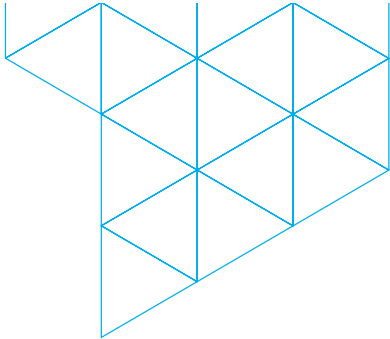
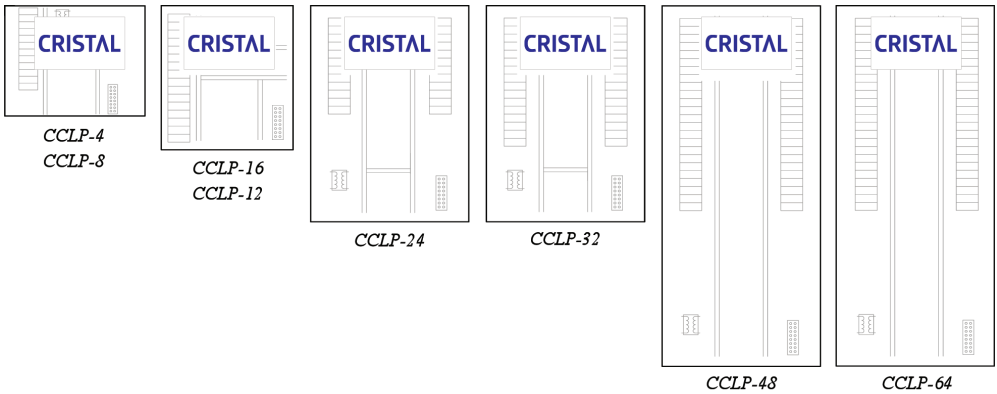




Relay Panels

Low-Voltage Lighting Control Systems

CCLP-X



1 / 1

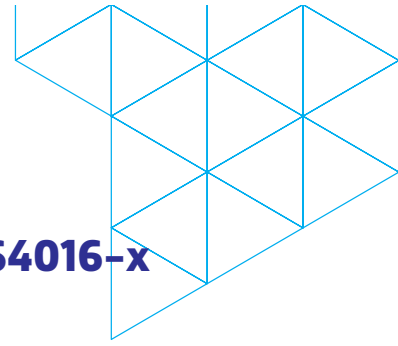
Description

Relay panels for low-voltage lighting control systems are all factory pre-wired and offer the following features:

- Size 4, 8, 12, 16, 24, 32, 48, or 64 Cristal Controls relays
- Model WR-6161 and/or WR-6166
- Nema-1 panel c/w door lock, voltage barrier and fused control transformer
- CSA US or UL certified
- Power supply 120V / 277 or 120/347
- Pre-wired and factory-assembled, including pre-set up as required
- Relay Scanner: CCLS-4016
- Time clock: Astronomical (CH.) or Jasper assisted

Dimensions

Capacity	4 & 8	12 & 16	24 & 32	48 & 64
Dimensions	16 x 20 x 4,62"	24" X 20" X 4,62"	36" X 24" X 4,62"	60" X 24" X 4,62"

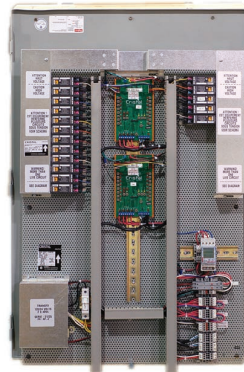


Relay Panels

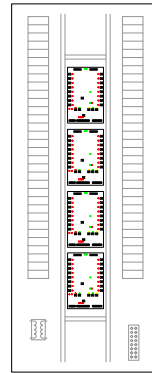
Low-Voltage Lighting Control Systems

CCLP-CCLS4016-x

1 / 1



CCLP-CCLS4016-24

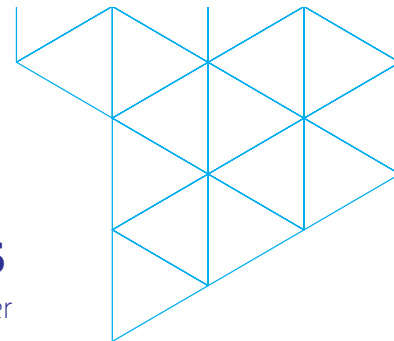


CCLP-CCLS4016-64

Description

Panel with CCLP series relays with scanner model CCLS-4016 for low-voltage control applications, pre-assembled in factory and offering the following features :

