

# **EXT 1212**

## **12x12W LED PAR OUTDOOR**



## **USER MANUAL**

KEEP THIS MANUAL FOR FUTURE NEEDS



# Table of contents

<b>Caution! .....</b>	<b>3</b>
<b>Introduction.....</b>	<b>3</b>
<b>Safety instructions .....</b>	<b>3</b>
<b>Installation.....</b>	<b>3</b>
Read 'Safety information' before installing the fixture .....	3
Fastening the fixture to a flat surface .....	3
Mounting the fixture on a truss .....	3
Securing with a safety cable.....	4
DMX-512 connection/connection between fixtures .....	4
<b>Operation.....</b>	<b>5</b>
Addressing .....	5
Universal DMX Control.....	5
Stand-alone Mode .....	5
Sound Active Mode.....	5
Master-Slave Operation.....	6
<b>Control Menu Map .....</b>	<b>6</b>
<b>DMX Protocol .....</b>	<b>6</b>
<b>Fixture Cleaning .....</b>	<b>6</b>
<b>Troubleshooting .....</b>	<b>7</b>
The fixture does not work, no light .....	7
No response to the sound.....	7
<b>SPECIFICATIONS.....</b>	<b>7</b>

## Caution!

- Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!
- Avoid looking directly into the light source!
- Keep this device away from rain and moisture!
- Make sure it is grounded when using it!
- Unplug mains lead before opening the housing!
- For your own safety, please read this user manual carefully before you initial start-up.
- Every person involved with the installation, operation and maintenance of this device has to
  - be qualified
  - follow the instructions of this manual
  - consider this manual to be part of the total product
  - keep this manual for the entire service life of the product
  - pass this manual on to every further owner or user of the product
  - download the latest version of the user manual from the Internet

## Introduction

Thank you for having chosen EXT 1212. You will see you acquired a powerful and versatile device.

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

## Safety instructions

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual. Always disconnect from the mains, when the device is not in use or before cleaning it. Keep away children and amateurs from the device! There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.

## Installation

### Read 'Safety information' before installing the fixture

The fixture is designed for indoor use only and must be used in a dry location with adequate ventilation. Ensure that none of the fixture's ventilation slots are blocked.

Fasten the fixture to a secure structure or surface. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed in this user manual using a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

### Fastening the fixture to a flat surface

The fixture can be fastened to a hard, fixed, flat surface that is oriented at any angle. Ensure that the surface and all fasteners used can support at least 10 times the weight of all fixtures and equipment to be installed on it.

Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed below with a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

### Mounting the fixture on a truss

The fixture can be clamped to a truss or similar rigging structure in any orientation. When installing the

fixture hanging vertically down, you can use an open-type clamp such as a G-clamp. When installing in any other orientation, you must use a half-coupler clamp that completely encircles the truss chord.

To clamp the fixture to a truss:

1. Check that the rigging structure can support at least 10 times the weight of all fixtures and equipment to be installed on it.
2. Block access under the work area.
3. Fold the legs of the mounting bracket together and bolt a rigging clamp securely to the mounting bracket. The bolt used must be M10, grade 8.8 steel minimum. It must pass through both mounting bracket legs and be fastened with a self-locking nut.
4. Working from a stable platform, hang the fixture with its clamp on the truss and fasten the clamp securely.
5. Secure the fixture with a safety cable as directed below.

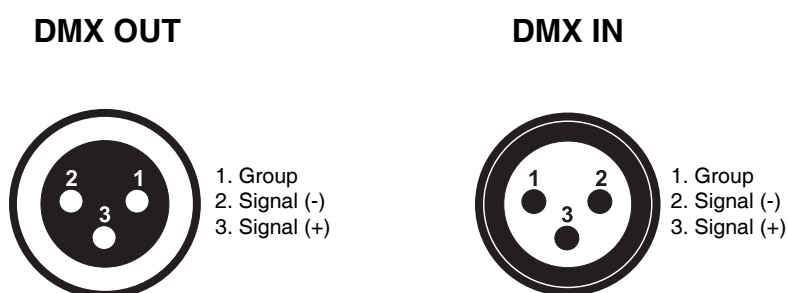
### **Securing with a safety cable**

Secure the fixture with a safety cable (or other secondary attachment) that is approved for the weight of the fixture so that the safety cable will hold the fixture if a primary attachment fails.

Loop the safety cable through the eyebolt in the back of the fixture and around a secure anchoring point. Do not loop the safety cable around the fixture's mounting bracket only, as this will leave the fixture unsecured if it separates from the bracket.

### **DMX-512 connection/connection between fixtures**

#### ***Occupation of the XLR-connection:***



If you are using controllers with this occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

#### ***Building a serial DMX-chain:***

Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

#### ***DMX-512 connection with DMX terminator:***

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain.

