MQ Stadium Console

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Contents

Edition Notes

This Stadium series User guide includes a description, safety precautions, installation, programming, operation, and maintenance instructions for the MQ250M and MQ500M consoles as of the release date of this edition.

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Intended Audience

Any person installing, operating, and/or maintaining this product should completely read through the guide that shipped with the product, as well as this manual, before installing, operating, or maintaining this product.

Disclaimer

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Taking Care of Your Console

To keep your console in best condition please observe the following recommendations:

- Keep liquids away from the console. Drinks spilt over a console may cause irreparable damage.
- Keep the console out of direct sunlight – place the console in the shade. Excess heat from the sun may cause damage to the touch screens and to overlays.
- Do not use sharp objects on the touchscreen. If you wish to use an object other than your finger, then use a blunt object that will not damage the surface.
- Do not block any ventilation grills on the rear panel, side and underneath the console.
- Do not use the console outside its operating temperature range.
- Handle the console with care when moving or transporting it. The console contains components that may be damaged by shock such as a hard drive. Always use a padded flight case wherever possible.
- Do not use solvents or cleansers to clean the console. Do not rub firmly on the metal or plastic surfaces – this may cause the paint or lettering to be removed. Gently use a damp cloth to clean the panels. Do not put water on the touch screen as this may get inside it and make it unusable.

Safety Notes

- Do not open the console unless you are a skilled person authorised and trained by ChamSys in console maintenance and repair. The console contains components with voltages that may shock.
- **CAUTION:** The MagicQ MQ250M and MQ500M Stadium consoles incorporate a replaceable processor battery. This is a CR2032 battery. These batteries can cause a serious burn hazard if ingested. Do not place battery into the mouth. Keep out of reach of small children. If accidentally ingested the battery it is imperative to seek immediate medical help.
- **CAUTION:** The MagicQ MQ250M and MQ500M Stadium consoles incorporate a sealed Lead Acid battery for the on-board UPS (Uninterruptible power supply), these batteries can cause a serious burn or injury. Do not attempt to puncture, disassemble, or short circuit the battery. Once the battery reaches the end of its useful life please dispose of or recycle the battery in accordance with local regulations. For battery data sheets please see the product pages on the ChamSys website.
- Do not use the console if the power cables are damaged in any way.
- Repairs should only be undertaken by authorised service representatives.
- If liquids are spilt over the console, then remove power immediately, and seek advice from your authorised service representative.
- When transporting the console ensure that there are sufficient people to carry the console.

- MagicQ MQ250M and MQ500M consoles use a TrueCON mains input connector. The TrueCON connector is a connector without breaking capacity. The TrueCON should not be connected or disconnected under load or live.
- When removing USB connectors from the front screen assembly USB port hold the display while removing the USB connector.

Introduction

This document is intended to enable you to get up and running the MagicQ MQ250M and MQ500M Stadium series consoles. It is designed to introduce the layout of the console along with the key functions. It then runs through patching a show, recording Cues and Cue Stacks and show playback.

This guide is not a substitute for the MagicQ manual. The manual provides detailed information on all the standard and advanced features of the console. The manual is available from ChamSys website at https://www.chamsys.co.uk.

MagicQ software is being continually improved – please use the information in this manual as a guide only – detailed information on new features and changes are available in the software changes logs on our web site.

MagicQ Consoles

The MagicQ range of consoles includes the MagicQ Stadium and MagicQ Compact series consoles. All consoles run the same MagicQ software – they just vary in number of faders and buttons, I/O options, size of displays and number of universes output from the console.

MagicQ Stadium and MagicQ Compact consoles manufactured from 2013 onwards use the same MagicQ operating system. Other older MagicQ consoles use the Pro2010 or Pro/Expert operating system.

Uninterruptable Power Supply (UPS)

The MagicQ MQ250M and MQ500M Stadium consoles feature an inbuilt UPS, this protects the console and its hardware in the event of power failure. The desk will run for around ~15 minutes on the backup battery. The UPS is designed as a power fail backup system only.

The console UPS battery must always remain charged. The battery charges while the console is powered on, the console must be powered on and running MagicQ for the battery to charge. To maintain battery life and UPS performance the console should be run for a minimum 12-hour constant period every 2 months to ensure the battery is kept charged and in the best condition.

Console Layouts

All MagicQ consoles layouts are very similar - the programming interface is consistent across the entire range of consoles. Below are the layouts of both the MQ250M and MQ500M consoles.

MQ250M Console

Figure 1. Layout of a MQ250M console

- ❶} - Main touch display
- ❷} - Encoder playbacks
- ❸} - GO, PAUSE and S keys
- ❹} - Fader playbacks
- ❺} - Flash keys
- ❻} - Dual crossfaders
- ❼} - Encoders A, B, C, D
- ❽} - Auxiliary display
- ❾} - Encoders E, F, X, Y
- ❿} - Command buttons
- ⓫} - Grand master
- ⓬} - Intensity wheel
- ⓭} - Numerical keypad
- ⓮} - Cursor keys
- ⓯} - Window buttons

MQ500M Console

Figure 2. Layout of a MQ500M console

- ❶} - Left touch display
- ❷} - Encoder playback
- ❸} - GO, PAUSE and S keys
- ❹} - Fader playbacks
- ❺} - Flash keys
- ❻} - Dual crossfaders
- ❼} - Execute keys
- ❽} - Right touch display
- ❾} - Encoders A, B, C, D
- ❿} - Encoders E, F, X, Y
- ⓫} - Command buttons
- ⓬} - Grand master
- ⓭} - Intensity wheel
- ⓮} - Numerical keypad
- ⓯} - Cursor keys
- ⓰} - Window buttons

Rear Connections

The below pictures show the rear panel connections available on both the MQ250M and MQ500M consoles. The consoles feature a similar set of connections, with some slight

differences.

MQ250M Console

Figure 3. Rear of a MQ250M console

- ❶} - Power switch and TrueCON input connector
- ❷} - Working light connector
- ❸} - DMX ports
- ❹} - LTC in/out
- ❺} - MIDI in/out
- ❻} - Sound to light port
- ❼} - 10Scene port
- ❽} - Battery test switch
- ❾} - Reset and recovery
- ❿} - Audio in/out ports
- ⓫} - Network ports
- ⓬} - Display port
- ⓭} - USB ports

MQ500M Console

Figure 4. Rear of a MQ500M console

- ❶} - Working light connector
- ❷} - Power switch and TrueCON input
- ❸} - DMX ports
- ❹} - Status LEDs
- ❺} - Remote triggers
- ❻} - MIDI ports
- ❼} - Reset switch
- ❽} - Serial port
- ❾} - Audio input
- ❿} - Network inputs
- ⓫} - USB ports
- ⓬} - DVI-D monitor
- ⓭} - Neutrik USB port

Plugging Up

Before starting up the MQ250M or MQ500M console:

- Connect the supplied power cable to the power socket labelled LINE INPUT.
- Optional: Connect the console working lights into the console working light sockets.

It is not necessary to connect a USB mouse. A mouse is optional and only required if the touch screen becomes damaged.

Adjustable Displays

The MQ250M and MQ500M consoles feature adjustable viewing angle displays. For security, the monitors on the MQ500M are locked when in transport.

To unlock the MQ500M displays, pull the latch located on the centre back of the displays out and lift display tray. The stand behind the screens is then used to position displays at desired viewing angle.

