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 32 | 1, | 193: | DTE | 193 | 4.357217  | 0.211326 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 33 | 1, | 201: | DTE | 201 | 4.382837  | 0.017498 | 87 | 00 | 00 | 05 | 08 | 00 | 00 | 14 |
| 34 | 1, | 209: | DTE | 209 | 4.397209  | 0.006253 | 87 | 00 | 00 | 05 | 08 | 00 | 04 | 18 |
| 35 | 1, | 217: | DTE | 217 | 4.418769  | 0.013333 | 87 | 00 | 00 | 05 | 08 | 40 | 04 | 58 |
| 36 | 1, | 225: | DTE | 225 | 4.437305  | 0.010515 | 87 | 00 | 00 | 05 | 08 | 40 | 05 | 59 |
| 37 | 1, | 233: | DTE | 233 | 4.460846  | 0.015415 | 87 | 00 | 00 | 05 | 08 | 40 | 05 | 59 |
| 38 | 1, | 241: | DTE | 241 | 4.683207  | 0.214236 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 39 | 1, | 249: | DTE | 249 | 4.697890  | 0.006667 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 40 | 1, | 257: | DTE | 257 | 5.486416  | 0.780505 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 41 | 1, | 265: | DTE | 265 | 5.704396  | 0.209971 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 42 | 1, | 273: | DTE | 273 | 5.724810  | 0.012396 | 87 | 00 | 00 | 05 | 08 | 00 | 00 | 14 |
| 43 | 1, | 281: | DTE | 281 | 5.753658  | 0.020721 | 87 | 00 | 00 | 05 | 08 | 00 | 04 | 18 |
| 44 | 1, | 289: | DTE | 289 | 5.764805  | 0.003023 | 87 | 00 | 00 | 05 | 08 | 00 | 04 | 18 |
| 45 | 1, | 297: | DTE | 297 | 5.990080  | 0.217150 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 46 | 1, | 305: | DTE | 305 | 6.010077  | 0.011876 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 47 |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 48 | 1, | 313: | DTE | 313 | 7.191142  | 1.172941 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 49 | 1, | 321: | DTE | 321 | 7.417248  | 0.217985 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 50 | 1, | 329: | DTE | 329 | 7.427349  | 0.001980 | 87 | 00 | 00 | 05 | 08 | 00 | 00 | 14 |
| 51 | 1, | 337: | DTE | 337 | 7.447245  | 0.011773 | 87 | 00 | 00 | 05 | 08 | 00 | 04 | 18 |
| 52 | 1, | 345: | DTE | 345 | 7.467447  | 0.012188 | 87 | 00 | 00 | 05 | 08 | 40 | 04 | 58 |
| 53 | 1, | 353: | DTE | 353 | 7.487342  | 0.011770 | 87 | 00 | 00 | 05 | 08 | 40 | 06 | 5a |
| 54 | 1, | 361: | DTE | 361 | 7.515357  | 0.019896 | 87 | 00 | 00 | 05 | 08 | 40 | 06 | 5a |
| 55 | 1, | 369: | DTE | 369 | 7.727827  | 0.204347 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 56 | 1, | 377: | DTE | 377 | 7.754901  | 0.019062 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 57 | 1, | 385: | DTE | 385 | 8.460772  | 0.697746 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 58 | 1, | 393: | DTE | 393 | 8.680798  | 0.211737 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 59 | 1, | 401: | DTE | 401 | 8.700073  | 0.011157 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 60 | 1, | 409: | DTE | 409 | 8.719327  | 0.011138 | 87 | 00 | 00 | 05 | 00 | 40 | 02 | 4e |
| 61 | 1, | 417: | DTE | 417 | 8.749327  | 0.021771 | 87 | 00 | 00 | 05 | 00 | 40 | 02 | 4e |
| 62 | 1, | 425: | DTE | 425 | 8.959716  | 0.202318 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 63 | 1, | 433: | DTE | 433 | 8.981475  | 0.013646 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 64 |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 65 | 1, | 441: | DTE | 441 | 10.034643 | 1.045043 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 66 | 1, | 449: | DTE | 449 | 10.252690 | 0.209977 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 67 | 1, | 457: | DTE | 457 | 10.272460 | 0.011811 | 87 | 00 | 00 | 05 | 08 | 00 | 00 | 14 |
| 68 | 1, | 465: | DTE | 465 | 10.301787 | 0.021042 | 87 | 00 | 00 | 05 | 08 | 00 | 08 | 1c |
| 69 | 1, | 473: | DTE | 473 | 10.315115 | 0.005313 | 87 | 00 | 00 | 05 | 08 | 40 | 08 | 5c |
| 70 | 1, | 481: | DTE | 481 | 10.332539 | 0.009299 | 87 | 00 | 00 | 05 | 08 | 40 | 0a | 5e |
| 71 | 1, | 489: | DTE | 489 | 10.352652 | 0.011912 | 87 | 00 | 00 | 05 | 08 | 40 | 0a | 5e |
| 72 | 1, | 497: | DTE | 497 | 10.582932 | 0.222095 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 73 | 1, | 505: | DTE | 505 | 10.598194 | 0.006875 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 74 | 1, | 513: | DTE | 513 | 11.355102 | 0.748783 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 75 | 1, | 521: | DTE | 521 | 11.583249 | 0.219860 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 76 | 1, | 529: | DTE | 529 | 11.594298 | 0.003032 | 87 | 00 | 00 | 05 | 08 | 00 | 00 | 14 |
| 77 | 1, | 537: | DTE | 537 | 11.614290 | 0.011983 | 87 | 00 | 00 | 05 | 08 | 00 | 08 | 1c |
| 78 | 1, | 545: | DTE | 545 | 11.634410 | 0.012108 | 87 | 00 | 00 | 05 | 08 | 00 | 08 | 1c |
| 79 | 1, | 553: | DTE | 553 | 11.860702 | 0.218246 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 80 | 1, | 561: | DTE | 561 | 11.883929 | 0.015209 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 81 |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 82 | 1, | 569: | DTE | 569 | 17.212495 | 5.320441 | 87 | 00 | 00 | 05 | 00 | 00 | 00 | 0c |
| 83 | 1, | 577: | DTE | 577 | 17.429504 | 0.208512 | 87 | 00 | 00 | 05 | 38 | 40 | 20 | 24 |
| 84 | 1, | 585: | DTE | 585 | 17.449181 | 0.011557 | 87 | 00 | 00 | 05 | 30 | 40 | 20 | 1c |
| 85 | 1, | 593: | DTE | 593 | 17.687588 | 0.230135 | 87 | 00 | 00 | 05 | 08 | 40 | 00 | 54 |
| 86 |    |      |     |     |           |          |    |    |    |    |    |    |    |    |
| 87 | 1, | 601: | DTE | 601 | 19.084974 | 1.389270 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 88 | 1, | 609: | DTE | 609 | 19.304309 | 0.211326 | 87 | 00 | 00 | 05 | 38 | 40 | 10 | 14 |
| 89 | 1, | 617: | DTE | 617 | 19.322325 | 0.009896 | 87 | 00 | 00 | 05 | 30 | 40 | 10 | 0c |

|     |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
|-----|--|------|-----|-----|-----------------------|----------|----|----|----|----|----|----|----|----|
| 90  | 1,   | 625: | DTE | 625 | 19.548644             | 0.218201 | 87 | 00 | 00 | 05 | 08 | 40 | 00 | 54 |
| 91  |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 92  | 1,   | 633: | DTE | 633 | 21.552699             | 1.996039 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 93  | 1,   | 641: | DTE | 641 | 21.762249             | 0.201429 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 94  |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 95  | 1,   | 649: | DTE | 649 | 23.468225             | 1.697861 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 96  |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 97  | 1,   | 657: | DTE | 657 | 26.528986             | 3.052640 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 98  | 1,   | 665: | DTE | 665 | 26.747911             | 0.210804 | 87 | 00 | 00 | 05 | 00 | 40 | 40 | 0c |
| 99  | 1,   | 673: | DTE | 673 | 26.803114             | 0.047079 | 87 | 00 | 00 | 05 | 00 | 40 | 40 | 0c |
| 100 | 1,   | 681: | DTE | 681 | 27.019989             | 0.208761 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 101 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 102 | 1,   | 689: | DTE | 689 | 28.646147             | 1.617973 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 103 | 1,   | 697: | DTE | 697 | 28.883398             | 0.229132 | 87 | 00 | 00 | 05 | 00 | 41 | 00 | 4d |
| 104 | 1,   | 705: | DTE | 705 | 28.893083             | 0.001521 | 87 | 00 | 00 | 05 | 00 | 41 | 00 | 4d |
| 105 | 1,   | 713: | DTE | 713 | 29.116483             | 0.215276 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 106 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 107 | 1,   | 721: | DTE | 721 | 31.068887             | 1.944073 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 108 | 1,   | 729: | DTE | 729 | 31.289159             | 0.212158 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 109 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 110 | 1,   | 737: | DTE | 737 | 34.095584             | 2.798305 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 111 | 1,   | 745: | DTE | 745 | 34.312738             | 0.209138 | 86 | 00 | 00 | 07 | 01 | 02 | 10 |    |
| 112 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 113 | 1,   | 752: | DTE | 752 | 36.782972             | 2.463258 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 114 | 1,   | 760: | DTE | 760 | 36.997205             | 0.206117 | 87 | 00 | 00 | 05 | 00 | 44 | 00 | 50 |
| 115 | 1,   | 768: | DTE | 768 | 37.017202             | 0.011772 | 87 | 00 | 00 | 05 | 00 | 44 | 00 | 50 |
| 116 | 1,   | 776: | DTE | 776 | 37.247476             | 0.222255 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 117 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 118 | 1,   | 784: | DTE | 784 | 38.886384             | 1.630577 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 119 | 1,   | 792: | DTE | 792 | 39.100203             | 0.205594 | 87 | 00 | 00 | 05 | 00 | 42 | 00 | 4e |
| 120 | 1,   | 800: | DTE | 800 | 39.121026             | 0.012700 | 87 | 00 | 00 | 05 | 00 | 42 | 00 | 4e |
| 121 | 1,   | 808: | DTE | 808 | 39.347561             | 0.218409 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 122 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 123 | 1,   | 816: | DTE | 816 | 41.014274             | 1.658495 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 124 | 1,   | 824: | DTE | 824 | 41.234233             | 0.211839 | 86 | 00 | 00 | 07 | 01 | 32 | 40 |    |
| 125 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 126 | 1,   | 831: | DTE | 831 | 43.281825             | 2.040720 | 87 | 00 | 00 | 05 | 00 | 40 | 00 | 4c |
| 127 | 1,   | 839: | DTE | 839 | 43.488249             | 0.198398 | 86 | 00 | 00 | 07 | 01 | 02 | 10 |    |
| 128 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 129 | There were a total of  |      |     | 845 | bytes transferred     |          |    |    |    |    |    |    |    |    |
| 130 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 131 | There were a total of  |      |     | 0   | DCE bytes transferred |          |    |    |    |    |    |    |    |    |
| 132 | The first DCE byte came in at 0.000000 seconds from the start of data collection |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 133 | The last DCE byte was at 0.000000 seconds from the start of data collection      |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 134 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 135 | There were a total of  |      |     | 845 | DTE bytes transferred |          |    |    |    |    |    |    |    |    |
| 136 | The first DTE byte came in at 0.000000 seconds from the start of data collection |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 137 | The last DTE byte was at 43.495328 seconds from the start of data collection     |      |     |     |                       |          |    |    |    |    |    |    |    |    |
| 138 |  |      |     |     |                       |          |    |    |    |    |    |    |    |    |

## 1.14.2 bb.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/BB.out,v 1.3 2007-05-31 08:02:22-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 10:03:37 AM)
4 Event 1 (5/29/2007 9:59:16.329522 AM) through
5 Event 919 (5/29/2007 10:03:18.966405 AM)
6
7 1, 1: DTE 3 59.747109 0.000000 87 00 00 05 00 00 00 0c
8 1, 9: DTE 11 59.791996 0.036872 87 00 00 05 00 00 02 0e
9 1, 17: DTE 19 59.801160 0.001145 87 00 00 05 00 00 00 0c
10 1, 25: DTE 27 59.810327 0.001146 86 00 00 07 02 02 11
11 1, 32: DTE 34 59.818349 0.001146 87 00 00 05 00 00 00 0c
12 1, 40: DTE 42 59.912079 0.085509 87 00 00 05 00 00 00 0c
13
14 1, 48: DTE 50 112.478362 52.558263 87 00 00 05 00 00 00 0c
15 1, 56: DTE 58 112.699474 0.212992 87 00 00 05 00 00 00 0c
16 1, 64: DTE 66 112.717493 0.009898 87 00 00 05 08 00 00 14
17 1, 72: DTE 74 112.736443 0.010833 87 00 00 05 08 00 08 1c
18
19 1, 80: DTE 82 115.537566 2.792999 87 00 00 05 08 00 08 1c
20 1, 88: DTE 90 115.766069 0.220390 87 00 00 05 00 00 00 0c
21 1, 96: DTE 98 115.778773 0.004630 87 00 00 05 00 00 00 0c
22
23 1, 104: DTE 106 119.944778 4.157991 87 00 00 05 00 00 00 0c
24 1, 112: DTE 114 120.163800 0.210907 87 00 00 05 00 00 00 0c
25 1, 120: DTE 122 120.183797 0.011771 87 00 00 05 08 00 00 14
26 1, 128: DTE 130 120.205041 0.013229 87 00 00 05 08 00 08 1c
27 1, 136: DTE 138 120.223999 0.010833 87 00 00 05 08 40 08 5c
28 1, 144: DTE 146 120.249618 0.017501 87 00 00 05 08 40 09 5d
29
30 1, 152: DTE 154 123.135512 2.877770 87 00 00 05 08 40 09 5d
31 1, 160: DTE 162 123.365521 0.221889 87 00 00 05 00 00 00 0c
32 1, 168: DTE 170 123.381197 0.007387 87 00 00 05 00 00 00 0c
33
34 1, 176: DTE 178 125.349222 1.959900 87 00 00 05 00 00 00 0c
35 1, 184: DTE 186 125.567731 0.210388 87 00 00 05 00 00 00 0c
36 1, 192: DTE 194 125.596158 0.020410 87 00 00 05 00 40 00 4c
37 1, 200: DTE 202 125.613346 0.009167 87 00 00 05 00 40 01 4d
38
39 1, 208: DTE 210 128.636201 3.014633 87 00 00 05 00 40 01 4d
40 1, 216: DTE 218 128.870848 0.226533 87 00 00 05 00 00 00 0c
41 1, 224: DTE 226 128.880116 0.001149 87 00 00 05 00 00 00 0c
42
43 1, 232: DTE 234 131.043106 2.154872 87 00 00 05 00 00 00 0c
44 1, 240: DTE 242 131.262441 0.211221 87 00 00 05 00 00 00 0c
45 1, 248: DTE 250 131.284416 0.013853 87 00 00 05 08 00 00 14
46 1, 256: DTE 258 131.303681 0.011035 87 00 00 05 08 00 04 18
47 1, 264: DTE 266 131.333163 0.021461 87 00 00 05 08 40 04 58
48 1, 272: DTE 274 131.342425 0.001146 87 00 00 05 08 40 05 59
49
50 1, 280: DTE 282 134.040720 2.690275 87 00 00 05 08 40 05 59
51 1, 288: DTE 290 134.257592 0.208724 87 00 00 05 00 00 00 0c
52 1, 296: DTE 298 134.283725 0.017910 87 00 00 05 00 00 00 0c
53
54 1, 304: DTE 306 137.084015 2.792435 87 00 00 05 00 00 00 0c
55 1, 312: DTE 314 137.307934 0.215803 87 00 00 05 00 00 00 0c
56 1, 320: DTE 322 137.333973 0.017814 87 00 00 05 08 00 00 14
57 1, 328: DTE 330 137.348027 0.005937 87 00 00 05 08 00 04 18
58
59 1, 336: DTE 338 140.141441 2.785289 87 00 00 05 08 00 04 18
60 1, 344: DTE 346 140.366715 0.217247 87 00 00 05 00 00 00 0c
61 1, 352: DTE 354 140.377962 0.003231 87 00 00 05 00 00 00 0c
62
63 1, 360: DTE 362 143.173454 2.787535 87 00 00 05 00 00 00 0c
64 1, 368: DTE 370 143.402282 0.220708 87 00 00 05 00 00 00 0c
65 1, 376: DTE 378 143.413311 0.002915 87 00 00 05 08 00 00 14
66 1, 384: DTE 386 143.434150 0.012823 87 00 00 05 08 00 04 18
67 1, 392: DTE 394 143.453307 0.011044 87 00 00 05 08 40 04 58
68 1, 400: DTE 402 143.473613 0.012263 87 00 00 05 08 40 06 5a

