

STORM FORM AND STORM FORM DMX USER GUIDE



The Storm Form is a rugged and compact outdoor gobo projector with adjustable zoom and focus. It is available with either Warm White or Cool White output. The Storm Form is also available in a DMX controllable version. The Storm Form and Storm Form DMX are small and discreet, but engineered to deliver lasting performance in permanent outdoor installations. The Storm Form and Storm Form DMX are available in black or silver finish. The Storm DMX is configured using our DMX Programmer app, which is available free for Apple and Android devices, or using our DarkBox Programmer standalone programming device.

Features

- Adjustable zoom and focus
- 16-27° beam angle
- Accepts 19mm steel or glass gobo (up to 2mm thick)
- Warm White (90+ CRI) or Cool White LED
- 9 Watt LED
- Class 2, low-voltage 12-24VDC input (DO NOT HOT PLUG)
- Rated IP65 for permanent outdoor installation
- Locking mount
- Waterproof connector for use with Gantom Pro Cable System
- Available in black or silver finish
- DMX controllable version available

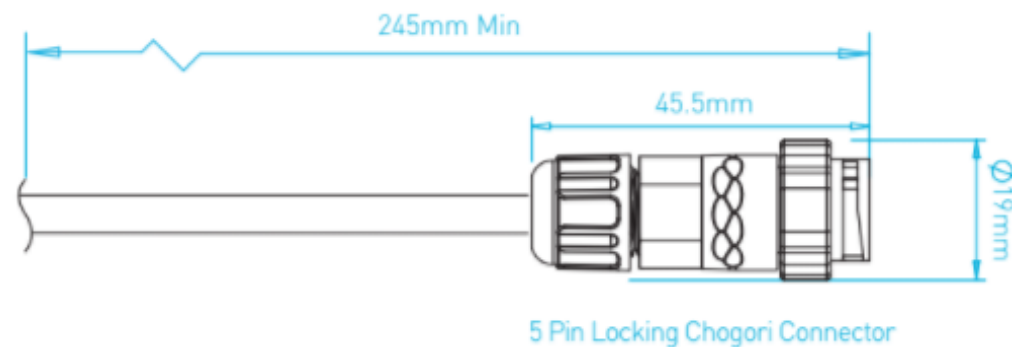
Available Models:

Item Number	Item Description
ST128	Storm Form - Warm White - Black Anodized Finish
ST130	Storm Form - Warm White - Silver Anodized Finish
ST131	Storm Form - Cool White - Black Anodized Finish
ST133	Storm Form - Cool White - Silver Anodized Finish
ST163	Storm Form DMX - Warm White - Black Anodized Finish
ST165	Storm Form DMX - Warm White - Silver Anodized Finish
ST166	Storm Form DMX - Cool White - Black Anodized Finish
ST168	Storm Form DMX - Cool White - Silver Anodized Finish

POWER AND WIRING REQUIREMENTS

The Storm Form and Storm Form DMX have a maximum wattage of 9.6W and an operating voltage range of 12-24VDC.

The Storm Form and Storm Form DMX include a single locking connector which combines both power and data into one compact cable. This connector is compatible with our **Gantom Pro Cable System**, including our G8 Power/Data Distribution Box. A single cable for power and data greatly simplifies installation and the locking connector gives a secure connection for long term use. This makes the **Gantom Pro Cable System** ideal for permanent installations. For more information on this system, please visit <https://www.gantom.com/accessories/gantom-pro-cable/>



BARE WIRE PINOUT		
Power	+	RED
	-	BLUE
DMX signal	D+	GREEN
	D-	YELLOW
	COM	BLACK

Note: all fixtures must be installed with the low voltage supply power OFF. Hot plugging (connecting to a live power supply) is not supported.

Hot plugging a fixture into a system with a running power supply will increase the load on the power supply, which can generate voltage spikes that more than double of the standard input voltage. This causes an out-of-spec and out-of-warranty voltage condition which may result in damage to the fixture. While Gantom fixtures have internal protections against voltage spikes, it is recommended that installers handle them with care to prevent these spikes from happening in the first place.

Installing all fixtures in the system before turning on power to the low voltage power supply assures that the power supply has a “soft start” which is free from harmful voltage spikes.

