

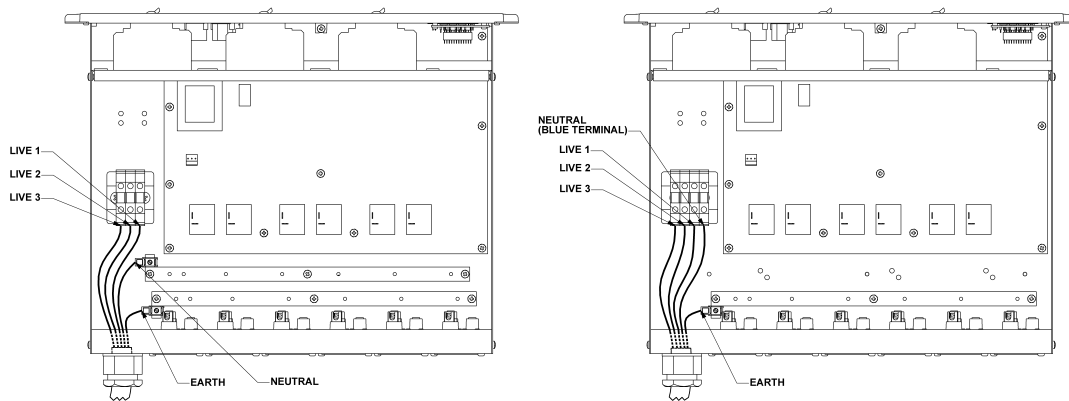
WARNING!
DO NOT REMOVE THE COVER WITHOUT FIRST
COMPLETELY DISCONNECTING THE SWITCH 6 FROM THE
MAINS SUPPLY

To Remove The Cover:

Isolate and disconnect the Switch 6 from the mains supply.
The mains supply terminals are located under the top cover.
Remove the four screws from the side end plates to lift off the cover.

Connecting The Mains:

The Switch 6 is supplied configured for three-phase operation. As shown in the diagram below;



Single Pole Breakers

Neutral Disconnect Breakers

A linking bar (part 00-380-00) can be supplied to order, for single-phase operation

Mounting/Installation:

The Switch 6 has side brackets for mounting in a standard 19" rack/case.

Ventilation:

The Switch 6 is cooled by natural convection. In order to prevent the unit from overheating, DO NOT block the vents located on either side of the unit.

Specification Overview:

The Switch 6 is a 2U 19" rack mounting switching unit, designed to meet the needs of the low cost touring market, offering six channels each capable of switching up to 10Amp loads.

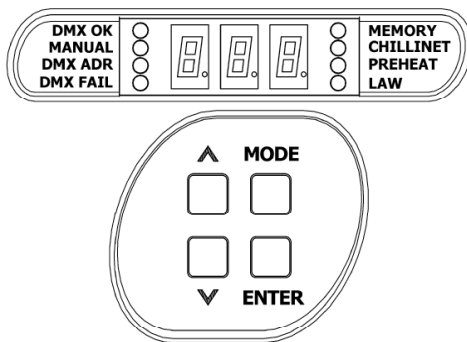
The unit is well specified, featuring breakers as standard, robust contactors and 12 memories for standalone operation. Remote operation is possible by DMX or Chillinet.



Control Interface

The main display consists of three seven-segment displays; the data displayed is dependent on the set-up mode of the unit. Around the outside of these displays are six LED's. Five of which indicate the current set-up mode of the unit, the sixth is used for DMX indication. The two LED's marked 'Preheat' and 'Law' are not used on the Switch 6.

The unit has a default mode, for operation. In this mode none of the set-up mode LED's will be lit, the main display will show the DMX address and if it has been terminated a small dot will be shown in the bottom right of the third display.



Mode Button:

The Mode button is used to cycle through the different set-up modes. They are;

- Manual
- DMX address
- DMX fail
- Memory
- Chillinet
- Default

Enter Button:

The Enter button is used to confirm actions.

Up & Down Buttons:

These are used to adjust the values shown in the main display. Pressing both buttons together will reset the display to the default values.

Set-up Modes:

Manual Control:

The Manual Control Mode allows the user to set-up a look on the unit without the need of an external controller.

Select '**Manual**' mode using the 'Mode' button. The display will show C.LL, where C is the channel number and LL is the level ('00' for Off, and 'FF' for Full). Select the channel you require or 'A' for all channels, using the 'Up & Down' Arrows. Press 'Enter' to toggle the level for that channel between Off and Full.

DMX Address:

The Switch 6 uses a start or block address, which can be set from 001 – 507.

Select '**DMX ADR**' using the 'Mode' button, the display will show the current DMX address. Select the required address using the 'Up & Down' Arrows.

DMX Fail:

There are three DMX fail modes available – 'fade to black', 'hold DMX' and 'fade to memory'.

Select '**DMX Fail**' using the 'Mode' button. Using the 'Up & Down' Arrows select your preferred choice from the list below;

Fail Mode	Main Display
Hold Last State	Hld
Fade to Zero	F00
Fade to Memory 1 - 12	F01 - F12

Note that the Switch 6 calculates fades internally, with the output transition occurring at a fixed level of 50%.

Memories:

The Switch 6 will store 12 memories for stand alone operation, these can only be re-called if there is no DMX present.

1. Set-up the scene using the '**Manual**' control function or a DMX controller.
2. Select '**Memory**' using the 'Mode' button.

Using the 'Up & Down' Arrows select the required memory number and press the 'Enter' button to confirm. A 'p' should appear next to the memory to signify that it has been programmed.

Holding both the 'Up & Down' Arrows for 1 second will clear the selected memory. If these buttons are held for 5 seconds, ALL memories will be cleared.

