

The BCS Light Controller

Electrician's Installation Guide

2022



Barclay Consulting Services

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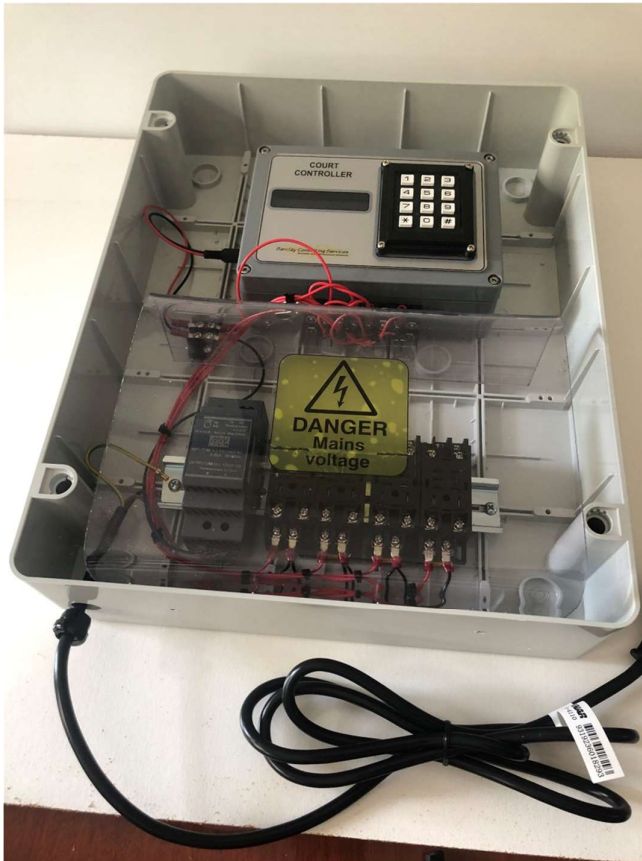
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Barclay Consulting Services (BCS) Light Controller Installation

BCS Installation Checklist

The court controller is mounted within a larger enclosure, together with the external relays that will drive the lighting contactors. This enclosure is designed to be installed by a local electrician.



Equipment enclosure



External Keypad and cable



Power Relays

Detailed Installation steps

Unpacking the Equipment Enclosure

Unpack the equipment enclosure

- Remove the external keypad.
- Remove the plastic bag containing the power relays
- Examine the Equipment Enclosure for loose parts.

Identification of the Equipment Enclosure Installation Site

Identify a suitable site for the equipment enclosure installation. The location should meet the following requirements:

- Provide protection from the weather and environmental contamination.
- Provide a secure location
- Be close to the switchboard and/or existing light switches
- Support installation of the external keypad within approximately 2 metres of the Equipment Enclosure.

Identification of the External Keypad Installation Site

Identify a suitable site for the external keypad installation. The location should meet the following requirements:

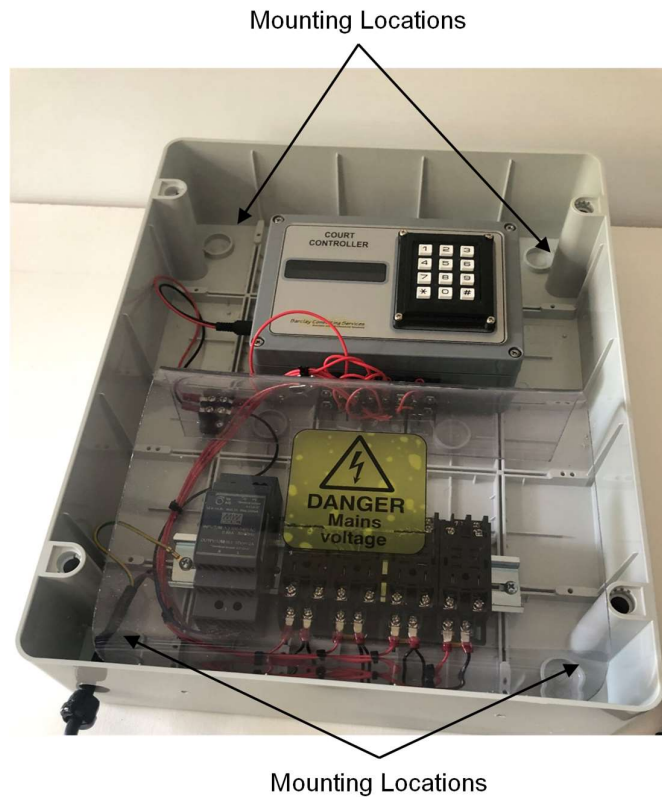
- Enable public access when facilities are closed up
- Be located within approximately 2 metres of the Equipment Enclosure.

Accessing Mains Power

Determine how mains power will be supplied to the Equipment Enclosure. This may require the installation of a power point within reach of the Equipment Enclosure power cord.

