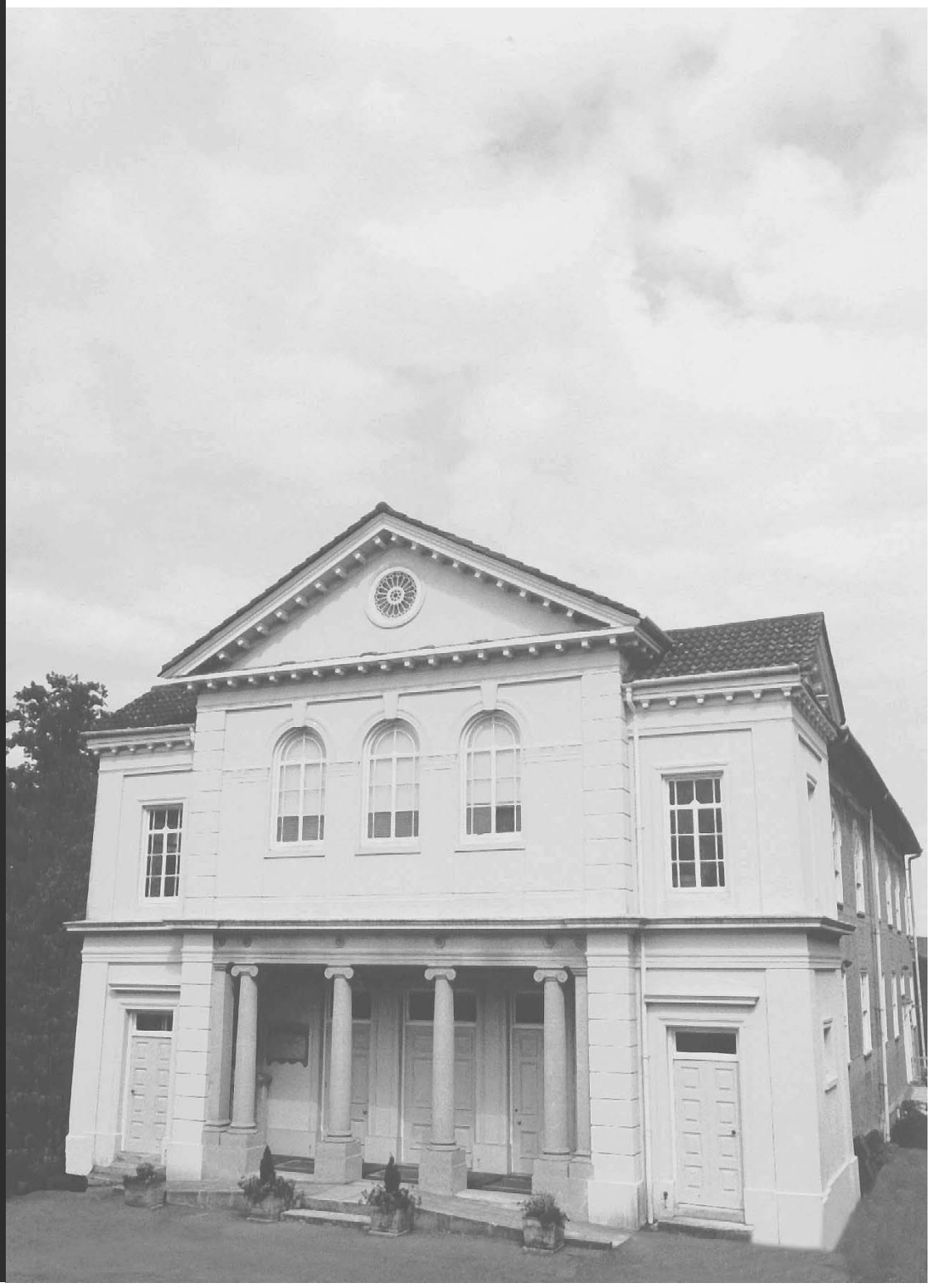
Maldon United Reformed Church

Market Hill, Maldon, Essex

A member of **CHURCHES TOGETHER *in* MALDON**

LIGHTING SYSTEM
Reference Manual



Introduction

During the refurbishment programme at Maldon United Reformed Church, the Church identified a need to incorporate new technology in order to enhance worship and better resource their buildings.

Video, lighting and sound equipment is now available to users of the buildings.

Lighting Technology

It is possible to set the house lighting in the Church Sanctuary to a scene setting. Also, in addition to all of the *house lighting* fittings being dimmable the Church also has a plentiful supply of standard small theatre stage lanterns (as detailed on the back cover of this booklet).

The stage lighting and houselighting systems are dimmable from a central dimmer (lighting mixer) board (Sirius 24 type) which can either be positioned at the back of the gallery or on the AV desk.

Contents of this Document

The Sanctuary with Gallery Level Stage Lighting

1. Video, Sound and Lighting Equipment List

(as at 06/02)

Video Equipment

Mitsubishi X-300 Projector	2000 Lumen Projector
Panasonic MX-30 Video Mixer	Three Source Video Mixer
Philips SVHS Video Recorder	SVHS Video Recorder
Hitachi VHS Video	VHS Video Recorder (mono)
Sony Handycam (Hi-8)	Hi-8 Colour Camera with Tripod
CCTV Colour Auto Iris Camera	Undergallery Camera for Organists and Projector Relay
Digital Windows PC	Computer loaded with Powerpoint and CCL Songselect
Logitech Cordless Desktop (2of)	Cordless Keyboard and Mouse sets (with switchbox)
Philips Colour Monitors 14inch (2of)	14" Colour Monitors
Philips 21" Colour TV/Monitor	21" Colour Monitor
Philips 14" Colour Monitor	14" Organ Monitor
Henrys 5" LCD panel displays (3of)	5" Monitors incorporated into the Video desk for Preview
Digital SVGA 17" Monitor	17" Monitor
1 into 8 PAL Video Distributor (2 of)	PAL Distributors
Farnell SVGA Distributor	1 into 4 SVGA Distributor
AverKEY 300	SVGA to PAL interpolator
Docucam	Colour PAL Document Camera for projecting paper images.
AM Two Button Remote Control	Powerpoint Forward and Back
FM Four Button Remote Control	Powerpoint Forward and Back control, plus House Lighting Control

Lighting Equipment

Dimming

Zero 88 Sirius 24	24 Channel Lighting Board
Lightfactor Paradime Dimmer Packs (6ch/pack)	4 of. Lighting dimmer modules (24 channel) (2x 15A sockets per channel)

A more than adequate supply of 15A plug-socket type extension cables is provided
(also 2x 63A inline to 13A plug adapters)

Lantern Stock

Thomas 650w Fresnel (10 of)	650w Fresnel Lantern
CCT Silhouette 30 1kw (3 of)	1kw Profile
CCT Minuette Zoom Profile (7of)	650w Zoom Profile
CCT Minuette TT 30deg. Profile (3of)	650w Fixed (30) Profile
Thorn Type Track Lights (8 of)	100w Clip Trackspots
4 foot Ultra Violet Fittings (4of)	Ultra Violet Effects Lighting

Sound Equipment

Mackie CR1604	16 Channel 4buss Mixer (phantom power and balanced XLR's on each input)
Denon Twin Professional	Rack Mount Double Cassette Recorder
Denon CD Player	CD Player
Induction Loop	Deaf Loop
InterM 100v Line Amp	100V Type Amplifier
InterM 8ohmn Amp	8ohmn 150w Amplifier
20w 'Keith Monks Audio'	100v Line Speakers
40w 'Keith Monks Audio'	100v Line Speakers
Ramsa 8ohmn Speakers	8ohmn 250w speakers
TOA Lapel Mic. (not diversity)	Lapel Radio Mic
TOA Handheld Mic (not diversity)	Handheld 'Stick' mic
Trantec Lapel Mic	Lapel Radio Mic
Yamaha Monitor Speaker	20w Monitor Speaker
Yamaha monitor speaker	10w Monitor Speaker (2of. on tripod stands)
Stageline DI Boxes (2of)	Direct Input Boxes
AKG wired stick mic's on stands (7of.)	Stick type microphones

Additional Resources Available:

- Martin Junior Fogger700 - Remote Controlled Smoke Machine
- 9 Orchestral Type Music Stands are available (with music stand lights on request)
- A Yamaha Clavinova exists in the church sanctuary area, for Piano, Harpsichord and Electric Piano.
- An A4/A3 Photocopier is available in the vestry of the church.
- A conventional OHP is available.

2. Diagram of the Lighting Dimming System (as found beside the organ)

The diagram below shows the 4 paradime dimmer units, as mounted beside the organ.

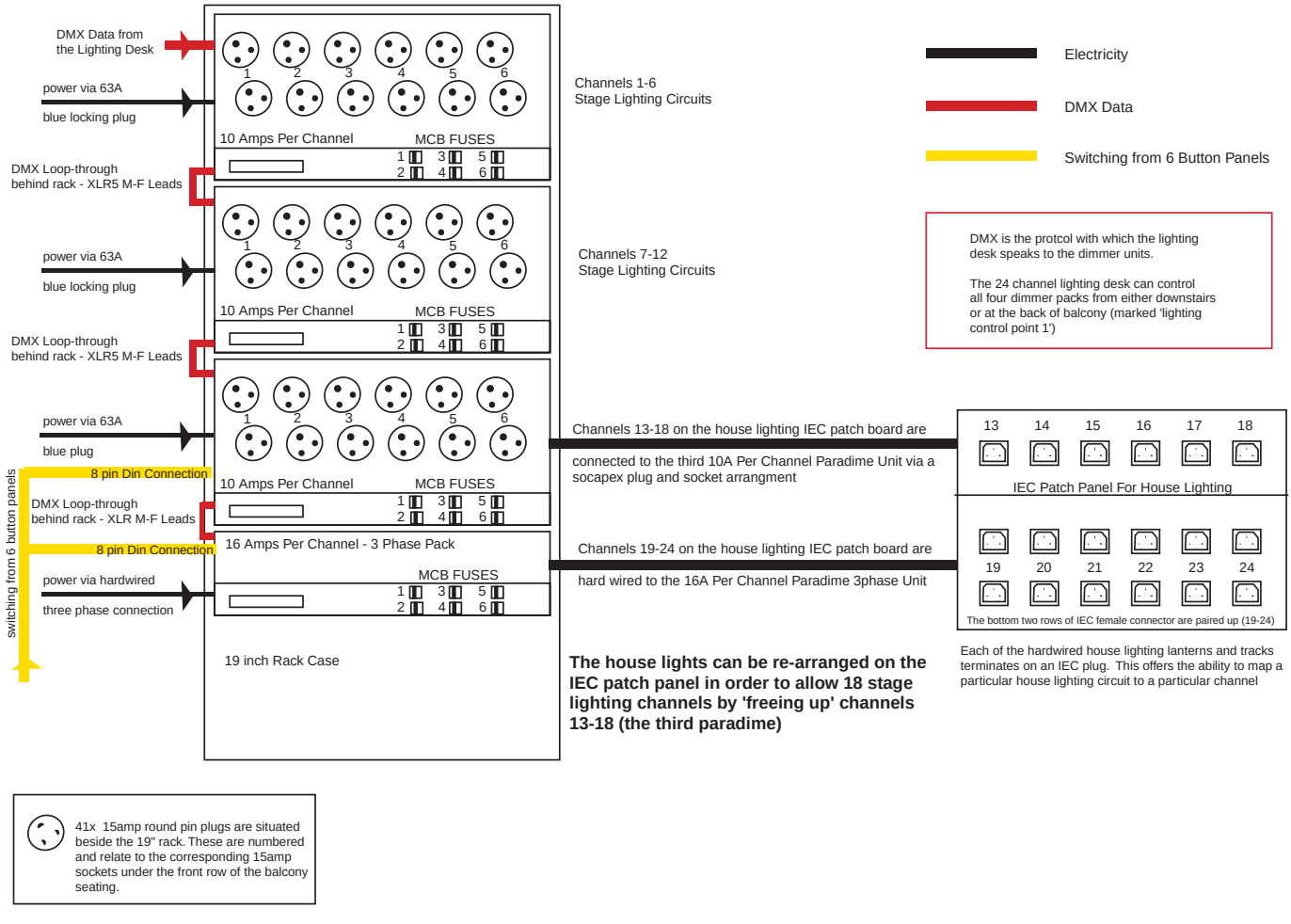
The channel numbers are 1-6 for the top, 7-12 for the second, 13-18 for the third and 19-24 for the bottom.

The top two dimmer packs are reserved for the stage lighting, the bottom two packs (ch. 13-24) are wired to an IEC patchbay which is illustrated in more detail later in this document.

At the top left of the diagram is the point where DMX data from the lighting (mixer) board connects to the dimmers, the DMX signal is then 'daisy chained' to the other three packs.

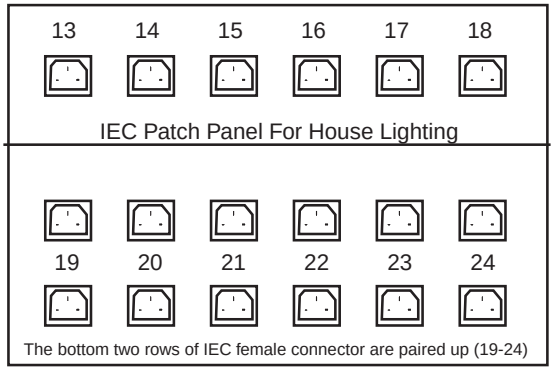
Three 6 button switch panels mounted on the wall on the ground floor is connected to the bottom two dimmer packs in order to switch between the 6 stored scenes. Please refer to the paradime manual in order to store (record) programs. Number 6 has been assigned as OFF, with 1 as all ON.

The 6 buttons scenes are set by first using the lighting mixer to achieve the desired mix of house lighting and then going to the third and forth dimmer packs and storing the scene.

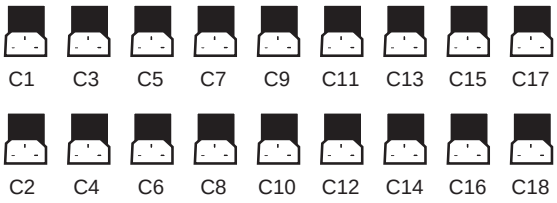


3. Detailed diagram of the houselighting IEC patch panel as found beside the organ

In order to patch the desired house lighting circuit to any of the channels numbered 13-24, the IEC patch panel allows the plugs to be routed to the appropriate channel on the sockets (as labeled below). Channels 19-24 have two IEC sockets as the bottom dimmer pack is capable of dimming 16A of current, as opposed to the other three which can only dim 10A per channel.



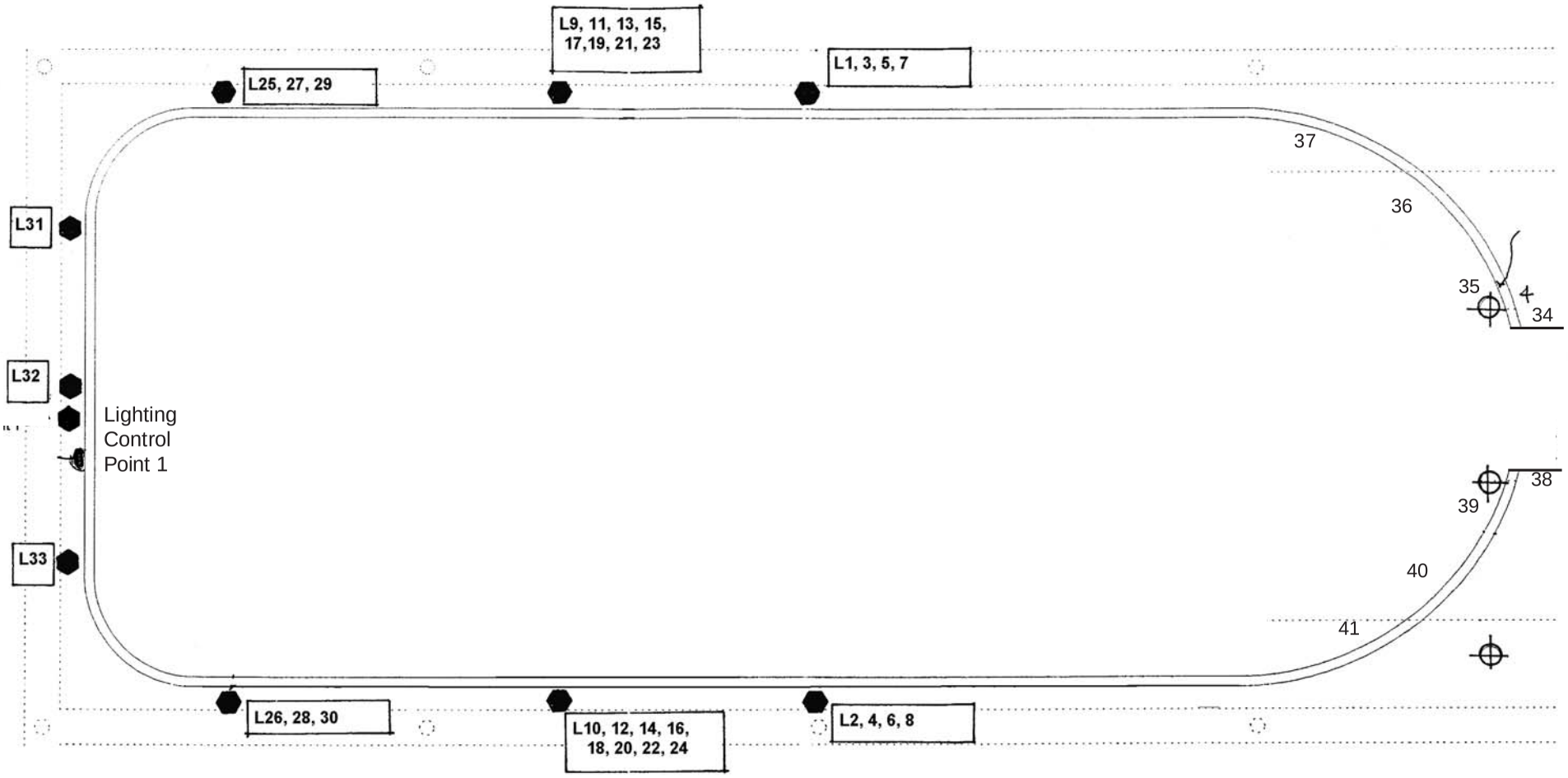
Each of the hardwired house lighting lanterns and tracks terminates on an IEC plug. This offers the ability to map a particular house lighting circuit to a particular channel



Houselighting Circuits
(each connected to an IEC plug)

C1 Gallery 'bowl' uplighters
C2 Gallery 'bowl' uplighters corners
C3 Undergallery 'bowl' uplighters (Left)
C4 Undergallery 'bowl' uplighters (Right)
C5 Ceiling Lanterns - Congregation
C6 Ceiling Lanterns - Rostrum (4)
C7 Ceiling Lanterns - Rostrum (Centre 2)
C8 Ceiling Lanterns - Organ (4)
C9 Undergallery Eyeball on Door (Right)
C10 Undergallery Eyeball Fittings (Right)
C11 Undergallery Eyeball Fittings (Left)
C12 Undergallery Eyeball on Door (Left)
C13 Rostrum Lighting Track (Left)
C14 Body of Church Lightinng Track (Left)
C15 Body of Church Lighting Track (Right)
C16 Rostrum Lighting Track (Right)
C17 SPARE
C18 Rostrum Cross (Cutout) Eyeball Lights

The theatre lighting circuits are 15A Round pin sockets (under the gallery front row seating) to 15A round pin plugs beside the dimmer rack. Sockets and Plugs are Labelled as follows (numbers 34-41 are around the curve on the rostrum downstairs):-



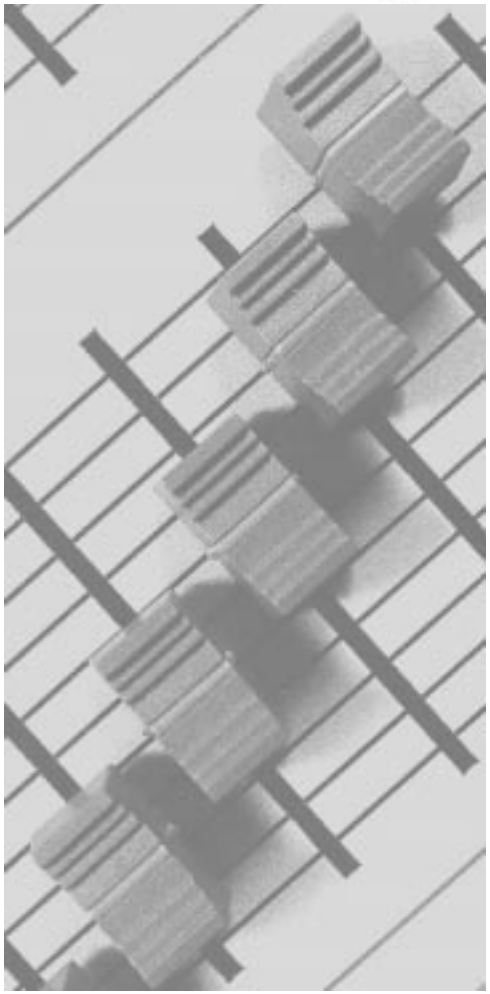
Appendix

1. **Sirius (Tirone) 24 Manual**
2. **Paradime Dimmer Pack Manual**
3. **Paradime 10A Specification**
4. **Paradime 16A Specification**
5. **Paradime 6 Button Panel Information**

Appendix

1. Sirius (Tirone) 24 Manual

the INFORMATION pack



Sirius 24
and
Sirius 48
Manual

zero 88
A touch of Brilliance

Warning

When using a Sirius on portable or temporary three phase supplies, **ALWAYS** unplug the desk before connecting or disconnecting the supply.

Sirius 24 and Sirius 48 Manual

Edition 3 - May 1999

Stock No 73-570-00
For desks fitted with DMX and Analogue output.
(Software versions 4322, 4422, 4522 or 4323, 4423, 4523.)

Zero 88 Lighting Ltd
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Contents

Introduction

This Manual
This manual describes the operation and programming of a Sirius 24 or a Sirius 48.

It begins with simple two preset operation, and progresses in easy stages to running complete, complex shows.

Each section begins with a basic description of controls and functions, followed by a step by step, diagrammatic guide, provided to give the first time user a “hands-on” approach.

Notes are included in each explanatory section to provide more detailed information on some of the desk’s features, together with Hints giving suggestions as to possible applications.

There is no difference in the operation of the two Sirius desks.

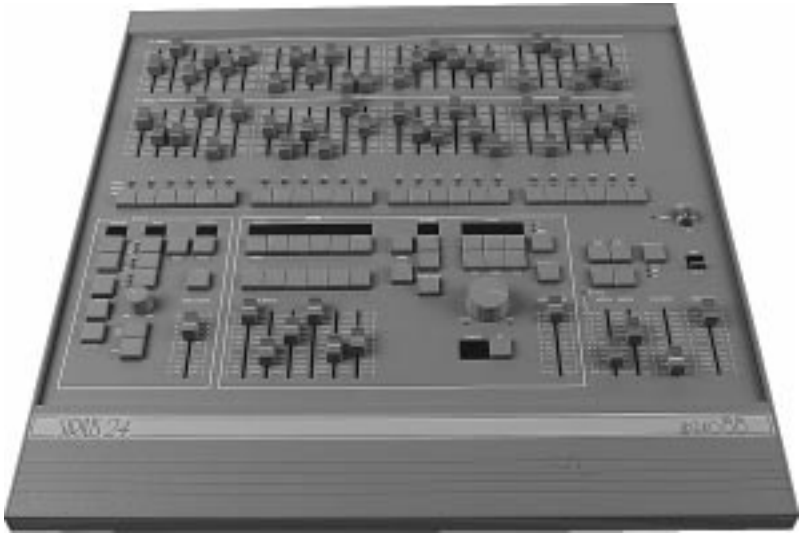
The Desk
The desk is divided into five distinct sections: Master controls, Presets, a Memory section, an Effects section, and the Super User function. These sections can be used to control the output channels in a variety of ways.

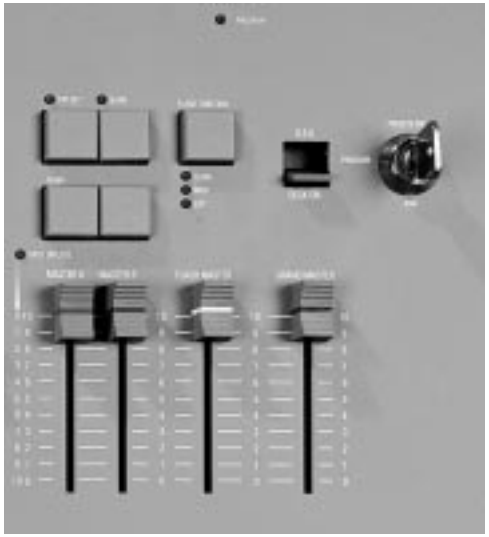
* The Master controls provide overall control of the entire desk.
* The Presets offer manual control of individual channels.
* The Memory section allows storage and retrieval of lighting scenes.
* The Effects section allows storage and retrieval of chase and audio effects.
* The Super User functions allow protected access to functions that affect the overall desk operation including Memory Card saving and loading.

The Memory Card
A Zero 88 Memory Card will store all the memories of a Sirius 24 or Sirius 48.

A memory card which has been used to store the memories of a Sirius 24 may be loaded into a Sirius 48 but will affect only Channels 13 through to 36.

Linked desks may also save their memory onto separate memory cards but the link must be disconnected when this is in progress.





These controls set the general operating conditions for the entire desk. The Master functions determine the mode of operation, the functions of buttons throughout the desk, and the maximum output level for any channel.

Master Controls

ON/OFF SWITCH:
Supplies power to the desk.(Back panel*)*

KEYSWITCH:
Selects preset, run, or program mode.

GRAND MASTER :
Sets maximum level for all outputs.

