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SPECTRA BANK 4, 6 & 8
(ORDER CODES: LEDJ60/LEDJ61/LEDJ62)

USER MANUAL

<u>WARNING</u>

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOUR INITIAL START-UP!**

CAUTION!

**Keep this equipment away from rain,
Moisture and liquids.**

SAFETY INSTRUCTIONS

Every person involved with the installation, operation & maintenance of this
equipment should:
-        Be competent
-        Follow the instructions of this manual

**CAUTION! TAKE CARE USING THIS EQUIPMENT!
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!**

Before your initial start-up, please make sure that there is no damage caused during
transportation. Should there be any, consult your dealer and do not use the equipment.

To maintain the equipment in good working condition and to ensure a safe operation, it is
necessary for the user to follow the safety instructions and warning notes written in this
manual.

Please note that damages caused by user modifications to this equipment are not
subject to warranty.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power-cable come into contact with other cables. Handle the power-cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Do not connect this equipment to a dimmer-pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains, when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available voltage is between 220v/240v.
- Make sure that the power-cable is never crimped or damaged. Check the equipment and the power-cable from time to time.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately. Have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and electric connection must only be carried out by a qualified technician.
- **THIS UNIT CONTAINS NO USER SERVICEABLE PARTS...**
- WARRANTY; One year from date of purchase.

OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void.

Incorrect operation may lead to danger e.g.: short-circuit, burns, electric shocks, lamp failure etc.

Do not endanger your own safety and the safety of others!
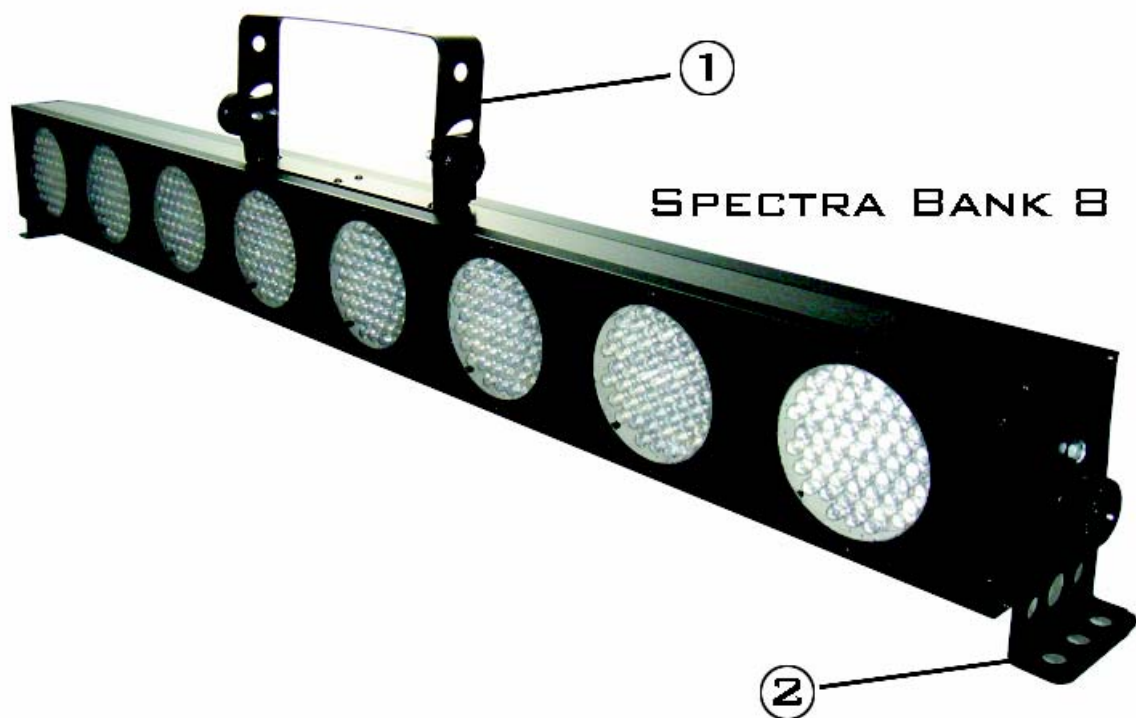Incorrect installation or use can cause serious damage to people and property!

