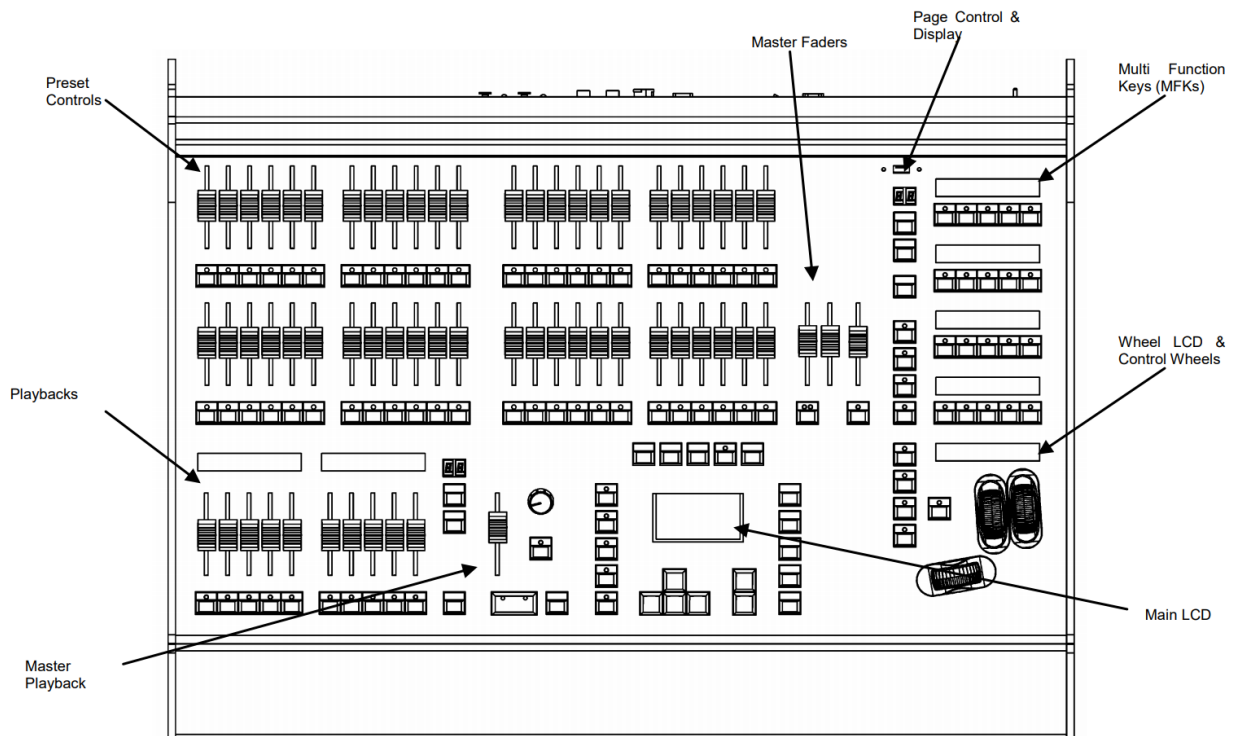


The image below, explains the front panel controls of the Solution console. This will also be applicable to the Solution XL console, however the Solution XL console has twice the number of channel faders (preset faders), and three times the number of playback faders.

Leapfrog 48 operates identically to Solution, and Leapfrog 96 operates identically to Solution XL, and so the guide below is also applicable to these consoles too.



Fixtures

Solution console can control up to 248 fixtures, and Solution XL consoles can control up to 296 fixtures. Fixtures can be a simple generic dimmer channel, or an LED fixture, moving head, or in fact any device that can be controlled with DMX.

Fixtures with multiple controls, have their controls or "parameters" grouped into attributes. These attributes are Colour, Beamshape and Position. Fixtures can be given a user defined name and number, for ease of reference, and may be patched across 64 universes. These universes can then be output from the DMX ports on the rear of the console, or output over Ethernet. The total number of DMX channels that can be patched is 2048 channels.