FLASH MASTER:
Sets maximum flash level for channel and memory buttons in flash mode.

D.B.O.:
Dead Black-Out, kills all desk outputs. *The letters* 'dbo' *appear in the Autofade display.*

FLASH FUNCTION:
Determines the function of flash buttons.

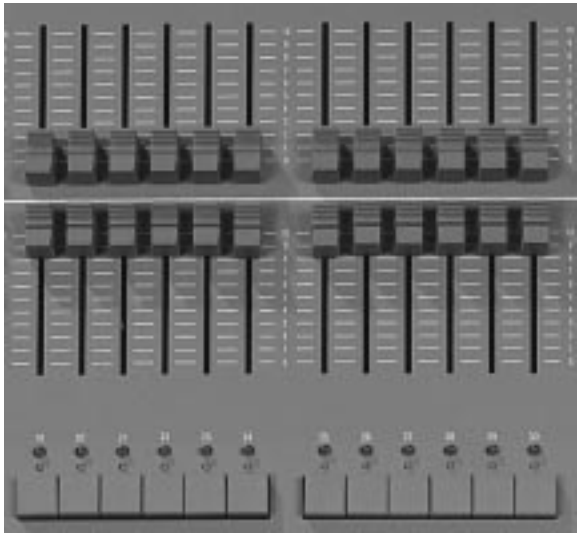
TOP SET:
Enables individual channel inhibit control.

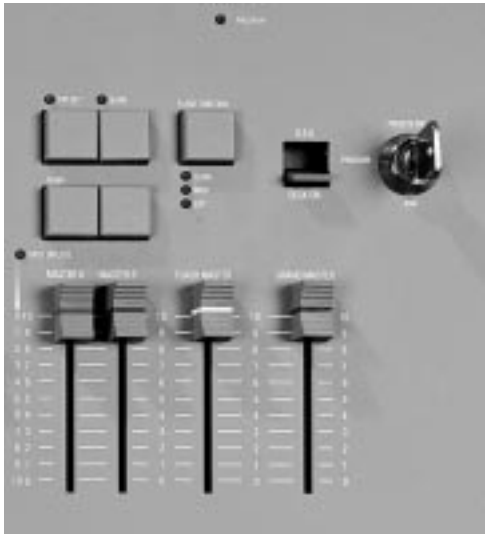
BLIND:
Allows programming/editing without affecting outputs.

NOTES

* Turn On Delay
  After the desk is switched on there may be a delay of up to ten seconds before the desk is fully operational, this is normal.
* Keyswitch
  The key is removable, except in the Program position. This stops the desk being tampered with whilst the operator is away.
* Flash Function
  When set to Flash, pressing a flash button will cause the channel, memory or effect to be mixed in to the current outputs, at a level determined by the Flash Master setting.
  When set to Solo, pressing a flash button will cause the channel, memory or effect to be output at the level of the Flash Master, with all other outputs suppressed.
  Note, when Edit mode is selected, Flash Function, and all Master Flash buttons are disabled.
* Use as a Slave Desk
  The Manual Master Flash buttons should not be used while either or both Master A Flash and/or Master B Flash buttons are being used.

Presets Only Operation





In Presets Only, all effect and memory functions are disabled, offering a completely manual system.

A scene can be set up on Preset A or B using the individual channel faders. The A and B master faders can then be used to manually crossfade between scenes while still under overall control of the Grand Master.

The green channel lights always show the actual output of each channel (i.e. the signal sent to the dimmers, and hence to the lanterns).

Preset Controls

PRESET A/B:
Two sets of faders controlling individual channels.

MASTER A/B:
Sets the maximum level of Preset A/B.

MASTER A/B FLASH:
Flashes Preset A/B to the level of the Flash and Grand Masters (see Notes).

CHANNEL FLASH:
Whilst pressed, individual channels are flashed. These buttons may be disabled within Super User.

OUTPUT LIGHTS:
Brightness indicates current channel output.

NOTES

* Master A Inversion (Split Dipless Crossfade)
  An option in Super User offers the possibility of inverting the action of the Master A fader. Full on is at the bottom of the scale, crossfades are now achieved by moving the A and B faders in tandem. A red light next to the Master A fader indicates whether this inversion has been selected. For further details see page 26.
* Master Fader Levels
  For each channel the level of the output is determined by the channel fader, and the Master A (or B) fader, and the Grand Master. i.e. with all three set to 50%, the total effect is 0.5 x 0.5 x 0.5, so that the channel will be output at 12.5% .
* Master A/B Faders
  With Master A/B faders up, the levels on Presets A/B will be output from the desk directly. This applies whatever the position of the keyswitch.
* Disabling the Channel Flash / Solo Buttons
  An option in Super User allows these buttons to be disabled
* Channel Flash Override
  The Channel Flash option can be modified by changing a Super User option- see page 26.

Turning on the Desk

1 Switch on the desk using the mains switch on the back panel.

2 Ensure the **D.B.O.** switch is also on.

3 Set the **Grand Master** fader full on (UP).

4 Set the **Flash Master**, **Master A** and **Master B** faders to zero (DOWN).

Setting Up Presets Only

1 Turn the keyswitch to select ***Presets Only***. *The Memory Display* shows *'Presets Only'*.

* NOTE: Turning on the desk and selecting 'Presets Only' is referred to throughout this manual as 'Setting up the desk'.

2 Set up one scene, by setting the required levels for each channel on the **Preset A** faders, and a different scene on **Preset B**.

Fading Between Scenes

1 Slowly fade up **Master A**. *The green output lights correspond to the desk output.*

2 To manually fade into the next scene, simultaneously push **Master B** up to full, and pull **Master A** down to off. You have direct control over the speed of the scene change.

Flashing a Channel

1 Press **Flash Function** to select **Flash**.

2 Set **Flash Master** to full.

3 Press and HOLD an individual channel **Flash** button. This channel has been added into the scene at the level set by the **Flash Master**.

4 Vary the level set by the **Flash Master** to see the effect.

Soloing to a Channel

1 Change the **Flash Function** to **Solo**.

2 Press and HOLD an individual channel **Flash** button. This time the channel has come on to the level set by the **Flash Master**, with all other outputs killed.

3 Release the **Flash** button to return the desk to its previous state.

Flash/Solo For Whole Presets

1 Press **Flash Function** to select **Flash**.

2 Set **Flash Master** to full.

3 Set **Master A** down to off and push **Master B** up to full.

4 Press the **Master A Flash** button to see the effect of flashing a complete preset/scene.

5 Change the **Flash Function** to **Solo**.

6 Press and HOLD the **Master A Flash** button. This time the complete preset/scene has come on to the level set by the **Flash Master**, with all other outputs killed.

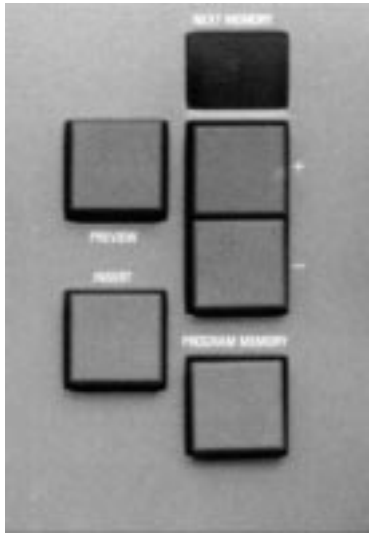
HINTS

* Grand Master Fader
The Grand Master fader is usually set to full on during normal desk operation.

* Solo
The action of Solo can be particularly useful for creating a sudden dramatic change, such as a lightning flash or explosion effect.

* Use as a Slave Desk
During Slave operation, we recommend that the individual **Preset** channel **Flash** buttons are not used with the **Flash *Function*** set to **Solo**.

Programming The Memory



The Memory Store
The Memory Store is a cue list for 99 programmed memories, which may be given individually specified fade up and down times. It provides an easy way of recording 99 scenes, which would otherwise have to be set up manually on Presets A/B. The store may contain scenes, and/or up to 200 effects (see Advanced Effects section), and acts as the core of the Memory desk. A further 90 Insert Memories are also available (see Advanced Memory Features section). A scene may be previewed *(indicated by the display flashing)*, before it is transferred to the outputs.

Programming
The scene to be recorded is set up on the B Presets. Any number of channels at any level may be assigned to each memory. Pressing the Program Memory button, assigns the Preset B levels to the chosen memory. The preview lights will come on to verify the data has been recorded. An empty memory in the Store is indicated by a dot shown in the bottom right corner of the 'Next Memory' display. Previewing is locked on when in Program, and the action of Preview buttons determines whether the Memory Store or Effects patterns are displayed on the yellow preview lights, and hence which can be programmed.

Programming Controls
+ / - :
Selects memory to be programmed

MEMORY PROGRAM:
Transfers Preset B levels to memory

PREVIEW:
Enables Memory Store previewing and programming

MASTER B:
Sets maximum channel level within memory

PRESET B:
Sets individual channel levels for programming

BLIND:
Disconnects B Preset from the desk outputs

NOTES

* The Blank Memory
  The blank memory "- -" cannot be programmed. This memory is selected automatically at turn-on, or by pressing both + and - buttons together.
* Error Message -??-
  Error messages are listed on page 29.
* Preset A
  Programming is not possible using Preset A

Setting Up the Desk for Programming

1 Set up presets only with ALL faders at zero (except **Grand Master**).

2 Turn the keyswitch to **Program.** ***Program*** *light will illuminate.*

3 Push the **Master B** fader to full, and ensure **Blind** is off.

4 Check the memory store is currently being previewed *(i.e. the Next Memory display is flashing)*, if not press Preview.

Programming a Memory

1 Select an available memory number (**Next Memory**) to be programmed using the '**+**' and '**-**' controls.

2 Set up a scene on preset B.

3 Briefly press **Program Memory** button to transfer the **Preset B** levels to memory. *The new memory is immediately displayed on the yellow preview leds, to verify that this information has been recorded.*

4 Repeat steps 1 to 3 to program additional memories.

Clearing a Memory

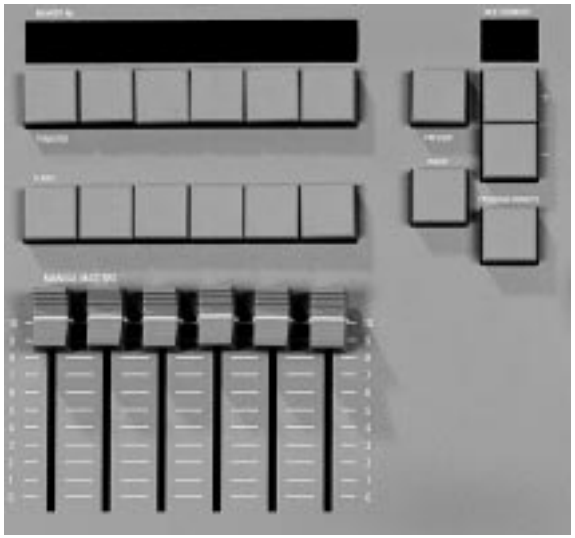
1 Ensure **Blind** is off and set **Master B** down to zero.

2 Briefly press **Program Memory** to create a blank memory *(ie a memory with no channel levels store so the preview lights are off)*.

3 Press and hold **Program Memory** for 1 second to clear the memory from the store, and create an empty memory *(a dot appears in the display)*.

HINTS

* Programming Appears Not To Work
  Check that Master B is up to full, since with Master B at zero, a blank memory will be programmed. This will result in the dot disappearing from the corner of the Next Memory display, but nothing appearing on the preview lights. Simply fade up Master B and reprogram the memory.
* Blind Programming
  Selecting Blind disconnects the B Presets from the outputs (see Advanced Memory Section).
* Reprogramming a Memory
  If the memory chosen is not empty, pressing the Program button will overwrite any previous information with the current settings of Preset B; the old memory will be lost.



Memories from the Memory Store may be assigned to Manual Masters in both Run and Program. Each Manual Master then manually controls the output level of a complete memory, which can be faded in and out, flashed or solo'd.

Operating the Manual Memories
In both Run and Program, the Manual Master faders offer direct manual control over the memory output level. The Manual Master Flash buttons will Flash or Solo complete memories (Run only). In Program, the Flash/Solo functions are disabled; the Channel Flash buttons are now used for editing individual channels within memories (see Advanced Memory Section).

Manual Master Controls
+ / - :
Selects Next Memory. Both pressed selects " - - "

TRANSFER:
Allocates Next Memory to the selected Manual Master

MANUAL MASTERS:
Set the maximum channel level for each memory

FLASH:
Run only. Flashes/solos the Manual Master memory

PREVIEW:
Memory displayed on preview lights (see notes)

NOTES

* Previewing In Run
  Preview may be locked on by holding the Preview button for two seconds. To turn off, press again briefly.
* Error Er -NP-
  Error messages are listed on page 29.
* Auto-Increment
  In Run mode (but not Program), when transferring a memory to a Manual Master, the next memory selected is automatically advanced. Hence pressing each transfer button in turn will automatically assign consecutive memories to the Manual Masters. In this way the entire cue list may be run through manually, in sequence, via the Manual Masters.

Transferring a Memory to a Manual Master

1 Set up presets only.

2 Select **Run**.

3 Select a programmed memory number in the **Next Memory** display to be assigned to the manual master using the '**+**' and '**-**' buttons.

4 Press the **Transfer** button. The memory number now appears in the section of the **Memory No** display above the **Transfer** button.
Note that the Next Memory has been advanced to the next programmed memory in the store (does not occur in Program).

Outputting a Manual Master

1 Repeat steps 3 and 4 above to transfer further memories from the Memory Store to the **Manual Masters**.

2 Output a **Manual Master**, either by fading up the **Manual Master** fader, or by using the **Flash** button (**Run** mode only, ensure the **Flash Master** is up!).

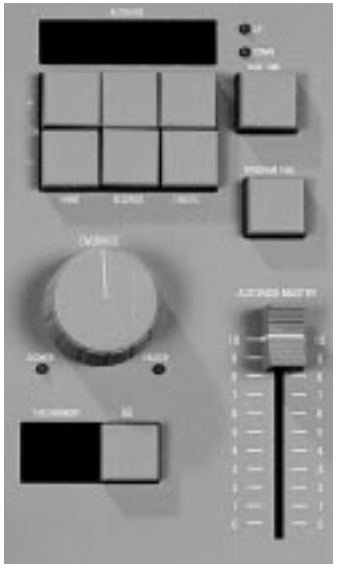
Previewing a Manual Master

1 Press and hold the **Preview** button, while holding it press the transfer button of the **Manual Master** to be previewed *(the display of the previewed Manual Master will flash)*. Alternatively preview the memory direct from the Memory Store.

HINTS

* Cancelling Manual Master Output
A manual master may be temporarily cleared from the outputs by pulling the Manual Master down to off. Setting the Flash Master to zero and pressing Flash will also work if the desk is set up for Channel Override (see page 26).
* Emptying a Manual Master
To permanently empty a Manual Master, simply select the blank pattern " - - " in the Memory Store (by pressing + and - together), and transfer it to the Manual Master.
* Transfer to two Manual Masters
Pressing two transfer buttons at the same time will transfer the same memory to both Manual Masters.
* Overwriting a Manual Master
Transferring a new memory to a Manual Master will clear out the old memory regardless of the position of the Manual Master Fader.

Autofade Programming



Memories from the Memory Store may be output automatically through the GO button. GO provides automatic sequencing of memories in a single action.

Scenes are automatically faded in and out at speeds determined by their pre programmed fade times.

Autofade Times

Separate up and down fade times can be programmed for any memory in Memory Store, including Insert Memories and Effects.

Times can vary from instantaneous, up to a maximum of ten minutes, in tenth of a second intervals.

Autofade Controls

PREVIEW:
Enables Memory Store previewing and programming

+ / - :
Next Memory select

FADE TIME:
Enables programming of up / down fade times

MINS/SECONDS/TENTHS:
Used to select required fade times

PROGRAM TIME:
Enters fade time into memory store data

NOTES

* Blank Memories
A memory with all channel levels programmed to be zero, is a blank memory. Such a memory may be assigned up/down fade times as normal. These are often used where a fade to blackout is required within a sequence.

Setting Up the Desk

1 Set up presets only.

2 Turn the keyswitch to **Program**.

3 Check that the Memory Section is being previewed *(i.e. Next Memory display flashing; , if not, press memory **Preview**)*.

Programming Fade Up Times

1 Select the memory to which fade times are to be assigned.

2 The ***up** light is on,* so fade up time programming is selected using the '**+**' and '**-**' buttons.

3 Adjust the minutes, seconds, and tenths until the required fade up time is shown on the **Autofade** display.

4 Press **Program Time**, to record this time into the memory store data. *The **up** light will stop flashing to verify that the time has been recorded. The **down** light will automatically come on.*

Programming Fade Down Times

1 Adjust the minutes, seconds, and tenths until the required fade down time is shown on the **Autofade** display.

2 Press **Program Time**, to record this time into the memory store data. *The **down** light will stop flashing to verify that the time has been recorded, the **up** light will come on automatically and the **Autofade** display will show the **up** time.*

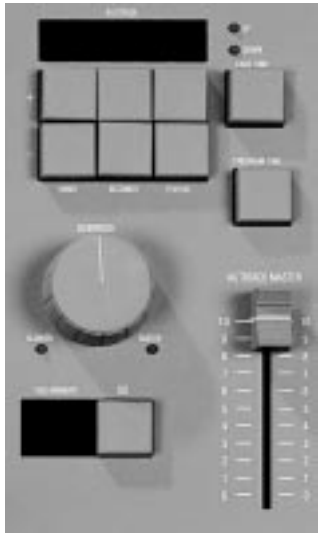
Note: Pressing the **Fade Time** button changes from up to down time programming and vice versa.

HINTS

* Default Fade Times

A memory which has no fade time programmed will automatically be assigned a zero fade up, and down time. Hence Go can be used without programming any times, but in this case, each scene change will be instantaneous.

Autofade Operation



The action of GO is to advance the desk outputs to the Next Memory, in the specified fade times, and to automatically select the next programmed memory in the store as the Next Memory.

Provision is made for direct override of both memory order and fade times.

Throughout a crossfade, the times displayed represent the time remaining before the outputs reach their recorded level.

Operating Controls

+ / - :
Next Memory select. Both pressed selects " - - "

GO:
Initiates transfer of next memory to outputs

FADE TIME:
Displays residual fade up / down times

OVERRIDE:
Modifies speed of current fades

AUTOFADE MASTER:
Sets maximum channel output level

PREVIEW:
Previews Next Memory channel levels and fade times

NOTES

* Fade Time Display
  In Run, the Autofade display will automatically show the fade up time when a new memory is transferred to the outputs through Go.
* Previewing Fade Times
  Fade Times associated with the Next Memory are flashed while preview is held.
* Override - Instantaneous to Static
  Turning the override fully anticlockwise, will temporarily freeze any fades in progress. Turning fully clockwise will cause an instantaneous change over.

Setting Up Memory Store

1 Set up presets only.

2 Turn the keyswitch to **Program**.

3 Fade the **Autofade Master** up to full.

4 Program two consecutive memories to have fade up and down times of a few seconds *(see Autofade Programming)*

5 Ensure that the first of these is displayed in the **Next Memory** window.

6 Turn keyswitch to **Run**.

7 Press and hold the memory **Preview** button to lock preview on. The memory fade time will be shown on the **Autofade** display.

8 Press **Fade Time** to select up or down fade times to be viewed.

Using the 'Go' Button

1 Press the **GO** button.

2 The **Autofade** display shows the time remaining until the outputs reach their recorded level (the **up** time).

3 Press **GO** again to initiate the crossfade to the next memory. *There are now two fades in progress, select **up** to watch the fade up time of the second memory, select **down**, to watch the time remaining until the previous memory has faded to zero.*

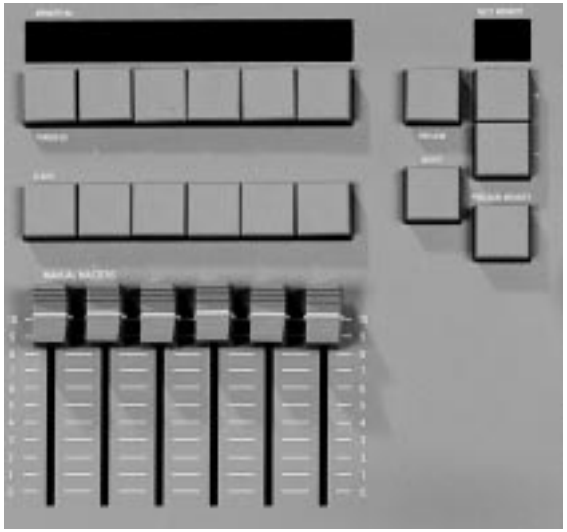
Overriding Fade Times

1 Turn the **Override** anticlockwise. The fade is slowed. Fully anticlockwise stops the fade.

2 Turn the **Override** clockwise to speed up the fades, fully clockwise gives an instantaneous change over.

HINTS

* Cancelling Outputs
  The memory store output may be cancelled, either by pulling the memory master to zero, or selecting "—" as Next Pattern, and pressing GO.
* Fading in one cue on top of another
  In order to fade in a memory, and leave it set while further scenes are faded in and out, simply fade in the first memory using Autofade as normal. Then transfer this memory to a Manual Master before fading in any other scenes.
* Override Action
  Operation of the Override control causes both up and down times to be changed simultaneously. If the times are of different lengths, then Override will only affect the longer of the two times when the shorter is complete.
* Equal Fade Times
  When the fade down time of one memory is equal to the fade up time of the next, the crossfade is dipless.



Edit
Edit mode is automatically selected when the desk is in Program mode. Channel flash buttons are now used to edit individual channels within any memory

Blind
Memories may be programmed either “live” or “blind”. In “blind” mode the B Preset levels do not affect the desk outputs, allowing for memories to be updated during use. When programming blind, B Master is effectively set to full up, and hence does not affect the overall level of the memory being programmed.

Level Match
Level Match enables a programmed memory to be recreated on the B Presets exactly as it was recorded. It operates in Run only and makes detailed memory editing very easy.

Insert
In Program the Insert feature allows the addition of an extra memory or memories between two adjacent memories. For example, if memories 16 and 17 are already programmed, Insert will add a new memory between them. These are called Point Memories and are programmed in the normal way.

Each point memory number is unique and can only be inserted once. The number of the Point Memory is allocated by the desk in strict numerical sequence beginning at 0.1 and ending at 9.9. This allows an additional 90 memories anywhere in the memory store.

Point Memories which have been added but not programmed will not appear in Run mode.

A deleted Point Memory will not be available for reinsertion until all other Point Memories in numerical sequence have been used.

Level Topset
Level Topset enables the faders on Preset A to be used to set the maximum output level for each channel. This level will not be exceeded by any other desk function. This is particularly useful for adjusting the output of a channel, without affecting the programmed information, e.g. when a lamp is knocked during a show, it can easily be turned off until it has been repositioned.
IMPORTANT: Always ensure that the Master A fader is at zero before Topset is turned on or off.

Manual Master to Memory Store
Any combination of Manual Master memories (not including effects) can be added together into a single memory in the Memory Store (Program only). Thus two or more memories can be added together to create a new memory.

Edit a channel in memory

1 Set up presets only.

2 Fade **Master B** full up.

3 Select **Program** and the memory to be edited for live editing.

4 If required, transfer the memory to a **Manual Master** and fade it to full.

5 To edit an individual channel, move the **Preset B** fader to the required level and press the channel **Flash** button to record the new channel level into memory.

Blind Programming

1 Turn the keyswitch to **Program**.

2 Turn **Blind** on.

3 Select memory (**Next Memory**) to be programmed.

4 Set up a scene on **Preset B**. Note that the **Master B** fader has no effect on the desk outputs

5 Press the **Program Memory** button to transfer the preset B levels to the memory as before.

Using Level Match

1 Turn the keyswitch to **Run**

2 Set **Master B** to zero

3 Press and hold memory **Preview** to lock preview on. Press **Blind** once. The channel **Preview** lights will flash *quickly* on any channels where the channel level on **Preset B** needs to be *decreased* to match the programmed level. The channel **Preview** lights will flash *slowly* on any channel where the channel level on **Preset B** needs to be *increased* to match the programmed level.

4 Adjust all the **Preset B** faders until all the channel **Preview** lights are on continuously.

Preset B now matches the previously programmed level for all channels. Fade up **Master B** and turn the keyswitch to **Program** to edit and reprogram the channels in the usual way.

Inserting a New Point Memory

1 Turn the keyswitch to **Program**

2 Select memory (**Next Memory**) after which the insert memory is to be inserted using the '**+**' and '**-**' controls.

3 Press the **Insert** button and hold it down for at least one second. *A new Point Memory number will be displayed in the Next Memory display.*

4 Program this new memory in the normal manner

Removing a Point Memory

1 Using the '**+**' and '**-**' controls, select the Point Memory that is to be removed on the **Next Memory** display

2 Ensure **Blind** is off and **Preset Master B** is at zero.

3 Press and hold down **Program Memory.** The point memory will become a Blank Memory

4 Press and hold down **Program Memory** again, The memory will be removed completely.

Using Level Topset

1 Set **Master A** to zero and all **Preset A** faders up to full.

2 Press and HOLD the **Top Set** button for at least one second until the light comes on.

3 Set the level of the **Preset A** faders to represent the maximum output level for each channel.

Note: When **Top Set** is on, pressing and holding it on until the associated light goes out, will switch **Top Set** off. Preset A reverts to normal operation.

Transferring Manual Masters to Memory Store

1 Set keyswitch to **Program**.

2 Set the **Manual Masters** to the required levels.

3 Select the memory to be programmed.

4 Press and hold **Program Memory**. While holding **Program Memory**, press the transfer buttons of all the **Manual Master**s to be added together into the memory.

Note: **Master B** must be at zero if it is not required to add the settings of preset B to memory also.

