GANTOM iQ AND iQx USER GUIDE

The Gantom iQ is the world's smallest gobo projector with zoom and focus for professional lighting applications. The Gantom iQx features the same amazing optics of the Gantom iQ but adds integrated DMX control. Using LED technology and special optics, the Gantom iQ and Gantom iQx can render bright and sharp images from a variety of gobo materials including film, metal, and glass. This fixture opens up a vast new dimension of creative lighting possibilities by allowing images, patterns, and signage to be projected in ways that were impossible with traditional gobo projectors. The integrated 3 channel DMX receiver of the Gantom iQx gives the user full range of control over brightness and various dimming effects including candle flicker and strobe. The Gantom iQx is ideal for theatrical lighting applications. Our user friendly DMX Programmer app, available for Apple and Android devices, allows easy address DMX assignment and dimming control.

Features

- Smallest gobo projector with zoom and focus on the market
- Zoom adjustable with front sliding lens: 25-40 degrees
- Focus adjustable with rear sliding lens
- Supports all standard gobo materials including metal, glass and film
- 5 stage optics render razor sharp images and patterns
- Low voltage and consumes less than 3W
- iQx features 3 DMX channel control: intensity, speed, and mode

Available Models

The Gantom iQ and Gantom iQx is available in cool white and warm white.

PRODUCT NAME	LED COLOR	DMX CHANNELS	ITEM NUMBER	
			GoCable Connector Version	ProCable Connector Version
Gantom iQ	Cool White (6500K)	NA	GT31	GP231
	Warm White (3000K)	NA	GT32	GP232
Gantom iQx	Cool White (6500K)	3	GT41	GP241
	Warm White (3000K)	3	GT42	GP242

ABOUT GANTOM iQ AND iQx GOBOS

The Gantom iQ and Gantom iQx can project any pattern that is cut into a 19mm (3/4") diameter disk. Traditional gobos such as stainless steel or glass will work for permanent installations. For temporary events, inexpensive full color gobos can be made from 35mm film slides or printed onto transparency paper.

For full color film gobos visit: http://www.colorslide.com . It is important that you know htttp://www.colorslide.com will print your gobo designs but cannot cut them into the correct circular shape. For this we recommend purchasing a 19mm (3/4") craft punch online or at a craft store. Please note that film slides will fade over time as the film is a photosensitive material. Although this process renders sharp full color images at a low price, these slides are designed for temporary use. Please consider stainless steel or glass for permanent applications.

For stainless steel or glass gobos visit: http://www.gamonline.com or http://www.rosco.com

You can also create your own gobos as long as your able to create well defined patterns onto a 3/4" (19mm) diameter disk that is less than 0.08" (2mm) thick. You can also use a high resolution inkjet printer to create full colored patterns onto transparency paper. However, due to the resolution of typical printers and the amount of magnification with our optics, the projected pattern will not be as sharp as a professionally made pattern. Use the following sizing information to design the images for your own custom gobos:

Gobo Size	19mm (0.75in) Ø
Max Image Size (For Patterns)	15mm (0.59in) Ø
Max Image Size (For Text)	10mm (0.39in) Ø

GOBO INSTALLATION

1. To install your gobo, first remove the lens assembly by unscrewing it counter-clockwise.

2. Next, remove the gobo retainer ring by turning it counter-clockwise

3. Insert the gobo

4. Install the gobo retainer ring by turning it clockwise until you can no longer easily turn it by hand. Then Re-attach the lens assembly by turning it clockwise until you can no longer easily turn it by hand.

5. Adjust the zoom/focus by moving the lenses along the lens slider. When the lenses are close together, the image will be wider. When the lenses are far apart, the image will be narrower.
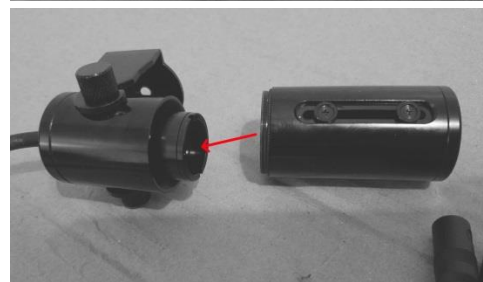
POWER   AND WIRING REQUIREMENTS

The Gantom iQ and Gantom iQx have a maximum fixture wattage of 2.8W and an operating voltage of 12V DC. For recommended power supplies check http://www.gantom.com/power-supplies/

Gantom's standard DMX controllable light fixtures have a 2.1mm DC barrel jack for power and a 3.5mm TRS jack for the control signal. Additionally, screw terminal adapters are included with every fixture to simplify custom wiring. You can screw bare wires directly into these adapters

Rather than using a typical XLR cable for carrying the DMX signal, standard Gantom fixtures use 3.5mm TRS cables. Gantom makes an XLR 5 Pin to 3.5mm TRS adapter (product number CB51) that is perfect for connecting Gantom products to an XLR based DMX environment.

