



# TL4016

## MEMORY CONTROL CONSOLE

### OWNER'S MANUAL

VERSION 1.7  
06/28/2022

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**SPECIFICATIONS**

Number of channels 16 or 32 depending on mode  
 Operating modes 16 CH x 2 manual scene  
 32 CH x 1 manual scene  
 16 CH and 16 recorded scenes  
 Scene memory 16 scenes total  
 Chase 2 programmable 23 step chases  
 Control protocol Standard DMX512  
 Optional LMX-128 (multiplex)  
 Output connector 5 pin female XLR for DMX  
 Options Add on 3 pin XLR for LMX  
 Sole 3 pin XLR for DMX  
 Compatibility DMX512  
 LMX-128 protocol compatible with other multiplex systems  
 Power input 12 VDC, 1 Amp external power supply provided  
 Dimensions 16.25"W X 9.25"D X 2.5"H

The LMX-128 option is not able to be combined with the 3 pin XLR for DMX option.

**INSTALLATION**

The TL4016 control console should be kept away from moisture and direct sources of heat.

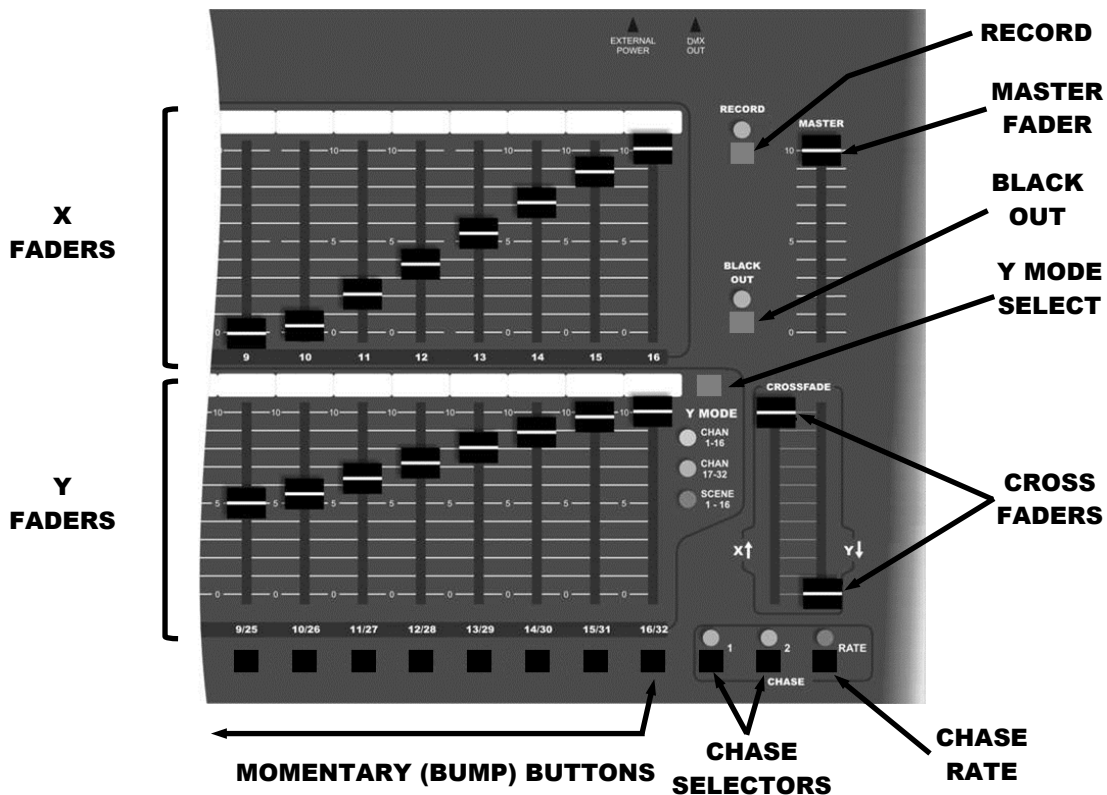
The TL4016 may be powered by an external supply with the following specifications:

Output Voltage: 12 VDC  
 Output Current: 800 Milliamps minimum  
 Connector: 2.1mm female connector  
 Center Pin: Positive (+) polarity

**DMX CONNECTIONS:** Connect the unit to a DMX Universe using a control cable with 5 pin XLR connectors. An external power supply must be used if only DMX is used. A 3 pin XLR connector for DMX instead of a 5 pin XLR is an option when ordering.

**DMX 5 PIN/3 PIN CONNECTOR WIRING**

PIN #	PIN #	SIGNAL NAME
1	1	Common
2	2	DMX data -
3	3	DMX data +
4	-	Not Used
5	-	Not Used



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**LMX CONNECTIONS:** Connect the unit to a Lightronics (or compatible) dimmer using a multiplex control cable with 3 pin XLR connectors. The TL4016 can be powered by the dimmer which it is connected to. It may also be powered via the provided external power supply. The unit will operate with dimmers in both the NSI/SUNN and Lightronics modes. All dimmers connected to the LMX connection MUST be in the SAME mode.

LMX-128 Connector Wiring

PIN #	SIGNAL NAME
1	Common
2	Phantom power from dimmers Normally +15 VDC
3	LMX-128 multiplex signal

If both DMX and LMX are installed, the TL4016 will transmit both DMX and LMX simultaneously.

