


Installing /Connection with the mains

1. **DANGER TO LIFE!** The electric connection must only be carried out by a qualified electrician!
2. In order to connect the device to the mains, you have to install a power-plug.
3. The occupation of the connection-cables is as follows:

Cable	Pin	International
Brown	Live	L
Blue	Neutral	N
Yellow/Green	Earth	

4. The earth has to be connected!
5. Connect the device to the mains with the power-plug.
6. If the device will be directly connected with the local power supply network, a disconnection switch with a minimum opening of 3 mm at every pole has to be included in the permanent electrical installation.
7. In general, lighting effects should not be connected to dimming-packs.
8. **DANGER TO LIFE!** Before taking into operation for the first time, the installation has to be approved by an expert!

OPERATION:

After you connected the spot to the mains, but you can't control the spots via your lighting controller.

Lamps

Use the following lamp only in MSR PAR fixtures.

Lamp code	W	C-temp	Life hours
OSRAM GX9,5 MSR Metal Halide Lamp	575	7.200°K	1000 hour

TECHNICAL SPECIFICATIONS

Power supply:	230VAC, 50Hz
Power consumption	600W
Dimensions (L x W x H)	250 x 250 x 550mm
Weight	12,3 kg
Fitting lamp	MSR Metal Halide Lamp Base: GX9,5
Fuse	250V, 6,3A
Maximum ambient temperature T _a :	25° C
Maximum housing temperature T _s :	140° C
Minimum distance:	2 M


THE END

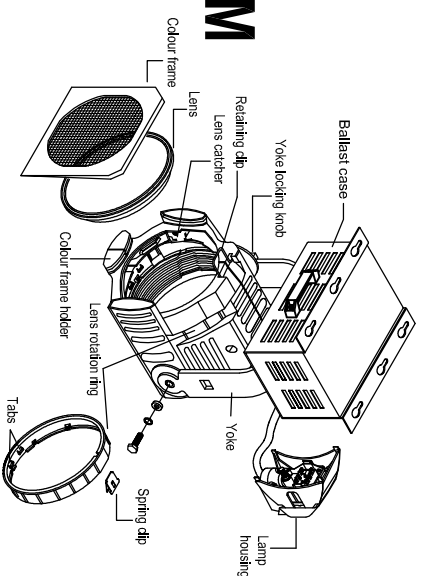
DXD

MSR MULTI BEAM INSTRUCTION

MADE IN CHINA

IMPORTANT SAFETY INSTRUCTIONS

1. Before you initially 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.
2. **CAUTION!** Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires! Keep away from heaters and other heating sources!
3. **Do not** mount the device on or near combustible surfaces. **Do not** operate the device without a lens installed.
4. Always hang the device with the color frame retaining clip in the locked position.
5. This device falls under protection-class I, therefore it is essential that the yellow/green conductor gets connected to earth. The electric connection must be carried out by a qualified employee.
6. 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.
8. If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.
9. Shields, lenses or ultraviolet screens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches.
10. Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
11. 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.
12. 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.
13. **DANGER OF BURNING!** Never touch the device during the operation! The housing heats up to the housing temperature T_{surface}.
14. Don't switch the device on and off in short intervals as this would reduce the lamp's life.
15. **HEALTH HAZARD!** Never look directly into the light source, as sensitive persons may suffer an epileptic shock (especially meant for epileptics)!
16. Keep away children and amateurs from the device!
17. There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.
18. The symbol  determines the minimum distance from lighted objects. The minimum distance between light-output and the illuminated surface must be more than 2 meter.



Accessories

Color frame	407CF	Wide Flood lens	400-WFL
Very Narrow Spot lens	400-VNSP	Set of four PAR lenses	400LS4
Narrow Spot lens	400-NSP	(VNSP, NSP, MFL, WFL)	
Medium Flood lens	400-MFL		

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Color frame retaining clip

The color frame holder is equipped with a spring-loaded retaining clip that prevents color frames and accessories from falling out.

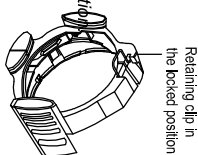


Figure 1

1. Release the retaining clip by pushing it sideways. The retaining clip opens.
2. Insert the color frame.
3. Press the retaining clip down until it locks.

Note: Use only color frames or top hats with 6.7-inch inside diameter.

Cleaning the reflector

The following recommendations are offered when cleaning and inspecting lenses and reflectors:

Do not use glass and window cleaners on the reflector. Chemicals in these cleaners will harm the reflective coating. **Do not** use paper towels or harsh materials to wipe the reflector. These materials can scratch the surface of the reflector.

WARNING! Unplug the fixture before attempting to clean reflector.

1. Remove the lens so you can access the reflector from the front of the fixture. See **Removing a lens** on page 2
2. Remove dust with a blast of oil free air, or wipe with a clean, soft, lint-free cotton cloth. If this is sufficient to remove dust, go to step 5. Otherwise, continue to step 3.
3. Dampen a clean, soft, lint-free cotton cloth with a mild, soapy water solution and gently wipe the reflector.
4. Remove any soapy water residue with a clean, soft, lint-free cotton cloth dampened with water.
5. Reinstall a lens before using the fixture.

Installing the lamp

Always replace the lamp if it becomes damaged or deformed.