**Caution:** At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 resistor between Signal (-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the

last fixture.

### **Connection with the mains:**

Connect the device to the mains with the enclosed power supply cable.

## **Operation**

The EXT 1212 can operate in three different modes. In each mode you can run the fixture as a stand alone fixture or in a master/slave configuration. This next section will detail the differences in the operating modes.

### **Addressing**

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to listen to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make different address for each fixture individually.

If you set the same address, all the units will start to listen to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to listen to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of the EXT 1212, which is 8 channels fixture. If you set, for example, the address to channel 9, the device will use the channel 9 to 16 for control.

### **Universal DMX Control**

This function allows you to use a universal DMX-512 controller to control the chases and patterns, dimmer and strobe. A DMX controller allows you to create unique programs tailored to your individual needs.

### **Stand-alone Mode**

In this mode, you can run internal program without a controller. This fixture include three stand-alone mode.

1. Press the MENU button until “**CCxx**” is displayed, and press ENTER. The unit will run colour jumping effect. Number 0-99 with increasing speed.
2. Press the MENU button until “**CPxx**” is displayed, and press ENTER. The unit will run colour switching effect. Number 0-99 with increasing speed.
3. Press the MENU button until “**dExx**” is displayed, and press ENTER. The unit will run colour fading effect. Number 0-99 with increasing speed.

### **Sound Active Mode**

This mode allows either single unit or several units linked together, to run to the beat of the music.

Press the MENU button until “**bEbE**” is displayed, and press ENTER. The unit will now run to the beat of the music.

## Master-Slave Operation

This function will allow you to link up to 16 units together and operate without a controller. In a Master-Slave set up one unit will act as the controlling unit and the others will react to the controlling units programs. Any unit can act as a Master or as a Slave.

1. Using approved IP data cables, daisy chain your units together via the connector on the units.
2. For the Master unit press the MENU button until "CCxx" or "CPxx" or "dExx" is displayed, and press ENTER.
3. For the slave units press the MENU button until "A001" is displayed, and Press ENTER.
4. The slave units will now follow the Master unit.

## Control Menu Map

MENU	SUB-MENU	FUNCTION INSTRUCTION
A001	A001-A512	DMX address setting(8 channel)
CC00	CC00-CC99	Color jumping, Speed increasing
CP00	CP00-CP99	Color switching, Speed increasing
dE00	dE00-dE99	Color fading, Speed increasing
bEbE		Sound mode
r000	r000-r255	Red dimmer, 0-100%
G000	G000-G255	Green dimmer, 0-100%
b000	b000-b255	Blue dimmer, 0-100%
o000	o000-o255	White dimmer, 0-100%

## DMX Protocol

8 CH	Fuction	Description
CH1	Dimmer	0-255 0-100%
CH2	Strobe	0-255 Speed increasing
CH3	Color Marco	0-50 No function 51-100 Color jumping 101-150 Color switching 151-200 Color fading 201-255 Sound control
CH4	Color Marco speed	0-255 Speed increasing
CH5	Red	0-255 0-100%
CH6	Green	0-255 0-100%
CH7	Blue	0-255 0-100%
CH8	White	0-255 0-100%

## Fixture Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

To clean the fixture:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Vacuum or gently blow away dust and loose particles from the outside of the fixture with low-pressure compressed air.
3. Clean the surfaces by wiping gently with a soft, clean lint-free cloth moistened with a weak detergent solution. Do not rub glass surfaces hard: lift particles off with a soft repeated press. Dry with a soft, clean, lint-free cloth or low-pressure compressed air. Remove stuck particles with an unscented

tissue or cotton swab moistened with glass cleaner or distilled water.

4. Check that the fixture is dry before reapplying power.

## Troubleshooting

Listed below are a few common problems that you may encounter, with solutions.

### ***The fixture does not work, no light***

- Check the connection of power and main fuse. Be sure the external fuse has not blown.
- Measure the mains voltage on the main connector.

### ***No response to the sound***

- Make sure the fixture does not receive DMX signal.
- Low frequencies (bass) should cause the unit to react to sound. Tapping on the microphone, quiet or high pitched sounds may not activate the unit.
- Check the sound sensitivity level. Make sure it is not set to a low sensitivity level.

## SPECIFICATIONS

Model: EXT 1212

Power supply: electronic auto-ranging

Voltage: 100V ~ 240V/50~60Hz

Light source: 12\*12W RGBW 4in1 LED

Power connection: IP67 power in&out

Data connection: IP67 data cable

Power Consumption: 150W

Housing: Die cast aluminum powder coat finish

Cooling: Convection

IP rating: IP65

Dimensions: 270 x 145 x 300 mm

Net Weight: 4.6 kg

DMX Modes: 8 DMX Channels

**Please note: All information is subject to change without prior notice.**