

# ***PROMOVER 1200 CYM***

## ***USER MANUAL/ INSTRUCTIONS***

Thank you for choosing the PROMOVER 1200 CYM product. Please note that this product, as in all the other PROMOVER 1200 fixture range, has been designed and engineered with total and precise attention to quality and detail.

PLEASE – read carefully this instruction manual in its entirety and keep it safe for future reference.. It is essential to know the information and comply with the instructions given in this manual to ensure the fitting is installed, used and serviced correctly and safely.

### **SAFETY INFORMATION:**

#### **Installation:**

Make sure all parts for fixing the projector are in a good state of repair.  
Make sure the point of anchorage is stable before positioning the projector.

The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails, the fitting falls as little as possible.

The safety chain gets used, if needs to be replaced with a genuine spare.

#### **Minimum distance of illuminated objects:**

The projector needs to be positioned so the objects hit by the beam of light are at least 2.5 meters (8.2) from the lens of the projector.

#### **Minimum distance from flammable materials:**

The projector must be positioned so that any flammable materials are at least 0.20 meters (8ft) from every point on the surface of the fitting.

#### **Mounting surfaces:**

It is NOT permissible to mount the fitting on normally flammable surfaces.

#### **Maximum ambient temperature:**

For the fitting to operate well and reliably, the ambient temperature should not exceed 35 degrees C (95 degrees F).

#### **IP20 protection rating:**

The fitting is protected against penetration by solid bodies of over 12mm (0.47”) in diameter (first digit 2), but not against dripping water, rain, splashes or jets of water (second digit 0).

#### **Protection against electrical shock:**

Connection must be made to a power supply system fitted with efficient earth ground

It is, however, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to death by using appropriately sized residual current devices.

### **Hooking up to the supply mains**

Connection to the electricity mains must be carried out by a qualified electrical installer.

Check that the mains frequency and voltage correspond to those for which the projector is designed as given on the electrical data label.

This label also gives the input power to which you need to refer to evaluate the maximum number of fittings to connect to the electricity line, in order to avoid overloading.

Pay attention to size the neutral conductor of three-phase systems adequately if the version is used with an electronic power supply unit without p.f. correction since the neutral current is equal to the sum of the currents on all the active phases.

The last warning does not hold for versions equipped with an electronic power supply unit with PFC or with an electromagnetic power supply unit.

### **Temperature of the external surface**

The maximum temperature that can be reached on the external surface of the fitting, in a thermally steady state, is 160 degrees C (320 degrees F).

### **Maintenance**

Before starting any maintenance work or cleaning the projector, cut off power from the mains supply. After switching off, do not remove any parts of the fitting for at least 10 minutes. After this time the likelihood of the lamp exploding is virtually nil.

If it is necessary to replace the lamp, wait for another 15 minutes to avoid getting burnt.

The fitting is designed to hold in any splinters produced by a lamp exploding. The lenses must be mounted and, if visibly damaged, they have to be replaced with genuine spares.

### **Lamp**

The fitting mounts a high-pressure lamp that needs an external igniter. This igniter is fitted onto the apparatus.

- Carefully read the "operating instructions" provided by the lamp manufacturer.
- Immediately replace the lamp if damaged or deformed by heat.

### **Unpacking and Preparation**

#### **Unpacking**

Cut the straps, open the top of the cardboard box and take out all the accessories. Then take off the supporting sides and lift the outer strip. Open the plastic bag and take the projector off the bench: position it on an easily accessible flat surface where you can carry out the following preliminary operations.

#### **Packing contents**

The pack contains the illustrated accessories as well as the projector.

#### **Fitting eyebolts**

Extract a screw from each side of the base and replace them with the two eyebolts supplied, reusing the flat and elastic washers.

**Warning:** Fully tighten the two eyebolts and make sure the threads hold properly.

### **Pan Mechanism Lock and Release Tilt Mechanism Lock and Release**

### **Opening and closing the side covers**

#### **Preparing the warning label**

Find the relamping label on the cover of the movable body and, if necessary, replace it with one of the optional multilingual labels located in the projector lamp compartment.

**WARNING: Read carefully and meticulously apply the information and instructions given on this label. In addition, check it is never removed as it contains important safety information.**

### **Fitting the lamp**

Take the new lamp out of its package, loosen the two side ring nuts and insert the lamp in its mountings. Finally, screw on the ring nuts.

**IMPORTANT:** to distribute the beam of light uniformly, the lamp needs to be positioned with the protrusion visible on the bulb outside the optical axis of the projector. For this purpose it is recommended to turn the protrusion towards one of the side covers.

**WARNING: do not touch the lamp's envelope with bare hands. Should this happen, clean the bulb with a cloth soaked in alcohol and dry it with a clean, dry cloth.**

### **Lamp regulation**

#### **Opening and closing the effects compartment**

#### **Removing internal clamps**

Take away the four elastic transit bands from the color and frost filters.