- ▶ Stackable for up to 4 x CCLS-4016 offering up to 64 outputs and 16 programmable inputs
- ▶ Intuitive configuration of the groupings and types of entries using push buttons on the CCLS-4016 scanner (72 on request)
- ▶ No personal computer or special software needed
- ▶ Possibility of configuring warning options for occupants and automatic deactivation with delayed action
- ▶ Nema-1 panel including door lock, control transformer and voltage barrier
- ▶ CSA US or UL certifications
- ▶ 120-1/347-1 supply (277-1 available on request)
- ▶ Pre-assembled and pre-programmed in factory as per specifications

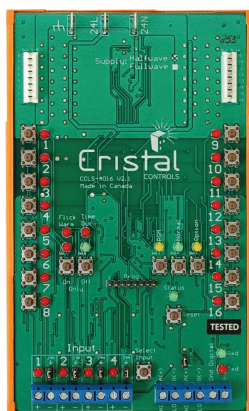


Relay Panels

Low-Voltage Lighting Control Systems

CCLS-4016

Electronic Scanner



1 / 2

Description

The CCLS-4016 programmable relay scanner from Cristal Controls allows users to control 16 mechanical or electronic relays. Four independent inputs can be assigned to control them all. Up to 3 relays can be connected to each input, for a maximum of 48 relays per scanner. All configurations are performed directly on the scanner with push buttons.

- ▶ Controls up to 16 Panasonic WR-6161 lighting relays (up to 3 relays per output)
- ▶ Communication port enables the interconnection of 4 CCLS-4016 relay scanners for a total control of 64 relays (16 inputs available)
- ▶ 4 independant configurable inputs that can receive the following signals :
 - ▶ Contact (N.C. = « On », N.O. = « Off »)
 - ▶ Contact (N.C. = « Off », N.O. = « On »)
 - ▶ DC with status feedback
 - ▶ DC without status feedback
- ▶ Group programming (inputs/outputs association) performed directly on the scanner
- ▶ Adjustable warning option to blink the lights briefly 5 minutes before scheduled to turn off
- ▶ Option for automatic de-activation time ajustable

Relay Scanner**CCLS-4016**

Low-Voltage Lighting Control Systems

Applications

1. Typically, the CCLS-4016 relay scanner is used to control the lighting of multiple zones simultaneously. 16 inputs can be programmed to operate one or several relays.
2. Many control devices like programmable time clocks, photocells, motion detectors, dry-contact switches or low-voltage switches with status feedback can be connected to inputs.
3. The CCLS-4016 relay scanner is designed to be programmed on location. Push buttons with LEDs directly on the board allow for easy programming.
4. For large-scale applications, it can interconnect up to 4 CCLS-4016 scanners, giving control over 64 outputs from 16 configurable inputs.
5. Compatible with BACnet, MODBUS, DMX and LON communication protocols (when added to a communication interface).

Technical Specifications**Supply**

- ▶ 24 Vac
- ▶ Typical consumption of 60 mA
- ▶ Maximum consumption of 550mA on a status change (one WR-6161 relay per output)

Outputs

- ▶ 16 X 24 Vac rectified positive or negative
- ▶ Up to 3 relays per output

Inputs

- ▶ 4 configurable inputs
- ▶ Choice of input type (contact NO or NC, DC with or without status feedback)

Dimensions

- ▶ Unit assembled in a DIN rail mountable frame
- ▶ 3 7/8" X 6 1/2" (96.5 mm X 165 mm)

CCLS-4016 v2.1

Step by step inputs setting

Step 1:

Select the input to be set:

1-To choose the input to be set Press (SELECT INPUT).

Step 2:

Set and match the input type with the type of signal connected to the CCLS-4016

1-Press (OPTION)

2- Press the button corresponding to the type :
(9) AC-Normal, (10) AC-Inverted, (11) DC-WR-8501, (12) DC-WR-8001: (16) Not uses.
Default value is (16).

3- To activate the « ON ONLY » and « OFF ONLY » restrictions.
Press (ON) or (OFF) to turn on or off the LED.
The « ON ONLY » LED indicate the input will kick on the light.
The « OFF ONLY » LED indicate the input will kick off the light.
If both LED are off, it cancel all action on the outputs from this input.

4-Press (SELECT INPUT) and repeat the above explanations for each input.

5-Complete the action by pressing (NORMAL).

