



POLYCOM®

Installed Voice Business Group

Application Note:

Using Crestron Viewport with Vortex and Echofree Devices

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Introduction

In addition to the Console window of Conference Composer, Crestron Viewport is a great way to verify that the Crestron control system is sending the proper commands to the EF Device as well as receiving the proper acknowledgments. Here are some tips in setting up the Viewport window to communicate with an EF Device.

RS-232 Hardware

The communication between the EF Device and a host controller is conducted via the RS-232 port on the back panel of the EF Device. The RS-232 port operates at the following settings:


- Bit Rate (bps): 9600 (default), 19200, or 38400
- Data Format: 8 data bits, no parity, 1 stop bit (8N1)
- Flow Control: none (default) or hardware (RTS, CTS)



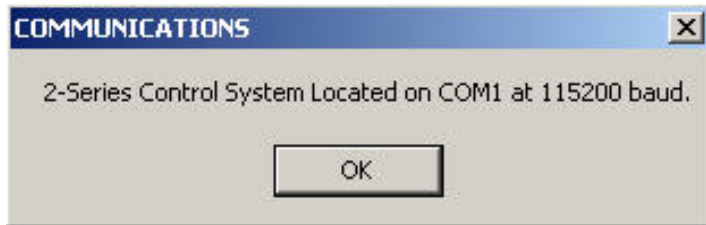
Baud rates higher than 9600 are only supported on EF2280 or EF2241 units that have Software Version 2.00 or higher.

Note that although the flow control setting is user selectable to *none* or *hardware*, hardware flow control must be used when updating the firmware of the EF Device. This means that while a 3-wire RS-232 cable (RX, TX, GND) is acceptable for control of the EF Device, the minimum cable for updating firmware should contain 5 wires (RX, TX, RTS, CTS, GND).

Starting Viewport

Open up Viewport by going to START, PROGRAMS, CRESTRON SIMPL WINDOWS and clicking VIEWPORT. Alternately, you can open SIMPL Windows and click on the Viewport Icon .

Once Viewport is open, click on DIAGNOSTICS, and ESTABLISH COMMUNICATIONS (FIND RACK). You should see a window open up that verifies that the PC has been able to communicate with the control system:



Command Syntax

You can use the **PASSTHRU** command to send and receive data from an EF Device. The syntax is as follows:

```
PASSTHRU COM x com mode baud rate data bits parity  
stop bits flow control
```

where:

x is the Com Port

com mode is 232, 422, or 485 mode (default is 232)

baud rate is any data rate from 300-115200 bps (default is 9600)

data bits is the word length (default is 8)

parity is a way to detect transmission errors (default is **N**)

stop bits is the number of bits to signal the end of transmission (default is 1)

flow control is either hardware or software handshaking (default is **NONE**).



You can send a **PASSTHRU ? command if you need more help on the syntax.**

- For an EF200 and EF1210, we recommend the following **PASSTHRU** command:

```
PASSTHRU COM x 9600
```

where **x** is the com port of the Crestron control system.

- For an EF2280 and EF2241, we recommend the following **PASSTHRU** command:

PASSTHRU COM x baud rate

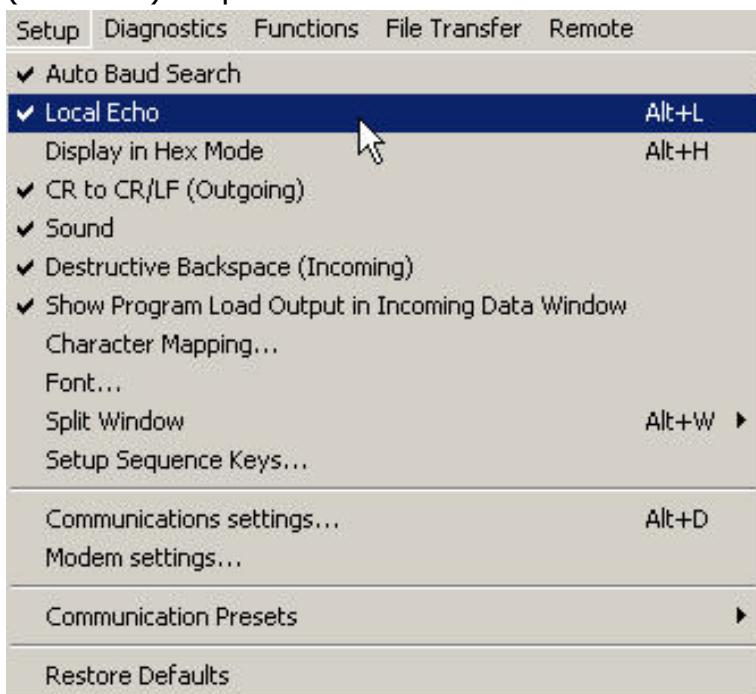
where **x** is the com port of the Crestron control system and **baud rate** is any data rate of 9600, 19200, or 38400 bps.