Description of the equipment

Features

The Spectra Bank is a high output LED spot bank.

- Spectra Bank 4 – 4 Spots
- Spectra Bank 6 – 6 Spots
- Spectra Bank 8 – 8 Spots
- Built-in microphone
- Linkable
- DMX

FRONT VIEW
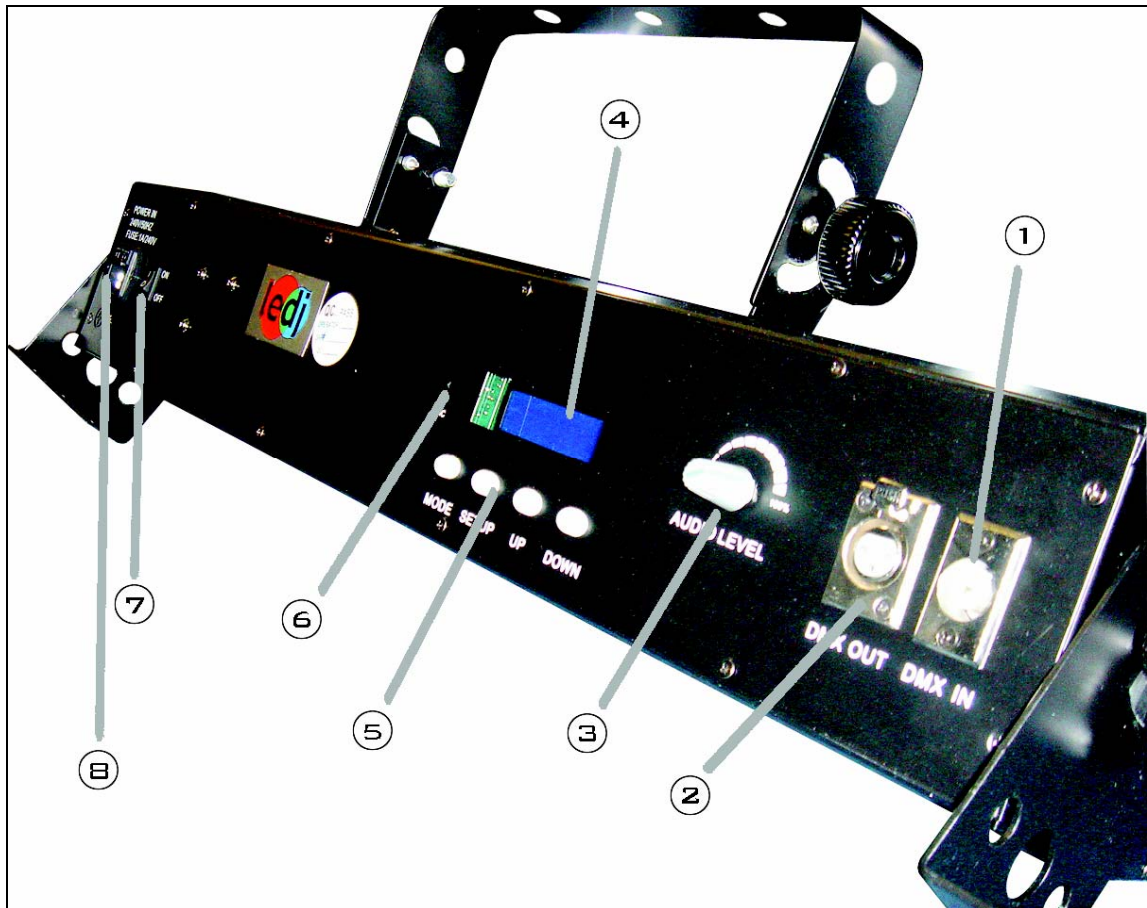

Fig 1

1) Hanging Brackets
2) Floor/ceiling mounts

BACK VIEW

FIG 2

1) DMX input
2) DMX output
3) Audio sensitivity control
4) LCD menu display
5) Menu selection buttons
6) Internal microphone
7) Power switch
8) Mains socket (fused)

Operation

After you have connected the Spectra Banks to the mains, the 10mm LED bar/s start chasing.
The LCD display lights up and you can then choose the desired mode via the **MODE** button:

- Stand alone mode
- Auto mode
- DMX mode
- Master/slave mode
- Sound activation mode

Stand-alone mode

Chaser:
A chase is a sequence of different steps that will be called up one after another in a continuous loop. You can select up to 14 different pre-programmed chases.