NOTES and HINTS

* Error LS
  Error messages are listed on page 29.
* Channel level information
  Level Match provides an easy way of determining the recorded level of an individual channel in memory, without transferring the memory to the outputs.
* Use Preset A as Level Topset all the time
  If the whole show can be run from memory, this allows the operator to instantly adjust the maximum output level of any channel.
* For Users New To Memory Desks
  Use the Insert Memories should the Director change his/her mind after all the scenes have been recorded!
  Should even more memories be needed, remember that a one step static chase is a scene and may be inserted anywhere in the Memory Store (See Advanced Effects Operation).

Effects Section Programming

The effects section consists of a chaser which can can hold nine patterns, each having up to 99 steps (subject to a combined total of 250 steps), and up to nine audio effects.

Each chase may be run manually using the Step button and/or automatically by the three drives available: Bass, Varispeed, and Autochase. The speed, direction and attack of the chase may be varied as required.

Each Audio Effect consists of four pre-programmed scenes, the intensity of each scene being modulated by a sound frequency band.

Chaser Programming
A chase is a set of up to 99 level memories, each of which is called a step. Thus any number of channels, at any level, may be recorded as one step. Steps are usually programmed using the B Preset or may be transferred from the Manual Masters (see Advanced Effects Section).

Audio Effect Programming
An Audio Effect is a set of four special memories. The overall level of each special memory in the set is modulated according to the sound level in four harmonic bands (Bass, Low Mid, High Mid, Treble).

Any number of channels at any level may be recorded into any special memory.

The special memories are usually programmed using the B Preset or may be transferred from the Manual Masters (see Advanced Effects Section).

Programming controls
+ / - :
Effect select. Both pressed selects effect " - - ". Repeated pressing of + cycles the Next Pattern display through the 9 chases followed by the 9 Audio Effects. Unprogrammed effects are not shown in Run Mode.

PRESET B:
Sets individual channel levels for programming.

PROGRAM STEP:
Records all Preset B levels at once as an effects memory.

ADD STEP:
Advances step number for programming.

DELETE STEP:
Deletes displayed step number from chase.

PREVIEW:
Enables previewing and programming of the effects.

START/STOP:
Starts/stops the chase running.

STEP:
Steps through a stopped chase sequence; in Program, selects the harmonic band to be programmed.

CHANNEL FLASH:
Edits an individual channel within an effect memory.

Programming a Chase

1 Set up presets only with **Master B** set to full.

2 Turn the keyswitch to **Program**.

3 Press chaser **Preview** to enable chaser programming.

4 Select chase (**Next Pattern**) to be programmed.

5 Set up channel levels to be recorded into step on preset B.

6 Press **Program Step** to record the first chase step.

7 Continue adding steps (99 maximum), by pressing **Add Step**, and then repeating steps 5 and 6 above.

An Alternative Programming Method

A quick method of programming a chase can be used if all channel levels are to be full on or off. This uses the edit mode of the chaser.

1 Repeat steps 1 to 4 above.

2 Set all **Preset B** faders to full.

3 Press the channel **Flash** buttons of those channels which are required in the chase step.

4 Press **Add Step** ONLY if another step is required.

Note: Do not press **Program Step**!

Previewing a Chase

1 Press the **Start/Stop** button. *The word* **GO** *appears in the* **Step No** *display to indicate the chase is running and the chase can be seen running on the* **preview** *lights.*

2 Press **Start/Stop** again to stop the chase.

Press **Step** to step through the chase manually.

Editing a Chase Step

1 Check that the chaser is being previewed.

2 Select the pattern, and step to be edited.

3 Move the **Preset B** fader to the required position.

4 Press the channel **Flash** button to edit the channel level.

Deleting a Chase Step or Entire Chase

1 Check that the chaser is being previewed.

2 Select the pattern and step to be deleted.

3 Press **Delete Step** to remove the step from the pattern. Holding Delete Step down will quickly delete an entire chase.

Programming an Audio Effect

1 Set up Presets only with **Master B** set to full

2 Turn the keyswitch to **Program**

3 Press effects **Preview** to enable effects programming

4 Press the Effects **+** control until an **A** appears in the **Next Pattern** display; **1** will appear in the **Step No** display. Repeated pressing of **+** will advance through **A 2**, **A 3** and so on. Select **A 4** for example.

5 Press **Step** to select the harmonic band to be used. **A 4.1** will appear in the **Step No** display, followed by **A 4.2**, **A 4.3**, **A 4.4**, and **A 4** if the **Step** button is pressed repeatedly (4.1 is Bass, 4.2 Low Mid, 4.3 High Mid, and 4.4 Treble). Select **4.1** - Bass

6 Set up the channel levels on preset B and press **Program Step** to recorded them into the special memory .

7 Press **Step** to move to **A 4.2**, then set up preset B **Program Step** as before.

8 Repeat for **A 4.3** and **A 4.4** if these are also required.

Previewing an Audio Effect

In Program Mode, only static preview is possible of those channels with levels programmed into the special memories.

Using the above example for Audio Effect No. 4:

1 Press **Step** to move to A 4; the *yellow* ***Preview*** *lights will show ALL channels with levels programmed into the special memories*

2 Press **Step** to move to **A 4.1**; *the yellow* ***Preview*** *lights will show ONLY the channels with levels programmed into the Bass driven special memory*.

3 Repeat for **A 4.2**, **A 4.3**, and **A 4.4**.

Editing an Audio Effect

1 Check that the Audio Effect number required is being previewed.

2 Select the Audio effect the special memory to be edited.

3 Move the **Preset B** fader to the required position.

4 Press the channel **Flash** button to edit the channel level.

Deleting an Audio Effect

1 Check that the effect section is being previewed and that the desk is in **Program**.

2 Select either the whole Audio Effect (eg **A 4**) or one special memory (eg **A 4.3**) to be deleted.

3 Press **Delete Step** to remove either the whole Audio Effect or one special memory.

NOTES and HINTS are on the next page

An effect may be output directly via the effect controls, or transferred to the memory store, and output through a Manual Master or the GO button (see Advanced Effects Section).

The speed, direction, and attack of a chase pattern may be decided before the chase sequence is transferred to the outputs, or modified directly in ‘live’ mode.

Effect Operating Controls

+ / - :
Selects one of the chases or Audio Effects. Both pressed selects pattern “ - ”

EFFECT :
Selects auto, varispeed, or bass chase.

DIRECTION :
Modifies direction of step sequence within chase

ATTACK :
Determines type of crossfade between steps of a chase or the type of Audio Effect.

SPEED:
Sets the speed of the chase sequence or the rate of attack of an Audio Effect

EFFECTS MASTER:
Sets maximum output level for an effect.

PREVIEW :
Displays effect on preview leds

TRANSFER:
Transfers an effect to the outputs

START/STOP:
Starts/stops automatic chase sequence output

STEP:
Outputs next step of stopped chase sequence

FLASH:
Flashes/solos the effect.

NOTES

* Auto / Varispeed/Bass Chase
  Auto chase requires no sound input, with chase speed determined directly by the speed control. Varispeed speeds up and slows the chase according to the tempo of the music on the audio input, with the speed control used to set a basic speed. Bass chase will step through the pattern on a bass beat giving a Sound to Light effect.
* Attack
  Three types of crossfade are available:

  
  Switch on / switch off

  
  Switch on / fade off

  
  Fade on / fade off.

  Switch on/fade off is particularly useful for PAR cans.
* Direction
  A chase sequence may be output in sequential step order, reverse step order, or repeatedly forwards, then backwards.

Selecting and modifying a chase

1 Set up presets only with **Effects Master** set to full and select **Run**.

2 Select the chase to be output.

3 Change the type of chase by pressing the **Effects** button if required (bass chase requires an audio input).

4 Modify the **Speed**, **Direction**, and **Attack** if needed.

5 Press the chaser **Preview** button to display the chase on the channel **Preview** lights.

6 Press **Start/Stop** to run or stop the chase.

Selecting and modifying an Audio Effect

1 Set up presets only with **Effects Master** set to full and select **Run**.

2 Select the Audio Effect to be output.

3 Change the **Attack** if required and the rate of attack using the **Speed** control.

4 Press the effects **Preview** button to display the effect on the channel **Preview** lights.

Transferring to Outputs

1 Press the effects **Transfer** button to transfer the chase to the outputs.

Note: With this effect running, another can be chosen, modified, and previewed by following the steps above. This will not affect the output until Transfer is pressed.

Operating Live

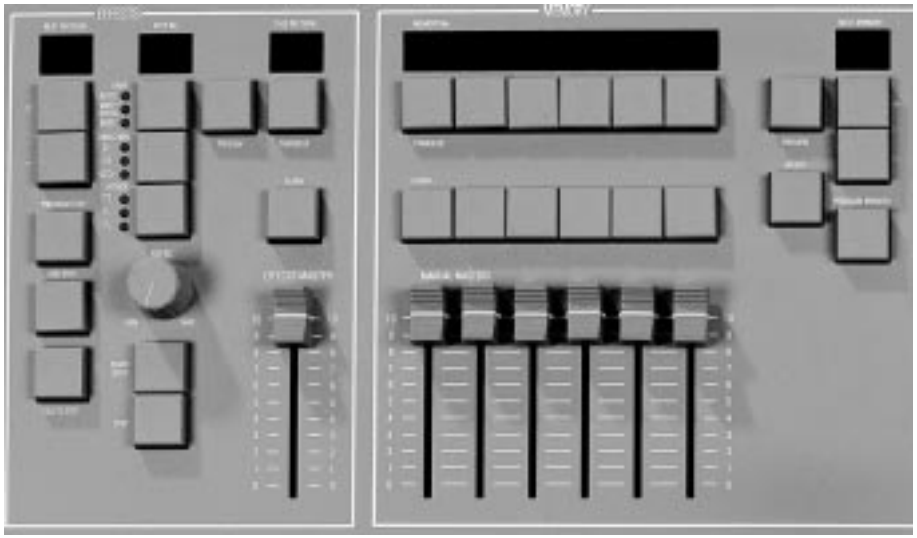
1 Press and hold the effects **Transfer** button for one second to lock on live operation. An **L** is shown in the **This Pattern** display. This allows direct, automatic transfer of selected patterns and modifications.

The live effect can be modified by the operator whilst in operation using the normal procedure.

2 To exit Live mode, press chaser **Transfer** again briefly.

HINTS and NOTES

* Effects as part of the memory store
  Any effect can be inserted between memories in the Memory Store. Hence a chase with a single step can be used as an extra static memory (see Advanced Effects Section).
* Manual Masters to Effect Memories
  Manual Master memories can be copied into effect memories directly (see Advanced Effects Section).
* Cancelling Effects
  Effects output can be cancelled by either pulling the Effects Master to zero, or selecting the blank pattern and pressing Transfer.
* Add Step
  Pressing Add Step immediately inserts a blank step into a chase. To enter channel level information into this step, either Program, or a Channel Flash button must be pressed.
* Manual Step Selection
  When manually stepping through a chase sequence, use Direction to step forwards or backwards as required.
* Quick Access to the Audio Effects
  Select the effects blank pattern '—'. Pressing - directly selects A 9, press again for A 8 and so on.
* Experiment!
  The Audio Effects are very powerful lighting design tools - Try programming Audio Effect 2 (for example) with all the red channels on A 2.1, all the yellows on A 2.2 and so on. Experimenting with these effects will show their true versatility.
* Blackouts
  Program a chase with one step and no level information. Transfer this to the Memory Store wherever a blackout is needed.
* Errors -FU- -NF- -NS- -LP-
  Error messages are listed on page 29.



Effect to Memory Store
Any effect may be inserted between memories in the memory store as an extra cue. The effect modifiers (attack, speed / rate, chase direction) are recorded in addition to channel and level data.

Fade times may then be assigned to the effect as for any other memory in the store.

Pressing Go will then fade in the chase sequence as it is running. Chase 1 in the Memory Store is indicated by C1 in the Next memory display, chase 2 by C2,...,chase 9 by C9, Audio Effect 1 by A1 and so on.

Manual Master to Effects
In Program mode, any combination of Manual Master memories may be added together into one step of a chase sequence or one of the Audio Effect special memories.

If the chase step or Audio Effect special memory has already been programmed, the original data is overwritten.

Effect to Manual Master (via Memory Store)
An entire effect may be assigned to a Manual Master by first transferring it from the Effects section to the Memory Store (in Program mode only), and from there to the Manual Master (Run and Program). An effect on a Manual Master will be running permanently, and can be flashed/solo'd and faded in and out as for a static memory.

NOTES

* Previewing a Chase in the Memory Store
  Selecting a Chase in the Store as Next Memory, and Pressing Transfer (in the Memory Store Section), will display the chase on the preview lights, with the Next Memory display flashing. GO will be flashing in the Step No. display, along with the effect, attack and direction lights, as they were recorded into the store.
* Transferring Memories Blind
  It is not possible to transfer memories blind.
* Warning: B Preset
  Turning Blind on when transferring memories will cause the levels set on Preset B to be copied into the memory during transfer.

Inserting a Effect into the Store

1 Set up presets only.

2 Select **Program**.

3 Select the effect for transfer, and set the modifiers as required.

4 Select the memory in the store, after which the effect is to be inserted.

5 Whilst pressing **Insert**, press the Effect **Transfer** button.

Transferring a Manual Master to an Effect memory.

1 Press effect **Preview**.

2 Select chase pattern and step or Audio Effect special memory into which data is to be transferred.

3 Set the **Manual Master** fader levels.

4 Set **Master B** to zero (stops transfer of preset B levels into the step).

5 Press and hold **Program Step** and press the **Transfer** buttons of the **Manual Masters** to be added into the effects memory.

Using Level Match with the Chaser

1 Turn the keyswitch to **Run**.

2 Stop the chaser.

3 Use the manual **Step** button to advance it to the required chase step.

4 Press and hold effects **Preview** to lock preview on. Press the **Blind** button once. The channel **Preview** lights will flash quickly if the channel level needs to be reduced, slowly if it needs to be increased.

5 Adjust each Preset B fader, until all of the lights have stopped flashing, in order to recreate the step.

Clearing an Effect from Memory Store

1 Turn the keyswitch to **Program**

2 Ensure **Blind** is off and set **Master B** down to zero.

3 Select the chase to be cleared using the memory '**+**' and '**-**' buttons.

4 Press and hold **Program Memory** for 1 second to clear the effect from the store *(the preceding effect or memory number appears in the display).*

HINTS

* Chases as extra Static Memories

A single step chase can be inserted into the store as an extra memory. Ensure the attack is switch on/off for this, as using a faded attack produces a pulsed effect.

Super User Operation - Main Options

Introduction
The Sirius 24 and 48 desks have an extensive range of options which are accessed in Super User mode.
Presets A and B work normally; the memory is disabled.

The principal options are:

* Memory Card Storage
* DMX Output Patch
* Resetting a Sirius after Slave use
* Clearing all the memories
* Other Things- namely:
  - Desk Recovery after a power fail
  - Use of 'Clic Trac' feature
  - Use of Remote Masters feature
  - Disabling of the Channel Flash/Solo feature
  - Reversal of the direction of operation of the Preset Master A to give a dipless crossfade action
  - Setting up the desk serial communications
  - Testing of the communications connector
  - Memory Card testing
  - Inter Processor Link (IPL) testing

To access Super User:
1 Turn keyswitch to **Presets Only**

2 Press and hold down the Effects **+** and **-** buttons, then turn the keyswitch to **Program**; release both buttons.
The **Memory No** display shows SUPER USER; the **Autofade** display shows the software version number.

Slave Operation of Desks
Introduction
A Slave Cable (Stock No 00-298-00) is all that is required to connect two Sirius desks together. On the desk designated as 'Slave', the keyswitch is ignored except to allow the desk to be put into Superuser; only the channel **Presets** and **Flash** buttons are usable.

Connection
Plug the end of the cable marked 'Slave' into **External Control** DIN socket of the desk that is to be the Slave, then the other end into the Master. Turn the slave desk power Off then On again. 'Slave Only' will be shown in the **Memory No** display. Select Super User on the Master and perform the 'Clear All' operation. This will clear all the memories in both desks.
*To find out if a desk was last used as a 'Slave', remove any Slave cable and turn on the desk. A desk that was previously 'Slave' has the message 'Slave' permanently displayed in the **Memory No** display.*

Separation
Unplug the Slave cable from both desks and switch both off and on again. Go into Super User on the desk that was the Slave and perform 'Slave Off' followed by 'Clear All'. Repeat the 'Clear All' on the Master.

Memory Card Operation on Slaved Desks
Remove the Slave cable from both desks, turn the power **Off**, then **On** again on the Slave desk. Select Super User on the Master Desk; Save to the card and then Verify in the normal way. Repeat for the Slave desk. Turn both desks' power off, plug the Slave cable back in and turn the power on again on both desks. Mark each card 'Master' or 'Slave' - do not mix them up!

The Zero 88 Memory Card may be inserted at any time in the slot at the rear of the desk to the left of the gooseneck light (viewed from the front). The Card will store all the memories of a Sirius 24 or Sirius 48.

Send To Card
This stores the entire desk contents to a Memory Card and moves to the "Verify card" option.

Read In Card
Loads into the desk the memories that were previously recorded on the card.
For emergency use a 24 channel card may be loaded into a Sirius 48. If this is done, a 'Clear all' should be performed first as the contents of memories that affect channels 1 to 12 and 37 to 48 will not be overwritten during the read process and may therefore contain spurious data.

Verify Card
Compares the contents of a card with the existing memories in the desk to confirm to the user that these are the same. If not, the message 'Different' will be displayed.

Output Patch
The default DMX output patch is desk channel 1 to DMX channel 1, 2 to 2, 3 to 3, up to 48: 48.
It is possible to alter the patch see page 25.

Slave Off
Only if the desk was last used as a Slave, will the 'Slave Off' function appear. This is used to reset the desk after Slave operation.

Clear All
Resets ALL memories, fade times and effects to blank or zero and all options to default settings.

Other things
Accesses a large number of subsidiary controls, described on the next page (see page 28 for a full description of error messages that could occur when using the card).

To program the DMX Output Patch

1 Select “Output Patch” from Super User.
Note: If the DMX card is not fitted the option is not available.
Press Memory Program button to select this option; the display shows “Out 001 ch 01" This means that DMX output channel 001 is being driven by desk channel 1.

2 To select the desk channel which drives the DMX output channel, press the channel Flash button for the appropriate channel. For example, pressing channel 9 Flash button sets “Out 001 ch 09". This means DMX output channel 001 is driven by desk channel 9. Pressing the Memory + / - buttons will cycle through the DMX channels 001 to 512. Each of these outputs can be patched to any desk channel by simply pressing the appropriate Channel Flash button.

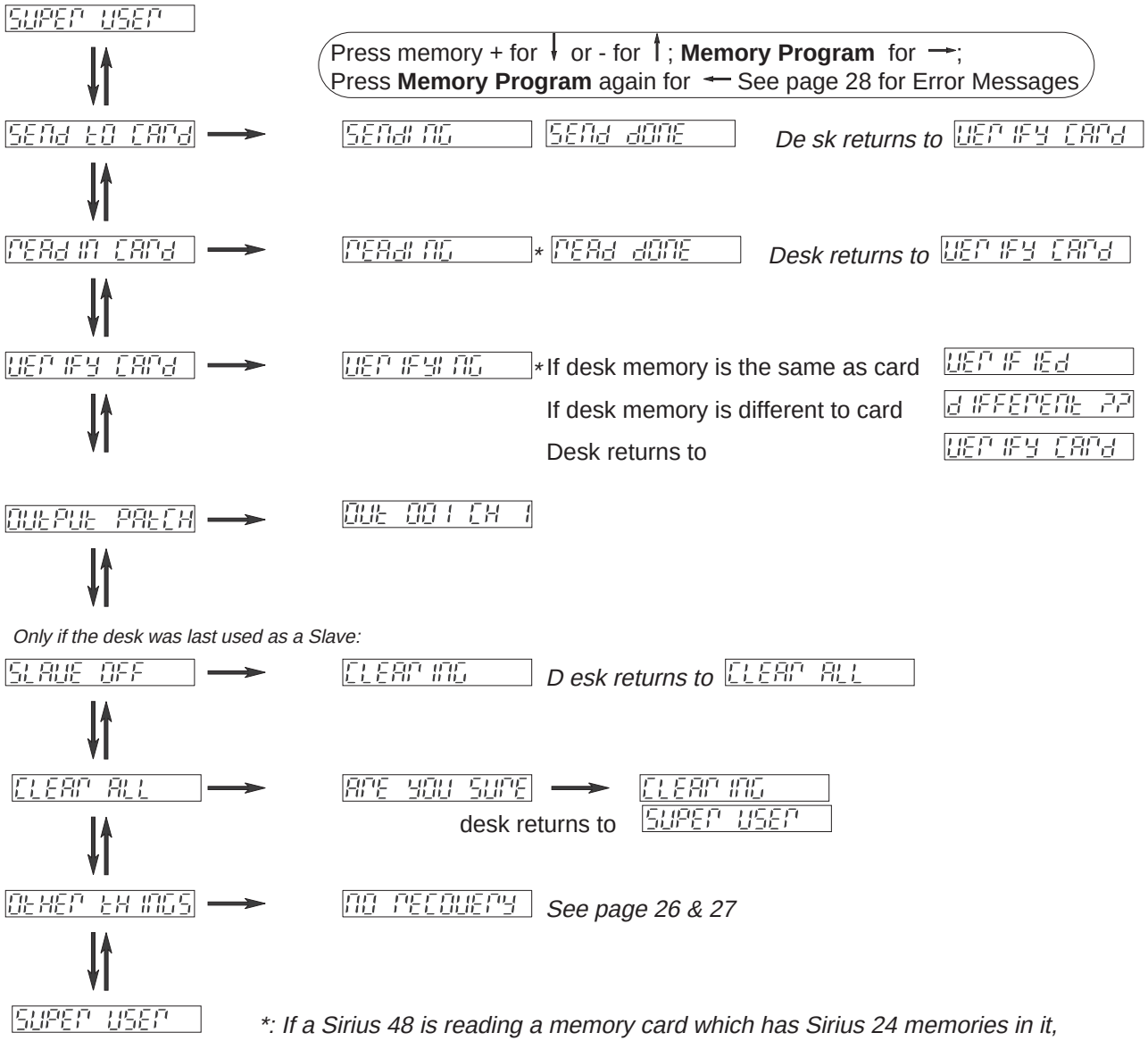
Whenever a change is made to the output patch the DMX outputs are ***re-routed instantaneously.***

3 To turn a DMX channel off:
press the Channel Flash button again. For example , pressing Channel 9 Flash button again sets “ Out 001 ch —” . This means that DMX output channel 001 is now turned off permanently.

4 When the Patch is complete Press the memory Program button to return to the “Output Patch” option in Super User.

High speed DMX Transmission.
The desk only transmits up to the last DMX output channel that has been programmed. By keeping Programmed channels within a small number range, and unused channels turned off, the fastest possible refresh rate will be achieved.

See page 31 for DMX card linking options.



**: If a Sirius 48 is reading a memory card which has Sirius 24 memories in it, the figures ‘24’ will appear with these messages.*

No Recovery / Recovery On
With 'Recovery On' set, any interruption in the power supply to the desk whilst it is in Run mode will ***not*** reset the desk when the power is restored; all the operating memories will be as they were when the power was lost.

With the 'No Recovery' option set, the desk is reset at switch on and '— —' appears in all the displays.

No Clic Trac / Clic Trac On
Clic Trac On should be set for use with Audio Visual equipment. When set, every tone in the band 100Hz to 150Hz received at the audio input will simulate one press of the 'Go' button.
To prevent spurious steps occurring, mix in a constant 2Khz tone to keep the desk's AGC gain down.

No Analog In / Analog In On
Analog In On enables 6 remote inputs which duplicate or replace the six manual masters.
No Analogue In disables these inputs.

A Sirius Remote Masters Kit, Stock No 00-290-00 is available - see page 33.

Analog Flash / Analog Only
When Analog In On is set, the option Analog Flash / Analog Only appears.
With Analog Flash set, the input from the external masters is mixed with the level of the desk manual masters on a highest wins basis. With Analog Only set, the desk manual masters are completely disabled.
Remote operation needs a Remote Masters Kit, Zero 88 Stock No 00-290-00. Setting Analog In On when a kit is not fitted and connected may lead to unreliable manual master operation.

Channel On / Channel Off
The 'Channels Off' setting disables all the channel flash buttons from operation in both the 'Flash' and 'Solo' functions. With 'Channels Off' set, the 'Channel Flash/Channel Override' option will appear.

Channel Flash / Channel Override
When 'Channel Flash' is set, 'Flash to Level' will flash each channel/memory output to the level set by the flash master; if any output is already higher than this new level, it will be unaffected. On 'Channel Override', pressing the Flash button will take the affected channel outputs to the level set by the flash master even if this is lower than an existing level.

Dipless Off / Dipless On
'Dipless On' reverses the operation of master A so that Full On is when the fader is down. Crossfades are now achieved by moving preset Masters A and B in tandem. The red split dipless light next to Master A is lit when this option is selected. 'Dipless On' cannot be selected if the Grand Master is up. If it is up when the Program button is pressed, the message 'Fader is Up' will show in the display; move the Grand Master to zero and press Program again.

True Dipless / Pile Add
When 'Dipless On' is selected, the option 'True Dipless / Pile Add' will be displayed. In operation there is no apparent difference between these two options if the preset Master faders A and B are moved in tandem.

In 'True Dipless', the channel outputs will never exceed the level of the highest channel fader whatever the position of the preset Master faders.

Baud Rate Lo / Hi / IP / OP
Baud rate should be set to Lo for normal Slave operation; the other settings are used for other communication options.

Test DIN Input
Provides diagnostic information for service use; press Program to give the input band and voltage.

Test Card
In 'Test Card', press Program to show in the Memory No display:

An 'L' in the first character when the desk recognises that a card is loaded.