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141      1,      807: DTE      809      222.073545      3.040867 87 00 00 05 00 00 00 0c
142      1,      815: DTE      817      222.293305      0.211638 87 00 00 05 00 04 00 10
143
144      1,      823: DTE      825      225.401449      3.100031 87 00 00 05 00 04 00 10
145      1,      831: DTE      833      225.620792      0.211327 87 00 00 05 00 00 00 0c
146
147      1,      839: DTE      841      228.584794      2.955882 87 00 00 05 00 00 00 0c
148      1,      847: DTE      849      228.810072      0.217159 87 00 00 05 00 02 00 0e
149
150      1,      855: DTE      857      231.596819      2.778621 87 00 00 05 00 02 00 0e
151      1,      863: DTE      865      231.812819      0.207887 87 00 00 05 00 00 00 0c
152
153      1,      871: DTE      873      236.756927      4.935987 87 00 00 05 00 00 00 0c
154      1,      879: DTE      881      236.965436      0.200391 87 00 00 05 00 40 02 4e
155      1,      887: DTE      889      236.984392      0.010836 87 00 00 05 00 00 00 0c
156
157      1,      895: DTE      897      242.397630      5.405121 87 00 00 05 00 00 00 0c
158      1,      903: DTE      905      242.609118      0.203201 86 00 00 07 02 02 11
159      1,      910: DTE      912      242.629004      0.012911 87 00 00 05 00 00 00 0c
160
161 There were a total of          917 bytes transferred
162
163 There were a total of          0 DCE bytes transferred
164 The first DCE byte came in at 0.000000 seconds from the start of data collection
165 The last DCE byte was at 0.000000 seconds from the start of data collection
166
167 There were a total of          917 DTE bytes transferred
168 The first DTE byte came in at 59.747109 seconds from the start of data collection
169 The last DTE byte was at 242.636883 seconds from the start of data collection
170

```

## 1.15 Philips-232

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: Unknown
4. Hello Message last few bytes: —
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07J.txt (none existent)
7. Special: No data was ever seen on the output of the Sprite 2. This might be because testing was done on the RS-422 IO pins, not on the RS-232 pins.

## 1.16 Samsung

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: 36
4. Hello Message last few bytes: 0x00 0x00 0x00 0xFF
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07C.txt and 29MAY07CC.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 9
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0xA0
  - 7.4 Unique last byte: No.
  - 7.5 Checksum: \_\_\_\_\_.
  - 7.6 Device address: Byte 3?

---

<sup>17</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Phili232.inc,v 1.1 2007-06-05 08:30:27-07 Hamilton Exp  
Hamilton \$

<sup>18</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Samsung.inc,v 1.1 2007-06-05 08:30:51-07 Hamilton Exp  
Hamilton \$

## 1.16.1 c.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/C.out,v 1.3 2007-05-31 08:02:22-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 7:41:45 AM)
4 Event 1 (5/29/2007 7:38:18.063162 AM) through
5 Event 648 (5/29/2007 7:41:18.348276 AM)
6
7 1, 1: DTE 1 0.000000 0.000000 a0 fe 01 01 00 00 00 00 ff
8 1, 10: DTE 10 0.024580 0.015312 a0 fe 01 03 1b 00 00 ff e3
9 1, 19: DTE 19 0.046968 0.012915 a0 fe 01 03 1a 00 ff ff e5
10 1, 28: DTE 28 0.113528 0.057392 a0 fe 01 01 00 00 00 00 ff
11
12 1, 37: DTE 37 112.892671 112.769778 a0 fe 01 01 00 00 00 00 ff
13 1, 46: DTE 46 112.917980 0.016044 a0 fe 01 01 00 00 00 11 ee
14 1, 55: DTE 55 112.937868 0.010514 a0 fe 01 01 00 04 00 11 ea
15 1, 64: DTE 64 113.158152 0.210909 a0 fe 01 01 00 00 00 00 ff
16 1, 73: DTE 73 113.178454 0.010931 a0 fe 01 01 00 00 00 00 ff
17
18 1, 82: DTE 82 115.298119 2.110394 a0 fe 01 01 00 00 00 00 ff
19 1, 91: DTE 91 115.319677 0.012260 a0 fe 01 01 00 00 00 11 ee
20 1, 100: DTE 100 115.336716 0.007814 a0 fe 01 01 00 04 00 11 ea
21 1, 109: DTE 109 115.368733 0.022603 a0 fe 01 01 00 04 11 11 d9
22 1, 118: DTE 118 115.386790 0.008792 a0 fe 01 01 00 06 11 11 d7
23 1, 127: DTE 127 115.621088 0.225070 a0 fe 01 01 00 00 00 00 ff
24 1, 136: DTE 136 115.649106 0.018753 a0 fe 01 01 00 00 00 00 ff
25
26 1, 145: DTE 145 116.751328 1.093058 a0 fe 01 01 00 00 00 00 ff
27 1, 154: DTE 154 116.769443 0.008848 a0 fe 01 01 00 00 11 00 ee
28 1, 163: DTE 163 116.789755 0.011032 a0 fe 01 01 00 02 11 00 ec
29 1, 172: DTE 172 117.009615 0.210486 a0 fe 01 01 00 00 00 00 ff
30 1, 181: DTE 181 117.062940 0.044163 a0 fe 01 01 00 00 00 00 ff
31
32 1, 190: DTE 190 118.518229 1.445916 a0 fe 01 01 00 00 00 00 ff
33 1, 199: DTE 199 118.537599 0.010104 a0 fe 01 01 00 00 00 11 ee
34 1, 208: DTE 208 118.559363 0.012285 a0 fe 01 01 00 08 00 11 e6
35 1, 217: DTE 217 118.586239 0.017605 a0 fe 01 01 00 08 11 11 d5
36 1, 226: DTE 226 118.615607 0.020098 a0 fe 01 01 00 0a 11 11 d3
37 1, 235: DTE 235 118.837765 0.212680 a0 fe 01 01 00 00 00 00 ff
38 1, 244: DTE 244 118.858485 0.011355 a0 fe 01 01 00 00 00 00 ff
39
40 1, 253: DTE 253 120.355226 1.487471 a0 fe 01 01 00 00 00 00 ff
41 1, 262: DTE 262 120.381055 0.016561 a0 fe 01 01 00 00 00 11 ee
42 1, 271: DTE 271 120.400320 0.009994 a0 fe 01 01 00 08 00 11 e6
43 1, 280: DTE 280 120.620811 0.211324 a0 fe 01 01 00 00 00 00 ff
44 1, 289: DTE 289 120.649008 0.018825 a0 fe 01 01 00 00 00 00 ff
45
46 1, 298: DTE 298 122.654548 1.996247 a0 fe 01 01 00 00 00 00 ff
47 1, 307: DTE 307 122.683771 0.020060 a0 fe 01 01 00 00 00 11 ee
48 1, 316: DTE 316 122.704329 0.011146 a0 fe 01 01 00 08 00 11 e6
49 1, 325: DTE 325 122.725364 0.011660 a0 fe 01 01 00 08 11 11 d5
50 1, 334: DTE 334 122.749053 0.014418 a0 fe 01 01 00 09 11 11 d4
51 1, 343: DTE 343 122.969600 0.211117 a0 fe 01 01 00 00 00 00 ff
52 1, 352: DTE 352 122.989700 0.010729 a0 fe 01 01 00 00 00 00 ff
53
54 1, 361: DTE 361 125.084365 2.085497 a0 fe 01 01 00 00 00 00 ff
55 1, 370: DTE 370 125.103423 0.009791 a0 fe 01 01 00 00 11 00 ee
56 1, 379: DTE 379 125.123319 0.010625 a0 fe 01 01 00 01 11 00 ed
57 1, 388: DTE 388 125.352493 0.220013 a0 fe 01 01 00 00 00 00 ff
58 1, 397: DTE 397 125.379420 0.017494 a0 fe 01 01 00 00 00 00 ff
59
60 1, 406: DTE 406 127.852887 2.464196 a0 fe 01 01 00 00 00 00 ff
61 1, 415: DTE 415 127.879335 0.017189 a0 fe 01 01 00 00 00 11 ee
62 1, 424: DTE 424 127.899326 0.010514 a0 fe 01 01 00 04 00 11 ea
63 1, 433: DTE 433 127.921827 0.013124 a0 fe 01 01 00 04 11 11 d9
64 1, 442: DTE 442 127.951822 0.020724 a0 fe 01 01 00 05 11 11 d8
65 1, 451: DTE 451 128.173458 0.212367 a0 fe 01 01 00 00 00 00 ff
66 1, 460: DTE 460 128.193449 0.010626 a0 fe 01 01 00 00 00 00 ff
67
68 1, 469: DTE 469 131.028316 2.825596 a0 fe 01 01 00 00 00 00 ff

```

```

69      1,      478: DTE  478  131.048409  0.010828 a0 fe 01 01 00 00 00 11 ee
70      1,      487: DTE  487  131.068722  0.011147 a0 fe 01 01 00 04 00 11 ea
71      1,      496: DTE  496  131.289769  0.211784 a0 fe 01 01 00 00 00 00 ff
72      1,      505: DTE  505  131.316390  0.017291 a0 fe 01 01 00 00 00 00 ff
73
74      1,      514: DTE  514  136.402037  5.076486 a0 fe 01 01 20 00 00 00 df
75      1,      523: DTE  523  136.623046  0.211847 a0 fe 01 01 00 00 00 00 ff
76
77      1,      532: DTE  532  139.827844  3.195538 a0 fe 01 01 40 00 00 00 bf
78      1,      541: DTE  541  140.152383  0.315377 a0 fe 01 01 00 00 00 00 ff
79
80      1,      550: DTE  550  156.781274  16.619529 a0 fe 01 01 02 00 00 00 fd
81      1,      559: DTE  559  157.021657  0.231116 a0 fe 01 01 00 00 00 00 ff
82
83      1,      568: DTE  568  159.654358  2.623336 a0 fe 01 01 01 00 00 00 fe
84      1,      577: DTE  577  159.896610  0.232985 a0 fe 01 01 00 00 00 00 ff
85
86      1,      586: DTE  586  165.396357  5.490479 a0 fe 01 03 1a 00 ff ff e5
87
88      1,      595: DTE  595  173.103976  7.698354 a0 fe 01 01 08 00 00 00 f7
89      1,      604: DTE  604  173.324152  0.210909 a0 fe 01 01 00 00 00 00 ff
90
91      1,      613: DTE  613  175.362471  2.029157 a0 fe 01 01 10 00 00 00 ef
92      1,      622: DTE  622  175.637113  0.265376 a0 fe 01 01 00 00 00 00 ff
93
94      1,      631: DTE  631  177.656340  2.010064 a0 fe 01 03 1b 00 00 ff e3
95
96      1,      640: DTE  640  180.275959  2.610213 a0 fe 01 03 1a 00 ff ff e5
97
98 There were a total of      648 bytes transferred
99
100 There were a total of      0 DCE bytes transferred
101 The first DCE byte came in at 0.000000 seconds from the start of data collection
102 The last DCE byte was at 0.000000 seconds from the start of data collection
103
104 There were a total of      648 DTE bytes transferred
105 The first DTE byte came in at 0.000000 seconds from the start of data collection
106 The last DTE byte was at 180.285114 seconds from the start of data collection
107

