

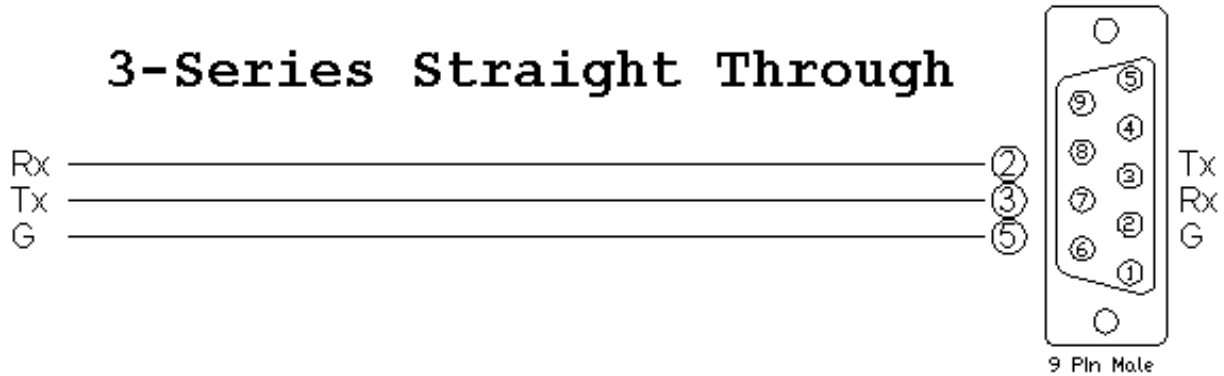
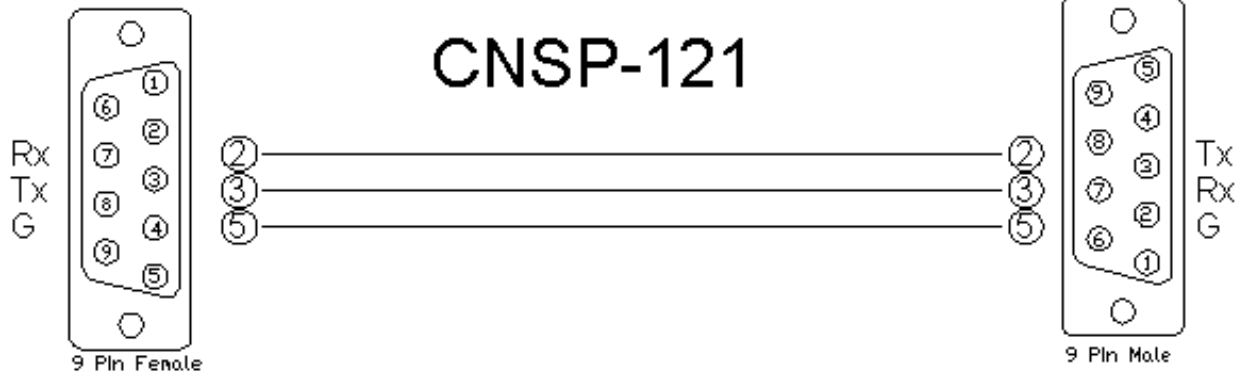
Partner: Converging Systems
 Model: eNode & IBT-100
 Device Type: Lighting



GENERAL INFORMATION

SIMPLWINDOWS NAME:	Converging Systems eNode + IBT-100 ILC LED Control v2.0
CATEGORY:	Shades/Drapes or Lighting
VERSION:	2.0
SUMMARY:	This module provides control of the Converging Systems ILC LEDs.
GENERAL NOTES:	This module controls Converging Systems ILC LEDs. The eNode provides TCP/IP control while the IBT-100 allows RS232 control. Motors and LEDs are assigned addresses that consist of a zone number a group number and a node number. The addresses are typically written zzz.ggg.nnn. Those are the values that are required for the motor control and LED control modules. In order to provide the most efficient processing of the data from there are three modules required. The Converging Systems eNode + IBT-100 Queue v2.0, the Converging Systems eNode + IBT-100 Zone Parser v2.0 and the Converging Systems eNode + IBT-100 Group Parser v2.0. This module is written to work with 2-series or later processors.
CRESTRON HARDWARE REQUIRED:	C2I-COM, C2-COM-*, C2I-*3-COM*, C2I-*ENET-*
SETUP OF CRESTRON HARDWARE:	RS232 Baud:57600 Parity: None Data Bits: 8 Stop Bits: 1 TCP/IP Port: 23
VENDOR FIRMWARE:	N/A
VENDOR SETUP:	Each device on the bus must have its ID zone, group and node set.
CABLE DIAGRAM:	RS232: 2-series & MC3: CNSP-121 3-series: See diagram below TCP/IP: Ethernet

