This LLB has the following Vis

Init Switch.vi

Initializes the Cytec switch to a known state with Echo and Verbose off, then sends an identifier command to the switch. If the switch responds correctly the boolean output - Device Found- is set to true.

Inputs	Values	Outputs	Values
Visa Resource In		Visa Resource Out	
Answerback (*boolean that enables a one character response that indicates successful completion of command*)	0 or 1	Device Found Device Response	0 or 1 String response

MTX Command Format

This VI creates a formatted command string from integer inputs for command, matrix #, module # and relay #. The command integer maps to the following commands.

0= clear (C), 1 = status(S), 2 = multiplex(X), 3 = unlatch(U) and 4 = latch(L).

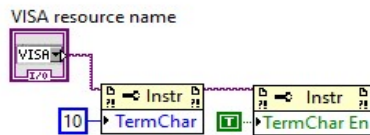| Inputs	Values	Outputs	Values
Command	0 to 4	Cmd String	String
Mtx #	0 to 15		
Mod #	0 to 256		
Rly #	0 to 256		

Looping Eg.vi

This example vi loops through # of modules and # of relays starting with Mod 0 Rly 0. Any matrix number can be selected for the example, but will usually be Matrix 0 for Mainframes. The command sent is the Multiplex command (X). For example if Matrix 0 is input with 8 modules and 16 relays then the example will loop from X0 0 0 to X0 7 15

Inputs	Values
Mtx #	0 to 15
# of Mods	0 to 256
# of Rlys	0 to 256

A note about terminations for LAN and Serial Communications.

VISA Reads

Your i/o session may be configured to read until it receives a terminating character or to read until it either receives all of the requested bytes or it times out.

Example of setting the termination character to a new line (0x0A, \n, 10)

If Answerback is on then you will have to read twice if TermChar is enabled in order to get both the response and the Answerback character.
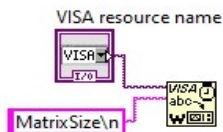
If you decide to enable the termination character then the terminator is a carriage return (0x0d, \r, 13) for Serial Communication and a new line (0x0A, \n, 10) for LAN Communication.

VISA Writes

The Cytec switch will not process any command unless a terminating character is received.

The terminating character should be a new line for all of the newer control modules

Note: There is some legacy product that still requires a carriage return for RS232.

Example of a string with a terminating character (shown using '\' Codes Display)