TX6 LED 300 Beam

300w Beam Moving Head

User Manual

$C\epsilon$ $\boxed{F}$ $\textcircled{\small\pm}$ **IP20** LED $\big($---0.2m$\big$ t_a40℃ t_c150℃

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Table of Contents

1. Introduction and Setup Unpacking and In the Box

Thank you for choosing our TX6 Beam moving head light. For your own safety, please read this manual before installing or using the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual for future needs.

The TX6 is made of a new type of high temperature strength plastic and cast aluminum casing. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's independently controllable and link-able with other lights for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs, houses of worship, and more.

The TX6 features high brightness and stability. Please carefully unpack it when you receive the fixture and check for any damages from shipping. And please check whether the following items are included inside the box:

- TX-6 300w Moving Head – 1
- DMX Signal Cable – 1
- Power Cable – 1
- Omega Clamps – 2
- User Manual - 1

Mounting and Operation

Caution: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 items the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture.

From a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5ft) away from any flammable materials (decoration etc.).

Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Mounting points: Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Clamp Mounting: The TX6 provides a unique mounting bracket assembly that integrates the bottom of the base, and the safety cable rigging point in one unit (see the illustration below).

When mounting this fixture to truss be sure to secure an appropriately rated clamp to each of the included omega brackets using a M10 screw fitted through the center hole of the "omega bracket". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly.

① Omega Bracket
② Satety Clamp
③ Safety Cable
④ 1/4 Turn Quick-Lock Fasteners
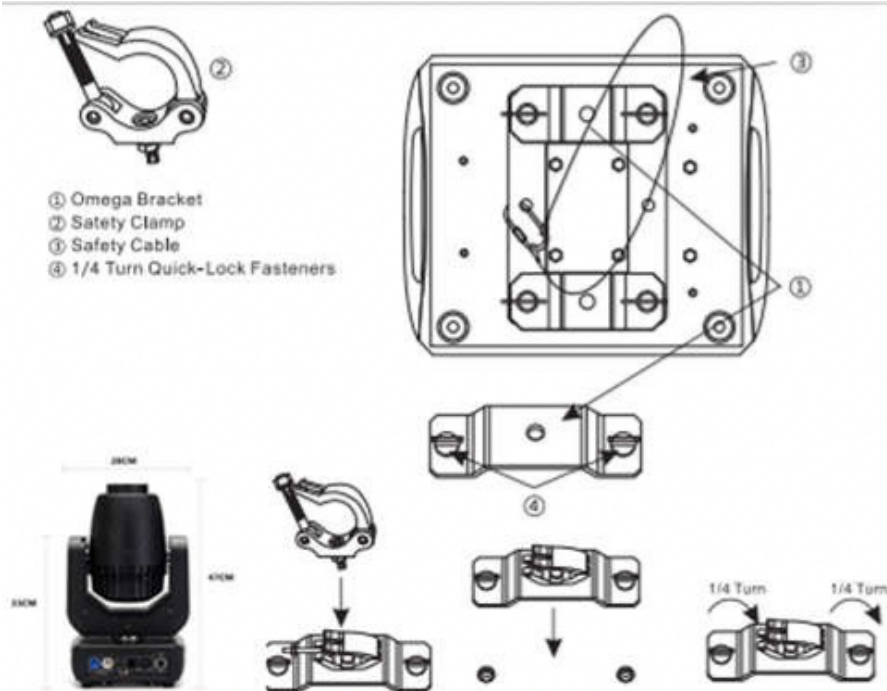
Regardless of the rigging option you choose for your TX6 Beam, always be sure to secure your fixture with a safety cable. The fixture providers a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

·The moving head is for spot effect for on-site decoration purpose. So make sure to operate the fixture until it is in normal temperature.

·This light should be keep away from strong shaking during any transportation or movement.
·Don't pull up the light by only the head, or it might cause damages to the mechanical parts.

·Don't expose the fixture in overheating, moisture or environments with too much dust when installing it.
·Make sure the installation environment is in good safety condition before installing the fixture.

·Make sure to put the safety chain and check whether the screws/clamps are screwed properly when installing the fixture.
·Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratches.

·Make sure the fixture is operated by qualified personnel who know the fixture before using.
·Keep the original packaging in case there is any future need for any warranty repair or service.

·Don't try to modify the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
·Warranty is voided if there are any malfunctions from not following the user manual while operating or any hazardous operation, like shock short circuit, electronic shock, lamp broken, etc.