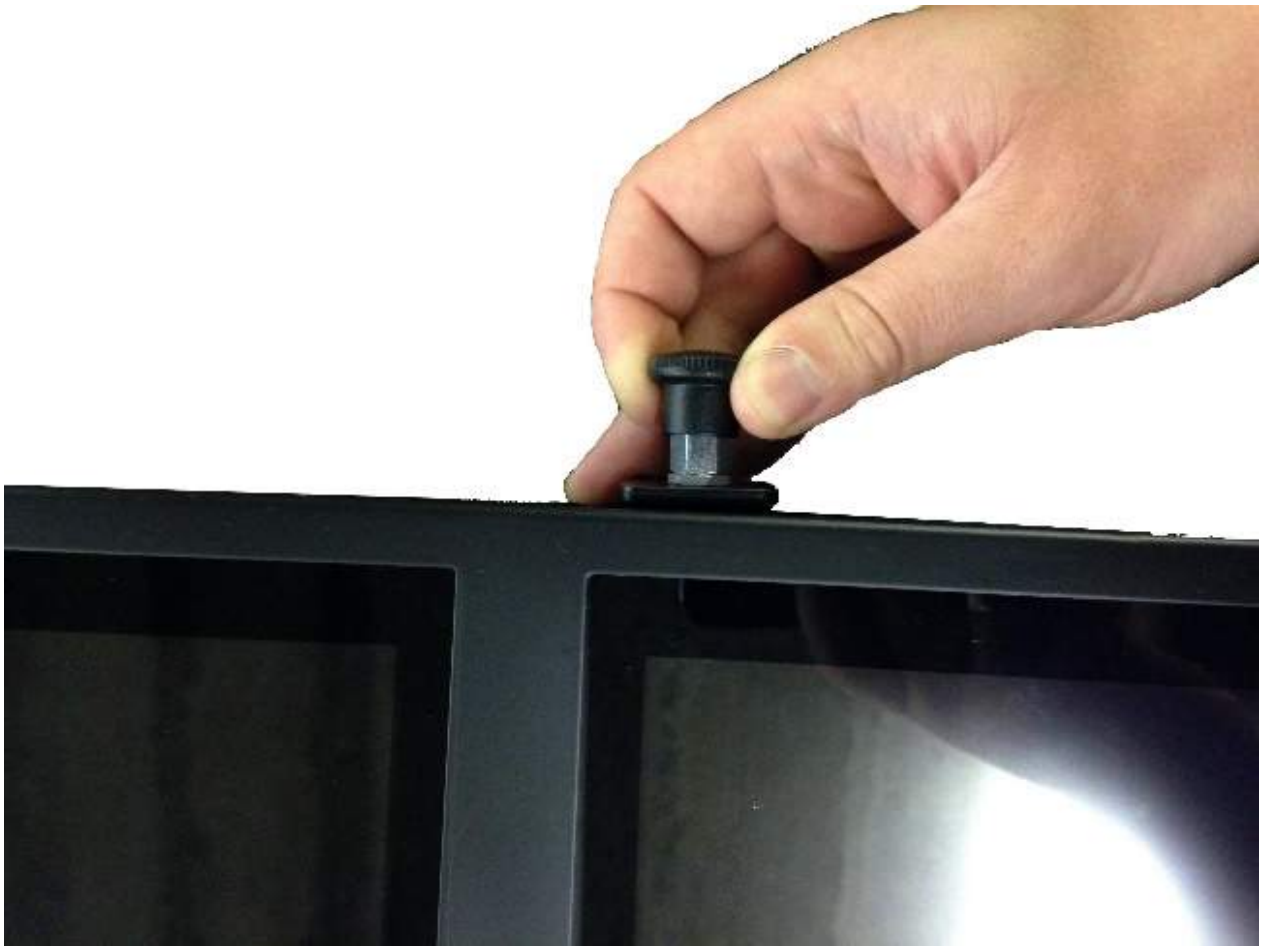


Figure 5. Latch on the MQ500M

The MQ500M displays must be in the down position and locked using the latch for transport.

The MQ250M display must also be down for transport, although no latch is required for the clamshell design.

DMX Connections

The MQ250M and MQ500M consoles both have 4 direct DMX outputs on the rear of the panel so you can connect your DMX cables direct to the console.

Alternatively, you can use Ethernet and an external Ethernet to DMX converter box such as our range of SnakeSys Ethernet to DMX Interfaces. Connect the Interface to the console Network port via a network cable.

Powering Up

The MQ250M and MQ500M feature a one touch soft on/off switch. To power up the console press the power switch on the back panel, pictured right.

Figure 6. Power switch on the MQ250M (left) and the MQ500M (right)

The blue LEDs next to the encoders should light, after a few seconds the screen will come to life, and you will see the operating system loading.

Powering Down

The MQ250M and MQ500M power switches can be used to power off the console, a single press of the power switch on the rear will sent the shutdown command to MagicQ to shut down the console.

Figure 7. Powering down a console

The consoles can also be shutdown via MagicQ, to quit the MagicQ application via software, press the SETUP button and then the QUIT soft button. When asked for confirmation, press YES.

Note that just removing the power cord to the console will not have the desired effect since the internal UPS continues to provide power.

If for some reason you are unable to power off the console, then you may need to force the console to power off as below.

Resetting the Console

Under rare circumstance it may be necessary to reset the console. To reset the console, press SETUP to go to the Setup Window and hold SHIFT and press RESET. This performs an

immediate soft reset of the console - the MagicQ application will be running the show again within about 2-3 seconds. If this has no effect, then a hard reset may be required. Hard resets should be avoided as they bypass the operating system shutdown procedures and may cause problems with the file system.

The reset switch is on located on the rear panel of the console. Press and hold the button for 5 seconds to reset the front panel.

Forcing the Console to power off

If for any reason the hardware reset does not work, it may be necessary to perform a hard reset.

Switch off the console at the mains supply and press and hold the power switch until the console powers off (about 10 seconds).

Touch Screen & Encoders

The buttons around the display are referred to as soft buttons since their function changes according to the active window on the touch screen. The current function of a soft button is displayed on the touch screen adjacent to the button. To select the function, you can either press the screen or the soft button itself.

Figure 8. Encoders on the consoles

Around the right-hand side of the console there are 8 rotary encoders:

- ❶} - 4 small encoders (A, B, C, D) on the right-hand side of the display
- ❷} - 4 larger encoders (E, F, X, Y) below the display

The function of the rotary encoders also changes according to the active window with the

current function being displayed adjacent to the encoder.

The SHIFT and CTRL buttons on the console selects alternate functions for the soft buttons and encoders.

MQ500M Execute Buttons

The MQ500M console features 12 multi-function execute buttons, pictured right. These can be set as either; window layouts, playbacks, executes (mapped to the execute window), macros or palettes – group, position, colour, beam, and FX.

Figure 9. Execute buttons on the MQ500M

To change the function of these keys, press the next/prev function buttons for the execute section on the console. The function of these keys is depicted on the console display directly above these buttons.

MQ200M Execute Display

The MQ250M console features similar functions, but via the auxiliary inbuilt touch display, pictured left.

Figure 10. "Execute window on the MQ250M

On this display a 4x3 Execute grid is always present, mimicking the physical buttons available on the MQ500M console. To change the function of these keys, hold the ALT key and select the desired function from the display.

Windows

The area in the centre of the screen is the windows section in which the various control windows are displayed. There are two main types of windows – boxes style windows which have large boxes such as the Group Window and spreadsheet style editing windows such as the Patch Window. See the image below for examples of both windows.

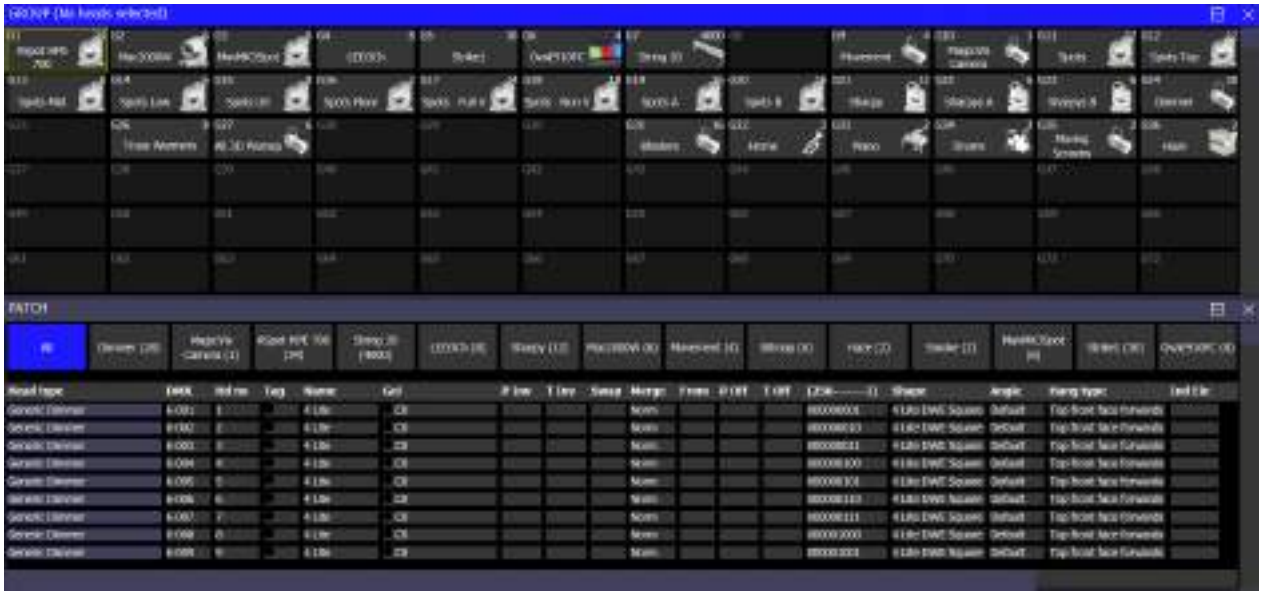


Figure 11. The Group Window

A window is displayed by pressing the appropriate window button. Changing window does not affect programming or playback.