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CONTROL:

<On/Off>	D	Pulse to turn the LED on and off.
Recall_Preset_<1...24>	D	Pulse to recall the desired color preset.
Store_Preset_<1...24>	D	Pulse to store the current color in the desired preset.
Hue_<Up/Down>	D	Press and hold to adjust the hue.
Hue_Value_In	A	Analog signal to allow direct setting of the hue. Can be driven from a Fader/Slider Smart Object. The Fader/Slider should have its Min Value set to 0 and its Max Value se to 240.
Lightness_<Up/Down>	D	Press and hold to adjust the lightness.
Lightness_Value_In	A	Analog signal to allow direct setting of the lightness. Can be driven from a Fader/Slider Smart Object. The Fader/Slider should have its Min Value set to 0 and its Max Value se to 240.
Saturation_<Up/Down>	D	Press and hold to adjust the saturation.

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Saturation_Value_In	A	Analog signal to allow direct setting of the saturation. Can be driven from a Fader/Slider Smart Object. The Fader/Slider should have its Min Value set to 0 and its Max Value se to 240.
Effect_<Sequence/Flame>	D	Pulse to start the desired sequence.
<Red/Green>_<Up/Down>	D	Press and hold to adjust the red or green.
<Red/Green>_Value_In	A	Analog signal to allow direct setting of the red or green. Can be driven from a Fader/Slider Smart Object. The Fader/Slider should have its Min Value set to 0 and its Max Value se to 240.
<Blue/White>_<Up/Down>	D	Press and hold to adjust the blue or white.
<Blue/White>_Value_In	A	Analog signal to allow direct setting of the blue or white. Can be driven from a Fader/Slider Smart Object. The Fader/Slider should have its Min Value set to 0 and its Max Value se to 240.
CCT_<Up/Down>	D	Press and hold to adjust the CCT.
CCT_Value_In	A	Analog signal to allow direct setting of the CCT. Can be driven from a Fader/Slider Smart Object. The Fader/Slider should have its Min Value set to 0 and its Max Value se to 240.
Sun_<Up/Down>	D	Press and hold to adjust the sun.
Sun_Value_In	A	Analog signal to allow direct setting of the sun. Can be driven from a Fader/Slider Smart Object. The Fader/Slider should have its Min Value set to 0 and its Max Value se to 240.
State_Change_Dissolve_Rate_Value_In	A	Analog signal to allow the setting of the dissolve rate for state changes between color settings.
On/Off/Preset_Dissolve_Rate_Value_In	A	Analog signal to allow the setting of the dissolve rate for on, off, preset changes.
Effect_Dissolve_Rate_Value_In	A	Analog signal to allow the setting of the dissolve rate for effects changes.
Sequence_Rate_Value_In	A	Analog signal to allow the setting of the dissolve rate for changes between presets.
Get_Initial_Status	D	Pulse to get the status from the LED node. It is advised that the Get_Initial_Status on each control module be pulsed at least 5.0 seconds apart. This is just to allow the Crestron system to get in sync with the Converging Systems ILC LEDs.
From_Group_Module	S	Serial signal to be routed from the To_Control_*_Module output on the Converging Systems eNode + IBT-100 Group Parser v2.0 module.

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PARAMETERS:

Zone Number	S	Enter the zone number for the LED node to be controlled. The addresses are typically written zzz.ggg.nnn.
Group Number	S	Enter the group number for the LED node to be controlled. The addresses are typically written zzz.ggg.nnn.
Node Number	S	Enter the node number for the LED node to be controlled. The addresses are typically written zzz.ggg.nnn.