```

## 1.16.2 cc.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/CC.out,v 1.3 2007-05-31 08:02:23-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 10:08:59 AM)
4 Event 1 (5/29/2007 10:04:16.391563 AM) through
5 Event 650 (5/29/2007 10:08:36.389954 AM)
6
7 1, 1: DTE 3 118.563720 0.000000 a0 fe 01 01 00 00 00 00 ff
8 1, 10: DTE 12 118.581634 0.008545 a0 fe 01 03 1b 00 00 ff e3
9 1, 19: DTE 21 118.601730 0.010730 a0 fe 01 03 1a 00 ff ff e5
10 1, 28: DTE 30 118.686718 0.075614 a0 fe 01 01 00 00 00 00 ff
11
12 1, 37: DTE 39 144.786194 26.090311 a0 fe 01 01 00 00 00 00 ff
13 1, 46: DTE 48 144.813165 0.017700 a0 fe 01 01 00 00 00 11 ee
14 1, 55: DTE 57 144.830971 0.008537 a0 fe 01 01 00 04 00 11 ea
15
16 1, 64: DTE 66 147.555544 2.715407 a0 fe 01 01 00 00 00 00 ff
17 1, 73: DTE 75 147.578969 0.014167 a0 fe 01 01 00 00 00 00 ff
18
19 1, 82: DTE 84 149.713947 2.125603 a0 fe 01 01 00 00 00 00 ff
20 1, 91: DTE 93 149.734458 0.011244 a0 fe 01 01 00 00 00 11 ee
21 1, 100: DTE 102 149.759354 0.015626 a0 fe 01 01 00 04 00 11 ea
22 1, 109: DTE 111 149.780493 0.011876 a0 fe 01 01 00 04 11 11 d9
23 1, 118: DTE 120 149.799034 0.009271 a0 fe 01 01 00 06 11 11 d7
24
25 1, 127: DTE 129 152.614942 2.806636 a0 fe 01 01 00 00 00 00 ff
26 1, 136: DTE 138 152.642017 0.017913 a0 fe 01 01 00 00 00 00 ff
27
28 1, 145: DTE 147 155.079022 2.427738 a0 fe 01 01 00 00 00 00 ff
29 1, 154: DTE 156 155.098186 0.009896 a0 fe 01 01 00 00 11 00 ee
30 1, 163: DTE 165 155.118179 0.010619 a0 fe 01 01 00 02 11 00 ec
31
32 1, 172: DTE 174 157.827648 2.700303 a0 fe 01 01 00 00 00 00 ff
33 1, 181: DTE 183 157.863054 0.026243 a0 fe 01 01 00 00 00 00 ff
34
35 1, 190: DTE 192 160.037513 2.165084 a0 fe 01 01 00 00 00 00 ff
36 1, 199: DTE 201 160.056452 0.009681 a0 fe 01 01 00 00 00 11 ee
37 1, 208: DTE 210 160.077624 0.012006 a0 fe 01 01 00 08 00 11 e6
38 1, 217: DTE 219 160.096969 0.009997 a0 fe 01 01 00 08 11 11 d5
39 1, 226: DTE 228 160.117497 0.011156 a0 fe 01 01 00 0a 11 11 d3
40
41 1, 235: DTE 237 163.276676 3.150023 a0 fe 01 01 00 00 00 00 ff
42 1, 244: DTE 246 163.308123 0.022083 a0 fe 01 01 00 00 00 00 ff
43
44 1, 253: DTE 255 165.516316 2.198922 a0 fe 01 01 00 00 00 00 ff
45 1, 262: DTE 264 165.536306 0.010849 a0 fe 01 01 00 00 00 11 ee
46 1, 271: DTE 273 165.556098 0.010585 a0 fe 01 01 00 08 00 11 e6
47
48 1, 280: DTE 282 168.472716 2.907339 a0 fe 01 01 00 00 00 00 ff
49 1, 289: DTE 291 168.495836 0.013855 a0 fe 01 01 00 00 00 00 ff
50
51 1, 298: DTE 300 170.613939 2.108839 a0 fe 01 01 00 00 00 00 ff
52 1, 307: DTE 309 170.640909 0.017780 a0 fe 01 01 00 00 00 11 ee
53 1, 316: DTE 318 170.659035 0.008858 a0 fe 01 01 00 08 00 11 e6
54 1, 325: DTE 327 170.679130 0.010835 a0 fe 01 01 00 08 11 11 d5
55 1, 334: DTE 336 170.701942 0.013542 a0 fe 01 01 00 09 11 11 d4
56
57 1, 343: DTE 345 174.144100 3.432997 a0 fe 01 01 00 00 00 00 ff
58 1, 352: DTE 354 174.165033 0.011564 a0 fe 01 01 00 00 00 00 ff
59
60 1, 361: DTE 363 177.140810 2.966403 a0 fe 01 01 00 00 00 00 ff
61 1, 370: DTE 372 177.160175 0.010099 a0 fe 01 01 00 00 11 00 ee
62 1, 379: DTE 381 177.181841 0.012395 a0 fe 01 01 00 01 11 00 ed
63
64 1, 388: DTE 390 180.680868 3.489860 a0 fe 01 01 00 00 00 00 ff
65 1, 397: DTE 399 180.701072 0.011043 a0 fe 01 01 00 00 00 00 ff
66
67 1, 406: DTE 408 183.210046 2.499606 a0 fe 01 01 00 00 00 00 ff
68 1, 415: DTE 417 183.233167 0.013855 a0 fe 01 01 00 00 00 11 ee

```

```

69      1,      424: DTE   426  183.250141  0.007711 a0 fe 01 01 00 04 00 11 ea
70      1,      433: DTE   435  183.273579  0.014064 a0 fe 01 01 00 04 11 11 d9
71      1,      442: DTE   444  183.290445  0.007604 a0 fe 01 01 00 05 11 11 d8
72
73      1,      451: DTE   453  186.811660  3.511944 a0 fe 01 01 00 00 00 00 ff
74      1,      460: DTE   462  186.837586  0.016660 a0 fe 01 01 00 00 00 00 ff
75
76      1,      469: DTE   471  189.075259  2.228506 a0 fe 01 01 00 00 00 00 ff
77      1,      478: DTE   480  189.095040  0.010416 a0 fe 01 01 00 00 00 11 ee
78      1,      487: DTE   489  189.120034  0.015724 a0 fe 01 01 00 04 00 11 ea
79
80      1,      496: DTE   498  192.674504  3.545191 a0 fe 01 01 00 00 00 00 ff
81      1,      505: DTE   507  192.691028  0.007293 a0 fe 01 01 00 00 00 00 ff
82
83      1,      514: DTE   516  196.877860  4.177665 a0 fe 01 01 20 00 00 00 df
84
85      1,      523: DTE   525  199.413079  2.525954 a0 fe 01 01 00 00 00 00 ff
86
87      1,      532: DTE   534  202.073177  2.650831 a0 fe 01 01 40 00 00 00 bf
88
89      1,      541: DTE   543  205.522950  3.440507 a0 fe 01 01 00 00 00 00 ff
90
91      1,      550: DTE   552  220.021971  14.489666 a0 fe 01 01 02 00 00 00 fd
92
93      1,      559: DTE   561  222.821632  2.790394 a0 fe 01 01 00 00 00 00 ff
94
95      1,      568: DTE   570  225.490993  2.660095 a0 fe 01 01 01 00 00 00 fe
96
97      1,      577: DTE   579  228.005803  2.505649 a0 fe 01 01 00 00 00 00 ff
98
99      1,      586: DTE   588  238.571300  10.556336 a0 fe 01 03 1a 01 ff ff e4
100
101     1,      595: DTE   597  241.517913  2.937399 a0 fe 01 01 08 00 00 00 f7
102
103     1,      604: DTE   606  244.582944  3.055667 a0 fe 01 01 00 00 00 00 ff
104
105     1,      613: DTE   615  247.038381  2.446176 a0 fe 01 01 10 00 00 00 ef
106
107     1,      622: DTE   624  249.852514  2.805035 a0 fe 01 01 00 00 00 00 ff
108
109     1,      631: DTE   633  254.888898  5.027222 a0 fe 01 03 1b 01 01 ff e1
110
111     1,      640: DTE   642  259.989020  5.090855 a0 fe 01 03 1a 01 ff ff e4
112
113 There were a total of      648 bytes transferred
114
115 There were a total of      0 DCE bytes transferred
116 The first DCE byte came in at 0.000000 seconds from the start of data collection
117 The last DCE byte was at 0.000000 seconds from the start of data collection
118
119 There were a total of      648 DTE bytes transferred
120 The first DTE byte came in at 118.563720 seconds from the start of data collection
121 The last DTE byte was at 259.998391 seconds from the start of data collection
122

```

## 1.17 Sensormatic

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 4800
2. Parity: None
3. Hello Message Length: 12
4. Hello Message last few bytes: 0x01 0x93 0x6C
5. Is the protocol a Polling Protocol?: No, in a real Sensormatic system, the headend continuously polls every  $\frac{1}{2} \rightarrow 1$  second.
6. Name of the data capture file: 29MAY07D.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 3, 5.
  - 7.2 ISO Level 1: RS-422.
  - 7.3 Unique first byte: No, the first byte is the device address.
  - 7.4 Unique last byte: No, it is the checksum
  - 7.5 Checksum: Yes, is the complement of the rest of the message. Such that the total 8-bit sum of the bytes of them message is 0x00.
  - 7.6 Device address: Yes, byte 1.
8. There is a Sensormatic protocol document, which is on file at Pelco, that is medium accurate in describing this protocol.
9. The TXB-S422 implements this protocol.

### 1.17.1 d.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/D.out,v 1.3 2007-05-31 08:02:23-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 7:47:55 AM)
4 Event 1 (5/29/2007 7:42:31.415550 AM) through
5 Event 226 (5/29/2007 7:47:00.853449 AM)
6
7 1, 1: DTE 3 101.475816 0.000000 01 93 6c
8 1, 4: DTE 6 101.497061 0.016666 01 93 6c
9 1, 7: DTE 9 101.544549 0.042904 01 93 6c
10 1, 10: DTE 12 101.622082 0.073117 01 93 6c
11
12 1, 13: DTE 15 186.389523 84.762861 01 93 6c
13 1, 16: DTE 18 186.414726 0.020624 01 c0 84 21 9a
14 1, 21: DTE 23 186.641565 0.217672 01 93 6c
15 1, 24: DTE 26 186.668230 0.022085 01 93 6c
16
17 1, 27: DTE 29 188.748726 2.076080 01 93 6c
18 1, 30: DTE 32 188.775183 0.021878 01 c0 84 21 9a
19 1, 35: DTE 37 188.805795 0.021511 01 c0 82 21 9c
20 1, 40: DTE 42 189.910420 1.095459 01 93 6c

```

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<sup>19</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Sensorma.inc,v 1.1 2007-06-05 08:30:58-07 Hamilton Exp Hamilton \$