Verify that the lamp you use is suitable for the electronic power at your facility.

Caution! Operating lamps above or below their rated voltage reduces lamp life and can cause premature lamp failure.

1. Disconnect the unit from power before installing the lamp.

WARNING! Let lamp cool before changing.

2. Loosen the knurled bolt on the back of the lamp housing and pull the housing straight out from the back of the fixture.
3. Remove the lamp from its box, holding it by the base.

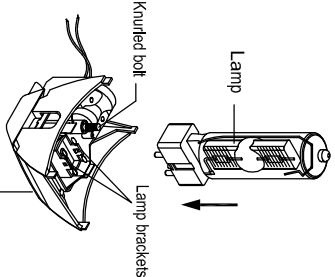
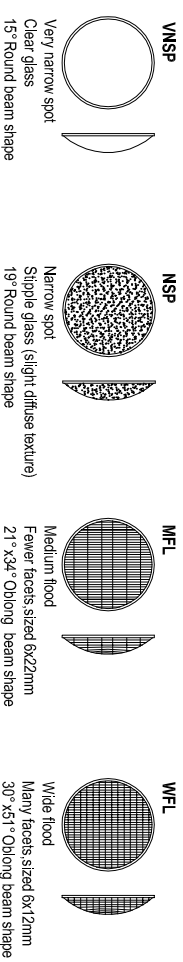


Figure 2

4. Line up the flat sides of the lamp base with the brackets on either side of the socket (Figure 2).
5. Push down on the lamp base until the lamp is firmly seated. Make sure that the lamp is fully seated, with the bottom of the lamp heat sink flush to the lamp housing casting.
6. To reinstall the lamp housing, center it on the reflector and the bolt hole, then tighten the knurled bolt to secure the lamp housing in place.

Lens identification

Lenses for the MSR Multi Beam come in four versions. The type or beam spread can be identified by the lens texture.



Changing PAR lenses

Change lenses if they become cracked or badly scratched. **Caution!** Never operate the PAR without a lens in place.

Installing a lens

1. Position the fixture with the front of the unit (the lens side) facing you, and tilted slightly (Figure 4).
2. Position the lens rotation ring with the spring clip at the top of the fixture, directly below the retaining clip.
3. Hold the lens by the edge, and position it so the convex side faces the back of the fixture (Figure 3).

Note: Installing the lens with the convex side out will not impair the optics, but it will make removing the lens difficult.

4. From the top of the fixture, slide the lens behind the lens catchers and position its base behind the tabs on the bottom of the lens rotation ring.
5. Gently push the top of the lens inward until it snaps behind the spring clip.

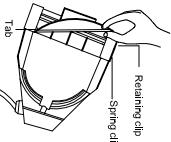


Figure 3

Removing a lens

WARNING! Unplug the fixture before attempting to remove or install a lens.

1. PAR lenses get hot while the unit is in operation. Let the fixture cool before handling the lens.
2. Place the fixture on a flat, stable work surface. Do not install or remove lenses with the unit hanging.
3. Position the lens rotation ring with the spring clip at the top of the unit, directly below the retaining clip.
4. Tilt the front of the fixture down at least 45°.
5. Press the spring clip with your finger to release the lens (Figure 4).
6. Allow the lens to drop forward from under the clip.
7. When the lens drops, remove your finger, allowing the lens to slide forward until it rests on the lens catchers (Figure 5).
8. Carefully remove the lens from the fixture.

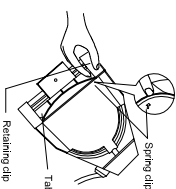


Figure 4

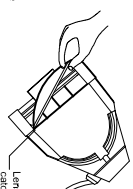


Figure 5

Selecting a Mounting Location

The fixture should be installed outside areas where persons may walk by or be seated.

1. Before rigging make sure that the installation area can hold a minimum point load of 10 times the fixture's weight.
2. Do not install the fixture on radiant-heating type area
3. Out of the way, but within arm's reach, so you can operate it easily
4. Close enough to an AC outlet to use the attached power cord
5. When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) within a distance of min. 1.0M
6. For overhead use, always install a safety-rope that can hold at least 10 times the weight of the fixture. You must only use safety-rope with screw-on carabines.

Warning: To reduce the likelihood of the injury or damage to person, mount it only on a stable and sturdy area.

Installation With Hook

You can choose four appropriate hook from your dealer to fix the fixture to the mounting pipe (e.g. truss system), and adjust the position of the fixture once it is mounted. (Figure 6)

1. Tightly fasten the hook to the yoke with the provided yoke bolt and lock washer.
2. Place the hook on the mounting pipe, then tighten the pipe bolt to secure it.
3. Adjust the desired inclination-angle via the yoke and fix the Yoke locking knob.
4. Pull the safety-rope through the hole on the housing and over the mounting pipe etc. Insert the end in the carabine and tighten the safety screw.

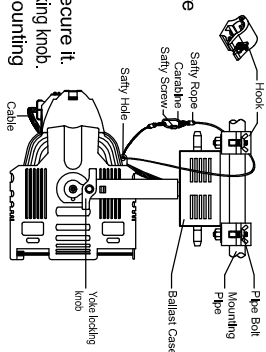


Figure 6