Chillinet:

Remote control of the Switch 6 is possible using the Chillinet connectors mounted on the front panel. Each unit on a Chillinet system must have a unique unit number.

To enable Chillinet and set the unit number, Select '**Chillinet**' using the 'Mode' button.

Set the unit number using the 'Up & Down' Arrows and press 'Enter', to confirm. The display will flash the unit number while it is checked against other units on the network.

If the unit number is found to be unique, then the display will return to being steady. If the unit number already exists on the network, the display will show '---'.

'---' indicates that Chillinet is disabled. To disable Chillinet, hold down the 'Up & Down' Arrows together.

Memory selection from Chillinet is only possible when a DMX control signal is not present.

The Chillinet network incorporates an 'Alarm' feature. If an Alarm message is received from another unit on the network, then the Switch 6 will fade all outputs to 80%, and the display will show 'ALA'. In this state, all other control (INCLUDING OVER TEMPERATURE SHUTDOWN) is disabled.

Note that the Switch 6 calculates fades internally, with the output transition occurring at a fixed level of 50%.

Super User:

The unit has a number of hidden functions, located in the Super User Menu. The super user menu's can only be accessed from the **Default** mode (No LEDS Lit). To enter Super User press and hold the 'Up & Down' Arrows together and press and hold the 'Mode' button for 5 seconds. All the mode LED's will flash to indicate the unit is in super user mode.

The 'Up & Down' Arrows are used to cycle through the various super user functions. Pressing the 'Mode' button at any point will revert to normal operation. If no buttons are pressed after 20 seconds the unit will automatically revert to normal operation.

Unit Lock/Unlock

Press the 'Up & Down' Arrows until the display shows "**LOC**". Press 'Enter' to confirm this action. The unit will revert to the Default mode. Pressing the 'Mode' button now will only cycle between **Manual Control** and **Default Mode**.

If Super User is entered when the unit is locked, only the unlock function will be available. The display will show "**UNL**". To unlock the unit, press and hold the 'Enter' button for 5 seconds. The unit will unlock and exit super user returning to the Default mode.

DMX Termination:

Press the 'Up & Down' Arrows until the display shows "**ter**". If the unit is terminated a dot will appear at the bottom of the last segment. Pressing the 'Enter' button will toggle between the two states.

Resetting The Unit:

Press the 'Up & Down' Arrows until the display shows "**rst**". Press 'Enter' to confirm. The display will flash briefly to confirm this action. The unit will be reset to its default settings, shown in the table below:

Set Up Parameter	State
Manual Control Levels	All Off
DMX Address	1
DMX Fail Mode	Hold Last State
Memory	Memory Cleared
Chillinet	Disabled
DMX termination	Disabled

Firmware Version:

To identify which version of firmware is loaded in the unit, press the 'Up & Down' Arrows until the firmware version is shown in the display (e.g. **1.03**). The 'Enter' button has no use here. (The firmware version will also be shown briefly on start up).

Internal Temperature:

Press the 'Up & Down' Arrows until the temperature is shown in the display, shown as **xxC**, where xx is the temperature in Centigrade. The 'Enter' button has no function in this mode.

Servicing Functions:

Versions of firmware prior to 1.03 include other functions within Super User, which are used for servicing and maintenance purposes. It is strongly recommended that these are only accessed by Zero 88 staff or an appointed Zero 88 dealer. From firmware version 1.03 onwards, these functions are hidden in normal operation.

SWITCH 6 USER GUIDE



Technical:

WARNING – DO NOT REMOVE THE COVER WITHOUT FIRST COMPLETELY DISCONNECTING THE SWITCH 6 FROM THE MAINS SUPPLY.

Electrical:

The Switch 6 range is designed to operate on 230V at 50Hz. The unit may not operate satisfactorily outside this specification.

- Mains Supply Voltage: 230V +/- 10%
- Single or 3 Phase (Star Only)
- Frequency: 45 – 65 Hz
- Channel Rating: 10A

Mechanical:

- Height: 88mm
- Width: 483mm
- Depth: 360mm
- Weight: 7.0kg (15.4lb)

DMX Connections

One male and one female 5 pin XLR connector. Pin assignment is:

Pin 1	0V
Pin 2	DMX- (RS485 B line)
Pin 3	DMX+ (RS485 A line)
Pin 4	Reserved
Pin 5	Reserved

DMX Indication:

On	DMX dimmer data (start byte of 00) being received OK.
Flash Fast	DMX data being received, but <u>not</u> dimmer data (start byte of 00)
Flash Slow	DMX data errors occurring.
Off	No DMX data being received.

Chillinet Connections:

Twin RJ12 connectors. Pin assignment is:

Pin 1	!! Factory use only. Do not connect !!
Pin 2	+12V
Pin 3	CAN-L
Pin 4	CAN-H
Pin 5	0V
Pin 6	!! Factory use only. Do not connect !!

Cooling:

Ambient Temperature: 0 to 40 Degrees Centigrade.

The Switch 6 is cooled by natural convection. An internal temperature sensor monitors the temperature. A warning, according to the table below, is shown on the display if the internal temperature rises above the normal operating level.

Temperature	Main display
<75C	normal
75C-95C	temperature
>95C	“hot”
sensor fault	“err”

Notes:

Zero 88 Lighting Ltd reserves the right to make changes to the equipment described in this manual without prior notice.

This equipment is designed for professional stage lighting control, and is unsuitable for any other purpose.

It should be used by, or under the supervision of, an appropriately qualified or trained person.

E&OE. Zero88 Lighting Ltd reserves the right to change the specification without prior notice.

Manual Stock Number: 7387700

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