Step 3:

Set the « FLICK WARN »,« TIME OUT » and input group modification:

1-Press (PGM)

The « FLICK WARN » shut the light OFF for 5 seconds which warns the user that the light will go OFF upon the « TIME OUT » setting.

The « TIME OUT » function, when activated, allows a timer to deactivate the input group by itself.

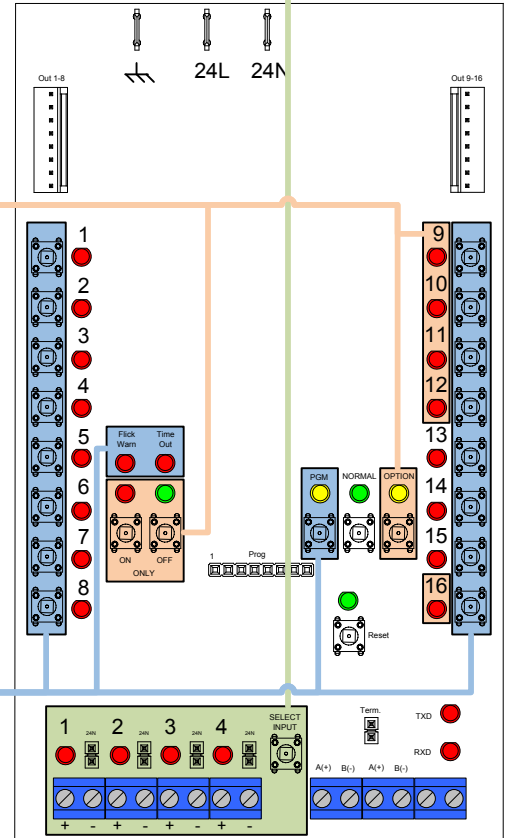
(OPTION) DEL 1 = 30 minutes
DEL 2 = 60 minutes
DEL 3 = 90 minutes
DEL 4 = 120 minutes *default

2-To set these functions, press (OPTION), the status of the « FLICK WARN » and « TIME OUT » LED will change.
The function is activated when the LED is ON.

3-To add or delete output from the group, simply press the output button (#).

4- Press (SELECT INPUT) and repeat the above explanations for each input.

5- Complete the action by pressing (NORMAL).



Note: After 5 minutes of inactivity's the CCLS-4016 will shut off all LED's.
To bring them ON press (NORMAL).