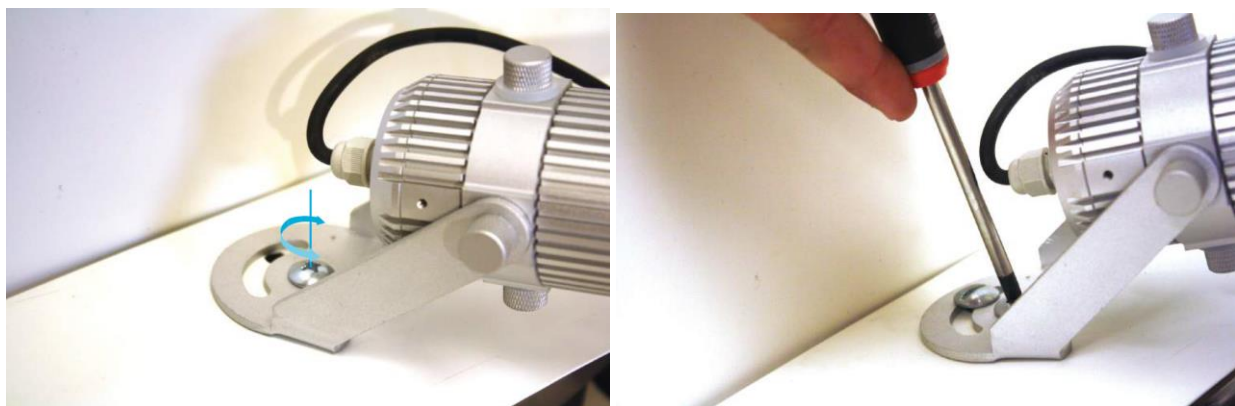
Safety and Operation notes:

Please carefully review the following safety notes regarding the Storm Form micro gobo projector. These notes are important for safe installation and usage of the product.

- Do not look directly at the light source while the fixture is powered on.
- Inspect all power cables for damage or crimped cable before use.
- Make sure that your circuit is properly grounded and all electrical safety precautions have been taken to prevent electric shock.
- Be aware that the fixture will become HOT to the touch when it is left on.
- Allow several minutes for the light to cool before touching it after extended periods of on time.
- Ensure that there are no flammable materials close to or in contact with the light fixture.
- Never touch the lenses within the fixtures. If the lenses must be cleaned, use a microfiber cloth and glasses cleaning solution.
- Make sure that the locking cable connectors are fully tightened when the product is installed.
- Check the voltage of the power line before connecting the fixture to ensure that it is within the required range for the fixture.
- In the event of a serious operating problem, cut power to the fixture and cease operation immediately.
- For technical support, please contact Support@GANTOM.com or call 1-855-GANTOM1 (1-855-426-8661).

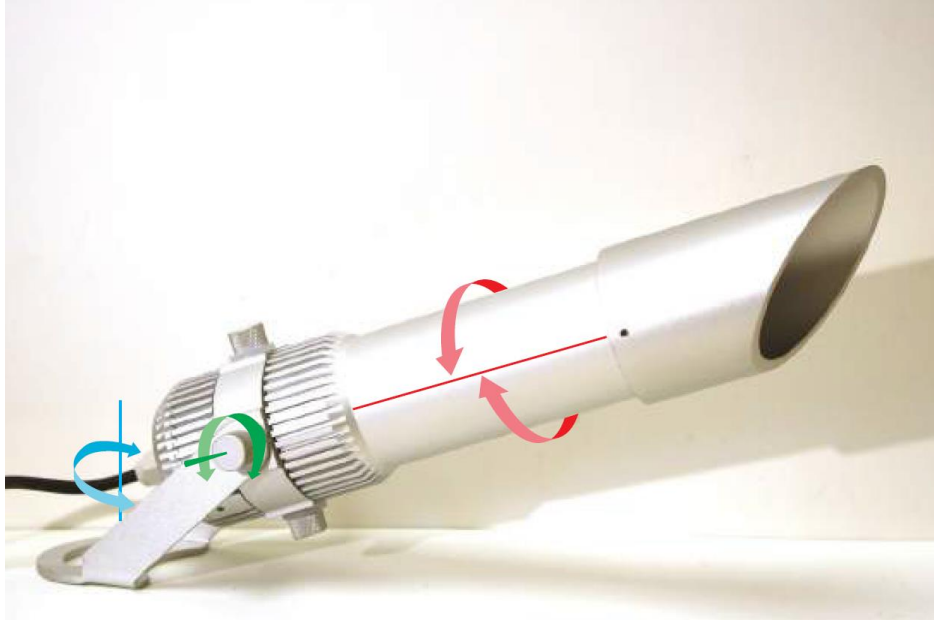
MOUNTING INSTRUCTIONS

The Storm Form micro gobo projector comes with an aluminum mounting yoke pre-installed. It is meant to be used with ¼" size hardware, but please note that mounting hardware is not included with the fixture. The yoke has a hole and a curved slot. Install a screw in the center hole first, then loosely screw down a second screw through the curved slot. Rotate the fixture to the appropriate angle and then finally tighten down both screws all the way to lock the fixture in place.