Cues & Playbacks

Solution & Solution XL allow you to record lighting scenes into "Cues". Each cue has a number, name (optional), trigger, a wait time (auto cues) and a set of delay & fade times. Each cue is stored within a "Playback". A Playback can have a single cue (equivalent of a "submaster") or multiple cues (equivalent of a "cue list"). If there are multiple cues, they can either be played sequentially one after another, or turned into a chase (where the desk will automatically and continuously cycle through each cue). Multiple Playbacks are available to help separate and group cues together. A

“Master Playback” is also available with larger GO button and dedicated PAUSE button.

The Solution desk has 20 pages of 10 playbacks, plus the Master Playback (201 in total).

The Solution XL desk has 20 pages of 30 playbacks, plus the Master Playback (601 in total).

Groups

Solution consoles provide 400 groups. Automatic groups for each fixture type can be generated if required.

Palettes

Solution consoles provides 400 user programmable palettes for each of the attributes (Colour, Beamshape and Position). The desk can also generate auto palettes which provide basic colours, gobos and positions based on the fixture types used in the desk.

Effects

The desk provides 400 user programmable effects. The desk can also generate a number of standard effects which include intensity, colour, beamshape and movement effects.

Macros

The desk provides 400 user programmable macros.

Lock Functions

The desk has a lock function which will prevent misuse of the desk.

Audio Input

The desk has an audio input, which may be used to trigger chases with bass drives.

Optional Remote Triggers Card

The desk provides SMPTE, MIDI and 6 contact closure inputs as an optional upgrade card, which can be used to trigger cues with SMPTE or MIDI timecode triggers.

Ethernet

The desk has an Ethernet port capable of supporting Art-Net and sACN. In addition to these outputs, this allows smart phones and laptops to be used as remotes.

USB Ports

The desk has four USB ports, which may be used for saving and loading show files, loading user fixture types and performing software upgrades. The USB ports on the desk support keyboard, mouse, external touch screens, memory sticks and desk lights.

Mouse and External Keyboard

The desk provides a USB mouse interface to allow you to move quickly around the monitor screen, select fields, choose options etc. The desk provides a USB interface to a standard PC keyboard, to allow text and numeric data to be entered.

Video Output

The desk provides the interface for one external monitor display (XGA). It is highly recommended that the desk is operated with a monitor display connected, as important information is displayed here.

DMX Output

Data is output on DMX channels 1 – 512 on four DMX universes as standard. The DMX output sockets on the rear panel of the desk default to outputting universes 1 to 4 only when fixtures are patched onto the respective universes.

Solution Introduction

Preset Faders

The Solution presets have three modes - "Disabled", "Two Preset" or "Wide". This can be changed using the PRESET MODE setting in Special Page 1 of the MFKs.

Preset Faders

The Solution desk has 48 preset faders arranged as two rows of 24 faders and buttons. These control 48 channels when Preset Mode is "Disabled", 48 channels when in "Wide", or 24 channels in "Two Preset" mode. The Solution XL desk has 96 preset faders arranged as two rows of 48 faders and buttons. These control 96 channels when Preset Mode is "Disabled", 96 channels when in "Wide", or 48 channels in "Two Preset" mode.

Channel Flash Buttons

Each desk has a CHANNEL FLASH button located below each PRESET fader, used to flash, solo or latch the channels or to select the channels or fixtures assigned to the corresponding faders; their action being determined by the CHANNEL BUTTON MODE setting in Special Page 1 of the MFKs.

A and B Master Faders

"Disabled" – these faders are unused "Two Preset" – The A MASTER fader controls the maximum output levels from the PRESET A FADERS. The B MASTER fader controls the maximum output levels from the PRESET B FADERS. "Wide" – The A MASTER and B MASTER faders control the maximum output levels from all the PRESET faders or the stored scene according to the setting on the PRESET CONTROL button.

Preset Control Button

The PRESET CONTROL button is only applicable in "Wide" mode and is used to control which of the A or B MASTER faders has control of the preset faders and which has control over the stored scene. The red LEDs in the button indicate the current state. Pressing the button swaps the function of the two faders.