Mounting the Equipment Enclosure

- Remove the Equipment Enclosure top cover.
- Unscrew the acrylic safety shield to enable access to the power relays.
- Mount the Equipment Enclosure at the chosen location using the mounting holes indicated in the following diagram.



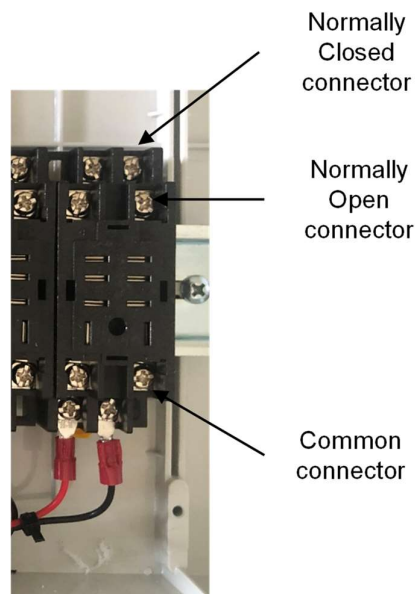
Mounting the External Keypad

- Drill holes required to route the keypad's attached cable to the equipment enclosure.
- Open the keypad with the special key / wrench that is supplied to expose the mounting holes - see following diagram.
- Fasten the keypad to the wall and run the cable through to the equipment enclosure.
- Mount the External Keypad at the chosen location using the mounting holes indicated in the following diagram.
 - The attached cable will need to be routed to the 6-way DIN connector on the left-hand side of the Light Controller.



Connecting the Power Relays to the Existing Lighting Circuits

- Connect the common and normally open connectors on the power relay holders in parallel with the existing lighting switches.
 - You will need to drill a suitable hole in the Equipment Enclosure to route the wires to the switches.
- Once the wiring has been completed, plug the power relays into the relay holders and
- Re-install the safety cover within the Equipment Enclosure.



Powering on the System

Turn the power on. The Light Controller should display “Controller Active” after about 20 seconds. The External Keypad should emit a low beep and the blue backlight should be visible.

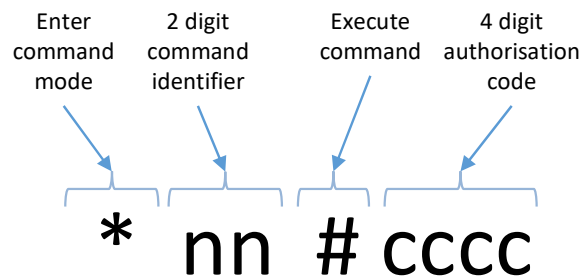
Setting the Initial configuration

Set/check the system time.

To enter command mode, press the “*” key on the Controller keypad.

Note: The Controller display will switch off 5 minutes after the controller has been activated. Press any key to switch the display on and activate the keypad.

The general format for entering an access controller command is as follows:



Note: the default 4-digit authorisation code is '1234'

| Command Identifier | Command | Description |
|--------------------|-------------------|---|
| 51 | Set date and time | Displays and sets the controller's date, time and day of the week Date: Day, Month and Year are all entered as two digit numbers e.g. Day=09, Month=11, Year=15 is 9/11/2015 Time: Hours and Minutes are all entered using a 24 hour clock format, two digit numbers for each e.g. HH=14, MM=09 is 2:09 PM. |

Set the Basic Configuration

Testing the System (Using the Controller Mounted Keypad)

The individual power relays can be activated by entering the following command sequences.

- Turn off auto mode

| Command Identifier | Command | Description |
|--------------------|---------------|---|
| 54 | Set auto mode | Sets or resets automatic mode. Auto mode controls the lights according to either downloaded bookings or manual PIN code entry. When auto mode is ON, commands 52 and 53 will not turn the lights ON or OFF. They are overridden by this control. To manually adjust lights auto mode must be set OFF. 0=n (OFF), 1=y (ON) |

- Set bypass light turn on time

| Command Identifier | Command | Description |
|--------------------|---------------------------|---|
| 58 | Bypass light turn on time | Removes the need for the controller to wait until the light turn on time is reached before turning on lights. This command is effective for a single day. |

- Activate and deactivate the individual relays

| Command Identifier | Command | Description |
|--------------------|------------------------|--|
| 52 | Turn on court light(s) | Requests the relay number and then activates the lights associated with that relay. Note that that Auto mode must be turned off for this command to take effect and Bypass Light Turn time must be enabled if the current time is before the scheduled light turn on time. The lights remain active until the command “53” is entered. |
| 53 | Turn off light(s) | Requests the relay number and then deactivates all associated lights with that relay. |

Setting the Final Configuration

This step should be performed by the system owner. The detailed configuration settings are described in the “BCS Light Controller Operations Manual”.

Appendix A: Wiring Diagram