AIMING INSTRUCTIONS

Once the fixture has been mounted, you can complete the aiming of the fixture. The fixture is adjustable in the following ways:



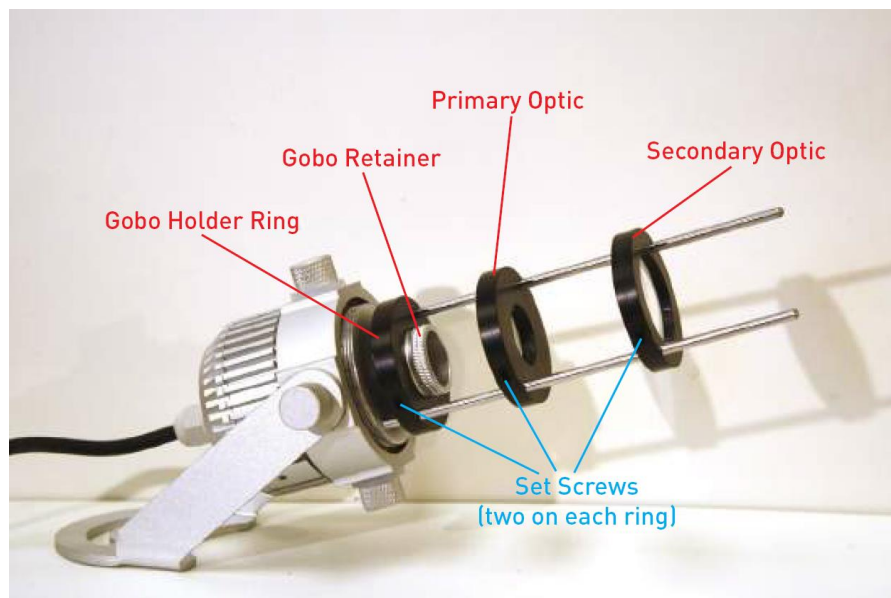
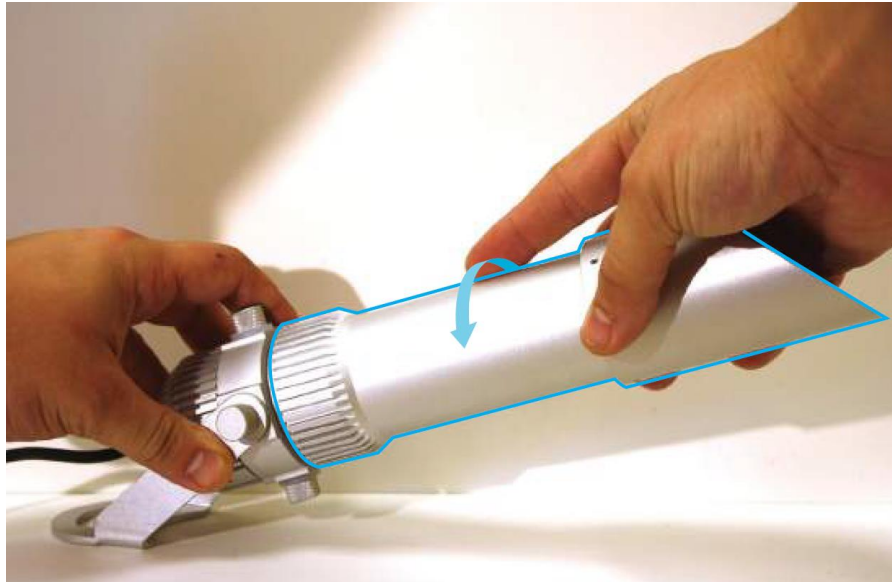
When you have the light pointed in the correct orientation, tighten the locking screws in the indicated locations:



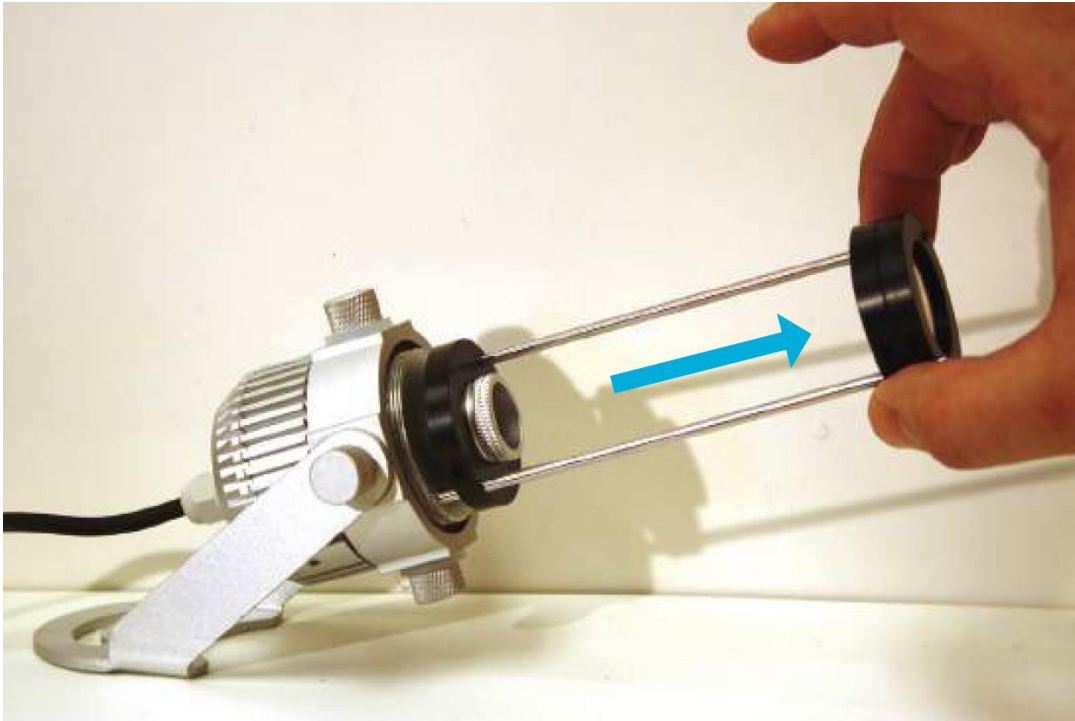
GOBO INSTALLATION

A gobo can be a great way to add texture and dimension to your application. The Storm Form micro gobo projector accepts glass and stainless steel gobos with an outer diameter of 19mm. The maximum image size for patterns is 15mm and the maximum image size for text is 10mm. Both stainless steel and full color glass gobos are available to fit the Gantom Form. Custom stainless steel and full color glass gobos are available through Rosco. Please see <http://www.rosco.com/gobos/> for more information on how you can order your own.

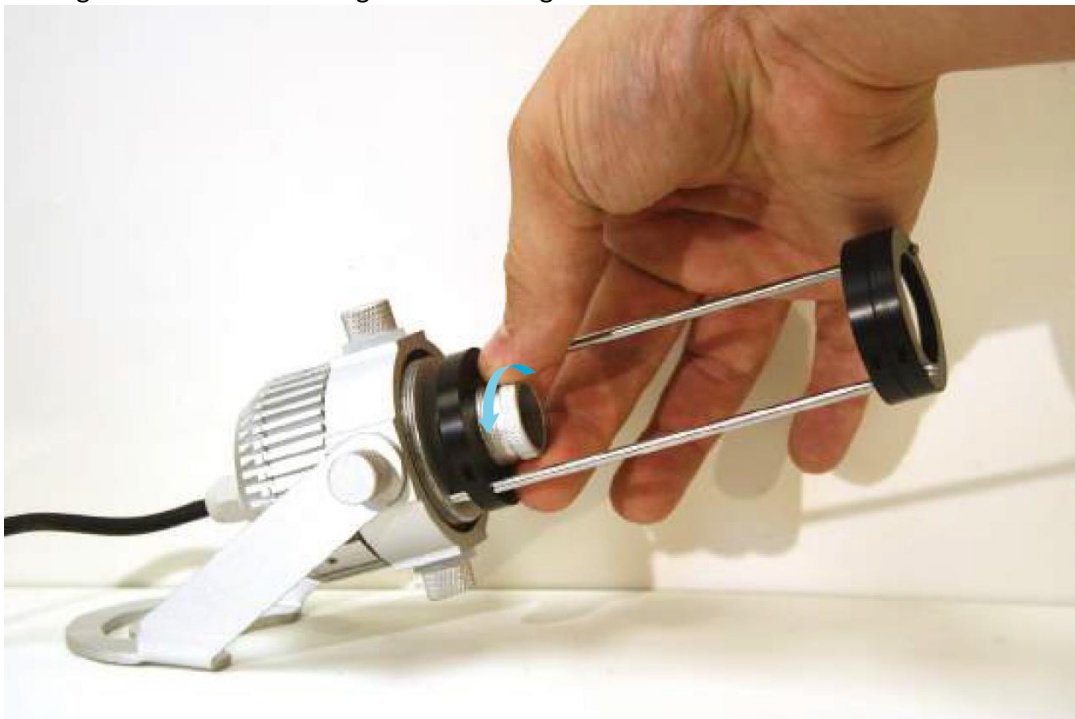
To install a gobo slide, first make sure that your fixture is powered off. Then remove the barrel by unscrewing it from the middle of the fixture.



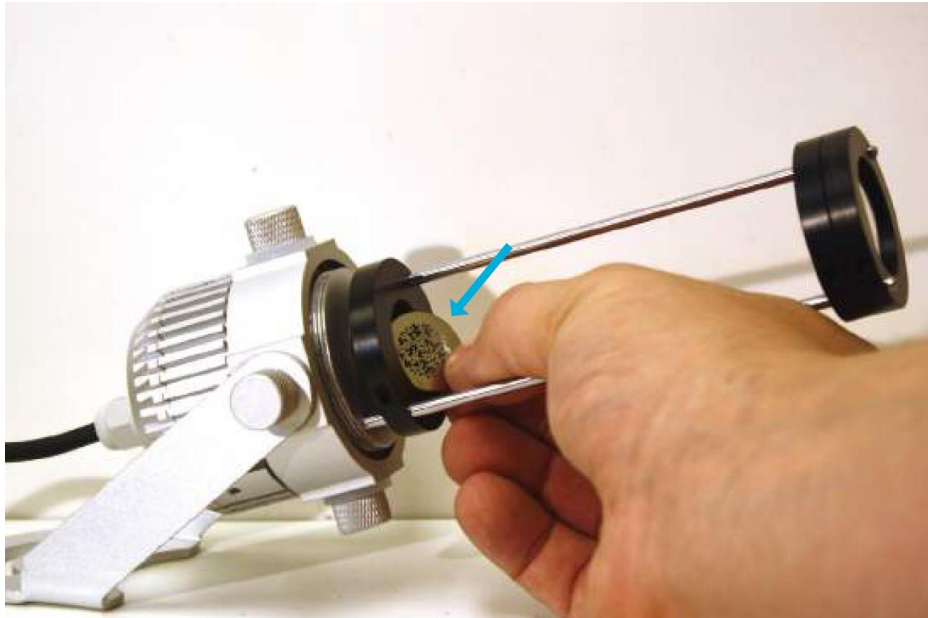
Next, move the primary and secondary optics all the way to the front end of the optic slider rails. To do this, you will need to loosen the set screws on the Primary and Secondary Optic as shown in the previous picture. **Pro Tip: Don't touch the lenses. A small fingerprint can distort your projection!** If the lens must be cleaned, do so with a microfiber cloth and glasses cleaning solution.