Features

- 300W High Output White LED
- 16 RGBW Cree LED's for Halo effect
- 20,000 hour lifespan and lower power consumption
- 3° Beam Angle
- Overtemp protection: When the internal temperature hits 40°C and then the fans begin to work, if the internal temperature hits 70°C, the brightness reduces to half until it cools.
- Color Wheel: 7 colors +white
- 1 static Gobo Wheel: 8 gobos +white
- 1 Rotating Gobo Wheel: 7 gobos +white
- Prism: 16-facet Prism + honeycomb prism, bi-directionally rotatable at variable speeds
- High speed strobe effect with 1-25 hz
- Internal program available
- 16/18 DMX Channels USITT DMX-512
- DMX 512, master-slave and sound activated controllable or auto operation
- Colorful LCD display

- Efficient low noise fan cooling system
- PowerCon IN/OUT
- 3-pin XLR connectors IN/OUT
- Two 1/4 turn fastening Omega Clamps
- IP 20 protection rating

Safety Precautions

CAUTION
Becareful with your operations.With a dangerous voltage you cansuffer a dangerous electric shock when touching wires!

This device has left the factory in 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.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device.
This light should be keep away from strong shaking during any transportation or movement.

Don't pull up the light by only the head, or it might cause damages to the mechanical parts.
Leave the device switched off until it has reached room temperature.
This device falls under protection-class I. Therefore it is essential that the device be earthed. The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.
Make sure that the available voltage is not higher than stated at the end of this manual.
Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.
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 initial start-up some smoke or smell or smell may arise. This is a normal process and does not necessary mean that the device is defective, it should decrease gradually.
Please don't project the beam onto combustible substances.

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.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.
If the external flexible cable or cord of this fixture is damaged, it shall be exclusively replaced by the manufacturer of his service agent or a similar qualified person in order to avoid a hazard.

Don't expose the fixture in overheating, moisture or environments with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronics shock to the people.

Customer Support

WARRANTY POLICY
GAMMA LED Vision warrants its products for the periods set below from the date of purchase to be free of manufacturer and workmanship defects. Warranty does not cover normal wear and tear caused by force, negligence or misuse of products. GAMMA LED Vision is not responsible for any damages or injury caused by misuse or improper handling of the products and in accordance with instructions and specifications of manual. Warranty terms are as follows:
LED Fixtures:
Indoor: 2 Years
Outdoor (IP 54 or higher): 1 Year
Lamp Fixtures: 1 year / excludes the lamp
LED Video Products:
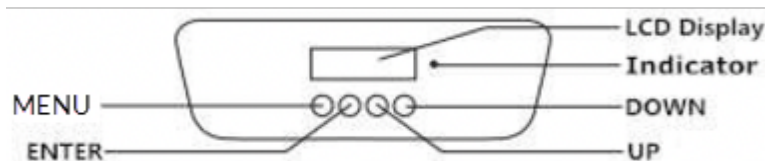Indoor: 2 Years
Outdoor (IP 54 or higher): 1 Year
Controllers: 2 years
Batteries: 6 months
All Trussing Related Products and Accessories: 1 Year
Please visit WWW.GAMMALEDVISON.COM for complete Limited Warranty terms and contact information.

2. Setup and Operation
Using the LCD Menu and Buttons

Menu Operation

Address Set ⟶ [Set Address Numbers]

Run Mode
- [DMX]
- [AUTO] ⟶ Auto 1-
- Auto2 [SOUND]
- [MANUAL] ⟶ Manual Test ⟶ Function and Operation

Setup ⟶ [Advanced Setting]
- Pan
- reverse Tilt
- reverse
- Display
- Screen Reverse
- Channel (16/14/12/10CH Select)
- Sensitivity (01-100)
- Motor zero
- Reset

