

GANTOM DMX V2 USER GUIDE



The Gantom DMX V2 is a 4W controllable LED light for professional applications. Featuring a non-linear dimming curve, the Gantom DMX can be dimmed with high precision even at the lowest intensity levels. Homogeneous optics smoothly blend the colors of the internal quad chip LED producing a clean projected field without the “halos” seen in many other color mixing fixtures. High frequency hybrid modulation allows the Gantom DMX to be used in video applications with minimal on-camera flickering. The Gantom DMX can even be battery powered for portable applications, perfect for event lighting where access to power and signal is inconvenient. The Gantom 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

- Homogeneous wide beam angles
- Non-linear dimming curve for smooth fading without visible “steps” in output intensity
- 14 bit dimming compressed into single 8 bit channel gives precision control without using extra channels
- DMX address and colors configured via DMX Programmer app or DarkBox Programmer device
- Less than 5W at full output
- Minimized on-camera flicker
- Integrated DMX receiver
- Integrated quad channel constant current driver for consistent output
- IP65 rated for indoor and outdoor use with occasional liquid exposure

Available Models

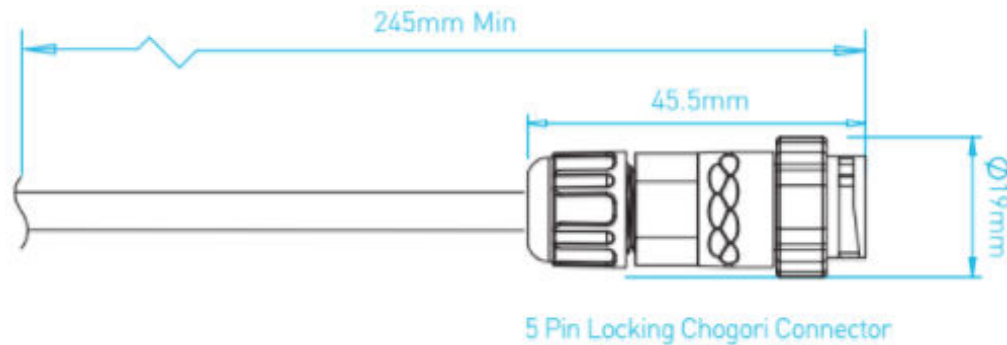
The Gantom DMX is available in full color RGBW or Dynamic White. It is also available as either a Spot or Flood light.

PRODUCT NAME	LED COLOR	DMX CHANNELS	ITEM NUMBER
Gantom DMX V2	Dynamic White (2500k-6500k)	2	GP291
	RGBW	4	GP292

POWER AND WIRING REQUIREMENTS

The Gantom DMX V2 has a maximum wattage of 4.8W and an operating voltage range of 12-24VDC.

The Gantom DMX V2 includes 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

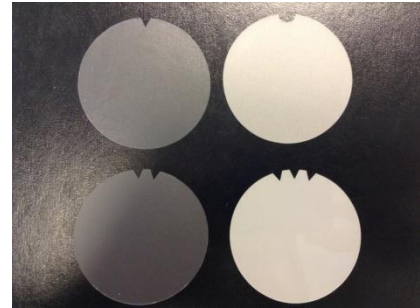
Note: all fixtures must be installed with the low voltage supply power OFF. Hot plugging (connecting to a live power supply) is not supported.

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.

ADDING AND REMOVING DIFFUSERS

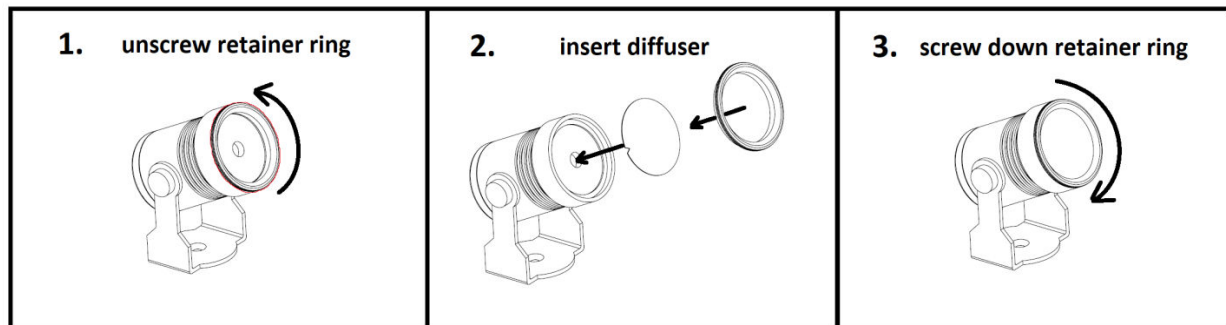
The Gantom DMX V2 includes a set of Brightview diffusers which are pre-cut to fit the fixture. These diffusers allow you to increase the beam angle to meet different application needs. Each diffuser is marked by having notches cut into the outside of it. The diffusers are described in the following table:



Photometrics at Full Power

	Beam / Field Angle	1m Illuminance (3.3ft)	2m Illuminance (6.6ft)	3m Illuminance (9.8ft)
RGBW Beam / Field Angle Bare optics	16° / 32°	940 lx (87 fc)	260 lx (24 fc)	112 lx (10 fc)
RGBW Beam / Field Angle Narrow diffuser - 1 Notch - (C-HE10)	18° / 36°	771 lx (72 fc)	218 lx (20 fc)	98 lx (9 fc)
RGBW Beam / Field Angle Medium diffuser - 2 Notch - (C-HE30)	30° / 58°	330 lx (31 fc)	99 lx (9 fc)	44 lx (4 fc)
RGBW Beam / Field Angle Wide diffuser - 3 Notch - (C-HE80)	55° / 98°	100 lx (9 fc)	28 lx (3 fc)	13 lx (1 fc)
RGBW Beam / Field Angle Assymmetric diffuser - U Notch	16° / 46° short axis 39° / 67° long axis	230 lx (21 fc)	66 lx (6 fc)	30 lx (3 fc)
DW Beam / Field Angle Bare optics	23° / 44°	1400 lx (130 fc)	360 lx (33 fc)	160 lx (15 fc)
DW Beam / Field Angle Narrow diffuser - 1 Notch - (C-HE10)	24° / 46°	900 lx (84 fc)	263 lx (24 fc)	115 lx (11 fc)
DW Beam / Field Angle Medium diffuser - 2 Notch - (C-HE30)	34° / 63°	460 lx (43 fc)	125 lx (12 fc)	55 lx (5 fc)
DW Beam / Field Angle Wide diffuser - 3 Notch - (C-HE80)	55° / 99°	114 lx (11 fc)	35 lx (3 fc)	16 lx (1 fc)
DW Beam / Field Angle Assymmetric diffuser - U Notch	30° / 50° short axis 46° / 77° long axis	315 lx (29 fc)	83 lx (8 fc)	36 lx (3 fc)

To install a diffuser into the fixture: 1. unscrew the bezel on the front of the fixture which is highlighted on the drawing below. 2. Insert the diffuser into the fixture. 3. Screw the bezel back onto the fixture so that the diffuser is held in place.



CONFIGURING YOUR GANTOM DMX V2

Due to its compact size, the Gantom DMX cannot use a physical DIP switch for addressing. Instead, the Gantom 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.

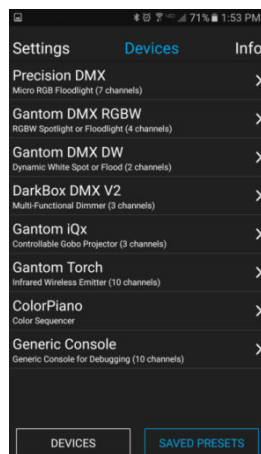


Configuring the light fixture with the DMX Programmer App:

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.

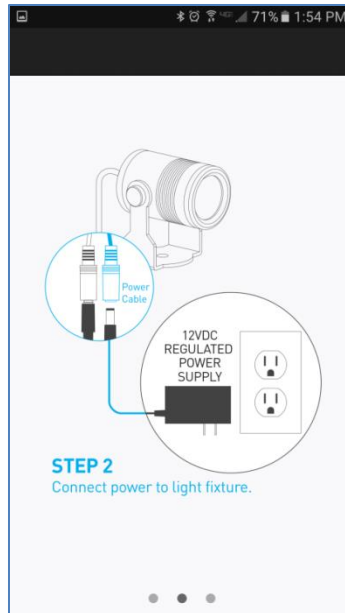
What you need:

- 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

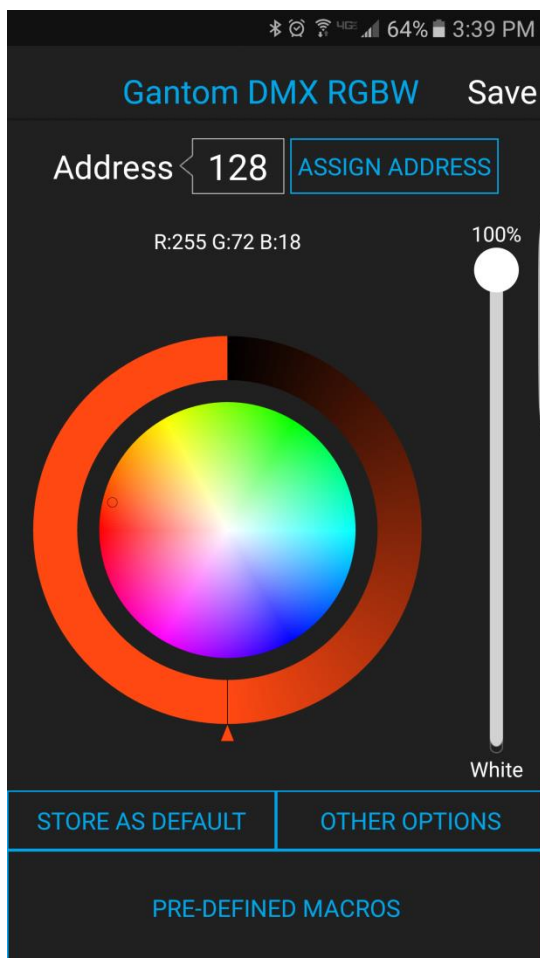


First, open the **DMX Programmer** app by Gantom. The app will open to the screen you see here. From this screen, select either the Gantom DMX RGBW or the Gantom DMX DW.

