# *PROMOVER 575*

# USER MANUAL / OPERATION INSTRUCTION

# PROMOVER 575 DMX-Scanner:

**INTRODUCTION**

Thank you for having chosen  *METEOR-KLS PROMOVER 575.* You will see you have acquired a powerful and versatile device. It has been designed to be very flexible and user friendly, without compromising effectiveness or professionalism.


Unpack your ***PROMOVER 575.***

Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any questions or problems, consult your dealer and do **NOT** use the device.

> ***SAFETY INSTRUCTIONS:*** (notes written in this user manual.)
> ***CAUTION!*** Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires.


This ***PROMOVER 575*** 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 follow all the warnings.


*Important:*

> Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.
> *CAUTION!* Keep this device away from rain and moisture!
> **Unplug mains lead before opening the housing.**


## *SAFETY INSTRUCTIONS*

For your own safety, please read this user manual carefully before your 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 future owners or users of this product*
> *- include every supplementary update with the original manual*

- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation). Do **NOT** switch it on immediately. Allow fixture to reach normal room temperature. By not doing so, the water condensation might damage your device and cause severe damage to lamp and circuit boards.
- Leave the device switched off until it has reached room temperature.
- This device falls under protection-Class I.
- The power plug must only be plugged into a protection Class I outlet.
- Never let the power-cord come into contact with other cables!
- Handle the power-cord and all connections to the mains with particular caution.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged by sharp edges.
- Check the device and the power-cord from time to time.
- Always disconnect from the mains, when the device is not in use or before cleaning it.
- Only handle the power-cord by the plug.
- Never pull out the plug by tugging the power-cord.

- During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

  *Caution:* During the operation, the housing becomes very hot.

  Do not switch the device On and Off in short intervals as this would reduce the lamp's life.
- Keep away from children and non-qualified users.

**OPERATING DETERMINATIONS**
- This device is a lighting effect for creating decorative entertainment lighting effects.
- This product is only allowed to be operated with an alternating voltage of 120 V,60 Hz and was designed for indoor use only.
- This device is designed for professional use on stages, in discotheques, theatres etc.
- Lighting effects are not designed for permanent operation.
- Consistent operation breaks will ensure that the device will serve you for a long time without defects.
- Do not shake the device. Avoid brute force when installing or operating the device.
- When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust.
- There should not be any cables lying around. You endanger your own and the safety of others!
- The symbol - - -"*m*" determines the minimum distance from lighted objects.
- The minimum distance between light-output and the illuminated surface must be more than 0.5 meters.
- This device is only allowed for suspended installation via the mounting bracket. In order to safeguard sufficient ventilation, leave 50 cm of free space around the device.
- Make sure that the area below the installation place is blocked off when rigging, derigging or servicing the fixture.
- Always secure the fixture with an appropriate safety-rope and proper rigging hardware designed to hold more than **10 times** the weight of the fixture (proper industry standard).
- Never look directly into the light source, as sensitive persons may suffer an epileptic shock
- The maximum ambient temperature t = 45° C must never be exceeded.
- Operate the device only after having become familiar with its functions.
- Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!
- Please use the original packaging if the device is to be transported.
- Please consider that unauthorized modifications on the device are forbidden due to safety reasons and will void any warranty
- Never remove the serial barcode from the device, as this would make the warranty void.
- If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the warranty becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock and lamp explosion,
- Lamps and fuse replacements are not covered under warranty.

# USER MANUAL:

ProMover 575 DMX-Scanner - Yoke Fixture
 Keep this manual for future needs! Put it in a place that you can access it if needed.

*Table of contents:*

## TECHNICAL SPECIFICATIONS:

    ***Power supply:*** 115 V AC, 60 Hz ~ 500 W 6
    ***Power consumption:*** 800w
    ***DMX-control-channels:*** 14 channels
    ***DMX-512-connection:*** 3-pin XLR
    ***Sound-control:*** via built-in microphone
    ***Strobe Flash-rate:*** (1-10 flashes/sec.) via shutter
    ***Number of colors:*** **16** dichroic + white +RAINBOW effect
    ***Number of gobos:*** **14** rotating gobos and open + rainbow scrolling
    ***Dimensions:*** 16L  x  13w  x  20h (500 x 485 x 615 mm)
    ***Weight:*** 62 lbs. (24kg).    **Boxed weight:** 71lbs
    ***Maximum ambient temperature (ta):*** 45° C
    ***Maximum housing temperature (tB)*** (steady state): 60° C
    ***Min. distance from flammable surfaces:*** 0.5 m
    ***Min. distance to lighted object:*** 0.5 m
    ***Fuse:*** 10 amp
    ***Fitting lamp:***    **HMI 575**

