

Partner: Rollease Acmeda
Model: ARC
Device Type: Motor Control



GENERAL INFORMATION

SIMPLWINDOWS NAME:	Rollease Acmeda ARC Command Processor RS485 v1.0
CATEGORY:	Shades/Drapes
VERSION:	1.0
SUMMARY:	This module controls all RS485 communications with the Rollease Acmeda hub.
GENERAL NOTES:	<p>This module is the core RS485 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 32 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 32 instance IDs. Each instance ID can only be used once. The other module in the suite is a control module. Control modules are responsible for providing the actual control interface in SIMPL. With SIMPL# technology, 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. Each Rollease Acmeda ARC Command Processor RS485 v1.0 module can support up to 30 Rollease Acmeda ARC Motor Control v1.0 modules.</p> <p>Once the processing module has determined that it is communicating with the hub, 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><i>In order to get the hub and motor addresses for an installation add the Rollease Acmeda ARC Command Processor RS485 v1.0 module to the Crestron SIMPL Windows program. Connect it to the serial port being used for the hub. Place the Setup digital signal in the high position. Then from the mobile app, Automate, send commands to all of the motors that will need to be controlled while SIMPL Debugger is open in Toolbox. The Rollease Acmeda ARC Command Processor RS485 v1.0 module will provide the hub and motor address used when controlling the motor through the app in the signals Setup_Info_Hub_Address and Setup_Info_Motor_Address.</i></p> <p><i>Because of the multi-module design, you can cause a lot of traffic on your system by triggering many input signals at the same time. If you have a lot of input signals to trigger at one time, be sure to pace the triggering of the signals allowing the controller to deal with the traffic. Keep in mind the modules, during the initialization process, will get the current state of each of your control points, So, you do not need to duplicate this effort.</i></p>

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	<i>You should wait for any and all processing modules to set "Is_Initialized" to high before attempting to control the device. This is your indication that the programming is correct and ready to go.</i>
CRESTRON HARDWARE REQUIRED:	3-series processor only
SETUP OF CRESTRON HARDWARE:	RS485 Baud: 9600 Parity: N Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	27

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PARAMETER:

Pulse_Hub_Address	Pulse_Hub_Address is the unique ID number for the hub object. To find the hub address follow the setup instructions in the general notes section.
CommandProcessorID	Setting to indicate the ID for a particular processing module. Up to 32 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 must each have different ID's set.

CONTROL:

Initialize	D	Set this input high to auto-initialize all control modules (once the processing module establishes communication with the Rollease Acmeda Hub). Pulse to reinitialize all control modules.
Debug	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.
Setup	D	When this input is set high all incoming messages will be parsed for the hub and motor addresses. These addresses will be put in the signals Setup_Info_Hub_Address and Setup_Info_Motor_Address. Use this to get the hub and motor addresses to use in the program.
From_Device	S	Serial signal to be routed from a 2-way com port.

FEEDBACK:

Is_Initialized	D	Set to high when all registered control modules have successfully indicated that they have received the required responses to all their queries.
Is_Communicating	D	Set to high when the processing module has successfully established communication with the Rollease Acmeda hub and is receiving appropriate responses.
Setup_Info_Hub_Address	S	Text indicating the hub address the last response originated from when the Setup input is high.
Setup_Info_Motor_Address	S	Text indicating the motor address the last response originated from when the Setup input is high.
To_Device	S	Serial signal to be routed to a 2-way com port.

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**TESTING:**

OPS USED FOR TESTING:	CP3 1.501.2867.24563
SIMPL WINDOWS USED FOR TESTING:	4.07.03
CRES DB USED FOR TESTING:	64.00.001.00
DEVICE DATABASE:	87.05.001.00
SYMBOL LIBRARY USED FOR TESTING:	1040
SAMPLE PROGRAM:	Rollease Acmeda ARC Demo
REVISION HISTORY:	V1.0 – Initial Release