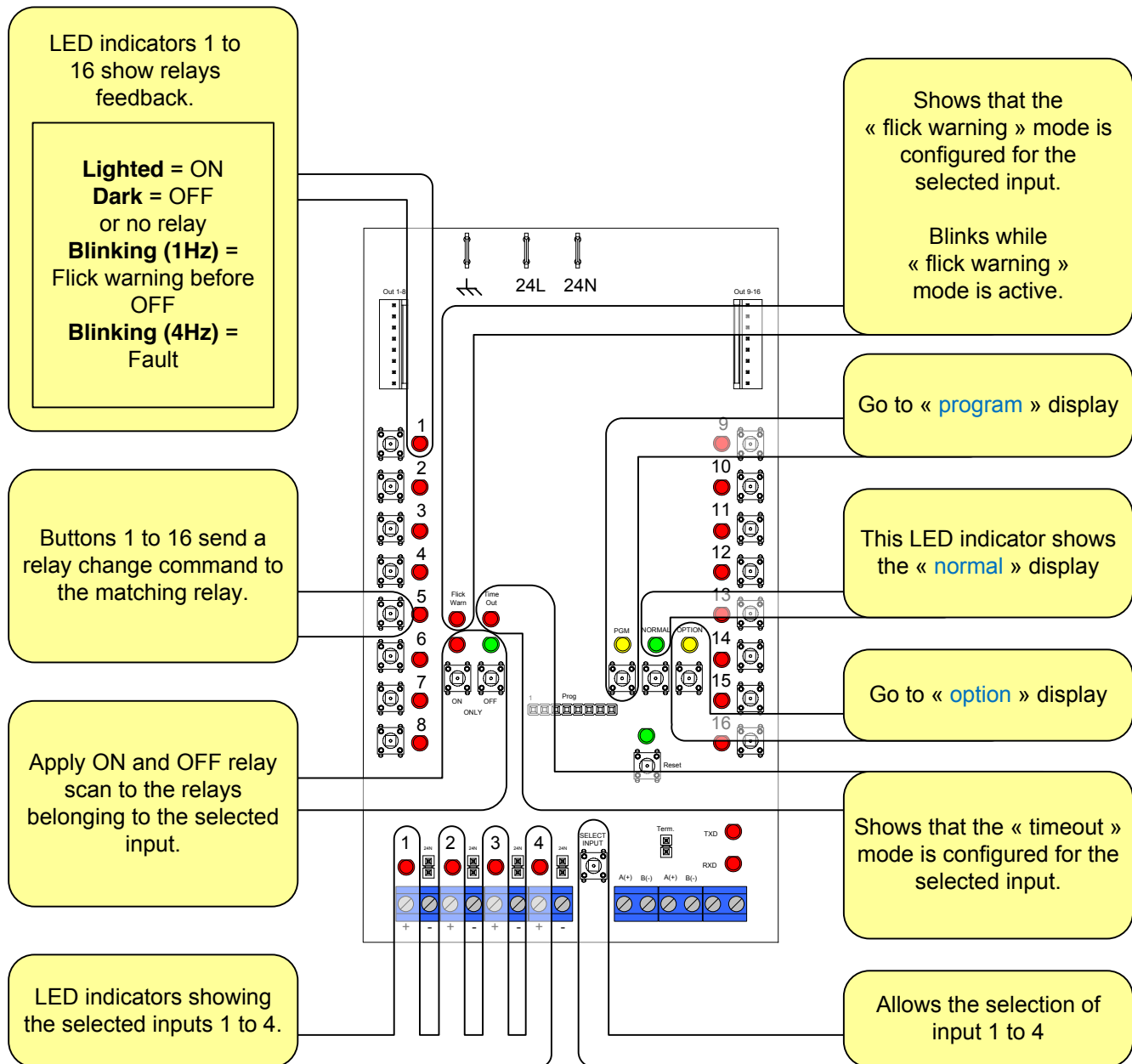
CRISTAL

Cristal Contrôles Ltd
2025 Lavoisier, Local 135
Québec, (Québec) Canada G1N 4L6
Ph. 418-681-9590 - Fax 418-681-7393
<http://www.cristalcontrols.com>

2013-02-11

CCLS-4016 v2.1

Normal display



Note: Most LED indicators are turned OFF after a 5 minutes period. Press any button to turn them ON.

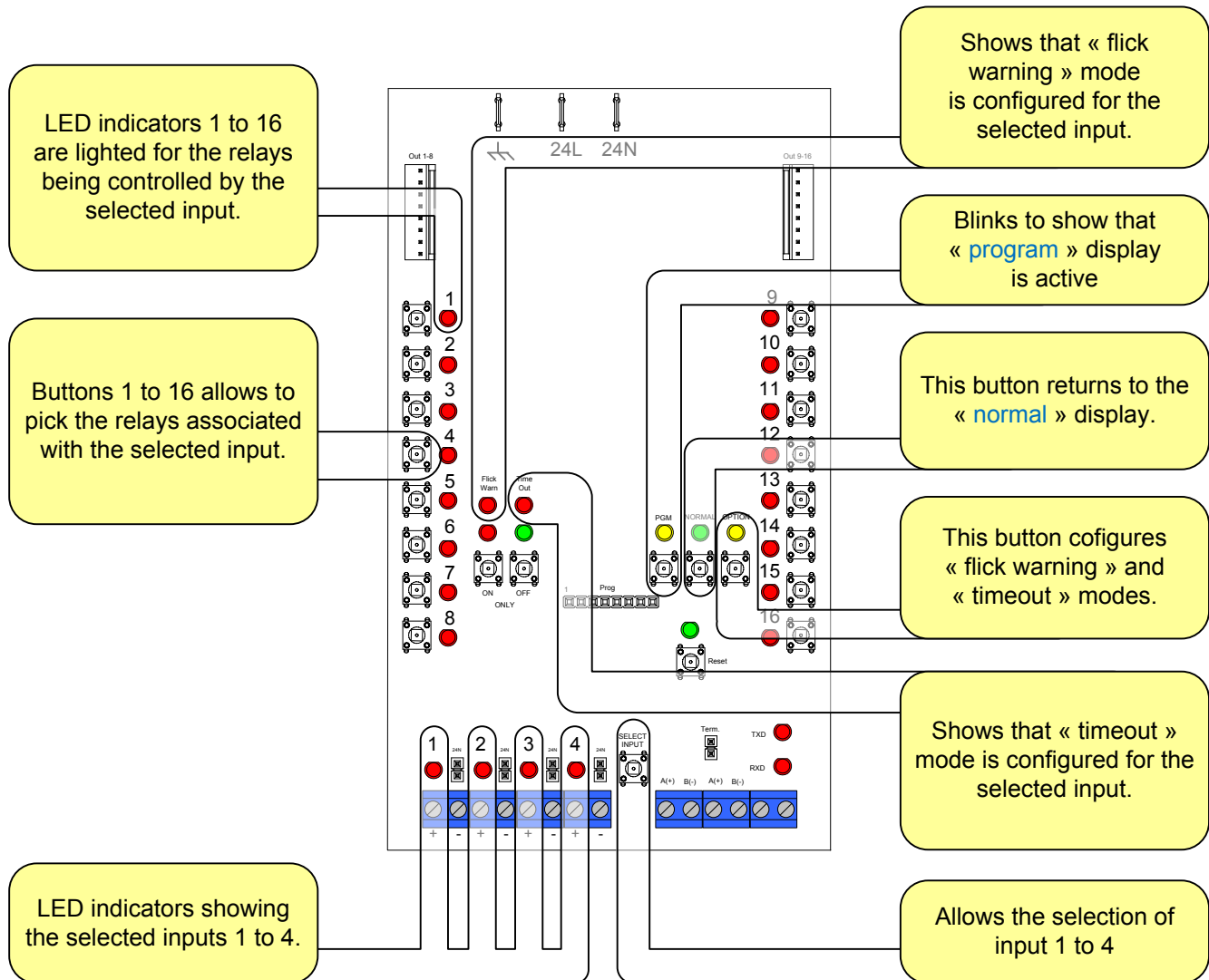
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2013-01-08