Factory Set

System Information
- Ver V1
- DMX Address
- Temperature
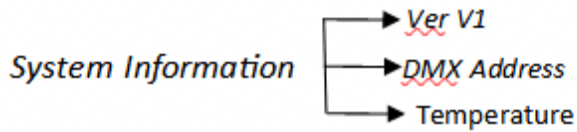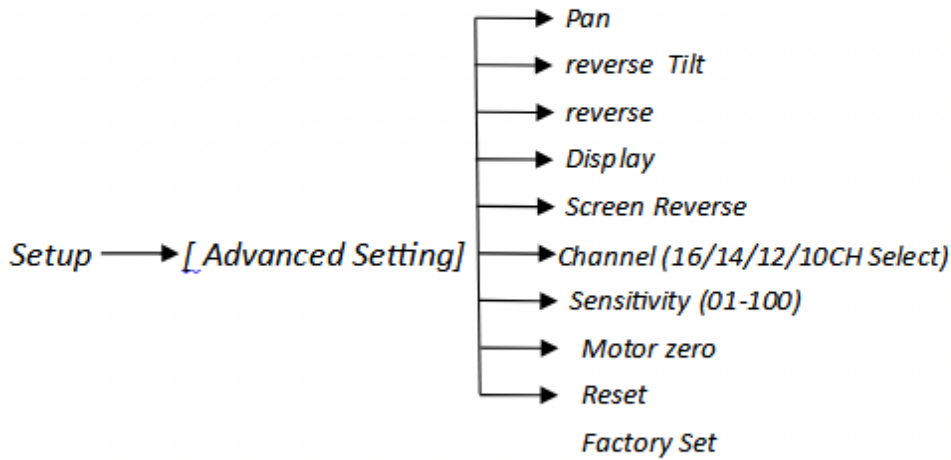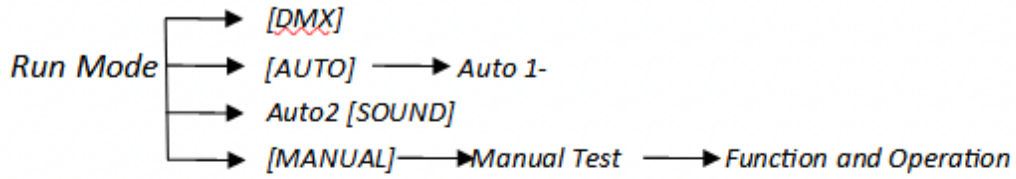
DMX Setup
DMX Basics
DMX512 stands for digital multiplex 512. This means that 512 channels are controlled digitally through 1 data cable.

A channel is a set of 255 steps that are assigned to control attributes in each light. This may be a color like red, green or blue, and intensity, strobe, pan/tilt or other attributes.

Multiple sets of 512 "universes" may be used. Only 1 universe will travel on a DMX cable, but through networked DMX (Art-Net or sACN E1.31), many universes can travel over a network.

DMX Wiring

DMX works by connecting 1 or multiple lights to the output of a DMX lighting console or software with a DMX interface.

DMX lights connect in what is called a "daisy-chain". Your first DMX cable will plug it's male DMX connector into the female DMX connector on your lighting console. The remaining female connector will then connect to the DMX input on your first light.

You may then connect your next fixture to the output of your first light, and continue the

chain.

32 Fixture Rule – DMX only allows you to connect up to 32 fixtures in a single daisy chain for signal strength. Sometimes, depending on the fixtures and cable length, this number is less (or more).
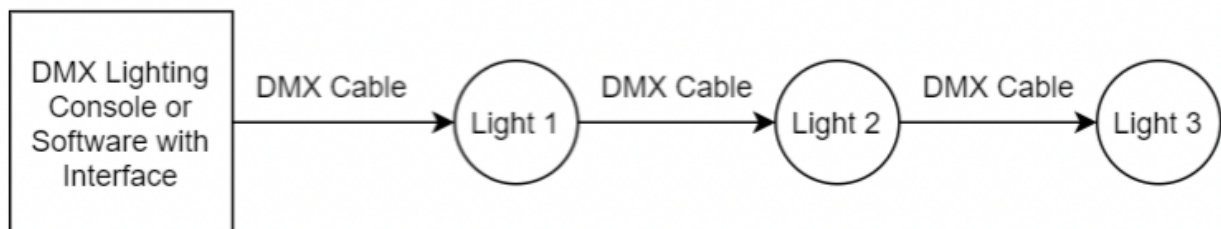
DMX Cables can be 3-pin or 5-pin. These use the same type of data, and in the 5-pin only pins 1, 2, and 3 are used. The cable should be a 2 conductor, shielded cable of at least 110 ohms resistance. Microphone cable is not DMX cable.