|    |    |      |     |     |            |          |    |    |          |
|----|----|------|-----|-----|------------|----------|----|----|----------|
| 21 | 1, | 43:  | DTE | 45  | 189.938958 | 0.023959 | 01 | 93 | 6c       |
| 22 |    |      |     |     |            |          |    |    |          |
| 23 | 1, | 46:  | DTE | 48  | 191.628280 | 1.684752 | 01 | 93 | 6c       |
| 24 | 1, | 49:  | DTE | 51  | 191.653462 | 0.020613 | 01 | c0 | 82 21 9c |
| 25 | 1, | 54:  | DTE | 56  | 192.720194 | 1.057566 | 01 | 93 | 6c       |
| 26 | 1, | 57:  | DTE | 59  | 192.745168 | 0.020417 | 01 | 93 | 6c       |
| 27 |    |      |     |     |            |          |    |    |          |
| 28 | 1, | 60:  | DTE | 62  | 193.922698 | 1.172947 | 01 | 93 | 6c       |
| 29 | 1, | 63:  | DTE | 65  | 193.948305 | 0.021029 | 01 | c0 | 85 21 99 |
| 30 | 1, | 68:  | DTE | 70  | 193.972681 | 0.015210 | 01 | c0 | 82 21 9c |
| 31 | 1, | 73:  | DTE | 75  | 195.219155 | 1.237396 | 01 | 93 | 6c       |
| 32 | 1, | 76:  | DTE | 78  | 195.244345 | 0.020779 | 01 | 93 | 6c       |
| 33 |    |      |     |     |            |          |    |    |          |
| 34 | 1, | 79:  | DTE | 81  | 196.491864 | 1.242935 | 01 | 93 | 6c       |
| 35 | 1, | 82:  | DTE | 84  | 196.516651 | 0.020210 | 01 | c0 | 85 21 99 |
| 36 | 1, | 87:  | DTE | 89  | 197.823529 | 1.297712 | 01 | 93 | 6c       |
| 37 | 1, | 90:  | DTE | 92  | 197.853304 | 0.025196 | 01 | 93 | 6c       |
| 38 |    |      |     |     |            |          |    |    |          |
| 39 | 1, | 93:  | DTE | 95  | 199.110820 | 1.252932 | 01 | 93 | 6c       |
| 40 | 1, | 96:  | DTE | 98  | 199.139987 | 0.024587 | 01 | c0 | 85 21 99 |
| 41 | 1, | 101: | DTE | 103 | 199.169145 | 0.019986 | 01 | c0 | 81 21 9d |
| 42 | 1, | 106: | DTE | 108 | 201.154868 | 1.976565 | 01 | 93 | 6c       |
| 43 | 1, | 109: | DTE | 111 | 201.179449 | 0.020000 | 01 | 93 | 6c       |
| 44 |    |      |     |     |            |          |    |    |          |
| 45 | 1, | 112: | DTE | 114 | 202.210741 | 1.026710 | 01 | 93 | 6c       |
| 46 | 1, | 115: | DTE | 117 | 202.241571 | 0.026250 | 01 | c0 | 81 21 9d |
| 47 | 1, | 120: | DTE | 122 | 204.209386 | 1.958649 | 01 | 93 | 6c       |
| 48 | 1, | 123: | DTE | 125 | 204.243328 | 0.029362 | 01 | 93 | 6c       |
| 49 |    |      |     |     |            |          |    |    |          |
| 50 | 1, | 126: | DTE | 128 | 205.944516 | 1.696606 | 01 | 93 | 6c       |
| 51 | 1, | 129: | DTE | 131 | 205.975345 | 0.026376 | 01 | c0 | 84 21 9a |
| 52 | 1, | 134: | DTE | 136 | 206.009055 | 0.024544 | 01 | c0 | 81 21 9d |
| 53 | 1, | 139: | DTE | 141 | 207.850465 | 1.832378 | 01 | 93 | 6c       |
| 54 | 1, | 142: | DTE | 144 | 207.875461 | 0.020416 | 01 | 93 | 6c       |
| 55 |    |      |     |     |            |          |    |    |          |
| 56 | 1, | 145: | DTE | 147 | 209.122756 | 1.242710 | 01 | 93 | 6c       |
| 57 | 1, | 148: | DTE | 150 | 209.148173 | 0.020837 | 01 | c0 | 84 21 9a |
| 58 | 1, | 153: | DTE | 155 | 210.942677 | 1.785339 | 01 | 93 | 6c       |
| 59 | 1, | 156: | DTE | 158 | 210.970590 | 0.023332 | 01 | 93 | 6c       |
| 60 |    |      |     |     |            |          |    |    |          |
| 61 | 1, | 159: | DTE | 161 | 215.443210 | 4.468036 | 01 | 8a | 75       |
| 62 |    |      |     |     |            |          |    |    |          |
| 63 | 1, | 162: | DTE | 164 | 217.286243 | 1.838454 | 01 | 8c | 73       |
| 64 |    |      |     |     |            |          |    |    |          |
| 65 | 1, | 165: | DTE | 167 | 220.156203 | 2.865380 | 01 | 8b | 74       |
| 66 |    |      |     |     |            |          |    |    |          |
| 67 | 1, | 168: | DTE | 170 | 222.176086 | 2.015304 | 01 | 8c | 73       |
| 68 |    |      |     |     |            |          |    |    |          |
| 69 | 1, | 171: | DTE | 173 | 224.443441 | 2.262776 | 01 | e2 | 1d       |
| 70 |    |      |     |     |            |          |    |    |          |
| 71 | 1, | 174: | DTE | 176 | 225.806970 | 1.358953 | 01 | e0 | 1f       |
| 72 |    |      |     |     |            |          |    |    |          |
| 73 | 1, | 177: | DTE | 179 | 231.307749 | 5.496200 | 01 | e8 | 17       |
| 74 |    |      |     |     |            |          |    |    |          |
| 75 | 1, | 180: | DTE | 182 | 234.770419 | 3.458090 | 01 | 87 | 78       |
| 76 |    |      |     |     |            |          |    |    |          |
| 77 | 1, | 183: | DTE | 185 | 236.077826 | 1.302713 | 01 | 89 | 76       |
| 78 |    |      |     |     |            |          |    |    |          |
| 79 | 1, | 186: | DTE | 188 | 238.988188 | 2.905887 | 01 | 88 | 77       |
| 80 |    |      |     |     |            |          |    |    |          |
| 81 | 1, | 189: | DTE | 191 | 241.091390 | 2.098621 | 01 | 89 | 76       |
| 82 |    |      |     |     |            |          |    |    |          |
| 83 | 1, | 192: | DTE | 194 | 244.637082 | 3.541113 | 01 | ec | 13       |
| 84 |    |      |     |     |            |          |    |    |          |
| 85 | 1, | 195: | DTE | 197 | 246.451584 | 1.809925 | 01 | e8 | 17       |
| 86 |    |      |     |     |            |          |    |    |          |
| 87 | 1, | 198: | DTE | 200 | 251.368511 | 4.912347 | 01 | c6 | 39       |
| 88 |    |      |     |     |            |          |    |    |          |
| 89 | 1, | 201: | DTE | 203 | 254.542376 | 3.169300 | 01 | 90 | 6f       |
| 90 |    |      |     |     |            |          |    |    |          |
| 91 | 1, | 204: | DTE | 206 | 256.056294 | 1.509339 | 01 | 92 | 6d       |
| 92 |    |      |     |     |            |          |    |    |          |

```
93      1,      207: DTE   209  258.440291  2.379407 01 91 6e
94
95      1,      210: DTE   212  260.040655  1.595785 01 92 6d
96
97      1,      213: DTE   215  264.315393  4.270159 01 9a 65
98      1,      216: DTE   218  264.340179  0.020207 01 b0 4f
99      1,      219: DTE   221  264.369960  0.025210 01 9b 64
100
101     1,      222: DTE   224  269.433322  5.058780 01 c6 39
102
103 There were a total of      224 bytes transferred
104
105 There were a total of          0 DCE bytes transferred
106 The first DCE byte came in at 0.000000 seconds from the start of data collection
107 The last DCE byte was at 0.000000 seconds from the start of data collection
108
109 There were a total of      224 DTE bytes transferred
110 The first DTE byte came in at 101.475816 seconds from the start of data collection
111 The last DTE byte was at 269.437899 seconds from the start of data collection
112
```

## 1.18 Ultrack

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: Even
3. Hello Message Length: Yes, didn't get it because parity was incorrectly set and I ran out of time.
4. Hello Message last few bytes: —
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07E.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 9.
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0x00
  - 7.4 Unique last byte: No
  - 7.5 Checksum: \_\_\_\_\_.
  - 7.6 Device address: Byte 2?

### 1.18.1 e.out

```

1  $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2  $Header: d:/GeneralInformation/1stLooks/RCS/E.out,v 1.2 2007-05-31 08:02:23-07 Hamilton Exp Hamilton $
3  FTS capture buffer (5/29/2007 7:54:59 AM)
4  Event 1 (5/29/2007 7:52:48.721990 AM) through
5  Event 366 (5/29/2007 7:54:25.543691 AM)
6
7    1,      1: DTE      1      0.000000  0.000000 00 00 80 80 80 e0
8    1,      7: DTE      7      0.007704  0.001250 00 00 80 3c 80 c0
9    1,     13: DTE     13      1.792630  1.778666 00 00 80 80 80 e0
10   1,     19: DTE     19      1.800332  0.001249 00 00 80 80 80 e0
11
12   1,     25: DTE     25      4.848188  3.041595 00 00 80 80 80 e0
13   1,     31: DTE     31      4.855990  0.001250 00 00 80 3c 80 c0
14   1,     37: DTE     37      4.863594  0.001417 00 00 c4 3c 80 a0
15   1,     43: DTE     43      7.161565  2.291722 00 00 80 80 80 e0
16   1,     49: DTE     49      7.169166  0.001250 00 00 80 80 80 e0
17
18   1,     55: DTE     55      9.381728  2.206305 00 00 80 80 80 e0
19   1,     61: DTE     61      9.389329  0.001250 00 00 c4 80 80 80
20   1,     67: DTE     67     12.059846  2.664267 00 00 80 80 80 e0
21   1,     73: DTE     73     12.067341  0.001250 00 00 80 80 80 e0
22
23   1,     79: DTE     79     14.118683  2.045098 00 00 80 80 80 e0
24   1,     85: DTE     85     14.126279  0.001353 00 00 80 c4 80 40
25   1,     91: DTE     91     14.133780  0.001251 00 00 c4 c4 80 20
26   1,     97: DTE     97     16.448932  2.308799 00 00 80 80 80 e0
27   1,    103: DTE    103     16.456532  0.001249 00 00 80 80 80 e0
28
29   1,    109: DTE    109     18.956244  2.493462 00 00 80 80 80 e0
30   1,    115: DTE    115     18.963739  0.001250 00 00 80 c4 80 40

```

---

```

20$Header: d:/GeneralInformation/1stLooks/RCS/Ultrack.inc,v 1.1 2007-06-05 08:31:04-07 Hamilton Exp
Hamilton $

```

```

31      1,    121: DTE   121    20.594627    1.624644 00 00 80 80 80 e0
32      1,    127: DTE   127    20.602222    0.001251 00 00 80 80 80 e0
33
34      1,    133: DTE   133    22.827914    2.219341 00 00 80 80 80 e0
35      1,    139: DTE   139    22.835409    0.001249 00 00 80 c4 80 40
36      1,    145: DTE   145    22.842910    0.001250 00 00 3c c4 80 00
37      1,    151: DTE   151    24.987046    2.137893 00 00 80 80 80 e0
38      1,    157: DTE   157    24.994647    0.001250 00 00 80 80 80 e0
39
40      1,    163: DTE   163    27.065882    2.064986 00 00 80 80 80 e0
41      1,    169: DTE   169    27.073481    0.001250 00 00 3c 80 80 a0
42      1,    175: DTE   175    29.156276    2.076545 00 00 80 80 80 e0
43      1,    181: DTE   181    29.163982    0.001250 00 00 80 80 80 e0
44
45      1,    187: DTE   187    31.121900    1.951675 00 00 80 80 80 e0
46      1,    193: DTE   193    31.129391    0.001251 00 00 80 3c 80 c0
47      1,    199: DTE   199    31.136994    0.001248 00 00 3c 3c 80 80
48      1,    205: DTE   205    32.913804    1.770559 00 00 80 80 80 e0
49      1,    211: DTE   211    32.921307    0.001258 00 00 80 80 80 e0
50
51      1,    217: DTE   217    35.298938    2.371397 00 00 80 80 80 e0
52      1,    223: DTE   223    35.306266    0.001250 00 00 80 3c 80 c0
53      1,    229: DTE   229    37.547537    2.234749 00 00 80 80 80 e0
54      1,    235: DTE   235    37.555135    0.001249 00 00 80 80 80 e0
55
56      1,    241: DTE   241    41.359013    3.797626 00 00 80 80 bb a0
57
58      1,    247: DTE   247    42.975001    1.609743 00 00 80 80 bb a0
59      1,    253: DTE   253    43.181155    0.200071 00 00 80 80 80 e0
60
61      1,    259: DTE   259    45.714252    2.526684 00 00 80 80 45 80
62
63      1,    265: DTE   265    47.717578    1.997143 00 00 80 80 45 80
64      1,    271: DTE   271    47.920045    0.196388 00 00 80 80 80 e0
65
66      1,    277: DTE   277    50.163749    2.237354 b0 00 f5 01 3e 20
67
68      1,    283: DTE   283    51.791509    1.621513 b0 00 f5 01 3e 20
69
70      1,    289: DTE   289    56.380256    4.582502 b0 00 f5 05 3a e0
71
72      1,    295: DTE   295    60.031648    3.645049 00 00 80 80 80 a8
73
74      1,    301: DTE   301    61.778970    1.741076 00 00 80 80 80 e0
75
76      1,    307: DTE   307    64.447609    2.662391 00 00 80 80 80 70
77
78      1,    313: DTE   313    66.944921    2.491066 00 00 80 80 80 e0
79
80      1,    319: DTE   319    69.446077    2.494974 b0 00 f5 07 38 80
81
82      1,    325: DTE   325    71.459613    2.007081 b0 00 f5 07 38 80
83
84      1,    331: DTE   331    87.020667    15.554704 00 00 80 80 80 62
85
86      1,    337: DTE   337    88.610100    1.583188 00 00 80 80 80 e0
87
88      1,    343: DTE   343    91.407775    2.791326 00 00 80 80 80 c4
89
90      1,    349: DTE   349    93.243315    1.829306 00 00 80 80 80 e0
91
92      1,    355: DTE   355    96.807747    3.558083 00 00 70 80 80 80
93      1,    361: DTE   361    96.815346    0.001250 00 00 80 80 80 e0
94
95      There were a total of      366 bytes transferred
96
97      There were a total of          0 DCE bytes transferred
98      The first DCE byte came in at 0.000000 seconds from the start of data collection
99      The last DCE byte was at 0.000000 seconds from the start of data collection
100
101     There were a total of      366 DTE bytes transferred
102     The first DTE byte came in at 0.000000 seconds from the start of data collection

```

103 The last DTE byte was at 96.821701 seconds from the start of data collection  
104

## 1.19 Vantage

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: 65
4. Hello Message last few bytes: 0x53 0x1B 0x00
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07F.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 9, 10, 11, 14.
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0x41
  - 7.4 Unique last byte: 0x1B, 0x00
  - 7.5 Checksum: \_\_\_\_\_.
  - 7.6 Device address: Byte 3

### 1.19.1 f.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/F.out,v 1.3 2007-05-31 08:02:23-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 8:00:37 AM)
4 Event 1 (5/29/2007 7:55:33.049366 AM) through
5 Event 679 (5/29/2007 7:59:20.669717 AM)
6
7 1, 1: DTE 3 75.826609 0.000000 41 20 01 40 0b 02 00 00 00 00 00 45 1b 00
8 1, 15: DTE 17 75.842743 0.001146 41 20 01 40 15 02 40 1b 00
9 1, 24: DTE 26 75.853056 0.001136 41 20 01 40 02 00 00 00 53 1b 00
10 1, 35: DTE 37 75.865972 0.001145 41 20 01 40 05 01 00 50 1b 00
11 1, 45: DTE 47 75.877534 0.001145 41 20 01 40 12 06 00 3e 1b 00
12 1, 55: DTE 57 75.889090 0.001146 41 20 01 40 02 00 00 00 53 1b 00
13
14 1, 66: DTE 68 128.684506 52.783853 41 20 01 40 02 00 00 00 53 1b 00
15 1, 77: DTE 79 128.697314 0.001222 41 20 01 40 02 00 44 00 0f 1b 00
16 1, 88: DTE 90 130.251861 1.542783 41 20 01 40 02 00 00 00 53 1b 00
17 1, 99: DTE 101 130.264428 0.001114 41 20 01 40 02 00 00 00 53 1b 00
18
19 1, 110: DTE 112 132.620019 2.344106 41 20 01 40 02 00 00 00 53 1b 00
20 1, 121: DTE 123 132.632617 0.001145 41 20 01 40 02 00 44 00 0f 1b 00
21 1, 132: DTE 134 132.645223 0.001147 41 20 01 40 02 44 44 00 cb 1b 00
22 1, 143: DTE 145 134.353287 1.696503 41 20 01 40 02 00 00 00 53 1b 00
23 1, 154: DTE 156 134.366103 0.001155 41 20 01 40 02 00 00 00 53 1b 00
24
25 1, 165: DTE 167 136.846014 2.468426 41 20 01 40 02 00 00 00 53 1b 00
26 1, 176: DTE 178 136.858718 0.001147 41 20 01 40 02 44 00 00 0f 1b 00
27 1, 187: DTE 189 138.920992 2.050719 41 20 01 40 02 00 00 00 53 1b 00
28 1, 198: DTE 200 138.933802 0.001354 41 20 01 40 02 00 00 00 53 1b 00
29
30 1, 209: DTE 211 141.014098 2.068845 41 20 01 40 02 00 00 00 53 1b 00

```

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<sup>21</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Vantage.inc,v 1.1 2007-06-05 08:31:11-07 Hamilton Exp Hamilton \$