CCLS-4016 v2.1

Program display



Note: Every CCLS-4016 controller from a panel switch to **program** display at the same time. An input can also control the relays from other controllers in the same panel.

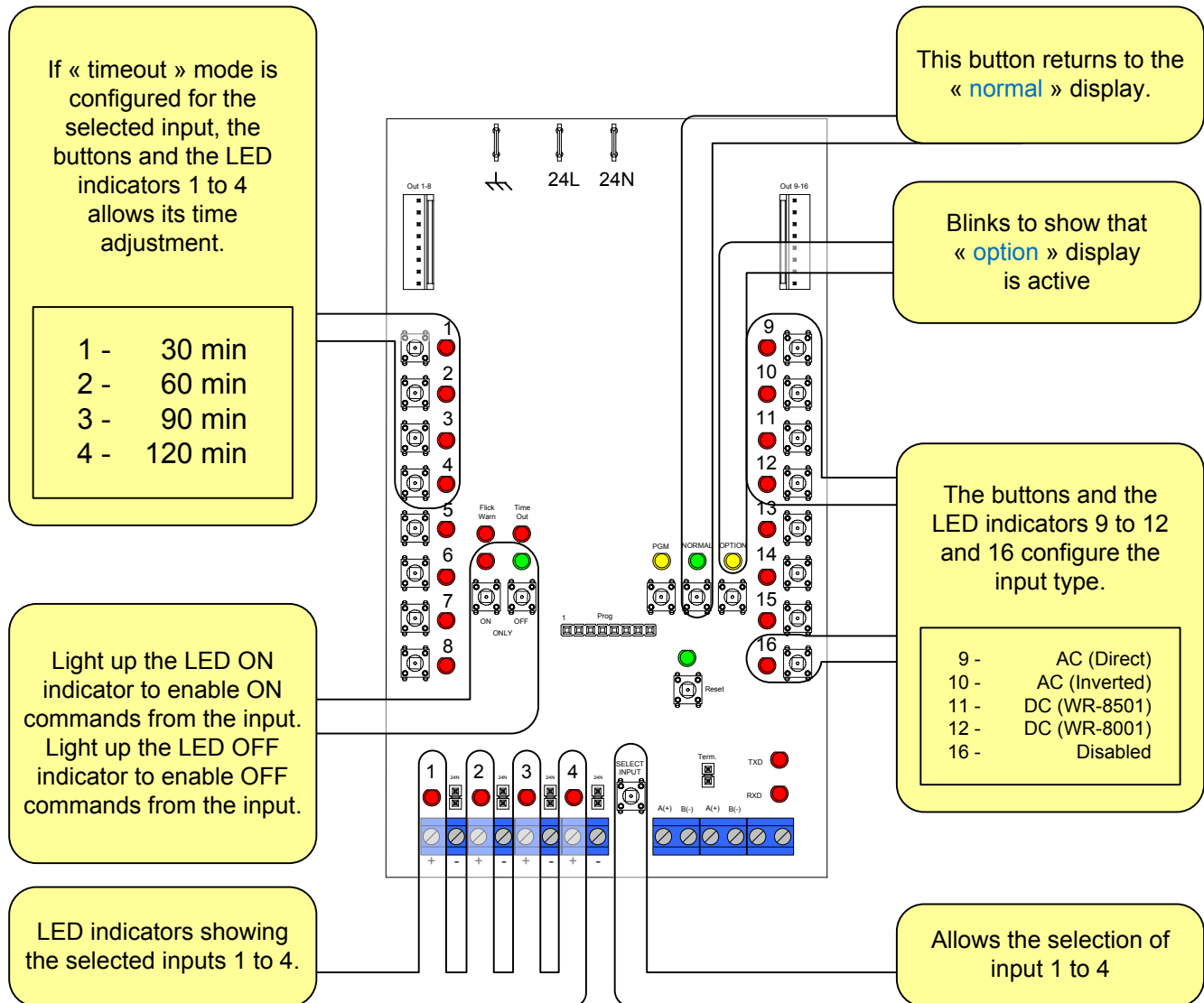
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2013-01-08