# DESCRIPTION OF THE DEVICE:

**Features:**

- Innovative Professional scanner with rotating gobos
- 16 different, dichroic color filters and white
- Rainbow-effect with adjustable speed in both directions
- Gobowheel with 14 rotating gobos, open and blackout
- Strobe-effect with adjustable speed (1-10 flashes/sec.) via shutter
- DMX-controlled operation or stand alone operation with Master/Slave-function
- Sound-controlled via built-in microphone
- Fuzzy-Sound-Control: program continues automatically during periods without music or bass-beat
- Control-Board with 4-digit LCD display
- Digital DMX focus
- For **HMI 575**
- Actual Lamp Hours – User time.
- DMX-control via every standard DMX-controller
- 14 DMX-control channels required

## DANGER TO LIFE:

- Only install the lamp with the device switched off. And not plugged into power
- Always unplug power from mains before attempting any service.
- For the installation, you need one **HMI 575**. Do not touch glass part of lamp.
- The lamp must only be changed when wearing appropriate protective clothing (protection glasses, protection gloves, helmet with sight, leather apron).

## INSTALLATION

Installing/Replacing the lamp Procedure:
*CAUTION!*
- *The lamp has to be replaced when it is damaged or deformed due to the heat!*
- *The lamp life given by the manufacturer must never be exceeded. This is why you need to take notes on the operational time of the lamp and replace the lamp in time.*
- *Keep exchanged lamp in a protective container and remove accordingly.*
- *During the operation, the lamp reaches temperatures of up to 600° C.*
- *Before replacing the lamp, unplug mains lead and let the lamp cool down (approx. 10 minutes).*
- *During the installation do not touch the glass-bulbs barehanded!*
- *Please follow the lamp manufacturer's notes!*
- *Do not install lamps with a higher wattage! Lamps with a higher wattage generate temperatures the device was not designed for.*
- *Damages caused by non-observance are not subject to warranty.*

**Step 1:** Unscrew the 4 Phillips screws on back plate. Unscrew 4 Phillip head screws that hold lamp housing system to fixture and carefully remove it from the housing.
**Step 2:** If replacing the lamp, remove the old lamp from the lamp holder.
**Step 3:** Insert the lamp into the lamp holder. Make sure lamp is properly secured in brass fitting.
**Step 4:** Replace the lamp system in the housing and tighten the fixation screws.
**Step 5:** Adjust the lamp as described under lamp adjustment.
**Do not operate this device with opened cover!**

**Lamp adjustment**

- The lamp holder is aligned at the factory. Due to differences between lamps, fine adjustment may improve light performance.
- Strike the lamp, open the shutter, and set the dimmer intensity to 100 % and focus the light on a flat surface (wall).
- Center the hot-spot (the brightest part of the beam) using the 3 adjustment screws "A, B, C". Turn one screw at a time to drag the hot-spot diagonally across the projected image. If you cannot detect a hotspot, adjust the lamp until the light is even.
- To reduce a hot-spot, pull the lamp in by turning all three screws "A, B, C" clockwise 1/4-turn at a time until the light is evenly distributed. If the light is brighter around the edge than it is in the center, or if light output is low, the lamp is too far back in the reflector. "Push" the lamp out by turning the screws "A, B, C" counterclockwise 1/4-turn at a time the light is bright and evenly distributed.

**Overhead Rigging** if the main attachment fails as a secondary back-up

*DANGER TO LIFE!*

- Please consider the DIN 15560 and the respective national norms during the installation!
- An authorized dealer must only carry out the installation!
- The installation of the device has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net.
- This secondary safety attachment must be constructed in a way that no part of the installation can fall down
- When rigging or derigging or servicing the device staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.
- The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another
- The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four year in the course of an acceptance test.
- The operator has to make sure that a skilled person approves safety-relating and machine-technical installations once a year.