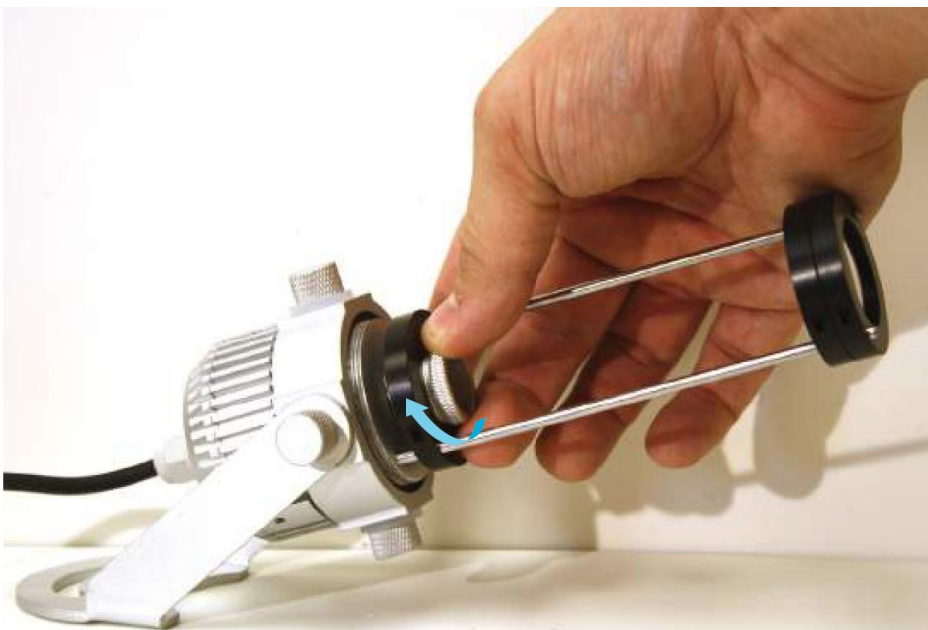
Unscrew the gobo retainer from the gobo holder ring.



Insert your gobo slide into the gobo retention hole, it should rest easily on the spring that is within the hole.



Next, screw the gobo retention ring back into the hole until it begins to resist. Once it begins to resist, continue turning it one quarter of a turn and then stop. This will give enough tension to hold the gobo, but will not over-tighten the retention ring. Please be careful not to over-tighten the extension ring or you risk damaging both your fixture and your gobo.

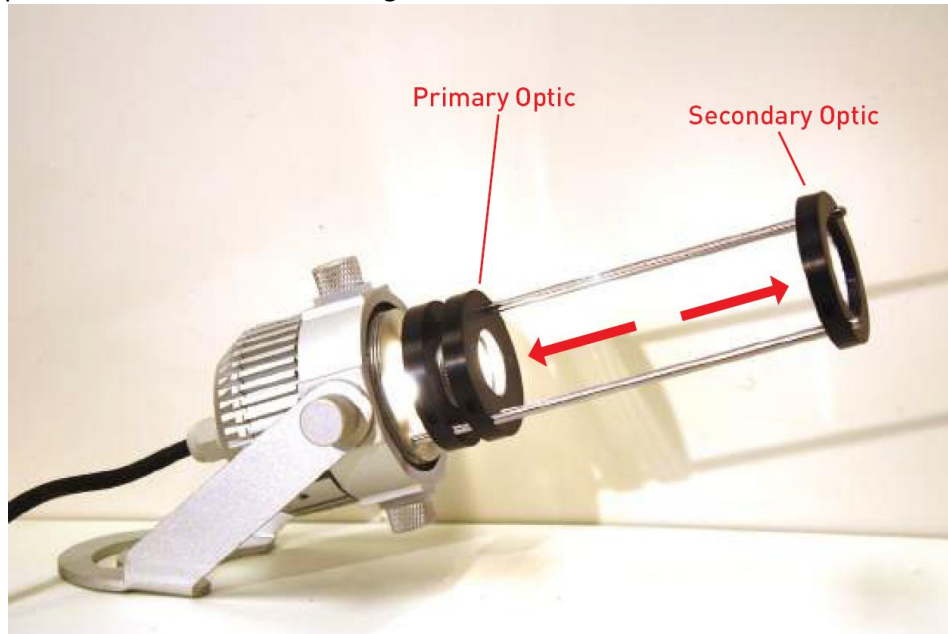


Once the gobo is in place within the retainer system, you can focus your optics to your desired effect.