On the MQ250M and MQ500M the PROG, OUT, SETUP and PATCH keys have secondary functions for window control, to access these hold the ‘ALT’ key to access the additional function.

For example, use ALT + Setup (EXT) to move a window from the Right to the Left screen.

Figure 12. The Patch Window

Multiple windows can be displayed at one time by sizing the windows appropriately. In addition, a complete configuration of windows – i.e., a complete view can be selected using CTRL and the top soft buttons. For example, to select the Palettes view (Groups, Positions, Colours and Beams) press CTRL and the first top soft button. Layouts can also be recorded and quickly recalled using the sections on the left side of the console display (right-hand display on the MQ500M).

When a window button is pressed, that window becomes the active window. The active window is on the top of the screen and is easily identified as the window with the highlighted

title bar at the top. It is also the window with the cursor in it.

An item in a window can be selected by either:

a. Pressing the touch screen over the appropriate part of the window

b. Moving the cursor to the appropriate position and pressing the ENTER button.

c. Moving the mouse to the position and pressing the left mouse button.

The cursor can be moved around the active window using the cursor keys in the Editor area of the console or via the cursor keys on the keyboard. PG UP, PG DN, PG LEFT, and PG RIGHT (ALT + cursor keys) can be used to scroll the window in the appropriate direction. HOME and END can be used to get to the start and end of the window, respectively.

Towards the bottom of the touch screen are two small windows, the Status Display, and the Input Display. The Status Display shows the current date and time, the ADD / SWAP status of the console and other relevant status information.

Figure 13. Status Display

The Input Display shows the data that has been currently entered through the keypad and the keyboard. Note that text is not entered into the main Windows until ENTER is pressed. This allows the user to choose whether the keyboard data is SET into fields in the windows or onto Playbacks.

Figure 14. Input Display

After a command has been entered it also confirms that the command has been accepted and shows any tips or error messages when a command is not possible.

Figure 15. Accepted command

Head Control

The area around the four large rotary encoders is referred to as the head control area. It is used to alter the parameters of individual heads and apply effects such as fans over groups of heads.

The NEXT HEAD and PREV HEAD buttons are used to select an individual head to modify.

The other buttons control the selection mode; LOCATE, HIGHLIGHT, FAN, MIRROR, SINGLE, ODD/EVEN, PAIR and ALL.

Programmer Buttons

The Editor buttons are used to modify program data. The 8 buttons on the right-hand side are the action buttons which are used to modify show data. The action buttons are:

UNDO REMOVE MOVE COPY

SET INCLUDE UPDATE RECORD

The buttons on the left:

BLIND and CLEAR affect the programmer

REL and SELECT affect playbacks.

SHIFT selects alternate functions.

 undoes keyboard input and clears actions.

Playback

The Playback area is situated directly below the left-hand touch screen on the MQ500M and consists of 15 fader playback and 15 execute button Playbacks. The Fader playbacks each have a fader and four buttons (FLASH, GO, STOP, SELECT). The MQ250M meanwhile features 10 of each Playbacks.
The Execute button playbacks have a Flash execute button. By default, this button is used to execute the button playbacks. Use the ‘SEL’ key in the programmer section to select the playback if required.

The area above each of the playbacks on the touch screen is used to provide information about the status of the playbacks.

The cross-fade section contains a GO, STOP. FWD, BCK buttons, dual cross faders and a master GO button. The cross-fade section controls the current playback selected with the S button by default.

Getting Going

Starting up the Console

After powering up you are presented with the introductory Help Window. Choose Continue Show.

You can revert to the Help Window by pressing the HELP button at any time.

The console remembers all windows that were open when the console was last used. To close all windows, press SHIFT and CLOSE.

Press SETUP to open the Setup Window.

Figure 16. Setup Window

Starting a New Show

To start a new show, open the Setup window using the Setup key, toggle to 'view settings' using the top left soft button. Then press the NEW SHOW soft button. This will clear the current show from memory – shows that have been previously saved to disc will not be affected. You will be asked to confirm by selecting YES.

Figure 17. Starting a new show

There is a choice of five modes:

- Normal - faders activate Cue Stacks. When recording, all data in the programmer is stored in recorded cues.
- Theatre non-track - faders operate levels only. When recording, all data in the programmer is stored in recorded cues.
- Theatre tracking - faders operate levels only. When recording only data in the programmer that has changed since the last record is stored in recorded cues.
- Hog II warp – like Theatre Tracking but with some extra features to make the programming more familiar to Hog II users.
- There is also the option to load in custom settings while starting a new show.

In Theatre modes, fixtures return to their default values when under control of a playback or the programmer. The keypad is set up to enable selection of Palettes using Palette numbers, and Cue Stack timing defaults to being stepped timing rather than chase timing.

The mode can be changed at any time by using the Programming Mode soft button in the Setup Window. In addition, each individual option / default value can be customised by the user and saved as their personal settings file.

Starting a show clears all patching, all programming, and all palettes. It does not clear console specific options such as the configuration of the DMX outputs or the calibration of the touch screen.

Enabling Console Outputs

To enable output of channel data, select the VIEW DMX I/O tab in the Setup Window. This window enables modification of the inputs and outputs for the 64/128 or 256 universes of the MQ250M or MQ500M console. The MagicQ consoles support DMX directly from the console or via an external Ethernet to DMX convertor.

Figure 18. DMX tab in the Setup Window

Using Direct DMX Outputs

MagicQ consoles have 4 DMX outputs directly on the rear panel.

The four DMX outputs on the rear panel automatically output universes 1 to 4 unless they are configured otherwise. The DMX will be output regardless of the “Status” enabled or disabled in the Setup window. All consoles have either a DMX status LED or individual Port status LED’s which show if the port is currently active.

If you wish to choose alternative universes to be output to the four DMX outputs on the rear panel, or you have software prior to version 1.3.4.5 then you will need to configure the outputs manually. For each of the Universes you wish to output on the rear panel, select Out Type as “MagicQ Direct” and Port 1, Port 2, Port 3, and Port 4.

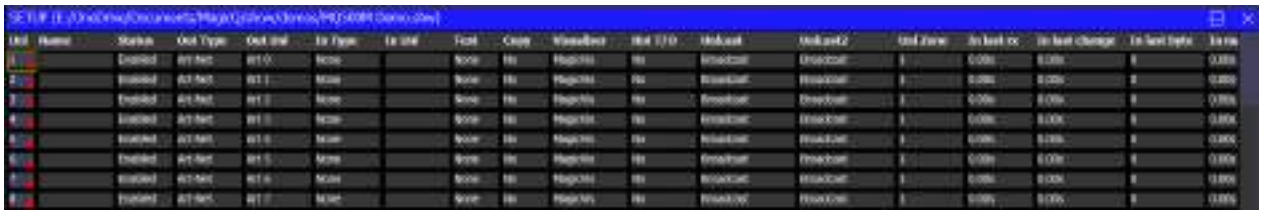


Figure 19. DMX configuration

Using ArtNet and ArtNet to DMX interfaces

To output ArtNet on a Universe enable it and ensure that the output type is set to ArtNet. Choose which ArtNet Universe you wish to Output the MagicQ Universe on. MagicQ defaults to outputting MagicQ universe 1 on the first ArtNet Universe (Art 0).

Figure 20. SnakeSys Ethernet to DMX512 box

If you are using Ethernet to DMX512 conversion boxes, then you will need to configure the boxes to respond to the correct Art-Net subnet and Art-Net universe. With SnakeSys B4 Ethernet to DMX boxes you need to place the device into Art-Net mode by setting dip switch 4 into the up position and all others down, and then set up the two rotary switches to the correct values – the left one for Art-Net subnet and the right one for Art-Net universe. The interface will then decode the four Art-Net universes starting from that Art-Net subnet and universe.

