



LANTA
PROFESSIONAL LIGHTING

Owner Handbook

QUANTOM



Quantom 384TM
384 Channel DMX Lighting Desk



About Lanta Lighting™

Based in the UK, Lanta are committed to providing high quality products at cost-effective prices to the professional lighting market. Since the first product was launched in 2006, Lanta has established a reputation for reliability, common sense design and customer support that has become the envy of others.

The Lanta Lighting range includes:-

Professional Lighting

Focussing on the use of LED technology, Lanta offer distinctive lighting effects for install and mobile applications. From washes to floods, spots to projectors, LED technology now outperforms traditional lights while at the same time requiring significantly lower power and generating far less unwanted heat.

Performance Lasers

Recent advances have reduced the costs of Lasers, made them more portable and brought improved performance and reliability. With step and animation lasers in multi and single colour formats for mobile DJs and static installs, Lanta promise Lasers that won't burn a hole in your pocket.

Atmospheric Effects

When you need special atmospheric effects, Lanta have everything from bubble machines to fake flame, hazers and foggers. There's also a range of fluids and consumables specially designed to get the best from the range.

Control Gear

Lightweight and portable, Lanta Control Gear is robust enough to survive life on the road and smart enough to control DMX kit whatever the venue.

Visit us at www.lantalighting.com for more details.

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Getting to know your Lanta Product

With 384 Channels of DMX512 control, the Quantum 384™ lighting desk confidently handles advanced lighting fixtures with responsive faders, a clear interface and an easy to read LED display. Suitable for rack or desk-top mounting, the lightweight unit is extremely portable but robust enough to cope with the rigours of life on the road. Up to 12 fixtures can be run from one unit with the added flexibility of user-defined chases and static scenes pulled from pre-programmed memory.

Channel Capacity	384 Total (12 Scanner Fixture of 32 Channels)
Scene Steps	240 Total (30 Program Banks of 8 Scenes Steps)
Chase Sequences	6 sets of 240 Scenes Steps
Input Connections	Locking 3 Pin Male XLR Socket
Output Connections	Locking 3 Pin Female XLR Socket
Power Requirement	9V-12V DC 500mA from 240 Volt AC 50/60Hz
Dimensions W x D x H	520mm x 190mm x 80mm
Max Operating Temperature	45°C
Weight	3.0Kg

Scanner Fixtures

A Scanner Fixture is a individual lighting device. The unit can control up to 12 individual Scanner Fixtures. Each Scanner Fixture can be driven by 32 Channels of industry standard DMX512 control signals.

Scene Steps

A Scene Step is a static lighting state. The lighting state for all Scanner Fixtures connected to the unit can be set for every Scene Step.

Program Banks

Scene Steps are stored in Program Banks which allow different Scene Steps to be called up in sequential order. The unit allows 30 Program Banks to be created with 8 Scenes Steps in each, for a grand total of 240 Scene Steps

Chase Sequences

A Chase Sequence contains Scene Steps. In a Chase Sequence, Scenes Steps can be called up in any required order. Up to 6 Chase Sequence can be stored, each holding up to 240 Scene Steps.

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System Setup

1- Pan/Tilt Fader Settings

Pan/Tilt channels can be assigned for every individual Scanner Fixture if required. This allows the unit to cope with features unique to a specific Scanner Fixture and allows consistent control of all Scanner Fixtures used in a venue.

Setting Fader Assignments

- 1) Press and hold the PROGRAM button until the LED blinks
- 2) Press and hold PROGRAM & TAPSYNC different DMX channel. Faders can be assigned to output on a different DMX channel. To cancel any assignment press the AUTO/DEL & MODE buttons together
- 3) Press SCANNER or PAGE SELECT to select a Scanner Fixture
- 4) Move a fader from 1-16 to assign Pan
- 5) Press TAPSYNC to select Pan/Tilt
- 6) Move a fader from 1-16 to assign Tilt
- 7) Press and hold PROGRAM & TAPSYNC to store and exit. All LEDs will blink

2- Cloning Scanner Fixture Settings

To Clone Scanner Settings

- 1) Press and hold Source SCANNER button
- 2) While holding the Source SCANNER button, press the Destination SCANNER button
- 3) Release the Source SCANNER button, then release the Destination SCANNER button
- 4) All SCANNER LED indicators will flash to confirm successful copy

3- Cross-Fade Intervals

You can choose whether the board's fade time during scene execution is implemented broadly to all output channels or only to the Pan & Tilt movement channels. This is relevant because often you will want gobos and colors to change quickly while not affecting the movement of the light.