FOCAL ADJUSTMENT

Power on the fixture and remove the barrel by unscrewing it from the middle of the fixture. Be sure to never look directly at the LED while the fixture is on.

Now, move the primary optic as close to the LED as possible and the secondary optic as far from the LED as possible on the optic slider rails. You may need to loosen the set screws on the primary and secondary optics in order to slide them along the rails.



Slowly begin sliding the secondary optic toward the LED until the projected image comes into focus. This will be the narrowest focused beam the fixture can achieve.



This picture shows the fixture in its narrowest beam configuration. To widen the beam move the primary optic forward about 1 mm, and then move the secondary object backward along the optic slider rails toward the LED until the beam comes back into focus. Repeat this

process until you have your desired projection size. At the maximum beam size, the primary and secondary optics will be touching each other at about 1/4th of the length of the optic slider rails.



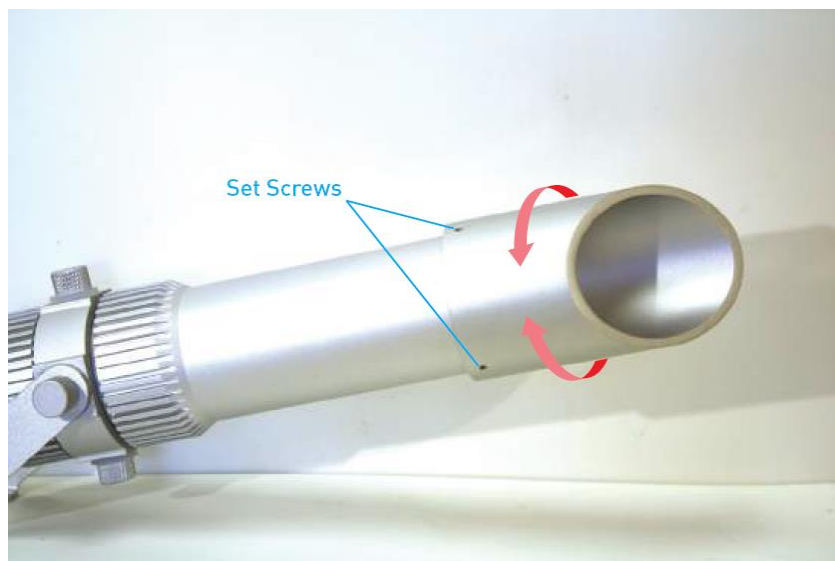
This picture shows the fixture in its widest beam configuration

When you have the beam adjusted to the focal setting you would like, tighten down the set screws on the primary and secondary optics. Complete the adjustment by screwing the barrel back onto the fixture.

INSTALLING ACCESSORIES

A removable cutaway snoot for shielding the light source from view is available for the Storm Form.

Installing the snoot: The snoot can be adjusted or removed by loosening the three set screws that are located toward the back of the snoot. You can then rotate the snoot to the appropriate position, and finally tighten down all three set screws.



CONFIGURING THE STORM FORM DMX

Due to its compact size, the Storm Form DMX cannot use a physical DIP switch for addressing. Instead, the Storm Form DMX is programmed using the **DMX Programmer App** by Gantom or by using the **DarkBox Programmer V2** programming device (part# DB32, pictured right). In addition to setting the DMX starting address for the fixture, this will allow you to save a default color and brightness for the fixture if the application does not require any DMX control.



Configuring light fixtures with the DarkBox Programmer V2 Device:

For details on how to configure your fixture using the **DarkBox Programmer V2**, please consult the user guide for that product. The DarkBox Programmer V2 device is the easiest and most reliable way to configure Gantom fixtures and is the preferred option when available.

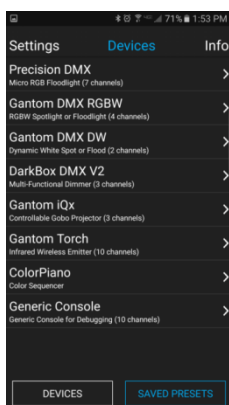
Configuring the light fixture with the DMX Programmer App:

When the DarkBox Programmer V2 standalone programming device is unavailable, it is also possible to configure the settings of the device using our free app for iOS and Android devices.