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

3.5mm TRS Plug

Tip
Ring
Sleeve

COM   D-   D+
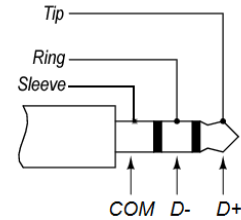
The Gantom One is also available in our Gantom Pro configuration. This version has a single locking connector which combines both power and data into one cable. This version is compatible with our G8 Power/Data Distribution Box and Pro Cable system. A single cable for power and data greatly simplifies installation and the locking connector gives a secure connection for long term use. The Gantom Pro series is recommended for permanent installations.

245mm Min

45.5mm

Ø19mm
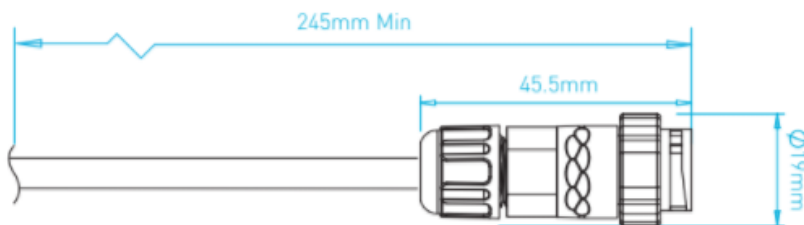
5 Pin Locking Chogori Connector

CONFIGURING YOUR GANTOM iQx

Due to its compact size, the Gantom iQx cannot use a physical DIP switch for addressing. Instead, the Gantom iQx is programmed using the DMX Programmer App by Gantom. In addition to setting the DMX starting address for the fixture, the app allows you to save a default brightness for the fixture if the application does not require any DMX control.
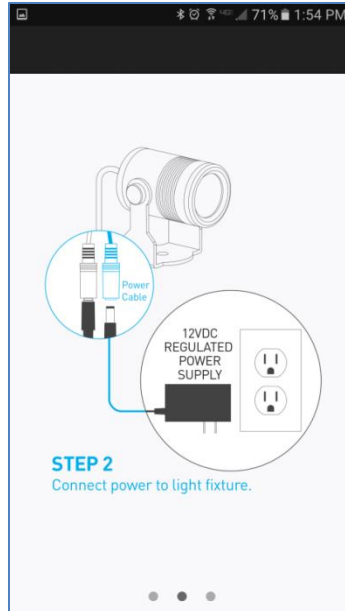
What you need:

- 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
- o   If you have a Gantom Pro series fixture, you will also need the CB107 Pro Cable Programming Adapter
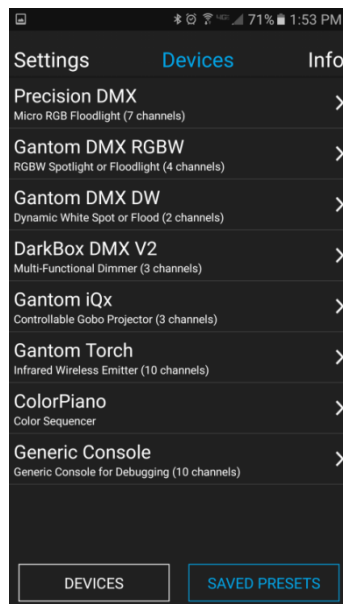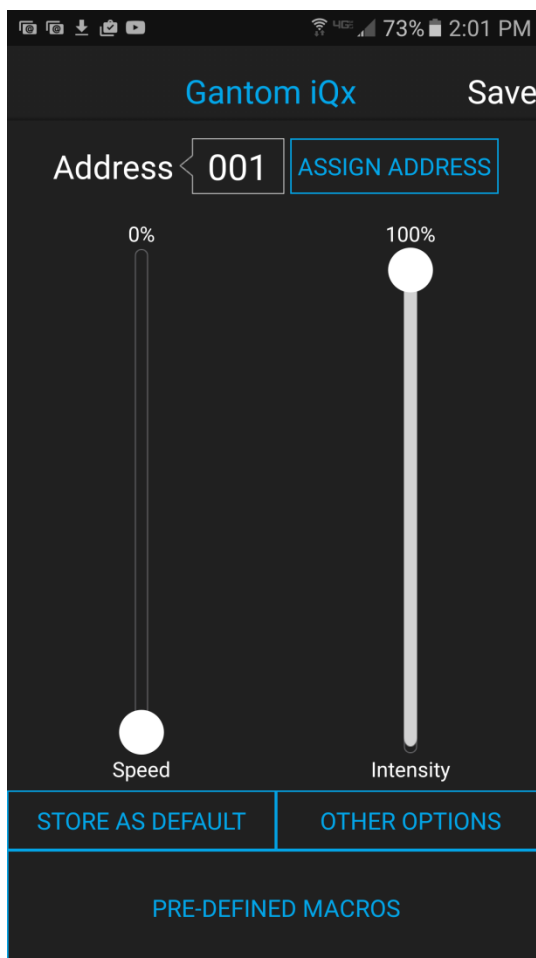
First, open the **DMX Programmer** app by Gantom. The app will open to the screen you see here. From this screen, select the **Gantom iQx.**

