STORM Z and STORM Z DMX
USER GUIDE

The Storm Z and Storm Z DMX are permanent outdoor versions of Gantom's popular Precision Z fixtures. The Storm Z produces a soft point-source light equivalent to traditional 20W halogen fixtures in a highly energy efficient, compact, outdoor-ready package. The fixture's modular design allows it to be swapped with other fixtures without the hassle of cutting wires, allowing for fast design changes and reconfiguration. The fixture is available with either Spot or Flood optics and can be produced with a wide variety of LED colors.

Features

- o The world's smallest DMX light fixture
- o 1W LED with 95% energy savings compared to 20W halogen lamp
- o Made for permanent outdoor installation
- o DMX address or standalone state configured via DMX Programmer app
- o Low voltage and minimal heat for improved safety over incandescent sources
- o Internal constant current driver gives highly efficient and consistent output.
- o Minimal maintenance required with over 50,000 hour lamp life.
- o Available in custom colors by special quotation

Available DMX Models:

Item #	Description	Item #	Description
ST169	Storm Z DMX Spot - Warm White - Black Anodized finish	ST175	Storm Z DMX Flood - Warm White - Black Anodized finish
ST171	Storm Z DMX Spot - Warm White - Silver Anodized finish	ST177	Storm Z DMX Flood - Warm White - Silver Anodized finish
ST172	Storm Z DMX Spot - Cool White - Black Anodized finish	ST178	Storm Z DMX Flood - Cool White - Black Anodized finish
ST174	Storm Z DMX Spot - Cool White - Silver Anodized finish	ST180	Storm Z DMX Flood - Cool White - Silver Anodized finish

Available non-DMX Models:

Item #	Description	Item #	Description
ST110	Storm Z Spot - Warm White - Black Anodized finish	ST116	Storm Z Flood - Warm White - Black Anodized finish
ST112	Storm Z Spot - Warm White - Silver Anodized finish	ST118	Storm Z Flood - Warm White - Silver Anodized finish
ST113	Storm Z Spot - Cool White - Black Anodized finish	ST119	Storm Z Flood - Cool White - Black Anodized finish
ST115	Storm Z Spot - Cool White - Silver Anodized finish	ST121	Storm Z Flood - Cool White - Silver Anodized finish

POWER   AND WIRING REQUIREMENTS

The Storm Z and Storm Z DMX have a maximum wattage of 1.5W and an operating voltage range of 12-24VDC.

The Storm Z and Storm Z 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/
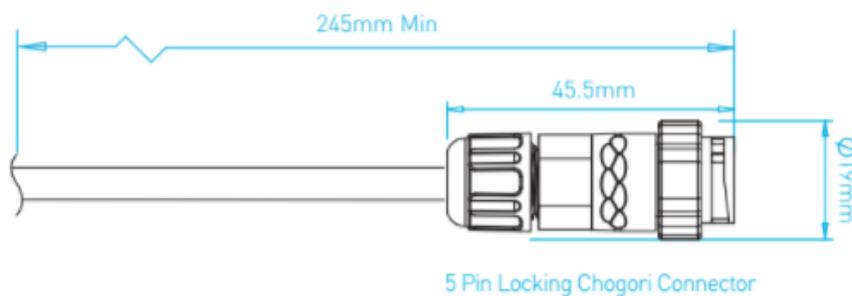
BARE WIRE PINOUT		
Power	+	RED
	-	BLUE
DMX signal	D+	GREEN
	D-	YELLOW
	COM	BLACK

Note: all fixtures must be installed with the low voltage supply power <u>OFF</u>. 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 <u>before</u> 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.

CONFIGURING THE STORM Z DMX

Due to its compact size, the Storm Z DMX cannot use a physical DIP switch for addressing. Instead, the Precision Z 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:

o   A CB107 Pro Cable Programming Adapter
o   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.
o   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.
o   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.
o   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
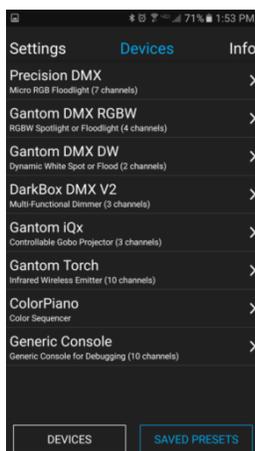
First, open the **DMX Programmer** app by Gantom. The app will open to the screen you see here. From this screen, select **Generic Console**. (note: a Precision Z DMX menu option will be added to the app at a later date)

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.

STEP 1
Connect male to male audio cable between light fixture and phone.

STEP 2
Connect power to light fixture.

