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Tutorial: Using RealTerm to Send and Receive PTCMD messages with DPR-100

2014-07-02

RealTerm 1: Configuring the COM Port



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RealTerm 2: Configuring the Display

 RealTerm: Serial Capture Program 2.0.0 4 72 1C 6E 07 72 1C 33 33 3 	1.70 a D5					
Display Port Capture Pins Send Display As Ascii Ascii Half Duplex Ascii Hex + Ascii Invert ZBits Big Endian Dita Frames Binary Nibble Binary Nibble Float4 Hex CSV Terminal Fork To	Echo Port 12C 12C-2 13 Binary Sync Chars ABCD • • • • • • • • • • • • • • • • • • •	2CMisc Data XOR AND 0	Misc Sync is: None ASCI Numb Leading Symptote	ver ync s	<u>in</u> Clear	Freeze ? Disconnect RXD (2) TXD (3) CTS (8) DCD (1) DSR (6) Ring (9) BREAK Error Fror
You can use ActiveX automation to contro	me! Cha	Count	1	CPS:0	Port: 4 115200 8N1 No	ne //.
HEX + space is the best fo debugging	r your M da	/ith H ata se	alf Dup ent and	olex yo I recei	ou will see both ived	

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RealTerm 3: Sending Characters



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PTCMD 1: Testing the Messaging

 An easy way of testing the connection is e.g. ask the firmware version number of DPR-100

0x04 0x72 0x1C 0x6E ; PT_FW_VER

- The reply will be e.g. for version 3.3.0
 0x07 0x72 0x1C 0x33 0x33 0x30 0xD5
- There are two types of error messages <NAK>
 - Message syntax error, e.g. for a wrong checksum
 0x03 0x0B 0xF2
 - Error in requested data, e.g. If the requested information is not available
 0x04 0x72 0x0B 0x7F



PTCMD 2: Reading and Writing EDID

- Read EDID Content:
 - 0x07 0x72 0x16 0x00 0x00 0x0A 0x67
 ; PT_EDID_READ Segment 0, offset 0, read 10
- Reply:
 - 0E 72 16 00 FF FF FF FF FF FF 00 54 C7 55
 - ; EDID Data: 0x00 0xFF 0xFF 0xFF 0xFF 0xFF 0xFF 0x00 0x54 0xC7
- Write EDID Content (Change serial # to 0x111):
 - *0x0B 0x72 0x17 0x00 0x0C 0x04 0x11 0x01 0x00 0x00 0x4A* ; PT_EDID_WRITE Segment 0, offset 0x0C, write 4 EDID Data: 0x11 0x01 0x00 0x00
- Reply:

04 72 0C 7E; <ACK>

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