Setting Cross-Fade Intervals

- 1) Turn the unit OFF
- 2) Hold the BLACKOUT & TAPSYNC buttons simultaneously.
- 3) Turn the unit ON
- 4) Press the TAPSYNC button to toggle between the available modes, A (All Channels) or P (Pan/Tilt only)
- 5) Press BLACKOUT and TAPSYNC to save settings. All LEDs will blink to confirm.

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4- Scanner Fixture DMX Settings

The unit provides 32 channels of DMX-512 control per Scanner Fixture. Starting DMX Address settings for individual Scanner Fixtures must be spaced 32 Channels apart as on the table below. Settings for standard 9-pin Binary Dipswitches are shown for ease.

Fixture No	Address	DMX Range	Binary Dipswitch "ON"
1	1	1-32	1
2	33	33-64	1 & 6
3	65	65-96	1 & 7
4	97	97-128	1, 6 & 7
5	129	129-160	1 & 8
6	161	161-192	1, 6 & 8
7	193	193-224	1, 7 & 8
8	225	225-256	1, 6, 7 & 8
9	257	257-288	1 & 9
10	289	289-320	1, 6 & 9
11	321	321-352	1, 7 & 9
12	353	353-385	1, 6, 7 & 9

5- Full Factory Reset

Warning! This will reset all data, including Program Banks, Chase Sequences and Scene Steps, to their original factory settings

To Perform a Factory Reset

- 1) Turn the unit OFF
- 2) Press and hold BANK UP and AUTO/DEL
- 3) Turn power to the unit ON whilst still holding BANK UP and AUTO/DEL

Programming The Unit

1- Scene Steps

Creating a Scene

- 1) Press the PROGRAM button until the LED blinks. Deselect Blackout if LED is lit.
- 2) Position SPEED and FADE TIME faders to their zero values toward the front of the unit.
- 3) Select the SCANNERS you wish to include in your Scene. You can select more than one Scanner Fixture. You can access channels 17-32 by pressing the Page Select button. This is necessary for fixtures that use more than 16 channels of control.
- 4) Adjust faders to required values. Press the FINE button, use fader by moving it then use the BANK UP/DOWN buttons to change values in increments of 1
- 5) Tap MIDI/ADD button
- 6) Choose a BANK (01-30) to change if necessary
- 7) Select a SCENES button to store. The LED display will now indicate the Scene number and Bank number used.
- 8) Repeat steps 3 through 7 as necessary. 8 scenes can be recorded in a Program Bank. All LEDs will flash to confirm.
- 9) To exit program mode, hold the PROGRAM button

Inserting a Scene Step

- 1) Press and hold the PROGRAM button to enter programming mode
- 2) Press the desired CHASE button
- 3) Press the TAPSYNC to switch the LCD display to steps view.
- 4) Use the BANK UP/DOWN buttons to navigate steps and locate the insert point of the new scene. The display will read the step number. For example, To insert a Scene Step between Steps 05 and 06 navigate using BANK buttons until the display reads "STEP05"
- 5) Press MIDI/ADD button to prepare the insert.
- 6) Use the BANK UP/DOWN button to locate the SCENE
- 7) Press the SCENE button that corresponds to the Scene Step to be inserted
- 8) Press MIDI/ADD button to insert the scene. All LEDs will blink

Reviewing a Scene Step

- 1) Make sure you are in MANUAL Mode
- 2) Select any one of the 30 banks by pressing the BANK UP/DOWN buttons.
- 3) Select a SCENE button (1-8) to review
- 4) Move faders to change Scanner Fixture values

Copying a Scene Step

- 1) Press and hold the PROGRAM button to enter programming mode.
- 2) Select BANK that contains original Scene Step using the BANK UP/DOWN buttons
- 3) Press the SCENE button that corresponds to the Scene Step to be copied
- 4) Press MIDI/ADD button to copy the scene
- 5) Select the destination BANK that contains the scene memory to record onto using the BANK UP/DOWN buttons.
- 6) Press the desired SCENE button to complete copy. All LEDs will blink.