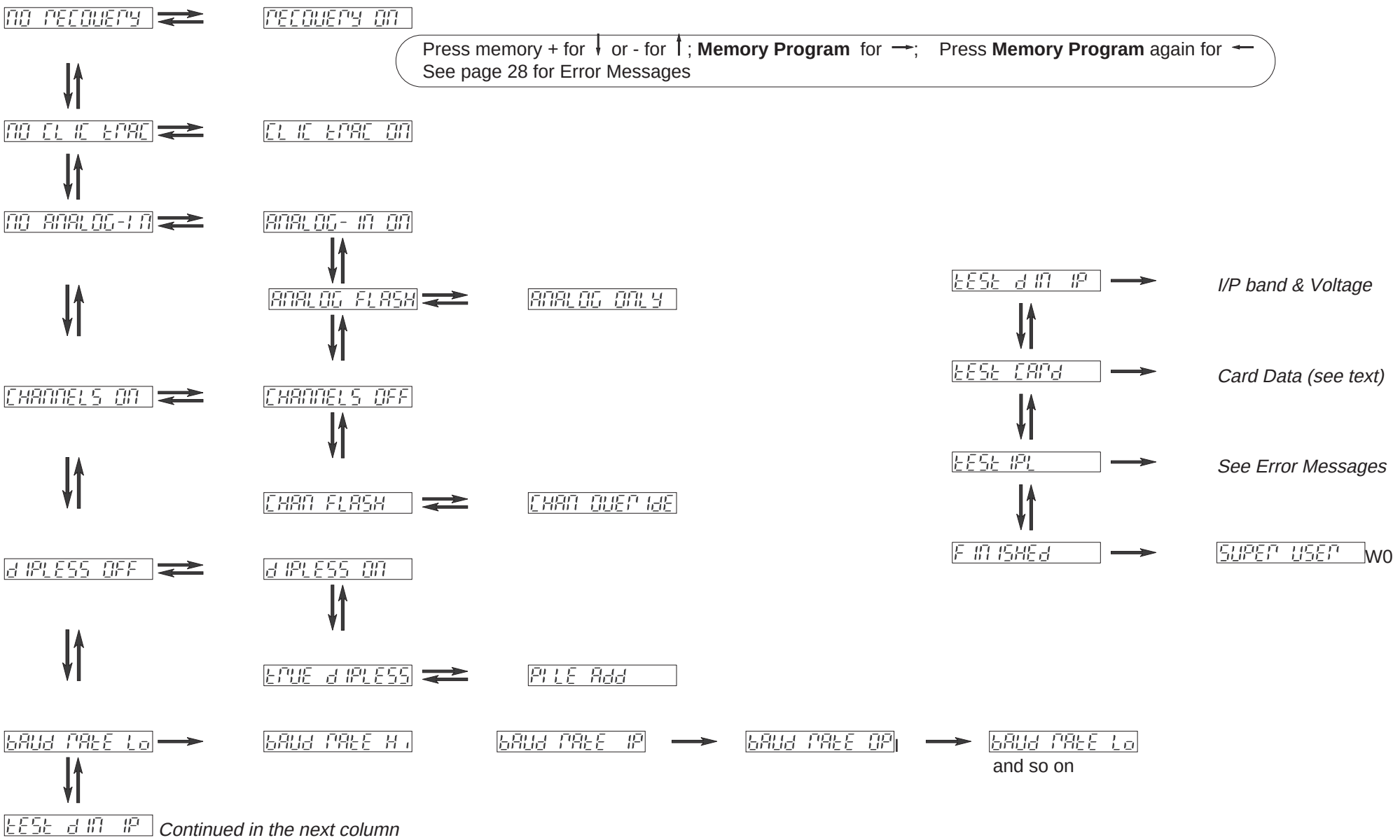
A 'P' in the second character if the card has the Protect switch set (a small sliding switch located on the back edge of the card).

The next characters show 'S=32' representing the size of the Memory Card.

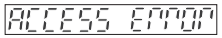
The last characters show 'B=n.n' where n.n is the card battery voltage.
The normal voltage is between 2.7 and 3.3 volts; low voltage is 2.6 volts; below this the card will not work.

Test IPL
Provides diagnostic information for service use. Press Program to view any error message.

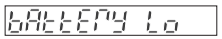
Finished
Pressing the 'Memory Program' button when 'Finished' is showing will return the display to Super User


NO RECOVERY
RECOVERY ON
Press memory + for ↓ or - for ↑; Memory Program for →; Press Memory Program again for ←
See page 28 for Error Messages
NO CLIC TMAC
CLIC TMAC ON
NO ANALOG-IN
ANALOG-IN ON
ANALOG FLASH
ANALOG ONLY
CHANNELS ON
CHANNELS OFF
CHAN FLASH
CHAN OVERIDE
DIPLESS OFF
DIPLESS ON
TRUE DIPLESS
PILE Add
BAUD RATE Lo
BAUD RATE Hi
BAUD RATE IP
BAUD RATE OP
BAUD RATE Lo
and so on
TEST DIN IP
I/P band & Voltage
TEST CARd
Card Data (see text)
TEST IPL
See Error Messages
FINISHEd
SUPER USER
W0
TEST DIN IP
Continued in the next column

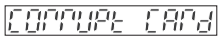
Error Messages - Super User



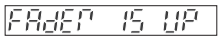
Desk cannot access Memory Card



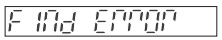
Memory Card battery is low. See Test Card on page 26



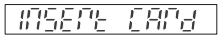
Memory Card is corrupt. Retry and mark as ‘dead’ if this happens more than once.



The Grand Master fader is not at zero whilst trying to select ‘Dipless On’ / ‘Dipless Off’.



Unable to find the Memory Card. It may have been removed during a Send, Read or Verify operation. Alternatively the card battery voltage may be low or fluctuating.

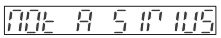


The Memory Card is not present or has not been inserted properly.

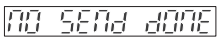
Inter Processor Link Fault (Sirius 48 only)

Inter Processor Link Faulty - The desk may only have ‘lost’ channels 1 to 12 and 37 to 48 (Sirius 48 only).

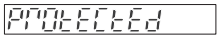
Inter Processor Link running normally (Sirius 48 only).



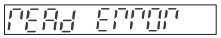
The Memory Card that is plugged in was last used with another controller.



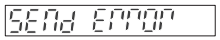
Memory Card has no information on it - No send has been done to store the data.



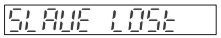
The Memory Card protect switch on the back edge of the card is set ‘On’.



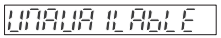
Desk unable to read the Memory Card - check that the card is properly inserted.



Desk unable to send to the Memory Card - Try again and ensure that the card is properly inserted.



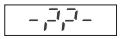
Shows on a desk set up as a Slave if communications with the Master desk are not working properly. Turn off both desks, remove and reconnect the slave cable, and switch both desks back on again.



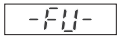
Indicates that there is only one processor board in a Sirius 24 when the Test IPL function is run.

Memory Section
All Error Messages listed here have an  message in the **Next Memory** display.

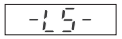
There are also the the following messages that can appear in the ***Autofade*** *display:*



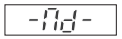
Desk puzzled! - a general button push error. *Hint*: Check that the Memory Section of the desk is being previewed before programming a memory



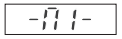
Full - the memory store is full.



Lost Store - memory corrupted at turn-on; any cues in the Memory Store will have been lost, and all fade times will have been reset to zero. To restore the "—" display select Program, and with LS in the Next Memory display, hold Program on the Memory Section for 1 second.



No Delete - cannot delete memory

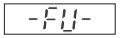


No Inserts - The maximum number of insert memories has been reached.

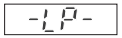
Not Programmed - an attempt has been made whilst in program to transfer an unprogrammed memory to a Manual Master.

Effects Section
All Error Messages listed here have an  *message in the* ***Step No*** *display.*

There are also the the following messages that can appear in the ***Autofade*** *display:*

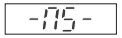


Full - the chaser is full. An attempt may have been made to add a hundredth step to a chase.



Lost Pattern - indicates that the chase has been lost and will have to be reprogrammed.

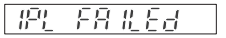
No Frames - indicates that the overall number of chase steps exceeds the maximum of 250.



Not Stopped - appears if a chase has not been stopped before an attempt is made to edit or program it.

Inter Processor Link
The error message below can appear in the **Memory No** Display of a Sirius 48 only.

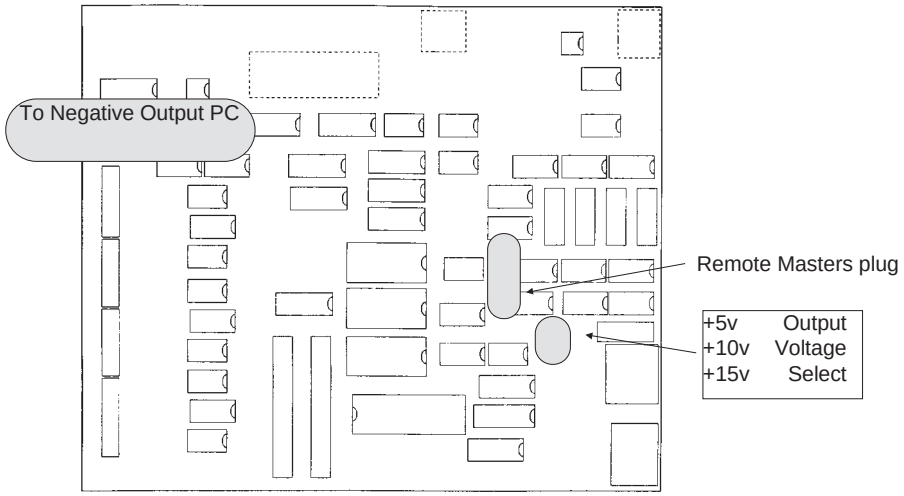
It will overwrite any information that is already there:



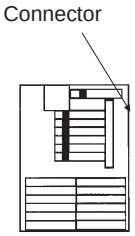
Inter Processor Link Failed - The desk may only have 'lost' channels 1 to 12 and 37 to 48.

Internal Connections and Adjustments

Sirius Main Board



Remote Masters Board



There are five internal connections and/or adjustments that may be made to the desk:

Addition of an Output connector.

Change of Mains Supply Voltage

Change of Output Voltage

Configuration of the DMX card.

Addition of a Remote Masters Board.

All of these require the bottom cover assembly to be removed. Some require access to the Main Board (Sirius 48 has two Main Boards). A layout of this is shown above highlighting the components involved.

To remove the bottom covers:

1 Switch off the desk.

2 Remove the mains lead.

3 Remove the key.

4 Carefully turn the desk over with the outputs away from you.

5 Remove the four screws in the large bottom panel that are nearest you.

6 Remove the four screws (two in each side plate) that secure the wide rear plate containing the rubber foot.

7 Remove the bottom panel assembly.

REASSEMBLE IN THE REVERSE ORDER.

Selecting different Analogue Output Voltages

The desk is supplied as standard with the ***Output Voltage Select*** links set to 0v to +10 volt. There are three link positions:

0v to + 5v
0v to + 10v
0v to + 15v

Repositioning these links changes the output voltage. ENSURE THAT THE LINK IS HORIZONTAL or the desk will not have any output voltage!

The Sirius 24 and 48 now come complete with DMX output as standard.

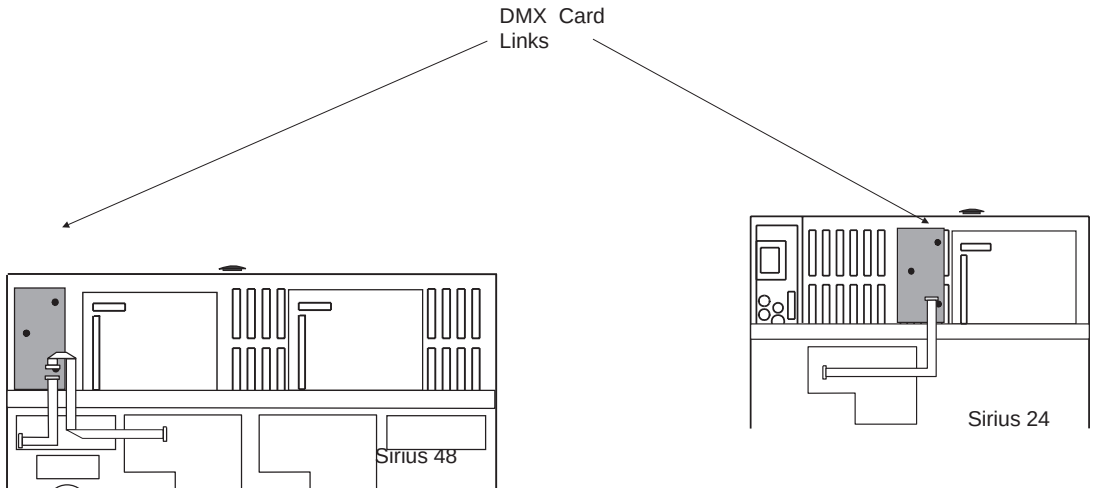
Unfortunately when adding this option as standard the fixing positions for the two other options have now been used.

At present it is not possible to fit the Negative Output kit (00-291-00) or the Remote Master kit (00-290-00) to this desk as described.

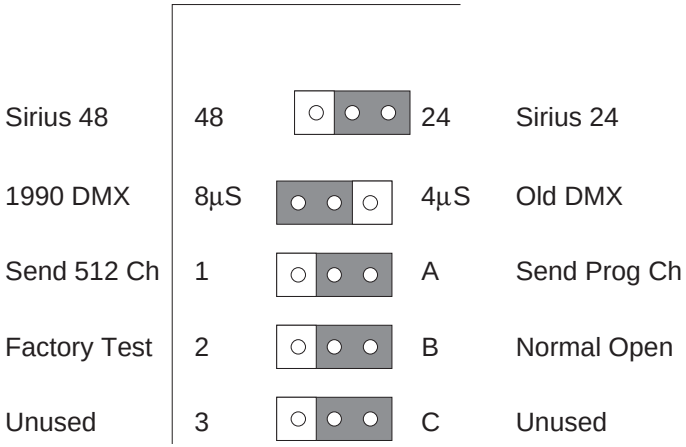
They can however be fitted as described if the DMX card is removed first. If the DMX is not removed there is room to fit the extra options of a little ingenuity is used. We do however recommend that these modifications are carried out by your Agent or by a competent Service Engineer.

The normal warranty of items will not be affected by this modification if done competently by suitably trained or experienced technician.

DMX Card Positions



DMX Card Links



Link settings are shown at default, except link 1 desk size.

DMX Desks Slaved

Where two desks (24 and/or 48) are being used in a Master and Slave configuration one DMX card is needed for each desk, with each one connected independently to its own demultiplexor.

Controlling the Dimmers

The DMX output from the Desk will normally be connected either directly to DMX 512 input dimmers or to 0 to 10v input dimmers using one or more Zero 88 demulitplexers.
If required, both the DMX512 and 0 to 10v desk outputs may be used simultaneously.

DMX Cable Details

The maximum cable length between desk and dimmer / demultiplexer will depend on several factors including:

Type of cable used
Number of demultiplexers connected
The electrical environment

Zero 88 recommend that shielded twisted pair cable approved for RS 422/485 (e.g. Belden 9841 or Alpha 5271) is used.

Communication over one hundred meters should normally be possible without problem, however for longer cable runs it may be necessary to fit a DMX termination plug (stock number 00-269-00) to the last Demultiplexer in order to ensure completely error free data transmission.

Substitution of microphone or other types of cable may be possible, but data transmission errors are more likely, particularly over long distances.

DMX XLR 5 Connections

XLR 5		DMX board	
Pin 1	Yellow	0v	signal common
Pin 2		1-	Dimmer drive complement
Pin 3		1+	Dimmer drive true
Pin 4	Spare	2-	Extra dimmer drive complement
Pin 5	Spare	2+	Extra dimmer drive true

DMX Card Link Settings.

Link 1:

Selects Sirius 48 / Sirius 24

Link 2:

Selects the Pre 1990 DMX standard or the later 1990 DMX standard. (The 4 / 8 µ*S* refers to the timing between the Break and the first transmitted Character and is actually either 4 or 8 microseconds).

Link 3:

Selects whether all 512 channels of DMX data are sent or whether programmed channels only are sent.

Link 4:

Selects Factory Test.

Link 5:

Currently unused.

Fitting an Analogue Output Connector Kit - Sirius 24

1 Remove the appropriate plastic plug(s) from the rear panel.

2 Fit the connector(s) in the holes using the screws and nuts supplied.

3 Wire the leads from each connector on the Main Board to the terminal block following the instructions supplied with the kit, or to your own requirements.

Fitting an Analogue Output Connector Kit - Sirius 48

1 Assemble the kit of connector(s) onto the new panel supplied.

2 Remove the blank part of the desk rear panel and fit the new panel complete with connectors.

3 Wire the leads from each connector to the terminal block on the Main Board following the instructions supplied with the kit, or to your own requirements. The left hand Board controls channels 1 - 12 and 37 - 48; the right hand Board controls channels 13 - 36.

Changing the Mains Fuse and Supply Voltage

The fuse is located on the power supply pcb at the top left corner of the desk, next to the mains input connector *(***Sirius 24**), or at the bottom left of the desk (**Sirius 48**).

The position of the mains fuse in one of two fuse clips is used to select 110V or 240V operation. The desk will work on 50 or 60 Hz without adjustment.

IMPORTANT:

1 The desk must have only ONE fuse fitted, in EITHER the 110V OR the 240V position.

2 For **Sirius 24**, the fuse value depends on the supply voltage:
For 200 - 250v use a 100mA T (Anti Surge) fuse
For 100 - 120v use a 250mA T (Anti Surge) fuse

For **Sirius 48** use a 250mA T (Anti Surge) fuse for either supply voltage setting.

Fitting a Remote Masters Board

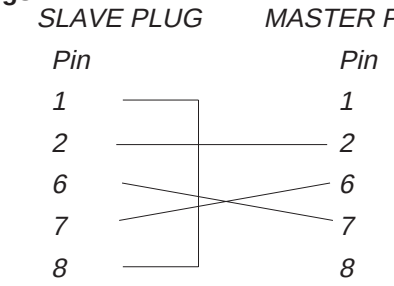
Identify the Sirius Main Board (the right hand board in a Sirius 48)

Hold the Remote Masters Board with the components to the right and plug the connector onto the plug in the position shown opposite.

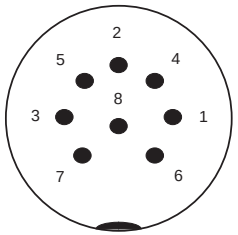
Fitting other additional Printed Circuit Boards

Follow the instructions enclosed with the circuit board.

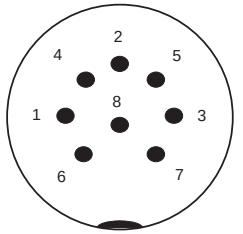
Slave Cable Connections using 8 Pin DIN Plugs



DIN Pin Connections



8 Pin DIN Plug
View of PINS



External
Control Socket

Note: Remote 'GO' Operation

An external contact closure (switch or relay) which shorts pin 1 to pin 8 on the External Control Socket will duplicate the operation of the 'GO' button.

Neither Pin should be connected to any external voltage or earth

Standard Outputs
0 to +5, +10V, or +15V (internally selectable)
DMX 512 1990, (Pre 1990 option selectable)

Mains Input
200 to 260V, or 100 to 130V (internally selectable) 50 or 60Hz

Audio Input
Stereo, greater than 30mV.
Input impedance 22K Ohms

To change the Mains Fuse
The position of the mains fuse in one of two fuse clips in the Sirius is used to select 110V or 240V operation. To change the fuse or its position, **Switch the desk off and remove the mains plug**, remove the key, and carefully turn the desk upside down. Unscrew the base panel (ten screws), and remove by lifting the rear edge, and gently pulling back from the front mounting. Remove the four screws in the side panel of the Sirius, and lift off the smaller back base panel. The fuse is situated in the back corner of the desk. Simply pull out and replace. Reassemble the desk in the reverse order.

IMPORTANT:
The desk must have only ONE AntiSurge (T) fuse fitted, in EITHER the 110V OR the 240V position. See previous page for the value.
DO NOT USE THE WRONG VALUE OR TYPE.

WARNING - Mains Supplies:
If the Sirius' memory is frequently being corrupted, it is probably due to a "dirty" mains supply. Zero 88 have designed a Mains Conditioning Unit (Part No 00-140-00), which can be installed to solve this problem and also prevent high voltage spikes on the mains supply causing damage.

Options and Accessories
For the **Sirius 24**:

00-294-00 Socapex Output Kit

00-490-00 Ring Locking DIN Kit
FOUR required for each Sirius

00-492-00 XLR7 Output Kit
FOUR required for each Sirius

00-493-00 Bleecon Output Kit
FOUR required for each Sirius

00-299-00 Flight Case for 24 ch Sirius + MCU

For the **Sirius 48**:

00-303-00 8 x Bleecon Output Kit

00-304-00 Twin Socapex Output Kit

00-305-00 8 x XLR7 Output Kit

00-306-00 8 x Ring Locking DIN Kit

00-289-00 Flight Case for Sirius 48 + MCU

For **both** Sirius Desks*:*

00-290-00 Remote Masters Kit
This provides the necessary cables, pcb and connectors to enable the Manual Masters to be remotely duplicated by a fader panel or a simple switch or touchpad.

00-291-00 Negative Output Kit:
This provides a second set of negative output voltages at the same level as the positive outputs. ie if the Sirius is set to +5v output, the negative kit will give a -5v output.
(**TWO** are required for a **Sirius 48**)

00-292-00 32kb Memory Card

00-293-00 Gooseneck Light

00-298-00 1m 8way DIN Cable for linking Desks

Options and Accessories (Continued)
00-140-00 Mains Conditioning Unit (MCU)
This prevents very noisy mains supplies from corrupting the Sirius' memories. Limited mains conditioning is built into the desk as standard

Complementary Products
Alpha Pack
A 3 channel power controller with local control and remote control input.

Betapack
Rack/Wall mounting dimmer pack with 6 channels x 10A

Betapack Plus
Rack/Wall mounting dimmer pack with 6 channels x 10A and Local Control

Contour
Rack mount 12 Channer Digital dimmer 10, 16 or 25 Amp Output.

ID 1216 or ID 625
Ready to go portable digital dimmer 12 x16 Amp or 6 x 25 Amp.

The Memory Card (00-292-00) uses a BR2325 battery. This is easily available from Radio Shack/Tandy as their Cat. No. 23-168

Zero 88 Lighting Ltd.
, Usk House, Llantarnam Park, Cwmbran, Gwent, NP44 3HD, U.K.

Tel +44 (0)1633 838088 ★
Fax +44 (0)1633 867880
e-mail sales@zero88
Web www.zero88.com

★ (24Hr Answer Phone)

Appendix

2. Paradime Dimmer Pack Manual

paradim[e]
QPACK DIGITAL DIMMER

INSTALLATION AND USER INSTRUCTIONS

English, Français, Deutsch, Español

ALL VERSIONS
TOUTES LES VERSIONS
ALLE VERSIONEN
TODAS LAS VERSIONES

LightProcessor
BRINGING TECHNOLOGY TO LIGHT

LightProcessor Ltd
11, Fairway Drive
Greenford
UB6 8PW
England.

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Fax: +44 20 8575 8678

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info@lightprocessor.com

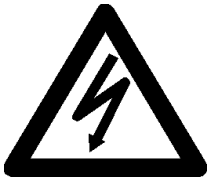
PARA/UNI/V13/03/00

CONTENTS

CONTENU

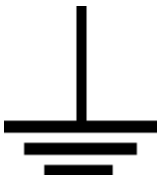
INSTALLATION INSTRUCTIONS
NOTICE D'INSTALLATION
INSTALLATIONSANLEITUNG
INSTRUCCIONES DE INSTALACION

Please be aware of these warning notices and their meaning!
Veuillez faire attention aux avertissements suivants!
Beachten Sie bitte diese Warnungen !
Dese cuenta de estos avisos importantes!



CAUTION! RISK OF ELECTRIC SHOCK
ATTENTION! RISQUE DE CHOC ELECTRIQUE
ACHTUNG! GEFAHR EINES STROMSCHLAGES
¡ATENCION! PELIGRO DE SHOCK ELECTRICO

CAUTION! REFER TO INSTRUCTION MANUAL
ATTENTION! REFEREZ-VOUS AU MODE D'EMPLOI
ACHTUNG! BEACHTEN SIE BITTE DIE BEDIENUNGSANLEITUNG
¡ATENCION! REFERIRSE AL MANUAL DE INSTRUCCIONES



IT IS ESSENTIAL THAT YOU MAKE AN EARTH CONNECTION BEFORE CONNECTING THE DIMMER TO THE MAINS SUPPLY .
IL EST INDISPENSABLE DE RACCORDER L'APPAREIL A LA TERRE AVANT D'ETABLIR LA CONNECTION AU SECTEUR.
VOR ANSCHLUSS DES DIMMERS BITTE UNBEDINGT EINE ERDUNG DURCHFÜHREN.
ALTA VOLTAJE. NECESITA ABSOLUTAMENTE UNA CONEXION CON TIERRA ANTES DE HACER LA CONEXION A LA RED

QUICK SET-UP AND INSTALL

1. Unpack the Product
   (Ensure you do not throw away any accessories packed separately in the box.)

2. Remove the front panel screws.
   Slide the chassis forward, taking care to release the Earth strap on the right hand side and separate the lid section.
   (see footnote * for wallmount version).

3. Mount the lid section into the rack using both front and rear rack support brackets.
   Ensure adequate ventilation.
   (see footnote ** for wallmount version)

4. If you intend to connect the unit to a single phase supply (10A per channel units only), fit the single phase input links provided. Change the mains input phase order.