Selecting a chase:
Press the SET UP button. Select the desired chase (00-14) via the
UP or **DOWN** buttons.
Select the desired chase sequence via the UP and DOWN buttons. (Step time/**SP** or strobe speed/**FS**).

FS = Flash speed from 00 – 100% **SP** = Step time from 00 – 100% time/minute.

Auto mode

- In auto mode the chases are called up automatically in a continuous loop.
- The desired speed of the loops can be selected via the
  UP and **DOWN** buttons.

Master/Slave Mode:

- The master/slave operation enables several units to be synchronized to one
  master unit.
- On the rear panel of the Spectra Bank you will find an XLR plug and an XLR socket
  which can be used for connecting several units.

Daisy Chain Connection

1) Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture
2) Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Proceed to connect from the output as stated above to the input of the following fixture and so on.

Sound Activation Mode

When in sound mode adjust the level control to enable the built in microphone to trigger the internal programs.

DMX mode

The control panel allows you to assign the DMX unit address, which is defined as the first channel from which the Spectra Bank 4, 6 & 8 will respond to the controller.

Addressing

Press the **SET UP** button until the display shows DMX mode DMX address 001.

Set the desired address via the **UP** and **DOWN** buttons.

DMX Channel Assignment:

When used in 5 channel mode all spectra banks (4, 6, and 8) use the following:

CH1	CH2	CH3	CH4	CH5
0 – 255 **DIMMER**	0 – 255 **STROBE**	0 – 255 **RED**	0 – 255 **GREEN**	0 – 255 **BLUE**

DMX CHANNEL MODE SELECTION:

The Spectra Bank 8 way has 4 DMX modes, 5, 8, 14, and 26 channel
(See following page for diagram)
The Spectra Bank 6 way has 4 DMX modes, 5, 8, 11, and 20 channel
(See following page for diagram)
The Spectra Bank 4 way has 3 DMX modes, 5, 8, and 14 channel

In all the above modes channels 1 and 2 are always **DIMMER** and **STROBE** respectively.

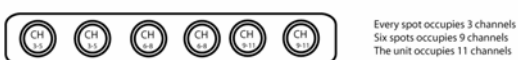## SPECTRA BANK 4:

14 - Channel Mode:

| CH 3-5 | CH 6-8 | CH 9-11 | CH 12-14 |

Every spot occupies 3 channels
Four spots occupies 12 channels
The unit occupies 14 channels

8 - Channel Mode:

| CH 3-5 | CH 3-5 | CH 6-8 | CH 6-8 |

Every spot occupies 3 channels
Four spots occupies 6 channels
The unit occupies 8 channels

5 - Channel Mode:

| CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 |

Every spot occupies 3 channels
Four spots occupies 3 channels
The unit occupies 5 channels

SPECTRA BANK 6:

20 - Channel Mode:

| CH 3-5 | CH 6-8 | CH 9-11 | CH 12-14 | CH 15-17 | CH 18-20 |

Every spot occupies 3 channels
Six spots occupies 18 channels
The unit occupies 20 channels

11 - Channel Mode:

| CH 3-5 | CH 3-5 | CH 6-8 | CH 6-8 | CH 9-11 | CH 9-11 |

Every spot occupies 3 channels
Six spots occupies 9 channels
The unit occupies 11 channels

8 - Channel Mode:

| CH 3-5 | CH 3-5 | CH 3-5 | CH 6-8 | CH 6-8 | CH 6-8 |

Every spot occupies 3 channels
Six spots occupies 6 channels
The unit occupies 8 channels

5 - Channel Mode:

| CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 |

Every spot occupies 3 channels
Six spots occupies 3 channels
The unit occupies 5 channels

SPECTRA BANK 8:

26 - Channel Mode:

| CH 3-5 | CH 6-8 | CH 9-11 | CH 12-14 | CH 15-17 | CH 18-20 | CH 21-23 | CH 24-26 |

Every spot occupies 3 channels
Eight spots occupies 24 channels
The unit occupies 26 channels

14 - Channel Mode:

| CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 | CH 6-8 | CH 6-8 | CH 6-8 | CH 6-8 |

Every spot occupies 3 channels
Eight spots occupies 12 channels
The unit occupies 14 channels

8 - Channel Mode:

| CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 | CH 6-8 | CH 6-8 | CH 6-8 | CH 6-8 |

Every spot occupies 3 channels
Eight spots occupies 6 channels
The unit occupies 8 channels

5 - Channel Mode:

| CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 | CH 3-5 |

Every spot occupies 3 channels
Eight spots occupies 3 channels
The unit occupies 5 channels

DMX-512:

• DMX (Digital Multiplex) is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions form the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a data "out" terminal).

DMX Linking:

• DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned to a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

Further DMX cables can be purchased from all good sound and lighting suppliers or Prolight dealers. Please quote:

CABL10 – 2M
CABL11 – 5M
CABL12 – 10M

Also remember that DMX cable must be daisy chained and cannot be split.

Notice:
• Be sure to follow figures 2 & 3 when making your own cables. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behaviour.
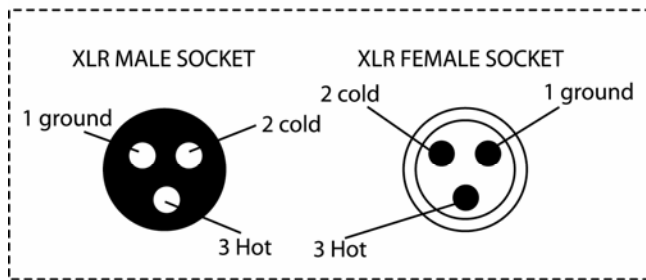

FIGURE 3   FIGURE 2

Special Note: Line termination:
• When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.
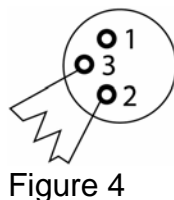

Figure 4

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Termination reduces signal
transmission problems and
interference. It is always
advisable to connect a DMX
terminal, (resistance 120 Ohm
1/4W) between Pin 2 (DMX-) and
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Using a cable terminator (part number CABL90) will decrease the possibilities of erratic behaviour.

5-Pin XLR DMX Connectors:
• Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-Pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The Chart below details the correct cable conversion.

3- Pin XLR to 5-PIN XLR Conversion		
Conductor	**3-Pin XLR out**	**5-Pin XLR in**
Ground shield	Pin 1	Pin 1
Negative (-)	Pin 2	Pin 2
Positive (+)	Pin 3	Pin 3

Maintenance

Always disconnect the electric mains power supply before cleaning or servicing. Damages caused by non-observance are not subject to warranty.

- The LEDJ Spectra Bank requires almost no maintenance. However, you should keep the unit clean. Wipe the cover with a damp cloth.
- Do not immerse in liquid.
- Do not use alcohol or solvents.
- Make sure the equipment is fully dry before re-connecting to the mains.

Product Specification

Model: Spectra Bank 4:
Voltage: AC 240V- 50Hz
Max Total Load: 55W
Input Fuse: F1A 250V
Built-in microphone
DMX Channels: 14
Number of LED's: 220 x 83w
Dimensions: 720 x 120 x 160mm (L x W x H)
Weight: 5 kg

Model: Spectra Bank 6:
Voltage: AC 240V- 50Hz
Max Total Load: 80W
Input Fuse: F1A 250V
Built-in microphone
DMX Channels: 20
Number of LED's: 330 x 83w
Dimensions: 1020 x 120 x 160mm (L x W x H)
Weight: 8 kg

Model: Spectra Bank 8:
Voltage: AC 240V- 50Hz
Max Total Load: 105W
Input Fuse: F1.5A 250V
Built-in microphone
DMX Channels: 26
Number of LED's: 440 x 83w
Dimensions: 1320 x 120 x 160mm (L x W x H)
Weight: 10 kg