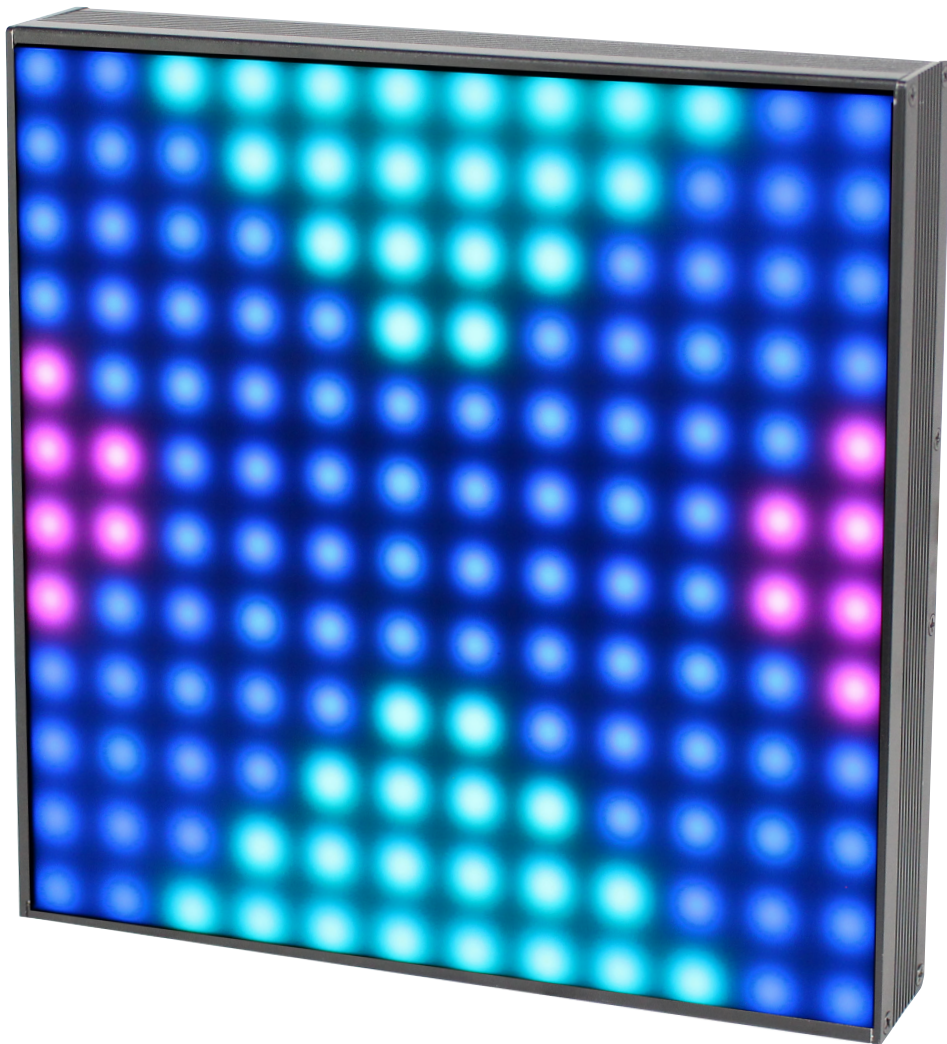


LEDj

TPix Panel User Manual



Order code: LEDJ472

WARNING

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

- Before your initial start-up, please make sure that there is no damage caused during transportation.
- Should there be any damage, consult your dealer and do not use the equipment.
- To maintain the equipment in good working condition and to ensure 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 unit.
- Do not open the equipment and do not modify the unit.
- 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 mains supply voltage is between 100~240V AC, 50/60Hz.
- Make sure that the power cable is never crimped or damaged. Check the equipment and the power cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately and 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 connect power or 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, stop use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Pro Light dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- This lighting fixture is for professional use only - it is not designed for or suitable for household use. The product must be installed by a qualified technician in accordance with local territory regulations. The safety of the installation is the responsibility of the installer. The fixture presents risks of severe injury or death due to fire hazards, electric shock and falls.
- Warning! Risk Group 2 LED product according to EN 62471. Do not view the light output with optical instruments or any device that may concentrate the beam.
- 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 and electric shocks etc.