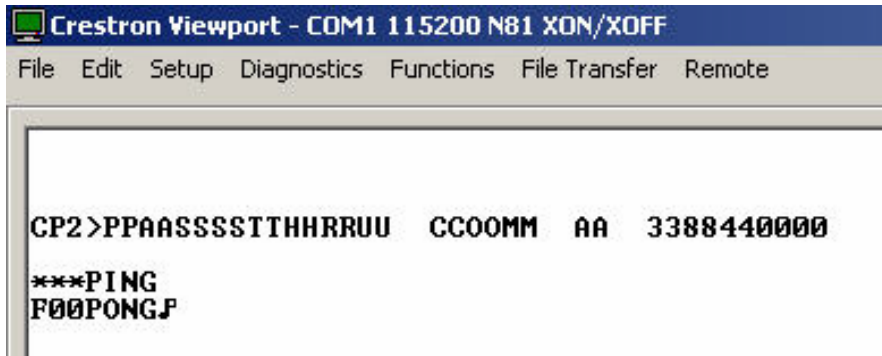
You don't have to type these settings in Viewport. You can click on FUNCTIONS, ENTER PASSTHROUGH MODE (CNX/2 SERIES) and set every value that was described above. However, in our testing with a CP2, we received an Invalid Parameters response from the CP2 when we tried to execute that feature.

Sending and Receiving Commands

Once you've sent the proper **PASSTHRU** command, click Setup and make sure that LOCAL ECHO is checked and DISPLAY IN HEX MODE is unchecked. CR TO CR/LF (OUTGOING) is optional.



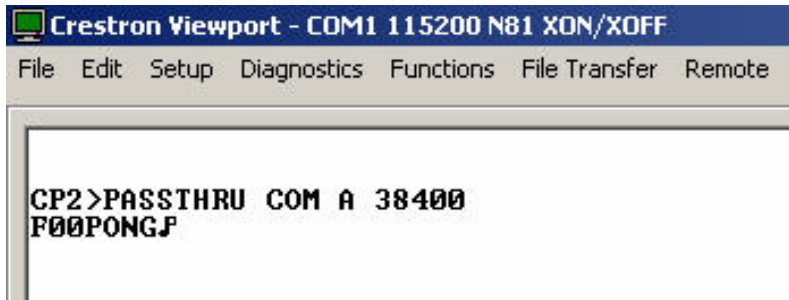
Now, you should be able to send any valid EF Device command to the unit. Here, a ***PING command has been sent to a EF2280 at a baud rate of 38400. Note that by checking the LOCAL ECHO option, that feature caused the **PASSTHRU** command to display double characters.



```
Crestron Viewport - COM1 115200 N81 XON/XOFF
File Edit Setup Diagnostics Functions File Transfer Remote

CP2>PPAASSSSSTTHHRRUU CCOOMM AA 3388440000
***PING
F00PONGJ
```

Without LOCAL ECHO checked, here is the same window as displayed in Viewport.



```
Crestron Viewport - COM1 115200 N81 XON/XOFF
File Edit Setup Diagnostics Functions File Transfer Remote

CP2>PASSTHRU COM A 38400
F00PONGJ
```

You do not have to use the LOCAL ECHO option when sending commands; however, it makes sending commands easier since you can see what you've typed locally.

TECHNICAL SUPPORT

For Polycom products (EF2280, EF2241, EF1210, EF400, EF200):

- Call 404-892-3200 between 9 am to 6 pm and Press 3
- Send an email to help@aspi.com

For other Polycom products (VS4000, Viewstation FX, iPower, etc.):

- Call 408-474-2048
- Send an email to: pass@polycom.com

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