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.



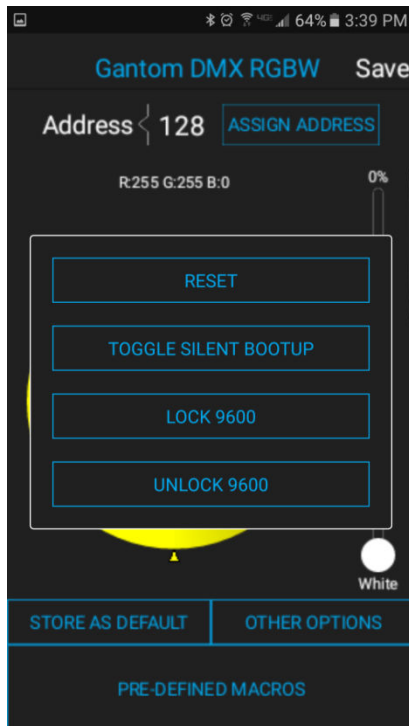
CONTROL SCREEN



- **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.
- **Color Palette** – the color palette will allow you to set the light to any RGB color. This is useful if you do not need live DMX control and would like to set the fixture to a default color at startup. Please note that for the Gantom DMX DW the color palette is replaced with a color temperature slider.
- **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.
- **Pre-Defined Macros** – Selecting this button will bring up a set of basic colors that can be selected without using the color palette.

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. Hitting the “Toggle Silent Bootup” setting will turn address reporting at startup on or off.

o **Lock/Unlock 9600** – The Gantom 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 Gantom DMX will flash several times when it is powered on to indicate its starting address. If the Gantom DMX RGBW is assigned to address 245 it will report its address by flashing red 2 times, then flashing green 4 times, then flashing blue 5 times. If it is assigned to DMX address 038, it will flash red 0 times, then flash green 3 times, then flash blue 8 times. For a Gantom DMX DW fixture, the fixture will flash the cool white LEDs for the first digit, the warm white LEDs for the second digit, and then the cool white LEDs again for the third digit. If the starting address is 358, the fixture will flash the cool white LEDs 3 times, then flash the warm white LEDs 5 times, then flash the cool white LEDs 8 times

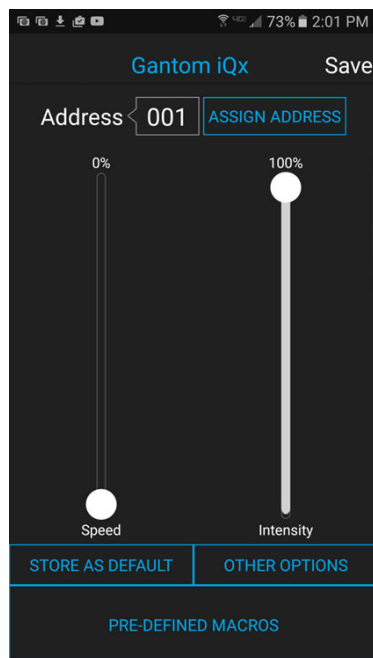
TURN OFF/ON boot sequence flashing: You may not want your fixture to report its channel mapping profile and address every time it receives power. In order to toggle the boot sequence flashes on/off, follow these steps. With the fixture connected to the app as previously outlined, tap the “Other Options” button on the Gantom DMX profile. 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 Gantom DMX for standalone operation, all you must do is use the sliders on the Gantom DMX control screen to set the desired intensity, color, and white 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 Gantom DMX was designed for use with standard DMX512 control systems. The Gantom DMX RGBW occupies four DMX channels and can be given any DMX starting address from 1-509. The Gantom DMX DW occupies two DMX channels and can be given any DMX address from 1-511. Please note that the Gantom DMX does not feature any RDM functionality.



ADDRESSING YOUR FIXTURE

To set the DMX address, first connect the Gantom DMX to the DMX Programmer app by Gantom as was outlined earlier in this document. With the Gantom DMX control screen open, you should have full control of the fixture through the channel sliders. 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

RGBW DMX Channel Descriptions

Channel	Name	Description
Ch 1	Red	Controls red channel
Ch 2	Green	Controls green channel
Ch 3	Blue	Controls blue channel
Ch 4	White	Controls white channel

DW DMX Channel Descriptions

Channel	Name	Description
Ch 1	CW	Controls cool white channel
Ch 2	WW	Controls warm white channel

Product Support:

We hope that this guide has been effective for learning how to use your Gantom 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.