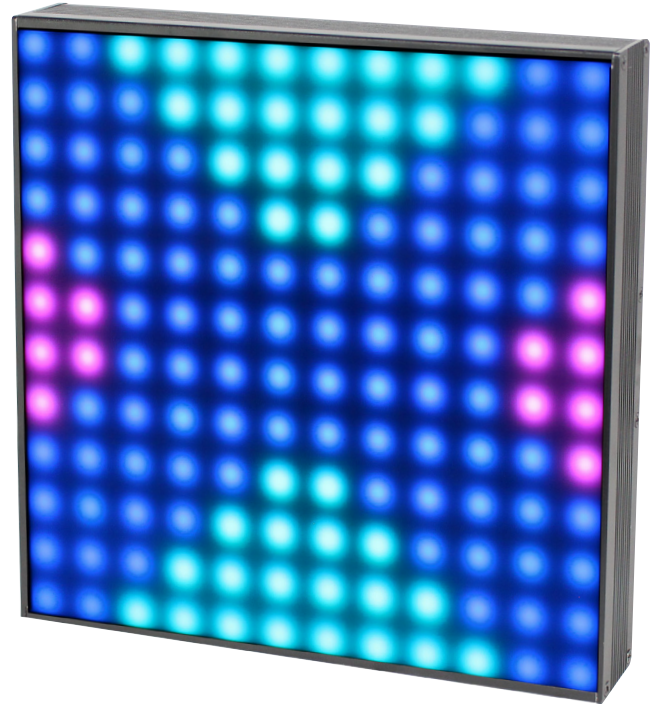
Do not endanger your own safety and the safety of others!

Incorrect installation or use can cause serious damage to people and/or property.