**Procedure:**

- The device should be installed outside areas where persons may walk by or be seated.
  *IMPORTANT!*
  *OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE,* including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and or damage to property.
- The device has to be installed out of the reach of people.
- If the device shall be lowered from the ceiling or high joists, professional trussing systems have to be used.
- The device must never be fixed swinging freely in the room.

  *Caution:* Devices in hanging installations may cause severe injuries if not properly mounted and secured correctly with appropriate back-up *"failsafe rigging".*

If you have doubts concerning the safety of a possible installation, **DO NOT** install the device.
Before rigging make sure that the installation area can hold a minimum point load of **10** times the device's weight.

## Master/Slave-operation
- The master/slave-operation enables that several devices can be synchronized and controlled by one Master device unit
- On the rear panel of the ***PROMOVER 575*** you can find an XLR-jack (DMX Out) and an XLR-plug (DMX In), which can be used for connecting several devices.
- Choose the device that is to control the effects. This device then works as master-device and controls all other slave-devices, which are to be connected to the master-device via a balanced microphone lead.
- Connect the DMX OUT-jack with the DMX IN-plug of the next device.
- Set the desired Master-mode for the master-device.
- Set the respective Slave-mode for all slave-devices.

*DANGER OF FIRE!*
- When installing the device, make sure there is no highly-inflammable material (decoration articles, etc.) within a distance of min. 0.5 m.
- Mount the device to your trussing system using an appropriate clamp. For overhead use, always install a safety-rope / chain that can hold at least 12 times the weight of the fixture. You must only use safety-ropes with quick link with screw cap. Pull the safety-rope through the attachment eyelet and over the trussing system or a safe fixation spot. Insert the end in the quick link and tighten the safety screw.
- The maximum drop distance must never exceed 20 cm.
A safety rope / chain which already held the strain of a crash or which is defective must not be used again.
- Adjust the desired inclination-angle via the mounting-bracket and tighten the fixation screws.

*DANGER TO LIFE!*
Before taking into operation for the first time, the installation has to be approved by an expert.
- Connection with the mains
- Connect the device to the mains with the enclosed power supply cable.
- DMX-512 connection / connection between fixtures
- The wires must not come into contact with each other, otherwise the fixtures will not work at all, or will not work properly.
- Only use a stereo shielded cable and 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

## 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 (5-pin), 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.

*Caution:*

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

# *OPERATION:*

After you connected the fixture to the mains, the **PROMOVER 575** starts running / resetting. During the Reset, the motors are trimmed and the device is ready for use afterwards.
*Note:* You will here "clicking" noise. That is each of the motors stepping through sequence to find each "0" starting position. This is normal.

### Stand Alone operation:

In the Stand Alone mode, the **PROMOVER 575** can be used without controller. You can do without a controller as the **PROMOVER 575** features a built-in microphone, which provides automatic sound control.
Disconnect the **PROMOVER 575** from the controller and select **"Master Mode: Sound-control".**

### Master/Slave-operation

Connect the master and slave-devices and adjust the settings as described above.
*Please note:* If you wish to change from one operating mode into another, you have to unplug the **PROMOVER 575** from the mains and plug it again.

### DMX-controlled operation:

You can control the projectors individually via your DMX-controller. Every DMX-channel has a different occupation with different features. In order to call up the different features, you first have to open the shutter (control channel 9, DMX-value 132-139 or 250-255) or set the dimmer to the desired intensity (control channel 6, DMX-value 6-128).

### Addressing

The Control Board on the front side of the base allows you to assign the DMX fixture address, which is defined as the first channel from which the **PROMOVER 575** will respond to the controller.
If you set, for example, the base address to channel 1, the **PROMOVER 575** will use channels 1 to 14 for control. Next available DMX value would be set for 15.

Please, be sure that you don't have any overlapping channels in order to control each **PROMOVER 575** correctly and independently from any other fixture on the DMX data link.
If two, three or more **PROMOVER 575** are addressed similarly, they will work similarly.

Before you attempt to operate this unit – make sure you have no unanswered questions.