5. Connect the power input and output load cables.

6. Check that the mains input voltage selector link(s) is correctly set for the supply to be connected (115/230V).

7. For rackmount models slide the dimmer chassis into the lid section now fitted into the rack.

   Ensure the earth strap(s) is reconnected properly. Replace the front panel screws.

8. Connect the signal input connectors. Foe wallmount models cut away the DMX termination resistor unless this Paradim^{e} is the only or the last device in the DMX chain.

9. Set the required input option (DMX ONLY is the factory setting).

10. Apply power.

11. Please take the time to read the full instruction manual which contains information on:-
    a) The safe use of the product
    b) Setting up the special features
    c) Adding accessories
    d) Routine maintenance

If you are an installer, on completion of the installation, please remove the installation instruction pages and ensure the client/user receives the User Instruction pages only.

* Remove the front panel screws. Remove the front plates, taking care to release both the earth straps.

** Secure the chassis to the wall.

L'INSTALLATION EN BREF

1. Déballez le produit. (Assurez-vous que vous ne jetiez aucun accessoire, emballé séparément dans la boîte.)

2. Dévissez les vis du panneau frontal.
   Tirez le chassîs. Faites attention au fil de terre à droite; dégagez-le et séparez le chassîs de la section supérieure.
   (Voyez la note *** en bas concernant la version murale).

3. Montez la section supérieure dans un rack, utilisant les supports d'avant et de derrière.
   Assurez une ventilation suffisante.
   (voyez la note **** en bas concernant la version murale).

4. Si vous allez utiliser le bloc en mode monophasé (modèles de 10A seulement), liez les trois bornes de phases au moyen des liens fournis. Changez l'ordre des phases.

5. Raccordez les câbles d'alimentation et les câbles de sortie.

6. Vérifiez que vous avez installé correctement les liens de sélection de tension (115/230V).

7. Remplacez le chassîs dans la section supérieure, déjà montée dans le rack.
   Remplacez le fil de terre.
   Remplacez les vis du panneau frontal.

8. Raccordez les câbles de contrôle. Pour les modèles muraux découpez la résistance de termination de la ligne DMX, à moins que l'appareil soit le dernier ou le seul dans la chaîne.

9. Choisissez le protocole de contrôle voulu (mis à DMX uniquement à l'usine).

10. Mettez la tension.

11. Veuillez lire le manuel d'instructions entier qui contient des informations concernant
    a) La sécurité pendant l'utilisation
    b) Les possibilités de configuration
    c) Les accessoires en option
    d) Le maintienance

Si vous êtes installateur, nous vous conseillons, après l'installation, d'arracher les pages qui s'appliquent à l'installation, pour laisser avec l'utilisateur le mode d'emploi seulement.

*** Dévissez les vis des panneau frontaux et enlevez-les, en vous assurant que vous dégagez les deux fils de terre.

**** Montez le chassîs au mur.

CHANGING THE SUPPLY INPUT PHASE ORDER

USER LOCKOUT
Both the phase order and supply frequency are settings which are not normally made by the user and are generally set by a technician at the time of installation. For this reason users may be 'locked out' from making changes. In order to remove this 'lock' it is necessary to remove the hardware link situated behind the display board. Unless you want the user to be able to alter the installation settings from the front panel, ensure the link is replaced after making any changes.

Press and release the 'down' key ∨ until the display shows
4 SET SUPPLY ?

Note that the numbers on the left of the screen identify the menu number. These are useful when helping users to find their way around the menus and are references to the menu tree diagram on page 41 of this manual.

Press the √ - the display will show
41 SET PHASES ?
Press the √ - the display will show
411 SET ORDER [123] (i.e. factory setting).

Pressing the up or down arrow keys will change the setting within the square brackets on the display. Subsequent presses will display the different settings available, these are:-

[111]	Single Phase
[123]	3 Phases connected in the order 1,2,3
[132]	3 Phases connected in the order 1,3,2
[aut]	*Auto Phase order detection*

The Auto Phase selection will only be functional if an additional Phase detect module has been fitted.

Change to the desired option and press √ to select and memorise the setting.

The display will momentarily show STORED OK

When the display shows 411 SET ORDER [ ], pressing the ∧ key takes you to 421 SET FREQ. The factory setting is 50Hz. Press √ to change the frequency then use the ∧/∨ keys to select [60Hz] or [AUTO].

CHANGEMENT DE L'ORDRE DES PHASES

RESTRICTION DES FONCTIONS DISPONIBLES A L'UTILISATEUR
L'ordre des phases et la fréquence sont des attributs qui normalement ne concerne pas l'utilisateur et qui sont configuré par le technicien lors de l'installation. Pour cette raison vous pouvez bloquer les changements non autorisés par l'utilisateur. Pour faire un déblocage il vous faut enlever le shunt, situé derrière l'afficheur. Si vous voulez que l'utilisateur ne puisse pas changer la configuration initiale, remplacez le shunt après avoir fait les changements.

Appuyez sur le bouton 'bas' ∨ plusieurs fois jusqu'à ce que le display affiche
4 SET SUPPLY?

Notez que les chiffres à gauche du display identifient le numéro du menu. C'est utile quand vous rendez de l'assistance aux utilisateurs et sont des références utilisés dans le diagramme sur la page 41 de ce manuel.

Appuyez sur √ et vous voyez 41 SET PHASES ? dans le display.
Appuyez sur √ et vous voyez 411 SET ORDER [123]

En appuyant sur les boutons flèches ∨/∧ vous changerez la sélection entre crochets dans l'afficheur. Les pressions subséquentes montreront sélections disponibles, c'est à dire

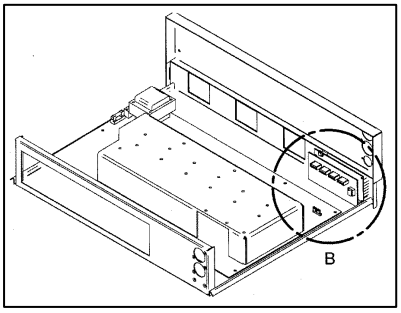
[111]	une phase
[123]	trois phases dans l'ordre 1,2,3
[132]	trois phases dans l'ordre 1,3,2
[auto]	*détection automatique de l'ordre des phases*

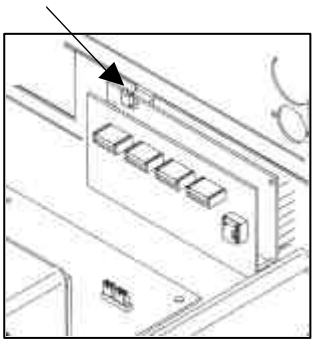
L'option 'auto' fonctionne seulement quand un module 'auto-détection' a été installé.

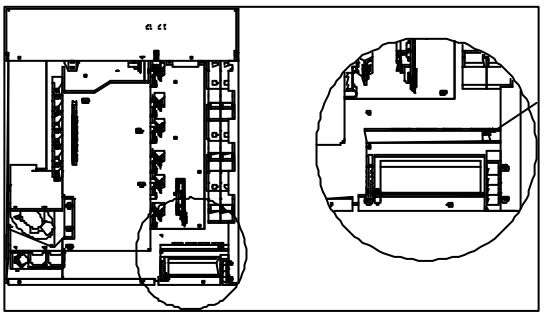
Changez à l'option désirée et appuyez sur √ pour mémoriser la sélection.

Vous verrez les mots STORED OK dans l'afficheur.

Quand il est affiché 411 SET ORDER [ ], appuyez sur la touche ∧ pour afficher 421 SET FREQ. Par défaut la fréquence est 50Hz. Appuyez sur les touches ∧/∨ pour la changer et pour sélectionner [60Hz] ou [AUTO].







Locating the Jumper

Rack models

Wallmount Models

CONNECTING AND CONFIGURING THE SUPPLY

CHANGING THE DIMMER FOR USE ON A DIFFERENT POWER SUPPLY VOLTAGE

The dimmer is able to operate on either 115V or 230V AC supplies. The internal power supply link must be altered, if appropriate, from the factory-set option. Disconnect and isolate the power supply from the dimmer. Remove the two or four front panel securing screws Pull the dimmer chassis forward approximately 100mm. for rack mounting models: undo the top and bottom screws and remove the right hand cover plate of wall mounting models.

The supply links can be seen on the near right hand corner of the main printed circuit board (rackmount models) or in the top right corner (wall mounting models) adjacent to the transformer and electronics control fuse. Remove the existing links and replace as shown in the drawing below.

Change the electronics protection fuse to the correct type and value for the chosen operating voltage.

Supply Voltage	Fuse type/value
115V	125mA (T) Anti-surge 5mm. x 20mm.
230V	63mA (T) Anti-surge 5mm. x 20mm.

Slide the chassis back into position (or replace the cover plate) and replace the front panel securing screws.

See the diagrams below and right.

CONNECTION ET CONFIGURATION - L'ALIMENTATION

CHANGER LA TENSION D'OPERATION DE L'APPAREIL

Le bloc peut fonctionner sur une tension de secteur de115V ou de 230V. Le lien intérieur de secteur doit être changé, si approprié, de la position par défaut mise à l'usine. Débranchez le secteur de l'appareil. Enlevez les deux (ou quatre) vis du panneau frontal des modèles rackables et tirez le châssis d'approximativement 100mm.: pour les modèles muraux enlevez les deux vis du couvercle droite

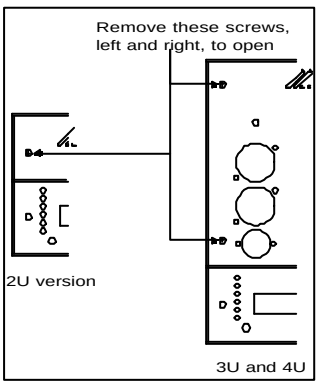
Vous verrez les liens à droite de la carte imprimée principale à coté du transformateur et le fusible pour l'électronique (en haut pour les modèles muraux). Enlevez les liens actuels et remplacez-les selon les diagrammes en dessous.

Changez le fusible de protection de l'électronique au type et à la valeur correct pour la tension d'opération choisie.

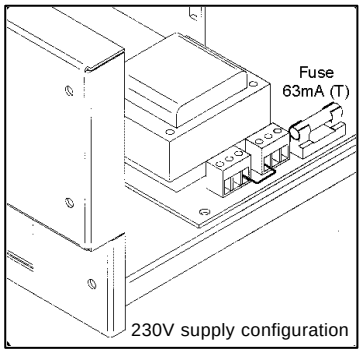
Tension de Secteur	Type/Valeur de fusible
115V	125mA (T) Anti-surge 5mm. x 20mm.
230V	63mA (T) Anti-surge 5mm. x 20mm.

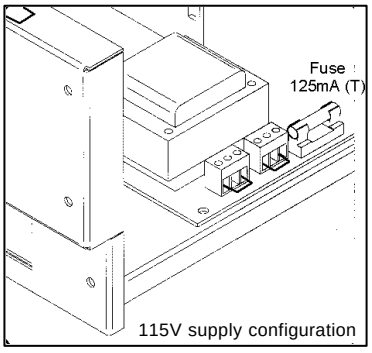
Remplacez le châssis (ou le couvercle) et remettez les vis.

Regardez les diagrammes en bas et a droite.



Front panel screws





Supply Links, Rack Models

FRONT PANEL CONTROLS AND FEATURES

POWER UP ROUTINE
When power is applied to the unit, a self-test is performed. The LCD text display shows SELF TEST followed by the current phase selection, SINGLE PHASE, THREE PHASE 123 or THREE PHASE 132. When the self test is passed, the display will show either PARADIME READY (followed by a scrolling message) if the menu is locked, or 'DMX START nnn OK' if the menu is unlocked. OK is shown on the far right hand side of the display while the dimmer checks for an incoming signal. If no valid DMX signal is present it will disappear after three seconds.

SETTING / CHANGING FEATURES
All the features of the dimmer are set using the four push-buttons in conjunction with instructions and options shown in the LCD display. All features are accessed through menu choices. The complete menu structure can be followed on the diagram at the end of this manual. Each individual menu screen has an exclusive reference number to guide you through the process.

MENU - USER LOCKS
If your button presses appear to be ignored, it may be because the menus have been 'locked' to prevent accidental changes being made. The menus must be 'unlocked' before changes can be made and if required, re-locked again afterwards. Menu locking is controlled by the MENU ACCESS function within Menu 8 READ INFO.

MENU - INSTALLER LOCKS
Certain items may be protected by an internal hardware 'lock'. These items should not normally need to be changed and you should contact your installer/supplier before attempting to do so.

MISE SOUS TENSION

ROUTINE D'INITIALISATION
Lors de la mise sous tension un autotest est effectué. L'afficheur montre SELF TEST, suivi de la sélection des phases actuellement en vigueur, SINGLE PHASE, THREE PHASE 123 ou THREE PHASE 132. Après le test le display affiche READY (suivi d'un message défilant) si le menu est bloqué ou ' DMX START nnn OK' si le menu est ouvert. Vous verrez OK tout à droite du display pendant que le bloc cherche un signal de contrôle. S'il n'y a pas de signal valide, il disparaîtra au bout de trois secondes.

SELECTION / CHANGEMENT DES CARACTERISTIQUES
Toutes les caractéristiques du Paradim^{e} sont sélectionnées au moyen des quatre boutons poussoirs en conjonction avec les instructions et les options affichées dans le display. Vous avez l'accès à toutes les caractéristiques au moyen des choix de ce menu. Voyez la structure entière du menu dans le diagramme sur la page 41 de ce manuel. Chaque élément du menu porte un numéro de référence pour vous guider par la procédure.

BLOCAGE DU MENU - UTILISATEUR
S'il semble que vos pressions de boutons ne produisent aucun effet, il pourrait être parce que le menu a été bloqué contre les changements accidentaux. Il vous faut le débloquer, avant de pouvoir faire les changements, et le rebloquer après, si vous voulez. Voyez la fonction MENU ACCESS dans le menu No. 8, READ INFO.

BLOCAGE DU MENU - INSTALLATEUR
De certaines options de menu peuvent être bloquées en hardware. Vous n'aurez pas normalement besoin de les changer. Référez-vous à votre installateur/fournisseur avant de l'essayer.

SYSTEM MESSAGES

There are various messages that may be displayed. General status or information messages include:

DMX Received OK	DMX is selected and the unit is now receiving valid DMX data.
DMX Absent	DMX is selected but the unit is no longer receiving valid DMX.
Invalid Start	DMX is selected but incompatible data is being received.
Output Scene ‘n’	Scene ‘n’ has been selected from the remote input.
Output Prog ‘n’	Chase programme ‘n’ has been selected from the remote input.
No Preset Chosen	Remote has been selected as an input source but currently nothing is active

Messages relating to critical faults and conditions that may affect the operation of the unit include:

Over Temperature	The dimmer has been operated outside the recommended parameters and has reached an unacceptable temperature. This may be due to changes in the ventilation arrangements, a dirty fan or similar and will require the unit to be inspected and reset by the installer or similar competent engineer.
Service Required	This indicates that the last time the unit was used a critical fault occurred. It must be reset by the installer or similar competent engineer.
Zero Cross Fail	Internal system component failure. Refer to installer.
IIC Error	Internal system component failure. Refer to installer.

MESSAGERIE

Il y a de divers messages qui peuvent être affichés. Les messages généraaux de situation actuelle ou d'information incluent:

DMX Received OK	Le mode de contrôle DMX a été sélectionné et le bloc reçoit un signal valide.
DMX Absent	DMX a été sélectionné mais le bloc ne reçoit plus de signal valide.
Invalid Start	DMX a été sélectionné mais le bloc reçoit des données incompatibles.
Output Scene 'n'	La scène 'n' a été sélectionnée par le contrôle à distance.
Output Prog 'n'	Le chaser 'n' a été sélectionné par le contrôle à distance.
No Preset Chosen	Le contrôle à distance est le mode choisi mais il n'y a pas de scène ni de chaser sélectionné.

Les messages concernant les erreurs critiques ou les conditions qui peuvent influer sur l'opération normale incluent:

Over Temperature	Le bloc a été opéré hors des paramètres recommandés et a atteint une température inacceptable. Ceci peut être dû à un changerment dans les conditions de ventilation, un ventilateur sale ou pareil et nécessite une inspection et une remise par l'installateur ou un ingénieur compétent.
Service Required	Indique que durant l'utilisation précédente un défaut critique est survenu. Il nécessite une inspection et une remise par l'installateur ou un ingénieur compétent.
Zero Cross Fail	Défaut interne de système. Référez-vous à l'installateur.
IIC Error	Défaut interne de système. Référez-vous à l'installateur.

CONNECTING THE CONTROL INPUTS

DMX
DMX connections are made via a 5-pin XLR plug, wired according to the USITT DMX512 1990 standard.

If the dimmer is the last piece of equipment in the signal chain, the DMX line must be terminated at the output socket. This is done by plugging in an XLR plug fitted with a 120 ohm resistor. See below.

ANALOGUE
Analogue control of each channel is via the 8-pin locking DIN plug wired as shown in the diagram. The control voltage is 0 volts (0% output) to approx. +8 volts DC (100% output).The dimmer provides a nominal 12V DC 'phantom' output supply @ 100mA max, to power a small desk.

Check the user manual of any equipment you intend to connect to the analogue input if you are unsure of the phantom supply polarity and specification.

See below for connections for rackmount models and the next page for connections for wallmount models.

CONNECTION DES ENTREES DE CONTROLE

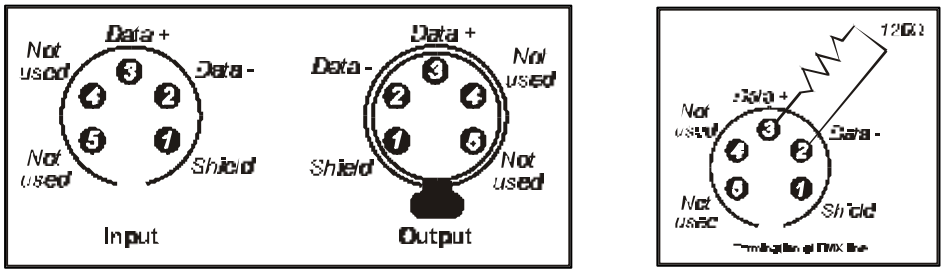
DMX
Les connections se font au moyen d'une fiche XLR à cinq broches selon la norme USITT DMX 1990.

Si le bloc est le dernier appareil dans la chaîne DMX, il faut terminer la ligne à la prise de sortie, en insérant une fiche XLR munie d'une résistance de 120 ohm.

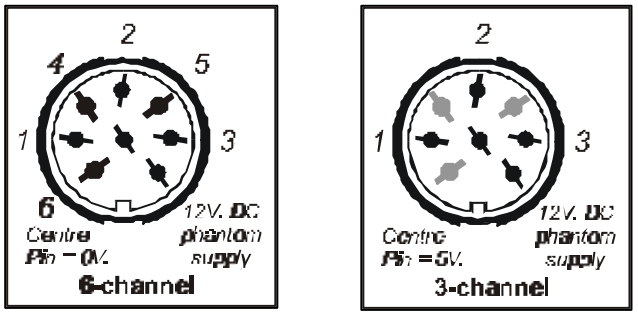
ANALOGIQUE
Le contrôle analogique de chaque canal se fait au moyen d'une fiche DIN verrouillable, comme montré dans le diagramme suivant. La tension de contrôle est 0V (0% sortie) à approximativement +8V CC (100%). Le bloc fournit une tension nominale 'fantôme' de +12V à 100mA maximum pour alimenter un petit pupitre.

Vérifiez dans le manuel de l'appareil que vous allez raccorder à l'entrée analogique, si vous n'êtes pas sûr de la polarité de la tension fantôme ou de la spécification.

Voyez en bas la disposition des connections des modèles rackables et la page en face pour les modèles à montage mural.



DMX Connections



Analogue Connections

ANSCHLUß DER KONTROLL-INPUTS

DMX
Der Anschluß der DMX-Verbindungen erfolgt durch einen 5-pin XLR-Stecker, entsprechend dem USITT DMX512 1990 Standart.

Wenn der Dimmer das letzte Gerät in der Kette ist, muß die DMX-Linie an der Output-Buchse beendet werden. Das erfolgt durch den Anschluß an einen XLR-Stecker, ausgerüstet mit einem 120 Ohm- Widerstand. Siehe unten.

ANALOG
Die analoge Kontrolle von jedem Channel erfolgt durch einen 8pin DIN-Stecker mit Renkverschluß, wie unten dargestellt. Die Kontroll-Spannung befindet sich in einem Bereich von 0 Volt (0 % Output) bis etwa +8 Volt DC (100 % Output). Der Dimmer besitzt einen nominalen 12V DC “Phantom“-Speisung @ 100mA max, um einen kleinen Desk zu betreiben.

Beachten Sie die Bedienungsanleitung, wenn Sie den analogen Input anschließen möchten und sich bezüglich der Polarität und Spezifikation des Phantom-Outputs nicht sicher sind.

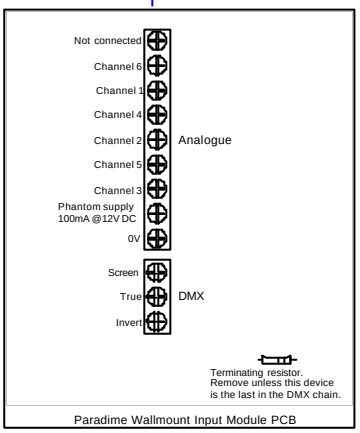
CONEXIÓN DE LAS ENTRADAS DE CONTROL

DMX
Las conexiones DMX se hacen por un enchufe XLR a cinco polos, conforme a la norma USITT DMX512 1990.

Si el aparato es el último en la cadena DMX, la línea debe ser terminado al enchufe de salida, Se hace esto por medio de un enchufe XLR dotado de una resistencia de 120 ohms.

ANALÓGICO
El control analógico se hace por un enchufe DIN a ocho polos, como indicado en el diagrama aquí abajo.

Mire en el manual de cualquier aparato que Ud. va a controlar con el voltaje de alimentación para comprobar la polaridad y la especificación.



CONNECTIONS FOR WALLMOUNT VERSION
CONNECTIONS DE LA VERSION A MONTAGE MURAL
ANSCHLÜSSE FÜR WANDMONTAGE –VERSION
CONEXION DE LA VERSION A MONTAJE MURAL.

OPTION / OPCION

An optional pluggable module is available for connection of the control inputs.

Il y a disponible en option un module muni de connecteurs pour un raccordement enfichable des entrées.

Es steht zur Verfügung als Option einen Modul mit XLR5/DIN Buchsen, der steckbarer Kontroll-Anschluß ermöglicht.

Hay disponible en opción un módulo dotado de enchufes para una conexión enchufable.

USING THE PARADIME WITHOUT A CONTROL DESK

In circumstances where there is not control desk available, the dimmer may be used to provide constant or animated output. Up to eight scenes containing a level for each channel may be 'captured' or recorded, held in memory and 'replayed' at will. Each scene is either 'captured' from the DMX or analogue input at a time when a desk is available or created by setting the preheat level on each channel.

There are nine chase sequence programmes available at nine different speeds programmed into the dimmer. For example,

PROG 11 = Chase pattern 1 @ speed 1 (fastest)
PROG 29 = Chase pattern 2 @ Speed 9 (slowest)

Preheat is set in menu 21. Scenes are captured (recorded) in menu 32. Scenes and chase programmes are chosen and replayed from menu 31.

The dimmer can also be set to replay a scene or chase programme, immediately the power is applied, without user intervention. The chosen scene or chase programme is selected in menu 36: the dimmer must be set for use with the DMX input in menu 51 but an actual DMX signal is not required . Note that, while a valid DMX signal is connected, the chosen scene or chase programme will be temporarily disabled.

NOTE: Any fade times that apply to a NO DMX SCENE will also apply to all other functions of the dimmer.

UTILISATION SANS CONTROLEUR

Dans les circonstances où il n'y a pas disponible un contrôleur, le bloc peut être utilisé indépendamment pour produire une sortie constante ou défilante. Vous pouvez enregistrer jusqu'à huit scènes, y compris le niveau de chaque canal, les mémoriser et les restituer à volonté. Pour l'enregistrement vous pouvez utiliser soit un contrôleur soit un niveau de préchauffage sur chaque canal.

Il y a disponible neuf programmes de séquence (chasers) à neuf vitesses différentes, mémorisés dans l'appareil. Par exemple,

PROG 11 = Chaser 1 @ vitesse 1 (la plus vite)
PROG 29 = Chaser 2 @ vitesse 9 (la plus lente)

Vous réglez le préchauffage dans le menu 21: vous enregistrez les scènes dans le menu 32. Vous restituez les scènes et les séquences dans le menu 31.

Vous pouvez configurer le bloc pour restituer automatiquement une scène ou une séquence lors de la mise sous tension et sans action de la part de l'utilisateur. Vous choisissez la scène au moyen du menu 36. Vous devez ensuite choisir le mode d'opération DMX dans le menu 51 (mais il n'est pas nécessaire qu'un signal DMX est reçu et pendant qu'un signal valide est en cours, la scène est bloquée).

NOTE: Quand une scène ou une séquence est sélectionnée ainsi, les temps de fondu sélectionnés toucheront sur toutes les opérations du bloc.

USING THE PARADIME WITH REMOTE CONTROLS

The dimmer can be instructed to replay any of the eight captured scenes or nine chase programmes from a remote low voltage control panel or other piece of equipment. The analogue input connector is used to access the six remote ‘preset’ scenes or programme chases. Each preset is ‘mapped’ to any one of the eight scenes or 99 chases.

Depending on the type of remote panel or interface connected any number of the presets may be exclusively selected or mixed together.

The phantom output may be routed back into the six input channels by push buttons, sliders, normally-open relay contacts, motion detectors or similar devices.

Using combinations of remote panel and dimmer input options, many different and sophisticated control systems may be created for numerous applications.

The input and remote control panel type are set in menu 51. For a six-button wallplate this will be WP6.

