

VCL RS-485 Protocol

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¹\$Header: d:/TXB-V485/ProtocolDocument/RCS/VCLproto.tex,v 1.10 2008-09-22 12:32:11-07 Hamilton Exp
Hamilton \$

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1 Protocol Characteristics

1.1 General Characteristics

The **VCL** (Video Control Limited) RS-485 protocol has the following characteristics:

1. Communications Format: RS-485 in two wire mode.
2. Communications Rate: 1200 or 9600 baud, 8 data bits, 1 stop bit, no parity. 9600 baud is the default.
3. Checksum Type: None
4. Unique First Byte: Yes, the most significant bit on the first byte of each message is set, on succeeding bytes the upper bit is clear. The other 7 bits are the camera address.
5. Camera Address Range: In the protocol the address is in the first byte. Since the most significant bit is set on the first byte, the address range is from $0 \rightarrow 127$. Actual cameras have address from $1 \rightarrow 128$. I.e. a protocol first byte of **0x82** applies to camera #3 (in D Protocol) or **0xFF** = camera address 128.
6. Is the protocol Two Way?: Yes, replies from the camera are currently unknown.
7. What is the maximum PRESET number: 127 (Total number is 128 as 0 is a valid preset number.)
8. What is the maximum “AUTO PAN” number: 4. (Total number is 5 as 0 is a valid AUTO PAN number.) This might be the same as Pelco’s pattern function.
9. What types of VCL protocol generating equipment are available?
 - 9.1 A VCL model MAX0025-00 Joy stick keyboard serial number F01-090061. There is no other name on the keyboard.
 - 9.2 A VCL model MAX0001-00 8 input matrix, serial number F01-130129. On the matrix it is called a MAXCOM8.
 - 9.3 A Dedicated Micros Sprite 2 VCR. This was used for the “First Looks” data only.
 - 9.4 There are four different GUIs from Forward Vision. Some of the commands are obviously wrong, while others provide a useful insight into the protocol. Most of the insites involve new op-codes and ranges on variable fields.

1.2 Specific Charistericts

1. Commands consist of two or three bytes of data. The first byte always has the most significant bit set. The rest of the first byte is the camera address. The camera address is “0 based”, i.e. a first byte of **0x80** goes to camera 1. All commands might get ACKs of some type. The format of the ACK/RESPONSE is unknown. However when the matrix is powered up, it sends out query commands and since it does not get any replies, will not allow choices of cameras to be made².
2. In Table 1, page 5 and Table 2, page 6 only the second byte is usually shown. Since the first byte consists of a “first byte ID bit” and the camera address, it is ignored. The second byte does the actual “work” required by the command and the third byte, when present provides “ancillary” data. (Preset ID, etc.)

²The Forward Vision GUIs operate without receiving replies.

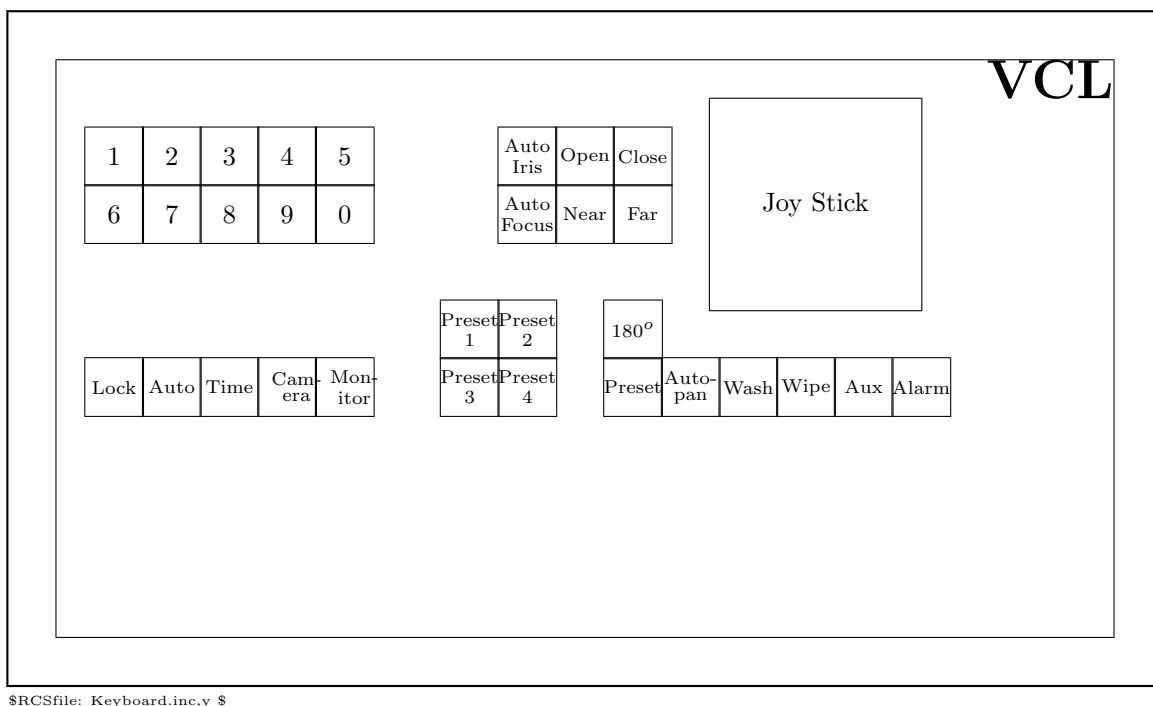


Figure 1: VCL keyboard[keyboard]

3. In Table 1, page 5 and Table 2, page 6 the command marked “UNKNOWN #1” was captured from the DMS Sprite 2 VCR only and was not observed coming from any other source. Thus its meaning is unknown.
4. Something strange occurs with the AUX command, in that it consists of two sub commands separated by up to about 500 ms. The meaning of these is unknown. (Why two? How is the AUX number chosen?) Later investigation using the Forward Vision GUI suggest that one is for “button down” and the other is for “button up” actions.
5. In the following pictures of the communications lines:
 - 5.1 **Trace 1:** This is the – RS-485 communications line.
 - 5.2 **Trace 2:** This is the + RS-485 communications line.
 - 5.3 **Trace 3:** This is an unterminated spare line. (Showing noise.)
 - 5.4 **Trace 4:** This is an unterminated spare line. (Showing noise.)
6. PRESET range is $0 \rightarrow 127$ in the protocol which corresponds to $0 \rightarrow 127$ in human. There is no obvious way to set a preset.
7. AUTO PAN range is $0 \rightarrow 4$ in the protocol which *might* correspond to $1 \rightarrow 5$ in human.
8. AUX is unclear how it works. Using the keyboard numeric keys does not do as expected.

VCL Commands by Name		
Action	Command	Length
180° FLIP	0x54	2
AUTO FOCUS ON	0x61	2
AUTO FOCUS OFF	0x41	2
AUTO IRIS ON	0x6D	2
AUTO IRIS OFF	0x4D	2
AUTO PAN START	0x5E PATTERN #	3
AUTO PAN END	0x7E	2
AUX ON	0x48	2
AUX OFF	0x5A	2
CALL PRESET	0x42 PRESET #	3
SET PRESET	0x47 PRESET #	3
CAMERA QUERY	0x46 0x00	3
CLOSE IRIS START	0x3F	2
CLOSE IRIS STOP	0x2F	2
FOCUS FAR START	0x3D	2
FOCUS FAR STOP	0x2D	2
FOCUS NEAR START	0x3C	2
FOCUS NEAR STOP	0x2C	2
OPEN IRIS START	0x3E	2
OPEN IRIS STOP	0x2E	2
PAN LEFT	0x4C SPEED	3
PAN LEFT STOP	0x6C	2
PAN RIGHT	0x52 SPEED	3
PAN RIGHT STOP	0x72	2
TILT DOWN	0x4E SPEED	3
TILT DOWN STOP	0x6E	2
TILT UP	0x55 SPEED	3
TILT UP STOP	0x75	2
UNKNOWN #1	0x7D	2
WASH (FIRST PUSH)	0x5C	2
WIPE START (KEY DOWN)	0x5B	2
WIPE END (KEY UP)	0x7B	2
ZOOM CCW START	0x3B	2
ZOOM CCW STOP	0x2B	2
ZOOM CW START	0x3A	2
ZOOM CW STOP	0x2A	2

Table 1: VCL Commands by Name[vclcmdsnames]

VCL Commands by Op-Codes		
Action	Command	Length
ZOOM CW STOP	0x2A	2
ZOOM CCW STOP	0x2B	2
FOCUS NEAR STOP	0x2C	2
FOCUS FAR STOP	0x2D	2
OPEN IRIS STOP	0x2E	2
CLOSE IRIS STOP	0x2F	2
ZOOM CW START	0x3A	2
ZOOM CCW START	0x3B	2
FOCUS NEAR START	0x3C	2
FOCUS FAR START	0x3D	2
OPEN IRIS START	0x3E	2
CLOSE IRIS START	0x3F	2
AUTO FOCUS OFF	0x41	2
CALL PRESET	0x42 PRESET #	3
CAMERA QUERY	0x46 0x00	3
SET PRESET	0x47 PRESET #	3
AUX ON	0x48	2
PAN LEFT	0x4C SPEED	3
AUTO IRIS OFF	0x4D	2
TILT DOWN	0x4E SPEED	3
PAN RIGHT	0x52 SPEED	3
180° FLIP	0x54	2
TILT UP	0x55 SPEED	3
AUX OFF	0x5A	2
WIPE START (KEY DOWN)	0x5B	2
WASH (FIRST PUSH)	0x5C	2
AUTO PAN START	0x5E PATTERN #	3
AUTO FOCUS ON	0x61	2
PAN LEFT STOP	0x6C	2
AUTO IRIS ON	0x6D	2
TILT DOWN STOP	0x6E	2
PAN RIGHT STOP	0x72	2
TILT UP STOP	0x75	2
WIPE END (KEY UP)	0x7B	2
UNKNOWN #1	0x7D	2
AUTO PAN END	0x7E	2

Table 2: VCL Commands by Op-Code[vclcmdsopcodes]

2 Command Timings and Voltage ranges

In the VCL protocol commands are sent in an unexpected manner. To date, 22SEP07, commands have only been two or three bytes in length but always include a “gap” between bytes.

2.1 Timing for two byte commands

1. In Figure 2, page 8 is shown a full command of two bytes for having the joy stick being released after it was rotated in a clockwise (CW) direction. Note that two bytes of data were sent and that there was a gap between both bytes.
2. In Figure 3, page 9, Figure 4, page 10 and Figure 5, page 11 are more details of the command timing.

2.2 Timing for three byte commands

1. In Figure 6, page 12 is shown the full PRESET 1 command.
2. In Figure 7, page 13 and Figure 8, page 14 are the two included gaps. In Figure 9, page 15 and Figure 10, page 16 the same time is shown on an expanded time frame.
3. In Figure 11, page 17, Figure 11, page 17 and Figure 11, page 17 the three bytes are shown in an expanded time frame.

2.3 Voltage Levels

In Figure 14, page 20, Figure 15, page 21, Figure 16, page 22 and Figure 17, page 23 are shown the voltages generated by the VCL matrix.

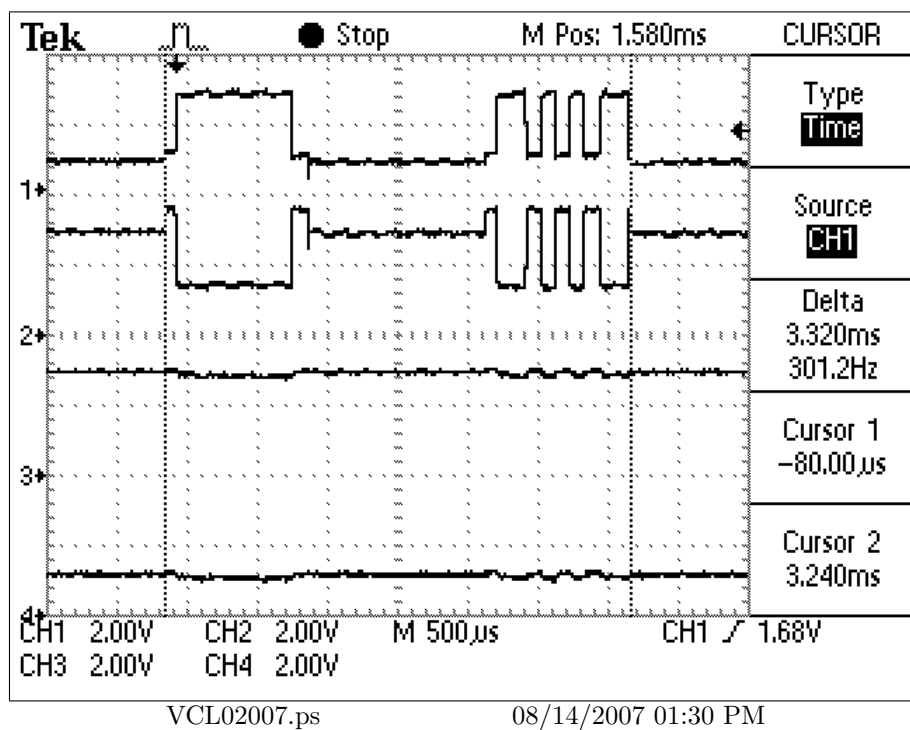


Figure 2: Overall duration of a CW end command[capture2:overalltime]

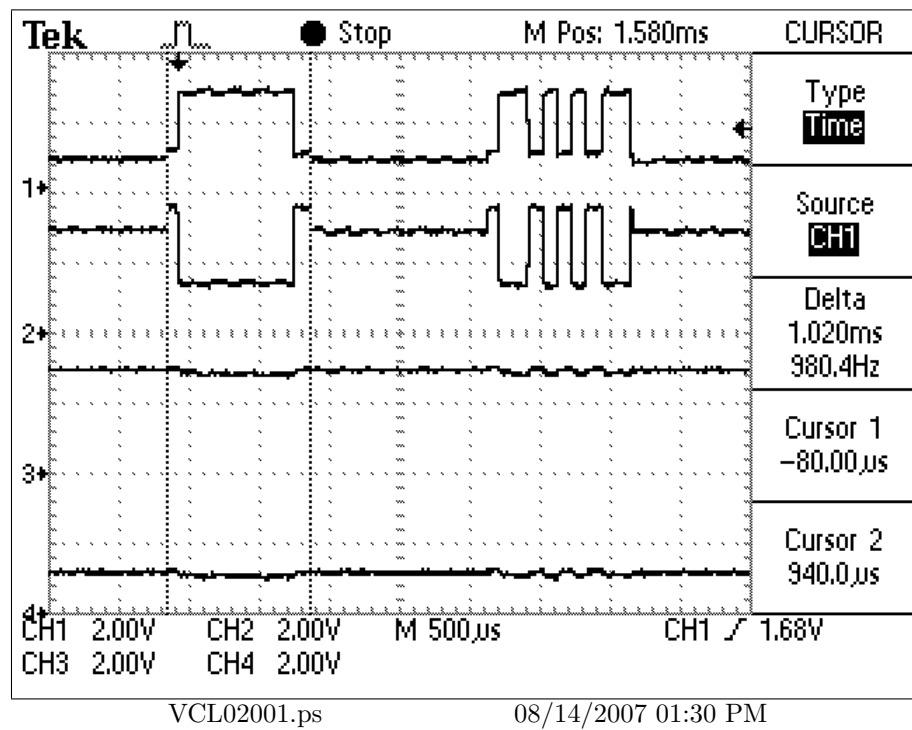


Figure 3: Duration of the first byte 0x80 of a CW end command[capture2:byte1]

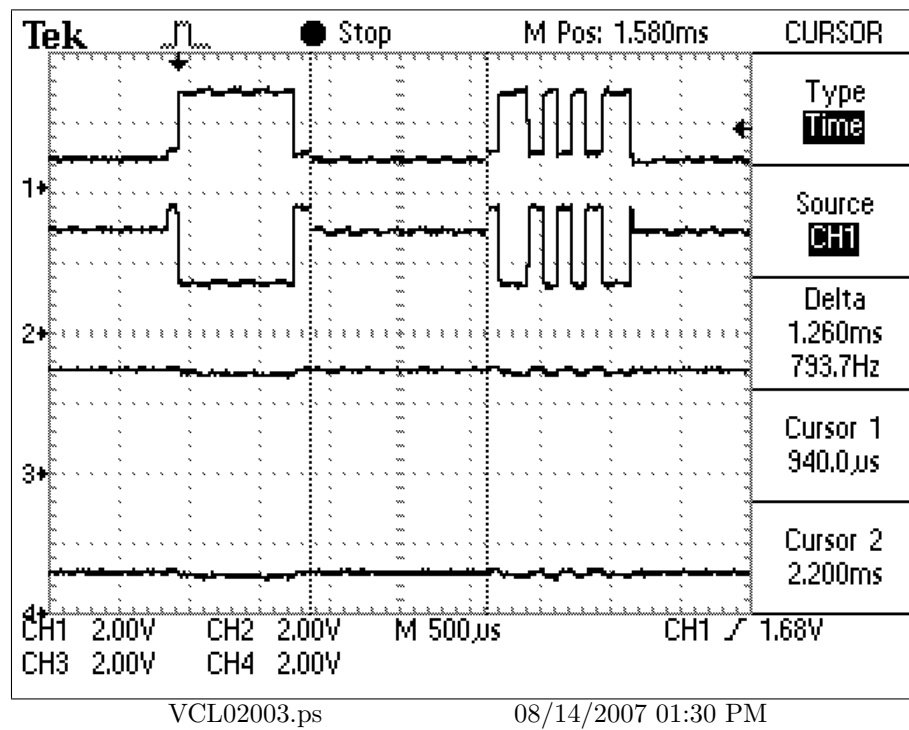


Figure 4: Duration of the gap between both command bytes [capture2:gap]

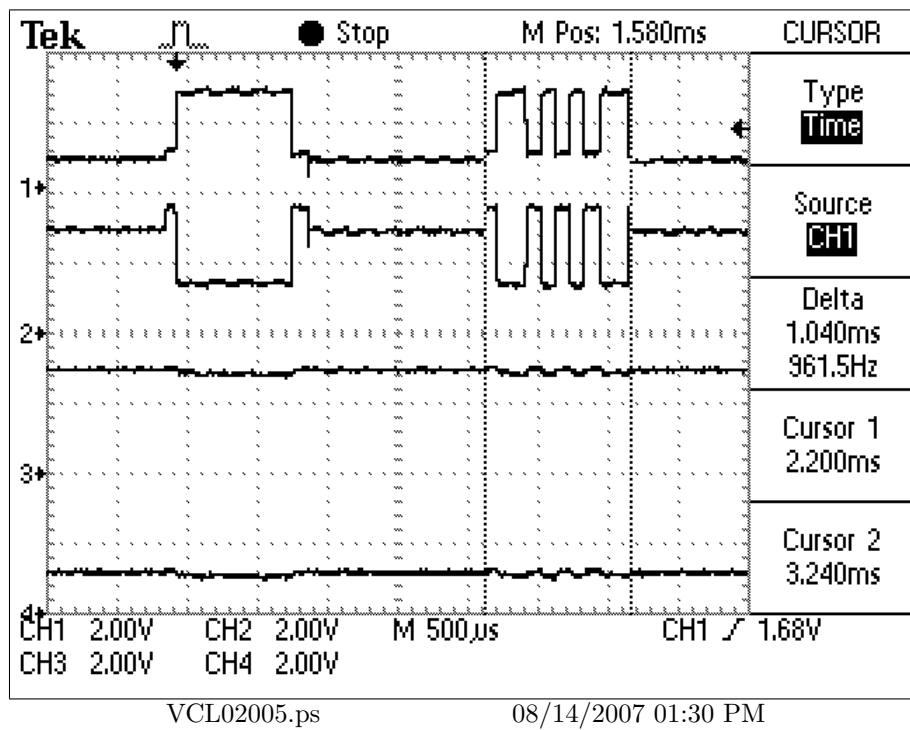


Figure 5: Duration of the second byte 0x2A of a CW end command [capture2:byte2]

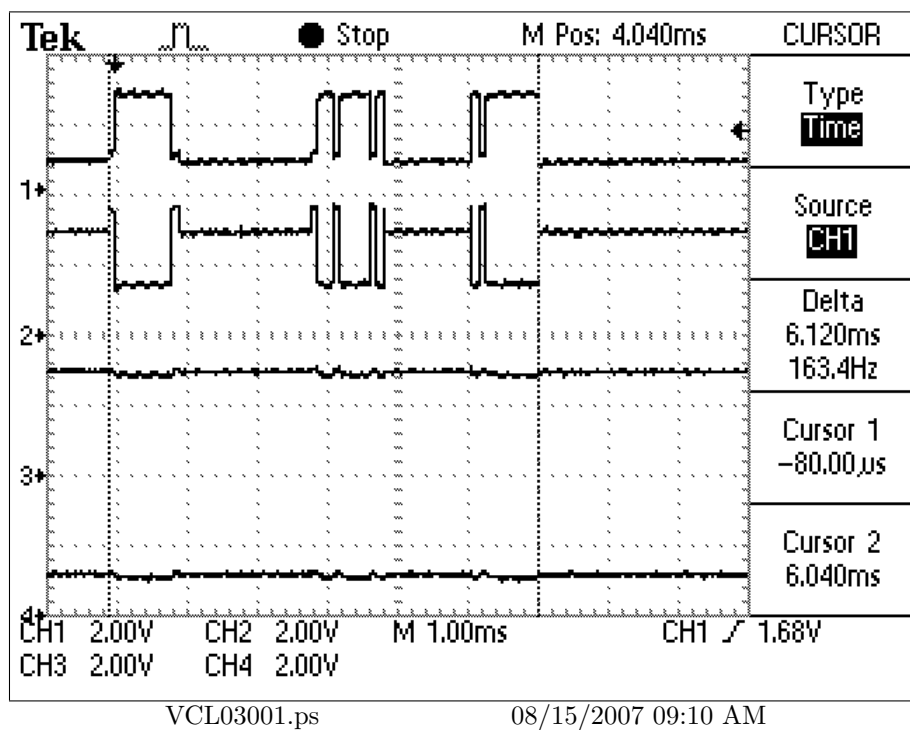


Figure 6: Overall timing for Preset 1[capture3:overall]

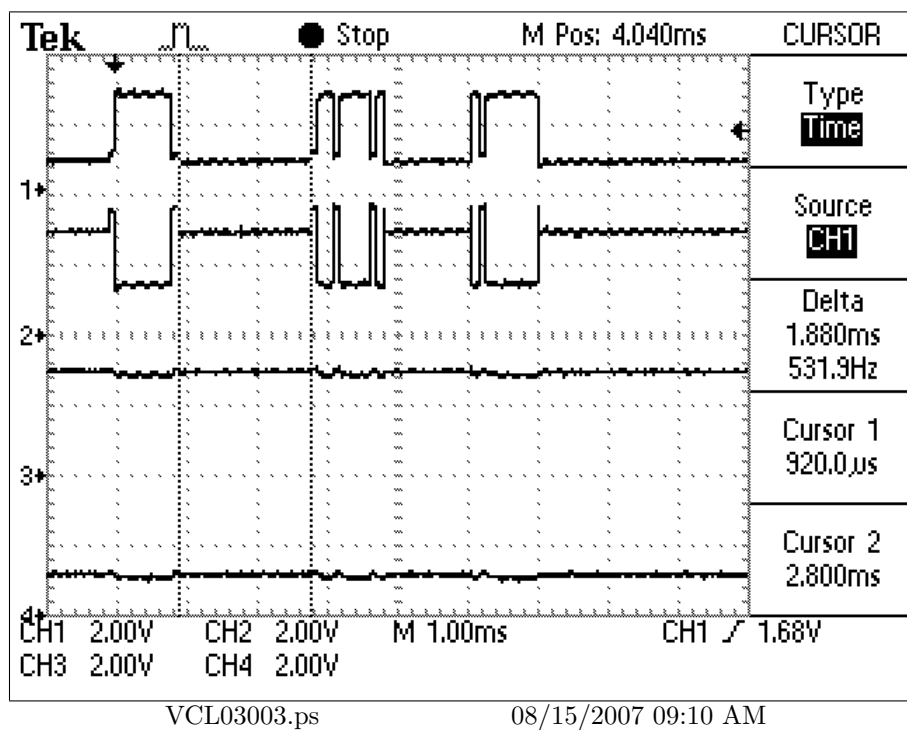


Figure 7: Timing for gap 1[capture3:gap1]

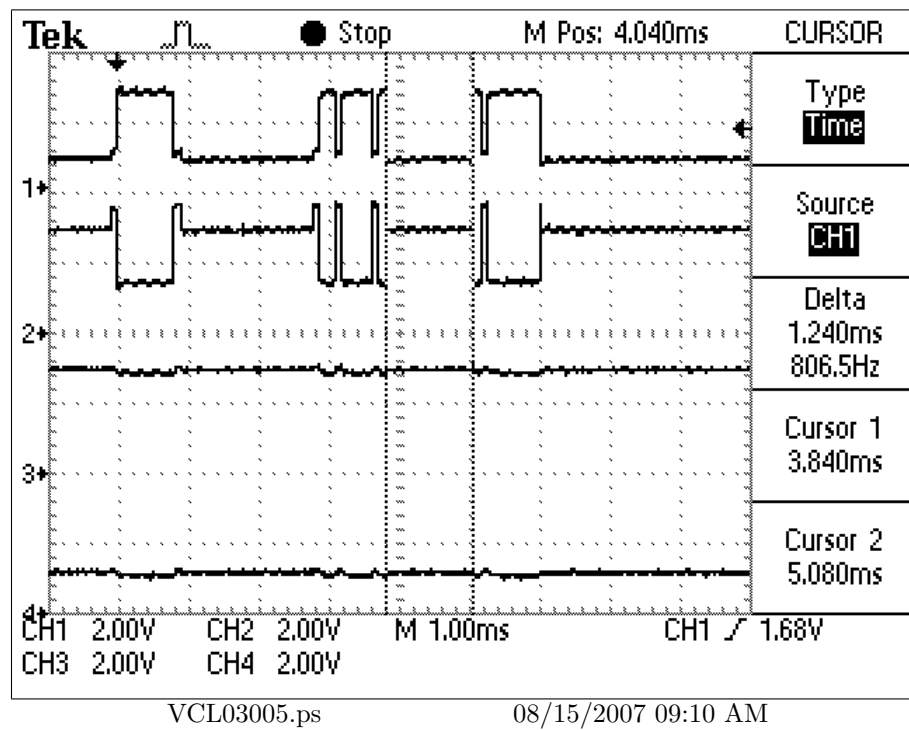


Figure 8: Timing for gap 2[capture3:gap2]