STEP 3
Once signal and power cables are connected, tap "Next" to control device.

STEP 2
Connect power to light fixture.
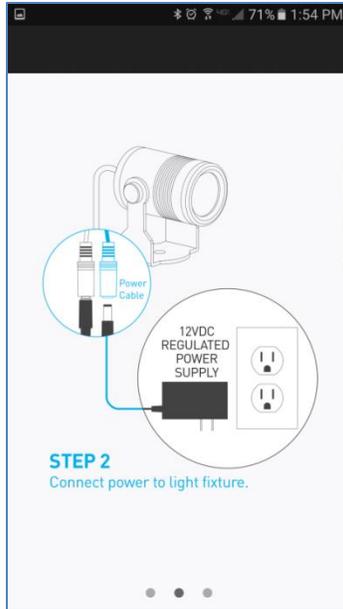
CONTROL SCREEN
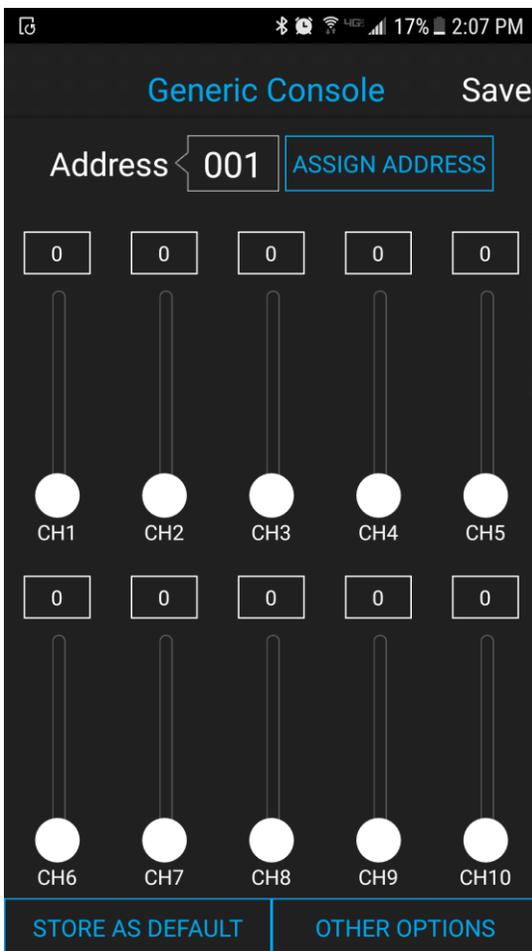
o   **Address** – This box shows the address that will be assigned to the fixture if you hit the "Assign Address" button

o   **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.

o   **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.

o   **Console Sliders** – These sliders allow you to set intensity levels for each channel. Only the CH1 slider will work with the Precision Z DMX

o   **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:

o **Reset** - selecting this will reset the fixture to its default factory settings. Do this if you are running into programming issues.

o **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.

o **Lock/Unlock 9600** – The Precision Z 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 Z DMX will flash several times when it is powered on to indicate its starting address. If the Storm Z 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 Z DMX. Next, tap the "Other Options", then tap the "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 Z 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 Z DMX was designed for use with standard DMX512 control systems. The Storm Z DMX occupies a single DMX channel and can be given any DMX starting address from 1-512. Please note that the Storm Z DMX does not feature any RDM functionality.

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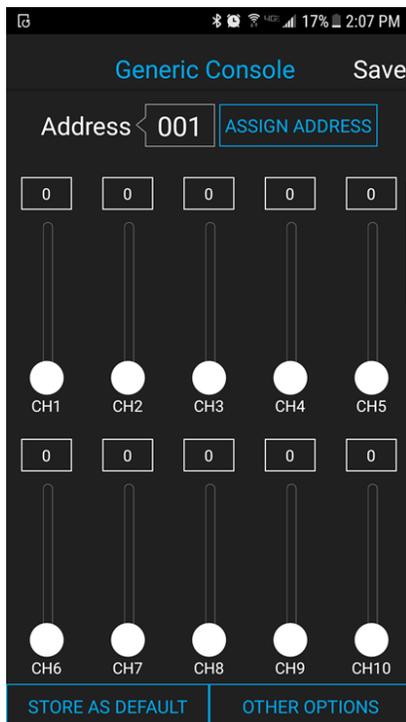
To set the DMX address, first connect the Storm Z DMX to the DMX Programmer app by Gantom as was outlined earlier in this document. With the Generic Console control screen open, you should have full control of the fixture using the CH1 slider. If the light fixture is connected to the app but is not responding,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