What you need:

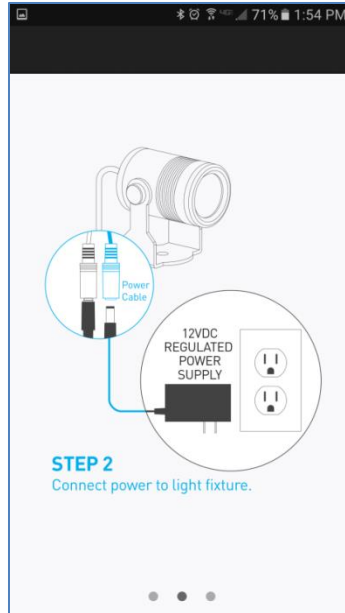
- A CB107 Pro Cable Programming Adapter
- An Android or iOS device for running the Gantom Programmer app. Please note that a headphone port is required to connect to the device to the fixture. The iPhone7 does work with, but you will need to use the headphone port adapter that is included with the phone.
- A male-to-male 3.5mm audio 3.5mm cable. This is the same type of cable that you would use to connect your Android or iOS device to headphones or to an AUX port.
- Power supply for the fixture. All Gantom fixtures accept 12v DC power. We recommend using one of our PowerPak Mini units if you are just going to power a single fixture.
- The free **DMX Programmer** app by Gantom. This can be found by searching “Gantom” in iTunes for an Apple device or Google Play for an Android device

First, open the **DMX Programmer** app by Gantom. The app will open to the screen you see here.

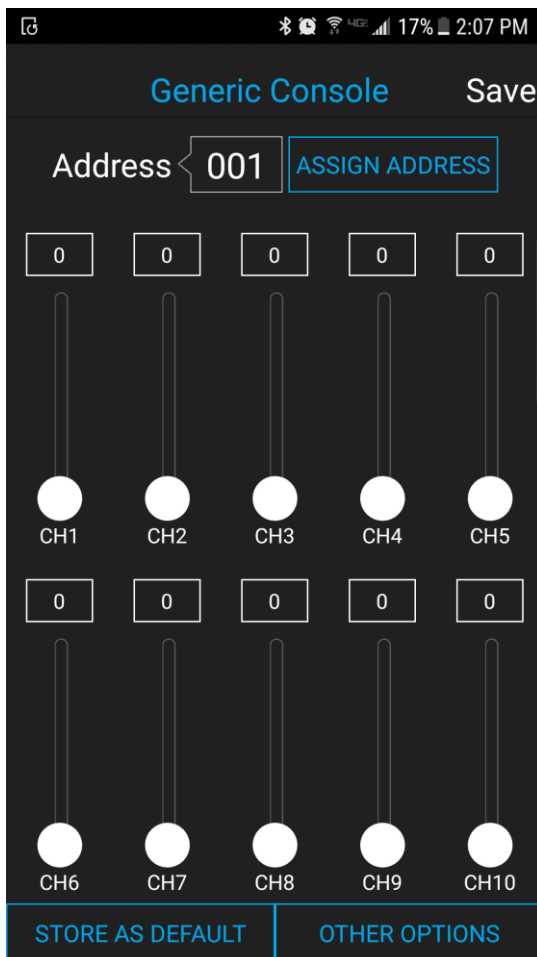


From this screen, select **Generic Console**. (note: a Storm Form DMX menu option may be added to the app at a later date)

The app will then provide you instructions on how to connect the light fixture to the tablet or smartphone. Please note the order in which the cables should be connected. First connect the headphone cable to the light fixture and to the tablet/smartphone. Next, connect the power to the fixture. When prompted by the app, tap the “Next” button and you will be taken to the control screen.



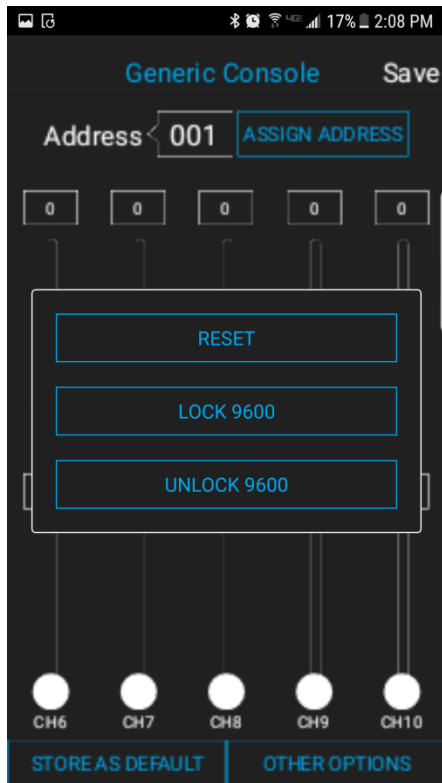
CONTROL SCREEN



- **Address** – This box shows the address that will be assigned to the fixture if you hit the “Assign Address” button
- **Assign Address** – Hitting this button will assign the selected address to the fixture. The light fixture should blink in response to having a new address assigned.
- **Save button** – this will allow you to save a settings profile into the app. Use this if you need to configure many fixtures to have the exact same settings. Please note that this button DOES NOT save the current profile or address to the fixture.
- **Console Sliders** – These sliders allow you to set intensity levels for each channel. Only the CH1 slider will work with the Storm Form DMX
- **Store as Default** – hitting this will save the current color and brightness to be the default state for the light when it turns on. If the light does not see DMX signal when it is powered on, it will go to this state.