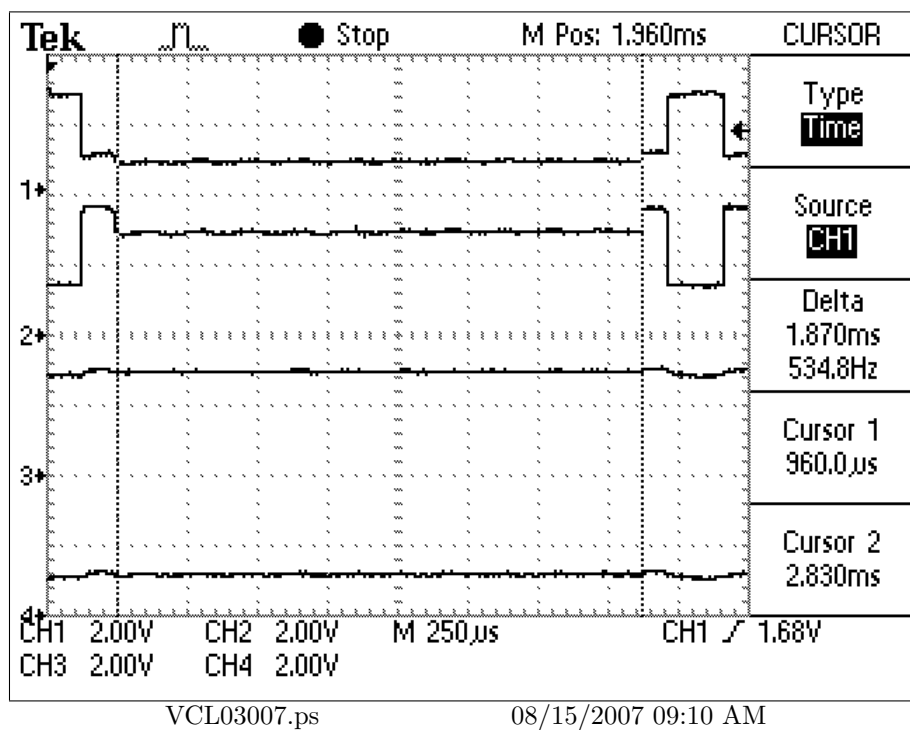


Figure 9: Timing for gap 1 expanded[capture3:gap1ex]

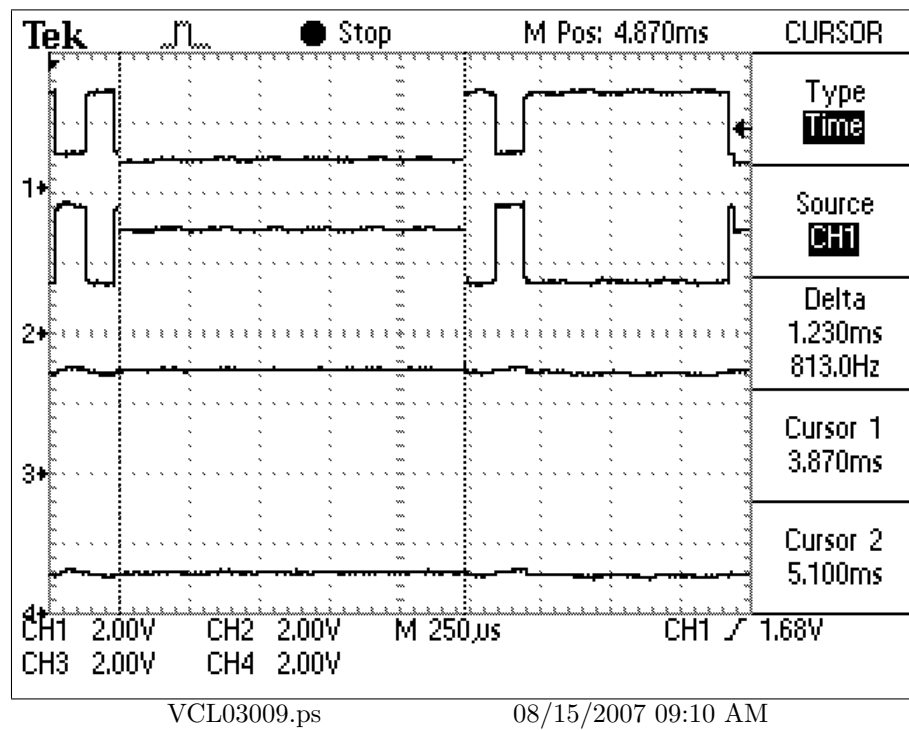


Figure 10: Timing for gap 2 expanded[capture3:gap2ex]

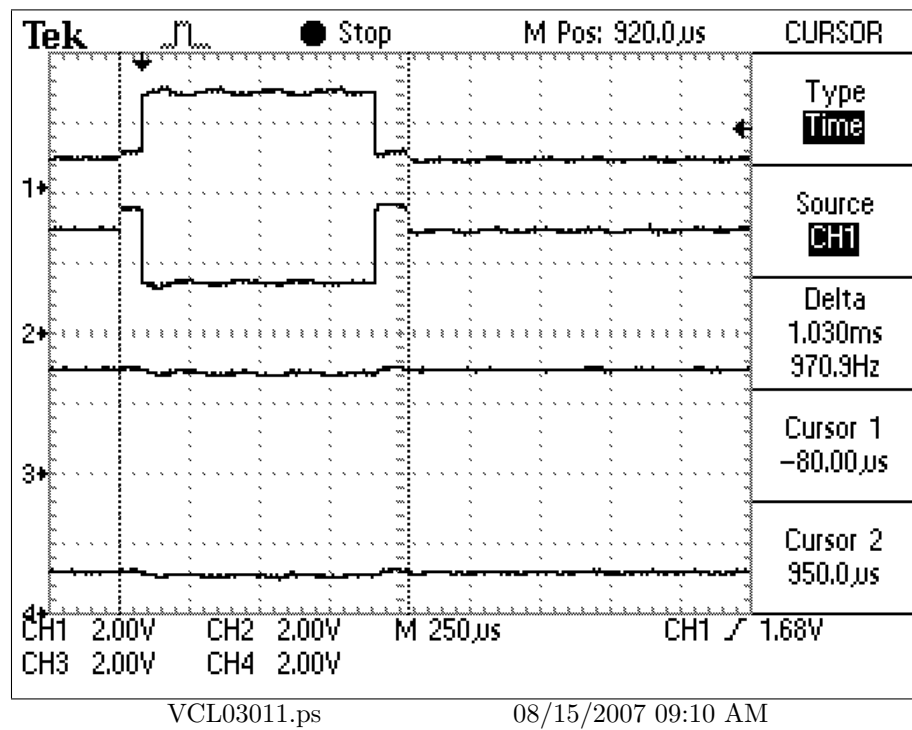


Figure 11: Timing for byte 1 expanded[capture3:byte1ex]

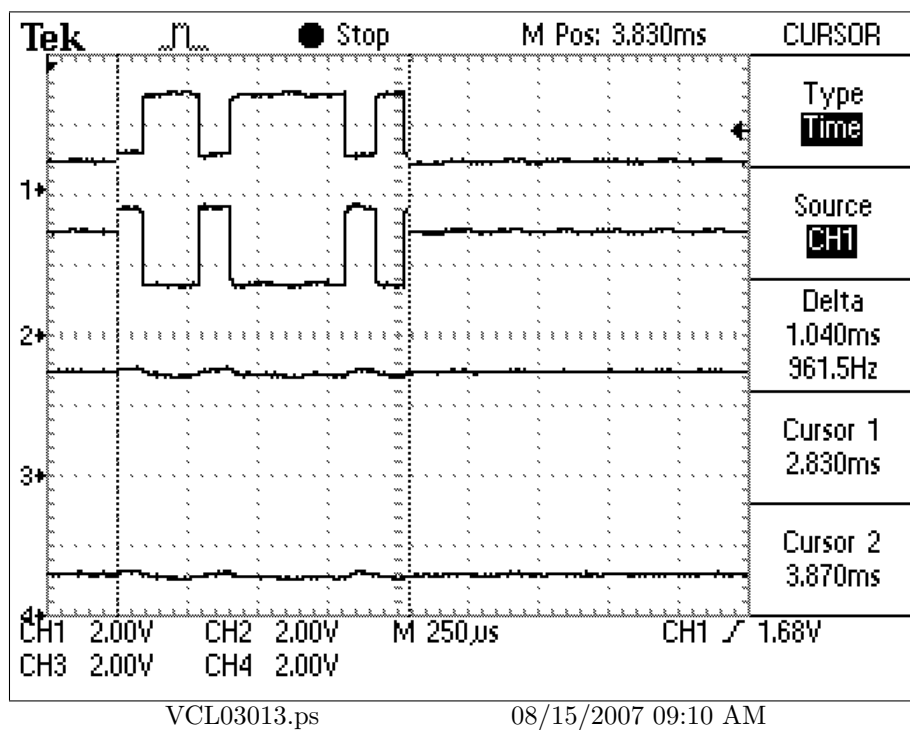
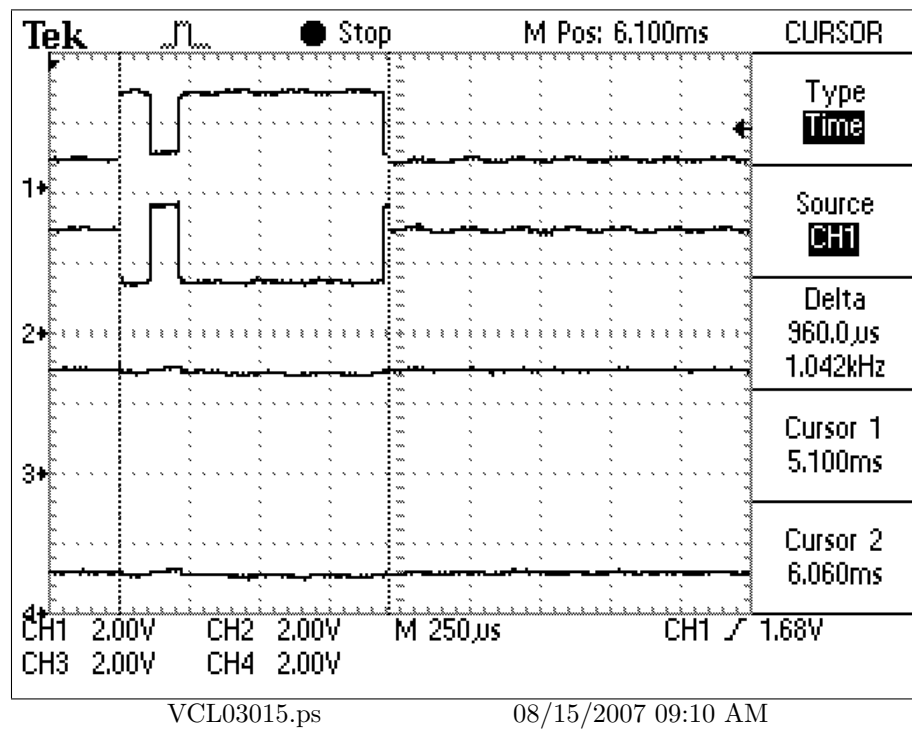


Figure 12: Timing for byte 2 expanded[capture3:byte2ex]

Figure 13: Timing for byte 3 expanded[`capture3:byte3ex`]

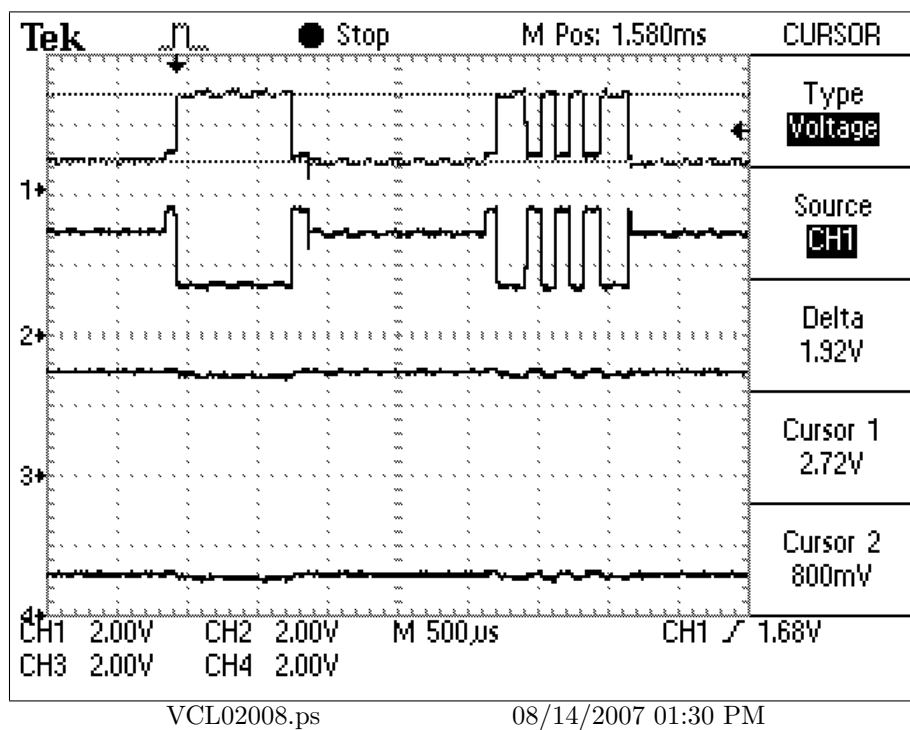


Figure 14: Peak-peak voltage of the – signal[capture2:negativepp]

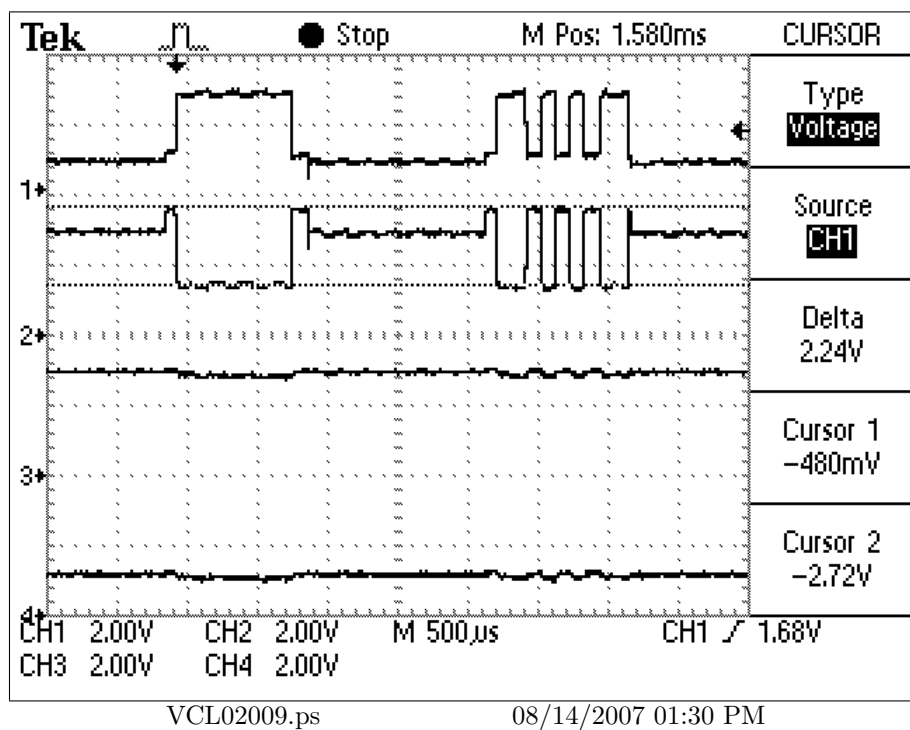


Figure 15: Peak-peak voltage of the + signal[capture2:pluspp]

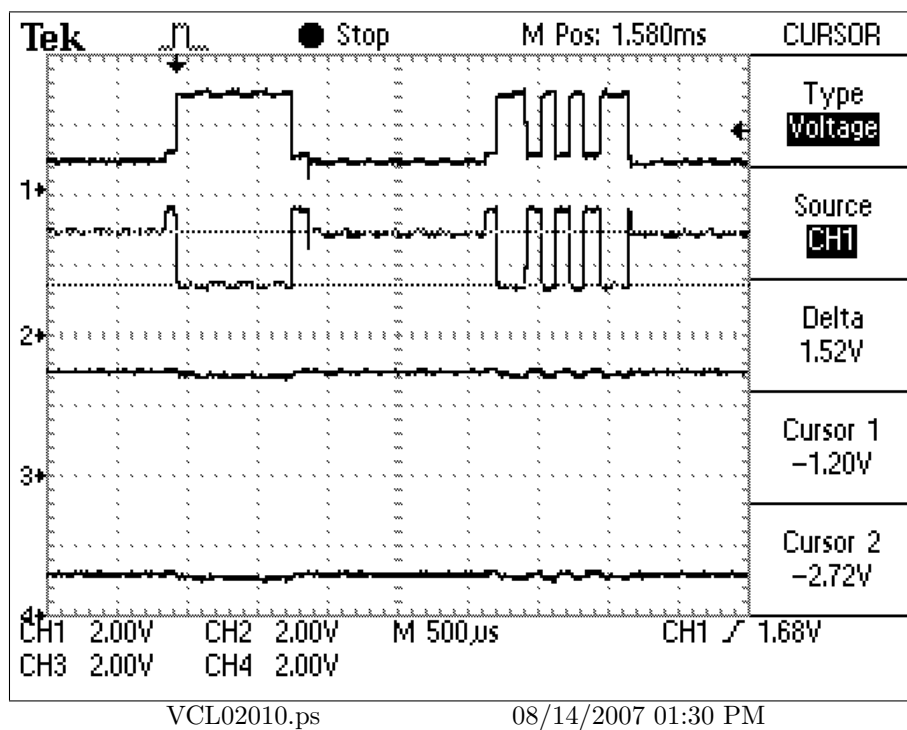


Figure 16: Base line to max low on the + signal[capture2:pluslow]

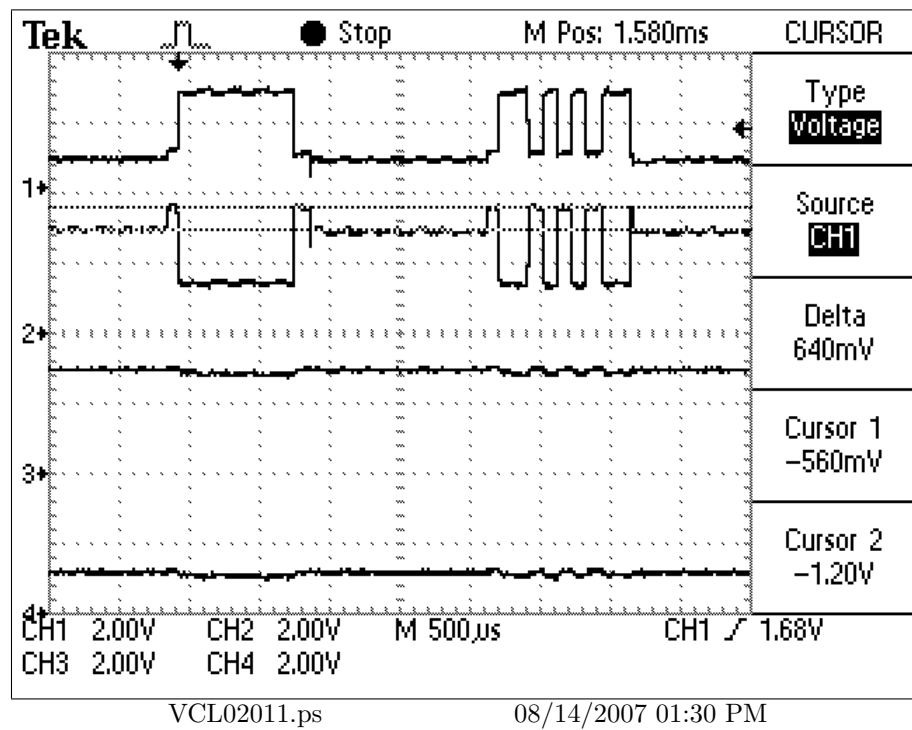


Figure 17: Base line to max high on the + signal[capture2:plushigh]