In most networks the Art-Net subnet is set. In Setup DMX I/O the Output and Input universes use subnet 0 unless specifically set to an Art-Net universe greater than 15 or set using the

notation X-Y where X is the subnet and Y the universe. If you are using only one Ethernet to DMX512 interface, then you can use Universe 0.

If you are using multiple Ethernet Interfaces, then you will need to set each Ethernet Interface to a different Art-Net Universe – for example when using two SnakeSys B4 Ethernet Interfaces set the first Interface to Art-Net Universe 0 and the second one to Art-Net Universe 4.

Connecting an MagicQ MQ500M Wing to the MQ500M

To connect an MQ500M Stadium Wing to an MQ500M console, connect the Wing to the console via USB and DVI using the cables provided with the Stadium Wing. In the Setup Window, View System, View Wings, set Wing 2 to: Stadium Wing, this is turn will set wing 3 to be ‘stadium top’ automatically. Note the MQ500M must be running software version v1.7.6.3 or higher to support the Stadium Wing. This Wing is not supported on the MQ250M console.

By default, the Playback Wings are set so that the Wings change page when the Next Page / Prev Page button are pressed on the MagicQ console. It is possible to make the Wings operate completely independently of the main MagicQ console by changing the “Lower Bank Tie” and “Upper Bank Tie”.

Connecting External Monitors

The MQ500M console has a DVI-D connector on the rear panel for connecting external monitors, while the MQ250M features a DisplayPort++ monitor connection. This monitor can also be a touch screen monitor.

The DVI-D connector on the MQ500M supports DVI monitors only, DVI-VGA adapters are not supported on this console.

The DisplayPort++ connector on the MQ250 supports DisplayPort to HDMI adapter as well as regular DisplayPort monitor (which can be up to 4K).

The monitor output is used for showing extra windows. To enable windows to be moved onto external monitors, enable it in Setup, View System, View Monitors.

In this menu set EXT 1 to status ‘enabled’, the resolution should auto set to the native resolution of your monitor.

Figure 21. Connecting an external monitor

The MQ500M console supports both USB and Serial touch screen monitors. To connect a serial touch monitor, simply connect the serial cable to the serial port on MagicQ. Then select the appropriate protocol in Setup, View Settings, Ports, Serial remote protocol and set Serial touch monitor to Monitor 2. The MQ250M console only supports USB touch screen monitors.

To calibrate external touch monitors, go to: Setup > View Settings and select CAL TOUCH, press 1 to confirm. Then press the 4 points on the external monitor, do not press on the internal display during this time.

External USB touch monitors are shown in the Setup > View system > View Monitors window.

Supported Touch Monitors

For the MQ250M and MQ500M consoles we have tested and recommend the touch monitors listed below. It is likely other monitors will be supported, but we can only guarantee the ones on this list.

- iiyama Prolite T2336MSC
- iiyama T2235MSC-B1
- Hanns G HT225HPB
- Asus VT207N
- Dell S2240T
- Dell P2418HT
- Viewsonic TD2421

MagicQ consoles have support for the following USB communication protocols:

- Elo 15 * E271-2210 10-byte protocol
- Elo legacy E281A-4002 6-byte protocol

- Elo 16 * legacy E271-140 4-byte protocol
- Elo legacy E261-280 3-byte protocol
- eGalax Touchkit
- eTurboTouch CT-410/510/700
- 3M/Microtouch EX II series
- ITM
- PanJit TouchSet
- eTurboTouch
- Gunze AHL61
- DMC TSC-10/25
- IRTOUCHSYSTEMS/UNITOP
- IdealTEK URTC1000
- General Touch
- GoTop Super_Q2/GogoPen/PenPower tablets
- JASTEC USB touch controller/DigiTech DTR-02U
- Zytronic capacitive touchscreen
- NEXIO/iNexio

Patching

Open the Patch Window by pressing the PATCH button. The Patch Window has three views, VIEW HEADS, VIEW CHANS and VIEW DMX. In this section we describe patching in VIEW HEADS.

Figure 22. Patch Window views

Choose the head you wish to patch by pressing the CHOOSE HEAD soft button. The Window will change to give you a list of manufacturers and heads. Select a head by pressing the touch screen. Alternatively scroll around the Window using the cursor keys, and press ENTER when the cursor is over the correct head.

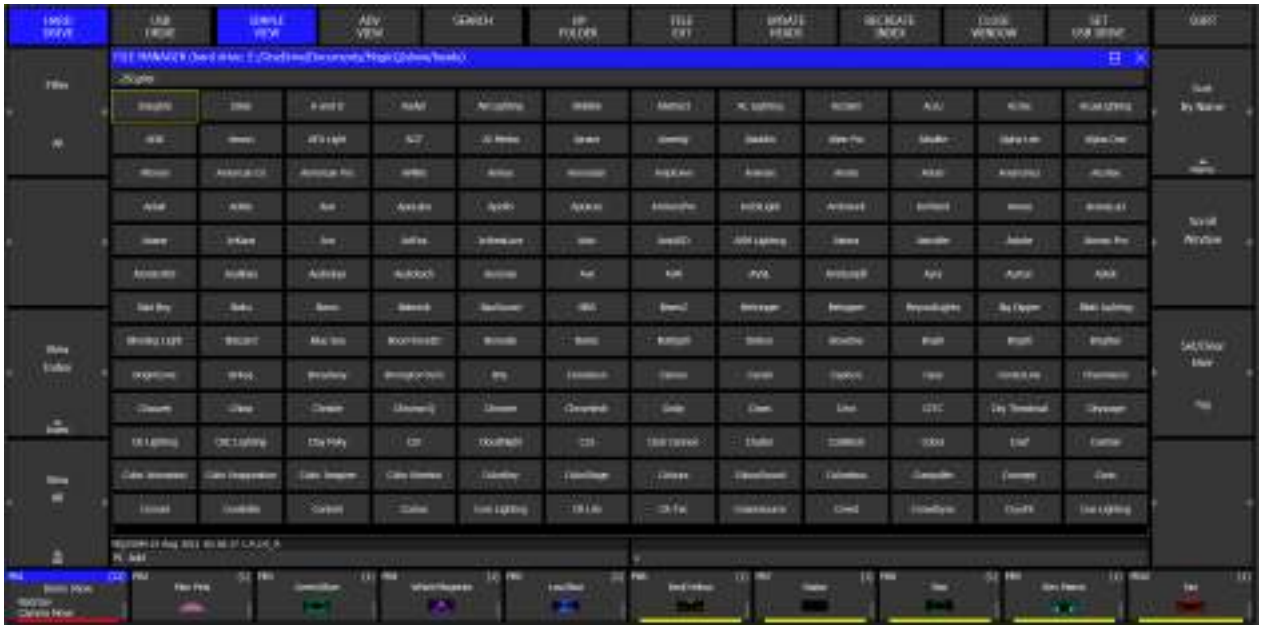


Figure 23. Viewing heads in the Patch Window

Once you have chosen a head you will be returned to the Patch Window. Press the PATCH IT soft button to patch the head. You will be prompted for the number you wish to prompt and the address where you wish to patch the heads. Use @ to patch at a specific address.