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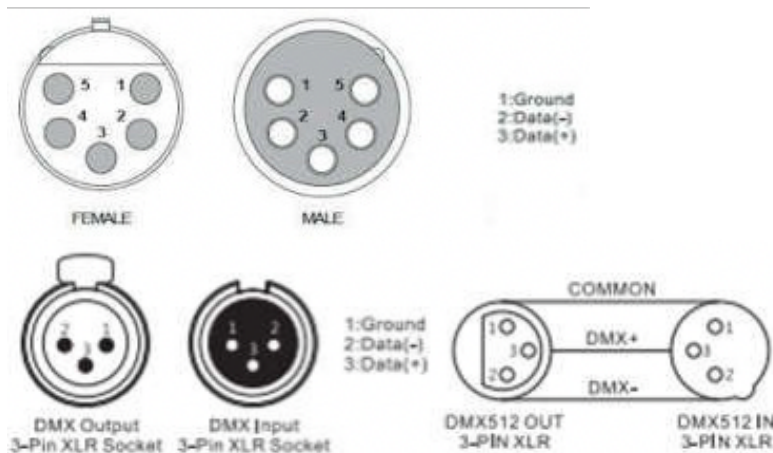
For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise and reflections. The DMX terminator is simply an XLR plug with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

DMX Modes and Configuration

The TX6 LED 300 Beam has multiple DMX modes, sometimes called "personalities", "profiles", or as we will use here "modes".

In general, modes with more DMX channels offer a greater level of control or options but take up more of your output channels on your lighting console or software.

Modes with less DMX channels often offer less control, but may be plenty for your needs. Depending on your needs and control solution, you may not need channels for automated programs, strobes, or macros – your console may have great effects! In this case, you can use a lesser channel mode and fit more lights per DMX universe.
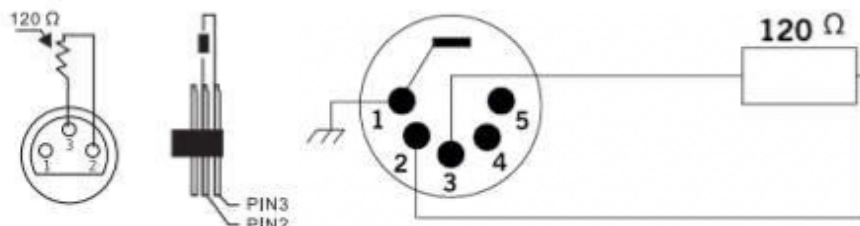
View the DMX mode charts below to find the mode that best suits your needs.

DMX Channel Mode Sheet:

On the left side of the sheet you will see the different modes and which channel corresponds to each function listed on the right in the given mode.

25/18 channels mode

25CH	18CH	Function	DMX Value	Movement details
CH1	CH1	Pan	0-255	Pan 0-540°
CH2	CH2	Pan fine	0-255	Pan Fine
CH3	CH3	Tilt	0-255	0-270°
CH4	CH4	Tilt fine	0-255	Tilt Fine
CH5	CH5	Pan Tilt Speed	0-255	From fast to slow
CH6	CH6	Dimmer	0-255	
CH7	CH7	Strobe	0-7	Turn on
			8-250	Strobe from slow to fast
CH8	CH8	Color	0-15	White
			16-31	Color 1
			32-47	Color 2
			48-63	Color 3
			64-79	Color 4
			80-95	Color 5
			96-111	Color 6
			112-127	Color 7
			128-191	CW from slow to fast
			192-255	CCW from slow to fast
CH9	CH9	Color effect	0-10	no
			11-209	Color fine
			210-255	Color dithering from slow to fast
CH10	CH10	Fixed Gobo wheel	0-6	white
			7-13	Gobo 1
			14-20	Gobo2
			21-27	Gobo 3
			28-34	Gobo 4
			35-41	Gobo 5
			42-48	Gobo 6
			49-55	Gobo 7
			56-63	Gobo 8
			64-70	Gobo8 Dithering
			71-77	Gobo 7 Dithering
			78-84	Gobo 6 Dithering