A First Looks, data capture try0.dat

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/TXB-V485/ProtocolDocument/RCS/Try0.dat,v 1.1 2007-08-14 10:46:44-07
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

```

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8 1, 1, DTE 1 0.000000 0.000000 80 75 Stop Up
9 1, 3, DTE 3 0.065513 0.064371 80 6e Stop Down
10 1, 5, DTE 5 0.110609 0.043951 80 6c Stop Left
11 1, 7, DTE 7 0.144457 0.032703 80 72 Stop Right
12 1, 9, DTE 9 0.185703 0.040100 80 2a Zoom CW End
13 1, 11, DTE 11 0.236468 0.049623 80 2b Zoom CW End
14 1, 13, DTE 13 0.276628 0.039018 80 2d Focus Far End
15 1, 15, DTE 15 0.305681 0.027911 80 2c Focus Near End
16 1, 17, DTE 17 0.332656 0.025829 80 2f Close End
17 1, 19, DTE 19 0.351300 0.017501 80 2e Open End
18 1, 21, DTE 21 0.421183 0.068634 80 7e Auto Pan End
19 1, 23, DTE 23 0.446450 0.024123 80 7e Auto Pan End
20 1, 25, DTE 25 0.541373 0.093739 80 75 Stop Up
21 1, 27, DTE 27 0.621780 0.079159 80 6e Stop Down
22 1, 29, DTE 29 0.651872 0.028953 80 6c Stop Left
23 1, 31, DTE 31 0.671872 0.018854 80 72 Stop Right
24 1, 33, DTE 33 0.709053 0.036036 80 2a Zoom CW End
25 1, 35, DTE 35 0.783832 0.073633 80 2b Zoom CW End
26 1, 37, DTE 37 0.811956 0.026977 80 2d Focus Far End
27 1, 39, DTE 39 0.835285 0.022213 80 2c Focus Near End
28 1, 41, DTE 41 0.852366 0.015936 80 2f Close End
29 1, 43, DTE 43 0.885908 0.032396 80 2e Open End
30 1, 45, DTE 45 57.011406 56.124358 80 75 Stop Up
31 1, 47, DTE 47 57.031185 0.018638 80 6e Stop Down
32 1, 49, DTE 49 57.051394 0.018958 80 6c Stop Left
33 1, 51, DTE 51 57.076077 0.023536 80 72 Stop Right
34 1, 53, DTE 53 57.096702 0.019480 80 2a Zoom CW End
35 1, 55, DTE 55 57.116175 0.018328 80 2b Zoom CW End
36 1, 57, DTE 57 57.136007 0.018584 80 2d Focus Far End
37 1, 59, DTE 59 57.161166 0.023742 80 2c Focus Near End
38 1, 61, DTE 61 57.181480 0.019062 80 2f Close End
39 1, 63, DTE 63 57.201577 0.018952 80 2e Open End
40 1, 65, DTE 65 57.221681 0.018963 80 55 Tilt Up 28
41 1, 68, DTE 68 58.024784 0.800810 80 55 Tilt Up 28
42 1, 71, DTE 71 58.597203 0.570132 80 75 Stop Up
43 1, 73, DTE 73 58.614273 0.015940 80 6e Stop Down
44 1, 75, DTE 75 58.634265 0.018847 80 6c Stop Left
45 1, 77, DTE 77 58.660308 0.024896 80 72 Stop Right
46 1, 79, DTE 79 58.678740 0.017294 80 2a Zoom CW End
47 1, 81, DTE 81 58.708836 0.028953 80 2b Zoom CW End
48 1, 83, DTE 83 58.728940 0.018958 80 2d Focus Far End
49 1, 85, DTE 85 58.748934 0.018744 80 2c Focus Near End
50 1, 87, DTE 87 58.768933 0.018750 80 2f Close End
51 1, 89, DTE 89 58.796949 0.026661 80 2e Open End
52 1, 91, DTE 91 58.814657 0.016460 80 75 Stop Up
53 1, 93, DTE 93 58.834545 0.018743 80 6e Stop Down
54 1, 95, DTE 95 58.854547 0.018855 80 6c Stop Left
55 1, 97, DTE 97 58.879852 0.024160 80 72 Stop Right
56 1, 99, DTE 99 58.899441 0.018444 80 2a Zoom CW End
57 1, 101, DTE 101 58.924117 0.023536 80 2b Zoom CW End
58 1, 103, DTE 103 58.944428 0.019166 80 2d Focus Far End
59 1, 105, DTE 105 58.965776 0.020200 80 2c Focus Near End
60 1, 107, DTE 107 58.984526 0.017605 80 2f Close End
61 1, 109, DTE 109 59.009519 0.023847 80 2e Open End
62 1, 111, DTE 111 60.802466 1.791801 80 75 Stop Up
63 1, 113, DTE 113 60.822462 0.018855 80 6e Stop Down
64 1, 115, DTE 115 60.842456 0.018848 80 6c Stop Left
65 1, 117, DTE 117 60.862560 0.018959 80 72 Stop Right
66 1, 119, DTE 119 60.910902 0.047203 80 2a Zoom CW End
67 1, 121, DTE 121 60.929421 0.017396 80 2b Zoom CW End
68 1, 123, DTE 123 60.947746 0.017169 80 2d Focus Far End
69 1, 125, DTE 125 60.967747 0.018854 80 2c Focus Near End
70 1, 127, DTE 127 60.992535 0.023642 80 2f Close End
71 1, 129, DTE 129 61.012741 0.019063 80 2e Open End
72 1, 131, DTE 131 61.033047 0.019160 80 55 Tilt Up 28
73 1, 134, DTE 134 61.057735 0.022188 80 52 Pan Right 28
74 1, 137, DTE 137 61.860629 0.800603 80 52 Pan Right 28
75 1, 140, DTE 140 62.605512 0.742595 80 75 Stop Up
76 1, 142, DTE 142 62.626649 0.020131 80 6e Stop Down
77 1, 144, DTE 144 62.645398 0.017605 80 6c Stop Left
78 1, 146, DTE 146 62.665494 0.018951 80 72 Stop Right
79 1, 148, DTE 148 62.685599 0.018959 80 2a Zoom CW End
80 1, 150, DTE 150 62.713508 0.026762 80 2b Zoom CW End
81 1, 152, DTE 152 62.730698 0.016044 80 2d Focus Far End
82 1, 154, DTE 154 62.750690 0.018847 80 2c Focus Near End
83 1, 156, DTE 156 62.771211 0.019376 80 2f Close End
84 1, 158, DTE 158 62.794746 0.022389 80 2e Open End
85 1, 160, DTE 160 62.818705 0.022813 80 75 Stop Up
86 1, 162, DTE 162 62.835884 0.016033 80 6e Stop Down
87 1, 164, DTE 164 62.855783 0.018752 80 6c Stop Left
88 1, 166, DTE 166 62.885360 0.028600 80 72 Stop Right

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89 1, 168, DTE 168 62.910978 0.024474 80 2a Zoom CW End
90 1, 170, DTE 170 62.930976 0.018750 80 2b Zoom CW End
91 1, 172, DTE 172 62.956765 0.024435 80 2d Focus Far End
92 1, 174, DTE 174 62.981597 0.023648 80 2c Focus Near End
93 1, 176, DTE 176 63.001068 0.018327 80 2f Close End
94 1, 178, DTE 178 63.022631 0.020314 80 2e Open End
95 1, 180, DTE 180 64.904411 1.880608 80 75 Stop Up
96 1, 182, DTE 182 64.927325 0.021774 80 6e Stop Down
97 1, 184, DTE 184 64.949505 0.021035 80 6c Stop Left
98 1, 186, DTE 186 64.969505 0.018856 80 72 Stop Right
99 1, 188, DTE 188 64.995331 0.024681 80 2a Zoom CW End
100 1, 190, DTE 190 65.014498 0.018011 80 2b Zoom CW End
101 1, 192, DTE 192 65.034595 0.018952 80 2d Focus Far End
102 1, 194, DTE 194 65.059491 0.023749 80 2c Focus Near End
103 1, 196, DTE 196 65.079591 0.018954 80 2f Close End
104 1, 198, DTE 198 65.099694 0.018958 80 2e Open End
105 1, 200, DTE 200 65.124587 0.023748 80 52 Pan Right 28
106 1, 203, DTE 203 65.927695 0.800985 80 52 Pan Right 28
107 1, 206, DTE 206 66.730999 0.801026 80 52 Pan Right 28
108 1, 209, DTE 209 67.263415 0.530129 80 75 Stop Up
109 1, 211, DTE 211 67.283509 0.018850 80 6e Stop Down
110 1, 213, DTE 213 67.303612 0.018958 80 6c Stop Left
111 1, 215, DTE 215 67.331462 0.026705 80 72 Stop Right
112 1, 217, DTE 217 67.348718 0.016113 80 2a Zoom CW End
113 1, 219, DTE 219 67.368496 0.018637 80 2b Zoom CW End
114 1, 221, DTE 221 67.393523 0.023884 80 2d Focus Far End
115 1, 223, DTE 223 67.413695 0.019062 80 2c Focus Near End
116 1, 225, DTE 225 67.434001 0.019161 80 2f Close End
117 1, 227, DTE 227 67.458586 0.023438 80 2e Open End
118 1, 229, DTE 229 67.478787 0.019056 80 75 Stop Up
119 1, 231, DTE 231 67.498684 0.018741 80 6e Stop Down
120 1, 233, DTE 233 67.518885 0.019056 80 6c Stop Left
121 1, 235, DTE 235 67.546802 0.026761 80 72 Stop Right
122 1, 237, DTE 237 67.565129 0.017181 80 2a Zoom CW End
123 1, 239, DTE 239 67.583773 0.017499 80 2b Zoom CW End
124 1, 241, DTE 241 67.603872 0.018952 80 2d Focus Far End
125 1, 243, DTE 243 67.623872 0.018854 80 2c Focus Near End
126 1, 245, DTE 245 67.644179 0.019161 80 2f Close End
127 1, 247, DTE 247 67.663866 0.018542 80 2e Open End
128 1, 249, DTE 249 69.430562 1.765552 80 75 Stop Up
129 1, 251, DTE 251 69.447224 0.015522 80 6e Stop Down
130 1, 253, DTE 253 69.467223 0.018749 80 6c Stop Left
131 1, 255, DTE 255 69.493886 0.025516 80 72 Stop Right
132 1, 257, DTE 257 69.517002 0.021971 80 2a Zoom CW End
133 1, 259, DTE 259 69.542314 0.024166 80 2b Zoom CW End
134 1, 261, DTE 261 69.582830 0.039266 80 2d Focus Far End
135 1, 263, DTE 263 69.602617 0.018642 80 2c Focus Near End
136 1, 265, DTE 265 69.622198 0.018437 80 2f Close End
137 1, 267, DTE 267 69.642192 0.019016 80 2e Open End
138 1, 269, DTE 269 69.663757 0.020554 80 4e Tilt Down 28
139 1, 272, DTE 272 69.682809 0.016764 80 52 Pan Right 28
140 1, 275, DTE 275 70.485920 0.800818 80 52 Pan Right 28
141 1, 278, DTE 278 71.289331 0.801125 80 52 Pan Right 28
142 1, 281, DTE 281 71.390978 0.099360 80 75 Stop Up
143 1, 283, DTE 283 71.415036 0.022917 80 6e Stop Down
144 1, 285, DTE 285 71.435134 0.018952 80 6c Stop Left
145 1, 287, DTE 287 71.460239 0.023960 80 72 Stop Right
146 1, 289, DTE 289 71.480544 0.019056 80 2a Zoom CW End
147 1, 291, DTE 291 71.500546 0.018856 80 2b Zoom CW End
148 1, 293, DTE 293 71.520537 0.018847 80 2d Focus Far End
149 1, 295, DTE 295 71.543767 0.022085 80 2c Focus Near End
150 1, 297, DTE 297 71.565635 0.020723 80 2f Close End
151 1, 299, DTE 299 71.595629 0.028848 80 2e Open End
152 1, 301, DTE 301 71.616042 0.019269 80 75 Stop Up
153 1, 303, DTE 303 71.635727 0.018537 80 6e Stop Down
154 1, 305, DTE 305 71.660310 0.023438 80 6c Stop Left
155 1, 307, DTE 307 71.680824 0.019264 80 72 Stop Right
156 1, 309, DTE 309 71.700825 0.018856 80 2a Zoom CW End
157 1, 311, DTE 311 71.722276 0.020306 80 2b Zoom CW End
158 1, 313, DTE 313 71.740817 0.017396 80 2d Focus Far End
159 1, 315, DTE 315 71.762957 0.020993 80 2c Focus Near End
160 1, 317, DTE 317 71.780811 0.016311 80 2f Close End
161 1, 319, DTE 319 71.800908 0.018951 80 2e Open End
162 1, 321, DTE 321 74.064928 2.262875 80 75 Stop Up
163 1, 323, DTE 323 74.084814 0.018744 80 6e Stop Down
164 1, 325, DTE 325 74.104920 0.018960 80 6c Stop Left
165 1, 327, DTE 327 74.127620 0.021565 80 72 Stop Right
166 1, 329, DTE 329 74.150539 0.021773 80 2a Zoom CW End
167 1, 331, DTE 331 74.170947 0.019161 80 2b Zoom CW End
168 1, 333, DTE 333 74.194384 0.022292 80 2d Focus Far End
169 1, 335, DTE 335 74.215002 0.019473 80 2c Focus Near End
170 1, 337, DTE 337 74.235002 0.018853 80 2f Close End
171 1, 339, DTE 339 74.265023 0.028874 80 2e Open End
172 1, 341, DTE 341 74.285198 0.019056 80 4e Tilt Down 28
173 1, 344, DTE 344 75.088099 0.800610 80 4e Tilt Down 28
174 1, 347, DTE 347 75.891510 0.801123 80 4e Tilt Down 28
175 1, 350, DTE 350 76.694923 0.801125 80 4e Tilt Down 28
176 1, 353, DTE 353 76.739285 0.042078 80 75 Stop Up
177 1, 355, DTE 355 76.763443 0.023013 80 6e Stop Down
178 1, 357, DTE 357 76.784277 0.019678 80 6c Stop Left
179 1, 359, DTE 359 76.804800 0.019375 80 72 Stop Right
180 1, 361, DTE 361 76.827606 0.021556 80 2a Zoom CW End
181 1, 363, DTE 363 76.849377 0.020626 80 2b Zoom CW End
182 1, 365, DTE 365 76.869373 0.018851 80 2d Focus Far End
183 1, 367, DTE 367 76.889371 0.018856 80 2c Focus Near End

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184	1,	369:	DTE	369	76.943421	0.052905	80	2f	Close End	279	1,	572:	DTE	572	90.797249	0.021874	80	4c	Pan Left	28
185	1,	371:	DTE	371	76.964461	0.019895	80	2e	Open End	280	1,	575:	DTE	575	91.600248	0.800706	80	4c	Pan Left	28
186	1,	373:	DTE	373	76.984663	0.019057	80	75	Stop Up	281	1,	578:	DTE	578	92.403660	0.801126	80	4c	Pan Left	28
187	1,	375:	DTE	375	77.004560	0.018751	80	6e	Stop Down	282	1,	581:	DTE	581	93.207088	0.801150	80	4c	Pan Left	28
188	1,	377:	DTE	377	77.024552	0.018848	80	6c	Stop Left	283	1,	584:	DTE	584	93.827703	0.618338	80	75	Stop Up	
189	1,	379:	DTE	379	77.047365	0.021667	80	72	Stop Right	284	1,	586:	DTE	586	93.849259	0.020414	80	6e	Stop Down	
190	1,	381:	DTE	381	77.064483	0.015972	80	2a	Zoom CW End	285	1,	588:	DTE	588	93.868732	0.018222	80	6c	Stop Left	
191	1,	383:	DTE	383	77.084651	0.018854	80	2b	Zoom CCW End	286	1,	590:	DTE	590	93.892693	0.022814	80	72	Stop Right	
192	1,	385:	DTE	385	77.104749	0.018953	80	2d	Focus Far End	287	1,	592:	DTE	592	93.912894	0.019057	80	2a	Zoom CW End	
193	1,	387:	DTE	387	77.133434	0.027541	80	2c	Focus Near End	288	1,	594:	DTE	594	93.932998	0.018959	80	2b	Zoom CCW End	
194	1,	389:	DTE	389	77.149741	0.014952	80	2f	Close End	289	1,	596:	DTE	596	93.961898	0.027755	80	2d	Focus Far End	
195	1,	391:	DTE	391	77.170366	0.019479	80	2e	Open End	290	1,	598:	DTE	598	93.982991	0.019898	80	2c	Focus Near End	
196	1,	393:	DTE	393	78.742720	1.571209	80	75	Stop Up	291	1,	600:	DTE	600	94.003088	0.018958	80	2f	Close End	
197	1,	395:	DTE	395	78.764591	0.020730	80	6e	Stop Down	292	1,	602:	DTE	602	94.029228	0.024994	80	2e	Open End	
198	1,	397:	DTE	397	78.783127	0.017391	80	6c	Stop Left	293	1,	604:	DTE	604	94.048707	0.018334	80	75	Stop Up	
199	1,	399:	DTE	399	78.802604	0.018334	80	72	Stop Right	294	1,	606:	DTE	606	94.069012	0.019159	80	6e	Stop Down	
200	1,	401:	DTE	401	78.827807	0.024057	80	2a	Zoom CW End	295	1,	608:	DTE	608	94.088188	0.018029	80	6c	Stop Left	
201	1,	403:	DTE	403	78.848119	0.019063	80	2b	Zoom CCW End	296	1,	610:	DTE	610	94.113381	0.024223	80	72	Stop Right	
202	1,	405:	DTE	405	78.868426	0.019161	80	2d	Focus Far End	297	1,	612:	DTE	612	94.133382	0.018751	80	2a	Zoom CW End	
203	1,	407:	DTE	407	78.888218	0.018647	80	2c	Focus Near End	298	1,	614:	DTE	614	94.158165	0.023638	80	2b	Zoom CCW End	
204	1,	409:	DTE	409	78.912482	0.023118	80	2f	Close End	299	1,	616:	DTE	616	94.178742	0.019429	80	2d	Focus Far End	
205	1,	411:	DTE	411	78.935393	0.021764	80	2e	Open End	300	1,	618:	DTE	618	94.198378	0.018337	80	2c	Focus Near End	
206	1,	413:	DTE	413	78.961851	0.025304	80	4e	Tilt Down 28	301	1,	620:	DTE	620	94.218377	0.018759	80	2f	Close End	
207	1,	416:	DTE	416	78.983511	0.019162	80	4c	Pan Left 28	302	1,	622:	DTE	622	94.238476	0.018858	80	2e	Open End	
208	1,	419:	DTE	419	79.786411	0.800610	80	4c	Pan Left 28	303	1,	624:	DTE	624	96.833057	2.593445	80	75	Stop Up	
209	1,	422:	DTE	422	80.589823	0.801125	80	4c	Pan Left 28	304	1,	626:	DTE	626	96.857735	0.023535	80	6e	Stop Down	
210	1,	425:	DTE	425	81.393233	0.801123	80	4c	Pan Left 28	305	1,	628:	DTE	628	96.878047	0.019062	80	6c	Stop Left	
211	1,	428:	DTE	428	82.196645	0.801124	80	4c	Pan Left 28	306	1,	630:	DTE	630	96.898146	0.018952	80	72	Stop Right	
212	1,	431:	DTE	431	83.000062	0.801130	80	4c	Pan Left 28	307	1,	632:	DTE	632	96.918043	0.018751	80	2a	Zoom CW End	
213	1,	434:	DTE	434	83.280434	0.278075	80	75	Stop Up	308	1,	634:	DTE	634	96.938244	0.019058	80	2b	Zoom CCW End	
214	1,	436:	DTE	436	83.300423	0.018849	80	6e	Stop Down	309	1,	636:	DTE	636	96.958141	0.018752	80	2d	Focus Far End	
215	1,	438:	DTE	438	83.325320	0.023752	80	6c	Stop Left	310	1,	638:	DTE	638	96.981673	0.022388	80	2c	Focus Near End	
216	1,	440:	DTE	440	83.345625	0.019160	80	72	Stop Right	311	1,	640:	DTE	640	96.998236	0.015416	80	2f	Close End	
217	1,	442:	DTE	442	83.366503	0.019732	80	2a	Zoom CW End	312	1,	642:	DTE	642	97.026362	0.026980	80	2e	Open End	
218	1,	444:	DTE	444	83.385410	0.017589	80	2b	Zoom CCW End	313	1,	644:	DTE	644	97.048640	0.021138	80	55	Tilt Up 28	
219	1,	446:	DTE	446	83.411660	0.025105	80	2d	Focus Far End	314	1,	647:	DTE	647	97.852271	0.801234	80	55	Tilt Up 28	
220	1,	448:	DTE	448	83.435716	0.022912	80	2c	Focus Near End	315	1,	650:	DTE	650	98.655682	0.801124	80	55	Tilt Up 28	
221	1,	450:	DTE	450	83.462585	0.025724	80	2f	Close End	316	1,	653:	DTE	653	99.459095	0.801126	80	55	Tilt Up 28	
222	1,	452:	DTE	452	83.485606	0.021877	80	2e	Open End	317	1,	656:	DTE	656	99.567726	0.106346	80	75	Stop Up	
223	1,	454:	DTE	454	83.510599	0.023848	80	75	Stop Up	318	1,	658:	DTE	658	99.588444	0.019577	80	6e	Stop Down	
224	1,	456:	DTE	456	83.530599	0.018855	80	6e	Stop Down	319	1,	660:	DTE	660	99.607507	0.017917	80	6c	Stop Left	
225	1,	458:	DTE	458	83.550592	0.018849	80	6c	Stop Left	320	1,	662:	DTE	662	99.629480	0.020828	80	72	Stop Right	
226	1,	460:	DTE	460	83.570905	0.019168	80	72	Stop Right	321	1,	664:	DTE	664	99.647500	0.016874	80	2a	Zoom CW End	
227	1,	462:	DTE	462	83.595480	0.023430	80	2a	Zoom CW End	322	1,	666:	DTE	666	99.669474	0.020828	80	2b	Zoom CCW End	
228	1,	464:	DTE	464	83.615793	0.019165	80	2b	Zoom CCW End	323	1,	668:	DTE	668	99.693120	0.022501	80	2d	Focus Far End	
229	1,	466:	DTE	466	83.636724	0.019785	80	2d	Focus Far End	324	1,	670:	DTE	670	99.712594	0.018232	80	2c	Focus Near End	
230	1,	468:	DTE	468	83.660581	0.022710	80	2c	Focus Near End	325	1,	672:	DTE	672	99.732624	0.018887	80	2f	Close End	
231	1,	470:	DTE	470	83.680988	0.019265	80	2f	Close End	326	1,	674:	DTE	674	99.754459	0.020617	80	2e	Open End	
232	1,	472:	DTE	472	83.701094	0.018961	80	2e	Open End	327	1,	676:	DTE	676	99.773001	0.017396	80	75	Stop Up	
233	1,	474:	DTE	474	84.647400	0.945161	80	75	Stop Up	328	1,	678:	DTE	678	99.796546	0.022399	80	6e	Stop Down	
234	1,	476:	DTE	476	84.667395	0.018854	80	6e	Stop Down	329	1,	680:	DTE	680	99.812787	0.015104	80	6c	Stop Left	
235	1,	478:	DTE	478	84.694160	0.025657	80	6c	Stop Left	330	1,	682:	DTE	682	99.832693	0.018761	80	72	Stop Right	
236	1,	480:	DTE	480	84.717702	0.022397	80	72	Stop Right	331	1,	684:	DTE	684	99.856760	0.023744	80	2a	Zoom CW End	
237	1,	482:	DTE	482	84.751445	0.032494	80	2b	Zoom CW End	332	1,	686:	DTE	686	99.877878	0.019063	80	2b	Zoom CCW End	
238	1,	484:	DTE	484	84.777688	0.025098	80	2b	Zoom CCW End	333	1,	688:	DTE	688	99.897711	0.018687	80	2d	Focus Far End	
239	1,	486:	DTE	486	84.798209	0.019376	80	2d	Focus Far End	334	1,	690:	DTE	690	99.918080	0.019062	80	2c	Focus Near End	
240	1,	488:	DTE	488	84.817784	0.018430	80	2c	Focus Near End	335	1,	692:	DTE	692	99.942970	0.023745	80	2f	Close End	
241	1,	490:	DTE	490	84.837682	0.018648	80	2f	Close End	336	1,	694:	DTE	694	99.963177	0.019061	80	2e	Open End	
242	1,	492:	DTE	492	84.861217	0.022400	80	2e	Open End	337	1,	696:	DTE	696	103.574475	3.610047	80	3a	Zoom CW Start	
243	1,	494:	DTE	494	84.883196	0.020835	80	4c	Pan Left 28	338	1,	698:	DTE	698	106.460893	2.885275	80	2a	Zoom CW End	
244	1,	497:	DTE	497	85.686279	0.800738	80	4c	Pan Left 28	339	1,	700:	DTE	700	110.057188	3.595152	80	3b	Zoom CW Start	
245	1,	500:	DTE	500	86.489710	0.801125	80	4c	Pan Left 28	340	1,	702:	DTE	702	112.970058	2.911625	80	2b	Zoom CW End	
246	1,	503:	DTE	503	87.293127	0.801130	80	4c	Pan Left 28	341	1,	704:	DTE	704	116.741334	3.770134	80	5b	Wipe start (key down)	
247	1,	506:	DTE	506	88.096540	0.801132	80	4c	Pan Left 28	342	1,	706:	DTE	706	119.285714	2.543240	80	7b	Wipe end (key up)	
248	1,	509:	DTE	509	88.208393	0.109567	80	75	Stop Up	343	1,	708:	DTE	708	124.023395	4.736435	80	7d		
249	1,	511:	DTE	511	88.229856	0.020216	80	6e	Stop Down	344	1,	710:	DTE	710	130.094818	6.070282	80	3c	Focus Near Start	
250	1,	513:	DTE	513	88.248383	0.017389	80	6c	Stop Left	345	1,	712:	DTE	712	130.897508	0.801549	80	3c	Focus Near Start	
251	1,	515:	DTE	515	88.268384	0.018855	80	72	Stop Right	346	1,	714:	DTE	714	131.699875	0.801233	80	3c	Focus Near Start	
252	1,	517:	DTE	517	88.292855	0.023235	80	2a	Zoom CW End	347	1,	716:	DTE	716	132.502351	0.80133				

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371 The first DTE byte came in at 0.000000 seconds from the start of data  
collection  
372 The last DTE byte was at 168.569703 seconds from the start of data collection  
373
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B Results of using all keyboard keys, data capture try1.dat

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1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/TXB-V485/ProtocolDocument/RCS/Try1.dat,v 1.1 2007-08-14 10:46:48-07
Hamilton Exp Hamilton $
3 FTS capture buffer (8/13/2007 11:25:53 AM)
4 Event 1 (8/13/2007 11:13:42.484918 AM) through
5 Event 4,279 (8/13/2007 11:25:17.070340 AM)
6
7 1, 1: DCE 1 0.000000 0.000000 80 42 Call Preset 01
8 1, 4: DCE 4 11.930956 11.925752 80 42 Call Preset 02
9 1, 7: DCE 7 18.491708 6.555549 80 42 Call Preset 03
10 1, 10: DCE 10 25.032463 6.535551 80 42 Call Preset 04
11 1, 13: DCE 13 34.289207 9.251541 80 54 180 degree flip
12 1, 15: DCE 15 50.770605 16.479112 80 5e Auto Pan Start 00
13 1, 18: DCE 18 59.531029 8.755836 80 7e Auto Pan End
14 1, 20: DCE 20 69.235863 9.702547 80 5b Wipe start (key
down)
15 1, 22: DCE 22 75.002299 5.764149 80 7b Wipe end (key up)
16 1, 24: DCE 24 81.319626 6.314987 80 5c Wash first push
17 1, 26: DCE 26 90.981126 9.659215 80 48 Aux part 1
18 1, 28: DCE 28 91.429224 6.445811 80 5a Aux part 2
19 1, 30: DCE 30 110.856298 19.425203 80 48 Aux part 1
20 1, 32: DCE 32 110.928058 0.069475 80 5a Aux part 2
21 1, 34: DCE 34 125.310844 14.380906 80 48 Aux part 1
22 1, 36: DCE 36 125.427609 0.114478 80 5a Aux part 2
23 1, 38: DCE 38 144.085352 18.655978 80 6d Auto Iris On
24 1, 40: DCE 40 151.222837 7.135199 80 4d Auto Iris Off
25 1, 42: DCE 42 162.817455 11.592019 80 61 Auto Focus On
26 1, 44: DCE 44 170.785423 7.965680 80 41 Auto Focus Off
27 1, 46: DCE 46 182.979274 12.191565 80 3e Open Start
28 1, 48: DCE 48 189.890737 6.909282 80 2e Open End
29 1, 50: DCE 50 198.012962 8.119938 80 3f Close Start
30 1, 52: DCE 52 202.809028 4.793884 80 2f Close End
31 1, 54: DCE 54 210.178168 7.367124 80 3c Focus Near Start
32 1, 56: DCE 56 215.683882 5.503429 80 2c Focus Near End
33 1, 58: DCE 58 222.039856 6.353686 80 3d Focus Far Start
34 1, 60: DCE 60 228.099907 6.057452 80 2d Focus Far End
35 1, 62: DCE 62 244.453829 16.351361 80 3a Zoom CW Start
36 1, 64: DCE 64 248.171773 3.715788 80 2a Zoom CW End
37 1, 66: DCE 66 254.153769 5.979541 80 3b Zoom CCW Start
38 1, 68: DCE 68 258.054575 3.898519 80 2b Zoom CCW End
39 1, 70: DCE 70 290.236300 32.179438 80 52 Pan Right 01
40 1, 73: DCE 73 290.341927 0.101153 80 52 Pan Right 0a
41 1, 76: DCE 76 290.434619 0.088538 80 52 Pan Right 24