## **INSTALLATION AND START-UP**

### **Installing the projector**

Except for when the projector is standing on the floor, it is compulsory to fit the safety chain. These need to be secured to the projector framework and then hooked onto the rings on the base of the projector and eyebolts screwed into the holes in the base of the projector.

**WARNING: Check the plate is correctly secured to the base of the fitting. If the plate has been removed, to carry out non-routine maintenance work, reposition it, inserting all 10 screws and at the same time checking the threads hold properly.**

### **Connecting to the mains supply**

#### **Connecting to the control signal line (DMX or RS232/423)**

Use a cable conforming: 2 –pole twisted, shielded, 120 ohm, characteristic impedance, 22-24 AWG, low capacity.

Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 5-pin male/female connectors. If the DMX signal is used, a terminating plug must be inserted into the last projector with a resistance of 120 ohm, (minimum 1/4W) between terminals 2 and 3. The termination is unnecessary if the signal is used.

**IMPORTANT:** The wires must not make contact with each other or with the metal casing of the connectors. The casing itself must be connected to the shield braid and to pin 1 of the connectors.

### **Switching on the projector**

Press the switch checking it all works properly. At switch on, the software contained in the DMX Receiver microprocessor does a checksum (automatic check) while the three-figure display is off and the three LED's controlling the input signal are all on. After a few seconds, the projector starts the mechanical zero setting of the effects. Only at the end of this procedure it switches on (option 3 OFF), or you can switch on (option 3 ON) the lamp.

After the information has scrolled, the projector address will stay displayed. You can also scroll the aforesaid information by turning all the rotary selector switches of the addresses to zero or by setting the TEST microswitch to ON. Alternatively you can set the projector to blackout (with all the channels on zero).

### **Setting the projector start address**

For each STAGE ZOOM, the starting address must be set for the digital signal. To do this, you need to operate three rotary selector switches for unit (1), tens (10) and hundreds (100), bearing in mind that each STAGE ZOOM occupies 16,17, 19 or 20 control channels. The start address setting operation can also be done with the projector switched off.

## **MAINTENANCE**

### **Locking and releasing Pan and Tilt movements**

-Refer to the instructions in the UNPACKING AND PREPARATION section.

### **Opening and closing the side covers**

-Refer to the instructions in the UNPACKING AND PREPARATION section.

### **Lamp change**

-Refer to the instructions for lamp change and regulation in the UNPACKING AND PREPARATION section.

### **Zero setting the working hours and number of times the lamp is switched on**

To zero the hours of the lamp's life ("Bulb hours") and the number of times it is switched on ("Bulb strikes") which are stored in the DMX Receiver microprocessor, proceed as follows:

1. Set the TEST microswitch to the ON position.
2. Shift the DISPLAY microswitch from ON to OFF (or from OFF to ON) and vice versa 3 times within a time of 6 seconds. If the procedure has been carried out correctly, the three-signal control LED's will light up simultaneously, while the display will go completely blank. This situation lasts for approximately 5 seconds.
3. Return the TEST microswitch to the OFF position.

### **Extracting effects kit**

Open the effects compartment, disconnect the connector gripping it by its side lugs and forcing in the direction shown by the arrow, taking care not to stretch the wires, then release, turning the four levers of the quick lock/release devices anti-clockwise. Slowly lift the effects kit till it comes completely out of the projector head, taking care over any interference with the wiring cables of the movable head. Rest this effects kit on a flat surface in the position shown.

**IMPORTANT:** when handling the effects kit, it must be gripped by the framework and not the motors, wiring, effects wheels or other parts that could easily get damaged or deformed.

### **Inserting effects kit**

Position the bundle of wires for wiring the effects kit motors outside the movable head, as shown in the figure. Prepare the PROMOVER 1200 CYM effects kit by manually turning both gobos discs to turn the empty positions (without gobos) towards the outside of the kit. Lift the effects kit above the

projector head and, slowly, rest it in the head, taking special care to avoid interference with the electric wires of the internal wiring.

**IMPORTANT:**

- Before inserting the effects kit it is advisable to take out the lamp to prevent it getting damaged during the operation.
- The effects kit must be inserted in the movable head so that the male connector is positioned in the same side where there is the bundle of wires terminating with a female connector. Lock the four levers of the quick lock/release devices by turning them clockwise. Grip the connector by its side lugs, check the direction of insertion and insert it correctly into the connector on the effects kit, forcing parallel to it, taking care not to stretch the wires.

**Replacing effects kit**

The instructions provided for extracting and inserting the whole effects kit are clearly useful also for replacing it completely with another effects kit for PROMOVER 1200 CYM. For conversion into STAGE COLOR 1200 refer to the specific manual code 099552.

**Replacing color filters**

- Warm filter
- Cold filter
- Blue with hole
- Yellow with hole
- Red filter
- 4 colors filter
- UV filter

**Replacing glass gobos**

**Replacing metal gobos**

**Periodical cleaning**

To ensure optimal operation and performance for a long time it is essential to periodically clean the parts subject to dust and grease deposits. The frequency with which the following operations are to be carried out depends on various factors, such as the amount of the effects and the quality of the working environment (air humidity, presence of dust, salinity, etc).