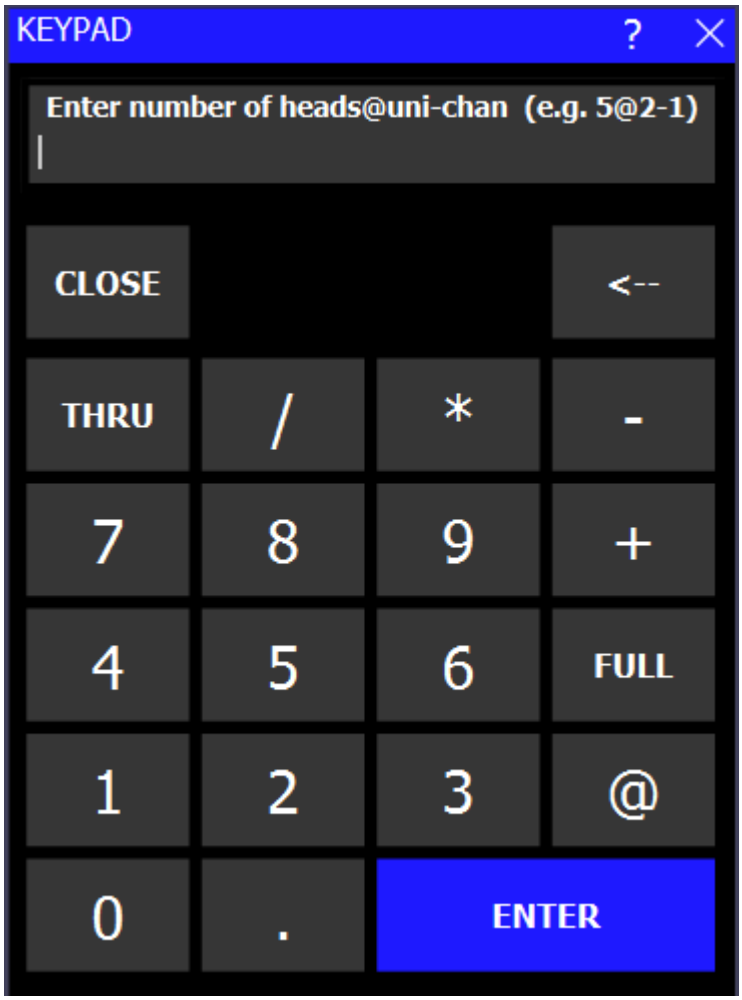


Figure 24. Keypad to patch a head

For example, to patch 5 Mac250 mode 4 to Universe 2 channel 1, enter:

5 @ 2 - 1

If you wish to patch multiple channels at fixed offsets e.g., five Martin Mac250s at DMX channels 1,21,41,61,81 then enter

5 @ 2 – 1 / 20

Figure 25. Patching a dimmer

To patch a dimmer, simply press CHOOSE DIM/MEDIA rather than CHOOSE HEAD and then patch one or more dimmers as below.

In the Patch Window all the lighter coloured fields can be configured. To modify a field, first move the cursor to the field, then input the new value using the keypad and keyboard, and finally press ENTER.

In this way you can modify DMX address, head number, head name and gel for each of your patched heads.

Naming and Numbering Heads

Once you have patched all the heads you can then name and number them as you wish. It is recommended that you name the dimmer, or the head based on its location (e.g., front wash / back truss SL). For dimmers you may wish to configure the gel. This makes programming easier – enabling the console to auto program cues for you.

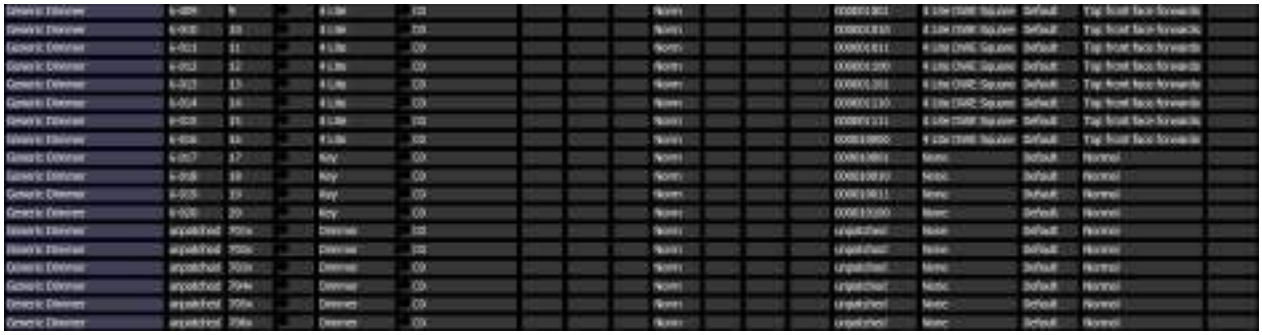


Figure 26. Naming and numbering heads

The gel field uses gel numbers. For Lee colours enter the gel number directly (e.g., 181 for Lee 181). For Rosco colours enter the gel number preceded by dot (e.g., .14 for Rosco 14). For no colour enter 0. If you would prefer to use colour names rather than gel numbers, then simply enter the colour name.

To test a patched head or dimmer, simply press the TEST MODE soft button (soft button encode C) and the head which the cursor is over will be tested. For heads it locates the fixture; for dimmers it sets the dimmer to 100%. Press the TEST MODE soft button again to turn test mode off.

Controlling Heads

Selecting Heads via the Keypad

To control intelligent heads, it is necessary to be able to select which heads to use. The MagicQ console keeps track of the currently selected heads to enable it to determine which heads to apply changes to. The operator can select head individually or can use groups to recall configurations of heads that are used frequently.

In “Hog Warp” mode or when the Setup option “Keypad always selects head is set” you can select heads from the keypad – for instance to select heads 1 through 4: 1 THRU 4 ENTER

In other modes, you can select the heads using: 1 THRU 4 @ @

Selecting heads from the Group Window

The console automatically generates a group for all the heads of a particular head type. In addition, new groups can easily be recorded.

The Group Window has two views. VIEW GROUPS enables selection of heads using groups whilst VIEW HEADS enables individual selection of heads.

In VIEW GROUPS, pressing the touch screen for a particular group selects all the heads associated with that group. All other heads are deselected. To select multiple groups, press SHIFT and a group to toggle the group in and out of selection.

In VIEW HEADS, individual heads are selected / deselected by pressing the touch screen. Use PG UP and PG DN to scroll through the heads.

Recording a Group

Select the heads you want in a group using keypad selection or in the VIEW HEADS view of the Group Window. Change back to the VIEW GROUPS view. Press RECORD and then select the group you wish to record either by pressing the touch screen or by using the cursor keys and then pressing ENTER.

Naming a Group

When recording a group, if you key in a name before pressing the touch screen (or pressing ENTER) then the group will be named at the same time as it is recorded.

You can name a group at any time by keying in the name, pressing SET, and pressing the touch screen. If you do not have a keyboard, then press SET and select the group to name by pressing the touch screen (or using cursor keys and ENTER). A keyboard window will be displayed for you on screen.

Recalling a Group

Once a group has been recorded then pressing the touch screen for the group will make all the heads in the group selected. All other heads will be deselected. Use SHIFT to select multiple groups. There is a Setup option to allow the user to default selecting multiple groups.

Setting Levels for Dimmers

From the keypad you can enter commands such as:

1 @ 50 ENTER

1 THRU 4 @ FULL ENTER

It is also possible to use the Intensity Window by pressing the INT button. This window displays a fader for each dimmer and head patched onto the console. Pressing the slider part of the fader sets the appropriate level. When a fader is moved from 0 the channel in the programmer is activated – and the fader will turn red.

Figure 27. The Intensity Window

The Window has 2 views, View Prog and View Pre-set – faders changed in the Prog View affect the intensity levels in the programmer and are recorded into Cues. Faders changed in the pre-set View are like traditional “one per channel” pre-set faders on older lighting consoles – this enables levels on channels to be set without affecting programming. This is equivalent to “Parking” on other consoles.

The SQUARE OFF soft button enables fast programming of intensities. Using the touch panel select the channels you wish to have at full and at zero – but don’t bother being exactly accurate with the level of the selection. Pressing SQUARE OFF finishes the job by setting all channels that are less than 50% to 0 whilst setting channels above 50% to full.

Use the ALL TO FULL and ALL TO ZERO buttons to change the level of all the channels.

Press the CLEAR button to clear the programmer.

Locating Heads

The first action you are likely to want to do is to locate the heads – i.e., to put them into a starting position. Select the required heads and then press the LOCATE button. Locating a head brings all the attributes for that head into the programmer.

If the heads enable DMX control of the striking of the lamp, then you may need to “Lamp On” the head to see the beam. Select the heads and then press SHIFT LOCATE. This runs the "Lamp On" macro.

Modifying Attributes

Intelligent heads have several different attributes typically including pan and tilt, colour, gobo and iris. When the MagicQ lighting console patches an intelligent head, it maps the head parameters to standard attributes to enable easy access of the features of the head.

Attributes are categorised into four types – Intensity, Position, Colour and Beam. On the MagicQ there is a window for each of these attribute types. Select the required heads, and then open the required window.

You can quickly open all the Palette Windows by holding CTRL and pressing the top soft button marked Palettes – this opens the windows in the layout below.