CCLS-4016 v2.1

Option display



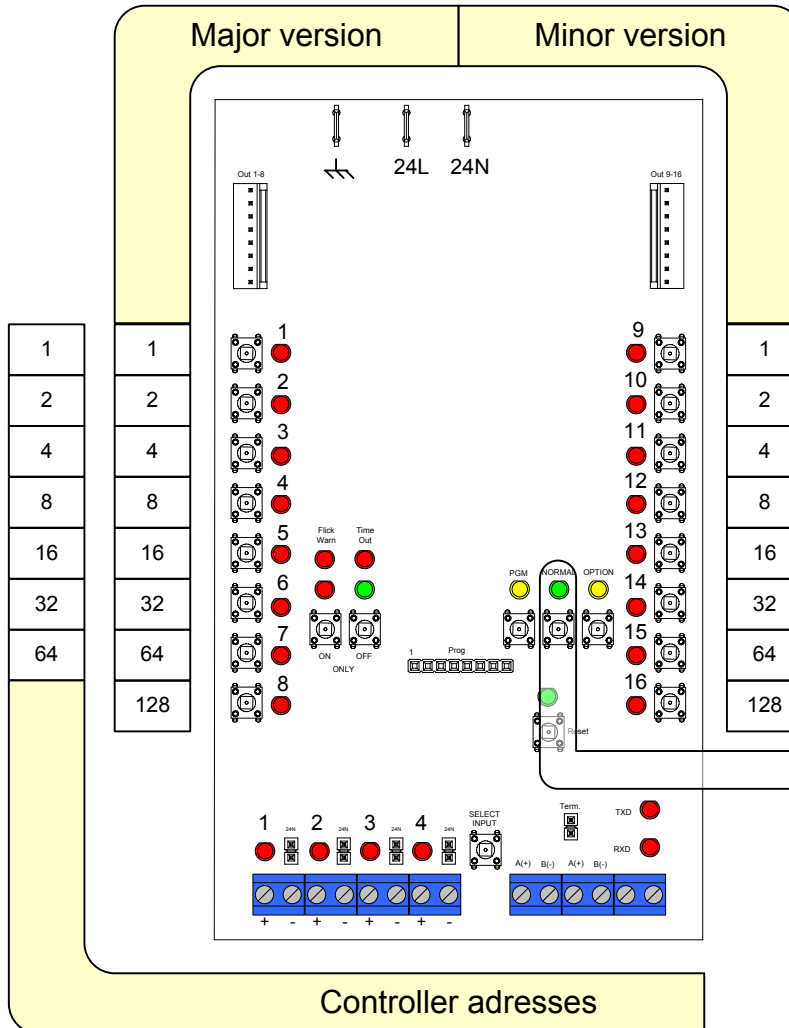
CCLS-4016 v2.1

Version and address displays

After the initialization period, add the numbers matching the lighted LED indicators and you will find the controller's program **version**. This version is being displayed during 3 seconds.

Major version

Minor version



Add the numbers matching the lighted LED indicators to find the controller's **address**.

Use the matching button to change the LED indicators state.

Hold the « normal » button during the 5 seconds initialization period to enable controller address configuration.