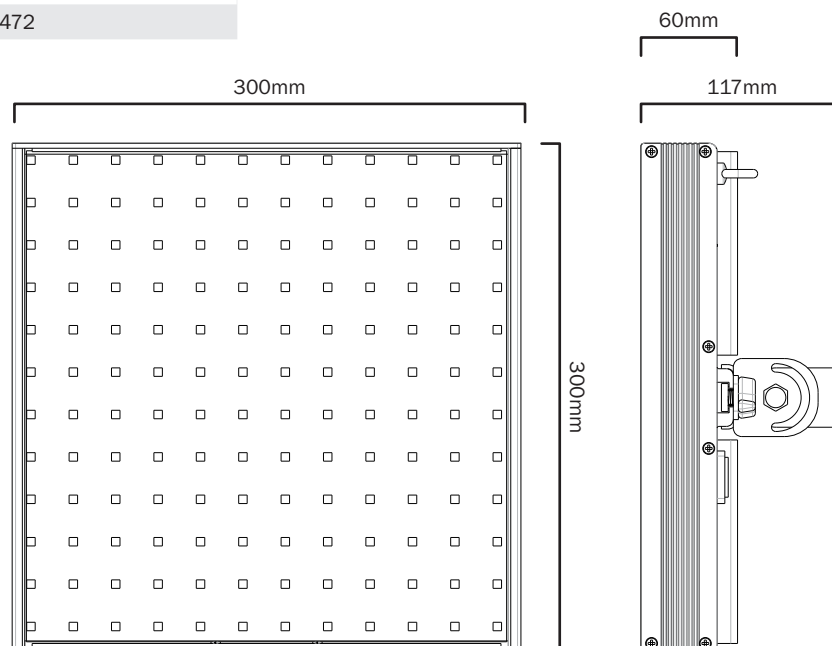
TPix Panel

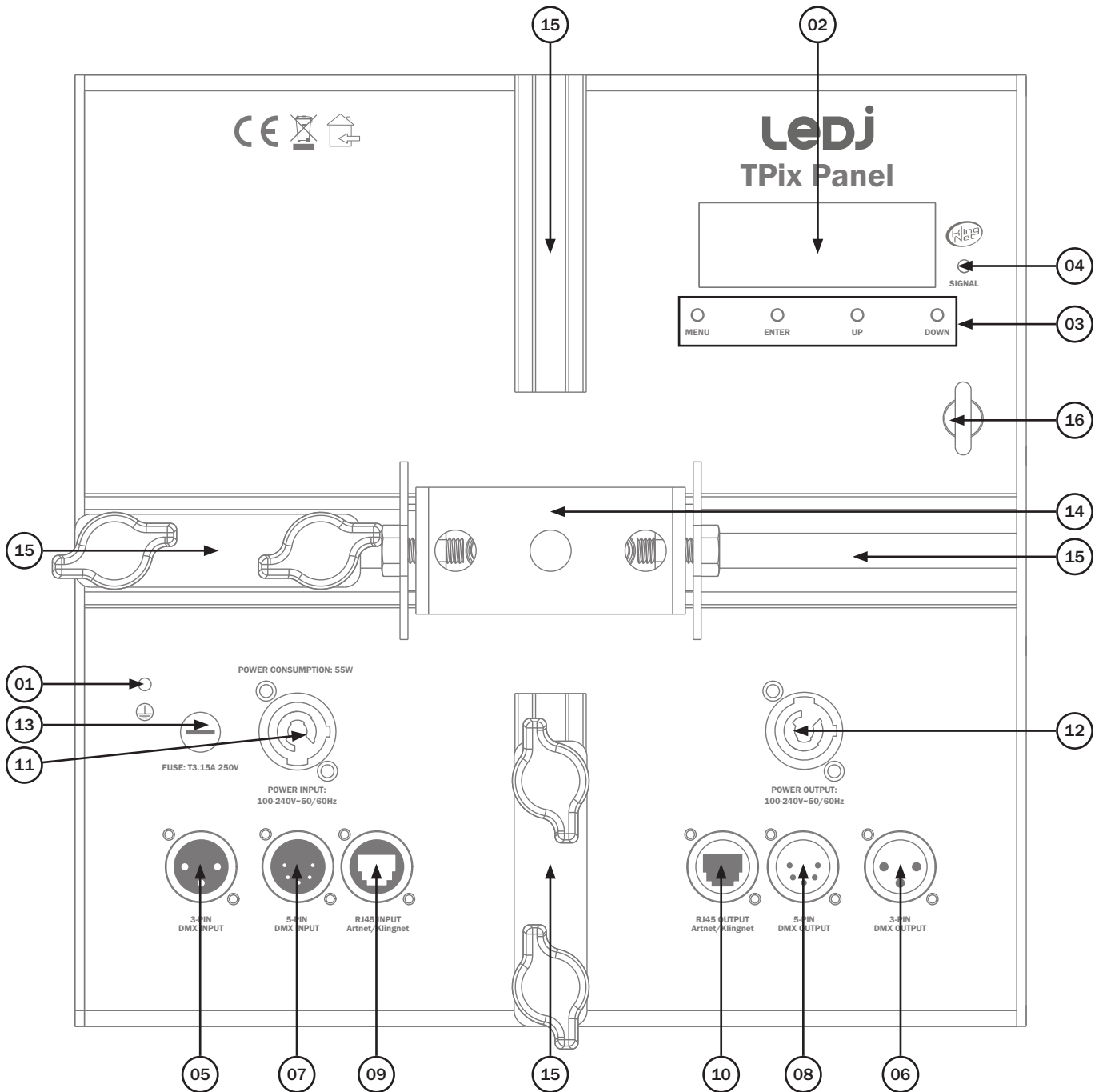
The TPix series are a range of 25mm pitch, pixel mappable fixtures controllable by DMX, Art-Net or Kling-Net. The on-board network switch allows for the Art-Net or Kling-Net to be fully daisy chained for swift rigging. A host of built in macros can be triggered from the menu system or via DMX for simple operation, or for full pixel control, the Art-Net or Kling-Net protocols may be used. All feature robust aluminium chassis, complete with sliding hardware for rigging and panel to panel alignment. All fixtures have a wide 120° viewing angle and feature a milky, frost effect front screen. A clear front screen is also included to further expand the versatility of this series.