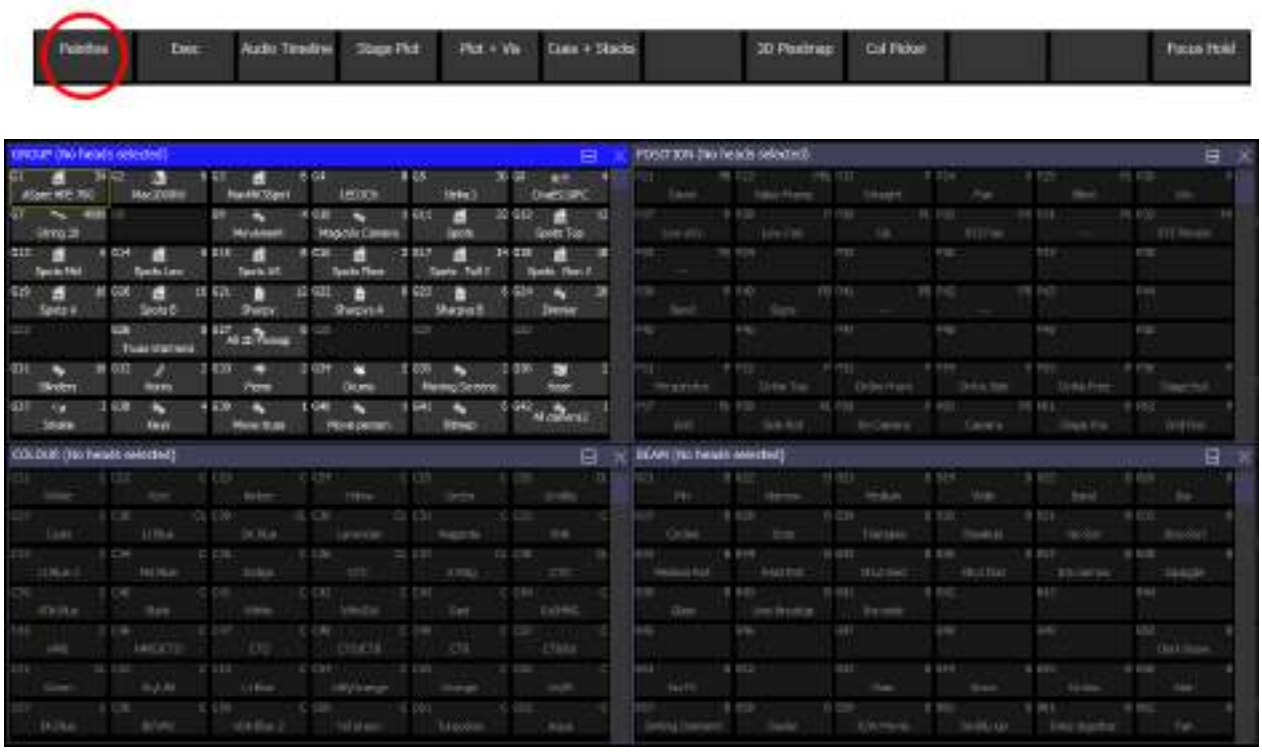


Figure 28. The Palette Window

The highlighted window enables controls the soft buttons and rotary encoders. In each of the Windows the X and Y encoders control the most important attributes – Pan and Tilt in Position Window, Col Wheel 1 and Col Wheel 2 in the Colour Window and Gobo Wheel 1 and

Gobo Wheel 2 in the Beam Window. In the Beam Window there are more than eight attributes to be controlled – these are accessed using multiple pages of encoders – by pressing the NEXT PAGE soft button.

Figure 29. Modifying the attributes of a head

For indexed attributes such as colour wheels and gobo wheels, the button associated with each encoder can be used to bump the attribute value to the next range. Pressing SHIFT and the button bumps back to the previous range.

In addition, the window enables selection of palette values for the attribute type using the touch screen. When heads are recorded the system automatically generates palettes for each attribute type. You can record new palette entries or modify existing ones as you see fit.

In the Colour Window pressing the COLOUR PICKER soft button changes to the colour picker. Press VIEW GELS to switch to gel selection in this window.

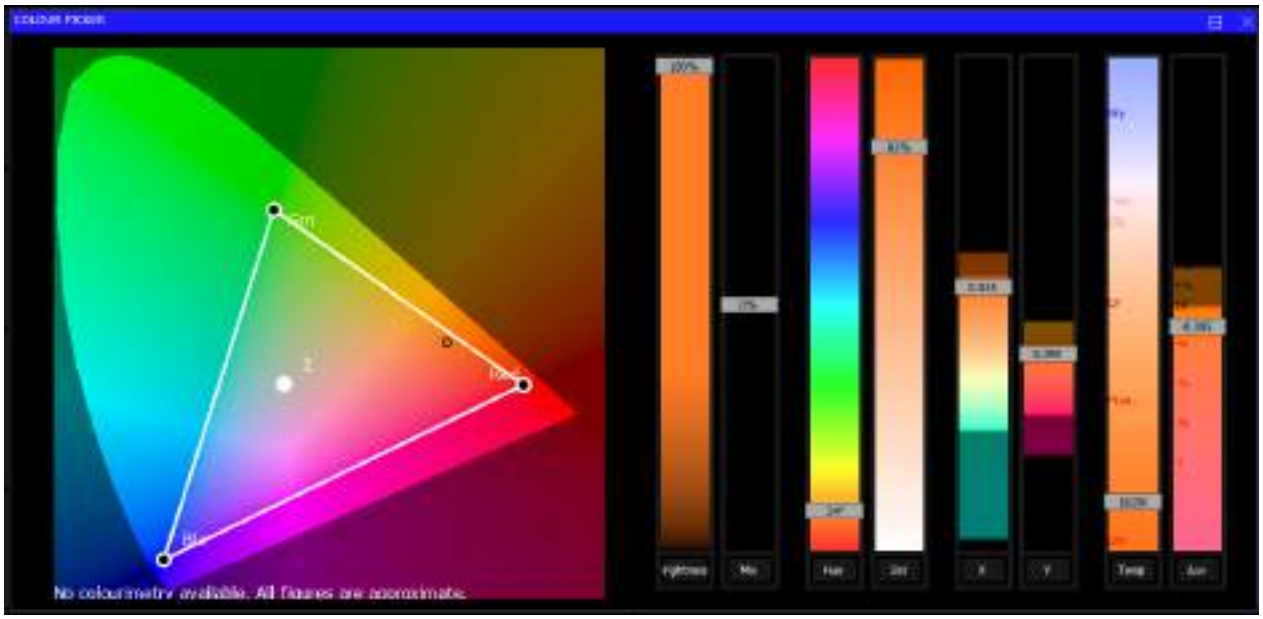


Figure 30. The Colour Window

Recording a Palette

To record a favourite combination of attributes into a palette (e.g., a rotating triangle with a prism on a MAC500), first modify the attributes to the values you wish to record. Then press RECORD and select the palette entry you wish to record. By default, only selected heads get recorded into a palette (this can be changed by pressing SHIFT + RECORD and choosing Record options).

Figure 31. Recording a palette

To name the palette, key in the name on the external keyboard, then press SET and select the palette entry you wish to name. To use the on-screen keyboard, first move the cursor over the palette entry, then press SET and key in the name followed by ENTER.

Adding in FX

To add FX to some heads, select the heads then from the Group Window or the Prog Window press the ADD FX soft button. Choose the FX to add.

Once you have chosen a FX you are returned to the Prog Window. Use the encoders to modify the parameters of the FX such as the speed, size and spread between heads.

You can add multiple FX to a head, provided that the FX uses different attributes - e.g., you can mix a Pan Sine with a Tilt Sine.

Cues and Shows

Recording a Cue

To record a look onto a Cue, first set up the look, then press RECORD and press the SELECT button of the Playback to record the Cue onto.

To test the Cue, first clear the programmer by pressing CLEAR then raise the Playback fader or press the Playback flash button.

Note that recording a Cue onto a Playback generates a Cue Stack with a single Cue. However, as there is only one step, it behaves as though it is just the Cue on the Playback.

To view a recorded Cue, press the SELECT button for the Playback, and then press CUE to open the Cue Window.

To configure options when recording, press SHIFT + RECORD and a toolbar of record options will be displayed. Choose the options you require then press the SELECT button of the Playback as above.

Figure 32. Options for recording cues

Recording a Cue Stack (Chase or Theatre Stack)

Recording a Cue Stack is the same as recording a Cue - you simply record multiple Cues onto a Playback and you end up with a Cue Stack.

So, for example to record a stack of two looks, the first yellow dots, the second blue triangles:

- Generate the yellow dots look.
- Press RECORD and press the SELECT button of the playback.
- Generate the blue triangles look.
- Press RECORD and press the SELECT button of the playback.