The six presets are ‘mapped’ in menu 34.

UTILISATION DES COMMANDES A DISTANCE

Vous pouvez restituer n'importe quelle des huit scènes ou des neuf séquences au moyen d'un appareil basse tension à distance. La prise analogique est utilisée pour avoir accès à six 'présélections' de scènes ou de séquences. Chaque présélection est reliée en software aux huit scènes et aux neuf séquences.

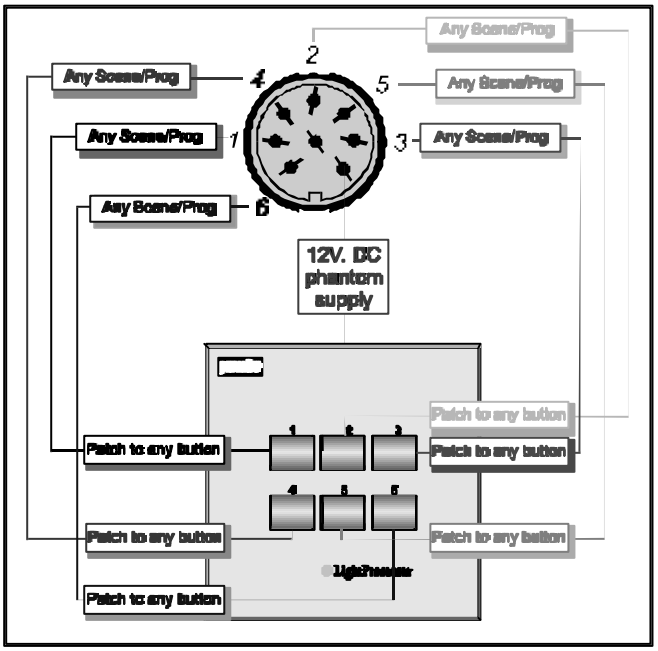
Dépendant du type d'appareil à distance que vous utilisez, vous pouvez restituer les présélections individuellement ou vous pouvez les mélanger.

Vous pouvez acheminer la sortie fantôme aux six canaux d'entrée au moyen de boutons poussoirs, de potentiomètres linéaires, contacts de relais, détecteurs de mouvement ou des appareils pareils.

L'utilisation des combinaisons de panneaux et d'entrée de pupitre vous permet de créer les systèmes de contrôle sophisitiqués pour de divers usages.

Vous choisissez le mode de contrôle et le type de commande à distance dans le menu 51. Pour la commande à six boutons votre choix sera WP6.

Vous faites le patch des présélections dans le menu 34.



COOLING AND DMX FAN CONTROL

The unit's fan cooling is electronically controlled by the microprocessor with overrides from a hardware thermostat. In normal use the fan will run very slowly and silently at all times. When the pre-set temperature threshold is exceeded, the microprocessor will increase the fan speed to full.

It is possible to temporarily suppress the full speed operation of the cooling fan remotely using an additional DMX channel. This will override the normal fan switch-on temperature point. The dimmer will only operate the fan when it is necessary in order to maintain safe working temperatures within the unit. The fan DMX channel is set up in menu 1.

VENTILATION ET CONTROLE DMX DU VENTILATEUR

La ventilation est réglé électroniquement par le microprocesseur avec un contrôle prioritaire au moyen d'un thermostat. Durant un fonctionnement normal le ventilateur marche lentement et silencieusement tout le temps. Quand la température atteint le seuil programmé, le microprocesseur accélera le ventilateur à pleine vitesse.

Il est possible de supprimer pour une période limitée la pleine marche du ventilateur, en utilisant un canal DMX supplémentaire. Ceci outrepassera le point normal de déclenchement du ventilateur. Le ventilateur démarrera seulement quand il est nécessaire pour maintenir une température de sécurité dans le boîtier. Vous choisissez le canal DMX du ventilateur dans le menu 1.

CONNECTING AND CONFIGURING THE SUPPLY

CHANGING THE DIMMER FOR USE ON A DIFFERENT POWER SUPPLY VOLTAGE
The Paradim[e] is able to operate on either 115 or 230V AC supplies. The internal power supply link must be altered if required from the factory set option. Disconnect and isolate the power supply from the dimmer. Remove the front panel. Identify the supply links on the main printed circuit board adjacent to the transformer and electronics control fuse. Remove the existing link(s) and replace as shown in the diagrams below.

Replace the front panel and securing screws.

SUPPLY INPUT WIRING - (STAR CONFIGURATION MODELS ONLY)
The dimmer is designed to operate on the following power supplies:

6 x 10 Amp models:
230V AC or 115V AC Single or Three phase & Neutral
Maximum input current 60Amps one phase.
Maximum input current 20Amps per phase.

6 x 16 Amp models:
230V AC or 115V AC Three phase & Neutral
Maximum input current 32Amps per phase.

6 x 20 Amp models:
230V AC or 115V AC Three phase & Neutral
Maximum input current 40 Amps per phase.

3 x 25 Amp models:
230V AC or 115V AC Three phase & Neutral
Maximum input current 25Amps per phase.

Ensure a mains power input cable of sufficient cross-section is used.

The input cable should be passed through a suitable cable restraining gland fitted in the 32mm hole in the rear panel service plate.

Secure the earth conductor to the earth block:

RACCORDEMENT ET CONFIGURATION DES PHASES

CHANGEMENT A UNE TENSION DE SECTEUR DIFFERENTE
Le bloc peut opérer sur 115V ou 230V. Le lien interne doit être changé, si nécessaire, de sa position originale. Débranchez et isolez le bloc du secteur. Enlevez le panneau face avant. Identifiez les liens de sélection de tension sur la carte électronique près du transformateur et le fusible de contrôle d'électronique. Enlevez les liens actuels et remplacez-les, selon les diagrammes ci-dessous

Remplacez le panneau face avant et remettez les vis.

CABLAGE DES PHASES - (MODELES CONFIGURES EN ETOILE SEULEMENT)
Ce bloc de puissance a été conçue pour opération sur les tensions suivantes:

Modèles 6 x 10A:
230V CA ou 115V CA sur une ou trois phases plus neutre.
Courant maximum d'entrée 60A sur une phase.
Courant maximum d'entrée 20A par phase.

Modèles 6 x 16A:
230V CA ou 115V CA sur trois phases plus neutre.
Courant maximum d'entrée 32A par phase.

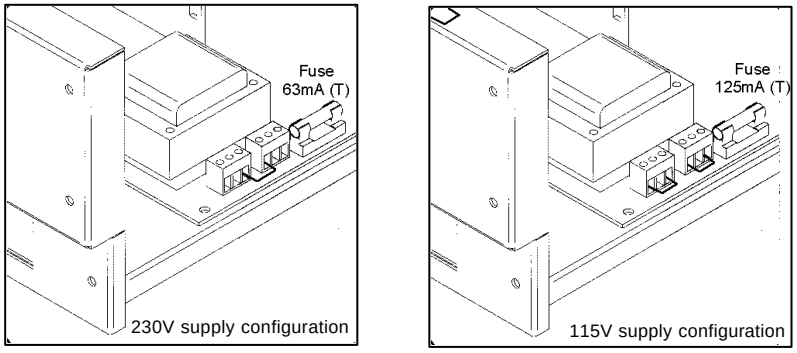
Modèles 6 x 20A:
230V CA ou 115V CA sur trois phases plus neutre.
Courant maximum d'entrée 40A par phase.

Modèles 3 x 25A:
230V CA ou 115V CA sur trois phases plus neutre.
Courant maximum d'entrée 25A par phase.

Assurez-vous de l'utilisation d'un câble de section suffisante.

Passez le câble par un serre-câbles installé dans le trou de 32mm. sur la plaque de service arrière.

Raccordez le conducteur de terre au bornier de terre.:



Supply Links, Rack Models

ANSCHLUß UND KONFIGURATION

GEBRAUCH IN EINEM ANDEREN STROMSPANNUNGSNETZ
Der Paradime Digital Dimmer kann mit 115V oder mit 230V betrieben werden. Die interne Netzverbindung muß, wenn erforderlich, von der Werkseinstellung geändert werden. Achten Sie dafür darauf, daß der Dimmer nicht an den Strom angeschlossen ist. Entfernen Sie die Frontpanele. Die Netz- Typ- Verbindungsbrücke befindet sich auf der Hauptplatine angelehnt an den Transformator und der Sicherung. Entfernen Sie die bestehende Verbindung und setzen Sie sie wie links unten dargestellt wieder ein. Achten Sie darauf, daß Sie auch die Sicherung wechseln. Setzen Sie die Frontpanele zurück und befestigen Sie mit den Schrauben.

EINGANGSANSCHLUß (Star Konfiguration Modelle)
Der Dimmer ist mit folgenden Stromanschlüssen betrieben werden:

6 x 10 Amp - Modelle
230V AC oder 115V AC ein- oder dreiphasig & Neutral
max. Input – Spannung 60 Amp einphasig
max. Input - Spannung 20 Amp. pro Phase.

6 x 16 Amp – Modelle
230V AC oder 115V AC dreiphasig & Neutral
max. Input - Spannung 32 Amp. pro Phase.

6 x 20 Amp – Modelle
230V AC oder 115V AC dreiphasig & Neutral
max. Input - Spannung 40 Amp. pro Phase.

3 x 25 Amp – Modelle
230V AC oder 115V AC dreiphasig & Neutral
max. Input - Spannung 25 Amp. pro Phase.

Beachten Sie, daß ein Haupt-Input-Kabel mit genügend Querschnitt benutzt wird.

Das Eingangskabel sollte, gesichert durch eine geeignete Verschraubung, in das 32mm Loch der hinteren Panele passen.

CONEXION Y CONFIGURACION DE LAS FASES

OPERACION EN OTRO VOLTAJE
Este aparato puede funcionar en 115V o 230V. La(s) varilla(s) interno debe(n) ser cambiada(s), si necesario, de lo por defecto puesto en la fábrica. Quite y aisle la potencia del aparato. Quite el panel frontal. Ud. vedrá las varillas en la placa principal vecino al transformador y el fusible de control del electrónico. Quite las varillas y repongalas como mostrado en el diagrama aquí debajo a la izquierda.

Cambie el fusible al tipo y valor corecto por el voltaje escogido.

Reponga los paneles frontales y los tornillos de seguridad.

CONEXION DE POTENCIA - CONFIGURACION ESTRELLA
Este aparato funciona en los sistemas de potencia siguientes:-

Modelos 6 x 10A:
230V CA o 115V CA monofásico o trifásico y neutro.
Corriente máximo de entrada 60A monofásico.
Corriente máximo de entrada 20A por fase.

Modelos 6 x 16A:
230V CA o 115V CA trifásico y neutro.
Corriente máximo de entrada 32A por fase.

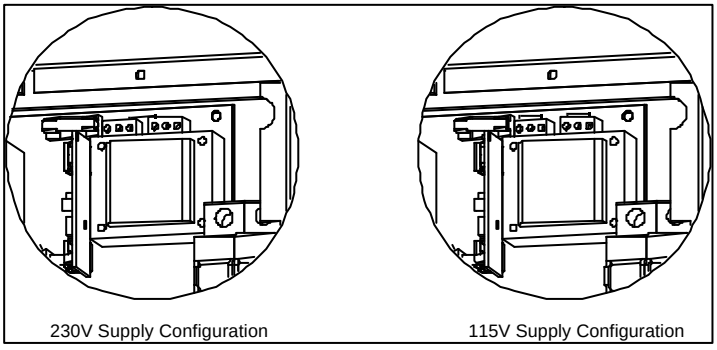
Modelos 6 x 20A:
230V CA o 115V CA trifásico y neutro.
Corriente máximo de entrada 40A por fase.

Modelos 3 x 25A:
230V CA o 115V CA trifásico y neutro.
Corriente máximo de entrada 25A por fase.

Asegurese que el cable de entrada tenga un diámetro de conductor suficiente.

El cable de entrada debe pasar por un pasahilos en el subpanel de atrás asegurado en el agujero de 32mm.

Ponga el conductor de tierra en las bornes a tierra.



Supply Links, Wallmount models

For single phase supplies:

Fit the links provided to link terminal P2 to P1 and P3.
Connect the live phase conductor to terminal P2.Connect the neutral conductor to terminal N1.

For three phase & neutral (star)

Ensure there are no single phase links installed
Connect the three Live phase conductors to terminals P1, P2 and P3.
Connect the neutral conductor to terminal N1.

Tighten the gland around the cable.

Check that the operating software is set for the correct supply configuration and phase order.

SUPPLY INPUT WIRING (DELTA CONFIGURATIONS ONLY)

The dimmer is designed to operate on the following power supplies:

6 x 10 Amp models:
Maximum input current 60Amps one phase.
230V AC or 115V AC Single or Three Phase Delta
Maximum input current 20Amp per phase.

6 x 16 Amp models:
230V AC or 115V AC Single or Three phase & Neutral
Maximum input current 32Amp per phase.

6 x 20 Amp models:
230V AC or 115V AC Single or Three phase & Neutral
Maximum input current 40Amp per phase.

3 x 25 Amp models:
230V AC or 115V AC Single or Three phase & Neutral
Maximum input current 25Amp per phase.

Ensure a mains power input cable of sufficient size is used.

The input cable should be passed through a suitable cable gland fitted to the 32mm hole in the rear panel service plate.

Secure the earth conductor to the earth block:

Three Phase (Delta) fixed supplies:

Connect the three Live phase conductors to terminals P1, P2 and P3.
Do not connect the Neutral terminals.

Tighten the gland around the cable.

Check that the operating software is set for the correct supply configuration and phase order.

Pour les installations monophasées:

Posez les liens pour relier la borne P2 aux bornes P1 et P3.
Raccordez le conducteur de phase à la borne P2. Raccordez le conducteur neutre à la borne N1.

Pour les installations triphasées (en étoile):

Assurez-vous que les liens monophasés ne sont pas raccordés
Raccordez les trois conducteurs de phase aux bornes P1, P2 et P3.
Raccordez le conducteur neutre à la borne N1.

Reserrez le serre-câbles.

Vérifiez que le système opératoire a été configuré correctement pour l'ordre des phases et la fréquence.

CABLAGE DES PHASES - (MODELES CONFIGURES EN TRIANGLE SEULEMENT)

Ce bloc de puissance a été conçue pour opération sur les tensions suivantes:

Modèles 6 x 10A:
230V CA ou 115V CA sur une ou trois phases en triangle.
Courant maximum d'entrée 60A sur une phase.
Courant maximum d'entrée 20A par phase.

Modèles 6 x 16A:
230V CA ou 115V CA sur trois phases plus neutre.
Courant maximum d'entrée 32A par phase.

Modèles 6 x 20A:
230V CA ou 115V CA sur trois phases plus neutre.
Courant maximum d'entrée 40A par phase.

Modèles 3 x 25A:
230V CA ou 115V CA sur trois phases plus neutre.
Courant maximum d'entrée 25A par phase.

Assurez-vous de l'utilisation d'un câble de section suffisante.

Passez le câble par un serre-câbles installé dans le trou de 32mm. sur la plaque de service arrière.

Raccordez le conducteur de terre au bornier de terre.

Pour les installations triphasées (en triangle) fixes:

Raccordez les trois conducteurs de phases aux bornes P1, P2 et P3.
Ne raccordez rien aux bornes neutres.

Reserrez le serre-câbles.

Vérifiez que le système opératoire a été configuré correctement pour l'ordre des phases et la fréquence.

THREE PHASE EXTERNALLY OPTIONED (DELTA / STAR) SUPPLIES:
Remove the Delta Supply Option Links
Connect the three Live phase conductors to terminals P1, P2 and P3.
Connect the three Neutral conductors to terminals N1, N2 and N3

To externally option for Three Phase Delta supplies:
Connect the three Live phase conductors to supply Phases 1, 2 and 3.
Connect the Neutral conductor N1 to supply phase 2
Connect the Neutral conductor N2 to supply phase 3
Connect the Neutral conductor N3 to supply phase 1

To externally option for Three Phase Star supplies:
Connect the three Live phase conductors to supply Phases 1, 2 and 3.
Connect all three neutral conductors to supply Neutral.

Tighten the gland around the cable.

Check that the operating software is set for the correct supply configuration and phase order.

POUR LES INSTALLATIONS TRIPHASÉES EXTÉRIEUREMENT SÉLECTIONNABLES (EN ÉTOILE / EN TRIANGLE):
Enlevez les liens internes entre les bornes P1, P2, P3 et les bornes N2, N3 et N1.
Raccordez les trois conducteurs de phases aux bornes P1, P2 et P3.
Raccordez les trois conducteurs neutres aux bornes N1, N2 et N3.

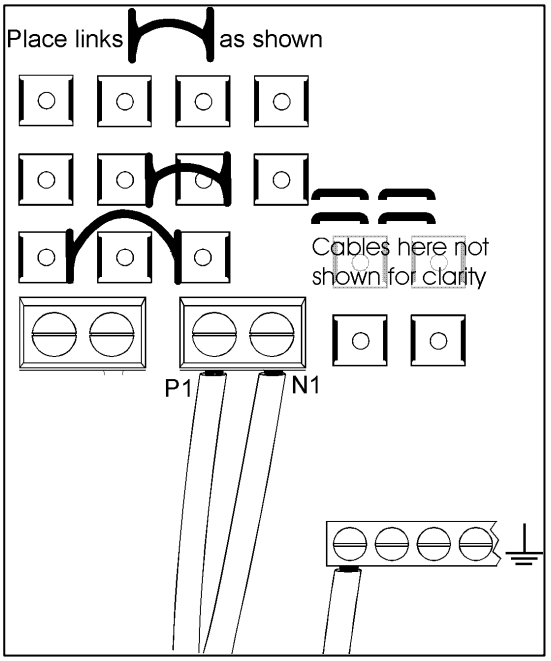
Option extérieur en triangle:
Raccordez les trois conducteurs de phases aux bornes P1, P2 et P3.
Raccordez le conducteur N1 à la phase 2 du secteur.
Raccordez le conducteur N2 à la phase 3 du secteur.
Raccordez le conducteur N3 à la phase 1 du secteur.

Option extérieur en étoile:
Raccordez les trois conducteurs de phases aux bornes P1, P2 et P3.
Raccordez tous les trois neutres au neutre du secteur.

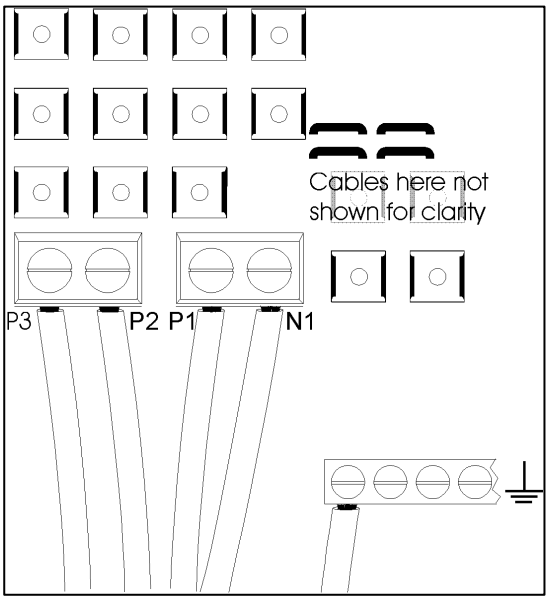
Reserrez le serre-câbles.

Vérifiez que le système opératoire a été configuré correctement pour l'ordre des phases et la fréquence.

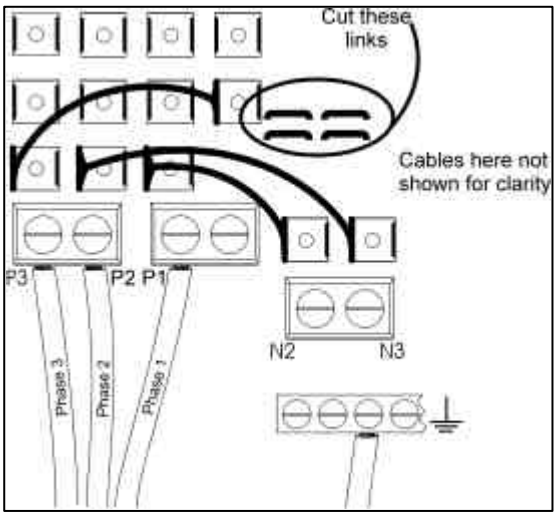
Single Phase Connection
Connection Monophasée
Einphasiger Anschluß
Conexión Monofásica



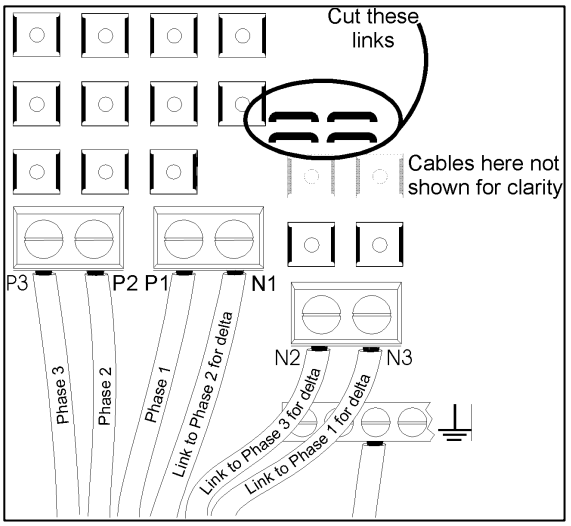
Three Phase Star Connection
Connection Triphasée en Etoile
Dreiphasiger Anschluß, Star
Conexión Triofásica en Estrella



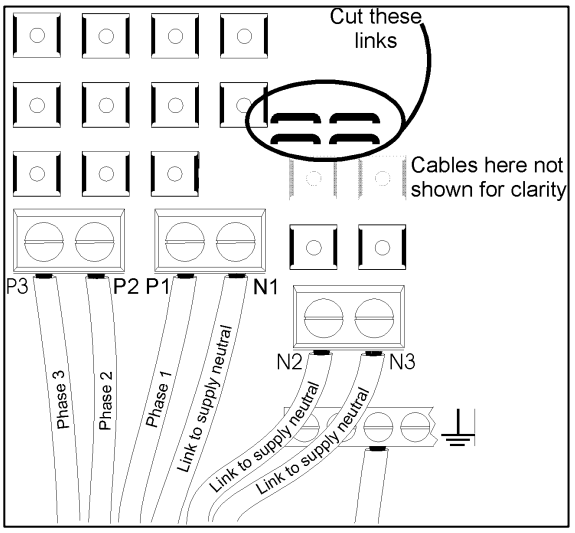
Three Phase Delta Connection
Connection Triphasée en Triangle
Dreiphasiger Anschluß, Delta
Conexión Triofásica en Triángulo



To Externally Option for Three-Phase Delta Supplies.
Option Extérieur Trois Phases en Triangle.
Extern Wechselbare Dreiphasige Anschlüsse, Delta.
Para Opción Exterior Tres Fases en Triángulo.



To Externally Option for Three-Phase Star Supplies.
Option Extérieur Trois Phases en Etoile.
Extern Wechselbare Dreiphasige Anschlüsse, Star.
Para Opción Exterior Tres Fases en Estrella.



CONNECTING THE OUTPUTS

(Hardwired Version)
The standard rear service panel is provided with a series of 20mm. holes. *The complete panel may be removed to allow more space while connections are made.*

Distribute the output cables via one or more cable restraining glands. It is essential that a live and neutral pair for each output passes through the same gland. Secure the earth conductors to the earth block. Connect the live and neutral conductors to output terminal blocks marked for each of the six channels

Tighten the cable glands and ensure that the cables cannot be strained.

SERVICE PANEL OUTPUT OPTIONS
Additional service panels, either blank or pre-fitted and wired to multi-pole connectors, are available as accessories for fitting to all models of the dimmer.

RACCORDEMENT DES CHARGES

(Versions Raccordement à Borniers)
Le panneau de service arrière standard est muni de plusieurs trous de 20mm. *Vous pouvez enlever le panneau entier pour faciliter le travail de raccordement.*

Passez les câbles par un ou plus serre-câbles. Il est essentiel qu'un paire, phase et neutre, passe par le même serre-câbles. Raccordez les conducteurs de terre au bornier de terre. Raccordez les conducteurs phase et neutre aux borniers marqués pour chacun des six canaux.

Serrez les câbles dans les serre-câbles, en vous assurant que les câbles ne peuvent pas être tendus.

PANNEAUX DE SERVICE DISPONIBLES EN OPTION
Il y a disponibles des panneaux de service supplémentaire, soit aveugles ou munis de prises multi-pôles, que vous pouvez installer dans tous les modèles.

Connector Type	Quantity	Part Number
Blank	0	SERVBLANK
Ceep/Socapex	1	SERVSOCA1
Ceep/Socapex	2	SERVSOCA2
Wieland/Harting	1	SERVHART1
Wieland	2	SERVHART2
Wieland Hotpatch	12	SERVHOT

MOUNTING INTO A STANDARD 19 INCH RACK CABINET

This product is designed to be mounted horizontally using both the front and rear supports provided.

1. Follow the instructions for opening the unit and removing the dimmer chassis from the lid section.
2. Fit both the front supports using the 8mm. M4 screws provided to the lid section of the unit.
3. Measure the distance between the front face of the front rack support and the rear face of the rear rack cabinet rail.
4. Offer the rear rack support brackets up to the lid section. Move the rear supports until the distance between the front and rear support is similar to the distance previously measured in the rack cabinet. Mark two holes in the rear support bracket that best align with the slots in the lid.
5. Insert M6 cage nuts supplied into the marked holes.
6. Line up and fix the rear support brackets into the rear of the rack.
7. Fix the lid section into position in the 19” rack cabinet using the front supports.
8. Secure the lid section from the inside to each of the rear support brackets using the M6 10mm. bolts supplied.
9. Follow the instructions for replacing the dimmer chassis.