Page Controls, Mode Keys and Multi Function Keys (MFKs)

This section of the front panel contains page controls and a seven segment display, a set of Mode keys (FIXTURE, GROUP, COLOUR, BEAMSHAPE, POSITION, EFFECTS, MACRO, SPECIAL) and a block of 20 Multi Function Keys (MFKs).

Page Controls and Display

The current Page is indicated on the dual seven segment display. The PAGE UP and PAGE DOWN keys are used to select the required page. Pressing the PAGE UP and PAGE DOWN keys together selects Page 1. Each mode (Fixture, Group, Colour etc.) has its own current page.

Mode Keys

The mode keys (FIXTURE, GROUP, COLOUR, BEAMSHAPE, POSITION, EFFECTS, MACRO, SPECIAL) determine the function of the block of 20 Multi Function Keys (MFKs). Each of the mode keys contains a red LED, which is lit when selected. If the mode key is flashing, this indicates that the wheels are in control of this attribute but the MFKs are showing another function. This allows simultaneous selection of fixtures whilst still manipulating attributes, for example.

Multi Function Keys (MFKs)

The Multi Function Keys are arranged in 4 rows of 5 keys with a graphical LCD above each row of keys. The brightness and contrast of the LCDs can be adjusted as required. Each Multi Function Key contains a red LED. These LEDs are used to indicate which fixtures, groups etc. are selected depending on their current function. Pressing and releasing one of the Mode Keys changes the MFK's to that page and the control wheels follow (when appropriate). The MFKs remain in that mode until a different Mode key is pressed. Pressing and holding down a Mode key temporarily changes all the MFKs to that function. Selecting an MFK will apply that MFK but the MFKs will return to the previous MFK mode, when the Mode key is released. For example – Press and release the FIXTURES key. The MFKs change to fixture selection keys. Select a number of fixtures. Press and hold down the COLOUR key. The MFKs change to colour palette selection keys (while the COLOUR key is being held down). Press one of the colour palette MFKs to apply the colour palette to the selected fixtures. Release the COLOUR key and the MFKs return to being fixture selection keys.

Playback Faders

The Playback faders controls the maximum output level of the cue being output on the Master Playback. This fader only affects the dimmer and brightness fixture channels (if applicable). The Colour, Beamshape and Position fixture channels are not affected by the master fader.

Playback Buttons

The Playback buttons, located below each of the playback faders are used to flash, solo or latch the data programmed on the playback. When multiple cues are programmed on the Playback, these buttons can act as a GO or Pause function. Each button can have two actions, a "Normal" action and a "Shifted" action (when SHIFT and the PLAYBACK BUTTON are pressed together). The actions of these buttons are user definable via the Playback Setup Window (accessible by holding SETUP and pressing the PLAYBACK BUTTON).

Playback Page Controls and Display

The current Playback Page (1-20) is indicated on the dual seven segment display. The PAGE UP and PAGE DOWN keys are used to select the required playback page. Pressing the PAGE UP and PAGE DOWN keys together selects Playback Page 1.

Step Button

The STEP button is used to initiate the Global Tap tempo when Playbacks are set to "Chase" and have "Global Tap Tempo" enabled. There is no difference between the two Step buttons.

Master Playback

The Master Playback controls "Playback 0". This Playback is no different to any of the other Playbacks, except that it's separated out and is always available, no matter which Page the console is currently set to.

Fader

The MASTER fader controls the maximum output level of the cue being output on the Master Playback. This fader only affects the dimmer and brightness fixture channels (if applicable). The Colour, Beamshape and Position fixture channels are not affected by the master fader.

Go Button

The GO button is used to initiate a crossfade between the cue currently being output and the Next cue in the Playback as indicated on the Playback screen. Other actions are available via the Playback Setup Window (accessible by holding SETUP and pressing the GO button).

Pause Button

The PAUSE button is used to pause a crossfade between the current and next cue. When a crossfade has been paused, the red light in the button flashes. Pressing the GO button releases the pause. Pressing Pause again will step backwards in the cue stack.