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Deleting an Individual Scene Step

- 1) Press and hold the PROGRAM button to enter programming mode
- 2) Select BANK that contains Scene Step to be deleted with BANK UP/DOWN buttons
- 3) Press and hold the AUTO DEL button
- 4) Press the SCENE button that corresponds to the Scene Step you want to delete. All LEDs will blink. When deleting a scene the physical location is not removed, however, all 384 DMX channels available to the scene will be set to value 0.

Deleting all Scene Steps

Warning - This process is irreversible! All Scenes Steps with data will zeroed.

- 1) Press and hold the PROGRAM button and the BANK DOWN button while turning off power to the unit.
- 2) Turn the unit back on

2- Program Banks

Running a Program Bank

- 1) Use BANK UP/DOWN buttons to change Program Banks. Deselect Blackout if LED is lit.
- 2) Press the AUTO DEL button repeatedly until the AUTO LED turns on
- 3) Adjust PROGRAM speed via the SPEED fader and loop rate via the FADE TIME fader.
- 4) Alternatively tap the TAPSYNC button twice. The time between two taps sets the time between SCENES (up to 10 minutes).

Checking a Program Bank

- 1) Press and hold the PROGRAM button until the LED blinks
- 2) Use the BANK UP/DOWN buttons to select the Program Bank to review.
- 3) Press the SCENES buttons to review each Scene Step individually

Editing a Program Bank

- 1) Press and hold the PROGRAM button until the LED blinks. Deselect Blackout if LED is lit.
- 2) Use BANK UP/DOWN buttons to change Program Banks if necessary
- 3) Select the desired fixture via the SCANNERS button
- 4) Adjust and change fixture attributes using the channel faders and wheel
- 5) Press the MIDI/ADD button to prepare the save
- 6) Select the desired SCENES button to save

Copying a Program Bank

- 1) Press and hold the PROGRAM button until the LED blinks
- 2) Use BANK UP/DOWN buttons to select the Program Bank to copy. All 8 Scene Steps in the Program Bank will be copied
- 3) Press the MIDI/ADD button to prepare the copy
- 4) Use BANK UP/DOWN buttons to select the destination PROGRAM bank
- 5) Press MUSIC BANK COPY button to execute the copy. All LEDs on the controller will blink

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3- Chase Sequences

Creating a Chase Sequence

- 1) Press the PROGRAM button until the LED blinks
- 2) Press the CHASE (1-6) button you wish to program
- 3) Change BANK if necessary to locate a scene
- 4) Select the SCENE to insert
- 5) Tap the MIDI/ADD button to store
- 6) Repeat steps 3-5 to add additional Scene Steps in the Chase Sequence. Up to 240 Scene Steps can be recorded.
- 7) Press and hold the PROGRAM button to save the Chase Sequence

Running a Chase Sequence

- 1) Press a CHASE button then press the AUTO DEL button.
- 2) Adjust the Chase speed by tapping the TAPSYNC button twice at a rate of your choosing. The time between 2 taps will set the chase speed (up to 10 minutes)

Checking a Chase Sequence

- 1) Make sure you are in MANUAL Mode
- 2) Select the desired CHASE button
- 3) Press the TAPSYNC button to switch the LCD display to steps
- 4) Review each Scene Step individually by using the BANK UP/DOWN buttons.