MONTAGE DANS UN RACK DE 19 POUCES

Cet appareil a été conçu pour un montage horizontal, utilisant les supports avant et arrière fournis.

1. Suivez les instructions pour l'ouverture du bloc et tirez le châssis de la section coffret.
2. Vissez les deux supports avant à la section coffret, utilisant les vis M4 x 8mm. fournis.
3. Mesurez la distance entre la face avant du rail avant du rack et la face arrière du rail arrière du rack.
4. Présentez les supports arrière à la section coffret. Déplacez les supports arrière jusqu'à ce que la distance entre eux et les supports avant est pareille à la distance mesurée du rack. Marquez deux trous dans les supports arrières qui correspondent le mieux avec les fentes dans la section coffret.
5. Insérez les écrous M6 fournis dans les trous marqués.
6. Alignez et fixez les supports arrière au rail arrière du rack.
7. Fixez la section coffret dans le rack au moyen des supports avant.
8. De l'intérieur fixez la section coffret au supports arrière au moyen des boulons M6 x 10mm. fournis.
9. Suivez les instructions pour le remplacement du châssis.

MOUNTING THE UNIT TO THE WALL

This product is designed to be mounted vertically in an upright attitude. Failure to mount correctly will prevent the ventilation system from functioning correctly and may lead to operational problems.

1. Open the unit by removing the six screws securingthe two front cover plates. Release the earth strap from each cover plate.

2. Three fixing points are provided. Identify a point 20mm. below the desired level of the top of the Paradim^{e} and 28mm. in from the right hand side. Drill the wall and fit a suitable screw anchor at this point and a 1½No. 10 (40 x 4mm.) roundhead woodscrew, leaving a 3mm. gap between the head of the screw and the wall.

3. Hang the Paradim^{e} on the screw, using the top right mounting point and mark the two other mounting points. A spirit level will help with this operation.

4. Remove the Paradim^{e} from the wall. Drill and plug the other two holes and fit the screws, again leaving a gap between the screw head and the wall.

5. Hang the Paradim^{e} on the three screws, ensuring that the slots have engaged behind all three screw heads. Tighten down the screws, so that the Paradim^{e} cannot be moved.

6. Refit the earth straps to the cover plates and screw back into place.

MONTAGE AU MUR

Cet appareil a été conçu pour un montage vertical. Un montage incorrect peut empêcher le fonctionnement correct du système de ventilation et peut provoquer les problèmes d'opération.

1. Ouvrez le boitier en enlevant les six vis des deux panneaux frontaux. Dégagez les connections à terre des deux panneaux.

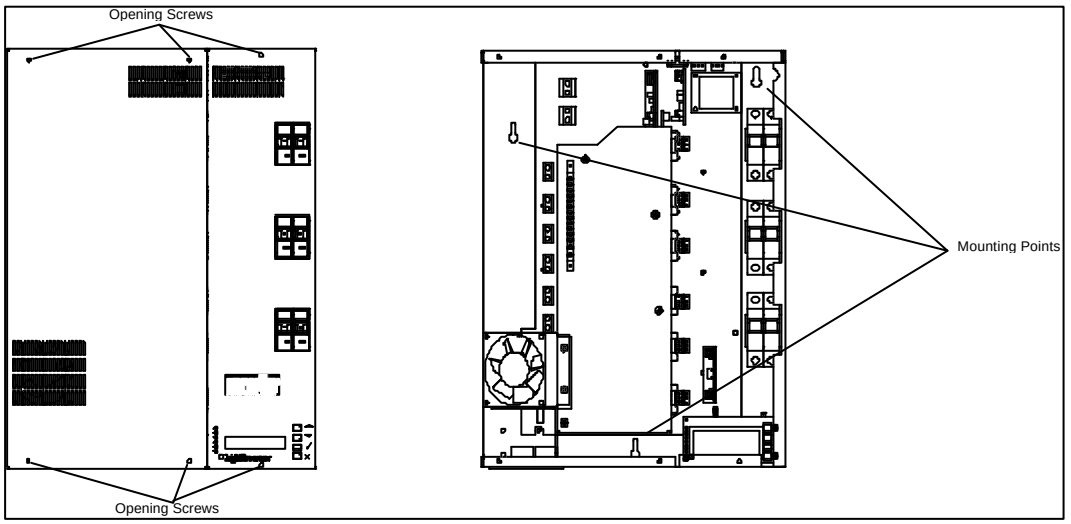
2. Il y a trois points de fixation. Choisissez un point 20mm. en bas du niveau désiré du haut de l'appareil et 28mm. du côté droit. Percez le mur et posez une cheville appropriée et une vis à tête ronde de 40 x 4mm.. Laissez un interstice de 3mm. entre la tête de la vis et le mur.

3. Suspendez le Paradim^{e} de la vis et marquez la position des deux autres vis. Servez-vous d'un niveau à bulle pour vous aider.

4. Enlevez le Paradim^{e} du mur et préparez les autres deux trous. Laissez un interstice de 3mm. entre la tête des vis et le mur.

5. Suspendez le Paradim^{e} des trois vis, en vous assurant que les vis ont engagé dans les fentes. Resserrez les vis, afin que l'appareil ne puisse pas bouger.

6. Remplacez les fils de terre et revissez les panneaux face avant.



THE MENU SYSTEM AND USER OPTIONS

1 SET DMX ADDR?
If you intend to use DMX512 as the control protocol, you must set a start address. You may also control the cooling fan by DMX, if you wish, although, in most cases, you will leave this function to the microprocessor.

Press √.
∧/∨ to select DMX start address or the FAN address and press √.

11 START ADDRS?
111 START [001]
∧/∨ to desired start channel and press √.

12 FAN ADDRS?
121 FANdmx [nnn]
Default = off ∧/∨ to desired start channel and press √.
(note: Any DMX level above 250 will switch off the fan)

2 SET CHANNELS?
You may set the following attributes for each channel. Channel numbers are always expressed as channels 1-6 (or in some cases A for All channels) of this Dimmer pack and do not refer to DMX channels.

Press √.
∧/∨ to select the attribute to change and press √.

21 SET PREHEAT?
Set preheats to prolong lamp life. Set a level where the lamp filaments just glow.
211 CHANNEL [n]
∧/∨ to select channel (or All option) and press √.
2111 LEVEL [000]
Default = 0.
∧/∨ to desired level and press √.

22 SET MAX OUT?
You may set the maximum output level for each channel. Note that if a channel is set to 50%, full slider travel on the control desk will be needed to bring the channel to 50%.
221 CHANNEL [n]
∧/∨ to select channel (or All option) and press √.
2211 LEVEL [nnn]
Default = 255 (full)
∧/∨ to desired level and press √.

LE MENU ET LES OPTIONS D'USAGE

1 SET DMX ADDR?
Si vous avez l'intention d'utiliser le protocole de contrôle DMX, vous devez entrer une adresse de départ. Vous pouvez aussi contrôler le ventilateur au moyen de DMX, si vous voulez, quoique dans la majorité des cas, vous laisseriez cette fonction au microprocesseur.

Appuyez sur √.
Appuyez sur ∨/∧ pour sélectionner l'adresse de départ ou l'adresse du ventilateur et appuyez sur √.

11 START ADDRS? {adresse de départ}
111 START [001]
∨/∧ à l'adresse désirée et appuyez sur √.

12 FAN ADDRS? {adresse de départ du ventilateur}
121 FANdmx [nnn]
Par défaut = off. ∨/∧ à l'adresse désirée et appuyez sur √.
(Note: un niveau en excès de 250 éteindra le ventilateur).

2 SET CHANNELS?
Vous pouvez entrer les attributs suivants pour chaque canal. Les canaux sont exprimés en 1-6 ou A (= tous les canaux) et pas par référence aux canaux DMX.

Appuyez sur √.
∨/∧ à l'attribut désiré et appuyez sur √.

21 SET PREHEAT?
Entrez un préchauffage pour prolonger la vie des lampes. Choisissez un niveau ou les filaments rougoient à peine.
211 CHANNEL [n]
∨/∧ au canal désiré et appuyez sur √.
2111 LEVEL [nnn]
Par défaut = 0
∨/∧ au niveau désiré et appuyez sur √.

22 SET MAX OUT?
Vous pouvez entrer un niveau maximum de sortie pour chaque canal. Notez que vous choisissez un niveau de, par exemple, 50%, il faut déplacer le potentiomètre de contrôle à la limite de son mouvement possible pour arriver à un niveau de sortie de 50%.
221 CHANNEL [n]
∨/∧ au canal désiré (ou All) et appuyez sur √.
2211 LEVEL [nnn]
Par défaut = 255 (plein feu)
∨/∧ au niveau désiré et appuyez sur √.

23 SET CURVES?
Choose from: Linear, Square, Switch.
Square law curve will provide a more accurate relationship between lamp brightness and control desk slider position, when using incandescent lamps.
Switch is specifically not a curve! It allows a switch only between full-on and full-off and is used where the dimmer load may be damaged if dimmed, or a constant full level output is required.

231 CHANNEL [n]
∧/∨ to select channel and press √.

2311 CURVE [LIN]
Default = Linear
∧/∨ to select curve and press √.

24 SET FADE?
Setting a fade time to a channel will slow down any level change received at the input. This enables smooth fade effects from simple switched inputs or may be used to protect the dimmer load from instantaneous level changes. Selected fade time applies to both fade in and fade out.

241 CHANNEL [n]
∧/∨ to select channel and press √.

2411 TIME [n]
Default = 1 (minimum).
∧/∨ to set fade time (1-9) and press √. Available fade times are approx (1-9): 0, 1.2, 3, 4, 7, 133, 165, 220, 330 seconds.

3 SET SCENES?
The user may programme a total of eight scenes, 1-8, by 'capturing' or 'recording' the current dimmer pack output. Dimmer output can be achieved by incoming DMX/analogue signals and/or preheat level settings. Scenes may be replayed using either the front panel controls or Preset control inputs.

Press √.

31 REPLAY?
Select a previously recorded scene or programme chase to output.

311 GO [n]
∧/∨ to select a scene or chase and press √.

23 SET CURVES? {Courbes de gradation}
Choisissez de linéaire, carré, switch.
Une courbe carrée produit un rapport plus précis entre la position du potentiomètre de contrôle et l'intensité de la lampe, quand vous utilisez les lampes incandescentes.
Switch n'est point une courbe! Il permet seulement une commutation de la charge. Vous l'utilisez dans le cas où vous pourrait dommager la charge, si vous tentiez de faire une graduation.

231 CHANNEL [n]
∨/∧ au canal désiré et appuyez sur √.

2311 CURVE [LIN]
Par défaut = linéaire
∨/∧ pour sélectionner la courbe et appuyez sur √.

24 SET FADE?
La mise d'un temps de fondu ralentira la vitesse d'un changement de niveau reçu aux entrées. Ceci permet un fondu doux des entrées commutées et peut être utilisé pour protéger la charge contre les changements de niveau instantanés. Le temps sélectionné s'applique au temps de montée et de descente.

241 CHANNEL [n]
∨/∧ pour sélectionner le canal et appuyez sur √.

2411 TIME [n] {Delai}
Par défaut = 1 (mimimum).
∨/∧ pour selectionner un temps (1-9) et appuyez sur √. Les temps disponibles sont (1-9): 0, 1.2, 3, 4, 7, 133, 165, 220, 330 secondes.

3 SET SCENES?
L'utilisateur peut programmer huit scènes, 1-8, par la 'saisie' ou 'l'enregistrement' de la sortie actuelle du Paradim^{e}. Vous pouvez produire une sortie en utilisant le signal d'une régie lumière ou le niveau de préchauffage. Vous pouvez restituer les scènes soit en utilisant les contrôles du panneau frontal soit les contrôles à distance.

Appuyez sur √.

31 REPLAY? {Restitution}
Sélectionnement pour sortie d'une scène ou d'une séquence pré-enregistrée.

311 GO [n] {Démarrage} ∨/∧ pour sélectionner une scène/séquence et appuyez sur √.

32 RECORD?
Save the current dimmer output to one of the 8 scene memories.

321 GET SCENE [n]
∧/∨ to select scene number.
Press √ to capture current dimmer output.

33 DMX FAIL?
The following options are selectable in the event that the DMX input to the dimmer fails or is removed. This is only applicable when DMX is a selected input source.

331 [ ]
Choose from:
LAST HELD the last signal received is held in the outputs.
ALL OFF all channels go to 0 output.
GO NO DMX the NO DMX SCN scene is output.
SCENE 8 a user programmable scene.
Default = ALL OFF.
∧/∨ to desired option and press √ to store.

34 MAP INPUTS?
Pins 1-6 of the analogue input connector can be used to access the Preset inputs and may be mapped to any of the stored scenes 1-8 and/or programme chase/speeds 10-99.

341 CHANNEL [n]
∧/∨ to select one of the six available presets and press √.

3411 DO [ ]
∧/∨ to select one of the available scenes or programme chases for this channel number and press √.

35 FADE TIMES?
In a similar way to individual channels, the scenes 1-8 may be set to automatically fade in/out over a set period of time. This is useful for 'seamless' level changes in some architectural lighting applications. Fades between scenes are 'dipless'.

351 SCENE [n]
∧/∨ to select scene and press √.

3511 [00m 00s]
∧/∨ to set the desired fade time for the scene and press √.

32 RECORD? {Enregistrement}
Mémorisation de la sortie actuelle à une des huit mémoires de scène.

321 GET SCENE [n] {Sélection de scène} ∨/∧ pour sélectionner le numéro de scène.
Appuyez sur √ pour saisir la sortie actuelle.

33 DMX FAIL?
Les options suivantes sont à votre disposition dans le cas où le signal d'entrée DMX tombe en panne ou manque. Elles ne sont que valides si DMX est le protocole de signal choisi.

331[ ]
Choisissez de:
LAST HELD le dernier signal reçu est tenu dans les sorties.
ALL OFF tous les canaux sont rendus à 0.
GO NO DMX la scène NO DMX SCN est sortie.
SCENE 8 une scènE programmable par l'utilisateur
Par défaut = ALL OFF
∨/∧ à l'option désirée et appuyez sur √ pour la mémoriser.

34 MAP INPUTS?
Les broches 1-6 de la prise analogique peuvent être utilisées pour gagner accès aux présélections et peuvent être patchées aux huit scènes mémorisées et aux séquences/vitesses 10-99.

341 CHANNEL [n]
∨/∧ pour sélectionner un des canaux 1-6 disponibles et appuyez sur √.

3411 DO [ ]
∨/∧ pour sélectionner une des scènes ou des séquences pour ce canal et appuyez sur √.

35 FADE TIMES?
Les scènes 1-8 peuvent être programmées avec un temps de fondu, comme est le cas avec les canaux individuels. C'est utile pour les changements de niveau 'sans faille' dans les usages architecturaux. Les fondus entre les scènes sont 'dipless'.

351 SCENE [n]
∨/∧ à la scène désirée et appuyez sur √.

3511 [00m 00s] ∨/∧ pour mettre le temps de fondu désiré et appuyez sur √.

36 NO DMX SCN?
A scene or chase programme stored here will be output immediately power is applied to the dimmer if DMX is a selected input signal and no DMX signal is connected.

361 [ ]
∧/∨ to select scene or chase and press √.

4 SET SUPPLY?
Access to this item is restricted to installers and is dealt with in separate installation instructions.

5 SET INPUTS?
You may select the input signal type used to control the dimmer from the following list. Where there is more than one input signal source selected, the highest level received by any channel will be used (HTP) Default = DMX only.

Press √.

51 [ ]
Choose from:
DMX only, ANALOG only, DMX+ANALOG, WP6, WP7, WP7+DMX , WP8, WP9, WPS6, WPS7.

Menu Description	Functionality
DMX only	DMX input only active
Analog only	Analogue input only active
DMX+Analog	DMX and analogue inputs mixed on HTP basis
WP6	Latching scene control input for use with 6-button panel. Mixed with DMX input on HTP basis
WP7	Non-latching scene control input for use with 7-button panel only
WP7+DMX	7-button panel scene control mixed with DMX on HTP basis
WP8	Six 0-10V inputs have control over each of the scenes. Previously-selected fader must be returned to zero before next is selected
WP9	Six 0-10V inputs have control over each scene – any/all scenes can be mixed on an HTP basis
WPS6	6-button plus 6-fader panel. Button is used to select scene: associated fader acts as a scene master
WPS7	6-button plus 7-fader panel. As WPS6 with additional grand master fader

∨/∧ to select option and press √ to store.

36 NO DMX SCN?
Une scène/séquence que vous mémorisez ici sera sortie automatiquement lors de la mise sous tension si DMX a été sélectionné comme le protocole de contrôle mais il n'y a pas présent de signal actuel.

361 [ ]
∨/∧ à la scène/séquence désirée et appuyez sur √.

4 SET SUPPLY?
L'accès à cette position est limité aux installateurs et est le sujet des instructions séparées.

5 SET INPUTS?
Vous pouvez sélectionner le type de signal de contrôle désiré de la liste suivante. Où il y en a plusieurs choisis, c'est le niveau le plus haut sur chaque canal qui sera sortie (HTP). Par défaut = DMX ONLY (DMX seul).

Appuyez sur √.

51 [ ]
Choisissez de:
DMX only, ANALOG only, DMX+ANALOG, WP6, WP7, WP7+DMX, WP8, WP9, WPS6, WPS7.

Option menu	Fonctionalité
DMX only	Signal d'entrée DMX uniquement
Analog only	Signal d'entrée analogique en uniquement
DMX+Analog	Entrées DMX et analogique mélangées sur base HTP
WP6	Contrôle maintenu de scènes. Utilisation avec télécommande à six boutons. Mélangé avec entrée DMX sur base HTP.
WP7	Contrôle fugitif des scènes. Utilisation avec télécommande à sept boutons.
WP7+DMX	Utilisation de la télécommande à sept boutons mélangée avec l'entrée DMX sur base HTP.
WP8	Six entrées de 0-10V contrôlent les scènes. Un potentiomètre en marche doit être retourné à 0 avant l'utilisation du prochain.
WP9	Six entrées de 0-10V contrôlent les scènes. Les scènes peuvent être mélangées sur base HTP.
WPS6	Six boutons plus six potentiomètres linéaires. Sélection de scène au moyen du bouton; noveau au moyen du potentiomètre.
WPS7	Six boutons plus sept potentiomètres. Comme WPS6 mais avec grand master.

∨/∧ à l'option désirée et appuyez sur √.

6 SET TEXT?
The text message 'LightProcessor Digital Dimmer' which scrolls through thedisplay during normal operation may be edited to a message of your choice. The message may contain up to 40 alphanumeric characters

Note: The menu must be 'unlocked' to make changes. If the menu is 'locked' the message NOT ALLOWED will be displayed.

Press √.

LightPro [L] ∧/∨ to change the character shown in the brackets[ ]
Press √ to move to the next character.
At the end of your message, using the ∨ button select [END] then press √ to store the changes.

When editing an existing message,press √ repeatedly until the end of the message is reached before selecting [END] and storing the changes.

7 NOT USED
Press Ö to view the installed software revision number and serial number.

8 READ INFO?
The following information is available.

Press √.

81 HOURS USED?
The number of complete hours the dimmer has been in operation.
Press √ to view
811 [00000 HOURS]
82 TEMPERATURE
821[ ] nnn°C
Choose from: MIN , MAX , NOW or RESET
∧/∨ to select option and press √ to view or reset the max. and min. readings to zero.
83 DMX LEVELS
View DMX input levels as 0-255
831 CH[n] = nnn ∧/∨ to scroll through each of the six dimmer channels
- the current DMX input level is shown.
84 ANA LEVELS
View Analogue input levels as 0-255
841 CH[n] = nnn
∧/∨ to scroll through each of the six dimmer channels - the current Analogue input level is shown.

6 SET TEXT?
Le message 'LightProcessor Digital Dimmer' qui défile par l'afficheur durant l'opération normale peut être édité à un message de votre choix. Le message peut contenir jusqu' à 40 caractères alphanumériques.

Note: Le menu doit être UNLOCKED (ouvert) pour permettre les changements. Si le menu est bloqué, vous verrez le message NOT ALLOWED dans l'afficheur.

Appuyez sur √.

LightPro [L] ∨/∧ pour changer la caractère entre les crochets [ ]
Appuyez sur √ pour procéder à la prochaine caractère.
A la fin de votre message, en utilisant le bouton ∨, sélectionnez [END] et puis appuyez sur √ pour sauver les changements.

Quand vous éditez un message existant, allez à la fin du message, en appuyant sur Ö à maintes reprises, avant de sélectionner [END] et de sauver les changements.

7 NOT USED
Appuyez sur Ö pour voir la version de logiciel et le numéro de série.

8 READ INFO?
Les informations suivantes sont à votre disposition.

Appuyez sur √ .

81 HOURS USED?
Le nombre d'heures entières d'opération du bloc.
Appuyez sur √ .
811 [00000 HOURS]
82 TEMPERATURE
821[ ] nnn°C
Choisissez de MIN, MAX, NOW (actuelle), RESET (remettre)
∨/∧ pour sélectionner l'option et appuyez pour voir/remettre la température à 0.
83 DMX LEVELS
Voir les niveaux DMX, exprimé en 0-255.
831 CH[n] = nnn
∨/∧ pour défiler par les six canaux et vous verrez les niveaux correspondants d'entrée.
84 ANA LEVELS
Voir les niveaux analogiques, exprimé en 0-255.
841 CH[n] = nnn
∨/∧ pour défiler par les six canaux et vous verrez les niveaux correspondants d'entrée.

85 CLEAR ERROR
Used to clear error messages caused by conditions which require the dimmer to be examined before further use.
Access to this item is restricted to installers and is dealt with in separate installation instructions.
86 MENU ACCESS
861 [ ]
Choose from: UNLOCKED , LOCKED.
∧/∨ to select option and press √.
87 SET DEFAULTS?
Returns all software settings and features to the factory default values.
Press √.

9 TEST CHANNELS
Press √.

91 CH[n] √ =TEST
∧/∨ to select individual or [A]ll channels.
Press √ once to switch channel(s) on 50%
Press √ again to switch channel(s) on 100%
Press √ again to switch channel(s) OFF.

85 CLEAR ERROR
Utilisé pour effacer les messages d'erreur, occasionnés par des conditions qui nécessitent une examination du gradateur avant une continuation d'usage.
L'accès à cette position est limité aux installateurs et est le sujet des instructions séparées.
86 MENU ACCESS
861 [ ]
Choisissez de UNLOCKED (ouvert), LOCKED (fermé). ∨/∧ pour sélectionner l'option et appuyez sur √ .
87 SET DEFAULTS
Remet toutes les sélections de logiciel et les configurations aux valeurs par défaut.
Appuyez sur √ .

9 TEST CHANNELS
Appuyez sur √ .

91 CH[n] √ = TEST
∨/∧ pour sélectionner un canal individuel ou [A] (tous les canaux).
Appuyez sur √ une fois pour allumer à 50%.
Appuyez sur √ une fois de plus pour allumer à 100%.
Appuyez sur √ une fois de plus pour éteindre.

MAINTENANCE

As with all commercial products of this type, it is the responsibility of the user/owner of the equipment to apply test and maintenance procedures to ensure compliance with local laws and regulations. Regular internal inspection by qualified personnel will ensure reliable operation. Accumulated dirt and dust should be removed carefully. There should be no loose cables within the unit. All plugable modules should be firmly seated in their sockets. Any cables/sockets showing signs of wear or damage should be replaced. Any internal installation wiring should be kept to a minimum and kept clear of the heatsink. The cooling fan is the only moving part; it has a normal lifespan of approximately five years. Rotate the fan manually to assess its state of health. Keep the fan and its grille free from dust and dirt. Do not use a high pressure pneumatic line for this purpose, as this may damage the fan motor and electronics.

PORTABLE APPLIANCE TESTING

This type of periodic testing should be carried out on all types of portable equipment in accordance with the policies set down by the operating company. The following describes three tests that may be applied.

1. Continuity. This is a qualification test between the input live and neutral. This tests the internal circuitry and fusing to ensure that a valid circuit exists.

2. Earth Bond. This tests the continuity and capability of the earthing system to ensure (a) that a circuit exists and (b) that it is capable of handling large fault currents.The test must be performed between the main input connector's earthing point and the case of the dimmer. Any probe used must be sharp enough to break through the paint on the case. The test must be repeated on the earth pin of each output socket to ensure that the socket provides a proper earth for its load.

3. Insulation. This tests whether there is any fault within the product that could cause the case to become live. Tests must be applied to both the input terminals and the output terminals/sockets. Because triacs will be 'off' when the insulation test is performed, the internal circuitry and wiring after the triac will need to be connected in parallel with the mains input terminals. Therefore the insulation test must be performed with all accessible lives and neutrals paralleled together: each output socket must have its live and neutral connector shorted together, joined with all other outlets and finally joined with the shorted input phase and neutral terminals. This represents a single terminal to which a high voltage is applied with respect to the earth terminal. All circuit breakers must be 'on' for this test.

ENTRETIEN

Comme est cas avec tous les produits commerciaux de ce type, il est la responsabilité de l'utilisateur/propriétaire de l'appareil de le tester et de l'entretenir pour assurer une conformité avec la loi. Un examen interne regulier assurera une opération fiable. La crasse et la poussière accumulée doivent être enlevées avec soin. Evitez les câbles flottants dans le boîtier. Tous les modules enfichables doivent être fermement assis dans leurs prises. S'il y a des câbles ou des prises usées, il faut les remplacer. S'il y a de câblage interne supplémentaire, il doit être limité autant que possible et ne doit pas toucher la radiateur. Le ventilateur est la seule pièce mobile; il a une vie normale d'approximativement cinq ans. Tournez-le manuellement pour vous assurer qu'il est en bon ordre. N'utilisez pas une ligne pneumatique à haute pression, qui peut endommager le moteur et l'électronique.

