

**Partner: Clearone**  
**Model: ConvergePro2**  
**Device Type: Digital Signal Processor**



## GENERAL INFORMATION

<b>SIMPLWINDOWS NAME:</b>	Clearone ConvergePro2 Command Processor RS232 v1.1
<b>CATEGORY:</b>	Mixer
<b>VERSION:</b>	1.1
<b>SUMMARY:</b>	This module controls all RS232 communication with the Clearone ConvergePro2.
<b>GENERAL NOTES:</b>	<p>This module is the core RS232 communication module for a suite of modules. The suite of modules utilizes the SIMPL# technology and will only work on the 3-Series Controller. Up to 10 instances of this module can be used in a single program slot. The module has a parameter that allows you to choose one of the 10 instance IDs. Each instance ID can only be used once. The other modules in this suite are control modules. The control modules are responsible for providing the actual control interface in SIMPL. With the SIMPL# technology, the Control modules no longer need to be physically "connected" to the command processor. They register themselves automatically behind the scenes. Each of the control modules also have a command processor ID parameter that you assign to the instance of the command processor to which they report to. You can virtually have an unlimited number of control modules report to a single instance of a command processor. If you are going to use more than one command processor, each must have their own RS232 port.</p> <p>A .pccp2 file (CrestronDemo_v3.pccp2) was created for Crestron testing purposes and MUST be used for proper operation of the Clearone ConvergePro2 Demo program.</p> <p>Once the processing module has determined that it is communicating with the ConvergePro2, it will initialize any individual control modules that are registered to it. Once a control module receives all the responses it is looking for, it will instruct the processing module that its initialization has been completed. The processing module will then request the next control modules initialization. Once all control modules are initialized that are registered with the processing module, the Is_Initialized output on the processing module will go high. At this point, you will have full control of all functionality on the registered control modules.</p> <p><b><i>In order for the module suite to work correctly ALL control modules must be configured correctly and have a corresponding DSP control point in the DSP program. Once this happens the command processor module will have its Is_Initialized signal asserted.</i></b></p> <p><b><i>Each control module has a Is_Initialized signal that will indicate when it is setup correctly. You can use this for debugging purposes.</i></b></p>

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**GENERAL INFORMATION** *continued*

<b>CRESTRON HARDWARE REQUIRED:</b>	3-series processor <b><u>only</u></b>
<b>SETUP OF CRESTRON HARDWARE:</b>	RS232 Baud: 57600 Parity: N Data Bits: 8 Stop Bits: 1  <b><i>Note: Do not use a "C2N-IO" serial port with this module. It has proven not to function properly. It is recommended to only use the onboard serial ports of the 3-Series processors.</i></b>
<b>VENDOR FIRMWARE:</b>	v3.4.39.0

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**PARAMETER:**

<b>Command_Processor_ID</b>	Setting to indicate the ID for a particular processing module. Up to 10 separate processing modules may be used in a single program, each one operating independently. Note that if multiple processing modules are to be used in a single program, they <b>must</b> each have different ID's set.
<b>Username</b>	Setting to indicate the Username of the ConvergePro2. The default is "clearone"
<b>Password</b>	Setting to indicate the Password of the ConvergePro2. The default is "converge"

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**CONTROL:**

<b>Initialize</b>	D	Set this input high to auto-initialize all control modules (once the processing module establishes communication with the ConvergePro2). Pulse to reinitialize all control modules.
<b>Debug</b>	D	Set this input high to allow internal trace messages to be printed in SIMPL Debugger. This is useful for debugging the processes going on inside the compiled SIMPL# code.
<b>From_Device</b>	S	This signal should be tied to the RS232 port RX signal.

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**FEEDBACK:**

<b>Is_Initialized</b>	D	Set to high when all registered control modules have successfully indicated that they have received the required responses to all their queries.
<b>Is_Communicating</b>	D	Set to high when the processing module has successfully established communication with the ConvergePro2 and is receiving appropriate responses.
<b>To_Device</b>	S	This signal should be tied to the RS232 port TX signal.

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**TESTING:**

<b>OPS USED FOR TESTING:</b>	CP3: 1.501.0013
<b>SIMPL WINDOWS USED FOR TESTING:</b>	4.06.01
<b>CRES DB USED FOR TESTING:</b>	61.06.001.00
<b>DEVICE DATABASE:</b>	82.00.002.00
<b>SYMBOL LIBRARY USED FOR TESTING:</b>	1024
<b>SAMPLE PROGRAM:</b>	Clearone ConvergePro2 v1.1 RS232 Demo
<b>REVISION HISTORY:</b>	v1.0 – Initial Release v1.1 – No revisions have been made to this module.