Copying a Program Bank

- 1) Press and hold the PROGRAM button to enter programming mode.
- 2) Press the desired CHASE button.
- 3) Select the BANK to be copied using the BANK UP/DOWN buttons.
- 4) Press MUSIC/BANK COPY button to prepare copy.
- 5) Press MIDI/ADD button to copy the bank. All LEDs will blink

Copying a Scene Step

- 1) Press and hold the PROGRAM button to enter programming mode.
- 2) Press the desired CHASE button
- 3) Select BANK that contains the scene to be copied using the BANK UP/DOWN buttons.
- 4) Press the SCENE button that corresponds to the scene to be copied
- 5) Press MIDI/ADD button to copy the scene. All LEDs will blink

Inserting a Scene Step

- 1) Press and hold the PROGRAM button to enter programming mode
- 2) Press the desired CHASE button
- 3) Press the TAPSYNC to switch the LCD display to steps view
- 4) Use the BANK UP/DOWN buttons to navigate steps and locate the insert point of the new scene. The display will read the step number. For example, to insert a scene between Steps 05 and 06 navigate using BANK buttons until the display reads "STEP05"
- 5) Press MIDI/ADD button to prepare the insert
- 6) Use the BANK UP/DOWN button to locate the SCENE

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- 7) Press the SCENE button that corresponds to the scene to be inserted
- 8) Press MIDI/ADD button to insert the scene. All LEDs will blink.

Deleting a Scene Step

- 1) Press and hold the PROGRAM button to enter programming mode.
- 2) Press the desired CHASE button that contains the scene to be deleted
- 3) Press the TAPSYNC button to switch the LCD display to steps.
- 4) Select the scene/step to be deleted using the BANK UP/DOWN buttons
- 5) Press AUTO DEL button to delete the step/scene. All LEDs will blink

Deleting an Individual Chase Sequence

- 1) Press and hold the PROGRAM button to enter programming mode.
- 2) Press the CHASE button (1-6) to be deleted
- 3) Press and hold AUTO DEL button and the respective CHASE button to delete the Chase Sequence. All LEDs will blink

Deleting All Chase Sequences

Warning! This procedure will result in irrevocable loss of Chase Sequence memory. The individual Scene Steps and Program Banks will be preserved. It is highly recommended that prior to programming a Chase Sequence for the first time all Chase Sequences are deleted from memory.

- 1) Turn OFF controller
- 2) Press and hold BANK DOWN & AUTO DEL buttons while turning the unit ON.
- 3) All LEDs will blink

Operating Modes

1- Manual Control

Manual Control allows direct control of Scanner Fixtures. Faders and wheels can move Scanner Fixtures and change their DMX values. Changes made will not be stored.

Controlling Scanners Manually

- 1) Press the AUTO DEL button repeatedly until the MANUAL LED is lit
- 2) Select a SCANNER button
- 3) Move faders to change Scanner Fixture attributes
- 4) Press the TAPSYNC button to toggle the output indicator on the LCD display between DMX values (0-255) and percentage (0%-100%)

2- Sound Activated

In this mode, programs will be triggered by the sound using its built-in microphone. Multiple chases selected will loop and run in the order originally selected.

Choosing Sound Activated Mode

- 1) Press the MUSIC BANK COPY button until the MUSIC LED turns on.
- 2) Select program BANK to run in Sound Active mode using the BANK UP/DOWN buttons.
- 3) Alternatively you can press a single CHASE button (1-6) or several CHASE buttons in sequence and all selected chases will loop in the order selected
- 4) You can adjust the duration time using the FADE TIME fader.

3- Auto Run

In the Auto Run mode, programs will be triggered by the unit's fade and speed values set by faders. Multiple chases selected will loop and run in the order originally selected.

Choosing Auto Run Mode

- 1) Press the AUTO DEL button until the AUTO LED turns on
- 2) If a CHASE button is not pressed the controller will automatically run a BANK program.
- 3) Change BANK programs by using BANK UP/DOWN buttons
- 4) Alternatively you can press a single CHASE button (1-6) or several CHASE buttons in sequence and all selected chases will loop in the order selected.
- 5) You can adjust the time between steps by moving the SPEED fader and the duration of the step by moving the FADE TIME fader.

Choosing Multiple Chases

To avoid conflict between Scene Steps running simultaneously that control the same

fixture attributes consider creating individual color and gobo chases.

- 1) Press and hold AUTO DEL button.
- 2) While holding down AUTO DEL, in succession press and release each CHASE you would like to run simultaneously.

4- MIDI Operation

The controller will only respond to MIDI commands on the MIDI channel which it is set to full stop. All MIDI control is performed using Note on commands. All other MIDI instructions are ignored. To stop a chase, send the blackout on note.