			85-91	Gobo 5 Dithering
			92-98	Gobo 4 Dithering
			99-105	Gobo 3 Dithering
			106-112	Gobo 2 Dithering
			113-119	Gobo 1 Dithering
			120-127	White
			128-191	Clockwise, from slow to fast
			192-255	Counterclockwise, from slow to fast
			128-191	CW from slow to fast
CH11	CH11	Rotation Wheel	0-15	White
			16-31	Gobo1
			32-47	Gobo 2
			48-63	Gobo 3
			64-79	Gobo 4
			80-95	Gobo 5
			96-111	Gobo 6
			112-127	Gobo 7
			128-191	Clockwise, from slow to fast
			192-255	Counterclockwise, from slow to fast
CH12	CH12	Gobo Rotation	0-15	Gobo Rotation turn on
			16-95	Gobo Rotate 0-250
			96-135	Gobo Rotate 0-90
			136-155	Gobo Rotate 0-250
			156-175	Gobo Rotate 0-360
			176-215	Gobo rotate CW from slow to fast
			216-255	Gobo rotate CCW from slow to fast
CH13	CH13	Focus	0-255	Gobo hazy to clear
CH14	CH14	Prism 1	0-63	No react
			64-255	Prism in
CH15	CH15	Prism 2	0-63	No react
			64-255	Prism in
CH16	CH16	Prism rotate	0-15	Prism in
			16-95	Prism rotate 0-250
			96-135	Prism rotate 0-90
			136-155	Prism rotate 0-250
			156-175	Prism rotate 0-360

			176-215	Prism self-rotating CW from slow to fast
			216-255	Prism self-rotating CCW rotating from slow to fast
CH17	CH17	Frost	0-4	No function
			5-127	Frost from shallow to deep
			128-191	Frost shake
			192-255	Frost effect
CH18		LED Dimmer	0-255	From dark to bright
CH19		LED Strobe	0-24	Turn on
			25-64	from fast to slow
			65-69	Turn on
			70-84	Fast bright and faded from fast to slow
			85-89	Turn on
			90-104	Fast bright and faded from fast to slow
			105-109	Turn on
			110-124	Asynchronous strobe from fast to slow
			125-129	Turn on
			130-144	Asynchronous fast bright and faded from fast to slow
			145-149	Turn on
			150-164	Fast bright and faded from fast to slow
			165-169	Turn on
			170-184	Pulse strobe
			185-189	Turn on
			190-204	Asynchronous Pulse
			205-209	Turn on
			210-224	Fade away
			225-229	Turn on
			230-244	Pulse strobe
			245-255	Turn on
CH20		Head LED R	0-255	Dimming from dark to bright
CH21		Head LED G	0-255	Dimming from dark to bright
CH22		Head LED B	0-255	Dimming from dark to bright
CH23		Head LED W	0-255	Dimming from dark to bright
CH25		LED color changing faded	0-10	No function
			11-20	color 1
			21-30	color 2
			31-40	color 3
			41-50	color 4

			51-60	color 5
			61-70	color 6
			71-80	color 7
			81-90	color 8
			91-100	color 9
			101-110	color 10
			111-120	color 11
			121-130	color 12
			131-140	color 13
			141-150	color 14
			151-160	color 15
			161-170	color 16
			171-180	Full color
			181-255	Color gradient from slow to fast
CH25	CH18	Auto Run	0-7	No react
			8-131	Auto mode
			132-249	Sound control
			250-253	Reset
			254-255	No react

3. Maintenance
Routine Maintenance

The following points have to be considered during the inspection:

1) All screws 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 the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).

3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.

4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.

2) Clean the fan each week.

3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol solvents.

There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine parts from your local dealer.

CAUTION
Disconnect from mains before starting maintenance operation.

Troubleshooting Problems

The following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work:

• Check that the unit is plugged in to a working power connector.
• Press the menu button to confirm that the unit is powered on. If the screen does

not light up, the unit has no power.

B. Not Responding to the DMX Controller

- Check DMX cables to verify that they are plugged in and functional.
- Check the DMX address and mode – does it match the address and mode patched

  in the lighting console or software?

- Plug the light directly into the DMX controller with a cable that you know is good. Unplug all other lights – does it work?
- Try to use another DMX controller. **4. Technical Specifications**
    - Input Voltage: AC90-260V 50/60Hz
    - Light Source: 300W High Output White LED
    - Control Signal: DMX 512, master-slave and sound activated or auto operation

      Control Channel: 18/25 DMX Channels USITT DMX-512

    - Power Consumption: 300w
    - Dimensions: 330(D)*230(W)*560(H)mm
    - Net Weight: 15.7kg

Photometric Data

| Lux | 160000 | 92000 | 58500 | 28600 | 20000 |

Gobo Size (cm): 13, 19, 26, 33, 47

3°

| Distance (m) | 2m | 3m | 4m | 5m | 7m |