42 1, 79: DCE 79 290.536277 0.097182 80 52 Pan Right 48
43 1, 82: DCE 82 290.632664 0.091805 80 52 Pan Right 60
44 1, 85: DCE 85 290.720434 0.083541 80 52 Pan Right 7a
45 1, 88: DCE 88 290.830842 0.106247 80 52 Pan Right 7f
46 1, 91: DCE 91 291.910153 1.075147 80 55 Tilt Up 05
47 1, 94: DCE 94 292.102016 0.097782 80 55 Tilt Up 1c
48 1, 97: DCE 97 292.108478 0.092295 80 55 Tilt Up 54
49 1, 100: DCE 100 292.195759 0.083117 80 55 Tilt Up 7f
50 1, 103: DCE 103 293.472145 1.271907 80 52 Pan Right 7c
51 1, 106: DCE 106 293.559842 0.083526 80 52 Pan Right 56
52 1, 109: DCE 109 293.668424 0.104415 80 52 Pan Right 26
53 1, 112: DCE 112 293.757642 0.084890 80 52 Pan Right 08
54 1, 115: DCE 115 293.861185 0.098959 80 72 Stop Right
55 1, 117: DCE 117 294.836337 0.972863 80 4c Pan Left 01
56 1, 120: DCE 120 294.942059 0.101246 80 4c Pan Left 04
57 1, 123: DCE 123 295.034652 0.088535 80 4c Pan Left 13
58 1, 126: DCE 126 295.138087 0.099122 80 4c Pan Left 38
59 1, 129: DCE 129 295.232765 0.090201 80 4c Pan Left 60
60 1, 132: DCE 132 295.322240 0.085309 80 4c Pan Left 7c
61 1, 135: DCE 135 295.429290 0.102849 80 4c Pan Left 7f
62 1, 138: DCE 138 296.707476 1.273994 80 55 Tilt Up 7d
63 1, 141: DCE 141 296.796530 0.085002 80 55 Tilt Up 5e
64 1, 144: DCE 144 296.903712 0.102705 80 55 Tilt Up 3a
65 1, 147: DCE 147 296.994639 0.086765 80 55 Tilt Up 0f
66 1, 150: DCE 150 297.098177 0.099059 80 55 Tilt Up 03
67 1, 153: DCE 153 297.189105 0.086451 80 75 Stop Up
68 1, 155: DCE 155 298.176969 0.985572 80 4e Tilt Down 01
69 1, 158: DCE 158 298.271645 0.090202 80 4e Tilt Down 09
70 1, 161: DCE 161 298.373423 0.097613 80 4e Tilt Down 26
71 1, 164: DCE 164 298.468092 0.090620 80 4e Tilt Down 54
72 1, 167: DCE 167 298.557156 0.084900 80 4e Tilt Down 7b
73 1, 170: DCE 170 298.666150 0.104422 80 4e Tilt Down 7f
74 1, 173: DCE 173 300.119870 1.449559 80 4c Pan Left 5c
75 1, 176: DCE 176 300.225173 0.101140 80 4c Pan Left 26
76 1, 179: DCE 179 300.317775 0.088436 80 4c Pan Left 02
77 1, 182: DCE 182 300.405273 0.083023 80 6c Stop Left
78 1, 184: DCE 184 301.396570 0.989004 80 52 Pan Right 01
79 1, 187: DCE 187 301.498334 0.097290 80 52 Pan Right 0a
80 1, 190: DCE 190 301.594782 0.091973 80 52 Pan Right 2c
81 1, 193: DCE 193 301.682321 0.083059 80 52 Pan Right 5c
82 1, 196: DCE 196 301.789457 0.102807 80 52 Pan Right 7f
83 1, 199: DCE 199 303.156875 1.363250 80 4e Tilt Down 64
84 1, 202: DCE 202 303.264263 0.102913 80 4e Tilt Down 1a
85 1, 205: DCE 205 303.353224 0.084797 80 6e Stop Down
86 1, 207: DCE 207 303.460506 0.104995 80 55 Tilt Up 05
87 1, 210: DCE 210 303.553104 0.088434 80 55 Tilt Up 06

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88 1, 213: DCE 213 303.656533 0.099264 80 55 Tilt Up 05
89 1, 216: DCE 216 303.749343 0.088218 80 75 Stop Up
90 1, 218: DCE 218 304.629812 0.878182 80 52 Pan Right 02
91 1, 221: DCE 221 304.716993 0.083019 80 72 Stop Right
92 1, 223: DCE 223 324.303948 19.584356 80 55 Tilt Up 01
93 1, 226: DCE 226 325.870100 1.561991 80 55 Tilt Up 02
94 1, 229: DCE 229 325.959578 0.085316 80 55 Tilt Up 01
95 1, 232: DCE 232 326.064882 0.101140 80 55 Tilt Up 02
96 1, 235: DCE 235 327.919462 1.850414 80 55 Tilt Up 03
97 1, 238: DCE 238 328.998563 1.074835 80 55 Tilt Up 04
98 1, 241: DCE 241 329.283229 0.280193 80 55 Tilt Up 03
99 1, 244: DCE 244 329.391975 0.104584 80 55 Tilt Up 04
100 1, 247: DCE 247 329.878510 0.482375 80 55 Tilt Up 05
101 1, 250: DCE 250 331.242907 1.359922 80 55 Tilt Up 06
102 1, 253: DCE 253 331.836726 0.589659 80 55 Tilt Up 07
103 1, 256: DCE 256 333.304864 1.463663 80 55 Tilt Up 08
104 1, 259: DCE 259 333.685989 0.376963 80 55 Tilt Up 09
105 1, 262: DCE 262 334.083153 0.393001 80 55 Tilt Up 0a
106 1, 265: DCE 265 334.279803 0.192593 80 55 Tilt Up 0b
107 1, 268: DCE 268 334.383347 0.099381 80 55 Tilt Up 0a
108 1, 271: DCE 271 334.674786 0.287283 80 55 Tilt Up 0b
109 1, 274: DCE 274 334.764153 0.084893 80 55 Tilt Up 0a
110 1, 277: DCE 277 334.869250 0.100934 80 55 Tilt Up 0b
111 1, 280: DCE 280 335.644518 0.771104 80 55 Tilt Up 0c
112 1, 283: DCE 283 336.143653 0.494972 80 55 Tilt Up 0d
113 1, 286: DCE 286 336.630292 0.482469 80 55 Tilt Up 0e
114 1, 289: DCE 289 337.024018 0.389564 80 55 Tilt Up 0f
115 1, 292: DCE 292 337.315358 0.287283 80 55 Tilt Up 10
116 1, 295: DCE 295 337.406498 0.086665 80 55 Tilt Up 0f
117 1, 298: DCE 298 337.513571 0.102911 80 55 Tilt Up 10
118 1, 301: DCE 301 337.604817 0.087081 80 55 Tilt Up 0f
119 1, 304: DCE 304 337.708245 0.099369 80 55 Tilt Up 10
120 1, 307: DCE 307 338.198639 0.486229 80 55 Tilt Up 11
121 1, 310: DCE 310 338.588612 0.385811 80 55 Tilt Up 12
122 1, 313: DCE 313 339.273746 0.680970 80 55 Tilt Up 13
123 1, 316: DCE 316 339.665945 0.387897 80 55 Tilt Up 14
124 1, 319: DCE 319 340.245702 0.575701 80 55 Tilt Up 16
125 1, 322: DCE 322 340.546202 0.296442 80 55 Tilt Up 18
126 1, 325: DCE 325 341.324699 0.774334 80 55 Tilt Up 1a
127 1, 328: DCE 328 341.808007 0.479146 80 55 Tilt Up 1c
128 1, 331: DCE 331 341.916436 0.104251 80 55 Tilt Up 1a
129 1, 334: DCE 334 342.006014 0.085005 80 55 Tilt Up 1c
130 1, 337: DCE 337 342.403176 0.393103 80 55 Tilt Up 1e
131 1, 340: DCE 340 343.283854 0.876516 80 55 Tilt Up 20
132 1, 343: DCE 343 343.677265 0.389356 80 55 Tilt Up 1e
133 1, 346: DCE 346 343.766637 0.084900 80 55 Tilt Up 20
134 1, 349: DCE 349 344.450238 0.679437 80 55 Tilt Up 22
135 1, 352: DCE 352 345.527884 1.073483 80 55 Tilt Up 24
136 1, 355: DCE 355 345.925050 0.393006 80 55 Tilt Up 26
137 1, 358: DCE 358 347.392772 1.463664 80 55 Tilt Up 28
138 1, 361: DCE 361 347.773897 0.376964 80 55 Tilt Up 2a
139 1, 364: DCE 364 348.274801 0.496429 80 55 Tilt Up 2c
140 1, 367: DCE 367 349.155376 0.876100 80 55 Tilt Up 2e
141 1, 370: DCE 370 350.231249 1.071399 80 55 Tilt Up 30
142 1, 373: DCE 373 350.918604 0.683195 80 55 Tilt Up 32
143 1, 376: DCE 376 352.083844 1.160975 80 55 Tilt Up 34
144 1, 379: DCE 379 353.360234 1.272228 80 55 Tilt Up 36
145 1, 382: DCE 382 354.240805 0.876412 80 55 Tilt Up 38
146 1, 385: DCE 385 354.528700 0.283735 80 55 Tilt Up 36
147 1, 388: DCE 388 354.635776 0.102913 80 55 Tilt Up 38
148 1, 391: DCE 391 356.683883 2.043632 80 55 Tilt Up 3a
149 1, 394: DCE 394 356.787428 0.099384 80 55 Tilt Up 38
150 1, 397: DCE 397 356.881887 0.090306 80 55 Tilt Up 3a
151 1, 400: DCE 400 357.169730 0.283677 80 55 Tilt Up 3c
152 1, 403: DCE 403 358.643244 1.469288 80 55 Tilt Up 3e
153 1, 406: DCE 406 358.929272 0.281866 80 55 Tilt Up 3c
154 1, 409: DCE 409 359.038431 0.104996 80 55 Tilt Up 3e
155 1, 412: DCE 412 359.233002 0.190512 80 55 Tilt Up 3c
156 1, 415: DCE 415 359.325909 0.088743 80 55 Tilt Up 3e
157 1, 418: DCE 418 362.364066 3.033991 80 55 Tilt Up 40
158 1, 421: DCE 421 362.451451 0.083226 80 55 Tilt Up 3e
159 1, 424: DCE 424 362.649884 0.194260 80 55 Tilt Up 40
160 1, 427: DCE 427 362.848205 0.194159 80 55 Tilt Up 42
161 1, 430: DCE 430 363.333172 0.480806 80 55 Tilt Up 44
162 1, 433: DCE 433 363.529936 0.192770 80 55 Tilt Up 42
163 1, 436: DCE 436 363.831998 0.297901 80 55 Tilt Up 44
164 1, 439: DCE 439 364.711010 0.874848 80 55 Tilt Up 42
165 1, 442: DCE 442 364.807566 0.092394 80 55 Tilt Up 44
166 1, 445: DCE 445 365.398153 0.586322 80 55 Tilt Up 46
167 1, 448: DCE 448 365.884584 0.482271 80 55 Tilt Up 4a
168 1, 451: DCE 451 366.278411 0.389665 80 55 Tilt Up 48
169 1, 454: DCE 454 366.668392 0.385818 80 55 Tilt Up 4c
170 1, 457: DCE 457 367.051075 0.378625 80 55 Tilt Up 4e
171 1, 460: DCE 460 367.548653 0.493417 80 55 Tilt Up 50
172 1, 463: DCE 463 368.812742 1.259917 80 55 Tilt Up 52
173 1, 466: DCE 466 368.919606 0.101036 80 55 Tilt Up 50
174 1, 469: DCE 469 369.207513 0.283743 80 55 Tilt Up 52
175 1, 472: DCE 472 369.604778 0.393274 80 55 Tilt Up 54
176 1, 475: DCE 475 369.890696 0.281756 80 55 Tilt Up 56
177 1, 478: DCE 478 370.485038 0.590180 80 55 Tilt Up 58
178 1, 481: DCE 481 371.071875 0.582674 80 55 Tilt Up 5a
179 1, 484: DCE 484 371.365298 0.289262 80 55 Tilt Up 5c
180 1, 487: DCE 487 372.829478 1.460017 80 55 Tilt Up 5e
181 1, 490: DCE 490 373.516731 0.683195 80 55 Tilt Up 60
182 1, 493: DCE 493 373.908475 0.387436 80 55 Tilt Up 62

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183	1,	496:	DCE	496	374.687283	0.774646	80	55	Tilt Up	64	278	1,	780:	DCE	780	419.499085	0.194373	80	52	Pan Right	07
184	1,	499:	DCE	499	374.885609	0.194268	80	55	Tilt Up	66	279	1,	783:	DCE	783	419.693654	0.190406	80	52	Pan Right	08
185	1,	502:	DCE	502	375.567542	0.677879	80	55	Tilt Up	68	280	1,	786:	DCE	786	419.983533	0.285247	80	52	Pan Right	09
186	1,	505:	DCE	505	376.159907	0.588201	80	55	Tilt Up	6a	281	1,	789:	DCE	789	421.150565	1.162871	80	52	Pan Right	0a
187	1,	508:	DCE	508	376.549881	0.385810	80	55	Tilt Up	6c	282	1,	792:	DCE	792	421.546044	0.391339	80	52	Pan Right	0b
188	1,	511:	DCE	511	376.646164	0.092122	80	55	Tilt Up	6e	283	1,	795:	DCE	795	421.846275	0.296068	80	52	Pan Right	0c
189	1,	514:	DCE	514	376.844658	0.194164	80	55	Tilt Up	70	284	1,	798:	DCE	798	422.229339	0.378902	80	52	Pan Right	0d
190	1,	517:	DCE	517	376.932046	0.083230	80	55	Tilt Up	72	285	1,	801:	DCE	801	422.531610	0.298109	80	52	Pan Right	0e
191	1,	520:	DCE	520	377.431392	0.495181	80	55	Tilt Up	74	286	1,	804:	DCE	804	422.925231	0.389146	80	52	Pan Right	0f
192	1,	523:	DCE	523	378.011152	0.575599	80	55	Tilt Up	77	287	1,	807:	DCE	807	423.109286	0.179895	80	52	Pan Right	10
193	1,	526:	DCE	526	378.209574	0.194365	80	55	Tilt Up	78	288	1,	810:	DCE	810	423.216672	0.103224	80	52	Pan Right	11
194	1,	529:	DCE	529	378.605069	0.391332	80	55	Tilt Up	79	289	1,	813:	DCE	813	423.504573	0.283734	80	52	Pan Right	12
195	1,	532:	DCE	532	378.891098	0.281866	80	55	Tilt Up	7a	290	1,	816:	DCE	816	423.805075	0.296340	80	52	Pan Right	13
196	1,	535:	DCE	535	378.996404	0.101248	80	55	Tilt Up	7b	291	1,	819:	DCE	819	424.001727	0.192491	80	52	Pan Right	14
197	1,	538:	DCE	538	379.286279	0.285401	80	55	Tilt Up	7c	292	1,	822:	DCE	822	424.293068	0.287178	80	52	Pan Right	13
198	1,	541:	DCE	541	379.680115	0.389673	80	55	Tilt Up	7d	293	1,	825:	DCE	825	424.384308	0.086765	80	52	Pan Right	14
199	1,	544:	DCE	544	379.770937	0.086661	80	55	Tilt Up	7e	294	1,	828:	DCE	828	424.684813	0.296339	80	52	Pan Right	16
200	1,	547:	DCE	547	379.969367	0.194264	80	55	Tilt Up	7f	295	1,	831:	DCE	831	425.567158	0.878183	80	52	Pan Right	18
201	1,	550:	DCE	550	394.541513	14.567985	80	55	Tilt Up	7e	296	1,	834:	DCE	834	426.252430	0.681112	80	52	Pan Right	1a
202	1,	553:	DCE	553	394.651979	0.106304	80	55	Tilt Up	7d	297	1,	837:	DCE	837	426.540745	0.283736	80	52	Pan Right	1c
203	1,	556:	DCE	556	394.846915	0.190727	80	55	Tilt Up	7c	298	1,	840:	DCE	840	426.841037	0.296131	80	52	Pan Right	1e
204	1,	559:	DCE	559	395.333548	0.482575	80	55	Tilt Up	7b	299	1,	843:	DCE	843	427.327782	0.482583	80	52	Pan Right	20
205	1,	562:	DCE	562	395.532078	0.194055	80	55	Tilt Up	7a	300	1,	846:	DCE	846	427.619366	0.287421	80	52	Pan Right	22
206	1,	565:	DCE	565	395.818774	0.282534	80	55	Tilt Up	79	301	1,	849:	DCE	849	428.301264	0.677569	80	52	Pan Right	24
207	1,	568:	DCE	568	395.923730	0.098858	80	55	Tilt Up	78	302	1,	852:	DCE	852	428.404796	0.099369	80	52	Pan Right	26
208	1,	571:	DCE	571	396.118711	0.190823	80	55	Tilt Up	77	303	1,	855:	DCE	855	428.698321	0.289360	80	52	Pan Right	28
209	1,	574:	DCE	574	396.302761	0.179992	80	55	Tilt Up	76	304	1,	858:	DCE	858	428.785609	0.083124	80	52	Pan Right	2a
210	1,	577:	DCE	577	396.501290	0.194368	80	55	Tilt Up	74	305	1,	861:	DCE	861	428.984038	0.194269	80	52	Pan Right	2c
211	1,	580:	DCE	580	396.699721	0.194269	80	55	Tilt Up	72	306	1,	864:	DCE	864	429.379533	0.391332	80	52	Pan Right	2e
212	1,	583:	DCE	583	396.898041	0.194159	80	55	Tilt Up	70	307	1,	867:	DCE	867	429.665660	0.281966	80	52	Pan Right	30
213	1,	586:	DCE	586	396.999910	0.097707	80	55	Tilt Up	6e	308	1,	870:	DCE	870	430.349163	0.679344	80	52	Pan Right	32
214	1,	589:	DCE	589	397.293015	0.288944	80	55	Tilt Up	6c	309	1,	873:	DCE	873	430.547691	0.194374	80	52	Pan Right	34
215	1,	592:	DCE	592	397.380713	0.083224	80	55	Tilt Up	6a	310	1,	876:	DCE	876	431.229252	0.677674	80	52	Pan Right	36
216	1,	595:	DCE	595	397.777989	0.393215	80	55	Tilt Up	68	311	1,	879:	DCE	879	431.625035	0.391452	80	52	Pan Right	38
217	1,	598:	DCE	598	398.173067	0.390917	80	55	Tilt Up	66	312	1,	882:	DCE	882	431.730332	0.101149	80	52	Pan Right	36
218	1,	601:	DCE	601	398.459340	0.281799	80	55	Tilt Up	64	313	1,	885:	DCE	885	431.826156	0.091772	80	52	Pan Right	38
219	1,	604:	DCE	604	398.658040	0.194537	80	55	Tilt Up	62	314	1,	888:	DCE	888	432.308002	0.476117	80	52	Pan Right	3a
220	1,	607:	DCE	607	398.855944	0.193846	80	55	Tilt Up	60	315	1,	891:	DCE	891	432.414971	0.102807	80	52	Pan Right	3c
221	1,	610:	DCE	610	399.142487	0.281965	80	55	Tilt Up	5e	316	1,	894:	DCE	894	433.098895	0.679343	80	52	Pan Right	3e
222	1,	613:	DCE	613	399.341015	0.194365	80	55	Tilt Up	5c	317	1,	897:	DCE	897	433.186280	0.083224	80	52	Pan Right	40
223	1,	616:	DCE	616	399.444551	0.099479	80	55	Tilt Up	5a	318	1,	900:	DCE	900	433.384706	0.194365	80	52	Pan Right	42
224	1,	619:	DCE	619	399.539249	0.090525	80	55	Tilt Up	58	319	1,	903:	DCE	903	433.978945	0.590076	80	52	Pan Right	44
225	1,	622:	DCE	622	399.737662	0.194261	80	55	Tilt Up	56	320	1,	906:	DCE	906	434.177474	0.194366	80	52	Pan Right	46
226	1,	625:	DCE	625	399.839333	0.097508	80	55	Tilt Up	54	321	1,	909:	DCE	909	434.463607	0.282075	80	52	Pan Right	48
227	1,	628:	DCE	628	400.023372	0.179887	80	55	Tilt Up	50	322	1,	912:	DCE	912	434.764109	0.296449	80	52	Pan Right	4a
228	1,	631:	DCE	631	400.219985	0.192451	80	55	Tilt Up	4e	323	1,	915:	DCE	915	435.644682	0.876516	80	52	Pan Right	4c
229	1,	634:	DCE	634	400.520575	0.296281	80	55	Tilt Up	4a	324	1,	918:	DCE	918	435.739361	0.090622	80	52	Pan Right	4e
230	1,	637:	DCE	637	400.816807	0.292007	80	55	Tilt Up	48	325	1,	921:	DCE	921	436.132669	0.389146	80	52	Pan Right	50
231	1,	640:	DCE	640	400.901340	0.079328	80	55	Tilt Up	44	326	1,	924:	DCE	924	436.223806	0.086661	80	52	Pan Right	52
232	1,	643:	DCE	643	401.207153	0.301649	80	55	Tilt Up	42	327	1,	927:	DCE	927	436.422343	0.194372	80	52	Pan Right	56
233	1,	646:	DCE	646	401.298398	0.087072	80	55	Tilt Up	3e	328	1,	930:	DCE	930	437.012617	0.586117	80	52	Pan Right	58
234	1,	649:	DCE	649	401.781496	0.479041	80	55	Tilt Up	3a	329	1,	933:	DCE	933	438.183483	1.166288	80	52	Pan Right	5a
235	1,	652:	DCE	652	401.979921	0.194261	80	55	Tilt Up	38	330	1,	936:	DCE	936	438.578984	0.391339	80	52	Pan Right	5c
236	1,	655:	DCE	655	402.086895	0.102810	80	55	Tilt Up	34	331	1,	939:	DCE	939	438.666373	0.083226	80	52	Pan Right	60
237	1,	658:	DCE	658	402.178135	0.087078	80	55	Tilt Up	2e	332	1,	942:	DCE	942	438.775430	0.104894	80	52	Pan Right	62
238	1,	661:	DCE	661	402.376566	0.194267	80	55	Tilt Up	2c	333	1,	945:	DCE	945	439.459038	0.679448	80	52	Pan Right	64
239	1,	664:	DCE	664	402.573014	0.192282	80	55	Tilt Up	2a	334	1,	948:	DCE	948	439.548092	0.084895	80	52	Pan Right	66
240	1,	667:	DCE	667	402.771542	0.194055	80	55	Tilt Up	28	335	1,	951:	DCE	951	440.339297	0.787044	80	52	Pan Right	68
241	1,	670:	DCE	670	402.860808	0.085103	80	55	Tilt Up	26	336	1,	954:	DCE	954	440.838400	0.494942	80	52	Pan Right	6a
242	1,	673:	DCE	673	403.057564	0.192699	80	55	Tilt Up	24	337	1,	957:	DCE	957	440.925819	0.083225	80	52	Pan Right	68
243	1,	676:	DCE	676	403.166305	0.104580	80	55	Tilt Up	22	338	1,	960:	DCE	960	441.022268	0.092286	80	52	Pan Right	6a
244	1,	679:	DCE	679	403.257556	0.087086	80	55	Tilt Up	20	339	1,	963:	DCE	963	441.220806	0.194374	80	52	Pan Right	6c
245	1,	682:	DCE	682	403.360985	0.099375	80	55	Tilt Up	1e	340	1,	966:	DCE	966	441.308090	0.083122	80	52	Pan Right	6e
246	1,	685:	DCE	685	403.652394	0.287242	80	55	Tilt Up	1c	341	1,	969:	DCE	969	441.415476	0.103248	80	52	Pan Right	70
247	1,	688:	DCE	688	403.740127	0.083224	80	55	Tilt Up	1a	342	1,	972:	DCE	972	442.491041	0.071399	80	52	Pan Right	

373	1,	1065:	DCE	1065	464.508052	0.106455	80	52	Pan Right	54	468	1,	1349:	DCE	1349	495.628588	0.104686	80	4c	Pan Left	3a
374	1,	1068:	DCE	1068	464.595653	0.083437	80	52	Pan Right	52	469	1,	1352:	DCE	1352	495.823887	0.191240	80	4c	Pan Left	3c
375	1,	1071:	DCE	1071	464.794186	0.194373	80	52	Pan Right	4e	470	1,	1355:	DCE	1355	496.020125	0.190305	80	4c	Pan Left	3e
376	1,	1074:	DCE	1074	464.899281	0.100939	80	52	Pan Right	48	471	1,	1358:	DCE	1358	496.399478	0.375191	80	4c	Pan Left	40
377	1,	1077:	DCE	1077	465.190724	0.287443	80	52	Pan Right	46	472	1,	1361:	DCE	1361	496.705293	0.301755	80	4c	Pan Left	42
378	1,	1080:	DCE	1080	465.674114	0.478915	80	52	Pan Right	44	473	1,	1364:	DCE	1364	496.794661	0.085206	80	4c	Pan Left	44
379	1,	1083:	DCE	1083	465.779440	0.101149	80	52	Pan Right	42	474	1,	1367:	DCE	1367	496.991010	0.192176	80	4c	Pan Left	46
380	1,	1086:	DCE	1086	465.873598	0.090001	80	52	Pan Right	3e	475	1,	1370:	DCE	1370	497.096626	0.101141	80	4c	Pan Left	48
381	1,	1089:	DCE	1089	466.172435	0.294256	80	52	Pan Right	38	476	1,	1373:	DCE	1373	497.475976	0.375186	80	4c	Pan Left	4a
382	1,	1092:	DCE	1092	466.268882	0.091972	80	52	Pan Right	36	477	1,	1376:	DCE	1376	497.586492	0.106352	80	4c	Pan Left	4c
383	1,	1095:	DCE	1095	466.659174	0.386125	80	52	Pan Right	34	478	1,	1379:	DCE	1379	497.674190	0.083536	80	4c	Pan Left	4e
384	1,	1098:	DCE	1098	466.857501	0.194165	80	52	Pan Right	30	479	1,	1382:	DCE	1382	497.872207	0.193852	80	4c	Pan Left	50
385	1,	1101:	DCE	1101	467.054259	0.192598	80	52	Pan Right	2e	480	1,	1385:	DCE	1385	498.070703	0.194027	80	4c	Pan Left	52
386	1,	1104:	DCE	1104	467.345697	0.287276	80	52	Pan Right	2c	481	1,	1388:	DCE	1388	498.172396	0.097186	80	4c	Pan Left	50
387	1,	1107:	DCE	1107	467.633603	0.283848	80	52	Pan Right	28	482	1,	1391:	DCE	1391	498.268950	0.091974	80	4c	Pan Left	52
388	1,	1110:	DCE	1110	467.739115	0.101040	80	52	Pan Right	26	483	1,	1394:	DCE	1394	498.356545	0.083119	80	4c	Pan Left	56
389	1,	1113:	DCE	1113	467.933685	0.190414	80	52	Pan Right	24	484	1,	1397:	DCE	1397	498.465398	0.104687	80	4c	Pan Left	58
390	1,	1116:	DCE	1116	468.117879	0.179719	80	52	Pan Right	22	485	1,	1400:	DCE	1400	498.554868	0.085308	80	4c	Pan Left	5a
391	1,	1119:	DCE	1119	468.316574	0.194366	80	52	Pan Right	20	486	1,	1403:	DCE	1403	498.661675	0.102746	80	4c	Pan Left	5c
392	1,	1122:	DCE	1122	468.618953	0.298215	80	52	Pan Right	1e	487	1,	1406:	DCE	1406	498.856621	0.190616	80	4c	Pan Left	5e
393	1,	1125:	DCE	1125	468.711555	0.088545	80	52	Pan Right	1a	488	1,	1409:	DCE	1409	499.148067	0.287283	80	4c	Pan Left	60
394	1,	1128:	DCE	1128	468.815714	0.099682	80	52	Pan Right	18	489	1,	1412:	DCE	1412	499.541895	0.389657	80	4c	Pan Left	62
395	1,	1131:	DCE	1131	468.999349	0.178116	80	52	Pan Right	16	490	1,	1415:	DCE	1415	499.933583	0.387527	80	4c	Pan Left	64
396	1,	1134:	DCE	1134	469.196002	0.192491	80	52	Pan Right	14	491	1,	1418:	DCE	1418	500.131862	0.193951	80	4c	Pan Left	66
397	1,	1137:	DCE	1137	469.303077	0.102912	80	52	Pan Right	13	492	1,	1421:	DCE	1421	500.513398	0.376956	80	4c	Pan Left	68
398	1,	1140:	DCE	1140	469.394217	0.086974	80	52	Pan Right	12	493	1,	1424:	DCE	1424	500.618601	0.101041	80	4c	Pan Left	6a
399	1,	1143:	DCE	1143	469.694830	0.296448	80	52	Pan Right	11	494	1,	1427:	DCE	1427	500.815468	0.192706	80	4c	Pan Left	6c
400	1,	1146:	DCE	1146	469.790969	0.092095	80	52	Pan Right	10	495	1,	1430:	DCE	1430	501.011705	0.191977	80	4c	Pan Left	6e
401	1,	1149:	DCE	1149	469.878459	0.083015	80	52	Pan Right	0f	496	1,	1433:	DCE	1433	501.196067	0.179888	80	4c	Pan Left	70
402	1,	1152:	DCE	1152	469.989082	0.106441	80	52	Pan Right	0e	497	1,	1436:	DCE	1436	501.593335	0.393104	80	4c	Pan Left	72
403	1,	1155:	DCE	1155	470.076676	0.083431	80	52	Pan Right	0c	498	1,	1439:	DCE	1439	501.891548	0.294053	80	4c	Pan Left	74
404	1,	1158:	DCE	1158	470.183757	0.102889	80	52	Pan Right	0b	499	1,	1442:	DCE	1442	502.076120	0.179984	80	4c	Pan Left	76
405	1,	1161:	DCE	1161	470.473431	0.285512	80	52	Pan Right	0a	500	1,	1445:	DCE	1445	502.274543	0.194366	80	4c	Pan Left	77
406	1,	1164:	DCE	1164	470.575509	0.097609	80	52	Pan Right	09	501	1,	1448:	DCE	1448	502.576918	0.298214	80	4c	Pan Left	78
407	1,	1167:	DCE	1167	470.759559	0.179890	80	52	Pan Right	07	502	1,	1451:	DCE	1451	503.353644	0.772667	80	4c	Pan Left	79
408	1,	1170:	DCE	1170	470.957980	0.194260	80	52	Pan Right	06	503	1,	1454:	DCE	1454	503.550099	0.192293	80	4c	Pan Left	7a
409	1,	1173:	DCE	1173	471.064951	0.102912	80	52	Pan Right	05	504	1,	1457:	DCE	1457	503.748522	0.193958	80	4c	Pan Left	7b
410	1,	1176:	DCE	1176	471.639610	0.570493	80	52	Pan Right	04	505	1,	1460:	DCE	1460	504.142247	0.389251	80	4c	Pan Left	7c
411	1,	1179:	DCE	1179	471.750122	0.106456	80	52	Pan Right	03	506	1,	1463:	DCE	1463	504.337127	0.190823	80	4c	Pan Left	7d
412	1,	1182:	DCE	1182	471.835844	0.081245	80	52	Pan Right	02	507	1,	1466:	DCE	1466	504.533883	0.192760	80	4c	Pan Left	7e
413	1,	1185:	DCE	1185	472.716628	0.876621	80	52	Pan Right	01	508	1,	1469:	DCE	1469	504.718046	0.179998	80	4c	Pan Left	7f
414	1,	1188:	DCE	1188	473.018586	0.297797	80	72	Stop Right		509	1,	1472:	DCE	1472	519.309463	14.587360	80	4e	Tilt Down	01
415	1,	1190:	DCE	1190	483.590662	10.569788	80	4c	Pan Left	01	510	1,	1475:	DCE	1475	532.029953	12.716017	80	6e	Stop Down	
416	1,	1193:	DCE	1193	483.980745	0.385608	80	4c	Pan Left	02	511	1,	1477:	DCE	1477	537.690863	5.658309	80	4c	Pan Left	7e
417	1,	1196:	DCE	1196	484.757678	0.772769	80	4c	Pan Left	03	512	1,	1480:	DCE	1480	537.889183	0.193844	80	4c	Pan Left	7d
418	1,	1199:	DCE	1199	485.242271	0.480701	80	4c	Pan Left	04	513	1,	1483:	DCE	1483	538.087816	0.194157	80	4c	Pan Left	7e
419	1,	1202:	DCE	1202	486.135614	0.889119	80	4c	Pan Left	05	514	1,	1486:	DCE	1486	538.191557	0.099266	80	4c	Pan Left	7d
420	1,	1205:	DCE	1205	486.231753	0.091977	80	4c	Pan Left	04	515	1,	1489:	DCE	1489	540.635271	2.439549	80	4c	Pan Left	7c
421	1,	1208:	DCE	1208	486.319452	0.083224	80	4c	Pan Left	05	516	1,	1492:	DCE	1492	541.411996	0.172565	80	4c	Pan Left	7d
422	1,	1211:	DCE	1211	486.426532	0.102903	80	4c	Pan Left	06	517	1,	1495:	DCE	1495	541.608439	0.192418	80	4c	Pan Left	7c
423	1,	1214:	DCE	1214	486.517675	0.086982	80	4c	Pan Left	05	518	1,	1498:	DCE	1498	542.005602	0.392688	80	4c	Pan Left	7b
424	1,	1217:	DCE	1217	486.624756	0.102922	80	4c	Pan Left	06	519	1,	1501:	DCE	1501	542.204146	0.194381	80	4c	Pan Left	79
425	1,	1220:	DCE	1220	486.821409	0.192601	80	4c	Pan Left	05	520	1,	1504:	DCE	1504	542.291734	0.083539	80	4c	Pan Left	6c
426	1,	1223:	DCE	1223	486.914213	0.088328	80	4c	Pan Left	06	521	1,	1507:	DCE	1507	542.398810	0.102914	80	4c	Pan Left	68
427	1,	1226:	DCE	1226	487.200341	0.281964	80	4c	Pan Left	07	522	1,	1510:	DCE	1510	543.567540	1.164673	80	4c	Pan Left	66
428	1,	1229:	DCE	1229	487.310957	0.106453	80	4c	Pan Left	09	523	1,	1513:	DCE	1513	543.671172	0.099104	80	4c	Pan Left	62
429	1,	1232:	DCE	1232	487.505946	0.190679	80	4c	Pan Left	0a	524	1,	1516:	DCE	1516	543.765703	0.090204	80	4c	Pan Left	5e
430	1,	1235:	DCE	1235	487.597092	0.086984	80	4c	Pan Left	09	525	1,	1519:	DCE	1519	543.854970	0.085103	80	4c	Pan Left	5c
431	1,	1238:	DCE	1238	487.700625	0.099370	80	4c	Pan Left	0a	526	1,	1522:	DCE	1522	543.963815	0.104682	80	4c	Pan Left	58
432	1,	1241:	DCE	1241	487.795307	0.090517	80	4c	Pan Left	09	527	1,	1525:	DCE	1525	544.249952	0.282135	80	4c	Pan Left	54
433	1,	1244:	DCE	1244	487.993736	0.194264	80	4c	Pan Left	0a	528	1,	1528:	DCE	1528	544.355566	0.101142	80	4c	Pan Left	52
434	1,	1247:	DCE	1247	488.191843	0.194052	80	4c	Pan Left	0b	529	1,	1531:	DCE	1531	544.448164	0.088432	80	4c	Pan Left	4e
435	1,	1250:	DCE	1250	488.777338	0.581009	80	4c	Pan Left	0c	530	1,	1534:	DCE	1534	544.552010	0.099370	80	4c	Pan Left	48
436	1,	1253:	DCE	1253	488.961279	0.179783	80	4c	Pan Left	0d	531	1,	1537:	DCE	1537	544.646380	0.090203	8			

563	1,	1632:	DCE	1632	561.770150	0.876309	80	4e	Tilt	Down	05	568	1,	1917:	DCE	1917	587.503611	0.083226	80	4e	Tilt	Down	40
564	1,	1635:	DCE	1635	561.968577	0.193955	80	4e	Tilt	Down	06	569	1,	1920:	DCE	1920	587.610996	0.103223	80	4e	Tilt	Down	3a
565	1,	1638:	DCE	1638	562.070342	0.097289	80	4e	Tilt	Down	08	660	1,	1923:	DCE	1923	587.701826	0.086768	80	4e	Tilt	Down	36
566	1,	1641:	DCE	1641	562.166791	0.091975	80	4e	Tilt	Down	0a	661	1,	1926:	DCE	1926	587.805363	0.099374	80	4e	Tilt	Down	34
567	1,	1644:	DCE	1644	562.651969	0.481117	80	4e	Tilt	Down	0b	662	1,	1929:	DCE	1929	588.096915	0.287495	80	4e	Tilt	Down	32
568	1,	1647:	DCE	1647	562.755505	0.099373	80	4e	Tilt	Down	0c	663	1,	1932:	DCE	1932	588.295440	0.194372	80	4e	Tilt	Down	30
569	1,	1650:	DCE	1650	562.952166	0.192498	80	4e	Tilt	Down	0d	664	1,	1935:	DCE	1935	588.384493	0.084891	80	4e	Tilt	Down	2e
570	1,	1653:	DCE	1653	563.046369	0.090039	80	4e	Tilt	Down	0e	665	1,	1938:	DCE	1938	588.491886	0.103227	80	4e	Tilt	Down	2c
571	1,	1656:	DCE	1656	563.332870	0.282445	80	4e	Tilt	Down	0f	666	1,	1941:	DCE	1941	588.580858	0.084810	80	4e	Tilt	Down	2a
572	1,	1659:	DCE	1659	563.441714	0.104684	80	4e	Tilt	Down	11	667	1,	1944:	DCE	1944	588.686245	0.101140	80	4e	Tilt	Down	28
573	1,	1662:	DCE	1662	563.636703	0.190825	80	4e	Tilt	Down	12	668	1,	1947:	DCE	1947	588.882769	0.192046	80	4e	Tilt	Down	24
574	1,	1665:	DCE	1665	563.836800	0.195935	80	4e	Tilt	Down	13	669	1,	1950:	DCE	1950	588.977580	0.090621	80	4e	Tilt	Down	22
575	1,	1668:	DCE	1668	564.015580	0.174623	80	4e	Tilt	Down	14	670	1,	1953:	DCE	1953	589.081113	0.099368	80	4e	Tilt	Down	20
576	1,	1671:	DCE	1671	564.126156	0.106352	80	4e	Tilt	Down	16	671	1,	1956:	DCE	1956	589.175804	0.090795	80	4e	Tilt	Down	1e
577	1,	1674:	DCE	1674	564.321143	0.190826	80	4e	Tilt	Down	1a	672	1,	1959:	DCE	1959	589.264860	0.084900	80	4e	Tilt	Down	1c
578	1,	1677:	DCE	1677	564.412381	0.087075	80	4e	Tilt	Down	1c	673	1,	1962:	DCE	1962	589.372248	0.103226	80	4e	Tilt	Down	1a
579	1,	1680:	DCE	1680	564.610497	0.193947	80	4e	Tilt	Down	20	674	1,	1965:	DCE	1965	589.461302	0.084890	80	4e	Tilt	Down	18
580	1,	1683:	DCE	1683	564.809033	0.194060	80	4e	Tilt	Down	22	675	1,	1968:	DCE	1968	589.570152	0.104682	80	4e	Tilt	Down	14
581	1,	1686:	DCE	1686	565.005688	0.192182	80	4e	Tilt	Down	24	676	1,	1971:	DCE	1971	589.765140	0.190514	80	4e	Tilt	Down	13
582	1,	1689:	DCE	1689	565.095055	0.085205	80	4e	Tilt	Down	26	677	1,	1974:	DCE	1974	590.056683	0.287484	80	4e	Tilt	Down	12
583	1,	1692:	DCE	1692	565.293583	0.194365	80	4e	Tilt	Down	28	678	1,	1977:	DCE	1977	590.255217	0.194370	80	4e	Tilt	Down	11
584	1,	1695:	DCE	1695	565.490028	0.192281	80	4e	Tilt	Down	2a	679	1,	1980:	DCE	1980	590.342502	0.083122	80	4e	Tilt	Down	10
585	1,	1698:	DCE	1698	565.688460	0.193956	80	4e	Tilt	Down	2c	680	1,	1983:	DCE	1983	590.541036	0.194370	80	4e	Tilt	Down	0f
586	1,	1701:	DCE	1701	566.082183	0.389249	80	4e	Tilt	Down	2e	681	1,	1986:	DCE	1986	590.646334	0.101139	80	4e	Tilt	Down	10
587	1,	1704:	DCE	1704	566.277066	0.190825	80	4e	Tilt	Down	30	682	1,	1989:	DCE	1989	590.739249	0.088574	80	4e	Tilt	Down	0e
588	1,	1707:	DCE	1707	566.473824	0.192595	80	4e	Tilt	Down	32	683	1,	1992:	DCE	1992	590.840802	0.097392	80	4e	Tilt	Down	0c
589	1,	1710:	DCE	1710	566.569961	0.091975	80	4e	Tilt	Down	34	684	1,	1995:	DCE	1995	590.937359	0.092393	80	4e	Tilt	Down	0a
590	1,	1713:	DCE	1713	566.657669	0.083231	80	4e	Tilt	Down	36	685	1,	1998:	DCE	1998	591.024752	0.083230	80	4e	Tilt	Down	09
591	1,	1716:	DCE	1716	566.768186	0.106352	80	4e	Tilt	Down	38	686	1,	2001:	DCE	2001	591.135584	0.106770	80	4e	Tilt	Down	08
592	1,	1719:	DCE	1719	566.963069	0.190409	80	4e	Tilt	Down	3a	687	1,	2004:	DCE	2004	591.222865	0.083120	80	4e	Tilt	Down	07
593	1,	1722:	DCE	1722	567.158056	0.190826	80	4e	Tilt	Down	3c	688	1,	2007:	DCE	2007	591.329945	0.102915	80	4e	Tilt	Down	05
594	1,	1725:	DCE	1725	567.252735	0.090517	80	4e	Tilt	Down	3e	689	1,	2010:	DCE	2010	591.421185	0.086765	80	4e	Tilt	Down	04
595	1,	1728:	DCE	1728	567.354501	0.097602	80	4e	Tilt	Down	40	690	1,	2013:	DCE	2013	591.721689	0.296338	80	4e	Tilt	Down	03
596	1,	1731:	DCE	1731	567.448867	0.090308	80	4e	Tilt	Down	44	691	1,	2016:	DCE	2016	592.104386	0.378534	80	4e	Tilt	Down	02
597	1,	1734:	DCE	1734	567.538348	0.085003	80	4e	Tilt	Down	46	692	1,	2019:	DCE	2019	592.499976	0.391437	80	4e	Tilt	Down	01
598	1,	1737:	DCE	1737	567.735003	0.192596	80	4e	Tilt	Down	48	693	1,	2022:	DCE	2022	592.979326	0.475186	80	6e	Stop	Down	
599	1,	1740:	DCE	1740	567.933426	0.194262	80	4e	Tilt	Down	4a	694	1,	2024:	DCE	2024	593.091966	0.110352	80	4e	Tilt	Down	01
600	1,	1743:	DCE	1743	568.038729	0.101140	80	4e	Tilt	Down	4c	695	1,	2027:	DCE	2027	593.284932	0.188804	80	6e	Stop	Down	
601	1,	1746:	DCE	1746	568.418089	0.375298	80	4e	Tilt	Down	4e	696	1,	2029:	DCE	2029	610.801906	17.514688	80	52	Pan	Right	02
602	1,	1749:	DCE	1749	568.723799	0.301614	80	4e	Tilt	Down	50	697	1,	2032:	DCE	2032	610.808666	0.001870	80	55	Tilt	Up	01
603	1,	1752:	DCE	1752	568.815041	0.087081	80	4e	Tilt	Down	52	698	1,	2035:	DCE	2035	610.910232	0.097609	80	52	Pan	Right	04
604	1,	1755:	DCE	1755	569.013466	0.193950	80	4e	Tilt	Down	54	699	1,	2038:	DCE	2038	610.917098	0.001856	80	55	Tilt	Up	02
605	1,	1758:	DCE	1758	569.211889	0.194366	80	4e	Tilt	Down	56	700	1,	2041:	DCE	2041	610.982411	0.061669	80	55	Tilt	Up	03
606	1,	1761:	DCE	1761	569.603544	0.387492	80	4e	Tilt	Down	58	701	1,	2044:	DCE	2044	611.093278	0.106702	80	52	Pan	Right	05
607	1,	1764:	DCE	1764	569.995490	0.387791	80	4e	Tilt	Down	5c	702	1,	2047:	DCE	2047	611.100215	0.001876	80	55	Tilt	Up	04
608	1,	1767:	DCE	1767	570.179545	0.179892	80	4e	Tilt	Down	5e	703	1,	2050:	DCE	2050	611.198027	0.094165	80	52	Pan	Right	07
609	1,	1770:	DCE	1770	570.290055	0.106354	80	4e	Tilt	Down	60	704	1,	2053:	DCE	2053	611.204896	0.001874	80	55	Tilt	Up	06
610	1,	1773:	DCE	1773	570.485085	0.190546	80	4e	Tilt	Down	62	705	1,	2056:	DCE	2056	611.288224	0.079786	80	52	Pan	Right	09
611	1,	1776:	DCE	1776	570.576287	0.087077	80	4e	Tilt	Down	66	706	1,	2059:	DCE	2059	611.295411	0.001892	80	55	Tilt	Up	07
612	1,	1779:	DCE	1779	570.679721	0.099371	80	4e	Tilt	Down	68	707	1,	2062:	DCE	2062	611.394990	0.096038	80	52	Pan	Right	0a
613	1,	1782:	DCE	1782	570.774402	0.090518	80	4e	Tilt	Down	6a	708	1,	2065:	DCE	2065	611.401759	0.001876	80	55	Tilt	Up	08
614	1,	1785:	DCE	1785	570.876063	0.097499	80	4e	Tilt	Down	6c	709	1,	2068:	DCE	2068	611.467169	0.061766	80	52	Pan	Right	0c
615	1,	1788:	DCE	1788	570.972511	0.092389	80	4e	Tilt	Down	6e	710	1,	2071:	DCE	2071	611.486544	0.014897	80	55	Tilt	Up	0b
616	1,	1791:	DCE	1791	571.074288	0.097609	80	4e	Tilt	Down	70	711	1,	2074:	DCE	2074	611.593954	0.102931	80	52	Pan	Right	0d
617	1,	1794:	DCE	1794	571.170297	0.091856	80	4e	Tilt	Down	72	712	1,	2077:	DCE	2077	611.600808	0.001751	80	55	Tilt	Up	0c
618	1,	1797:	DCE	1797	571.455092	0.280197	80	4e	Tilt	Down	74	713	1,	2080:	DCE	2080	611.680808	0.076353	80	52	Pan	Right	0e
619	1,	1800:	DCE	1800	571.560397	0.101143	80	4e	Tilt	Down	76	714	1,	2083:	DCE	2083	611.687572	0.001874	80	55	Tilt	Up	0e
620	1,	1803:	DCE	1803	571.758822	0.194261	80	4e	Tilt	Down	77	715	1,	2086:	DCE	2086	611.788932	0.097507	80	52	Pan	Right	10
621	1,	1806:	DCE	1806	571.953707	0.190722	80	4e	Tilt	Down	78	716	1,	2089:	DCE	2089	611.796004	0.001867	80	55	Tilt	Up	10
622	1,	1809:	DCE	1809	572.137649	0.179780	80	4e	Tilt	Down	79	717	1,	2092:	DCE	2092	611.879337	0.079689	80	52	Pan	Right	12
623	1,	1812:	DCE	1812	572.246610	0.104693	80	4e	Tilt	Down</													

753	1,	2200:	DCE	2200	613.748187	0.097503	80	52	Pan Right	58	848	1,	2483:	DCE	2483	628.421987	0.001874	80	55	Tilt Up	12
754	1,	2203:	DCE	2203	613.755259	0.001868	80	55	Tilt Up	6e	849	1,	2486:	DCE	2486	628.518023	0.092493	80	52	Pan Right	13
755	1,	2206:	DCE	2206	613.840160	0.081359	80	55	Tilt Up	70	850	1,	2489:	DCE	2489	628.524795	0.001876	80	55	Tilt Up	10
756	1,	2209:	DCE	2209	614.035355	0.191032	80	52	Pan Right	5a	851	1,	2492:	DCE	2492	628.604483	0.076180	80	52	Pan Right	10
757	1,	2212:	DCE	2212	614.042122	0.001875	80	55	Tilt Up	72	852	1,	2495:	DCE	2495	628.625724	0.017043	80	55	Tilt Up	0d
758	1,	2215:	DCE	2215	614.128829	0.083165	80	52	Pan Right	5e	853	1,	2498:	DCE	2498	628.717079	0.086875	80	52	Pan Right	0b
759	1,	2218:	DCE	2218	614.136178	0.001869	80	55	Tilt Up	76	854	1,	2501:	DCE	2501	628.723843	0.001874	80	55	Tilt Up	08
760	1,	2221:	DCE	2221	614.232213	0.092495	80	52	Pan Right	64	855	1,	2504:	DCE	2504	628.788993	0.061519	80	52	Pan Right	07
761	1,	2224:	DCE	2224	614.238985	0.001876	80	55	Tilt Up	79	856	1,	2507:	DCE	2507	628.810723	0.017252	80	55	Tilt Up	06
762	1,	2227:	DCE	2227	614.324188	0.081557	80	52	Pan Right	6a	857	1,	2510:	DCE	2510	628.914257	0.099477	80	52	Pan Right	05
763	1,	2230:	DCE	2230	614.331373	0.002289	80	55	Tilt Up	7c	858	1,	2513:	DCE	2513	628.921044	0.002062	80	55	Tilt Up	04
764	1,	2233:	DCE	2233	614.430951	0.096036	80	52	Pan Right	6c	859	1,	2516:	DCE	2516	629.112057	0.187388	80	52	Pan Right	04
765	1,	2236:	DCE	2236	614.437720	0.001875	80	55	Tilt Up	7e	860	1,	2519:	DCE	2519	629.118928	0.001875	80	55	Tilt Up	02
766	1,	2239:	DCE	2239	614.612510	0.171144	80	55	Tilt Up	7f	861	1,	2522:	DCE	2522	629.198716	0.076246	80	52	Pan Right	03
767	1,	2242:	DCE	2242	614.898428	0.281755	80	52	Pan Right	6e	862	1,	2525:	DCE	2525	629.205276	0.001772	80	75	Stop Up	
768	1,	2245:	DCE	2245	615.003732	0.101141	80	52	Pan Right	70	863	1,	2527:	DCE	2527	629.381724	0.174573	80	52	Pan Right	02
769	1,	2248:	DCE	2248	615.096640	0.088744	80	52	Pan Right	72	864	1,	2530:	DCE	2530	629.580259	0.194372	80	52	Pan Right	01
770	1,	2251:	DCE	2251	615.295174	0.194367	80	52	Pan Right	74	865	1,	2533:	DCE	2533	629.669210	0.084787	80	72	Stop Right	
771	1,	2254:	DCE	2254	615.491937	0.192659	80	52	Pan Right	76	866	1,	2536:	DCE	2536	631.840539	0.2168726	80	55	Tilt Up	02
772	1,	2257:	DCE	2257	615.778063	0.281965	80	52	Pan Right	77	867	1,	2538:	DCE	2538	632.035526	0.190928	80	55	Tilt Up	03
773	1,	2260:	DCE	2260	615.795559	0.013437	80	3a	Zoom CW Start		868	1,	2541:	DCE	2541	632.131975	0.092285	80	55	Tilt Up	04
774	1,	2262:	DCE	2262	615.882639	0.084788	80	52	Pan Right	78	869	1,	2544:	DCE	2544	632.219263	0.083123	80	55	Tilt Up	05
775	1,	2265:	DCE	2265	616.079398	0.192595	80	52	Pan Right	79	870	1,	2547:	DCE	2547	632.434176	0.210740	80	4c	Pan Left	01
776	1,	2268:	DCE	2268	616.175849	0.092289	80	52	Pan Right	7a	871	1,	2550:	DCE	2550	632.441017	0.001876	80	55	Tilt Up	06
777	1,	2271:	DCE	2271	616.372614	0.192602	80	52	Pan Right	7b	872	1,	2553:	DCE	2553	632.526063	0.081504	80	4c	Tilt Up	07
778	1,	2274:	DCE	2274	616.658740	0.281963	80	52	Pan Right	7c	873	1,	2556:	DCE	2556	632.721111	0.190614	80	4c	Pan Left	02
779	1,	2277:	DCE	2277	616.959140	0.296238	80	52	Pan Right	7d	874	1,	2559:	DCE	2559	632.727878	0.001859	80	55	Tilt Up	08
780	1,	2280:	DCE	2280	617.143194	0.179895	80	52	Pan Right	7e	875	1,	2562:	DCE	2562	632.814959	0.083122	80	55	Tilt Up	0a
781	1,	2283:	DCE	2283	617.737529	0.590180	80	52	Pan Right	7f	876	1,	2565:	DCE	2565	632.918597	0.099474	80	4c	Pan Left	03
782	1,	2286:	DCE	2286	617.840858	0.099167	80	52	Pan Right	7e	877	1,	2568:	DCE	2568	632.925199	0.001708	80	55	Tilt Up	0b
783	1,	2289:	DCE	2289	618.134212	0.289193	80	52	Pan Right	7f	878	1,	2571:	DCE	2571	633.026717	0.097705	80	4c	Pan Left	04
784	1,	2292:	DCE	2292	618.329060	0.190686	80	52	Pan Right	7e	879	1,	2574:	DCE	2574	633.033900	0.001875	80	55	Tilt Up	0c
785	1,	2295:	DCE	2295	618.420234	0.086691	80	52	Pan Right	7f	880	1,	2577:	DCE	2577	633.115352	0.077909	80	55	Tilt Up	0e
786	1,	2298:	DCE	2298	623.021277	4.596812	80	52	Pan Right	7e	881	1,	2580:	DCE	2580	633.204413	0.084893	80	4c	Pan Left	05
787	1,	2301:	DCE	2301	623.219806	0.194366	80	52	Pan Right	7d	882	1,	2583:	DCE	2583	633.401177	0.192601	80	4c	Pan Left	07
788	1,	2304:	DCE	2304	623.306996	0.083028	80	52	Pan Right	7c	883	1,	2586:	DCE	2586	633.513980	0.108664	80	4c	Pan Left	06
789	1,	2307:	DCE	2307	623.418022	0.106623	80	52	Pan Right	7b	884	1,	2589:	DCE	2589	633.520852	0.001873	80	55	Tilt Up	0d
790	1,	2310:	DCE	2310	623.613010	0.190826	80	52	Pan Right	7a	885	1,	2592:	DCE	2592	633.584393	0.060003	80	4c	Pan Left	07
791	1,	2313:	DCE	2313	623.902310	0.285139	80	52	Pan Right	79	886	1,	2595:	DCE	2595	633.603764	0.015209	80	55	Tilt Up	0e
792	1,	2316:	DCE	2316	624.297970	0.391497	80	52	Pan Right	78	887	1,	2598:	DCE	2598	633.695008	0.087078	80	4c	Pan Left	06
793	1,	2319:	DCE	2319	624.385360	0.083219	80	52	Pan Right	77	888	1,	2601:	DCE	2601	633.800257	0.101187	80	4c	Pan Left	05
794	1,	2322:	DCE	2322	624.492761	0.102927	80	52	Pan Right	76	889	1,	2604:	DCE	2604	633.807189	0.001875	80	55	Tilt Up	09
795	1,	2325:	DCE	2325	624.583576	0.086665	80	52	Pan Right	74	890	1,	2607:	DCE	2607	633.908330	0.097183	80	4c	Pan Left	03
796	1,	2328:	DCE	2328	624.688877	0.101140	80	52	Pan Right	70	891	1,	2610:	DCE	2610	633.915515	0.001875	80	55	Tilt Up	06
797	1,	2331:	DCE	2331	624.781798	0.088442	80	52	Pan Right	6c	892	1,	2613:	DCE	2613	633.980825	0.061665	80	4c	Pan Left	02
798	1,	2334:	DCE	2334	624.885124	0.099164	80	52	Pan Right	6e	893	1,	2616:	DCE	2616	634.086138	0.101151	80	4c	Pan Left	03
799	1,	2337:	DCE	2337	624.996264	0.106977	80	52	Pan Right	5e	894	1,	2619:	DCE	2619	634.195395	0.104791	80	4c	Pan Left	02
800	1,	2340:	DCE	2340	625.003030	0.001875	80	55	Tilt Up	7b	895	1,	2622:	DCE	2622	634.202161	0.001769	80	55	Tilt Up	05
801	1,	2343:	DCE	2343	625.068336	0.061667	80	52	Pan Right	5a	896	1,	2625:	DCE	2625	634.281956	0.076147	80	4c	Pan Left	01
802	1,	2346:	DCE	2346	625.087712	0.014896	80	55	Tilt Up	76	897	1,	2628:	DCE	2628	634.290808	0.004687	80	55	Tilt Up	02
803	1,	2349:	DCE	2349	625.195313	0.103018	80	52	Pan Right	58	898	1,	2631:	DCE	2631	634.376327	0.081360	80	6c	Stop Left	
804	1,	2352:	DCE	2352	625.202080	0.001875	80	55	Tilt Up	74	899	1,	2633:	DCE	2633	634.381009	0.002186	80	75	Stop Up	
805	1,	2355:	DCE	2355	625.283544	0.077818	80	55	Tilt Up	72	900	1,	2636:	DCE	2636	635.653853	1.270970	80	55	Tilt Up	01
806	1,	2358:	DCE	2358	625.662886	0.375188	80	55	Tilt Up	70	901	1,	2638:	DCE	2638	635.741134	0.083118	80	4c	Pan Left	01
807	1,	2361:	DCE	2361	625.787982	0.120934	80	55	Tilt Up	6c	902	1,	2641:	DCE	2641	635.851860	0.106559	80	55	Tilt Up	02
808	1,	2364:	DCE	2364	625.794958	0.001876	80	2a	Zoom CW End		903	1,	2644:	DCE	2644	635.939079	0.083056	80	4c	Pan Left	03
809	1,	2366:	DCE	2366	625.860061	0.063334	80	55	Tilt Up	6a	904	1,	2647:	DCE	2647	636.050284	0.106871	80	4c	Pan Left	04
810	1,	2369:	DCE	2369	625.968913	0.104685	80	55	Tilt Up	64	905	1,	2650:	DCE	2650	636.057050	0.001875	80	55	Tilt Up	04
811	1,	2372:	DCE	2372	626.076403	0.103014	80	52	Pan Right	56	906	1,	2653:	DCE	2653	636.154800	0.094103	80	4c	Pan Left	05
812	1,	2375:	DCE	2375	626.083173	0.001875	80	55	Tilt Up	60	907	1,	2656:	DCE	2656	636.161565	0.001871	80	55	Tilt Up	08
813	1,	2378:	DCE	2378	626.162963	0.076144	80	55	Tilt Up	5e	908	1,	2659:	DCE	2659	636.244964	0.079856	80	55	Tilt Up	09
814	1,	2381:	DCE	2381	626.272223	0.105097	80	52	Pan Right	54	909	1,	2662:	DCE	2662	636.534946	0.285540	80	55	Tilt Up	0a
815	1,	2384:	DCE	2384	626.278993	0.001873	80	55	Tilt Up	5a	910	1,	2665:	DCE	2665	636.731752	0.192644	80	55	Tilt Up	0c
816	1,	2387:	DCE	2387	626.362428	0.079789	80	52	Pan Right	4e	911	1,	2668:	DCE	2668	636.820864	0.084997	80	55		

943	1,	2764:	DCE	2764	638.991563	0.011661	80	3b	Zoom CW Start	1038	1,	3048:	DCE	3048	654.932077	7.919848	80	2b	Zoom CW End
944	1,	2766:	DCE	2766	639.076980	0.083232	80	4c	Pan Left 14	1039	1,	3050:	DCE	3050	657.574310	2.640057	80	4c	Pan Left 7e
945	1,	2769:	DCE	2769	639.099894	0.018747	80	55	Tilt Up 34	1040	1,	3053:	DCE	3053	657.679717	0.101245	80	4c	Pan Left 7d
946	1,	2772:	DCE	2772	639.191247	0.087192	80	4c	Pan Left 16	1041	1,	3056:	DCE	3056	657.686486	0.001875	80	55	Tilt Up 7e
947	1,	2775:	DCE	2775	639.198015	0.001876	80	55	Tilt Up 38	1042	1,	3059:	DCE	3059	657.786168	0.095890	80	4c	Pan Left 7c
948	1,	2778:	DCE	2778	639.371024	0.169511	80	4c	Pan Left 14	1043	1,	3062:	DCE	3062	657.793249	0.001872	80	55	Tilt Up 7d
949	1,	2781:	DCE	2781	639.476432	0.101348	80	4c	Pan Left 16	1044	1,	3065:	DCE	3065	657.876484	0.079589	80	4c	Pan Left 7b
950	1,	2784:	DCE	2784	639.483307	0.001872	80	55	Tilt Up 3a	1045	1,	3068:	DCE	3068	657.883348	0.002021	80	55	Tilt Up 7c
951	1,	2787:	DCE	2787	639.761729	0.274881	80	4c	Pan Left 14	1046	1,	3071:	DCE	3071	657.984704	0.097814	80	4c	Pan Left 77
952	1,	2790:	DCE	2790	639.872659	0.106766	80	4c	Pan Left 18	1047	1,	3074:	DCE	3074	657.991884	0.001871	80	55	Tilt Up 79
953	1,	2793:	DCE	2793	639.879426	0.001876	80	55	Tilt Up 3c	1048	1,	3077:	DCE	3077	658.075320	0.079896	80	4c	Pan Left 76
954	1,	2796:	DCE	2796	639.966411	0.083338	80	4c	Pan Left 1c	1049	1,	3080:	DCE	3080	658.082091	0.001876	80	55	Tilt Up 77
955	1,	2799:	DCE	2799	639.973586	0.001868	80	55	Tilt Up 3e	1050	1,	3083:	DCE	3083	658.169377	0.083744	80	4c	Pan Left 72
956	1,	2802:	DCE	2802	640.162378	0.185250	80	4c	Pan Left 20	1051	1,	3086:	DCE	3086	658.176146	0.001873	80	55	Tilt Up 74
957	1,	2805:	DCE	2805	640.169456	0.002186	80	55	Tilt Up 40	1052	1,	3089:	DCE	3089	658.273957	0.094268	80	4c	Pan Left 6a
958	1,	2808:	DCE	2808	640.356903	0.183629	80	4c	Pan Left 22	1053	1,	3092:	DCE	3092	658.280724	0.001877	80	55	Tilt Up 70
959	1,	2811:	DCE	2811	640.363669	0.001873	80	55	Tilt Up 42	1054	1,	3095:	DCE	3095	658.364158	0.079789	80	4c	Pan Left 5e
960	1,	2814:	DCE	2814	640.466791	0.099575	80	4c	Pan Left 24	1055	1,	3098:	DCE	3098	658.371219	0.001752	80	55	Tilt Up 68
961	1,	2817:	DCE	2817	640.473976	0.001874	80	55	Tilt Up 44	1056	1,	3101:	DCE	3101	658.470923	0.096039	80	4c	Pan Left 56
962	1,	2820:	DCE	2820	640.736085	0.258566	80	55	Tilt Up 46	1057	1,	3104:	DCE	3104	658.477692	0.001878	80	55	Tilt Up 62
963	1,	2823:	DCE	2823	640.846775	0.106359	80	4c	Pan Left 26	1058	1,	3107:	DCE	3107	658.542997	0.061652	80	4c	Pan Left 4e
964	1,	2826:	DCE	2826	640.853951	0.001875	80	55	Tilt Up 48	1059	1,	3110:	DCE	3110	658.562308	0.015146	80	55	Tilt Up 5c
965	1,	2829:	DCE	2829	640.951871	0.094379	80	4c	Pan Left 28	1060	1,	3113:	DCE	3113	658.669970	0.103433	80	4c	Pan Left 4a
966	1,	2832:	DCE	2832	640.958632	0.001874	80	55	Tilt Up 4a	1061	1,	3116:	DCE	3116	658.676739	0.001875	80	55	Tilt Up 58
967	1,	2835:	DCE	2835	641.042072	0.079898	80	4c	Pan Left 2c	1062	1,	3119:	DCE	3119	658.756629	0.076245	80	4c	Pan Left 48
968	1,	2838:	DCE	2838	641.048839	0.001874	80	55	Tilt Up 4e	1063	1,	3122:	DCE	3122	658.763233	0.001709	80	55	Tilt Up 56
969	1,	2841:	DCE	2841	641.238103	0.185304	80	4c	Pan Left 2e	1064	1,	3125:	DCE	3125	658.956209	0.189164	80	4c	Pan Left 42
970	1,	2844:	DCE	2844	641.244869	0.001772	80	55	Tilt Up 50	1065	1,	3128:	DCE	3128	658.962810	0.001708	80	55	Tilt Up 52
971	1,	2847:	DCE	2847	641.330280	0.081767	80	55	Tilt Up 4e	1066	1,	3131:	DCE	3131	659.050263	0.083745	80	4c	Pan Left 3c
972	1,	2850:	DCE	2850	641.435798	0.101354	80	4c	Pan Left 32	1067	1,	3134:	DCE	3134	659.057033	0.001876	80	55	Tilt Up 50
973	1,	2853:	DCE	2853	641.442564	0.001874	80	55	Tilt Up 50	1068	1,	3137:	DCE	3137	659.153067	0.092492	80	4c	Pan Left 32
974	1,	2856:	DCE	2856	641.525787	0.079681	80	4c	Pan Left 34	1069	1,	3140:	DCE	3140	659.159836	0.001872	80	55	Tilt Up 4a
975	1,	2859:	DCE	2859	641.631409	0.101145	80	55	Tilt Up 52	1070	1,	3143:	DCE	3143	659.239629	0.076312	80	4c	Pan Left 2c
976	1,	2862:	DCE	2862	641.722233	0.086661	80	4c	Pan Left 36	1071	1,	3146:	DCE	3146	659.260769	0.016980	80	55	Tilt Up 48
977	1,	2865:	DCE	2865	641.815154	0.088754	80	4c	Pan Left 38	1072	1,	3149:	DCE	3149	659.423467	0.158530	80	4c	Pan Left 28
978	1,	2868:	DCE	2868	641.922124	0.102809	80	55	Tilt Up 58	1073	1,	3152:	DCE	3152	659.442760	0.015130	80	55	Tilt Up 4e
979	1,	2871:	DCE	2871	642.029617	0.103329	80	4c	Pan Left 3a	1074	1,	3155:	DCE	3155	659.550438	0.103432	80	4c	Pan Left 1a
980	1,	2874:	DCE	2874	642.036385	0.001876	80	55	Tilt Up 5c	1075	1,	3158:	DCE	3158	659.557207	0.001873	80	55	Tilt Up 3e
981	1,	2877:	DCE	2877	642.101692	0.061661	80	4c	Pan Left 3e	1076	1,	3161:	DCE	3161	659.637100	0.076351	80	4c	Pan Left 11
982	1,	2880:	DCE	2880	642.121171	0.015313	80	55	Tilt Up 5e	1077	1,	3164:	DCE	3164	659.643868	0.001875	80	55	Tilt Up 3a
983	1,	2883:	DCE	2883	642.316266	0.190929	80	4c	Pan Left 40	1078	1,	3167:	DCE	3167	659.729181	0.081667	80	4c	Pan Left 10
984	1,	2886:	DCE	2886	642.323031	0.001874	80	55	Tilt Up 60	1079	1,	3170:	DCE	3170	659.837615	0.104436	80	4c	Pan Left 0f
985	1,	2889:	DCE	2889	642.424489	0.097810	80	4c	Pan Left 3e	1080	1,	3173:	DCE	3173	659.845945	0.002291	80	55	Tilt Up 38
986	1,	2892:	DCE	2892	642.431567	0.001770	80	55	Tilt Up 5e	1081	1,	3176:	DCE	3176	659.942710	0.092293	80	4c	Pan Left 0b
987	1,	2895:	DCE	2895	642.511354	0.076141	80	55	Tilt Up 60	1082	1,	3179:	DCE	3179	659.949792	0.002186	80	55	Tilt Up 34
988	1,	2898:	DCE	2898	642.711761	0.196242	80	4c	Pan Left 40	1083	1,	3182:	DCE	3182	660.031456	0.078008	80	4c	Pan Left 08
989	1,	2901:	DCE	2901	642.718537	0.001885	80	55	Tilt Up 62	1084	1,	3185:	DCE	3185	660.038224	0.001875	80	55	Tilt Up 2e
990	1,	2904:	DCE	2904	642.798324	0.076150	80	4c	Pan Left 42	1085	1,	3188:	DCE	3188	660.119778	0.077909	80	4c	Pan Left 07
991	1,	2907:	DCE	2907	642.894565	0.092183	80	4c	Pan Left 44	1086	1,	3191:	DCE	3191	660.230819	0.107080	80	4c	Pan Left 05
992	1,	2910:	DCE	2910	642.981954	0.083225	80	4c	Pan Left 46	1087	1,	3194:	DCE	3194	660.237585	0.001875	80	55	Tilt Up 2c
993	1,	2913:	DCE	2913	643.003096	0.016978	80	55	Tilt Up 64	1088	1,	3197:	DCE	3197	660.315497	0.074372	80	4c	Pan Left 04
994	1,	2916:	DCE	2916	643.092570	0.085305	80	4c	Pan Left 4a	1089	1,	3200:	DCE	3200	660.338516	0.018853	80	55	Tilt Up 2a
995	1,	2919:	DCE	2919	643.196006	0.099268	80	55	Tilt Up 66	1090	1,	3203:	DCE	3203	660.519237	0.176659	80	4c	Pan Left 02
996	1,	2922:	DCE	2922	643.286933	0.086765	80	4c	Pan Left 4c	1091	1,	3206:	DCE	3206	660.526025	0.001885	80	55	Tilt Up 26
997	1,	2925:	DCE	2925	643.394427	0.103015	80	4c	Pan Left 4e	1092	1,	3209:	DCE	3209	660.625584	0.095623	80	4c	Pan Left 01
998	1,	2928:	DCE	2928	643.401196	0.001874	80	55	Tilt Up 68	1093	1,	3212:	DCE	3212	660.632767	0.001874	80	55	Tilt Up 24
999	1,	2931:	DCE	2931	643.487899	0.083057	80	55	Tilt Up 66	1094	1,	3215:	DCE	3215	660.694443	0.058133	80	6c	Stop Left
1000	1,	2934:	DCE	2934	643.575673	0.083130	80	55	Tilt Up 68	1095	1,	3217:	DCE	3217	660.717248	0.020625	80	55	Tilt Up 20
1001	1,	2937:	DCE	2937	643.881486	0.301646	80	4c	Pan Left 52	1096	1,	3220:	DCE	3220	660.822767	0.101354	80	4c	Pan Left 01
1002	1,	2940:	DCE	2940	643.888145	0.001766	80	55	Tilt Up 6a	1097	1,	3223:	DCE	3223	660.830991	0.003647	80	55	Tilt Up 1e
1003	1,	2943:	DCE	2943	643.972002	0.079790	80	55	Tilt Up 6c	1098	1,	3226:	DCE	3226	660.911193	0.075625	80	6c	Stop Left
1004	1,	2946:	DCE	2946	644.077409	0.101350	80	4c	Pan Left 56	1099	1,	3228:	DCE	3228	660.915982	0.002186	80	55	Tilt Up 1a
1005	1,	2949:	DCE	2949	644.084178	0.001876	80	55	Tilt Up 6e	1100	1,	3231:	DCE	3231	661.006398	0.086664	80	55	Tilt Up 16
1006	1,	2952:	DCE	2952	644.187301	0.099582	80	4c	Pan Left 58	1101	1,	3234:	DCE	3234	661.108159	0.097287	80	55	Tilt Up 13
1007	1,	2955:	DCE	2955	644.194379	0.001875	80	55	Tilt Up 70	1102	1,	3237:	DCE	3237	661.204623	0.091986	80	55	Tilt Up 10
1008	1,	2958:	DCE	2958	644.257916	0.059890	80	4c	Pan Left 5a	1103	1,	3240:	DCE	3240	661.292208	0.083119	80	55	Tilt Up

1133	1,	3324:	DCE	3324	676.588521	0.002017	80	2a	Zoom CW End	1228	1,	3593:	DCE	3593	681.379860	0.106662	80	4c	Pan Left	7f
1134	1,	3326:	DCE	3326	676.670142	0.079683	80	4e	Tilt Down 08	1229	1,	3596:	DCE	3596	681.387358	0.002186	80	55	Tilt Up	22
1135	1,	3329:	DCE	3329	676.676911	0.001876	80	3b	Zoom CCW Start	1230	1,	3599:	DCE	3599	681.393088	0.001770	80	3b	Zoom CCW Start	
1136	1,	3331:	DCE	3331	676.765348	0.086667	80	4e	Tilt Down 5a	1231	1,	3601:	DCE	3601	681.453195	0.058400	80	4e	Tilt Down 05	
1137	1,	3334:	DCE	3334	676.869201	0.099373	80	4c	Pan Left 02	1232	1,	3604:	DCE	3604	681.563711	0.106353	80	4e	Tilt Down 7f	
1138	1,	3337:	DCE	3337	676.875966	0.001876	80	4e	Tilt Down 62	1233	1,	3607:	DCE	3607	681.665267	0.097393	80	2b	Zoom CCW End	
1139	1,	3340:	DCE	3340	676.941377	0.061766	80	52	Pan Right 74	1234	1,	3609:	DCE	3609	681.758069	0.090514	80	4c	Tilt Down 07	
1140	1,	3343:	DCE	3343	676.960754	0.015212	80	4e	Tilt Down 34	1235	1,	3612:	DCE	3612	681.850879	0.088644	80	55	Tilt Up	7f
1141	1,	3346:	DCE	3346	677.070125	0.105206	80	52	Pan Right 7f	1236	1,	3615:	DCE	3615	681.936496	0.081505	80	4c	Pan Left	05
1142	1,	3349:	DCE	3349	677.077619	0.002186	80	4e	Tilt Down 28	1237	1,	3618:	DCE	3618	682.061699	0.121041	80	52	Pan Right	7f
1143	1,	3352:	DCE	3352	677.083038	0.001772	80	2b	Zoom CCW End	1238	1,	3621:	DCE	3621	682.068776	0.002185	80	55	Tilt Up	68
1144	1,	3354:	DCE	3354	677.155844	0.071037	80	4c	Pan Left 20	1239	1,	3624:	DCE	3624	682.150230	0.077807	80	4e	Tilt Down 2a	
1145	1,	3357:	DCE	3357	677.162614	0.001875	80	4e	Tilt Down 7f	1240	1,	3627:	DCE	3627	682.259187	0.104791	80	52	Pan Right	16
1146	1,	3360:	DCE	3360	677.263965	0.097705	80	4c	Pan Left 7f	1241	1,	3630:	DCE	3630	682.266056	0.001875	80	4e	Tilt Down 7f	
1147	1,	3363:	DCE	3363	677.271149	0.001876	80	4e	Tilt Down 60	1242	1,	3633:	DCE	3633	682.347509	0.077599	80	72	Stop Right	
1148	1,	3366:	DCE	3366	677.350830	0.076138	80	55	Tilt Up 22	1243	1,	3635:	DCE	3635	682.352715	0.002286	80	55	Tilt Up	01
1149	1,	3369:	DCE	3369	677.359267	0.004270	80	3a	Zoom CW Start	1244	1,	3638:	DCE	3638	682.443241	0.086879	80	52	Pan Right	52
1150	1,	3371:	DCE	3371	677.448649	0.087090	80	55	Tilt Up 74	1245	1,	3641:	DCE	3641	682.450423	0.001806	80	55	Tilt Up	7f
1151	1,	3374:	DCE	3374	677.555921	0.103119	80	52	Pan Right 02	1246	1,	3644:	DCE	3644	682.548231	0.094264	80	4c	Pan Left	01
1152	1,	3377:	DCE	3377	677.563317	0.002188	80	55	Tilt Up 20	1247	1,	3647:	DCE	3647	682.555002	0.001876	80	55	Tilt Up	01
1153	1,	3380:	DCE	3380	677.569100	0.002138	80	2a	Zoom CW End	1248	1,	3650:	DCE	3650	682.638436	0.079789	80	4c	Pan Left	7f
1154	1,	3382:	DCE	3382	677.659564	0.088643	80	52	Pan Right 7f	1249	1,	3653:	DCE	3653	682.645203	0.001874	80	4e	Tilt Down 7f	
1155	1,	3385:	DCE	3385	677.667164	0.002292	80	55	Tilt Up 1c	1250	1,	3656:	DCE	3656	682.746552	0.097390	80	52	Pan Right	11
1156	1,	3388:	DCE	3388	677.672893	0.001873	80	3a	Zoom CW Start	1251	1,	3659:	DCE	3659	682.753738	0.001874	80	55	Tilt Up	1c
1157	1,	3390:	DCE	3390	677.732894	0.058231	80	55	Tilt Up 48	1252	1,	3662:	DCE	3662	682.817274	0.059992	80	52	Pan Right	34
1158	1,	3393:	DCE	3393	677.843414	0.106459	80	52	Pan Right 2a	1253	1,	3665:	DCE	3665	682.854464	0.033024	80	55	Tilt Up	0b
1159	1,	3396:	DCE	3396	677.850491	0.001770	80	55	Tilt Up 7f	1254	1,	3668:	DCE	3668	682.943831	0.085204	80	4c	Pan Left	79
1160	1,	3399:	DCE	3399	677.932047	0.077910	80	4c	Pan Left 52	1255	1,	3671:	DCE	3671	682.950911	0.001934	80	4e	Tilt Down 7f	
1161	1,	3402:	DCE	3402	678.039346	0.103132	80	4c	Pan Left 7f	1256	1,	3674:	DCE	3674	683.032410	0.077852	80	52	Pan Right	12
1162	1,	3405:	DCE	3405	678.046832	0.002291	80	55	Tilt Up 0b	1257	1,	3677:	DCE	3677	683.039343	0.001874	80	4e	Tilt Down 20	
1163	1,	3408:	DCE	3408	678.052561	0.001771	80	2a	Zoom CW End	1258	1,	3680:	DCE	3680	683.140693	0.097704	80	52	Pan Right	7f
1164	1,	3410:	DCE	3410	678.130472	0.076140	80	4e	Tilt Down 2a	1259	1,	3683:	DCE	3683	683.147566	0.001874	80	4e	Tilt Down 2c	
1165	1,	3413:	DCE	3413	678.237761	0.103125	80	4c	Pan Left 02	1260	1,	3686:	DCE	3686	683.229169	0.077748	80	72	Stop Right	
1166	1,	3416:	DCE	3416	678.245255	0.002291	80	4e	Tilt Down 18	1261	1,	3688:	DCE	3688	683.234235	0.002466	80	4e	Tilt Down 7f	
1167	1,	3419:	DCE	3419	678.250986	0.001771	80	3b	Zoom CCW Start	1262	1,	3691:	DCE	3691	683.324538	0.086666	80	55	Tilt Up	12
1168	1,	3421:	DCE	3421	678.341397	0.088642	80	52	Pan Right 7b	1263	1,	3694:	DCE	3694	683.428599	0.099582	80	4c	Pan Left	1e
1169	1,	3424:	DCE	3424	678.348583	0.002291	80	55	Tilt Up 04	1264	1,	3697:	DCE	3697	683.435364	0.001872	80	55	Tilt Up	7f
1170	1,	3427:	DCE	3427	678.432018	0.079894	80	52	Pan Right 7f	1265	1,	3700:	DCE	3700	683.515151	0.076145	80	4c	Pan Left	7f
1171	1,	3430:	DCE	3430	678.438785	0.001875	80	55	Tilt Up 20	1266	1,	3703:	DCE	3703	683.540137	0.020924	80	55	Tilt Up	2e
1172	1,	3433:	DCE	3433	678.525759	0.083330	80	52	Pan Right 4c	1267	1,	3706:	DCE	3706	683.609525	0.069229	80	4e	Tilt Down 7f	
1173	1,	3436:	DCE	3436	678.532841	0.001875	80	4e	Tilt Down 05	1268	1,	3709:	DCE	3709	683.713058	0.099372	80	4c	Pan Left	02
1174	1,	3439:	DCE	3439	678.630762	0.094276	80	52	Pan Right 08	1269	1,	3712:	DCE	3712	683.825861	0.108640	80	4c	Pan Left	46
1175	1,	3442:	DCE	3442	678.637522	0.001875	80	4e	Tilt Down 66	1270	1,	3715:	DCE	3715	683.834298	0.002291	80	4e	Tilt Down 72	
1176	1,	3445:	DCE	3445	678.715439	0.074376	80	4c	Pan Left 4e	1271	1,	3718:	DCE	3718	683.912422	0.073541	80	4c	Pan Left	7f
1177	1,	3448:	DCE	3448	678.738459	0.018853	80	4e	Tilt Down 7c	1272	1,	3721:	DCE	3721	683.919024	0.001711	80	55	Tilt Up	78
1178	1,	3451:	DCE	3451	678.831581	0.089066	80	4c	Pan Left 7f	1273	1,	3724:	DCE	3724	684.020540	0.097872	80	4c	Pan Left	32
1179	1,	3454:	DCE	3454	678.840432	0.003646	80	55	Tilt Up 02	1274	1,	3727:	DCE	3727	684.027409	0.001875	80	55	Tilt Up	7f
1180	1,	3457:	DCE	3457	678.847307	0.002395	80	2b	Zoom CCW End	1275	1,	3730:	DCE	3730	684.111155	0.079890	80	52	Pan Right	7f
1181	1,	3459:	DCE	3459	678.918762	0.068747	80	55	Tilt Up 7f	1276	1,	3733:	DCE	3733	684.117925	0.001877	80	55	Tilt Up	78
1182	1,	3462:	DCE	3462	679.010007	0.087081	80	4c	Pan Left 1a	1277	1,	3736:	DCE	3736	684.204699	0.083233	80	4e	Tilt Down 14	
1183	1,	3465:	DCE	3465	679.115415	0.101247	80	52	Pan Right 72	1278	1,	3739:	DCE	3739	684.310423	0.101255	80	52	Pan Right	02
1184	1,	3468:	DCE	3468	679.122183	0.001875	80	55	Tilt Up 76	1279	1,	3742:	DCE	3742	684.317180	0.001873	80	4e	Tilt Down 7f	
1185	1,	3471:	DCE	3471	679.221599	0.095770	80	52	Pan Right 7f	1280	1,	3745:	DCE	3745	684.400517	0.079690	80	4c	Pan Left	5a
1186	1,	3474:	DCE	3474	679.228955	0.002466	80	55	Tilt Up 18	1281	1,	3748:	DCE	3748	684.407285	0.001875	80	3b	Zoom CCW Start	
1187	1,	3477:	DCE	3477	679.315921	0.083433	80	52	Pan Right 64	1282	1,	3750:	DCE	3750	684.490824	0.081456	80	4c	Pan Left	1e
1188	1,	3480:	DCE	3480	679.323422	0.002175	80	55	Tilt Up 68	1283	1,	3753:	DCE	3753	684.592586	0.097598	80	52	Pan Right	74
1189	1,	3483:	DCE	3483	679.329149	0.002083	80	3a	Zoom CW Start	1284	1,	3756:	DCE	3756	684.600921	0.004168	80	2b	Zoom CCW End	
1190	1,	3485:	DCE	3485	679.406959	0.075934	80	4c	Pan Left 3a	1285	1,	3758:	DCE	3758	684.706228	0.103017	80	52	Pan Right	7f
1191	1,	3488:	DCE	3488	679.414142	0.001873	80	55	Tilt Up 7f	1286	1,	3761:	DCE	3761	684.713411	0.001874	80	4e	Tilt Down 05	
1192	1,	3491:	DCE	3491	679.493834	0.076151	80	4c	Pan Left 7f	1287	1,	3764:	DCE	3764	684.793094	0.076214	80	55	Tilt Up	7f
1193	1,	3494:	DCE	3494	679.599138	0.101141	80	4c	Pan Left 22	1288	1,	3767:	DCE	3767	684.901843	0.104582	80	4c	Pan Left	03
1194	1,	3497:	DCE	3497	679.691881	0.088578	80	4c	Pan Left 18	1289	1,	3770:	DCE	3770	684.908815	0.002083	80	3a	Zoom CW Start	
1195	1,	3500:	DCE	3500	679.802874	0.106660	80	4c	Pan Left 7f	1290	1,	3772:	DCE	3772	684.992250	0.081558	80	4c	Pan Left	7f
1196	1,	3503:	DCE	3503	679.810686	0.002293	80	55	Tilt Up 0b	1291	1,	3775:	DCE	3775	684.999016	0.001874	80	55	Tilt Up	0b
1197	1,	3506:	DCE	3506	679.816102	0.001875	80	2a	Zoom CW End	1292	1,	3778:	DCE	37						

1323	1,	3867:	DCE	3867	686.846098	0.088332	80	4c	Pan Left	7f	1418	1,	4146:	DCE	4146	691.951521	0.002016	80	4e	Tilt Down	70
1324	1,	3870:	DCE	3870	686.953592	0.103017	80	55	Tilt Up	12	1419	1,	4149:	DCE	4149	692.052875	0.097812	80	52	Pan Right	7f
1325	1,	3873:	DCE	3873	686.960252	0.001768	80	2b	Zoom CW	End	1420	1,	4152:	DCE	4152	692.059651	0.001884	80	55	Tilt Up	12
1326	1,	3875:	DCE	3875	687.058065	0.096040	80	4c	Pan Left	48	1421	1,	4155:	DCE	4155	692.143072	0.079784	80	52	Pan Right	66
1327	1,	3878:	DCE	3878	687.064831	0.001876	80	55	Tilt Up	7f	1422	1,	4158:	DCE	4158	692.150155	0.001771	80	55	Tilt Up	7f
1328	1,	3881:	DCE	3881	687.132227	0.063389	80	52	Pan Right	76	1423	1,	4161:	DCE	4161	692.231551	0.077749	80	4c	Pan Left	2a
1329	1,	3884:	DCE	3884	687.242998	0.106604	80	52	Pan Right	7f	1424	1,	4164:	DCE	4164	692.340669	0.104958	80	4c	Pan Left	7f
1330	1,	3887:	DCE	3887	687.250136	0.001873	80	55	Tilt Up	12	1425	1,	4167:	DCE	4167	692.347433	0.001873	80	55	Tilt Up	30
1331	1,	3890:	DCE	3890	687.347527	0.093848	80	52	Pan Right	72	1426	1,	4170:	DCE	4170	692.434618	0.083224	80	4e	Tilt Down	58
1332	1,	3893:	DCE	3893	687.354715	0.001867	80	55	Tilt Up	79	1427	1,	4173:	DCE	4173	692.520029	0.081246	80	6e	Stop Down	
1333	1,	3896:	DCE	3896	687.432729	0.074475	80	4c	Pan Left	34	1428	1,	4175:	DCE	4175	692.610900	0.088688	80	4c	Pan Left	7c
1334	1,	3899:	DCE	3899	687.441269	0.004374	80	55	Tilt Up	7f	1429	1,	4178:	DCE	4178	692.630445	0.015219	80	55	Tilt Up	7f
1335	1,	3902:	DCE	3902	687.544911	0.099475	80	4c	Pan Left	7f	1430	1,	4181:	DCE	4181	692.721263	0.086661	80	55	Tilt Up	26
1336	1,	3905:	DCE	3905	687.552096	0.001875	80	55	Tilt Up	12	1431	1,	4184:	DCE	4184	692.825118	0.099689	80	52	Pan Right	7f
1337	1,	3908:	DCE	3908	687.615631	0.059992	80	4c	Pan Left	60	1432	1,	4187:	DCE	4187	692.833338	0.003327	80	55	Tilt Up	02
1338	1,	3911:	DCE	3911	687.635009	0.015316	80	4e	Tilt Down	44	1433	1,	4190:	DCE	4190	692.933343	0.095526	80	52	Pan Right	54
1339	1,	3914:	DCE	3914	687.743960	0.104788	80	52	Pan Right	76	1434	1,	4193:	DCE	4193	692.940214	0.001876	80	4e	Tilt Down	7f
1340	1,	3917:	DCE	3917	687.751041	0.001875	80	55	Tilt Up	11	1435	1,	4196:	DCE	4196	693.005522	0.061773	80	4c	Pan Left	7f
1341	1,	3920:	DCE	3920	687.832704	0.078018	80	52	Pan Left	08	1436	1,	4199:	DCE	4199	693.114578	0.104580	80	55	Tilt Up	24
1342	1,	3923:	DCE	3923	687.841140	0.003646	80	4e	Tilt Down	04	1437	1,	4202:	DCE	4202	693.219987	0.101245	80	4c	Pan Left	4e
1343	1,	3926:	DCE	3926	687.939053	0.093227	80	4c	Pan Left	7f	1438	1,	4205:	DCE	4205	693.226861	0.001874	80	55	Tilt Up	7a
1344	1,	3929:	DCE	3929	687.945819	0.002041	80	4e	Tilt Down	6e	1439	1,	4208:	DCE	4208	693.314046	0.083331	80	4c	Pan Left	22
1345	1,	3932:	DCE	3932	688.027481	0.077702	80	52	Pan Right	6a	1440	1,	4211:	DCE	4211	693.320916	0.001874	80	4e	Tilt Down	66
1346	1,	3935:	DCE	3935	688.034398	0.001710	80	55	Tilt Up	0c	1441	1,	4214:	DCE	4214	693.418726	0.094268	80	52	Pan Right	16
1347	1,	3938:	DCE	3938	688.135919	0.097709	80	52	Pan Right	30	1442	1,	4217:	DCE	4217	693.425598	0.001875	80	4e	Tilt Down	7f
1348	1,	3941:	DCE	3941	688.142786	0.001874	80	4e	Tilt Down	03	1443	1,	4220:	DCE	4220	693.503511	0.074059	80	52	Pan Right	7f
1349	1,	3944:	DCE	3944	688.225959	0.079630	80	4c	Pan Left	7f	1444	1,	4223:	DCE	4223	693.526426	0.018751	80	4e	Tilt Down	09
1350	1,	3947:	DCE	3947	688.233140	0.001875	80	4e	Tilt Down	7f	1445	1,	4226:	DCE	4226	693.616002	0.085099	80	52	Pan Right	7b
1351	1,	3950:	DCE	3950	688.312993	0.076311	80	52	Pan Right	09	1446	1,	4229:	DCE	4229	693.622877	0.001875	80	55	Tilt Up	7f
1352	1,	3953:	DCE	3953	688.427360	0.110205	80	52	Pan Right	7f	1447	1,	4232:	DCE	4232	693.702565	0.076149	80	4c	Pan Left	60
1353	1,	3956:	DCE	3956	688.435278	0.002297	80	4e	Tilt Down	6a	1448	1,	4235:	DCE	4235	693.811725	0.105168	80	4c	Pan Left	7f
1354	1,	3959:	DCE	3959	688.440586	0.001772	80	3a	Zoom CW	Start	1449	1,	4238:	DCE	4238	693.818384	0.001771	80	75	Stop Up	
1355	1,	3961:	DCE	3961	688.509748	0.067287	80	4c	Pan Left	04	1450	1,	4240:	DCE	4240	693.901617	0.081463	80	52	Pan Right	01
1356	1,	3964:	DCE	3964	688.532765	0.018852	80	55	Tilt Up	02	1451	1,	4243:	DCE	4243	693.908801	0.002293	80	55	Tilt Up	4e
1357	1,	3967:	DCE	3967	688.539435	0.001773	80	2a	Zoom CW	End	1452	1,	4246:	DCE	4246	694.010150	0.097821	80	52	Pan Right	7f
1358	1,	3969:	DCE	3969	688.620990	0.079786	80	4c	Pan Left	7e	1453	1,	4249:	DCE	4249	694.016919	0.001874	80	55	Tilt Up	5c
1359	1,	3972:	DCE	3972	688.627865	0.001876	80	55	Tilt Up	7f	1454	1,	4252:	DCE	4252	694.098477	0.077911	80	4e	Tilt Down	2c
1360	1,	3975:	DCE	3975	688.713277	0.081559	80	52	Pan Right	03	1455	1,	4255:	DCE	4255	694.207427	0.104879	80	52	Pan Right	2a
1361	1,	3978:	DCE	3978	688.720150	0.001875	80	55	Tilt Up	7e	1456	1,	4258:	DCE	4258	694.214511	0.001866	80	4e	Tilt Down	7f
1362	1,	3981:	DCE	3981	688.819728	0.096037	80	52	Pan Right	7f	1457	1,	4261:	DCE	4261	694.281591	0.063436	80	4c	Pan Left	7c
1363	1,	3984:	DCE	3984	688.826915	0.002075	80	4e	Tilt Down	34	1458	1,	4264:	DCE	4264	694.392624	0.106871	80	4c	Pan Left	3c
1364	1,	3987:	DCE	3987	688.908371	0.076145	80	52	Pan Right	04	1459	1,	4267:	DCE	4267	694.399394	0.001876	80	4e	Tilt Down	32
1365	1,	3990:	DCE	3990	688.915142	0.001777	80	4e	Tilt Down	7f	1460	1,	4270:	DCE	4270	694.495536	0.092503	80	52	Pan Right	58
1366	1,	3993:	DCE	3993	689.014822	0.096042	80	4c	Pan Left	7f	1461	1,	4273:	DCE	4273	694.502303	0.001875	80	4e	Tilt Down	02
1367	1,	3996:	DCE	3996	689.021588	0.001875	80	4e	Tilt Down	0a	1462	1,	4276:	DCE	4276	694.567512	0.061562	80	72	Stop Right	
1368	1,	3999:	DCE	3999	689.106800	0.081661	80	4c	Pan Left	62	1463	1,	4278:	DCE	4278	694.583140	0.013026	80	6e	Stop Down	
1369	1,	4002:	DCE	4002	689.113880	0.001876	80	55	Tilt Up	7f	1464										
1370	1,	4005:	DCE	4005	689.213458	0.095939	80	52	Pan Right	46	1465										
1371	1,	4008:	DCE	4008	689.220061	0.001708	80	55	Tilt Up	05	1466										
1372	1,	4011:	DCE	4011	689.303496	0.079623	80	52	Pan Right	7f	1467										
1373	1,	4014:	DCE	4014	689.310846	0.001875	80	4e	Tilt Down	42	1468										
1374	1,	4017:	DCE	4017	689.397613	0.083226	80	55	Tilt Up	70	1469										
1375	1,	4020:	DCE	4020	689.501356	0.099578	80	4c	Pan Left	1c	1470										
1376	1,	4023:	DCE	4023	689.508437	0.002354	80	55	Tilt Up	7f	1471										
1377	1,	4026:	DCE	4026	689.589994	0.078014	80	4c	Pan Left	7f	1472										
1378	1,	4029:	DCE	4029	689.596660	0.001771	80	75	Stop Up		1473										
1379	1,	4031:	DCE	4031	689.699678	0.101249	80	52	Pan Right	3e	1474										
1380	1,	4034:	DCE	4034	689.706382	0.001708	80	4e	Tilt Down	04											
1381	1,	4037:	DCE	4037	689.770404	0.060000	80	52	Pan Right	7f											
1382	1,	4040:	DCE	4040	689.789772	0.015210	80	4e	Tilt Down	1c											
1383	1,	4043:	DCE	4043	689.896558	0.102620	80	72	Stop Right												
1384	1,	4045:	DCE	4045	689.901537	0.002293	80	4e	Tilt Down	7f											
1385	1,	4048:	DCE	4048	689.969037	0.063854	80	4c	Pan Left	7f											
1386	1,	4051:	DCE	4051	690.079659	0.106561	80	55	Tilt Up	20											
1387	1,	4054:	DCE	4054	690.185066	0.101349	80	4c	Pan Left	64											
1388	1,	4057:	DCE	4057	690.192147	0.001874	80	55	Tilt Up	7f											
1389	1,	4060:	DCE	4060	690.277353	0.081559	80	52	Pan Right	4a											
1390	1,	4063:	DCE	4063	690.284120	0.001875	80	55	Tilt Up	07											
1391	1,	4066:	DCE	4066	690.381928	0.094156	80	52	Pan Right	7f</											

C Matrix power up plus extras, data capture try2.dat