In « **address** » display mode, the « normal » LED indicator blinks at 1Hz.

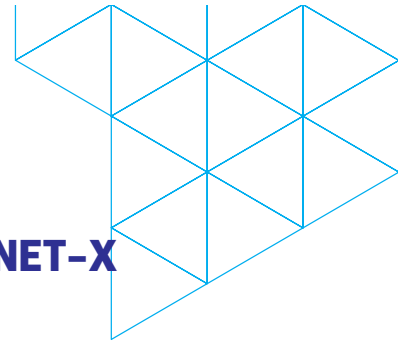
Press the « normal » button again to go to the « **normal** » display.

Note: During controller power-up, every LED indicators but « status » are ON during 2 seconds for the initialization period.

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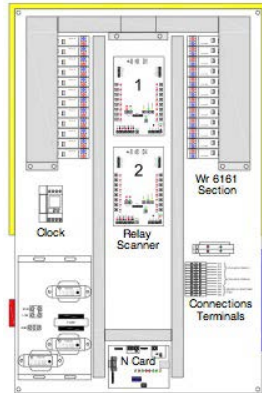
2013-01-08



Relay Panels

Low-Voltage Lighting Control Systems

CCLP-BACNET-X



1 / 3

Description

Cristal Controls relay panels series CCLP-CCLS4016 with BACnet networking option via interface CC-Bacnet for low-voltage lighting control applications offer the following features :

- ▶ Intuitive configuration of the groupings and types of entries using push buttons on the CCLS-4016 scanner
- ▶ No personal computer or special software required to set up the panels
- ▶ Each panel to be controlled by a BACnet network (I.P. or MSTP)
- ▶ Nema-1 panel including door lock, control transformer and voltage barrier
- ▶ CSA US or UL certifications
- ▶ 120-1/347-1 supply (277-1 available on request)
- ▶ Pre-assembled and pre-programmed in factory as per specifications

Unique Panel-to-Panel Communication Mode

Expansion of the CCLS-4016 programming mode to the relays of other lighting panels available in the building. Allows the configuration of a complete lighting system as a giant virtual lighting panel only with the use of buttons and LEDs.

Panneau à relais**CCLP-BACNET-X**

Systèmes de contrôle d'éclairage à bas voltage

Supported BACnet Objects

Object	Numéro	Nom	Valeur Min	Valeur Max	Défaut	Description
Device		CCLP-1664	0	4194302		
BI	0-15	INPUT 01-16	0 = OFF	1 = ON	0 = OFF	État actuel des entrées programmables
BI	16-79	RELAY FB 01-64	0 = OFF	1 = ON	0 = OFF	État réel des relais
BO	0-63	RELAY CMD 01-64	0 = OFF	1 = ON	0 = OFF	Pour envoyer une commande à un relais
BO	64-127	RELAY FLK 01-64	0 = OFF	1 = ON	0 = OFF	Envoie une commande d'avertissement "flick" à un relais
BV	0-7	GROUP CMD 01-08	0 = OFF	1 = ON	0 = OFF	Envoie une commande vers un groupe de plusieurs relais
BV	8-15	GROUP FLK 01-08	0 = OFF	1 = ON	0 = OFF	Envoie une commande d'avertissement "flick" à un groupe de relais
BV	16	CAN-GATEWAY	0 = Inactif	1 = Actif	0	Active la communication des CCLS-4016 entre les panneaux
AV	0-7	GROUP FB 01-08	0.0 %	100.0 %	0.0 %	Retour d'état pour les relais d'un groupe. 0% = OFF, 100% = ON, autre = mélangé
AV	8-11	CCLS ADDR 01-04	1	127	Auto	Adresse CAN des contrôleurs CCLS-4016
FILE	0	FILE 0				Configuration des groupes
FILE	1	FILE 1				Informations sur les versions
FILE	2	FILE 2				Journal des événements d'éclairage