Choosing MIDI Operation

- 1) Press and hold the MIDI/REC button for about 3 seconds.
- 2) Select the MIDI control channel (1-16) via the BANK UP/DOWN buttons to set. This is the Channel that the controller will receive MIDI note commands.
- 3) Press and hold the MIDI/ADD button for 3 seconds to save settings.
- 4) To release MIDI control, press any other button except the BANK buttons during step 2

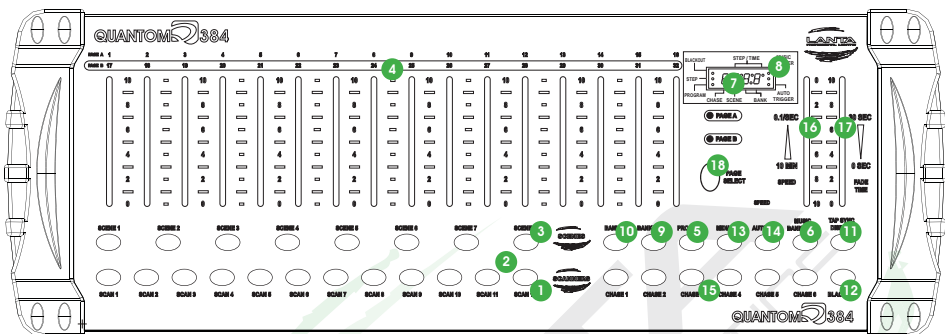
MIDI Note	Effect (Turn On/Off)
00 to 07	Scene Steps 1-8, Program Bank 1
08 to 15	Scene Steps 1-8, Program Bank 2
16 to 23	Scene Steps 1-8, Program Bank 3
24 to 31	Scene Steps 1-8, Program Bank 4
32 to 39	Scene Steps 1-8, Program Bank 5
40 to 47	Scene Steps 1-8, Program Bank 6
48 to 55	Scene Steps 1-8, Program Bank 7
56 to 63	Scene Steps 1-8, Program Bank 8
64 to 71	Scene Steps 1-8, Program Bank 9
72 to 79	Scene Steps 1-8, Program Bank 10
80 to 87	Scene Steps 1-8, Program Bank 11

MIDI Note	Effect (Turn On/Off)
88 to 95	Scene Steps 1-8, Program Bank 12
96 to 103	Scene Steps 1-8, Program Bank 13
104 to 111	Scene Steps 1-8, Program Bank 14
112 to 119	Scene Steps 1-8, Program Bank 15
120	Chase 1
121	Chase 2
122	Chase 3
123	Chase 4
124	Chase 5
125	Chase 6
126	Blackout

5- Blackout

The Blackout button brings all lighting output to 0 or off.

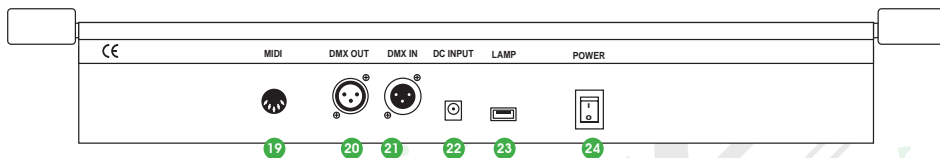
Top Panel Configuration



	Description	Effect
1	Scanner Select	Selects fixtures 1-12
2	Scanner Indicator LED	Shows fixture selected
3	Scene Select	Selects scene
4	Channel Fader	Adjusts DMX values of Ch1-16 and Ch17-32
5	Program	Enters Programming mode
6	Music/Bank Copy	Activates Music Mode. Copy function in Programming mode.
7	LED Display	Shows detail
8	Mode Indicator LED	Shows Manual, Music or Auto mode
9	Bank Up	Changes scene/step in banks/chases. Changes DMX value in Fine mode.