Override Control

The OVERRIDE control is used to slow down or speed up the crossfade between the current and next cue. When the control is moved away from the central neutral position.

Main LCD

The Main LCD provides part of the user interface on the front panel of the desk. The content, layout, operation and other information displayed on this screen is dependent on the current operation being carried out on the desk. When the Playbacks screen is selected, the Main LCD acts as a small viewing portal on the Playbacks window. When any of the other main windows (Outputs, Groups etc.) are selected, the Main LCD displays a simple text message directing you to refer to the monitor, plus the desk software version and other helpful information,

SETUP - used to enter Setup mode and display the Setup screen on the Main LCD and monitor. Also used for exiting Setup mode.

MEMORIES - opens the Cue List of the selected Playback. To select a different playback, hold MEMORIES and press the flash/GO button of any Playback together.

SUBMASTERS - displays information on the current page of "Playbacks".

OUTPUTS - used to display the Outputs screen on the monitor.

PGM WIN - opens the "Fixture Levels" window of the selected Playback, which displays the value of every fixture in every cue. To select a different playback, hold PGM WIN and press the flash/GO button of any Playback.

Cursor Keys (UP, DOWN LEFT, RIGHT) - used to move around the fields on the main LCD (where appropriate) and/or the monitor screen. These buttons are equivalent to the four cursor keys on an external keyboard (if fitted).

Plus (+) and Minus (-) - used to increment or decrement the value of the current selection.

NAME - used for naming cues, playbacks, palettes etc.

TIME - used in combination with other keys to perform various functions over the internal fade time (eg outputting palettes over a time).

LOAD - load a cue into the programmer, press LOAD, type the cue number on the MFKs, and then press the flash/GO button of the playback containing the cue you wish to load.

CLEAR - used for clearing the “programmer”. As soon as any changes are made to the look in the programmer, the LED in the CLEAR key is lit, to indicate that dimmer or fixture parameter values have changed. Pressing the CLEAR key once clears the fixture selection in the Output Window. Pressing the CLEAR key a second time will clear (undo) all the operations made in the “programmer” since the LED was first lit and the LED in the key goes out.

UPDATE - used to update loaded items or items modified by the programmer.

RECORD - used for programming cues, groups and palettes.

COPY - used to copy Cues and Playbacks from one location to another

INSERT - includes a range of functionality, customisable by the user by holding SETUP and pressing INSERT.

DELETE - used when deleting items (cues, playbacks, groups, palettes etc.)

ENTER - used for completing commands and selecting ‘soft’ buttons on the Main LCD, monitor screens and popup windows.

HOME - used as a quick method for setting all the parameters, or all the parameters for a particular attribute to their home values.

GRAND MASTER - controls the final output values of all dimmer and fixture intensity channels, resulting from the Program Window, Playback X and submasters. The Grand Master level is displayed on the monitor screen.

BLACKOUT - reduces the outputs of all dimmer and fixture intensity channels to zero. Pressing the BLACKOUT key toggles between active and not active. The red LED in the BLACKOUT key flashes when blackout is active.

SHIFT - used in conjunction with various front panel controls to provide additional functions, eg holding SHIFT and pressing the COLOUR key displays the Colour Palette Window on the monitor.

Wheel LCD

The Wheel LCD is used to indicate which fixture parameters or other data are being controlled by each of the three control wheels. Example - When showing fixture parameter values - The Wheel LCD displays the parameter name (eg Colour1) and the value in %, DMX or the parameter detail name. Tag status is shown by inverse graphics – a white background shows a tagged parameter, and a blue background display shows an untagged parameter.

Control Wheels

The three control wheels are used for setting fixture parameter levels and other data. The names of the fixture parameters or other data currently assigned to each of the wheels and their values is shown on the Wheel LCD.

Wheel Editing Modes

There are a number of wheel editing modes which apply when editing several fixtures at the same time (Absolute, Relative, Fan First, Fan Middle, Fan Last, Fan V). For each attribute there is a normal wheel mode which applies when the control wheel is moved and a shifted wheel mode which applies when the SHIFT key is held down and the control wheel is moved.