- 144 tri-colour SMD 5050 LEDs (RGB)
- Viewing angle: 120°
- Illuminance: 3290 Nits - clear front screen
- Illuminance: 2900 Nits - frosted front screen
- Refresh rate: 400Hz
- Pixels: 12 x 12
- Pixel pitch: 25mm
- DMX channels: 8
- Art-Net channels: 432
- Bracket allows for multiple rigging or floor standing applications
- 4 push button menu with LCD display
- PowerCON input/output
- 5-Pin XLR input/output
- 3-Pin XLR input/output
- Ethercon input/output (Art-Net/Kling-Net)
- Convection cooled



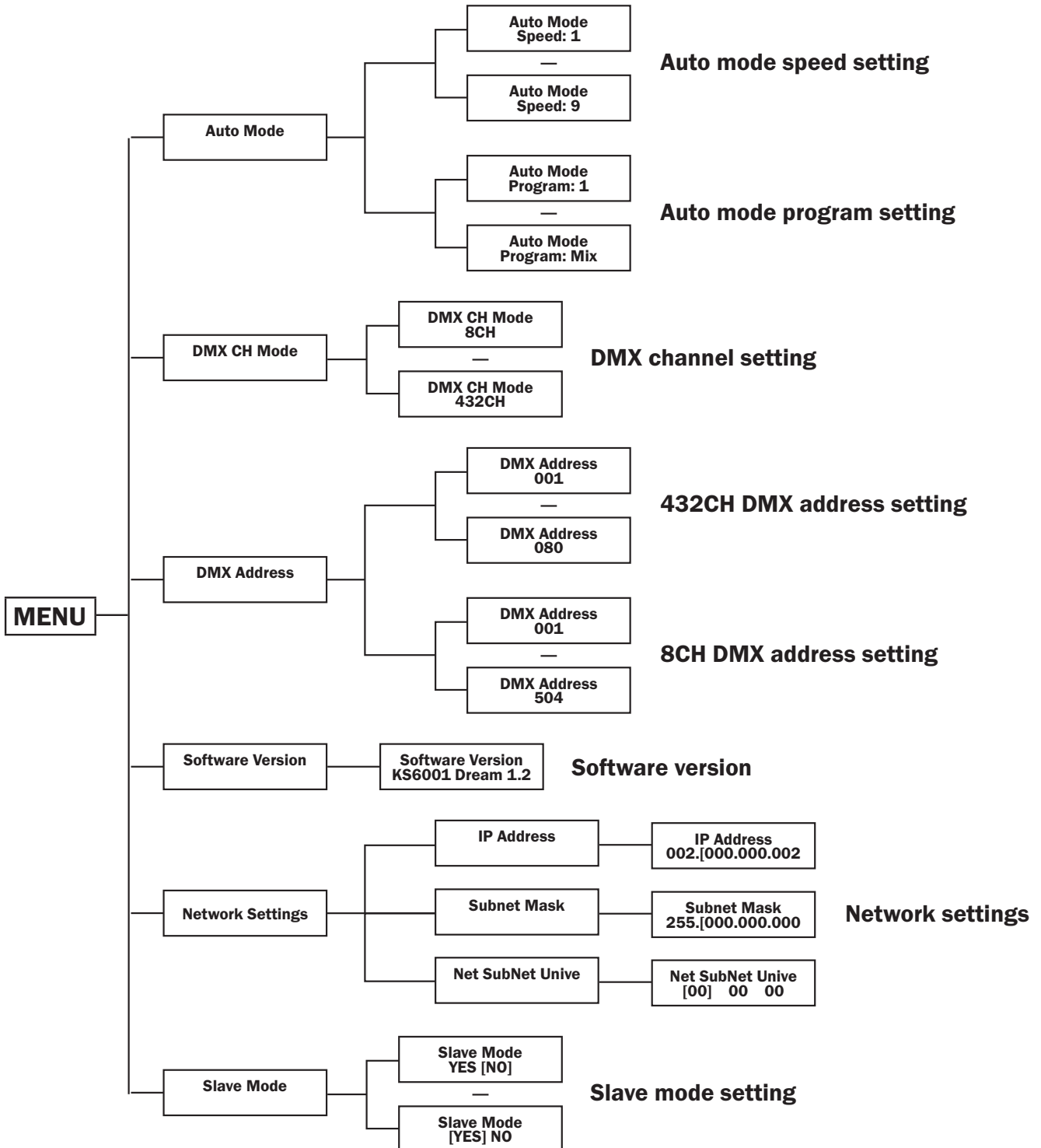
Specifications	TPix Panel
Power consumption	55W
Power supply	100~240V, 50/60Hz
Fuse	T3.15A 250V
Dimensions	300 x 300 x 117mm
Weight	2.5kg
Order code	LEDJ472