To test the Cue, clear the programmer by pressing CLEAR then raise the Playback fader or press the Playback flash button.

View the Cue Stack by selecting the Playback and pressing CUE STACK to open the Cue Stack Window.

When you record more than one Cue onto a Playback the Cue Stack controls the transition from one Cue to another. In Normal mode by default the Cue Stack operates like a chase - i.e., each Cue is executed in turn, with timing being handled by a Chase Speed for the whole Cue Stack.

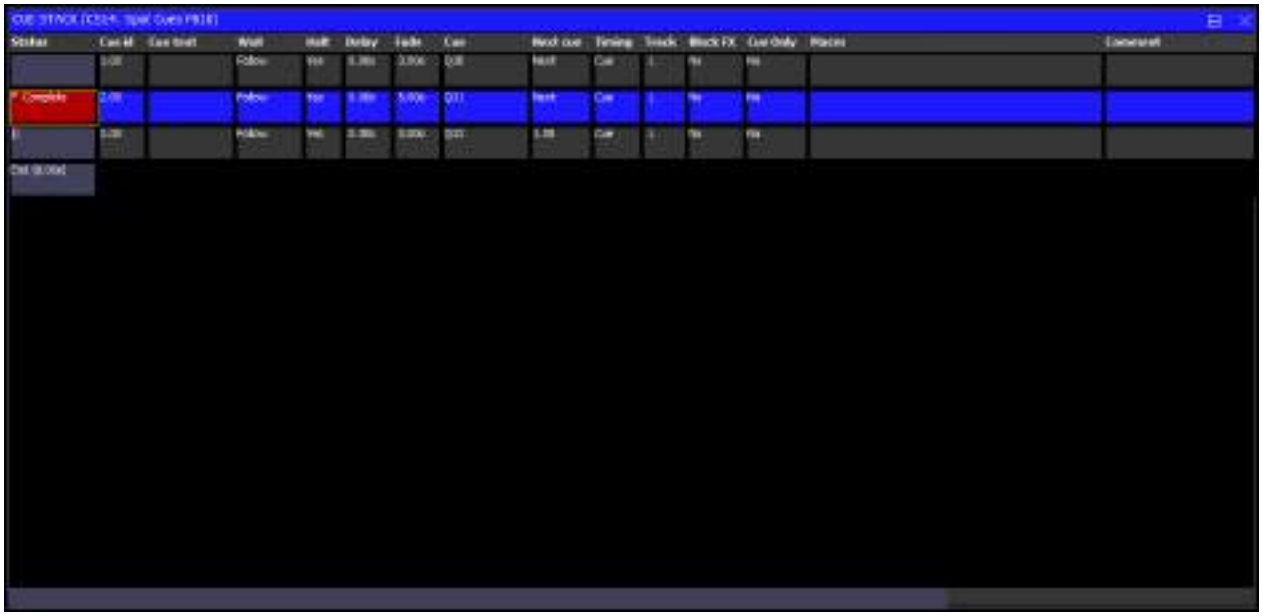


Figure 33. Cue Stack Window

In Theatre Modes the default timing is Cue Timing – individual Fade times on each step with GO stepping from one step to the next.

The timing mode can be changed, so that the Cues play back in a theatre style using the GO / STOP buttons. Select the VIEW OPTIONS view and press the CUE TIMING and CHASE TIMING soft buttons to modify the timing mode.

Saving Your Show

MagicQ utilises a large hard disk to enable storage of a virtually infinite number of shows. When you are programming a show, the show is stored in memory. To store your show on the disk you need to press the SAVE SHOW soft button in the Setup Window.

Whilst programming, you should regularly save your show, so that if the unexpected happens and the power fails your show data is not lost. You can choose any filename - the console will automatically set the file extension to .shw.

By default, the console periodically saves a backup of your show to disk. It uses the same show name but with the file extension .sbk.

It is a good idea to save your show to different file names so that you have various points you can back-track to if things go wrong. For example, save the show as myshow-patch.shw after you have patched and then as myshow-final.shw after you have finished programming.

When you shut down the console through the QUIT soft button in the Setup Window, the console automatically saves a backup copy of your show with a .sbk extension. When you subsequently restart the console, this file will be re-loaded. This ensures that the console starts up as it was when the QUIT soft button was pressed.

Playing Back Your Show

Now you have Cues and Cue Stacks recorded you can play back your show using the Playback

faders and buttons. You can control how each Cue Stack is played back using the Cue Stack options – for example you can set the fader to control LTP fades or FX size and speed.

Make sure the master faders are raised!

Note that if you have a large show file you may wish to turn auto backups off during playback. Remember to turn them back on when you are programming.

If you get stuck at any point, just press the HELP button!

Troubleshooting

No Outputs

Check whether the desk is operating correctly by opening the Outputs Window and looking at the channel data. If channels are not at their correct levels, then check:

- Are the Grand Master and Playback Master (Sub Master) faders up?
- Are Playback faders raised?
- Is there channel data recorded in the Cues on the playbacks?
- Is BLIND mode on?
- Are heads and dimmers patched to the correct universe?
- Is test mode for the Universe in DMX I/O on?

If the Outputs Window shows correct values. Look at the View Chans, View DMX view in the Outputs Window – this shows the real values that are being output in the DMX 512 or ArtNet stream.

Check the Outputs are configured and enabled correctly in the View DMX I/O view of the Setup Window. If you are using an Ethernet convertor box check that it is receiving data correctly. Check:

- Outputs are configured correctly
- Outputs are enabled
- TCP/IP address and sub net mask are configured correctly (Setup View, Settings). Typically IP address should be 2.9.200.1 and sub net mask should be 255.0.0.0.
- Ethernet box is powered up and connected to the console correctly
- Ethernet box is configured correctly (typically uses ArtNet Universe 0-0)

Desk Not Responding

Is the time changing in the status window? If the time is not changing then a reset is required (see resetting the Console). If the time is changing then the main processor and software are running fine. Check

- Master faders up
- Correct playback pages selected
- Playback has a Cue stored on it
- The desk is not locked (CTRL top left soft button)
- Is button test mode on? (hold top left SHIFT button and press top right SHIFT button)

Are all the Select buttons flashing blue? This indicates that the front panel is not communicating with the main processor board. Try:

- Pressing CTRL 9 on the external keyboard – this resets the front panel.
- Pressing CTRL 0 on the external keyboard – this resets the MagicQ application.
- Pressing CTRL BREAK on the external keyboard – this shuts down the console.

Strange Key Presses, Unexpected Window Changes

Enter board test mode to determine the cause of the fault. On MQ100 hold top left SHIFT button and press top right SHIFT button. On Compact console hold ALT and CTRL and press SHIFT.

Check a button has not become stuck down. Check nothing is accidentally leaning on the keyboard or other buttons. Exit button test mode by using the same keys as pressed to enter test mode above.

Screen Problems

If the screen is blank – then this may be because of the screen saver. Try pressing SHIFT. If the screen remains blank even after pressing buttons, then try holding CTRL and pressing the bottom right soft button (soft button closest to the large encoder wheels) twice. This attempts to restart the screen backlight.

The screen may have been turned off and locked by a user. Press CTRL and the second soft button down on the left (soft button B). If this does not help, then press CTRL and the second soft button a second time.

If the screen remains blank, then try connecting an external monitor.

If the screen is slightly blue or pictures are distorted after power up then shut down the console and restart. If you cannot see the QUIT button on the screen, then hold the Left, Down and Right cursor keys and press DBO to force a shutdown.

If the screen is white, then the processor has stopped running. Press and hold the reset button on the back panel for 15 seconds to power off the console. Then restart the console. If the white screen continues then it may be necessary to unplug and replace the power connection to the processor inside the rear panel.

If the screen shows “Enter system disk” then the main processor has not recognised the hard drive correctly. Restart the console using the reset button on the console.

Start Up Problems

If the console does not start at all – i.e. no LEDs are lit on the rear panel then check the front panel LED under the arm-rest. If no LEDs are lit then there is a failure of the main PSU. Contact your dealer for support.

If the console starts but fails to boot completely then the power cables or disc cables may have come loose during transport. Contact an electrically competent engineer, to re-seat the cables.

If the console always enters the Software Upgrade Utility, then a button is most likely stuck down. Enter 0 or quit to leave the Software Upgrade Utility. Once the console has started then hold one SHIFT button and press another SHIFT button to enter the button test mode. Press SHIFT and SHIFT again to exit button test mode.