```

31      1,      220: DTE   222  141.026900  0.001137 41 20 01 40 02 00 bc 00 97 1b 00
32      1,      231: DTE   233  141.039815  0.001248 41 20 01 40 02 44 bc 00 53 1b 00
33      1,      242: DTE   244  142.614671  1.563292 41 20 01 40 02 00 00 00 53 1b 00
34      1,      253: DTE   255  142.627270  0.001146 41 20 01 40 02 00 00 00 53 1b 00
35
36      1,      264: DTE   266  144.749018  2.110186 41 20 01 40 02 00 00 00 53 1b 00
37      1,      275: DTE   277  144.761932  0.001148 41 20 01 40 02 00 bc 00 97 1b 00
38      1,      286: DTE   288  146.824164  2.050568 41 20 01 40 02 00 00 00 53 1b 00
39      1,      297: DTE   299  146.837119  0.001146 41 20 01 40 02 00 00 00 53 1b 00
40
41      1,      308: DTE   310  148.962410  2.113625 41 20 01 40 02 00 00 00 53 1b 00
42      1,      319: DTE   321  148.975425  0.001145 41 20 01 40 02 00 bc 00 97 1b 00
43      1,      330: DTE   332  148.988233  0.001138 41 20 01 40 02 bc bc 00 db 1b 00
44      1,      341: DTE   343  150.880956  1.881161 41 20 01 40 02 00 00 00 53 1b 00
45      1,      352: DTE   354  150.894071  0.001147 41 20 01 40 02 00 00 00 53 1b 00
46
47      1,      363: DTE   365  153.455129  2.549393 41 20 01 40 02 00 00 00 53 1b 00
48      1,      374: DTE   376  153.467825  0.001249 41 20 01 40 02 bc 00 00 97 1b 00
49      1,      385: DTE   387  155.811417  2.332133 41 20 01 40 02 00 00 00 53 1b 00
50      1,      396: DTE   398  155.824225  0.001146 41 20 01 40 02 00 00 00 53 1b 00
51
52      1,      407: DTE   409  158.147816  2.312035 41 20 01 40 02 00 00 00 53 1b 00
53      1,      418: DTE   420  158.160464  0.000993 41 20 01 40 02 00 44 00 0f 1b 00
54      1,      429: DTE   431  158.173430  0.001147 41 20 01 40 02 bc 44 00 53 1b 00
55      1,      440: DTE   442  160.143320  1.958431 41 20 01 40 02 00 00 00 53 1b 00
56      1,      451: DTE   453  160.156131  0.001146 41 20 01 40 02 00 00 00 53 1b 00
57
58      1,      462: DTE   464  162.144469  1.976879 41 20 01 40 02 00 00 00 53 1b 00
59      1,      473: DTE   475  162.157269  0.001136 41 20 01 40 02 00 44 00 0f 1b 00
60      1,      484: DTE   486  164.018441  1.849504 41 20 01 40 02 00 00 00 53 1b 00
61      1,      495: DTE   497  164.031032  0.001146 41 20 01 40 02 00 00 00 53 1b 00
62
63      1,      506: DTE   508  166.748522  2.706032 41 20 01 40 02 00 00 3b 18 1b 00
64
65      1,      517: DTE   519  168.914531  2.154457 41 20 01 40 02 00 00 3b 18 1b 00
66      1,      528: DTE   530  169.116173  0.190228 41 20 01 40 02 00 00 00 53 1b 00
67
68      1,      539: DTE   541  170.975031  1.847211 41 20 01 40 02 00 00 c5 8e 1b 00
69
70      1,      550: DTE   552  172.913995  1.927406 41 20 01 40 02 00 00 c5 8e 1b 00
71      1,      561: DTE   563  173.113233  0.187686 41 20 01 40 02 00 00 00 53 1b 00
72
73      1,      572: DTE   574  197.213959  24.089174 41 20 01 40 03 01 c0 02 00 8e 1b 00
74
75      1,      584: DTE   586  198.445535  1.218892 41 20 01 40 03 01 00 02 00 4e 1b 00
76
77      1,      596: DTE   598  200.504576  2.046335 41 20 01 40 03 01 40 02 00 0e 1b 00
78
79      1,      608: DTE   610  202.304290  1.786904 41 20 01 40 03 01 00 02 00 4e 1b 00
80
81      1,      620: DTE   622  218.709691  16.392595 41 20 01 40 03 01 00 01 40 0f 1b 00
82
83      1,      632: DTE   634  220.347134  1.624639 41 20 01 40 03 01 00 01 00 4f 1b 00
84
85      1,      644: DTE   646  221.972636  1.612788 41 20 01 40 03 01 00 01 c0 8f 1b 00
86
87      1,      656: DTE   658  223.753157  1.767954 41 20 01 40 03 01 00 01 00 4f 1b 00
88
89      1,      668: DTE   670  227.609826  3.843869 41 20 01 40 12 03 01 40 1b 00
90
91 There were a total of          677 bytes transferred
92
93 There were a total of              0 DCE bytes transferred
94 The first DCE byte came in at 0.000000 seconds from the start of data collection
95 The last DCE byte was at 0.000000 seconds from the start of data collection
96
97 There were a total of          677 DTE bytes transferred
98 The first DTE byte came in at 75.826609 seconds from the start of data collection
99 The last DTE byte was at 227.620351 seconds from the start of data collection
100
101
102

```

## 1.20 VCL

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: 44
4. Hello Message last few bytes: 0x80 0x2F 0x80 0x2E
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07G.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 2, 3
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0x80, might actually be a first byte indicator of the most significant bit, followed by seven bits of address, starting at 0 for address 1.
  - 7.4 Unique last byte: \_\_\_\_\_.
  - 7.5 Checksum: No
  - 7.6 Device address: No

### 1.20.1 g.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/G.out,v 1.3 2007-05-31 08:02:23-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 8:05:11 AM)
4 Event 1 (5/29/2007 8:02:02.799816 AM) through
5 Event 747 (5/29/2007 8:04:51.369519 AM)
6
7 1, 1: DTE 1 0.000000 0.000000 80 75
8 1, 3: DTE 3 0.065513 0.064371 80 6e
9 1, 5: DTE 5 0.110609 0.043951 80 6c
10 1, 7: DTE 7 0.144457 0.032703 80 72
11 1, 9: DTE 9 0.185703 0.040100 80 2a
12 1, 11: DTE 11 0.236468 0.049623 80 2b
13 1, 13: DTE 13 0.276628 0.039018 80 2d
14 1, 15: DTE 15 0.305681 0.027911 80 2c
15 1, 17: DTE 17 0.332656 0.025829 80 2f
16 1, 19: DTE 19 0.351300 0.017501 80 2e
17 1, 21: DTE 21 0.421183 0.068634 80 7e
18 1, 23: DTE 23 0.446450 0.024123 80 7e
19 1, 25: DTE 25 0.541373 0.093739 80 75
20 1, 27: DTE 27 0.621780 0.079159 80 6e
21 1, 29: DTE 29 0.651872 0.028953 80 6c
22 1, 31: DTE 31 0.671872 0.018854 80 72
23 1, 33: DTE 33 0.709053 0.036036 80 2a
24 1, 35: DTE 35 0.783832 0.073633 80 2b
25 1, 37: DTE 37 0.811956 0.026977 80 2d
26 1, 39: DTE 39 0.835285 0.022213 80 2c
27 1, 41: DTE 41 0.852366 0.015936 80 2f
28 1, 43: DTE 43 0.885908 0.032396 80 2e
29

```

---

<sup>22</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/VCL.inc,v 1.1 2007-06-05 08:30:44-07 Hamilton Exp Hamilton \$

|     |    |      |     |     |           |           |    |       |
|-----|----|------|-----|-----|-----------|-----------|----|-------|
| 30  | 1, | 45:  | DTE | 45  | 57.011406 | 56.124358 | 80 | 75    |
| 31  | 1, | 47:  | DTE | 47  | 57.031185 | 0.018638  | 80 | 6e    |
| 32  | 1, | 49:  | DTE | 49  | 57.051394 | 0.018958  | 80 | 6c    |
| 33  | 1, | 51:  | DTE | 51  | 57.076077 | 0.023536  | 80 | 72    |
| 34  | 1, | 53:  | DTE | 53  | 57.096702 | 0.019480  | 80 | 2a    |
| 35  | 1, | 55:  | DTE | 55  | 57.116175 | 0.018328  | 80 | 2b    |
| 36  | 1, | 57:  | DTE | 57  | 57.136007 | 0.018584  | 80 | 2d    |
| 37  | 1, | 59:  | DTE | 59  | 57.161166 | 0.023742  | 80 | 2c    |
| 38  | 1, | 61:  | DTE | 61  | 57.181480 | 0.019062  | 80 | 2f    |
| 39  | 1, | 63:  | DTE | 63  | 57.201577 | 0.018952  | 80 | 2e    |
| 40  | 1, | 65:  | DTE | 65  | 57.221681 | 0.018963  | 80 | 55 28 |
| 41  | 1, | 68:  | DTE | 68  | 58.024784 | 0.800810  | 80 | 55 28 |
| 42  | 1, | 71:  | DTE | 71  | 58.597203 | 0.570132  | 80 | 75    |
| 43  | 1, | 73:  | DTE | 73  | 58.614273 | 0.015940  | 80 | 6e    |
| 44  | 1, | 75:  | DTE | 75  | 58.634265 | 0.018847  | 80 | 6c    |
| 45  | 1, | 77:  | DTE | 77  | 58.660308 | 0.024896  | 80 | 72    |
| 46  | 1, | 79:  | DTE | 79  | 58.678740 | 0.017294  | 80 | 2a    |
| 47  | 1, | 81:  | DTE | 81  | 58.708836 | 0.028953  | 80 | 2b    |
| 48  | 1, | 83:  | DTE | 83  | 58.728940 | 0.018958  | 80 | 2d    |
| 49  | 1, | 85:  | DTE | 85  | 58.748934 | 0.018744  | 80 | 2c    |
| 50  | 1, | 87:  | DTE | 87  | 58.768933 | 0.018750  | 80 | 2f    |
| 51  | 1, | 89:  | DTE | 89  | 58.796949 | 0.026661  | 80 | 2e    |
| 52  | 1, | 91:  | DTE | 91  | 58.814657 | 0.016460  | 80 | 75    |
| 53  | 1, | 93:  | DTE | 93  | 58.834545 | 0.018743  | 80 | 6e    |
| 54  | 1, | 95:  | DTE | 95  | 58.854547 | 0.018855  | 80 | 6c    |
| 55  | 1, | 97:  | DTE | 97  | 58.879852 | 0.024160  | 80 | 72    |
| 56  | 1, | 99:  | DTE | 99  | 58.899441 | 0.018444  | 80 | 2a    |
| 57  | 1, | 101: | DTE | 101 | 58.924117 | 0.023536  | 80 | 2b    |
| 58  | 1, | 103: | DTE | 103 | 58.944428 | 0.019166  | 80 | 2d    |
| 59  | 1, | 105: | DTE | 105 | 58.965776 | 0.020200  | 80 | 2c    |
| 60  | 1, | 107: | DTE | 107 | 58.984526 | 0.017605  | 80 | 2f    |
| 61  | 1, | 109: | DTE | 109 | 59.009519 | 0.023847  | 80 | 2e    |
| 62  |    |      |     |     |           |           |    |       |
| 63  | 1, | 111: | DTE | 111 | 60.802466 | 1.791801  | 80 | 75    |
| 64  | 1, | 113: | DTE | 113 | 60.822462 | 0.018855  | 80 | 6e    |
| 65  | 1, | 115: | DTE | 115 | 60.842456 | 0.018848  | 80 | 6c    |
| 66  | 1, | 117: | DTE | 117 | 60.862560 | 0.018959  | 80 | 72    |
| 67  | 1, | 119: | DTE | 119 | 60.910902 | 0.047203  | 80 | 2a    |
| 68  | 1, | 121: | DTE | 121 | 60.929421 | 0.017396  | 80 | 2b    |
| 69  | 1, | 123: | DTE | 123 | 60.947746 | 0.017169  | 80 | 2d    |
| 70  | 1, | 125: | DTE | 125 | 60.967747 | 0.018854  | 80 | 2c    |
| 71  | 1, | 127: | DTE | 127 | 60.992535 | 0.023642  | 80 | 2f    |
| 72  | 1, | 129: | DTE | 129 | 61.012741 | 0.019063  | 80 | 2e    |
| 73  | 1, | 131: | DTE | 131 | 61.033047 | 0.019160  | 80 | 55 28 |
| 74  | 1, | 134: | DTE | 134 | 61.057735 | 0.022188  | 80 | 52 28 |
| 75  | 1, | 137: | DTE | 137 | 61.860629 | 0.800603  | 80 | 52 28 |
| 76  | 1, | 140: | DTE | 140 | 62.605512 | 0.742595  | 80 | 75    |
| 77  | 1, | 142: | DTE | 142 | 62.626649 | 0.020131  | 80 | 6e    |
| 78  | 1, | 144: | DTE | 144 | 62.645398 | 0.017605  | 80 | 6c    |
| 79  | 1, | 146: | DTE | 146 | 62.665494 | 0.018951  | 80 | 72    |
| 80  | 1, | 148: | DTE | 148 | 62.685599 | 0.018959  | 80 | 2a    |
| 81  | 1, | 150: | DTE | 150 | 62.713508 | 0.026762  | 80 | 2b    |
| 82  | 1, | 152: | DTE | 152 | 62.730698 | 0.016044  | 80 | 2d    |
| 83  | 1, | 154: | DTE | 154 | 62.750690 | 0.018847  | 80 | 2c    |
| 84  | 1, | 156: | DTE | 156 | 62.771211 | 0.019376  | 80 | 2f    |
| 85  | 1, | 158: | DTE | 158 | 62.794746 | 0.022389  | 80 | 2e    |
| 86  | 1, | 160: | DTE | 160 | 62.818705 | 0.022813  | 80 | 75    |
| 87  | 1, | 162: | DTE | 162 | 62.835884 | 0.016033  | 80 | 6e    |
| 88  | 1, | 164: | DTE | 164 | 62.855783 | 0.018752  | 80 | 6c    |
| 89  | 1, | 166: | DTE | 166 | 62.885360 | 0.028600  | 80 | 72    |
| 90  | 1, | 168: | DTE | 168 | 62.910978 | 0.024474  | 80 | 2a    |
| 91  | 1, | 170: | DTE | 170 | 62.930976 | 0.018750  | 80 | 2b    |
| 92  | 1, | 172: | DTE | 172 | 62.956765 | 0.024435  | 80 | 2d    |
| 93  | 1, | 174: | DTE | 174 | 62.981597 | 0.023648  | 80 | 2c    |
| 94  | 1, | 176: | DTE | 176 | 63.001068 | 0.018327  | 80 | 2f    |
| 95  | 1, | 178: | DTE | 178 | 63.022631 | 0.020314  | 80 | 2e    |
| 96  |    |      |     |     |           |           |    |       |
| 97  | 1, | 180: | DTE | 180 | 64.904411 | 1.880608  | 80 | 75    |
| 98  | 1, | 182: | DTE | 182 | 64.927325 | 0.021774  | 80 | 6e    |
| 99  | 1, | 184: | DTE | 184 | 64.949505 | 0.021035  | 80 | 6c    |
| 100 | 1, | 186: | DTE | 186 | 64.969505 | 0.018856  | 80 | 72    |
| 101 | 1, | 188: | DTE | 188 | 64.995331 | 0.024681  | 80 | 2a    |

|     |    |      |     |     |           |          |    |       |
|-----|----|------|-----|-----|-----------|----------|----|-------|
| 102 | 1, | 190: | DTE | 190 | 65.014498 | 0.018011 | 80 | 2b    |
| 103 | 1, | 192: | DTE | 192 | 65.034595 | 0.018952 | 80 | 2d    |
| 104 | 1, | 194: | DTE | 194 | 65.059491 | 0.023749 | 80 | 2c    |
| 105 | 1, | 196: | DTE | 196 | 65.079591 | 0.018954 | 80 | 2f    |
| 106 | 1, | 198: | DTE | 198 | 65.099694 | 0.018958 | 80 | 2e    |
| 107 | 1, | 200: | DTE | 200 | 65.124587 | 0.023748 | 80 | 52 28 |
| 108 | 1, | 203: | DTE | 203 | 65.927695 | 0.800985 | 80 | 52 28 |
| 109 | 1, | 206: | DTE | 206 | 66.730999 | 0.801026 | 80 | 52 28 |
| 110 | 1, | 209: | DTE | 209 | 67.263415 | 0.530129 | 80 | 75    |
| 111 | 1, | 211: | DTE | 211 | 67.283509 | 0.018850 | 80 | 6e    |
| 112 | 1, | 213: | DTE | 213 | 67.303612 | 0.018958 | 80 | 6c    |
| 113 | 1, | 215: | DTE | 215 | 67.331462 | 0.026705 | 80 | 72    |
| 114 | 1, | 217: | DTE | 217 | 67.348718 | 0.016113 | 80 | 2a    |
| 115 | 1, | 219: | DTE | 219 | 67.368496 | 0.018637 | 80 | 2b    |
| 116 | 1, | 221: | DTE | 221 | 67.393523 | 0.023884 | 80 | 2d    |
| 117 | 1, | 223: | DTE | 223 | 67.413695 | 0.019062 | 80 | 2c    |
| 118 | 1, | 225: | DTE | 225 | 67.434001 | 0.019161 | 80 | 2f    |
| 119 | 1, | 227: | DTE | 227 | 67.458586 | 0.023438 | 80 | 2e    |
| 120 | 1, | 229: | DTE | 229 | 67.478787 | 0.019056 | 80 | 75    |
| 121 | 1, | 231: | DTE | 231 | 67.498684 | 0.018741 | 80 | 6e    |
| 122 | 1, | 233: | DTE | 233 | 67.518885 | 0.019056 | 80 | 6c    |
| 123 | 1, | 235: | DTE | 235 | 67.546802 | 0.026761 | 80 | 72    |
| 124 | 1, | 237: | DTE | 237 | 67.565129 | 0.017181 | 80 | 2a    |
| 125 | 1, | 239: | DTE | 239 | 67.583773 | 0.017499 | 80 | 2b    |
| 126 | 1, | 241: | DTE | 241 | 67.603872 | 0.018952 | 80 | 2d    |
| 127 | 1, | 243: | DTE | 243 | 67.623872 | 0.018854 | 80 | 2c    |
| 128 | 1, | 245: | DTE | 245 | 67.644179 | 0.019161 | 80 | 2f    |
| 129 | 1, | 247: | DTE | 247 | 67.663866 | 0.018542 | 80 | 2e    |
| 130 |    |      |     |     |           |          |    |       |
| 131 | 1, | 249: | DTE | 249 | 69.430562 | 1.765552 | 80 | 75    |
| 132 | 1, | 251: | DTE | 251 | 69.447224 | 0.015522 | 80 | 6e    |
| 133 | 1, | 253: | DTE | 253 | 69.467223 | 0.018749 | 80 | 6c    |
| 134 | 1, | 255: | DTE | 255 | 69.493886 | 0.025516 | 80 | 72    |
| 135 | 1, | 257: | DTE | 257 | 69.517002 | 0.021971 | 80 | 2a    |
| 136 | 1, | 259: | DTE | 259 | 69.542314 | 0.024166 | 80 | 2b    |
| 137 | 1, | 261: | DTE | 261 | 69.582830 | 0.039266 | 80 | 2d    |
| 138 | 1, | 263: | DTE | 263 | 69.602617 | 0.018642 | 80 | 2c    |
| 139 | 1, | 265: | DTE | 265 | 69.622198 | 0.018437 | 80 | 2f    |
| 140 | 1, | 267: | DTE | 267 | 69.642192 | 0.019016 | 80 | 2e    |
| 141 | 1, | 269: | DTE | 269 | 69.663757 | 0.020554 | 80 | 4e 28 |
| 142 | 1, | 272: | DTE | 272 | 69.682809 | 0.016764 | 80 | 52 28 |
| 143 | 1, | 275: | DTE | 275 | 70.485920 | 0.800818 | 80 | 52 28 |
| 144 | 1, | 278: | DTE | 278 | 71.289331 | 0.801125 | 80 | 52 28 |
| 145 | 1, | 281: | DTE | 281 | 71.390978 | 0.099360 | 80 | 75    |
| 146 | 1, | 283: | DTE | 283 | 71.415036 | 0.022917 | 80 | 6e    |
| 147 | 1, | 285: | DTE | 285 | 71.435134 | 0.018952 | 80 | 6c    |
| 148 | 1, | 287: | DTE | 287 | 71.460239 | 0.023960 | 80 | 72    |
| 149 | 1, | 289: | DTE | 289 | 71.480544 | 0.019056 | 80 | 2a    |
| 150 | 1, | 291: | DTE | 291 | 71.500546 | 0.018856 | 80 | 2b    |
| 151 | 1, | 293: | DTE | 293 | 71.520537 | 0.018847 | 80 | 2d    |
| 152 | 1, | 295: | DTE | 295 | 71.543767 | 0.022085 | 80 | 2c    |
| 153 | 1, | 297: | DTE | 297 | 71.565635 | 0.020723 | 80 | 2f    |
| 154 | 1, | 299: | DTE | 299 | 71.595629 | 0.028848 | 80 | 2e    |
| 155 | 1, | 301: | DTE | 301 | 71.616042 | 0.019269 | 80 | 75    |
| 156 | 1, | 303: | DTE | 303 | 71.635727 | 0.018537 | 80 | 6e    |
| 157 | 1, | 305: | DTE | 305 | 71.660310 | 0.023438 | 80 | 6c    |
| 158 | 1, | 307: | DTE | 307 | 71.680824 | 0.019264 | 80 | 72    |
| 159 | 1, | 309: | DTE | 309 | 71.700825 | 0.018856 | 80 | 2a    |
| 160 | 1, | 311: | DTE | 311 | 71.722276 | 0.020306 | 80 | 2b    |
| 161 | 1, | 313: | DTE | 313 | 71.740817 | 0.017396 | 80 | 2d    |
| 162 | 1, | 315: | DTE | 315 | 71.762957 | 0.020993 | 80 | 2c    |
| 163 | 1, | 317: | DTE | 317 | 71.780811 | 0.016311 | 80 | 2f    |
| 164 | 1, | 319: | DTE | 319 | 71.800908 | 0.018951 | 80 | 2e    |
| 165 |    |      |     |     |           |          |    |       |
| 166 | 1, | 321: | DTE | 321 | 74.064928 | 2.262875 | 80 | 75    |
| 167 | 1, | 323: | DTE | 323 | 74.084814 | 0.018744 | 80 | 6e    |
| 168 | 1, | 325: | DTE | 325 | 74.104920 | 0.018960 | 80 | 6c    |
| 169 | 1, | 327: | DTE | 327 | 74.127620 | 0.021565 | 80 | 72    |
| 170 | 1, | 329: | DTE | 329 | 74.150539 | 0.021773 | 80 | 2a    |
| 171 | 1, | 331: | DTE | 331 | 74.170947 | 0.019161 | 80 | 2b    |
| 172 | 1, | 333: | DTE | 333 | 74.194384 | 0.022292 | 80 | 2d    |
| 173 | 1, | 335: | DTE | 335 | 74.215002 | 0.019473 | 80 | 2c    |

|     |    |      |     |     |           |          |    |       |
|-----|----|------|-----|-----|-----------|----------|----|-------|
| 174 | 1, | 337: | DTE | 337 | 74.235002 | 0.018853 | 80 | 2f    |
| 175 | 1, | 339: | DTE | 339 | 74.265023 | 0.028874 | 80 | 2e    |
| 176 | 1, | 341: | DTE | 341 | 74.285198 | 0.019056 | 80 | 4e 28 |
| 177 | 1, | 344: | DTE | 344 | 75.088099 | 0.800610 | 80 | 4e 28 |
| 178 | 1, | 347: | DTE | 347 | 75.891510 | 0.801123 | 80 | 4e 28 |
| 179 | 1, | 350: | DTE | 350 | 76.694923 | 0.801125 | 80 | 4e 28 |
| 180 | 1, | 353: | DTE | 353 | 76.739285 | 0.042078 | 80 | 75    |
| 181 | 1, | 355: | DTE | 355 | 76.763443 | 0.023013 | 80 | 6e    |
| 182 | 1, | 357: | DTE | 357 | 76.784277 | 0.019678 | 80 | 6c    |
| 183 | 1, | 359: | DTE | 359 | 76.804800 | 0.019375 | 80 | 72    |
| 184 | 1, | 361: | DTE | 361 | 76.827606 | 0.021556 | 80 | 2a    |
| 185 | 1, | 363: | DTE | 363 | 76.849377 | 0.020626 | 80 | 2b    |
| 186 | 1, | 365: | DTE | 365 | 76.869373 | 0.018851 | 80 | 2d    |
| 187 | 1, | 367: | DTE | 367 | 76.889371 | 0.018856 | 80 | 2c    |
| 188 | 1, | 369: | DTE | 369 | 76.943421 | 0.052905 | 80 | 2f    |
| 189 | 1, | 371: | DTE | 371 | 76.964461 | 0.019895 | 80 | 2e    |
| 190 | 1, | 373: | DTE | 373 | 76.984663 | 0.019057 | 80 | 75    |
| 191 | 1, | 375: | DTE | 375 | 77.004560 | 0.018751 | 80 | 6e    |
| 192 | 1, | 377: | DTE | 377 | 77.024552 | 0.018848 | 80 | 6c    |
| 193 | 1, | 379: | DTE | 379 | 77.047365 | 0.021667 | 80 | 72    |
| 194 | 1, | 381: | DTE | 381 | 77.064483 | 0.015972 | 80 | 2a    |
| 195 | 1, | 383: | DTE | 383 | 77.084651 | 0.018854 | 80 | 2b    |
| 196 | 1, | 385: | DTE | 385 | 77.104749 | 0.018953 | 80 | 2d    |
| 197 | 1, | 387: | DTE | 387 | 77.133434 | 0.027541 | 80 | 2c    |
| 198 | 1, | 389: | DTE | 389 | 77.149741 | 0.014952 | 80 | 2f    |
| 199 | 1, | 391: | DTE | 391 | 77.170366 | 0.019479 | 80 | 2e    |
| 200 |    |      |     |     |           |          |    |       |
| 201 | 1, | 393: | DTE | 393 | 78.742720 | 1.571209 | 80 | 75    |
| 202 | 1, | 395: | DTE | 395 | 78.764591 | 0.020730 | 80 | 6e    |
| 203 | 1, | 397: | DTE | 397 | 78.783127 | 0.017391 | 80 | 6c    |
| 204 | 1, | 399: | DTE | 399 | 78.802604 | 0.018334 | 80 | 72    |
| 205 | 1, | 401: | DTE | 401 | 78.827807 | 0.024057 | 80 | 2a    |
| 206 | 1, | 403: | DTE | 403 | 78.848119 | 0.019063 | 80 | 2b    |
| 207 | 1, | 405: | DTE | 405 | 78.868426 | 0.019161 | 80 | 2d    |
| 208 | 1, | 407: | DTE | 407 | 78.888218 | 0.018647 | 80 | 2c    |
| 209 | 1, | 409: | DTE | 409 | 78.912482 | 0.023118 | 80 | 2f    |
| 210 | 1, | 411: | DTE | 411 | 78.935393 | 0.021764 | 80 | 2e    |
| 211 | 1, | 413: | DTE | 413 | 78.961851 | 0.025304 | 80 | 4e 28 |
| 212 | 1, | 416: | DTE | 416 | 78.983511 | 0.019162 | 80 | 4c 28 |
| 213 | 1, | 419: | DTE | 419 | 79.786411 | 0.800610 | 80 | 4c 28 |
| 214 | 1, | 422: | DTE | 422 | 80.589823 | 0.801125 | 80 | 4c 28 |
| 215 | 1, | 425: | DTE | 425 | 81.393233 | 0.801123 | 80 | 4c 28 |
| 216 | 1, | 428: | DTE | 428 | 82.196645 | 0.801124 | 80 | 4c 28 |
| 217 | 1, | 431: | DTE | 431 | 83.000062 | 0.801130 | 80 | 4c 28 |
| 218 | 1, | 434: | DTE | 434 | 83.280434 | 0.278075 | 80 | 75    |
| 219 | 1, | 436: | DTE | 436 | 83.300423 | 0.018849 | 80 | 6e    |
| 220 | 1, | 438: | DTE | 438 | 83.325320 | 0.023752 | 80 | 6c    |
| 221 | 1, | 440: | DTE | 440 | 83.345625 | 0.019160 | 80 | 72    |
| 222 | 1, | 442: | DTE | 442 | 83.366503 | 0.019732 | 80 | 2a    |
| 223 | 1, | 444: | DTE | 444 | 83.385410 | 0.017589 | 80 | 2b    |
| 224 | 1, | 446: | DTE | 446 | 83.411660 | 0.025105 | 80 | 2d    |
| 225 | 1, | 448: | DTE | 448 | 83.435716 | 0.022912 | 80 | 2c    |
| 226 | 1, | 450: | DTE | 450 | 83.462585 | 0.025724 | 80 | 2f    |
| 227 | 1, | 452: | DTE | 452 | 83.485606 | 0.021877 | 80 | 2e    |
| 228 | 1, | 454: | DTE | 454 | 83.510599 | 0.023848 | 80 | 75    |
| 229 | 1, | 456: | DTE | 456 | 83.530599 | 0.018855 | 80 | 6e    |
| 230 | 1, | 458: | DTE | 458 | 83.550592 | 0.018849 | 80 | 6c    |
| 231 | 1, | 460: | DTE | 460 | 83.570905 | 0.019168 | 80 | 72    |
| 232 | 1, | 462: | DTE | 462 | 83.595480 | 0.023430 | 80 | 2a    |
| 233 | 1, | 464: | DTE | 464 | 83.615793 | 0.019165 | 80 | 2b    |
| 234 | 1, | 466: | DTE | 466 | 83.636724 | 0.019785 | 80 | 2d    |
| 235 | 1, | 468: | DTE | 468 | 83.660581 | 0.022710 | 80 | 2c    |
| 236 | 1, | 470: | DTE | 470 | 83.680988 | 0.019265 | 80 | 2f    |
| 237 | 1, | 472: | DTE | 472 | 83.701094 | 0.018961 | 80 | 2e    |
| 238 | 1, | 474: | DTE | 474 | 84.647400 | 0.945161 | 80 | 75    |
| 239 | 1, | 476: | DTE | 476 | 84.667395 | 0.018854 | 80 | 6e    |
| 240 | 1, | 478: | DTE | 478 | 84.694160 | 0.025657 | 80 | 6c    |
| 241 | 1, | 480: | DTE | 480 | 84.717702 | 0.022397 | 80 | 72    |
| 242 | 1, | 482: | DTE | 482 | 84.751445 | 0.032494 | 80 | 2a    |
| 243 | 1, | 484: | DTE | 484 | 84.777688 | 0.025098 | 80 | 2b    |
| 244 | 1, | 486: | DTE | 486 | 84.798209 | 0.019376 | 80 | 2d    |
| 245 | 1, | 488: | DTE | 488 | 84.817784 | 0.018430 | 80 | 2c    |

|     |    |      |     |     |           |          |    |       |
|-----|----|------|-----|-----|-----------|----------|----|-------|
| 246 | 1, | 490: | DTE | 490 | 84.837682 | 0.018648 | 80 | 2f    |
| 247 | 1, | 492: | DTE | 492 | 84.861217 | 0.022400 | 80 | 2e    |
| 248 | 1, | 494: | DTE | 494 | 84.883196 | 0.020835 | 80 | 4c 28 |
| 249 | 1, | 497: | DTE | 497 | 85.686279 | 0.800738 | 80 | 4c 28 |
| 250 | 1, | 500: | DTE | 500 | 86.489710 | 0.801125 | 80 | 4c 28 |
| 251 | 1, | 503: | DTE | 503 | 87.293127 | 0.801130 | 80 | 4c 28 |
| 252 | 1, | 506: | DTE | 506 | 88.096540 | 0.801132 | 80 | 4c 28 |
| 253 | 1, | 509: | DTE | 509 | 88.208393 | 0.109567 | 80 | 75    |
| 254 | 1, | 511: | DTE | 511 | 88.229856 | 0.020216 | 80 | 6e    |
| 255 | 1, | 513: | DTE | 513 | 88.248383 | 0.017389 | 80 | 6c    |
| 256 | 1, | 515: | DTE | 515 | 88.268384 | 0.018855 | 80 | 72    |
| 257 | 1, | 517: | DTE | 517 | 88.292855 | 0.023325 | 80 | 2a    |
| 258 | 1, | 519: | DTE | 519 | 88.313482 | 0.019480 | 80 | 2b    |
| 259 | 1, | 521: | DTE | 521 | 88.333475 | 0.018750 | 80 | 2d    |
| 260 | 1, | 523: | DTE | 523 | 88.360281 | 0.025556 | 80 | 2c    |
| 261 | 1, | 525: | DTE | 525 | 88.383783 | 0.022355 | 80 | 2f    |
| 262 | 1, | 527: | DTE | 527 | 88.403774 | 0.018849 | 80 | 2e    |
| 263 | 1, | 529: | DTE | 529 | 88.423981 | 0.019061 | 80 | 75    |
| 264 | 1, | 531: | DTE | 531 | 88.443871 | 0.018744 | 80 | 6e    |
| 265 | 1, | 533: | DTE | 533 | 88.466058 | 0.021041 | 80 | 6c    |
| 266 | 1, | 535: | DTE | 535 | 88.483969 | 0.016765 | 80 | 72    |
| 267 | 1, | 537: | DTE | 537 | 88.504073 | 0.018958 | 80 | 2a    |
| 268 | 1, | 539: | DTE | 539 | 88.525944 | 0.020725 | 80 | 2b    |
| 269 | 1, | 541: | DTE | 541 | 88.549067 | 0.021978 | 80 | 2d    |
| 270 | 1, | 543: | DTE | 543 | 88.569164 | 0.018942 | 80 | 2c    |
| 271 | 1, | 545: | DTE | 545 | 88.589061 | 0.018741 | 80 | 2f    |
| 272 | 1, | 547: | DTE | 547 | 88.610096 | 0.019890 | 80 | 2e    |
| 273 |    |      |     |     |           |          |    |       |
| 274 | 1, | 549: | DTE | 549 | 90.566557 | 1.955314 | 80 | 75    |
| 275 | 1, | 551: | DTE | 551 | 90.587283 | 0.019481 | 80 | 6e    |
| 276 | 1, | 553: | DTE | 553 | 90.609541 | 0.021113 | 80 | 6c    |
| 277 | 1, | 555: | DTE | 555 | 90.630296 | 0.019479 | 80 | 72    |
| 278 | 1, | 557: | DTE | 557 | 90.647374 | 0.015932 | 80 | 2a    |
| 279 | 1, | 559: | DTE | 559 | 90.670081 | 0.021562 | 80 | 2b    |
| 280 | 1, | 561: | DTE | 561 | 90.693240 | 0.022012 | 80 | 2d    |
| 281 | 1, | 563: | DTE | 563 | 90.712574 | 0.018229 | 80 | 2c    |
| 282 | 1, | 565: | DTE | 565 | 90.732569 | 0.019016 | 80 | 2f    |
| 283 | 1, | 567: | DTE | 567 | 90.755901 | 0.022355 | 80 | 2e    |
| 284 | 1, | 569: | DTE | 569 | 90.773082 | 0.016034 | 80 | 55 28 |
| 285 | 1, | 572: | DTE | 572 | 90.797249 | 0.021874 | 80 | 4c 28 |
| 286 | 1, | 575: | DTE | 575 | 91.600248 | 0.800706 | 80 | 4c 28 |
| 287 | 1, | 578: | DTE | 578 | 92.403660 | 0.801126 | 80 | 4c 28 |
| 288 | 1, | 581: | DTE | 581 | 93.207088 | 0.801150 | 80 | 4c 28 |
| 289 | 1, | 584: | DTE | 584 | 93.827703 | 0.618338 | 80 | 75    |
| 290 | 1, | 586: | DTE | 586 | 93.849259 | 0.020414 | 80 | 6e    |
| 291 | 1, | 588: | DTE | 588 | 93.868732 | 0.018222 | 80 | 6c    |
| 292 | 1, | 590: | DTE | 590 | 93.892693 | 0.022814 | 80 | 72    |
| 293 | 1, | 592: | DTE | 592 | 93.912894 | 0.019057 | 80 | 2a    |
| 294 | 1, | 594: | DTE | 594 | 93.932998 | 0.018959 | 80 | 2b    |
| 295 | 1, | 596: | DTE | 596 | 93.961898 | 0.027755 | 80 | 2d    |
| 296 | 1, | 598: | DTE | 598 | 93.982991 | 0.019898 | 80 | 2c    |
| 297 | 1, | 600: | DTE | 600 | 94.003088 | 0.018958 | 80 | 2f    |
| 298 | 1, | 602: | DTE | 602 | 94.029228 | 0.024994 | 80 | 2e    |
| 299 | 1, | 604: | DTE | 604 | 94.048707 | 0.018334 | 80 | 75    |
| 300 | 1, | 606: | DTE | 606 | 94.069012 | 0.019159 | 80 | 6e    |
| 301 | 1, | 608: | DTE | 608 | 94.088188 | 0.018029 | 80 | 6c    |
| 302 | 1, | 610: | DTE | 610 | 94.113381 | 0.024223 | 80 | 72    |
| 303 | 1, | 612: | DTE | 612 | 94.133382 | 0.018751 | 80 | 2a    |
| 304 | 1, | 614: | DTE | 614 | 94.158165 | 0.023638 | 80 | 2b    |
| 305 | 1, | 616: | DTE | 616 | 94.178742 | 0.019429 | 80 | 2d    |
| 306 | 1, | 618: | DTE | 618 | 94.198378 | 0.018337 | 80 | 2c    |
| 307 | 1, | 620: | DTE | 620 | 94.218377 | 0.018759 | 80 | 2f    |
| 308 | 1, | 622: | DTE | 622 | 94.238476 | 0.018858 | 80 | 2e    |
| 309 |    |      |     |     |           |          |    |       |
| 310 | 1, | 624: | DTE | 624 | 96.833057 | 2.593445 | 80 | 75    |
| 311 | 1, | 626: | DTE | 626 | 96.857735 | 0.023535 | 80 | 6e    |
| 312 | 1, | 628: | DTE | 628 | 96.878047 | 0.019062 | 80 | 6c    |
| 313 | 1, | 630: | DTE | 630 | 96.898146 | 0.018952 | 80 | 72    |
| 314 | 1, | 632: | DTE | 632 | 96.918043 | 0.018751 | 80 | 2a    |
| 315 | 1, | 634: | DTE | 634 | 96.938244 | 0.019058 | 80 | 2b    |
| 316 | 1, | 636: | DTE | 636 | 96.958141 | 0.018752 | 80 | 2d    |
| 317 | 1, | 638: | DTE | 638 | 96.981673 | 0.022388 | 80 | 2c    |

|     |                       |      |     |     |                   |          |    |       |
|-----|-----------------------|------|-----|-----|-------------------|----------|----|-------|
| 318 | 1,                    | 640: | DTE | 640 | 96.998236         | 0.015416 | 80 | 2f    |
| 319 | 1,                    | 642: | DTE | 642 | 97.026362         | 0.026980 | 80 | 2e    |
| 320 | 1,                    | 644: | DTE | 644 | 97.048640         | 0.021138 | 80 | 55 28 |
| 321 | 1,                    | 647: | DTE | 647 | 97.852271         | 0.801234 | 80 | 55 28 |
| 322 | 1,                    | 650: | DTE | 650 | 98.655682         | 0.801124 | 80 | 55 28 |
| 323 | 1,                    | 653: | DTE | 653 | 99.459095         | 0.801126 | 80 | 55 28 |
| 324 | 1,                    | 656: | DTE | 656 | 99.567726         | 0.106346 | 80 | 75    |
| 325 | 1,                    | 658: | DTE | 658 | 99.588444         | 0.019577 | 80 | 6e    |
| 326 | 1,                    | 660: | DTE | 660 | 99.607507         | 0.017917 | 80 | 6c    |
| 327 | 1,                    | 662: | DTE | 662 | 99.629480         | 0.020828 | 80 | 72    |
| 328 | 1,                    | 664: | DTE | 664 | 99.647500         | 0.016874 | 80 | 2a    |
| 329 | 1,                    | 666: | DTE | 666 | 99.669474         | 0.020828 | 80 | 2b    |
| 330 | 1,                    | 668: | DTE | 668 | 99.693120         | 0.022501 | 80 | 2d    |
| 331 | 1,                    | 670: | DTE | 670 | 99.712594         | 0.018232 | 80 | 2c    |
| 332 | 1,                    | 672: | DTE | 672 | 99.732624         | 0.018887 | 80 | 2f    |
| 333 | 1,                    | 674: | DTE | 674 | 99.754459         | 0.020617 | 80 | 2e    |
| 334 | 1,                    | 676: | DTE | 676 | 99.773001         | 0.017396 | 80 | 75    |
| 335 | 1,                    | 678: | DTE | 678 | 99.796546         | 0.022399 | 80 | 6e    |
| 336 | 1,                    | 680: | DTE | 680 | 99.812787         | 0.015104 | 80 | 6c    |
| 337 | 1,                    | 682: | DTE | 682 | 99.832693         | 0.018761 | 80 | 72    |
| 338 | 1,                    | 684: | DTE | 684 | 99.857670         | 0.023744 | 80 | 2a    |
| 339 | 1,                    | 686: | DTE | 686 | 99.877878         | 0.019063 | 80 | 2b    |
| 340 | 1,                    | 688: | DTE | 688 | 99.897711         | 0.018687 | 80 | 2d    |
| 341 | 1,                    | 690: | DTE | 690 | 99.918080         | 0.019062 | 80 | 2c    |
| 342 | 1,                    | 692: | DTE | 692 | 99.942970         | 0.023745 | 80 | 2f    |
| 343 | 1,                    | 694: | DTE | 694 | 99.963177         | 0.019061 | 80 | 2e    |
| 344 |                       |      |     |     |                   |          |    |       |
| 345 | 1,                    | 696: | DTE | 696 | 103.574475        | 3.610047 | 80 | 3a    |
| 346 |                       |      |     |     |                   |          |    |       |
| 347 | 1,                    | 698: | DTE | 698 | 106.460893        | 2.885275 | 80 | 2a    |
| 348 |                       |      |     |     |                   |          |    |       |
| 349 | 1,                    | 700: | DTE | 700 | 110.057188        | 3.595152 | 80 | 3b    |
| 350 |                       |      |     |     |                   |          |    |       |
| 351 | 1,                    | 702: | DTE | 702 | 112.970058        | 2.911625 | 80 | 2b    |
| 352 |                       |      |     |     |                   |          |    |       |
| 353 | 1,                    | 704: | DTE | 704 | 116.741334        | 3.770134 | 80 | 5b    |
| 354 |                       |      |     |     |                   |          |    |       |
| 355 | 1,                    | 706: | DTE | 706 | 119.285714        | 2.543240 | 80 | 7b    |
| 356 |                       |      |     |     |                   |          |    |       |
| 357 | 1,                    | 708: | DTE | 708 | 124.023395        | 4.736435 | 80 | 7d    |
| 358 |                       |      |     |     |                   |          |    |       |
| 359 | 1,                    | 710: | DTE | 710 | 130.094818        | 6.070282 | 80 | 3c    |
| 360 | 1,                    | 712: | DTE | 712 | 130.897508        | 0.801549 | 80 | 3c    |
| 361 | 1,                    | 714: | DTE | 714 | 131.699875        | 0.801233 | 80 | 3c    |
| 362 | 1,                    | 716: | DTE | 716 | 132.502351        | 0.801334 | 80 | 3c    |
| 363 | 1,                    | 718: | DTE | 718 | 133.191026        | 0.687524 | 80 | 2c    |
| 364 |                       |      |     |     |                   |          |    |       |
| 365 | 1,                    | 720: | DTE | 720 | 135.507597        | 2.315320 | 80 | 3d    |
| 366 | 1,                    | 722: | DTE | 722 | 136.310181        | 0.801234 | 80 | 3d    |
| 367 | 1,                    | 724: | DTE | 724 | 137.112549        | 0.801227 | 80 | 3d    |
| 368 | 1,                    | 726: | DTE | 726 | 137.914926        | 0.801235 | 80 | 3d    |
| 369 | 1,                    | 728: | DTE | 728 | 138.342979        | 0.426917 | 80 | 2d    |
| 370 |                       |      |     |     |                   |          |    |       |
| 371 | 1,                    | 730: | DTE | 730 | 140.706143        | 2.362022 | 80 | 5c    |
| 372 |                       |      |     |     |                   |          |    |       |
| 373 | 1,                    | 732: | DTE | 732 | 143.361031        | 2.653746 | 80 | 7c    |
| 374 |                       |      |     |     |                   |          |    |       |
| 375 | 1,                    | 734: | DTE | 734 | 148.333257        | 4.971084 | 80 | 7e    |
| 376 |                       |      |     |     |                   |          |    |       |
| 377 | 1,                    | 736: | DTE | 736 | 150.828691        | 2.494294 | 80 | 3e    |
| 378 |                       |      |     |     |                   |          |    |       |
| 379 | 1,                    | 738: | DTE | 738 | 153.128220        | 2.298378 | 80 | 2e    |
| 380 |                       |      |     |     |                   |          |    |       |
| 381 | 1,                    | 740: | DTE | 740 | 155.696882        | 2.567525 | 80 | 3f    |
| 382 |                       |      |     |     |                   |          |    |       |
| 383 | 1,                    | 742: | DTE | 742 | 158.306247        | 2.608232 | 80 | 2f    |
| 384 |                       |      |     |     |                   |          |    |       |
| 385 | 1,                    | 744: | DTE | 744 | 163.329188        | 5.021748 | 80 | 7e    |
| 386 |                       |      |     |     |                   |          |    |       |
| 387 | 1,                    | 746: | DTE | 746 | 168.568562        | 5.238233 | 80 | 7e    |
| 388 |                       |      |     |     |                   |          |    |       |
| 389 | There were a total of |      |     | 747 | bytes transferred |          |    |       |

390  
391 There were a total of 0 DCE bytes transferred  
392 The first DCE byte came in at 0.000000 seconds from the start of data collection  
393 The last DCE byte was at 0.000000 seconds from the start of data collection  
394  
395 There were a total of 747 DTE bytes transferred  
396 The first DTE byte came in at 0.000000 seconds from the start of data collection  
397 The last DTE byte was at 168.569703 seconds from the start of data collection  
398

## 1.21 VCL-Matrix

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: Unknown
4. Hello Message last few bytes: —
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07N.txt File is non-existent.
7. Special: Nothing ever came out of the Sprite 2.

## 1.22 Vista

This data was collected from a Dedicated Micro Systems Sprite 2 on 29MAY07.

1. Baud rate: 9600
2. Parity: None
3. Hello Message Length: 44
4. Hello Message last few bytes: 0x00 0x00 0x01 0x03
5. Is the protocol a Polling Protocol?: No
6. Name of the data capture file: 29MAY07H.txt
7. Protocol Characteristics:
  - 7.1 Message Length(s): 9
  - 7.2 ISO Level 1: \_\_\_\_\_.
  - 7.3 Unique first byte: 0xAA, 0x02
  - 7.4 Unique last byte: 0x03
  - 7.5 Checksum: Sum of all but the first two bytes and the last byte.
  - 7.6 Device address: Byte 3?

---

<sup>23</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/VCLMatrix.inc,v 1.1 2007-06-05 08:31:18-07 Hamilton Exp  
Hamilton \$

<sup>24</sup>\$Header: d:/GeneralInformation/1stLooks/RCS/Vista.inc,v 1.1 2007-06-05 08:31:24-07 Hamilton Exp Hamilton  
\$

## 1.22.1 h.out

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/GeneralInformation/1stLooks/RCS/H.out,v 1.3 2007-05-31 08:02:23-07 Hamilton Exp Hamilton $
3 FTS capture buffer (5/29/2007 8:19:32 AM)
4 Event 1 (5/29/2007 8:16:32.543200 AM) through
5 Event 657 (5/29/2007 8:19:04.523055 AM)
6
7 1, 1: DTE 1 0.000000 0.000000 aa 02 01 00 00 00 01 03
8 1, 10: DTE 10 0.010425 0.001157 aa 02 01 01 00 33 00 35 03
9 1, 19: DTE 19 0.032178 0.012604 aa 02 01 00 00 00 00 01 03
10 1, 28: DTE 28 0.042595 0.001146 aa 02 01 91 00 00 00 92 03
11 1, 37: DTE 37 0.113989 0.062123 aa 02 01 00 00 00 00 01 03
12
13 1, 46: DTE 46 40.047238 39.923927 aa 02 01 00 00 00 00 01 03
14 1, 55: DTE 55 40.057754 0.001147 aa 02 01 00 00 00 88 89 03
15 1, 64: DTE 64 40.068030 0.001109 aa 02 01 04 00 00 88 8d 03
16 1, 73: DTE 73 42.216787 2.139553 aa 02 01 00 00 00 00 01 03
17 1, 82: DTE 82 42.227410 0.001147 aa 02 01 00 00 00 00 01 03
18
19 1, 91: DTE 91 44.655563 2.418780 aa 02 01 00 00 00 00 01 03
20 1, 100: DTE 100 44.666080 0.001314 aa 02 01 00 00 00 88 89 03
21 1, 109: DTE 109 44.676497 0.001146 aa 02 01 04 00 00 88 8d 03
22 1, 118: DTE 118 44.687121 0.001144 aa 02 01 04 00 88 88 15 03
23 1, 127: DTE 127 44.697532 0.001146 aa 02 01 06 00 88 88 17 03
24 1, 136: DTE 136 47.615509 2.908605 aa 02 01 00 00 00 00 01 03
25 1, 145: DTE 145 47.625922 0.001146 aa 02 01 00 00 00 00 01 03
26
27 1, 154: DTE 154 50.181245 2.546059 aa 02 01 00 00 00 00 01 03
28 1, 163: DTE 163 50.191865 0.001146 aa 02 01 00 00 88 00 89 03
29 1, 172: DTE 172 50.202171 0.001147 aa 02 01 02 00 88 00 8b 03
30 1, 181: DTE 181 52.579298 2.367856 aa 02 01 00 00 00 00 01 03
31 1, 190: DTE 190 52.589605 0.001146 aa 02 01 00 00 00 00 01 03
32
33 1, 199: DTE 199 55.449777 2.851005 aa 02 01 00 00 00 00 01 03
34 1, 208: DTE 208 55.460163 0.001119 aa 02 01 00 00 00 88 89 03
35 1, 217: DTE 217 55.470708 0.001150 aa 02 01 08 00 00 88 91 03
36 1, 226: DTE 226 55.481225 0.001137 aa 02 01 08 00 88 88 19 03
37 1, 235: DTE 235 55.491642 0.001146 aa 02 01 0a 00 88 88 1b 03
38 1, 244: DTE 244 58.149554 2.648808 aa 02 01 00 00 00 00 01 03
39 1, 253: DTE 253 58.160168 0.001146 aa 02 01 00 00 00 00 01 03
40
41 1, 262: DTE 262 62.340038 4.170494 aa 02 01 00 00 00 00 01 03
42 1, 271: DTE 271 62.350649 0.001147 aa 02 01 00 00 00 88 89 03
43 1, 280: DTE 280 62.361065 0.001137 aa 02 01 08 00 00 88 91 03
44 1, 289: DTE 289 64.915033 2.544598 aa 02 01 00 00 00 00 01 03
45 1, 298: DTE 298 64.925550 0.001146 aa 02 01 00 00 00 00 01 03
46
47 1, 307: DTE 307 68.180345 3.245426 aa 02 01 00 00 00 00 01 03
48 1, 316: DTE 316 68.190862 0.001146 aa 02 01 00 00 00 88 89 03
49 1, 325: DTE 325 68.201375 0.001354 aa 02 01 08 00 00 88 91 03
50 1, 334: DTE 334 68.211793 0.001146 aa 02 01 08 00 88 88 19 03
51 1, 343: DTE 343 68.222313 0.001250 aa 02 01 09 00 88 88 1a 03
52 1, 352: DTE 352 70.738684 2.507101 aa 02 01 00 00 00 00 01 03
53 1, 361: DTE 361 70.749200 0.001146 aa 02 01 00 00 00 00 01 03
54
55 1, 370: DTE 370 73.256410 2.497834 aa 02 01 00 00 00 00 01 03
56 1, 379: DTE 379 73.266817 0.001407 aa 02 01 00 00 88 00 89 03
57 1, 388: DTE 388 73.277232 0.001146 aa 02 01 01 00 88 00 8a 03
58 1, 397: DTE 397 76.118343 2.831840 aa 02 01 00 00 00 00 01 03
59 1, 406: DTE 406 76.128755 0.001146 aa 02 01 00 00 00 00 01 03
60
61 1, 415: DTE 415 78.590554 2.452633 aa 02 01 00 00 00 00 01 03
62 1, 424: DTE 424 78.601071 0.001145 aa 02 01 00 00 00 88 89 03
63 1, 433: DTE 433 78.611377 0.001145 aa 02 01 04 00 00 88 8d 03
64 1, 442: DTE 442 78.621690 0.001146 aa 02 01 04 00 88 88 15 03
65 1, 451: DTE 451 78.632106 0.001145 aa 02 01 05 00 88 88 16 03
66 1, 460: DTE 460 81.888467 3.247090 aa 02 01 00 00 00 00 01 03
67 1, 469: DTE 469 81.898772 0.001146 aa 02 01 00 00 00 00 01 03
68

```

```

69      1,      478: DTE   478   84.311661  2.403505 aa 02 01 00 00 00 00 01 03
70      1,      487: DTE   487   84.322443  0.001147 aa 02 01 00 00 00 88 89 03
71      1,      496: DTE   496   84.332859  0.001177 aa 02 01 04 00 00 88 8d 03
72      1,      505: DTE   505   86.841527  2.499294 aa 02 01 00 00 00 00 01 03
73      1,      514: DTE   514   86.851933  0.001145 aa 02 01 00 00 00 00 01 03
74
75      1,      523: DTE   523   90.211820  3.350615 aa 02 01 00 08 00 00 09 03
76
77      1,      532: DTE   532   92.205874  1.984892 aa 02 01 00 00 00 00 01 03
78
79      1,      541: DTE   541   95.040008  2.824762 aa 02 01 00 04 00 00 05 03
80
81      1,      550: DTE   550   97.434000  2.384831 aa 02 01 00 00 00 00 01 03
82
83      1,      559: DTE   559  117.303114 19.859851 aa 02 01 00 10 00 00 11 03
84
85      1,      568: DTE   568  119.606806  2.294326 aa 02 01 00 00 00 00 01 03
86
87      1,      577: DTE   577  122.280647  2.664678 aa 02 01 00 20 00 00 21 03
88
89      1,      586: DTE   586  124.760254  2.470237 aa 02 01 00 00 00 00 01 03
90
91      1,      595: DTE   595  134.646482  9.876967 aa 02 01 91 01 00 00 93 03
92
93      1,      604: DTE   604  137.556644  2.900689 aa 02 01 00 02 00 00 03 03
94
95      1,      613: DTE   613  139.539658  1.973748 aa 02 01 00 00 00 00 01 03
96
97      1,      622: DTE   622  141.412896  1.863973 aa 02 01 00 01 00 00 02 03
98
99      1,      631: DTE   631  143.536620  2.114352 aa 02 01 00 00 00 00 01 03
100
101     1,      640: DTE   640  147.974039  4.428151 aa 02 01 8f 01 00 00 91 03
102
103     1,      649: DTE   649  151.970693  3.987183 aa 02 01 91 01 00 00 93 03
104
105 There were a total of      657 bytes transferred
106
107 There were a total of          0 DCE bytes transferred
108 The first DCE byte came in at 0.000000 seconds from the start of data collection
109 The last DCE byte was at 0.000000 seconds from the start of data collection
110
111 There were a total of      657 DTE bytes transferred
112 The first DTE byte came in at 0.000000 seconds from the start of data collection
113 The last DTE byte was at 151.979855 seconds from the start of data collection
114

```

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