- 01 - Earth point
- 02 - LCD display
- 03 - Function buttons
- 04 - Signal LED
- 05 - 3-Pin DMX input
- 06 - 3-Pin DMX output
- 07 - 5-Pin DMX input
- 08 - 5-Pin DMX output
- 09 - RJ45 ArtNet/
KlingNet input
- 10 - RJ45 ArtNet/
KlingNet output
- 11 - PowerCON input
- 12 - PowerCON output
- 13 - Fuse T3.15A 250V
- 14 - Hanging bracket
- 15 - Panel to panel
alignment brackets
- 16 - Safety eye

In the box: **1 x fixture,**
1 x clear front screen,
1 x frosted front screen,
1 x PowerCON cable
& 1 x user manual



IMPORTANT! PLEASE NOTE: The LCD display for this fixture has a timer that turns the display back-light off after 20 seconds of inactivity. To illuminate the display again press one of the 4 buttons.

DMX mode:

Operating in a DMX control mode environment gives the user the greatest flexibility when it comes to customising or creating a show. In this mode you will be able to control each individual trait of the fixture and each fixture independently.

To access the DMX channel mode, press the **"MENU"** button and use the **"UP"** and **"DOWN"** buttons on the rear of the unit to show **"DMX CH Mode"** on the LCD display. Now press the **"ENTER"** button and use the **"UP"** and **"DOWN"** buttons to set the required DMX channel **"DMX CH Mode 8CH"** or **"DMX CH Mode 432CH"**. Press the **"ENTER"** button to confirm the setting.

To exit out of any of the above options, press the **"MENU"** button.

To access the DMX address mode, press the **"MENU"** button and use the **"UP"** and **"DOWN"** buttons on the rear of the unit to show **"DMX Address"** on the LCD display. Now press the **"ENTER"** button and use the **"UP"** and **"DOWN"** buttons to set the required DMX address. Press the **"ENTER"** button to confirm the setting.

To exit out of any of the above options, press the **"MENU"** button.

8 channel mode:

Channel	Value	Function
1	000-255	Master dimmer (0-100%)
2	000-255	Strobe (slow-fast)
3	000-255	Red dimmer (0-100%)
4	000-255	Green dimmer (0-100%)
5	000-255	Blue dimmer (0-100%)
6 (CH1 & CH2 must be set to 000)	000-015	No function
	016-031	Program 1
	032-047	Program 2
	048-063	Program 3
	064-079	Program 4
	080-095	Program 5
	096-111	Program 6
	112-127	Program 7
	128-143	Program 8
	144-159	Program 9
	160-175	Program 10
	176-191	Program 11
	192-207	Program 12
208-223	Program 13	

Channel	Value	Function
6 cont.	224-239	Program 14
	240-255	Program 15
7 (CH1 & CH2 must be set to 000)	000-015	No function
	016-031	Program 16
	032-047	Program 17
	048-063	Program 18
	064-079	Program 19
	080-095	Program 20
	096-111	Program 21
	112-127	Program 22
	128-143	Program 23
	144-159	Program 24
	160-175	Program 25
	176-191	Program 26
	192-207	Program 27
208-223	Program 28	
224-239	Program 29	
240-255	Program Mix	
8	000-255	Speed (slow-fast)

432 channel mode:

Channel	Value	Function
1	000-255	LED 1 Red dimmer (0-100%)
2	000-255	LED 1 Green dimmer (0-100%)
3	000-255	LED 1 Blue dimmer (0-100%)
4	000-255	LED 2 Red dimmer (0-100%)
5	000-255	LED 2 Green dimmer (0-100%)
6	000-255	LED 2 Blue dimmer (0-100%)
7	000-255	LED 3 Red dimmer (0-100%)
8	000-255	LED 3 Green dimmer (0-100%)
9	000-255	LED 3 Blue dimmer (0-100%)
.....
430	000-255	LED 144 Red dimmer (0-100%)
431	000-255	LED 144 Green dimmer (0-100%)
432	000-255	LED 144 Blue dimmer (0-100%)

Auto mode:

To access the Auto mode, press the “MENU” button and use the “UP” and “DOWN” buttons on the rear of the unit to show “Auto Mode” on the LCD display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to select either “Speed” or “Program”.

When selecting “Speed” press the “ENTER” button and use the “UP” and “DOWN” buttons to select between “Speed: 1” ~ “Speed: 9”.

When selecting “Program” press the “ENTER” button and use the “UP” and “DOWN” buttons to select between “Program: 1” ~ “Program: 29” or “Program: Mix”.

Press the “ENTER” button to confirm the setting.

To exit out of any of the above options, press the “MENU” button.

Software version:

To access the fixtures software version, press the “MENU” button and use the “UP” and “DOWN” buttons on the rear of the unit to show “Software Version” on the LCD display. Now press the “ENTER” button and “Software Version KS6001 Dream 1.2” will be displayed.

To exit out of any of the above options, press the “MENU” button.

IP Address setting:

To access the IP address setting, press the “MENU” button and use the “UP” and “DOWN” buttons on the rear of the unit to show “Network Settings” on the LCD display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to select “IP Address”. Press the “ENTER” button and use the “UP” and “DOWN” buttons to select the part of the IP address you would like to change indicated by a “[”.

Press the “ENTER” button and use the “UP” and “DOWN” buttons to adjust the selected part of the IP address you have chosen. Press the “ENTER” button to confirm the setting.

To exit out of any of the above options, press the “MENU” button.

Subnet Mask setting :

To access the Subnet Mask setting, press the “**MENU**” button and use the “**UP**” and “**DOWN**” buttons on the rear of the unit to show “**Network Settings**” on the LCD display. Now press the “**ENTER**” button and use the “**UP**” and “**DOWN**” buttons to select “**Subnet Mask**”. Press the “**ENTER**” button and use the “**UP**” and “**DOWN**” buttons to select the part of the Subnet mask you would like to change indicated by a “[”. Press the “**ENTER**” button and use the “**UP**” and “**DOWN**” buttons to adjust the selected part of the Subnet mask you have chosen. Press the “**ENTER**” button to confirm the setting.

To exit out of any of the above options, press the “**MENU**” button.

Net SubNet Universe setting:

To access the Net SubNet Universe setting, press the “**MENU**” button and use the “**UP**” and “**DOWN**” buttons on the rear of the unit to show “**Network Settings**” on the LCD display. Now press the “**ENTER**” button and use the “**UP**” and “**DOWN**” buttons to select “**Net SubNet Universe**”. Press the “**ENTER**” button and use the “**UP**” and “**DOWN**” buttons to select the part of the Net SubNet Universe you would like to change indicated by a “[]”. Press the “**ENTER**” button and use the “**UP**” and “**DOWN**” buttons to adjust the selected part of the Net SubNet Universe you have chosen.

Press the “**ENTER**” button to confirm the setting.

To exit out of any of the above options, press the “**MENU**” button.

Master/slave mode:

To set the master unit, press the “**MENU**” button and use the “**UP**” and “**DOWN**” buttons on the rear of the unit to select one of the Auto Programs.

To set the other units in slave mode, press the “**MENU**” button and use the “**UP**” and “**DOWN**” buttons on the rear of the unit to show “**Slave Mode**” on the LCD display. Now press the “**ENTER**” button and use the “**UP**” and “**DOWN**” buttons to set slave mode on/off “**Slave Mode [YES]**” or “**Slave Mode [NO]**”.