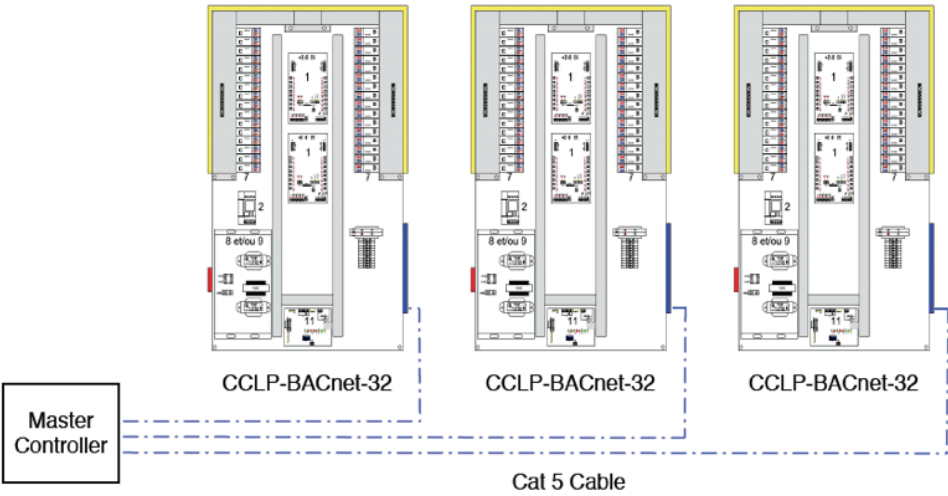
For detailed informations look at :
<http://www.cristalcontrols.com/lighting-control-systems/bacnet-networking-options/>

Relay panels
BACnet Network Node

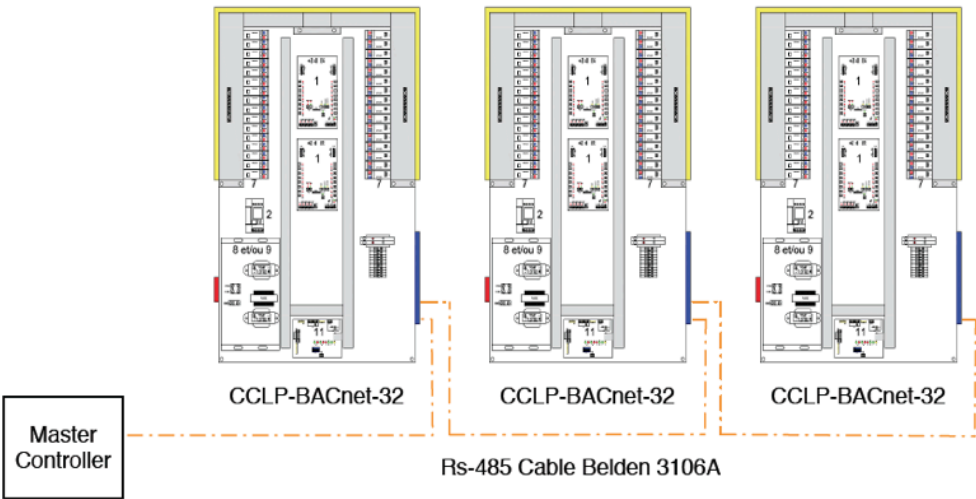
CCPL-x

Typical Network Connections

BACnet I.P.



BACnet mstp





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BACnet Testing Laboratories Product Listing

This product has been tested at a qualified BACnet Testing Laboratory and found to comply with all the necessary interoperability requirements in place on the published test date. This listing represents the tested capability of the Listed Product. For information on additional functionality that was not covered in the test process, refer to the Manufacturer's PICS statement on the BI website.

Listing Information

Vendor		Listing Status
Cristal Controls Ltd 2025 Lavoisier no 135 Québec, QC, G1N4L6 Canada		Listed Product
Test Requirements	BACnet Protocol Revision	Date Tested
Requirements as of August 2012	Revision 13	June 2013

Product Name	Model Number	Software Version
CCLP-BACnet	CCLP-1664-BIP, CCLP-1664-MSTP	3.3.1

Device Profiles

Profile	Model Numbers
BACnet Application Specific Controller (B-ASC)	All Devices

BIBBs Supported

Data Sharing	ReadProperty-B	DS-RP-B
	WriteProperty-B	DS-WP-B
	ReadPropertyMultiple-B	DS-RPM-B
	COV-B	DS-COV-B

Device and Network Management	Dynamic Device Binding-B	DM-DDB-B
	Dynamic Object Binding-B	DM-DOB-B
	DeviceCommunicationControl-B	DM-DCC-B
	ReinitializeDevice-B	DM-RD-B
	TimeSynchronization-B	DM-TS-B

Object Type Support

Binary Input	Binary Output	Binary Value
Analog Value	Device	File

Data Link Layer Options

Media	Options
BACnet/IP	Register as a Foreign Device
MS/TP master	9600, 19200, 38400, 57600, 76800

Character Set Support

ANSI X3.4/UTF-8