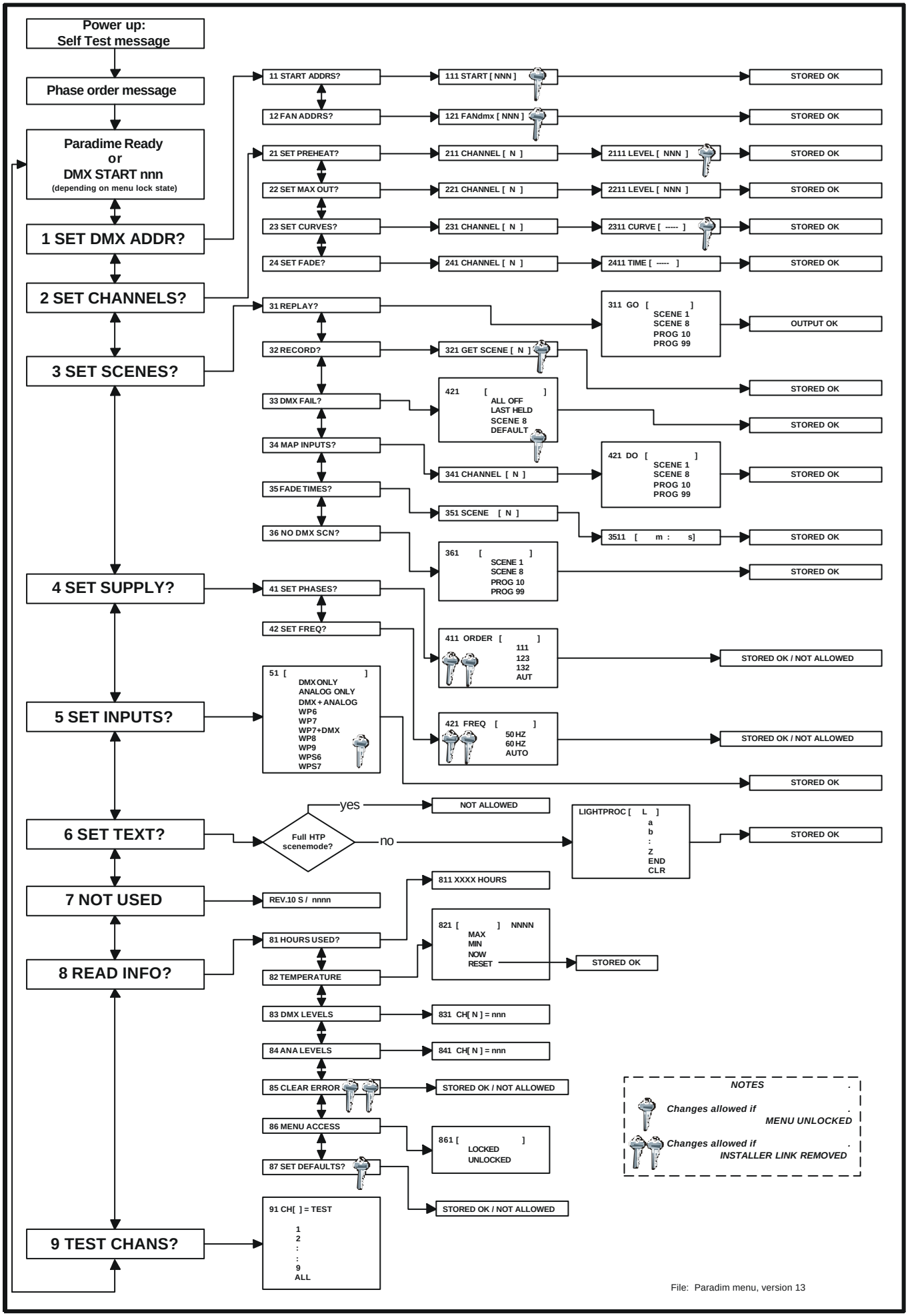
MISE A L'ESSAI DES APPAREILS PORTABLES

Ce type de procédure périodique devrait être effectué à toute type d'appareil selon la politique de l'entreprise. Le suivant décrit trois tests appropriés.

1. Continuité. Ceci est un test de qualification entre la tension d'entrée et le neutre. Il teste les circuits internes et les fusibles pour établir qu'un circuit valide existe.

2. Mise a Terre. Ceci teste la continuité et la capacité du système de mise à terre pour assurer (a) que le circuit existe et (b) qu'il est capable de résister aux grands courants de faute. Il est indispensable d'effectuer le test entre le borne de terre d'entrée et le boitier de l'appareil. La pointe de la sonde doit être suffisament aiguë pour percer le peinture du boitier. Il faut répéter ce test sur la broche de terre de chaque prise de sortie, pour assurer que la prise se pourvoit d'une terre suffisante pour sa charge.

3. Isolation. Ce test détermine s'il y a une faute qui peut rendre le boitier sous tension. Il faut le mettre en pratique aux bornes d'entrée et aux bornes/prises de sortie. Parce que les triacs ne sont pas sous tension quand le test est executé, les circuits internes et le câblage au delà des triacs doivent être reliés en parallèle avec les bornes d'entrée principales. Vous devez donc exécuter ce test avec tous les plus et les neutres reliés en parallèle: chaque prise doit avoir son plus et son neutre reliés en court circuit, reliée aux autres prises et reliés au bornes d'entrée principales phase et neutre, elles-mêmes reliées en court circuit. Ceci représente une seule borne à laquelle vous appliquez une haute tension relative à la borne de terre. Il faut que tous les disjoncteurs sont dans la position 'on'.


Power up:
Self Test message
Phase order message
Paradime Ready
or
DMX START nnn
(depending on menu lock state)
1 SET DMX ADDR?
2 SET CHANNELS?
3 SET SCENES?
4 SET SUPPLY?
5 SET INPUTS?
6 SET TEXT?
7 NOT USED
8 READ INFO?
9 TEST CHANS?
11 START ADDRS?
111 START [NNN]
STORED OK
12 FAN ADDRS?
121 FANdmx [NNN]
STORED OK
21 SET PREHEAT?
211 CHANNEL [N]
2111 LEVEL [NNN]
STORED OK
22 SET MAX OUT?
221 CHANNEL [N]
2211 LEVEL [NNN]
STORED OK
23 SET CURVES?
231 CHANNEL [N]
2311 CURVE [-----]
STORED OK
24 SET FADE?
241 CHANNEL [N]
2411 TIME [-----]
STORED OK
31 REPLAY?
311 GO [ ]
SCENE 1
SCENE 8
PROG 10
PROG 99
OUTPUT OK
32 RECORD?
321 GET SCENE [N]
STORED OK
33 DMX FAIL?
421 [ ]
ALL OFF
LAST HELD
SCENE 8
DEFAULT
STORED OK
34 MAP INPUTS?
341 CHANNEL [N]
421 DO [ ]
SCENE 1
SCENE 8
PROG 10
PROG 99
STORED OK
35 FADE TIMES?
351 SCENE [N]
3511 [m : s]
STORED OK
36 NO DMX SCN?
361 [ ]
SCENE 1
SCENE 8
PROG 10
PROG 99
STORED OK
41 SET PHASES?
42 SET FREQ?
411 ORDER [ ]
111
123
132
AUT
STORED OK / NOT ALLOWED
51 [ ]
DMX ONLY
ANALOG ONLY
DMX + ANALOG
WP6
WP7
WP7+DMX
WP8
WP9
WPS6
WPS7
421 FREQ [ ]
50 HZ
60 HZ
AUTO
STORED OK / NOT ALLOWED
STORED OK
Full HTP scenemode?
yes
NOT ALLOWED
no
LIGHTPROC [L]
a
b
:
Z
END
CLR
STORED OK
REV.10 S / nnnn
81 HOURS USED?
811 XXXX HOURS
821 [ ] NNNN
MAX
MIN
NOW
RESET
STORED OK
82 TEMPERATURE
83 DMX LEVELS
831 CH[N] = nnn
84 ANA LEVELS
841 CH[N] = nnn
85 CLEAR ERROR
STORED OK / NOT ALLOWED
86 MENU ACCESS
861 [ ]
LOCKED
UNLOCKED
87 SET DEFAULTS?
STORED OK / NOT ALLOWED
91 CH[ ] = TEST
1
2
:
:
9
ALL
NOTES
Changes allowed if MENU UNLOCKED
Changes allowed if INSTALLER LINK REMOVED
File: Paradim menu, version 13

SPECIFICATION

Power Requirements:

Voltage 230V AC nominal. (194-264V AC)
Link selectable to 100-120V AC
Frequency 48-62Hz.

Three phase + neutral + earth
Single phase = neutral + earth with links fitted (10A per channel models only)

Dimming Capacity

Six channels of dimming per dimmer unit.

Maximum load:	10A models	10A per channel/60A total.
	16A models	16A per channel, 3-phase only 32A per phase. 96A total.
	20A models	20A per channel, 3-phase only 40A per phase. 120A total.
	25A models	25A per channel, 3-phase only 50A per phase. 150A total.

Minimum load: All models 100W.

Control Inputs

Analogue 0 to +10V, via 8-pin locking DIN.
20kOhm input impedance

USITT DMX512 (1990), via 5-pin XLR.

Output Connectors

Power output connectors are available covering a range of international standards.

Hardwired versions are also available with screw terminal connectors.

Phantom Power Output

100mA at 14V DC unregulated and current limited by 1k resistor.

Physical Characteristics

Weight: between 11 and 14Kg., depending on model and rating.
Dimensions:
Rack models
Height: (depending on model) 2, 3 or 4 rack units.
Width: 19 inch rack mounting
Depth: 360mm. (excluding any output sockets)
Wall models
Height: 455mm.
Width: 335mm.
Depth: 105mm.

Environment

Temperature	0-30°C
Relative humidity	0-90% non-condensing
Pollution	Degree 2
Protection Classification	IP30

Conformance

All Paradim^{e} s are designed to meet CE regulations covered by:
LVD (using EN60439 and EN60950)
EMC (EN55014 and EN50082-1)

Appendix

3. Paradime 10A Specification

Paradim^{e} Digital Dimmer - 6 x 10 Amps. Versions.

Power Requirements:	Voltage 230V AC nominal. Link selectable to 115V AC nominal. Frequency 50/60Hz. Three phase + neutral + earth – 20Amps max. per phase Single phase + neutral + earth with links fitted – 60Amps max.
Dimming Capacity	Maximum load: 6 x 10A per channel/60A total. Minimum load: 100W per channel
Control Inputs	Analogue 0 to +10VDC, via 8-pin locking DIN. >47kOhm input impedance USITT DMX512 (1990), via 5-pin XLR.
Output Connectors	See table below.
Phantom Power Output	+14V DC at 100mA unregulated.
Physical Characteristics	Weight 12.5-15Kg., depending on configuration. Dimensions Height: (depending on configuration) 2, 3 or 4 rack units. Width: 19 inch rack mounting Depth: 358mm. (excluding any output sockets)
Environment	Temperature 0-30°C Relative humidity 0-90% non-condensing Pollution degree 2 Protection Classification IP30
Conformance	Paradim^{e} is designed to meet CE regulations covered by: LVD (using EN60439 and EN60950) EMC EN55014, EN55022 (radiated emissions) and EN50082-1

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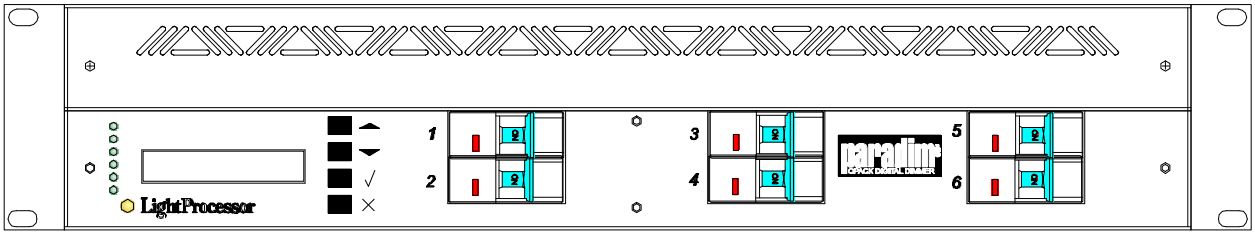
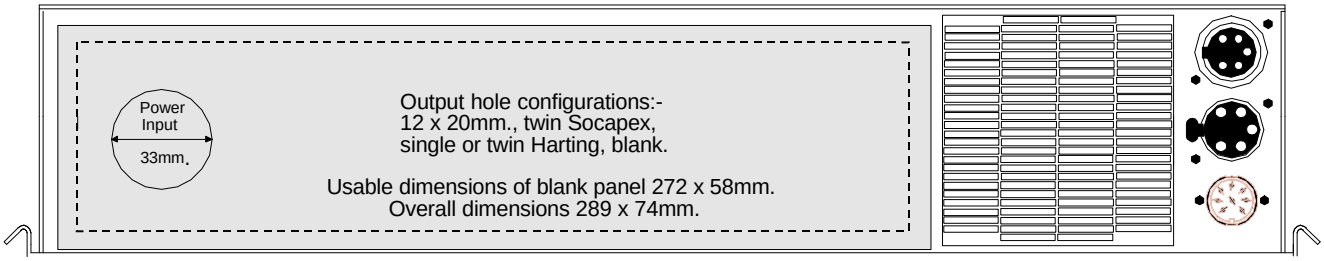
Front view 2U

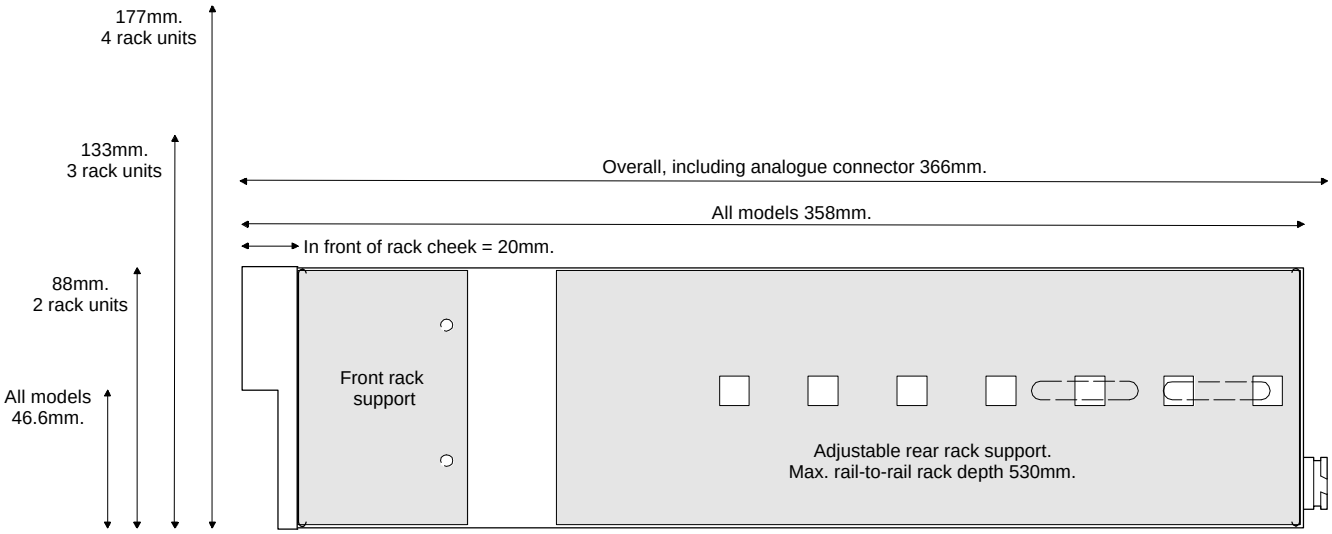


19inch (483mm.) Rack mounting. Front and rear supports supplied as standard

Rear view 2U



Side view 2U



Output Type	Height	Approx. Weight
Hardwired, Ceep/Socapex, Wieland/Harting	2U	12.5Kg.
CEE17	3U	13.5Kg.
UK 15Amps x 6	3U	13.5Kg.
UK 15Amps x 12	4U	15.0Kg.
Double Schuko or French	4U	15.0Kg.
Other output sockets may be available on application.		
Paradime also exists in 16A and 25A versions. Request separate specification sheets.		

Appendix

4. Paradime 16A Specification

Paradim^{e} Digital Dimmer - 6 x 16 Amps. Versions.

Power Requirements:	Voltage 230V AC nominal. Link selectable to 115V AC nominal. Frequency 50/60Hz. Three phase + neutral + earth – 32Amps max. per phase
Dimming Capacity	Maximum load: 6 x 16A per channel/96A total. Minimum load: 100W per channel
Control Inputs	Analogue 0 to +10VDC, via 8-pin locking DIN. >47kOhm input impedance USITT DMX512 (1990), via 5-pin XLR.
Output Connectors	See table below.
Phantom Power Output	+14V DC at 100mA unregulated.
Physical Characteristics	Weight 13.5-16Kg., depending on configuration. Dimensions Height: (depending on configuration) 2, 3 or 4 rack units. Width: 19 inch rack mounting Depth: 358mm. (excluding any output sockets)
Environment	Temperature 0-30°C Relative humidity 0-90% non-condensing Pollution degree 2 Protection Classification IP30
Conformance	Paradim^{e} is designed to meet CE regulations covered by: LVD (using EN60439 and EN60950) EMC EN55014, EN55022 (radiated emissions) and EN50082-1

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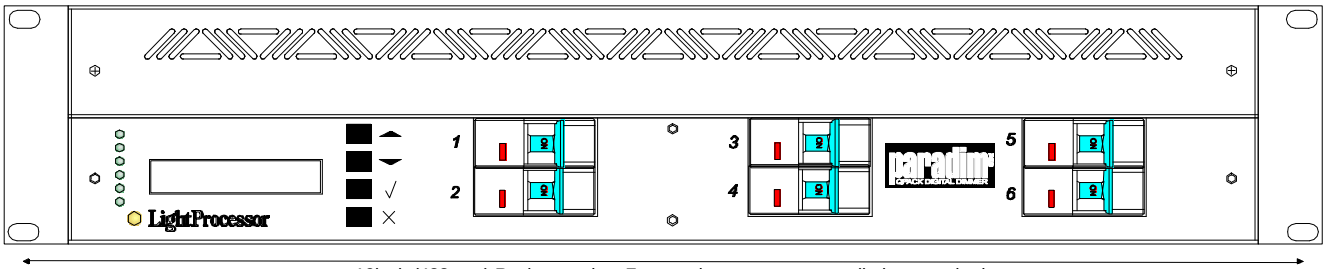
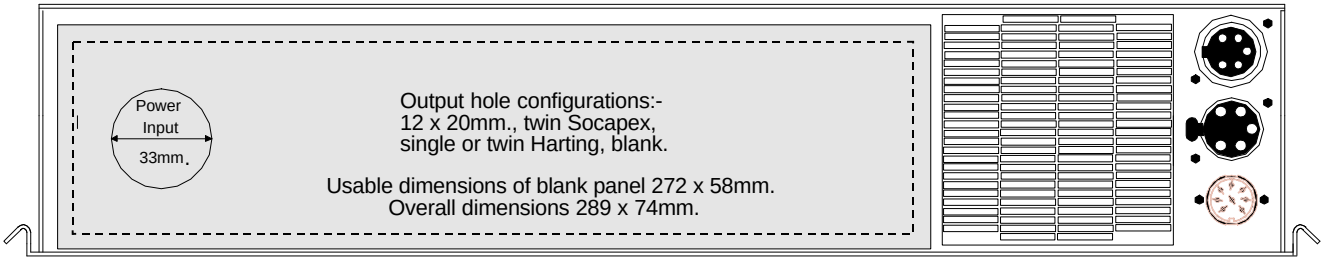
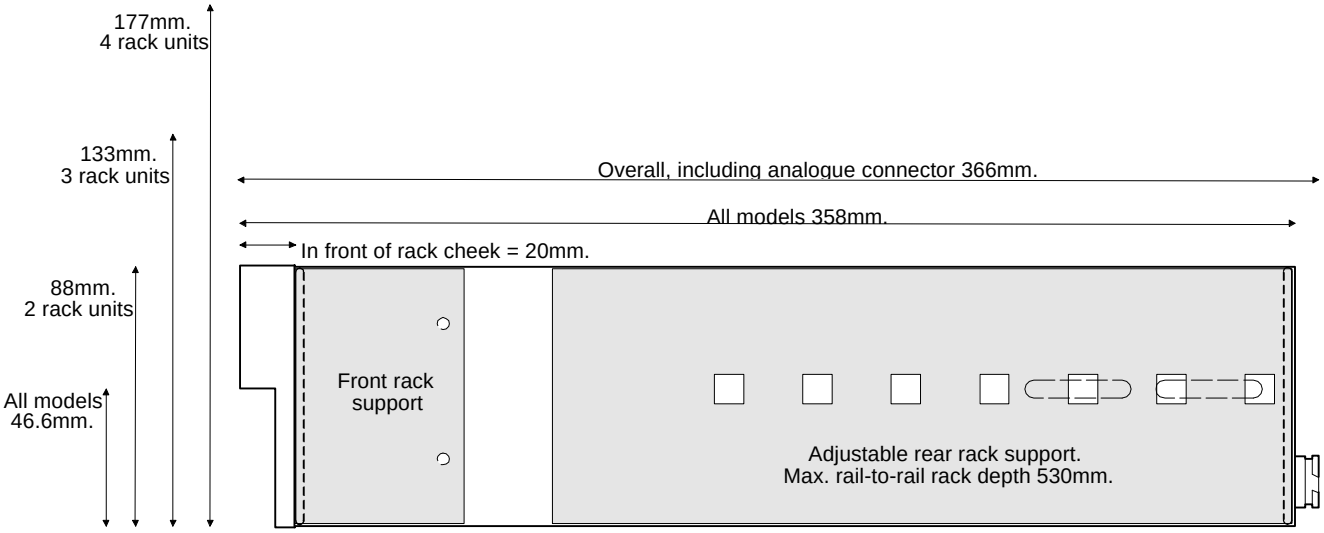
Fax: 0181 575 8678. www.lightprocessor.co.uk info@lightprocessor.co.uk



Front View, 2U



Rear View, 2U



Side View

Output Type	Height	Approx. Weight
Hardwired, Ceep/Socapex, Wieland/Harting	2U	13.5Kg.
CEE17, single Schuko+cap	3U	14.5Kg.
Double Schuko or French	4U	14.5Kg.
Other output sockets may be available on application.		
Paradime also exists in 10A and 25A versions. Request separate specification sheets.		

Appendix

5. Paradime 6 Button Panel Information

WP6 6 BUTTON REMOTE WALL PLATE

Instructions for installation and use

Installing the Wall Plate(s)

The Paradime Wall Plate is designed to fit standard UK electrical back boxes with a minimum internal depth of 25mm. Suitable back boxes for surface and flush mounting are available separately.

One or more wall plates my be connected to one or more Paradime digital dimmers, as shown in the examples below, using 8 core cable readily available for telephone and alarm system installations. Distances between dimmer(s) and Wall Panel(s) of up to 100 metres are acceptable as the system is designed to allow for any voltage drop incurred within these limits.

The Wall Plate and Paradime digital dimmer combination will display a pre-recorded static scene or chosen chase program. The dimmer will access the program associated with the last button press made, so multiple simultaneous presses will only result in selecting the final press.

Setting up the Paradime Digital Dimmer(s)

The scenes to be accessed from the remote panel must first be 'recorded'. This is done by selecting 'Analogue Only' or 'DMX Only' as the input choice (Menu 5 - Set Inputs) and then for each scene, either:-

a). capturing the current input to the dimmer from an analogue or DMX source
(Menu 3 - Set Scenes, Menu 32 - Record)

or

b). setting each channel level using the pre-heat facility
(Menu 21 - Set preheat, then going to Menu 3 - Set Scenes, Menu 32 - Record)

Note: You may wish to program one of the scenes as an 'OFF' selection.

Each scene may be set to fade in and out, when selected, by programming a fade time individually to each scene (Menu 3 - Set Scenes, Menu 35 - Fade Times)

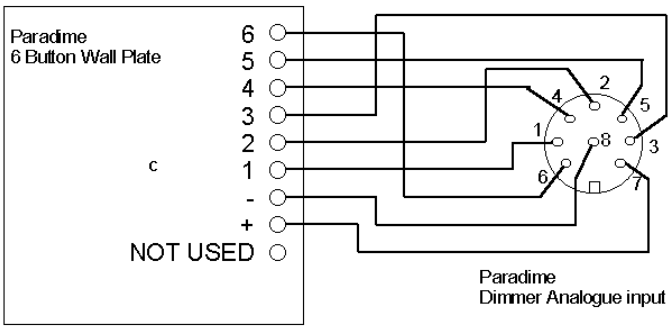
The 6 inputs should now be 'mapped' to select the desired scene or chase programme when each Wall Plate button is pressed (Menu 3 - Set Scenes, Menu 34 - Map Inputs) Each of the six inputs are selected in turn and a scene (numbered 1-8) or chase program (numbered 10-99) for each, chosen.

Once the scenes have been 'recorded' and the inputs programmed, the Paradime Digital Dimmer(s) should be set to work with the remote Wall Plate by choosing the 'WP6' (or in earlier Paradime software versions 'REMOTE C') in Menu 5 'Set Inputs'

The DMX input is also activated in this mode - any values being 'mixed' with individual channels within the selected scene on an htp basis.

Wiring example 1.
Basic system using single panel and dimmer.

A single plate is used to control a single Paradime dimmer pack



Wiring example 2.
Multiple Wall Plates with multiple dimmers.

Twelve channels of lighting are controlled from three Wall Plates.

Note, each of the six Wall Plate buttons may be used to control different inputs on one or more of the dimmers.

The example shown below is just one possible application:-

Button 6 has been connected to all three panels and both dimmers and may be programmed as an 'all off' or similarly 'global' scene.

All other button selections on the right hand plate effect only Paradime 2.

Buttons on the middle plate select scenes in both Paradime units.

With the exception of button 6, all other selections on the left hand WP6 effect only Paradime 1.