Press the “**ENTER**” button to confirm the setting.

KlingNet Settings:

- 01) Install a KlingNet based software on your PC (Windows or Mac).
- 02) Connect the TPix Panel to a power supply via the PowerCON input.
- 03) Make sure the PC has a fixed IP Address. No further network settings need to be adjusted.
- 04) Connect the TPix Panel to your computer via a CAT-5/CAT-6 cable (see page 10). Once the fixtures have been connected they will be automatically recognised by the KlingNet based software.
- 05) Map the devices using the “drag and drop” method, placing the fixtures in the “on-screen” interface on the right position. This will take a few minutes and once done the system is fully set up.

Please note: When creating large setups, it is recommended to use a 16-bit, high speed ethernet switch to transmit the KlingNet data signal.

ArtNet Settings:

- 01) Install an ArtNet based software on your PC (Windows or Mac).
- 02) Connect the TPix Panel to a power supply via the PowerCON input.
- 03) Connect the TPix Panel to your software/controller via a CAT-5/CAT-6 cable (see page 10).
- 04) Set the IP address of the software/controller to 2.x.x.x or 10.x.x.x, depending on the ArtNet settings.
- 05) Set the Subnet mask to 255.0.0.0 on both the TPix Panel and the software/controller. Make sure that all fixtures in the network have a unique IP address.

Please note: If you want to connect more than one fixture operating in 432 channel mode is advised. Follow the example below:

Example: TPix Panel 432 channel mode

- 01) Make sure that each connected TPix Panel has a unique IP address.
- 02) Make sure the Subnet mask on each fixture is set to 255.0.0.0.
- 03) Set the universe of the first TPix Panel to 1.
- 04) Set the first TPix Panels DMX Address to 001.

Please note: Due to the TPix Panel having 432 DMX channels you cannot connect a second panel in the same universe as the limit for one universe is 512 DMX channels.

- 05) Set the second TPix Panel to universe 2 with a DMX address of 001. You can repeat this step up to 15 times, each panel being the next ascending number universe (15 universes available in total).
- 06) If you require more than 15 TPix Panels to be connected set the Net of the 16th TPix Panel to 2. You are now able to connect another 15 Panels. The number of Nets available depends on the software used.
- 07) Using your software/controller, map all the connected devices using the settings above.
- 08) The TPix Panels are now ready for use.

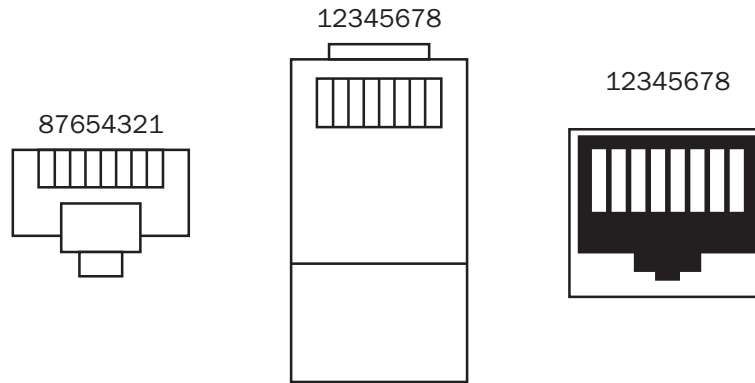
Please note: When creating large setups, it is recommended to use a 16-bit, high speed ethernet switch to transmit the ArtNet data signal.

Making a data cable:

A standard ETHERNET cable can be used to replace the data cable required to transmit the data.

Please follow the instructions below in order to create extra cables:

Take a standard net cable (CAT-5/CAT-5E/CAT-6) and connect it to an RJ45 connector as shown below.