## PROMOVER 575 CHANNELS

| CH. 1 | **COLOR** | 0 - 7 | WHITE |
| --- | --- | --- | --- |
| | | 8 - 15 | PINK |
| | | 16 - 23 | YELLOW |
| | | 24 - 31 | BLUE |
| | | 32 - 39 | ORANGE |
| | | 40 - 47 | GREEN |
| | | 48 - 55 | LIGHT PINK |
| | | 56 - 63 | LIGHT PURPLE |
| | | 64 - 127 | GRADUAL COLOR CHANGE |
| | | 128 - 191 | POSITIVE RAINBOW EFFECT w / increasing speed |
| | | 192 - 255 | REGRESSIVE RAINBOW w / decreasing speed |
| CH. 2 | **ROTATING** | 38732 | CIRCLE |
| | **GOBO** | 16 - 31 | SPIRAL |
| | | 32 - 47 | BREAKOUT |
| | | 48 - 63 | HAZARD |
| | | 64 - 79 | DESIGN |
| | | 80 - 95 | TRIANGLE |
| | | 96 - 111 | FIRE |
| | | 112 - 127 | SUN |
| | | 128 - 191 | POSITIVE RAINBOW EFFECT w increasing speed |
| | | 192 - 255 | REGRESSIVE RAINBOW w / decreasing speed |
| CH. 3 | **GOBO** | 0 - 15 | STOP |
| | **ROTATE** | 16 - 135 | SPEED GOBO - CLOCKWISE (right to left) |
| | | 136 - 255 | SPEED GOBO - counter - CLOCKWISE (left to right) |
| CH. 4 | **STATIC** | 0 – 7 | RING |
| | **GOBO** | 8 - 15 | HAND |
| | | 16 -23 | OVERLAY TRIANGLES |
| | | 24 - 31 | PROPELLOR |
| | | 32 - 39 | SLANTED STAR |
| | | 40 - 47 | MORAY |
| | | 48 - 55 | RADIOACTIVE |
| | | 56 - 63 | SINGLE SPIRAL |
| | | 64 - 71 | WHITE |
| | | 72 - 79 | GOBO 1 |
| | | 80 - 87 | GOBO 2 |
| | | 88 - 95 | GOBO 3 |
| | | 96 - 103 | GOBO 4 |
| | | 104 - 111 | GOBO 5 |
| | | 112 - 119 | GOBO 6 |
| | | 120 -127 | GOBO 7 |
| | | 128 - 191 | POSITIVE RAINBOW (clockwise scroll) |
| | | 192 - 255 | NEGATIVE RAINBOW (counter clockwise scroll) |
| CH. 5 | **PAN** | 0 - 255 | 360deg, 8 bit |
| CH. 6 | **TILT** | 0 - 255 | 270deg, 8 bit |
| CH. 7 | **EFFECT** | 0 -15 | WHITE |
| | **(prism)** | 116 - 239 | PRISM ROTATION - Decreasing speed |
| | | 240 - 255 | STOP, STATIC PRISM |
| CH. 8 | **FOCUS** | 0 - 255 | MOTORIZED FOCUS - zoom in / zoom out |
| CH.9 | **SHUTTER** | 0 - 15 | SHUTTER CLOSED |
| | | 16 - 128 | DIMMER CONTROL |
| | | 129 - 133 | WHITE |
| | | 134 - 243 | STROBE EFFECT- increasing |
| | | 244 - 249 | RESET (after 5 seconds) |
| | | 250 - 255 | SHUTTER OPEN |

| CH 10 | IRIS | 0 - 255 | IRIS OPEN TO CLOSE |
|---|---|---|---|
| CH 11 | LAMP | 0 - 5 | LAMP ON (Delay after 10 minutes) |
| | | 200 - 210 | LAMP OFF (after 5 second) |
| CH.12 | SPEED | 0 - 255 | X / Y CONTROLLABLE SPEED |
| CH.13 | PAN-16 | 0 - 255 | MOTOR SPEED PAN - 16 bit |
| CH.14 | TILT - 16 | 0 - 255 | MOTOR SPEED - TILT - 16 bit |

**FIXTURE LCD:**

**Control Board**

8 8 8    8 **Mode:** select Function

up dn md    **Up:** increasing key

(buttons)    0 0    0 **Down** - decrease key

0 0 1 d **dmx mode:light 1**      0 1 3 d **dmx mode: light 2**

n 1 n n **Master mode: sound**      5 1 5 5 **Slave mode: slave 1**

n 2 n n **master mode - slow**      5 2 5 5 **Slave Mode: slave 2**

n 3 n n **Master mode - stby**      5 3 5 5 **Slave Mode: slave 3**

0 0 0 H **User time: hour**      5 4 5 5 **User time: hour**

. 1 P **Pan Mode-Positive**      1 t **Tilt Mode - Positive**

. 2 P **Pan Mode-negative**      2 t **Tilt Mode - negative**

. 1 L **LED Positive Display**      . 2 L **LED Negative Display**

**1-** **Pan Mode Positive:** Normal operation: When you press the Pan1 and Pan2, their starting off point of Pan will be different.