If the console fails to start and displays a message asking you to run fsck manually then see disc repair below.

Backup Archives

By default, the console stores an archive of the show files for every quarter of an hour of the day, and for every day of the week. This enables the user to revert to a previous copy of their show.

Archive files are only made when the console auto saves – so if auto saves are disabled then no archive files will be generated. If the console is set to “auto save on changes” then archive files will only be stored when changes are made. To revert to an archived file press SHIFT and LOAD SHOW in the Setup Window.

Archive files are stored in a special directory that should not be modified by the user. When the user re-loads an archived backup file, the backup file is restored into the standard show directory.

Archive files have the name “backup0530.sbk” to indicate the show file that was recorded just before 5.30am. Daily files are also stored – “backupfri.sbk” indicates the show file that was recorded at the start of Friday. Archive files are overwritten every 24 hours, except for the daily files which are overwritten every 7 days.

Reporting Problems

MagicQ stores diagnostic information about keys pressed, strange events and resets in log files. If you notice a problem, then please send us the show file and the log file for the time the problem occurred and we will investigate and fix the problem in the next version of software.

Log files are stored in the log folder and are named according to the time and date the session was started – a new log file is started each time the console re-starts. The time and date of the file is the time that the session ended.

Please email the log files and show files to support@chamsys.co.uk.

Upgrading Console Software

New versions of MagicQ console software are made available on the downloads page of the ChamSys website – www.chamsys.co.uk in the form of .cdc files.

Ensure you have saved your current show file to a USB memory stick or to an external computer via network before you change software version. Also, ensure any personalities that you have customised have been saved to a different file name of your choice – the new

software will install the latest version of the standard personalities.

MagicQ includes a software management utility. This can be accessed from within the MagicQ software from Setup, View System, View Status. It can also be accessed on powering off the console and then pressing a key during boot up.

From a USB stick

- Insert the USB memory stick into the one of the USB sockets on the console (on the rear panel, or on the front inside the arm-rest).
- Select the File Manager from the Setup Window.
- Select USB DRIVE.
- Select the file for you console system. Compact consoles use the .cdc file. You will be prompted whether you wish to continue. Select YES.
- The software will be copied from the USB stick (takes 10 seconds or more) and then MagicQ will automatically restart with the new software running.

From network

- Connect the desk to the host system – typically a PC – either using a direct Ethernet crossover cable or via Ethernet hubs.
- Configure the IP addresses of the host system and the desk so that they are on the same sub-net. For instance, if the desk is set to IP address 2.9.200.5, subnet mask 255.0.0.0 then set the host system to IP address 2.9.200.6 subnet mask 255.0.0.0.
- Connect to the file system. Under Windows this can be achieved by selecting Network Neighbourhood in Windows Explorer. The desk should appear as a computer. Log in as user magicq with password magicq. Note that you may need to configure a user magicq with password magicq on the host system.
- Copy the .cde file into the magicq folder.
- On MagicQ select the File Manager from the Setup Window.
- Select UP DIR to go to the root folder.
- Select the .cdc file. You will be prompted whether you wish to continue. Select YES.
- The software will be copied from the USB stick (takes 10 seconds or more) and then MagicQ will automatically restart with the new software running.

Restoring Default Console Settings

The console software upgrade utility has 2 other functions – reset to factory defaults and erase console.

“Reset to factory defaults” changes settings back to factory settings but does not erase any user data. It is recommended that the current show is saved to a known file name before carrying out a factory reset. Because of the reset to factory defaults, the console will reload the default show.

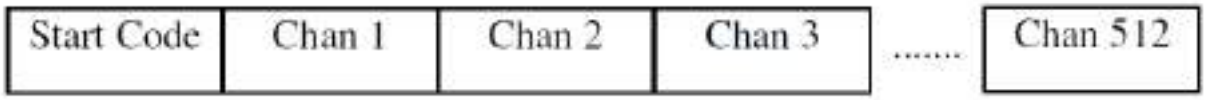
“Erase console” erases all user data and reloads the newest software on the system. All show data, custom personalities, and settings will be erased. Ensure all user data is saved before carrying out this action.

It is not necessary to recalibrate the touch screen after a factory reset. If for any reason the touch screen is not calibrated, then press CTRL + SET to calibrate it.

Appendix A - DMX, Ethernet and Art-Net

DMX

DMX data is transmitted in a serial form. This means that there is one cable carrying the data, which is sent bit by bit (a bit is a 1 or 0), one after another. The entire transmission of DMX data for a DMX universe is known as a DMX Packet. The DMX Packet consists of a start code and 512 channel levels.



The start code for DMX is generally 0. The channel section contains the level for that channel.

Ethernet

Ethernet is the technology used to connect computers on a network. Most computers use a protocol called TCP/IP (Transmission Control Protocol Over Internet Protocol) to communicate over an Ethernet network. Ethernet transmits the IP address (address of a computer on the network) of the sending computer, followed by the IP address of the receiving computer, followed by the data. The IP addresses allow the data to be routed to the correct computer.

On a typical office network, computers will have an IP address of 192.168.1.x, where x is between 0 and 254 (255 is a reserved address). These IP addresses are generally assigned dynamically by the Router on the network using a protocol called DHCP.

The computers use a subnet mask of 255.255.255.0. This specifies which range of IP addresses are on the local network. In the example above 255.255.255.0 specifies a range of from 192.168.1.0 to 192.168.1.255 which is a total of 256 addresses.

ArtNet

ArtNet is a royalty-free communication protocol (language), developed by Artistic License used to transmit DMX information over a network. An ArtNet network typically uses the 2.x.x.x or 10.x.x.x IP Address scheme using a subnet of 255.0.0.0. It is important to ensure that Art-net data using the Class A IP address scheme is not routed onto the internet.

Ideally a separate lighting network should setup between your MagicQ console and node(s).

Unlike normal office networks, the IP address must be in the range 2.x.x.x or 10.x.x.x, where x is between 0 and 255. The subnet mask must be set to 255.0.0.0. This means configuring the address of each piece of equipment on the network manually. MagicQ products are typically set to 10.x.x.x. from the factory.

Appendix B: FCC Part 15 Notice

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference; and

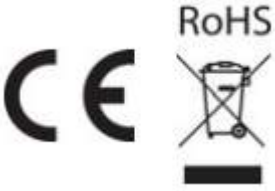
(2) this device must accept any interference received, including interference that may cause undesired operation.

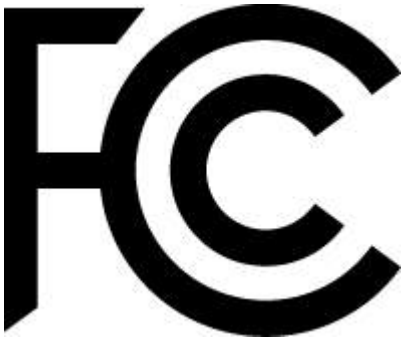
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference with radio and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

You may also consult your local ChamSys Ltd dealer or an experienced radio/TV technician for assistance.

NOTICE: The FCC regulations provide that any changes or modifications not expressly approved by ChamSys Ltd could void the user's authority to operate the equipment.






MET
US

Appendix C - Disposal and Recycling of unwanted consoles

Please be aware that ChamSys products must be disposed of in accordance with the WEEE disposal and recycling regulations (http://ec.europa.eu/environment/waste/weee/index_en.htm). ChamSys products must not be disposed of through normal household waste.

For non-UK customers please contact your local distributor.

For UK customers, please contact us on +44 (0)23 8023 8666, or email support@chamsys.co.uk.

WEEE Producer registration number WEE/FF5605UX.

Appendix D - MagicQ Warranty Certificate

Thank you for purchasing a MagicQ Compact Connect. All MagicQ products come with a two-year parts and labour warranty which covers the console for component/material failure. This warranty does not cover physical damage caused to the unit damage in transit, or damage to components caused by factors such as liquid damage/spills onto the unit.

For Warranty claims please contact the dealer you purchased the unit from. If you are based outside of the UK, please contact your local dealer. Your local dealer can be located here: www.chamsys.co.uk/contact.

This Compact Connect was manufactured on: .....

The Serial Number of this Compact Connect is:

Before leaving ChamSys, the Compact Connect has completed full testing processes including:

Full production test of console completed by:

Safety test including PAT test completed by:

Packed with all accessories by: