From: Hannen, Craig
Sent: Friday, January 04, 2002 3:18 PM

When I worked on the CM9760-DT I looked at what the keyboard was sending (Jacek had already updated it) and I put the same command format into the DT. The Excel file attached shows the format of the new commands coming from the keyboard and the new Monitor Status Response that the CC1 sends back. Jacek updated these commands in a somewhat consistent way. Any commands that have extra byte(s) have the extra byte(s) placed just before the ETX byte.

On a different subject, the format of the C0 command that sets presets is such that the preset number is not in the BCD format. The number is in the normal hex format. The command to go to a preset has the preset number in the BCD format (go figure).

Another thing that I don't see in your documentation that you may want to add pertains to the receive alarm command (header 0xF7). Jeff Jacobs tells me that the alarm number in this command is in a zero-indexed BCD format. So the command to receive alarm 1 includes the alarm BCD bytes 00 00 and the command to receive alarm 1000 includes the alarm BCD bytes 09 99 and so on.

One thing I observed in the CM9760-KBD when it sends the PTZ override command is that the byte called CTRL never contains any information. The byte is always set to 00. I don't know if that's a Protocol change or a bug. I didn't have two CM9760-KBD's handy to see if the override command still works as expected.

A bug in the CC1 code has caused it to stop sending the bit in the status response that indicates video loss has occurred. I don't know the version number where this problem started. Tom Dodrill tells me this will be fixed in later revisions of the CC1. These are all of the weird things I observed while making updates to the DT.

On a completely different subject, in the process of debugging the DT and the KBD, I created a Visual Basic application that works much like Breakout except that it translates P Protocol commands as they pass through the serial ports of a PC. This software translates about 90 percent of the commands that the KBD sends, and it displays the hex bytes of the commands it doesn't translate. If you ever work on any CM9760-KBD bugs in the future, you're welcome to try this software out.