OTHER OPTIONS SCREEN

If you hit the “Other Options” button on the control screen, the following menu appears:



- **Reset** - selecting this will reset the fixture to its default factory settings. Do this if you are running into programming issues.
- **Toggle Silent Bootup** – By default, the fixture will flash to report its DMX address when it is powered on. tapping the “Toggle Silent Bootup” option will turn address reporting at startup on or off.
- **Lock/Unlock 9600** – The Storm Form DMX fixture can listen to either a standard DMX signal OR to the special control signal that comes from the app. Lock 9600 will turn OFF the fixture’s ability to listen to DMX and ONLY allow it to be controlled through the app interface. For most applications it is recommended that you keep “UNLOCK 9600” selected.

BOOT SEQUENCE FLASHING

When the fixture first receives power, before it enters normal operation, it will first report its channel mapping profile and second report its DMX address through a sequence of flashes.

By default, the DMX starting address will be 1. The Storm Form DMX will flash several times when it is powered on to indicate its starting address. If the Storm Form DMX is assigned to address 245 it will report its address by flashing 2 times, pausing briefly, then flashing 4 times, pausing briefly, then flashing 5 times. If it is assigned to DMX address 038, it will flash 3 times, pause briefly, then flash 8 times

TURN OFF/ON boot sequence flashing: You may not want your fixture to report its channel mapping profile and address every time it receives power. In order to toggle the boot sequence flashes on/off, follow these steps. With the fixture connected to the DMX Programmer App, select the “Generic Console” profile. Once the control screen appears, power cycle the Storm Form DMX. Next, tap the “Other Options”, then tap the “Toggle Silent Bootup” button. The light should blink to indicate that it has received this new setting.

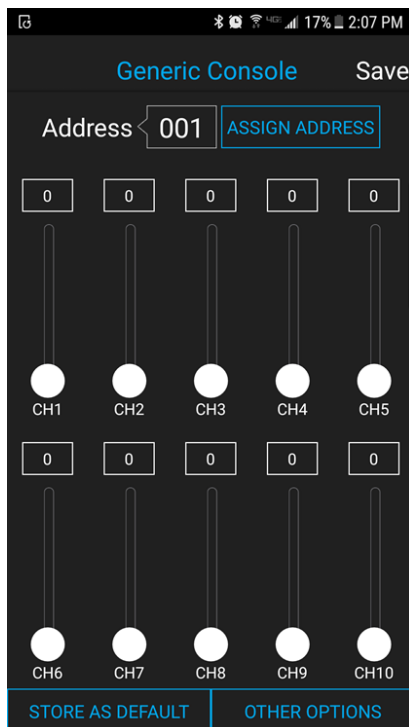
STANDALONE OPERATION

Some applications may not require live DMX control. In order to configure your Storm Form DMX for standalone operation, all you must do is use the CH1 slider on the Generic Console control screen to set the desired intensity level. Once the light has the desired output, tap the “STORE AS DEFAULT” button at the lower left portion of the screen to save this setting directly into the light fixture. Now, when the light fixture receives power it will automatically go to this newly saved DEFAULT setting once it’s boot sequence is complete. Please note that if DMX signal is passed to the fixture while it is operating in standalone mode, the DMX signal will override the standalone setting.

DMX CONTROLLED OPERATION

The Storm Form DMX was designed for use with standard DMX512 control systems. The Storm Form DMX occupies a single DMX channel and can be given any DMX starting address from 1-512. Please note that the Storm Form DMX does not feature any RDM functionality.

ADDRESSING YOUR FIXTURE



To set the DMX address, first connect the Storm Form DMX to the DMX Programmer app by Gantom as was outlined earlier in this document. With the Generic Console control screen open, you should have full control of the fixture using the CH1 slider. If the light fixture is connected to the app but is not responding, try power cycling the light fixture.

Once you have verified that the light fixture is responding to control signal from the app, tap the number field next to the word “Address”. A new screen will pop up, prompting you to enter a DMX address. After you enter your desired DMX address, the app will return to the Generic Console screen. Finally, you must hit the ASSIGN ADDRESS button in order to save the new address into the fixture. Hitting the “Save” button will not save anything to the light fixture’s memory.

DMX CHANNEL MAPPING

DMX Channel Descriptions			
Channel	Name	Level	Description
Ch 1	Brightness Level	0-255	Dim to bright

Product Support:

We hope that this guide has been effective for learning how to use your Storm Form or Storm Form DMX light fixture. However, if you run into a wiring issue, a bug in the software, or just a light that doesn't seem to want to cooperate, we at Gantom are ready to help you out! Just send an email to Support@GANTOM.com and we will get back to you as soon as possible.