```

1 $ Id: MakeSecs.1,v 1.9 2007-03-29 08:42:09-08 Hamilton Exp Hamilton $
2 $Header: d:/TXB-V485/ProtocolDocument/RCS/Try2.dat,v 1.1 2007-08-14 10:46:51-07
Hamilton Exp Hamilton $
3 FTS capture buffer (8/13/2007 1:52:55 PM)
4 Event 1 (8/13/2007 1:36:43.043690 PM) through
5 Event 230 (8/13/2007 1:51:54.601998 PM)
6
7 1, 1: DCE 1 0.000000 0.000000 87 46 00 Camera Query
8 1, 4: DCE 4 0.007706 0.003126 86 46 00 Camera Query
9 1, 7: DCE 7 0.017183 0.003227 85 46 00 Camera Query
10 1, 10: DCE 10 0.025555 0.002433 84 46 00 Camera Query
11 1, 13: DCE 13 0.031241 0.001852 83 46 00 Camera Query
12 1, 16: DCE 16 0.037181 0.002132 82 46 00 Camera Query
13 1, 19: DCE 19 0.042490 0.001563 81 46 00 Camera Query
14 1, 22: DCE 22 0.047073 0.001562 80 46 00 Camera Query
15 1, 25: DCE 25 101.100164 101.050069 80 52 Pan Right 30
16 1, 28: DCE 28 101.203720 0.099374 80 52 Pan Right 22
17 1, 31: DCE 31 101.294335 0.086558 80 72 Stop Right
18 1, 33: DCE 33 101.888778 0.592153 80 52 Pan Right 0a
19 1, 36: DCE 36 101.980026 0.087087 80 52 Pan Right 52
20 1, 39: DCE 39 102.083561 0.099481 80 52 Pan Right 34
21 1, 42: DCE 42 102.174285 0.086567 80 72 Stop Right
22 1, 44: DCE 44 102.768622 0.592153 80 52 Pan Right 2a
23 1, 47: DCE 47 102.859862 0.087072 80 52 Pan Right 7b
24 1, 50: DCE 50 102.965065 0.101038 80 52 Pan Right 48
25 1, 53: DCE 53 103.055899 0.086670 80 72 Stop Right
26 1, 55: DCE 55 103.454312 0.396125 80 52 Pan Right 01
27 1, 58: DCE 58 103.542010 0.083537 80 52 Pan Right 3c
28 1, 61: DCE 61 103.649088 0.102912 80 52 Pan Right 38
29 1, 64: DCE 64 103.737830 0.084683 80 72 Stop Right
30 1, 66: DCE 66 110.299002 6.558568 80 52 Pan Right 05
31 1, 69: DCE 69 110.402537 0.099372 80 52 Pan Right 16
32 1, 72: DCE 72 110.496904 0.090204 80 52 Pan Right 4e
33 1, 75: DCE 75 110.586384 0.084898 80 52 Pan Right 6a
34 1, 78: DCE 78 110.693252 0.102703 80 52 Pan Right 6c
35 1, 81: DCE 81 110.888241 0.190825 80 52 Pan Right 50
36 1, 84: DCE 84 110.982919 0.090516 80 52 Pan Right 05
37 1, 87: DCE 87 111.084589 0.097505 80 72 Stop Right
38 1, 89: DCE 89 128.210533 17.123662 80 52 Pan Right 04
39 1, 92: DCE 92 128.303442 0.088749 80 52 Pan Right 7e
40 1, 95: DCE 95 128.406974 0.099370 80 52 Pan Right 7f
41 1, 98: DCE 98 128.501659 0.090519 80 52 Pan Right 44
42 1, 101: DCE 101 128.587073 0.081252 80 72 Stop Right
43 1, 103: DCE 103 138.865730 10.276366 80 52 Pan Right 68
44 1, 106: DCE 106 138.974472 0.104586 80 52 Pan Right 7f
45 1, 109: DCE 109 139.062175 0.083235 80 52 Pan Right 36
46 1, 112: DCE 112 139.167375 0.101037 80 72 Stop Right
47 1, 114: DCE 114 139.855145 0.685584 80 52 Pan Right 03
48 1, 117: DCE 117 139.942745 0.083125 80 52 Pan Right 52
49 1, 120: DCE 120 140.049929 0.103020 80 52 Pan Right 7f
50 1, 123: DCE 123 140.339805 0.285818 80 52 Pan Right 36
51 1, 126: DCE 126 140.443338 0.099370 80 52 Pan Right 02
52 1, 129: DCE 129 140.534060 0.086558 80 72 Stop Right
53 1, 131: DCE 131 155.692630 15.156279 80 52 Pan Right 0f
54 1, 134: DCE 134 155.803455 0.106662 80 52 Pan Right 54
55 1, 137: DCE 137 155.890855 0.083235 80 52 Pan Right 7f
56 1, 140: DCE 140 156.390196 0.495180 80 52 Pan Right 54
57 1, 143: DCE 143 156.483002 0.088643 80 72 Stop Right
58 1, 145: DCE 145 170.365192 13.880007 80 3e Open Start
59 1, 147: DCE 147 170.610349 0.242871 80 2e Open End
60 1, 149: DCE 149 173.452924 2.840147 80 3e Open Start
61 1, 151: DCE 151 174.611604 1.156392 80 2e Open End
62 1, 153: DCE 153 190.576792 15.963007 80 3e Open Start
63 1, 155: DCE 155 190.751674 0.172613 80 2e Open End
64 1, 157: DCE 157 225.507610 34.753753 80 42 Call Preset 01
65 1, 160: DCE 160 230.941347 5.428531 80 42 Call Preset 08
66 1, 163: DCE 163 241.530087 10.583538 80 42 Call Preset 0b
67 1, 166: DCE 166 249.891769 8.356165 80 42 Call Preset 40
68 1, 169: DCE 169 256.760315 6.863030 80 42 Call Preset 6f
69 1, 172: DCE 172 264.309967 7.544554 80 42 Call Preset 7f
70 1, 175: DCE 175 377.973667 113.658184 80 6d Auto Iris On
71 1, 177: DCE 177 380.833808 2.857856 80 4d Auto Iris Off
72 1, 179: DCE 179 396.664214 15.828118 80 5e Auto Pan Start 00
73 1, 182: DCE 182 399.302495 2.633702 80 7e Auto Pan End
74 1, 184: DCE 184 409.868320 10.563539 80 5e Auto Pan Start 02
75 1, 187: DCE 187 419.065157 9.191844 80 7e Auto Pan End
76 1, 189: DCE 189 420.850470 1.783016 80 5e Auto Pan Start 00
77 1, 192: DCE 192 428.640736 7.785688 80 5e Auto Pan Start 04
78 1, 195: DCE 195 435.572711 6.927822 80 7e Auto Pan End
79 1, 197: DCE 197 715.283217 279.708322 80 48 Aux part 1
80 1, 199: DCE 199 715.484453 0.198948 80 5a Aux part 2
81 1, 201: DCE 201 720.961312 5.474986 80 48 Aux part 1
82 1, 203: DCE 203 720.984323 0.020720 80 5a Aux part 2
83 1, 205: DCE 205 754.523051 33.536993 80 3f Close Start
84 1, 207: DCE 207 754.736162 0.210827 80 2f Close End
85 1, 209: DCE 209 764.581509 9.843165 80 61 Auto Focus On
86 1, 211: DCE 211 792.531389 27.947698 80 52 Pan Right 34
87 1, 214: DCE 214 792.619091 0.083538 80 52 Pan Right 50
88 1, 217: DCE 217 792.723977 0.100724 80 72 Stop Right

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89 1, 219: DCE 219 834.778648 42.052548 80 3f Close Start
90 1, 221: DCE 221 834.976969 0.196035 80 2f Close End
91 1, 223: DCE 223 853.313680 18.334112 80 3f Close Start
92 1, 225: DCE 225 853.449609 0.133642 80 2f Close End
93 1, 227: DCE 227 911.330201 57.878304 80 3f Close Start
94 1, 229: DCE 229 911.555603 0.223218 80 2f Close End
95
96 There were a total of 230 bytes transferred
97
98 There were a total of 230 DCE bytes transferred
99 The first DCE byte came in at 0.000000 seconds from the start of data
collection
100 The last DCE byte was at 911.558308 seconds from the start of data collection
101
102 There were a total of 0 DTE bytes transferred
103 The first DTE byte came in at 0.000000 seconds from the start of data
collection
104 The last DTE byte was at 0.000000 seconds from the start of data collection
105

```

D VCL Protocol results from Forward Vision's GUI file, 08AUG12A.txt

First line of the GUI = "VCL CamSet 15 Forward Vision"

```

1 First line of the GUI = "VCL CamSet 15 Forward Vision"
2 08AUG12A.txt
3 9600 baud
4 No camera attached
5
6 $ Id: makesecs.l,v 1.10 2008-02-13 09:08:18-08 Hamilton Exp Hamilton $
7 $Header: d:/TXB-V485/ProtocolDocument/RCS/08AUG12A.txt,v 1.1 2008-08-18
11:22:07-07 Hamilton Exp Hamilton $
8 FTS capture buffer (8/12/2008 10:46:17 AM)
9 Event 1 (8/12/2008 10:37:30.678513 AM) through
10 Event 202 (8/12/2008 10:45:26.871704 AM)
11
12
13 Up
14 1, 1: DTE 1 0.000000 0.000000 80 55 Tilt Up 01
15
16 Stop
17 1, 4: DTE 4 3.871669 3.869387 80 75 Stop Up
18 1, 6: DTE 6 3.873961 0.001144 80 6e Stop Down
19 1, 8: DTE 8 3.876260 0.001147 80 72 Stop Right
20 1, 10: DTE 10 3.878556 0.001145 80 6c Stop Left
21 1, 12: DTE 12 3.880856 0.001152 80 2b Zoom CCW End
22 1, 14: DTE 14 3.883152 0.001150 80 2a Zoom CW End
23
24 Right
25 1, 16: DTE 16 12.279209 8.394910 80 52 Pan Right 01
26
27 Stop
28 1, 19: DTE 19 15.783253 3.501589 80 75 Stop Up
29 1, 21: DTE 21 15.785370 0.001125 80 6e Stop Down
30 1, 23: DTE 23 15.787836 0.001147 80 72 Stop Right
31 1, 25: DTE 25 15.790133 0.001152 80 6c Stop Left
32 1, 27: DTE 27 15.792432 0.001153 80 2b Zoom CCW End
33 1, 29: DTE 29 15.794730 0.001151 80 2a Zoom CW End
34
35 Down
36 1, 31: DTE 31 18.351154 2.555279 80 4e Tilt Down 01
37
38 Stop
39 1, 34: DTE 34 21.407085 3.053651 80 75 Stop Up
40 1, 36: DTE 36 21.409380 0.001154 80 6e Stop Down
41 1, 38: DTE 38 21.411670 0.001146 80 72 Stop Right
42 1, 40: DTE 40 21.413969 0.001146 80 6c Stop Left
43 1, 42: DTE 42 21.416267 0.001146 80 2b Zoom CCW End
44 1, 44: DTE 44 21.418564 0.001144 80 2a Zoom CW End
45
46 Left
47 1, 46: DTE 46 25.254931 3.835214 80 4c Pan Left 01
48
49 Stop
50 1, 49: DTE 49 27.894873 2.637662 80 75 Stop Up
51 1, 51: DTE 51 27.897165 0.001145 80 6e Stop Down
52 1, 53: DTE 53 27.899457 0.001153 80 72 Stop Right
53 1, 55: DTE 55 27.901671 0.001069 80 6c Stop Left
54 1, 57: DTE 57 27.904047 0.001153 80 2b Zoom CCW End
55 1, 59: DTE 59 27.906339 0.001153 80 2a Zoom CW End
56
57 Zoom Out
58 1, 61: DTE 61 31.934697 4.027220 80 3b Zoom CCW Start
59 1, 63: DTE 63 33.174491 1.238647 80 2b Zoom CCW End
60
61 Stop
62 1, 65: DTE 65 35.638610 2.462974 80 75 Stop Up
63 1, 67: DTE 67 35.640895 0.001137 80 6e Stop Down
64 1, 69: DTE 69 35.643189 0.001146 80 72 Stop Right
65 1, 71: DTE 71 35.645487 0.001153 80 6c Stop Left
66 1, 73: DTE 73 35.647776 0.001150 80 2b Zoom CCW End
67 1, 75: DTE 75 35.650071 0.001146 80 2a Zoom CW End
68
69 Zoom In
70 1, 77: DTE 77 39.150420 3.499204 80 3a Zoom CW Start
71 1, 79: DTE 79 41.078219 1.926657 80 2a Zoom CW End
72
73 Stop
74 1, 81: DTE 81 45.566193 4.486833 80 75 Stop Up
75 1, 83: DTE 83 45.568476 0.001319 80 6e Stop Down
76 1, 85: DTE 85 45.570760 0.001139 80 72 Stop Right
77 1, 87: DTE 87 45.573014 0.001101 80 6c Stop Left
78 1, 89: DTE 89 45.575351 0.001147 80 2b Zoom CCW End
79 1, 91: DTE 91 45.577643 0.001147 80 2a Zoom CW End
80
81 180 flip
82 1, 93: DTE 93 72.973104 27.394309 80 54 180 degree flip
83

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84 Pan Swap
85 1, 95: DTE 95 80.604845 7.630598 80 47 75
86
87 Wipe
88 1, 98: DTE 98 86.684850 6.077719 80 5c Wash first push
89 1, 100: DTE 100 88.988556 2.302564 80 7c Wash second push
90
91 Wash
92 1, 102: DTE 102 91.484591 2.495062 80 5b Wipe start (key
93 down) 1, 104: DTE 104 93.732402 2.246665 80 7b Wipe end (key up)
94
95 Lamp
96 1, 106: DTE 106 96.468442 2.734897 80 5d
97 1, 108: DTE 108 98.660209 2.190629 80 7d
98
99 AF on
100 1, 110: DTE 110 108.531877 9.870521 80 41 Auto Focus Off
101
102 AF off
103 1, 112: DTE 112 113.875768 5.342750 80 61 Auto Focus On
104
105 Near
106 1, 114: DTE 114 121.139494 7.262597 80 3c Focus Near Start
107
108 Far
109 1, 116: DTE 116 126.659235 5.518605 80 3d Focus Far Start
110
111 AE on
112 1, 118: DTE 118 133.195015 6.534641 80 4d Auto Iris Off
113
114 AE off
115 1, 120: DTE 120 137.274873 4.078709 80 6d Auto Iris On
116
117 Open
118 1, 122: DTE 122 144.306624 7.030610 80 3e Open Start
119
120 Close
121 1, 124: DTE 124 150.226507 5.918742 80 3f Close Start
122
123 Thermal On
124 1, 126: DTE 126 157.922152 7.694571 80 42 Call Preset 46
125
126 Thermal Off
127 1, 129: DTE 129 163.521957 5.597518 80 42 Call Preset 47
128
129 Learn
130 1, 132: DTE 132 169.777849 6.253606 80 47 01
131
132 goto
133 1, 135: DTE 135 175.225576 5.445447 80 42 Call Preset 01
134
135 TL softstop
136 1, 138: DTE 138 182.793315 7.565458 80 47 78
137
138 BR softstop
139 1, 141: DTE 141 189.097081 6.301490 80 47 79
140
141 Reset
142 1, 144: DTE 144 193.800748 4.701381 80 6b 30
143
144 wipe
145 1, 147: DTE 147 224.319797 30.516600 80 5c Wash first push
146
147 Wipe
148 1, 149: DTE 149 228.663922 4.342979 80 5c Wash first push
149 1, 151: DTE 151 230.335641 1.670576 80 7c Wash second push
150
151 Wash
152 1, 153: DTE 153 232.839684 2.503067 80 5b Wipe start (key
153 down) 1, 155: DTE 155 234.479484 1.638659 80 7b Wipe end (key up)
154
155 180 flip
156 1, 157: DTE 157 246.543142 12.062518 80 54 180 degree flip
157
158 wipe
159 1, 159: DTE 159 264.502252 17.957964 80 7c Wash second push
160
161 Right speed 10
162 1, 161: DTE 161 285.285897 20.782503 80 52 Pan Right 0a
163 Right speed 50
164 1, 164: DTE 164 312.260848 26.972666 80 52 Pan Right 32
165 Right speed 100
166 1, 167: DTE 167 316.964849 4.701548 80 52 Pan Right 64
167
168 Right address 8
169 1, 170: DTE 170 377.442614 60.475483 87 52 Pan Right 01
170 Right address 16
171 1, 173: DTE 173 386.618296 9.173397 8f 52 Pan Right 01
172 Right address 32
173 1, 176: DTE 176 399.073902 12.453319 9f 52 Pan Right 01
174 Right address 64
175 1, 179: DTE 179 414.217273 15.141082 bf 52 Pan Right 01
176 Right address 96