Colour Standard EIA/TIA T568A

Ethernet Patch Cable

		RJ45	Pin#		Pin#	RJ45	
TX +		Green/White Tracer	1	1	Green/White Tracer		PR 3
TX -		Green	2	2	Green		PR 3
RX +		Orange/White Tracer	3	3	Orange/White Tracer		PR 2
		Blue	4	4	Blue		PR 1
		Blue/White Tracer	5	5	Blue/White Tracer		PR 1
RX -		Orange	6	6	Orange		PR 2
		Brown/White Tracer	7	7	Brown/White Tracer		PR 4
		Brown	8	8	Brown		PR 4

Setting the DMX address:

The DMX mode enables the use of a universal DMX controller. Each fixture requires a “start address” from 1- 511. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 7 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100,101,102,103,104,105 and 106. Choose a start address so that the channels used do not overlap. E.g. the next unit in the chain starts at 107.

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 from 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.

DATA cable (DMX cable) requirements (for DMX operation):

This fixture can be controlled via DMX-512 protocol. The DMX address is set on the back of the unit. Your unit and your DMX controller require a standard 3-pin XLR connector for data input/output, see image below.



Further DMX cables can be purchased from all good sound and lighting suppliers or Pro Light Concepts dealers.

Please quote:

CABL10 – 2m

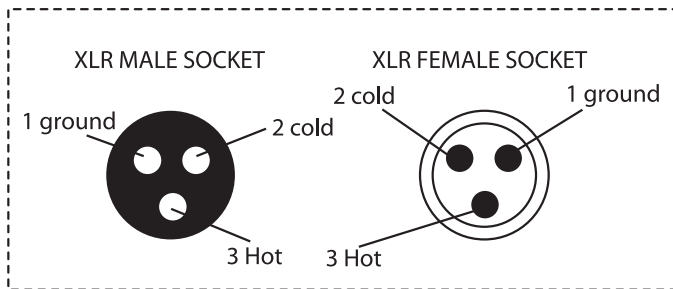
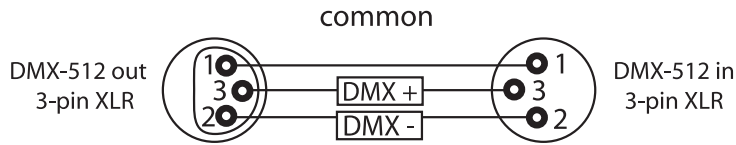
CABL11 – 5m

CABL12 – 10m

Note: DMX cable must be daisy chained and cannot be split.

Notice:

Be sure to follow the diagrams below when making your own cables. Do not connect the cables shield conductor to the ground lug or allow the shield conductor to come in contact with the XLRs outer casing. Grounding the shield could cause a short circuit and erratic behaviour.



XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Negative
Pin 3 = Postive

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.

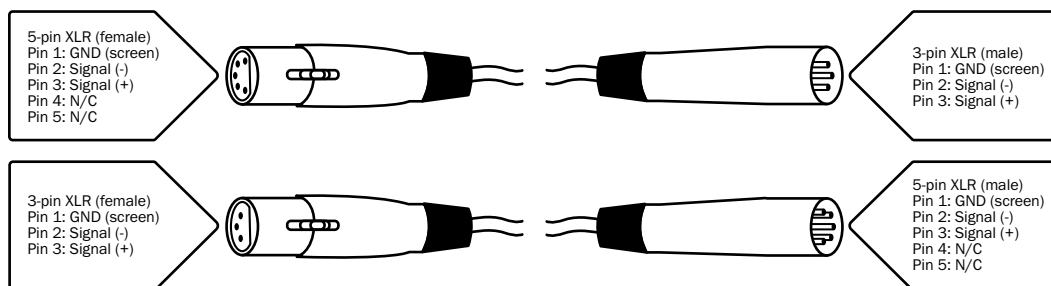
Using a cable terminator will decrease the possibilities of erratic behaviour.

(3-pin - Order ref: CABL90, 5-pin - Order ref: CABL89)

Termination reduces signal transmission problems and interference. It is always advisable to connect a DMX terminal, (resistance 120 Ohm 1/4 W) between pin 2 (DMX-) and pin 3 (DMX+) of the last fixture.

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 diagram below details the correct cable conversion.





***Correct Disposal of this Product
(Waste Electrical & Electronic Equipment)***

**(Applicable in the European Union and other European countries
with separate collection systems)**

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



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