	Description	Effect
10	Bank Down	Changes scene/step in banks/chases. Changes DMX value in Fine mode.
11	Tap Sync Display	Tap-sync changes DMX value to percentages
12	Blackout	Instant blackout of all fixtures
13	MIDI/Add	Activates MIDI control. Confirms record/save.
14	Auto/Del	Activates Auto mode. Delete when programming
15	Chaser	Selects Chase1-6
16	Speed Fader	Adjusts scene/step hold time during chase
17	Fade Time Fader	Cross fade interval between two scenes
18	Page Select	Toggles control between Page A & Page B

Rear Panel Configuration



	Description	Effect
19	MIDI Input	Allows use of MIDI control
20	DMX Output	Locking 3 Pin Female XLR Socket
21	DMX Input	Locking 3 Pin Male XLR Socket
22	DC Input	Main power feed jack
23	Gooseneck Lamp	USB power for lamp
24	Power	On/Off Rocker switch

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For your Safety

- Follow all instructions to maintain Manufacturer Warranty and for your own safety.
- There are no user replacement parts inside the product. Do not open the product for any reason. This will invalidate your Manufacturer Warranty and may impair the safety features of the product.
- Do not expose this product to moisture, rain or other fluids.
- Do not use if the product if you suspect it has been damaged in any way, including being dropped, is malfunctioning, or has been exposed to liquids or moisture. The unit must be repaired by an authorised service centre only. Manufacturer Warranty is void if unit is opened or adapted in any way. Operator safety may be compromised if this product is not operated and maintained in accordance with the details contained in this Owner Handbook.
- This appliance must be earthed. Do not remove the earth connection in the plug or any other location- it is essential for user safety.
- Be aware that products are mains powered and may be capable of producing high voltages from outputs and has mains voltages inside the cabinet.

Product Installation, Use & Maintenance

- Keep this Owner Handbook safe for future reference.
- Clean the product with a clean and dry, non-abrasive cloth. Do not use solvents or liquids to clean the product.
- To prevent overheating, do not obstruct any ventilation opening, fan cover or vent. Do not install near any sources of heat such as radiators, heaters, other heat producing items such as amplifiers, power units etc.
- Power connection to the product is via a UK 240 Volt AC three-pin mains plug. Do not remove or adapt this plug. If necessary, only replace the plug top fuse with one of the same type, size and value.
- The mains lead must not be crushed or damaged. If any damage occurs, disconnect from the mains immediately. Replace the damaged cable, or if the mains lead is captive, return the product to an authorised repair centre for cable replacement. Do not attempt to repair the cable - it must be discarded and destroyed.
- To maintain the Manufacturer Warranty, only attach authorised accessories and external devices. This includes cables, connectors and other electrical and/or mechanical devices.
- Unplug the product from the mains during lightning storms or periods of mains fluctuations. If the product is going to be unused for long periods, unplug from the mains.

Product Quality & Compliance

Products from Lanta Lighting meet all required safety standards in force at the time of manufacture and are fully compliant with them.

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Unpacking & Inspection

- Inspect the packaging before opening. If the packaging appears to have sustained significant damage, please take extra care before using the product. If you are in any doubt, consult a suitably qualified professional.
- If you suspect the product has been damaged, do not use it. Return it to your original supplier without delay.
- Keep all packaging in a safe place for storage or transport in future.

Manufacturer Warranty

- This Manufacturer Warranty is valid in the UK only.
- Lanta Lighting warrants that this product is free from workmanship defects and material failure during normal use and operation for a period of 12 months from first use or from original date of sale (whichever is the earliest) providing all of the terms indicated in the warranty section have been fully complied with.
- Expressly excluded is our liability for any directly connected or indirectly connected item or items or any consequential loss associated with the failure of the product howsoever caused.
- If the product has been opened, modified, tampered with, incorrectly connected, used inappropriately or in conflict with the instructions herein, or the product model or serial number has been damaged, removed, tampered with, obliterated or made partly unreadable by any person or persons, the Manufacturer Warranty is irrevocably null and void.
- No extension, adaption, alteration or modification to the terms of this Manufacturer Warranty will be permitted, unless expressly authorised in writing (excluding email and fax) by a Director of Lanta Lighting. Warranty is transferable during the Warranty period.

For Further Information about Lanta Lighting

Our website can be found at www.lantalighting.com and is available for the benefit of customers worldwide. Please consult for information, advice and support on this and other high quality products from Lanta.



www.lantalighting.com