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177      1,      182: DTE      182      423.377037      9.157322 df 52      Pan Right 01
178 Right address 128
179      1,      185: DTE      185      432.584726      9.205401 ff 52      Pan Right 01
180
181 Stop
182      1,      188: DTE      188      449.136245      16.549232 ff 75      Stop Up
183      1,      190: DTE      190      449.138532      0.001143 ff 6e      Stop Down
184      1,      192: DTE      192      449.140747      0.001076 ff 72      Stop Right
185      1,      194: DTE      194      449.143107      0.001145 ff 6c      Stop Left
186      1,      196: DTE      196      449.145402      0.001141 ff 2b      Zoom CCW End
187      1,      198: DTE      198      449.147704      0.001150 ff 2a      Zoom CW End
188
189 Reset
190      1,      200: DTE      200      476.191072      27.042227 ff 6b 30
191
192 There were a total of      202 bytes transferred
193
194 There were a total of      0 DCE bytes transferred
195 The first DCE byte came in at 0.000000 seconds from the start of data
collection
196 The last DCE byte was at 0.000000 seconds from the start of data collection
197
198 There were a total of      202 DTE bytes transferred
199 The first DTE byte came in at 0.000000 seconds from the start of data
collection
200 The last DTE byte was at 476.193191 seconds from the start of data collection
201

```

E VCL Protocol results from Forward Vision's GUI file, 08AUG12B.txt

First line of the GUI = "Forward Vision :: VCL CamSet21"

```

1 First line of the GUI = "Forward Vision :: VCL CamSet21"
2 08AUG12B.txt
3 9600 baud
4 No camera attached
5
6 $ Id: makesecs.l,v 1.10 2008-02-13 09:08:18-08 Hamilton Exp Hamilton $
7 $Header: d:/TXB-V485/ProtocolDocument/RCS/08AUG12B.txt,v 1.1 2008-08-18
11:22:12-07 Hamilton Exp Hamilton $
8 FTS capture buffer (8/12/2008 10:55:18 AM)
9 Event 1 (8/12/2008 10:48:59.158659 AM) through
10 Event 144 (8/12/2008 10:54:26.320534 AM)
11
12
13 Up
14 1, 1: DTE 1 0.000000 0.000000 80 55 Tilt Up 01
15
16 Stop
17 1, 4: DTE 4 4.103717 4.101435 80 75 Stop Up
18 1, 6: DTE 6 4.106010 0.001153 80 6e Stop Down
19 1, 8: DTE 8 4.108303 0.001154 80 72 Stop Right
20 1, 10: DTE 10 4.110594 0.001146 80 6c Stop Left
21 1, 12: DTE 12 4.112893 0.001153 80 2b Zoom CCW End
22 1, 14: DTE 14 4.115183 0.001153 80 2a Zoom CW End
23
24 Right
25 1, 16: DTE 16 8.671640 4.555316 80 52 Pan Right 01
26
27 Stop
28 1, 19: DTE 19 10.735463 2.061534 80 75 Stop Up
29 1, 21: DTE 21 10.737755 0.001153 80 6e Stop Down
30 1, 23: DTE 23 10.740048 0.001153 80 72 Stop Right
31 1, 25: DTE 25 10.742346 0.001154 80 6c Stop Left
32 1, 27: DTE 27 10.744637 0.001146 80 2b Zoom CCW End
33 1, 29: DTE 29 10.746929 0.001140 80 2a Zoom CW End
34
35 Down
36 1, 31: DTE 31 12.511393 1.763304 80 4e Tilt Down 01
37
38 Stop
39 1, 34: DTE 34 14.735391 2.221711 80 75 Stop Up
40 1, 36: DTE 36 14.737685 0.001154 80 6e Stop Down
41 1, 38: DTE 38 14.739969 0.001146 80 72 Stop Right
42 1, 40: DTE 40 14.742260 0.001138 80 6c Stop Left
43 1, 42: DTE 42 14.744559 0.001145 80 2b Zoom CCW End
44 1, 44: DTE 44 14.746856 0.001145 80 2a Zoom CW End
45
46 Left
47 1, 46: DTE 46 16.759276 2.011268 80 4c Pan Left 01
48
49 Stop
50 1, 49: DTE 49 18.623176 1.861611 80 75 Stop Up
51 1, 51: DTE 51 18.625470 0.001145 80 6e Stop Down
52 1, 53: DTE 53 18.627680 0.001064 80 72 Stop Right
53 1, 55: DTE 55 18.630054 0.001146 80 6c Stop Left
54 1, 57: DTE 57 18.632352 0.001153 80 2b Zoom CCW End
55 1, 59: DTE 59 18.634642 0.001150 80 2a Zoom CW End
56
57 Zoom In
58 1, 61: DTE 61 23.551113 4.915330 80 3a Zoom CW Start
59 1, 63: DTE 63 25.006738 1.454484 80 2a Zoom CW End
60
61 Zoom Out
62 1, 65: DTE 65 29.830872 4.823158 80 3b Zoom CCW Start
63 1, 67: DTE 67 31.182513 1.350499 80 2b Zoom CCW End
64
65 180 flip
66 1, 69: DTE 69 36.270436 5.086790 80 54 180 degree flip
67
68 Pan Swap
69 1, 71: DTE 71 40.198197 3.926711 80 47 75
70
71 Wipe
72 1, 74: DTE 74 42.894388 2.693904 80 5c Wash first push
73 1, 76: DTE 76 44.973998 2.078461 80 7c Wash second push
74
75 Wash
76 1, 78: DTE 78 46.750236 1.775096 80 5b Wipe start (key
down)
77 1, 80: DTE 80 48.453979 1.702610 80 7b Wipe end (key up)
78
79 Lamp
80 1, 82: DTE 82 51.038067 2.582947 80 5d
81 1, 84: DTE 84 52.781778 1.742564 80 7d
82

```

```

83 AF on
84 1, 86: DTE 86 59.213548 6.430635 80 41 Auto Focus Off
85
86 AF off
87 1, 88: DTE 88 63.117457 3.902766 80 61 Auto Focus On
88
89 Near
90 1, 90: DTE 90 67.165243 4.046646 80 3c Focus Near Start
91
92 Far
93 1, 92: DTE 92 71.365113 4.198728 80 3d Focus Far Start
94
95 AE on
96 1, 94: DTE 94 76.036982 4.670728 80 4d Auto Iris Off
97
98 AE off
99 1, 96: DTE 96 79.756805 3.718681 80 6d Auto Iris On
100
101 Open
102 1, 98: DTE 98 83.556753 3.798805 80 3e Open Start
103
104 Close
105 1, 100: DTE 100 87.572541 4.014648 80 3f Close Start
106
107 Soft Stops Top Left
108 1, 102: DTE 102 91.900426 4.326743 80 47 78
109
110 Soft Stops Bottom Right
111 1, 105: DTE 105 95.828218 3.925505 80 47 79
112
113 Learn
114 1, 108: DTE 108 100.268069 4.437736 80 47 01
115
116 goto
117 1, 111: DTE 111 104.115935 3.845585 80 42 Call Preset 01
118
119 Wipe
120 1, 114: DTE 114 110.603655 6.485440 80 5c Wash first push
121
122 Aux 1
123 1, 116: DTE 116 116.035460 5.430655 80 57 01
124
125 Wipe
126 1, 119: DTE 119 138.026531 21.988783 80 7c Wash second push
127
128 Aux 1
129 1, 121: DTE 121 140.994589 2.966756 80 77 01
130
131 goto preset 8
132 1, 124: DTE 124 195.176746 54.179869 80 42 Call Preset 08
133 goto preset 16
134 1, 127: DTE 127 201.784519 6.605487 80 42 Call Preset 10
135 goto preset 32
136 1, 130: DTE 130 222.695789 20.908983 80 42 Call Preset 20
137 goto preset 45
138 1, 133: DTE 133 264.582324 41.884247 80 42 Call Preset 2d
139
140 Reset Camera
141 1, 136: DTE 136 302.413025 37.828413 80 6b 30
142
143 Clear Soft Stops
144 1, 139: DTE 139 327.156153 24.740845 80 47 78
145 1, 142: DTE 142 327.159579 0.001139 80 47 79
146
147 There were a total of 144 bytes transferred
148
149 There were a total of 0 DCE bytes transferred
150 The first DCE byte came in at 0.000000 seconds from the start of data
collection
151 The last DCE byte was at 0.000000 seconds from the start of data collection
152
153 There were a total of 144 DTE bytes transferred
154 The first DTE byte came in at 0.000000 seconds from the start of data
collection
155 The last DTE byte was at 327.161875 seconds from the start of data collection
156

```

F VCL Protocol results from Forward Vision's GUI file, 08AUG12C.txt

First line of the GUI = "Forward Vision 412 CamSet :: VCL 1"

```

1 First line of the GUI = "Forward Vision 412 CamSet :: VCL 1"
2 This is a different GUI than in 08AUG12D.txt
3 08AUG12C.txt
4 9600 baud
5 No camera attached
6
7 $ Id: makesecs.l,v 1.10 2008-02-13 09:08:18-08 Hamilton Exp Hamilton $
8 $Header: d:/TXB-V485/ProtocolDocument/RCS/08AUG12C.txt,v 1.1 2008-08-18
11:22:16-07 Hamilton Exp Hamilton $
9 FTS capture buffer (8/12/2008 11:08:25 AM)
10 Event 1 (8/12/2008 11:04:50.957545 AM) through
11 Event 129 (8/12/2008 11:07:24.770065 AM)
12
13
14 Up
15 1, 1: DTE 1 0.000000 0.000000 80 55 Tilt Up 01
16
17 Stop
18 1, 4: DTE 4 3.143774 3.141487 80 75 Stop Up
19 1, 6: DTE 6 3.145902 0.000987 80 6e Stop Down
20 1, 8: DTE 8 3.148360 0.001152 80 72 Stop Right
21 1, 10: DTE 10 3.150651 0.001152 80 6c Stop Left
22 1, 12: DTE 12 3.152937 0.001141 80 2b Zoom CCW End
23 1, 14: DTE 14 3.155236 0.001147 80 2a Zoom CW End
24
25 Right
26 1, 16: DTE 16 5.159659 2.003279 80 52 Pan Right 01
27
28 Stop
29 1, 19: DTE 19 6.903593 1.741645 80 75 Stop Up
30 1, 21: DTE 21 6.905878 0.001145 80 6e Stop Down
31 1, 23: DTE 23 6.908171 0.001139 80 72 Stop Right
32 1, 25: DTE 25 6.910470 0.001147 80 6c Stop Left
33 1, 27: DTE 27 6.912766 0.001145 80 2b Zoom CCW End
34 1, 29: DTE 29 6.915066 0.001147 80 2a Zoom CW End
35
36 Down
37 1, 31: DTE 31 8.783586 1.867367 80 4e Tilt Down 01
38
39 Stop
40 1, 34: DTE 34 10.447433 1.661560 80 75 Stop Up
41 1, 36: DTE 36 10.449727 0.001153 80 6e Stop Down
42 1, 38: DTE 38 10.452019 0.001154 80 72 Stop Right
43 1, 40: DTE 40 10.454303 0.001139 80 6c Stop Left
44 1, 42: DTE 42 10.456428 0.000971 80 2b Zoom CCW End
45 1, 44: DTE 44 10.458893 0.001145 80 2a Zoom CW End
46
47 Left
48 1, 46: DTE 46 12.383411 1.923373 80 4c Pan Left 01
49
50 Stop
51 1, 49: DTE 49 14.455284 2.069588 80 75 Stop Up
52 1, 51: DTE 51 14.457571 0.001145 80 6e Stop Down
53 1, 53: DTE 53 14.459869 0.001152 80 72 Stop Right
54 1, 55: DTE 55 14.462126 0.001110 80 6c Stop Left
55 1, 57: DTE 57 14.464466 0.001152 80 2b Zoom CCW End
56 1, 59: DTE 59 14.466759 0.001146 80 2a Zoom CW End
57
58 Zoom In
59 1, 61: DTE 61 15.959507 1.491598 80 3a Zoom CW Start
60 1, 63: DTE 63 17.390993 1.430350 80 2a Zoom CW End
61
62 Zoom Out
63 1, 65: DTE 65 19.479138 2.087003 80 3b Zoom CCW Start
64 1, 67: DTE 67 20.742849 1.262564 80 2b Zoom CCW End
65
66 180 flip
67 1, 69: DTE 69 23.910747 3.166750 80 54 180 degree flip
68
69 Pan Swap
70 1, 71: DTE 71 26.582641 2.670748 80 47 75
71
72 Wipe
73 1, 74: DTE 74 28.614887 2.029973 80 5c Wash first push
74 1, 76: DTE 76 29.880159 1.264132 80 7c Wash second push
75
76 Wash
77 1, 78: DTE 78 30.998736 1.117436 80 5b Wipe start (key
down)
78 1, 80: DTE 80 32.134429 1.134554 80 7b Wipe end (key up)
79
80 AF on
81 1, 82: DTE 82 38.310250 6.174678 80 41 Auto Focus Off
82

```

```

83 AF off
84 1, 84: DTE 84 41.086129 2.774742 80 61 Auto Focus On
85
86 Near
87 1, 86: DTE 86 44.646005 3.558728 80 3c Focus Near Start
88
89 Far
90 1, 88: DTE 88 47.061917 2.414777 80 3d Focus Far Start
91
92 AE on
93 1, 90: DTE 90 49.845947 2.782882 80 4d Auto Iris Off
94
95 AE off
96 1, 92: DTE 92 52.397750 2.550662 80 6d Auto Iris On
97
98 Open
99 1, 94: DTE 94 55.141661 2.742764 80 3e Open Start
100
101 Close
102 1, 96: DTE 96 58.461525 3.318721 80 3f Close Start
103
104 Soft Stops Top Left
105 1, 98: DTE 98 62.397371 3.934697 80 47 78
106
107 Soft Stops Bottom Right
108 1, 101: DTE 101 67.149188 4.749529 80 47 79
109
110 Learn
111 1, 104: DTE 104 71.557129 4.405668 80 47 01
112
113 goto
114 1, 107: DTE 107 74.980940 3.421528 80 42 Call Preset 01
115
116 Aux 1
117 1, 110: DTE 110 81.572651 6.589426 80 57 01
118
119 Thermal
120 1, 113: DTE 113 85.612565 4.037628 80 5d
121
122 Wipe
123 1, 115: DTE 115 89.964364 4.350657 80 5c Wash first push
124
125 Reset Camera
126 1, 117: DTE 117 98.060117 8.094606 80 6b 30
127
128 Aux 1
129 1, 120: DTE 120 111.731549 13.669201 80 77 01
130
131 Thermal
132 1, 123: DTE 123 114.395437 2.661600 80 7d
133
134 Wipe
135 1, 125: DTE 125 117.211374 2.814796 80 7c Wash second push
136
137 Right address 128
138 1, 127: DTE 127 153.810372 36.597862 ff 52 Pan Right 01
139
140 There were a total of 129 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 129 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 153.812520 seconds from the start of data collection
149

```

G VCL Protocol results from Forward Vision's GUI file, 08AUG12D .txt

First line of the GUI = "Forward Vision 412 CamSet :: VCL 1"

```

1 First line of the GUI = "Forward Vision 412 CamSet :: VCL 1"
2 This is a different GUI than in 08AUG12C.txt
3 08AUG12D.txt
4 9600 baud
5 No camera attached
6
7 $ Id: makesecs.l,v 1.10 2008-02-13 09:08:18-08 Hamilton Exp Hamilton $
8 $Header: d:/TXB-V485/ProtocolDocument/RCS/08AUG12D.txt,v 1.1 2008-08-18
11:22:19-07 Hamilton Exp Hamilton $
9 FTS capture buffer (8/12/2008 11:17:41 AM)
10 Event 1 (8/12/2008 11:15:04.671909 AM) through
11 Event 132 (8/12/2008 11:16:55.958108 AM)
12
13
14 Up
15 1, 1: DTE 1 0.000000 0.000000 80 55 Tilt Up 01
16
17 Stop
18 1, 4: DTE 4 2.334405 2.331958 80 75 Stop Up
19 1, 6: DTE 6 2.336695 0.001154 80 6e Stop Down
20 1, 8: DTE 8 2.338984 0.001152 80 72 Stop Right
21 1, 10: DTE 10 2.341275 0.001146 80 6c Stop Left
22 1, 12: DTE 12 2.343568 0.001147 80 2b Zoom CCW End
23 1, 14: DTE 14 2.345859 0.001146 80 2a Zoom CW End
24
25 Right
26 1, 16: DTE 16 4.239947 1.892941 80 52 Pan Right 01
27
28 Stop
29 1, 19: DTE 19 6.007862 1.765635 80 75 Stop Up
30 1, 21: DTE 21 6.010151 0.001307 80 6e Stop Down
31 1, 23: DTE 23 6.012441 0.001144 80 72 Stop Right
32 1, 25: DTE 25 6.014739 0.001152 80 6c Stop Left
33 1, 27: DTE 27 6.017031 0.001153 80 2b Zoom CCW End
34 1, 29: DTE 29 6.019323 0.001148 80 2a Zoom CW End
35
36 Down
37 1, 31: DTE 31 7.679799 1.659330 80 4e Tilt Down 01
38
39 Stop
40 1, 34: DTE 34 9.751735 2.069652 80 75 Stop Up
41 1, 36: DTE 36 9.753857 0.000980 80 6e Stop Down
42 1, 38: DTE 38 9.756150 0.001137 80 72 Stop Right
43 1, 40: DTE 40 9.758448 0.001144 80 6c Stop Left
44 1, 42: DTE 42 9.760920 0.001320 80 2b Zoom CCW End
45 1, 44: DTE 44 9.763210 0.001148 80 2a Zoom CW End
46
47 Left
48 1, 46: DTE 46 11.439686 1.675330 80 4c Pan Left 01
49
50 Stop
51 1, 49: DTE 49 13.335578 1.893606 80 75 Stop Up
52 1, 51: DTE 51 13.337865 0.001154 80 6e Stop Down
53 1, 53: DTE 53 13.340157 0.001146 80 72 Stop Right
54 1, 55: DTE 55 13.342448 0.001144 80 6c Stop Left
55 1, 57: DTE 57 13.344740 0.001145 80 2b Zoom CCW End
56 1, 59: DTE 59 13.347039 0.001148 80 2a Zoom CW End
57
58 Zoom In
59 1, 61: DTE 61 15.214062 1.865873 80 3a Zoom CW Start
60 1, 63: DTE 63 16.175323 0.960127 80 2a Zoom CW End
61
62 Zoom Out
63 1, 65: DTE 65 17.247486 1.071019 80 3b Zoom CCW Start
64 1, 67: DTE 67 18.215200 0.966572 80 2b Zoom CCW End
65
66 180 flip
67 1, 69: DTE 69 20.119133 1.902790 80 54 180 degree flip
68
69 Pan Swap
70 1, 71: DTE 71 22.071061 1.950786 80 47 75
71
72 Wipe
73 1, 74: DTE 74 24.007233 1.933893 80 5c Wash first push
74 1, 76: DTE 76 25.262948 1.254568 80 7c Wash second push
75
76 Wash
77 1, 78: DTE 78 26.567238 1.303144 80 5b Wipe start (key
down)
78 1, 80: DTE 80 27.702851 1.134473 80 7b Wipe end (key up)
79
80 AF on
81 1, 82: DTE 82 31.926725 4.222725 80 41 Auto Focus Off
82

```

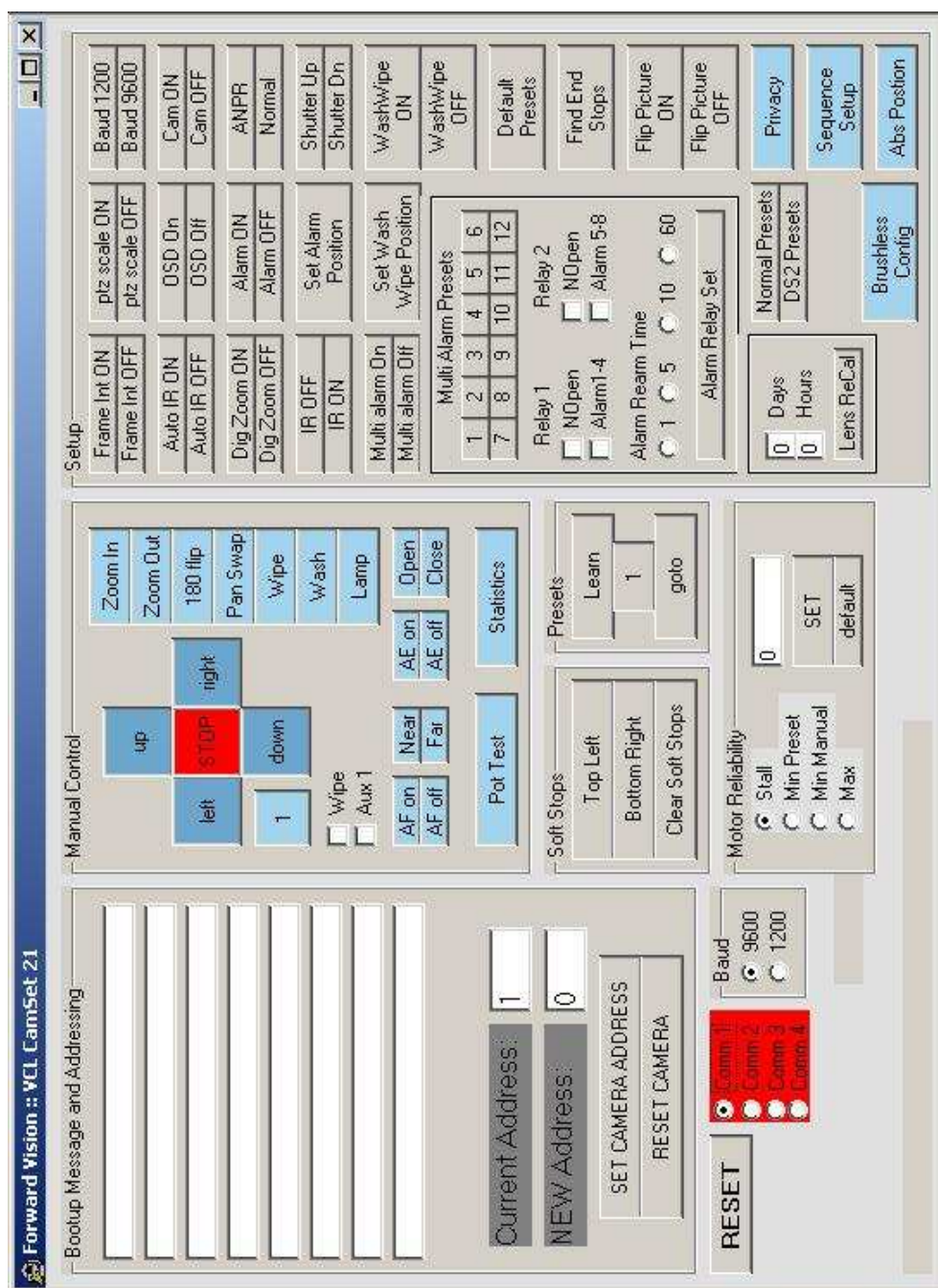
```

83 AF off
84 1, 84: DTE 84 34.254628 2.326763 80 61 Auto Focus On
85
86 Near
87 1, 86: DTE 86 36.750534 2.494764 80 3c Focus Near Start
88
89 Far
90 1, 88: DTE 88 39.454457 2.702775 80 3d Focus Far Start
91
92 AE on
93 1, 90: DTE 90 42.278358 2.822759 80 4d Auto Iris Off
94
95 AE off
96 1, 92: DTE 92 44.902266 2.622772 80 6d Auto Iris On
97
98 Open
99 1, 94: DTE 94 47.462233 2.558827 80 3e Open Start
100
101 Close
102 1, 96: DTE 96 50.126093 2.662719 80 3f Close Start
103
104 Soft Stops Top Left
105 1, 98: DTE 98 53.093938 2.966709 80 47 78
106
107 Soft Stops Bottom Right
108 1, 101: DTE 101 56.613835 3.517776 80 47 79
109
110 Clear Soft Stops
111 1, 104: DTE 104 59.861686 3.245564 80 47 78
112 1, 107: DTE 107 59.865112 0.001138 80 47 79
113
114 Learn
115 1, 110: DTE 110 69.154224 9.286821 80 47 01
116
117 goto
118 1, 113: DTE 113 72.869259 3.712747 80 42 Call Preset 01
119
120 Aux 1
121 1, 116: DTE 116 97.356335 24.484789 80 57 01
122
123 Thermal
124 1, 119: DTE 119 99.140273 1.781652 80 5d
125
126 Wipe
127 1, 121: DTE 121 100.820202 1.678794 80 5c Wash first push
128
129 Aux 1
130 1, 123: DTE 123 103.060162 2.238820 80 77 01
131
132 Thermal
133 1, 126: DTE 126 104.772064 1.709616 80 7d
134
135 Wipe
136 1, 128: DTE 128 107.371986 2.598781 80 7c Wash second push
137
138 Reset Camera
139 1, 130: DTE 130 111.283913 3.910780 80 6b 30
140
141 There were a total of 132 bytes transferred
142
143 There were a total of 0 DCE bytes transferred
144 The first DCE byte came in at 0.000000 seconds from the start of data
collection
145 The last DCE byte was at 0.000000 seconds from the start of data collection
146
147 There were a total of 132 DTE bytes transferred
148 The first DTE byte came in at 0.000000 seconds from the start of data
collection
149 The last DTE byte was at 111.286199 seconds from the start of data collection
150

```


H Typical Forward Vision GUI

In the following typical Forward Vision GUI, the areas maked MANUAL CONTROL, SOFT STOPS and PRESETS were the most useful. Some items generated unexpected values and having a “Genuine VCL” keyboard showed what the correct values were.



/TXB-V485/ProtocolDocument/ps/VCLCamset.ps

Figure 18: Typical Forward Vision GUI display

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