FEEDBACK:

Preset_<1...24>_Recalled	D	High to indicate the last preset that was recalled.
Preset_<1...24>_RGB_Color_String	S	Serial string for each preset to be used in an indirect text string for the font color. Format of the output is color="#rrggbb" where r is the red value, g is the green value and b is the blue value. This string can be used to set the font color using html formatting on Smart Graphics.
Preset_<1...24>_Hue_Value_Gauge	A	Analog value indicating the hue value. Valid range is 0 to 240. When using a Smart Graphic Fader/Slider set the Min Value to 0 and the Max Value to 240.
Preset_<1...24>_Saturation_Value_Gauge	A	Analog value indicating the hue value. Valid range is 0 to 240. When using a Smart Graphic Fader/Slider set the Min Value to 0 and the Max Value to 240.
Preset_<1...24>_Lightness_Value_Gauge	A	Analog value indicating the hue value. Valid range is 0 to 240. When using a Smart Graphic Fader/Slider set the Min Value to 0 and the Max Value to 240.
<Hue/Saturation/Lightness>_Value_Text	S	Serial signal to indicate the current hue, saturation and lightness values.
<Hue/Saturation/Lightness>_Value_Gauge	A	Analog signal to indicate the current hue, saturation and lightness values. Valid range is 0 to 240. When using a Smart Graphic Fader/Slider set the Min Value to 0 and the Max Value to 240.
RGB_Color_String	S	Serial string for the current LED color to be used in an indirect text string for the font color. Format of the output is color="#rrggbb" where r is the red value, g is the green value and b is the blue value. This string can be used to set the font color using html formatting on Smart Graphics.
Preset_<1...24>_<Red/Green>_Value_Gauge	A	Analog value indicating the red and green values. Valid range is 0 to 240. When using a Smart Graphic Fader/Slider set the Min Value to 0 and the Max Value to 240.
Preset_<1...24>_<Blue/White>_Value_Gauge	A	Analog value indicating the blue and white values. Valid range is 0 to 240. When using a Smart Graphic Fader/Slider set the Min Value to 0 and the Max Value to 240.
<Red/Green/Blue/White>_Value_Text	S	Serial signal to indicate the current red, green, blue and white values.

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< Red/Green/Blue/White > _Value_Gauge	A	Analog signal to indicate the current red, green, blue and white values. Valid range is 0 to 240. When using a Smart Graphic Fader/Slider set the Min Value to 0 and the Max Value to 240.
CCT_Value_Text	S	Serial signal to indicate the current CCT value.
CCT_Value_Gauge	A	Analog signal to indicate the current CCTvalue. Valid range is 1800 to 7000. When using a Smart Graphic Fader/Slider set the Min Value to 1800 and the Max Value to 7000.
Sun_Value_Text	S	Serial signal to indicate the current sun value.
Sun_Value_Gauge	A	Analog signal to indicate the current sun value. Valid range is 0 to 240. When using a Smart Graphic Fader/Slider set the Min Value to 0 and the Max Value to 240.
State_Change_Dissolve_Rate_Value_Text	S	Serial signal indicating the current State Change Dissolve rate.
On/Off/Preset_Dissolve_Rate_Value_Text	S	Serial signal indicating the current On, Off and Preset Change Dissolve rate.
Effect_Dissolve_Rate_Value_Text	S	Serial signal indicating the current Effect Change Dissolve rate.
Sequence_Rate_Value_Text	S	Serial signal indicating the current sequence rate.
To_Queue	S	Serial signal to be routed to the From_Modules input on the Converging Systems eNode + IBT-100 Queue v2.0 module.

TESTING:

OPS USED FOR TESTING:	CP3: 1.008.0040
SIMPL WINDOWS USED FOR TESTING:	4.03.20
DEVICE DB USED FOR TESTING:	72.00.001.00
CRES DB USED FOR TESTING:	54.05.005.00
SYMBOL LIBRARY USED FOR TESTING:	982
SAMPLE PROGRAM:	Converging Systems eNode + IBT-100 v2.0 Demo
REVISION HISTORY:	v1.0 – Original Release. v2.0 – Added new commands and feedback.