**2-** **Pan Mode Negative:** (mirror image); the Starting -off point of Pan1 = the end-point of Pan2 the Jumping-off point of Pan2 = the end-point of Pan1.

**3-** **Tilt  Mode Positive:** Normal operation: When you press the Tilt 1 and Tilt 2, their starting off point of Tilt will be same.(seldom ever used)

**4-** **Tilt Mode Negative:**  Also same as Pan. (seldom ever used)

**5-** **LED Positive Display**: When leaving on floor mounted or on test bench (as shown)

**6-** **LED Negative Display**  When you reverse the unit, if you make "LED Negative Display", then it's more convenient to see the display when upside down and mounted.

 **For address setting,**

Press the Mode-button until the display shows **"d"** and set the desired base address via the Up / Down-buttons.

## Controlling:

After having addressed all **PROMOVER 575** you may now start operating these via your lighting controller.

*Note:* After switching on, the **PROMOVER 575** will automatically detect whether DMX 512 data is received or not. If the data is received, the control LED flashes. If there is no data received at the DMX-input, the control LED lights up permanently.

This situation can occur if:

- The 3 PIN XLR plug (cable with DMX signal from controller) is not connected with the input of the **PROMOVER 575** or having a bad connecting cable

- The controller is switched off or defective, if the cable or connector is defective or the signal wires are swapped / reversed in the input connector.

*Note:* It's necessary to insert the XLR termination plug (with 120 Ohm) in the last lighting in the link in order to ensure proper transmission on the DMX data link.

## CLEANING AND MAINTENANCE

The operator has to make sure that safety-relating and machine-technical installations are Inspected by an expert after every four years in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are inspected by a skilled person once a year.

*The following points have to be considered during the inspection:*

**1)** All screws used for installing the devices or parts of the device have to be tightly connected and must not be corroded.

**2)** There must not be any deformations on housings, fixations and installation spots (ceiling, suspension, trussing).

**3)** Mechanically moved parts like axles, eyes and others must not show any traces of wearing (e.g. material abrading or damages) and must not rotate with unbalances.

**4)** The electric power supply cables must not show any damages, material fatigue (e.g. porous cables) or sediments. Further instructions depending on the installation spot and usage have to be adhered to by a skilled installer and any safety problems have to be removed.

- Disconnect from mains before starting maintenance operation!

- We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth.
- Never use alcohol or solvents!
- The lens has to be replaced when it is obviously damaged, so that its function is impaired, e. g. due to cracks or deep scratches!
- The objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly.
- The cooling-fans should be cleaned monthly.
- The gobos may be cleaned with a soft brush.
- The interior of the fixture should be cleaned at least annually using a vacuum cleaner or an air-jet.
- The dichroic color filters, the gobo-wheel and the internal lenses should be cleaned monthly.
- To ensure a proper function of the gobo-wheel, we recommend lubrication in six-month intervals.
- Carefully placed quantity of oil must not be excessive in order to avoid that oil runs out when the gobo-wheel rotates.
- There are no serviceable parts inside the device.
- Maintenance and service operations are only to be carried out by authorized dealers.
- Please refer to the instructions under *"Installing/Replacing the lamp"*.

**Replacing the fuse**

If the fine-wire fuse of the device fuses, only replace the fuse by a fuse of same type and rating.

Before replacing the fuse, always unplug mains lead / power cable

**Procedure:**

**Step 1:**  Open the Fuse-holder on the rear panel with a slotted screwdriver (below power)
**Step 2:**  Remove the old fuse from the fuse holder.
**Step 3:**  Install the new fuse in the fuse holder.
**Step 4:**  Replace the fuse holder in the housing.
Should you need any spare parts, please use genuine parts.
If the power supply cable of this device becomes damaged, it has to be replaced by a special power supply cable available at your dealer.

*Should you have further questions, please contact your dealer.*

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

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