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. Also be sure that the volume on your device is set to maximum. 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 **Control Sliders** – the control sliders will allow you to set the intensity (brightness) of the light as well as the speed of whichever pre-defined macro effect is selected. Setting the "Speed" slider above 0% will start a strobe effect with variable speed if no effect has been selected.

o **Store as Default** – hitting this will save the current brightness and pre-defined macro effect 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.

o **Pre-Defined Macros** – Selecting this button will bring up a set of pre-made special effects like strobe, pulse, and flicker.

OTHER OPTIONS SCREEN

If you hit the "Other Options" button on the control screen, the following menu appears:
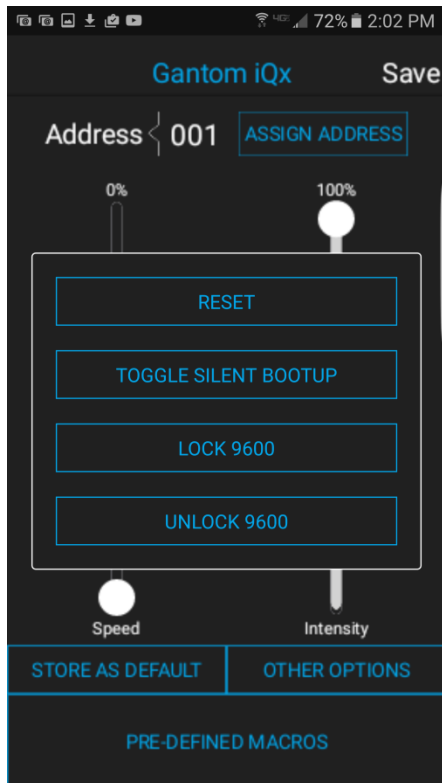
o   **Reset** - selecting this will reset the fixture to its default factory settings. Do this if you are running into programming issues.

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 iQx 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 iQx will flash several times when it is powered on to indicate its starting address. If the Gantom iQx 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 app as previously outlined, tap the "Other Options" button on the Gantom iQx 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 iQx for standalone operation, all you must do is use the sliders on the Gantom iQx control screen to set the desired intensity, special effect macro, and special effect speed. 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 iQx was designed for use with standard DMX512 control systems. The Gantom iQx occupies three DMX channels and can be given any DMX starting address from 1-510. Please note that the Gantom iQx does not feature any RDM functionality.
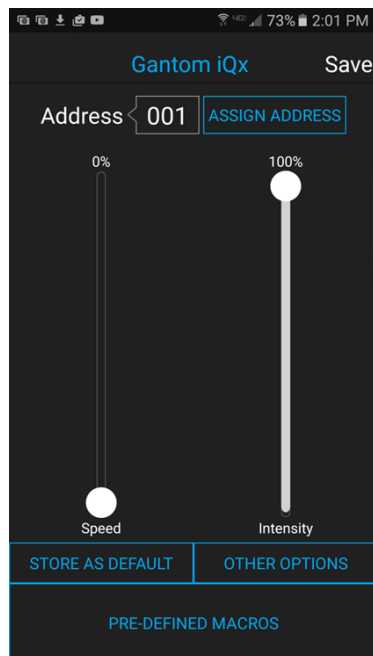
ADDRESSING YOUR FIXTURE

To set the DMX address, first connect the Gantom iQx to the DMX Programmer app by Gantom as was outlined earlier in this document. With the Gantom iQx 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

DMX Channel Descriptions

Channel	Name	Level	Description
Ch 1	Brightness Level	0-255	Dim to bright
Ch 2	Speed	/	If Ch 3 is 0, Ch 2 controls blink speed If Ch3 is non zero, Ch 2 controls speed of function
Ch3	Built-In Functions	32-64	Fade in
		65-96	Fade out
		97-127	Pulsing
		128-159	Surge
		160-191	Strobe
		191-255	Flicker

Product Support: We hope that this guide has been effective for learning how to use your Gantom iQ or Gantom iQx 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.