Use a soft cloth dampened with any detergent liquid for cleaning glass to remove the dirt from the reflectors, from the lenses and filters.

It is recommended that the projector undergoes an annual service by a qualified technician for special maintenance involving at least the following operations:

- .General cleaning of internal parts
- .Restoring lubrication of all parts subject to friction, using lubricants specifically.
- .Electrical, photometric and functional checks; eventual repairs.

**CHANNEL**

CHANNEL	EFFECT
1	IRIS
2	COLOR
3	DIMMER
4	STROBE
5	PAN
6	TILT
7	LINEAR ZOOM
8	LINEAR FOCUS

9	PRISM TOTATION
10	PRISM STREAM
11	FIXATION GOBO
12	GOBO STREAM
13	GOBO ROTATION
14	CYAN
15	MAGENTA
16	YELLOW
17	GRADUAL CHANGE
18	PAN 16BIT
19	TILT 16BIT
20	GOBO FINE

Select the options by setting the microswitches as indicated:

Option	Function
1	ON Linear movement of the color wheel OFF Stepped movement of the color wheel
2	ON Linear moving of the fixed gobo disc OFF Stepped movement of the fixed gobo wheel
3	ON Lamp control enabled OFF Auto light off after 5 min. of blackout disenabled
4	ON PAN Fine and TILT Fine control enable OFF PAN Fine and TOLT Fine control disable
5	- PAN direction change
6	- TILT direction change
7	ON Gobo Fine control enable OFF Gobo Fine control disable
8	ON CMY color mixing system selected OFF RGB color-mixing system selected
9	- NOT USED
10	ON Display orientation for ceiling installation OFF Display orientation for floor installation
11	- TEST
12	- If ON, there is Low Voltage Supply on output at DMX signal input connector pin

## TECHNICAL INFORMATION

### Power supplies available

\*Version with electronic ballast (with and without PFC):

-200-240V 50/60Hz

-100-120V 50/60Hz

\*Version with electromagnetic ballast:

-230V 50Hz

-240V 50Hz

-20BV 60Hz

-200V 50Hz

-200V 60Hz

The projector is designed to operate at the mains frequency and voltage given on the electrical data label of the appliance.

## **Input power**

- \*Version with electronic ballast without PFC  
2200VA at 230V 50Hz
- \*Version with electronic ballast with PFC:  
1600VA at 230V 50Hz
- \*Version with electromagnetic ballast:  
1700VA at 230V 50Hz (p.f. correction 140uF standard).

## **Lamp**

Discharge lamp with built-in power supply unit.

- \*Type HMI 1200W/S
- Cap SFC 10-4
- Color temperature 6000K
- Luminous flux 110000 lm
- Average life 750 hours
- Any working position

## **Motors**

22 Stepper motors, operating with micro steps, totally microprocessor controlled.

## **Optical unit**

- \*Twin lens condenser.
- \*Spherical reflector with a high luminous efficiency
- \*Zoom lens 16 degrees-24 degrees.

## **Channels**

16, 17, 19 or 20 control channels

## **Inputs**

- \*DMX 512

## **Movable body**

- \*Movement by means of two stepper motors, controlled by microprocessor.
- \*Automatic repositioning of PAN and TILT after accidental movement not controlled by control unit.
- \*Travel:
  - PAN = 450 degrees
  - TILT = 252 degrees
- \*Maximum speeds:
  - PAN = 4.0 sec (360 degrees)
  - TILT = 3.2 sec (250 degrees)
- \*Resolution:
  - PAN = 1.76 degrees
  - PAN FINE = 0.007 degrees
  - TILT = 0.98 degrees
  - TILT FINE = 0.004 degrees

## **IP 20 protection rating**

- \*Protected against the entry of solid bodies larger than 12mm (0.47").
- \*No protection against the entry of liquids.

### **CE Marking**

In conformity with the European Union Low Voltage Directive 73/23 and Electromagnetic compatibility Directive 89/336.

### **Safety Devices**

- \*Bipolar circuit breaker with thermal protection.
- \*Automatic break in power supply in case of overheating or failed operation of cooling system.
- \*Power supply cut off automatically on opening the side covers.
- \*Four fixing points for safety rope.

### **Cooling**

Forced ventilation with axial fans.

### **Body**

- \*In die-cast aluminum and steel.
- \*Epoxy powder painting.
- \*Two side handles for transportation
- \*Device locking PAN and TILT mechanisms for transportation and maintenance.

### **Working position**

Functioning in any position.

### **Weights and dimensions**

- \*Version with electronic ballast: about 45.2 kg (99 lbs. 7 oz.)
- \*Version with electromagnetic ballast: about 58.7 kg (129 lbs. 2 oz.).

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