## OPERATION

### INDICATIONS AND CONTROLS

**X Faders:** Controls individual channel levels for channels 1-16.

**Y Faders:** Controls levels of scenes or individual channels depending on current Y operating mode.

**Y Mode Button:** Selects operating mode of Y faders.

**Y Mode Indicator:** Indicates current operating mode of Y faders.

**Cross Faders:** These provide the ability to fade between the upper (X) faders and lower (Y) faders. The cross fade function splits into two parts giving you the ability to control the level of the upper and lower groups of faders individually. In all modes, the X cross fader must be UP to activate the upper faders and the Y cross fader must be DOWN to activate the lower faders.

**Master:** Controls the output level of all functions.

**Bump Buttons:** Activate channels 1 through 16 while pressed. The master fader affects the level of channels activated by the bump buttons. The bump buttons do not activate scenes.

**Chase Selector 1 & 2 Buttons:** Press to select chase patterns. The respective chase LED will light when that chase is active.

**Chase Rate Button:** Press 3 or more times at the desired rate to set chase speed. Chase rate LED will flash at the selected rate.

**Blackout Button:** Pressing button causes all channels, scenes and chases to go to zero intensity. The blackout LED will light whenever the console is in blackout mode.

**Blackout Indicator:** Lighted when blackout is active.

**Record Button:** Press to record scenes and chase patterns. Record LED will flash when in record mode.

**Record Indicator:** Flashes when chase or scene recording is active.

### 'Y' OPERATING MODES

The TL4016 has three different modes concerning the Y faders. Pressing the "Y MODE" button changes the function of the Y (lower sixteen) faders. The selected mode is indicated by the Y mode LEDs. The X (upper sixteen faders) ALWAYS control the level of channels 1 through 16. The three operating Y modes are:

**CHAN 1 - 16:** Both the X and Y rows of faders control channels 1 through 16. The cross fader is used to transfer control between X and Y.

**CHAN 17 - 32:** Y faders control channels 17 through 32.

**SCENE 1 - 16:** Y faders control the intensity of 16 recorded scenes.

### INITIAL SETUP

**Chase Reset:** (Resets chases to the factory programmed defaults). Remove power from the unit. Hold down the CHASE 1 and CHASE 2 buttons. Apply power to the unit while holding these buttons down. Continue to hold down the buttons for approximately 5 seconds, then release.

**Scene Erase:** (Clears all scenes). Remove power from the unit. Hold down the RECORD button. Apply power to the unit while holding this button down. Continue to hold down the button for approximately 5 seconds, then release.

You should check the address settings of the dimmers/fixtures before proceeding with TL4016 operation.

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**RECORDING CHASES**

1. Press the "RECORD" button, the record LED will flash.
2. Press the "CHASE 1" or "CHASE 2" button to select a chase to record to.
3. Use the channel faders to set the channel(s) you want to be ON in this step to full intensity.
4. Press the "RECORD" button to save the step and move to the next step.
5. Repeat steps 3 and 4 until all desired steps are recorded (up to 23 steps).
6. Press the "CHASE 1" or "CHASE 2" button to exit from the chase record mode. \*Not required if all 23 steps have been recorded.

**CHASE PLAYBACK**

1. Press the "RATE" button 3 or more times at the desired rate to set the chase speed.
2. Press "CHASE 1" button or "CHASE 2" button to turn chases on and off.

Note: Both chases may be on at the same time. If chases have a different number of steps, complex changing patterns can be created.

**RECORDING SCENES**

1. Activate either the "CHAN 1- 16" or "CHAN 17-32" Y mode options and create the scene to be recorded by setting the faders to the desired levels.
2. Press "RECORD".
3. Press the bump button below the Y fader you wish to record the scene to.

Note: Scenes may also be recorded in the "SCENE 1-16" mode. This enables you to copy a scene to another or quickly create modified versions of scenes. Recording occurs even if BLACKOUT is on or the master fader is down.

**SCENE PLAYBACK**

1. Activate the "SCENE 1-16" Y mode option.
2. Bring up a fader on the lower row (Y fader) that has had a scene recorded to it.

Note: The "Y" cross fader must be DOWN to use the lower (Y) faders.

**QUICK START INSTRUCTIONS**

The bottom cover of the TL4016 contains brief instructions for scenes and chases. The instructions are not intended as a substitute for this manual and should be viewed as "reminders" for operators who

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are already familiar with TL4016 operation.

**MAINTENANCE AND REPAIR****TROUBLESHOOTING**

1. Check that the DMX/LMX cable is not defective.
2. To simplify troubleshooting - reset the unit to provide a known set of conditions.
3. Make sure the dimmer address switches are set to the desired channels.

**OWNER MAINTENANCE**

The best way to prolong the life of your TL4016 is to keep it dry, cool, clean and covered when not in use.

The unit exterior may be cleaned using a soft cloth dampened with a mild detergent/water mixture or a mild spray-on type cleaner. DO NOT SPRAY ANY LIQUID directly on the unit. DO NOT IMMERSER the unit in any liquid or allow liquid to get into the controls. DO NOT USE any solvent based or abrasive cleaners on the unit.

The faders are not cleanable. If you use a cleaner in them – it will remove the lubrication from the sliding surfaces. Once this happens it is not possible to re-lubricate them.

The white strips above the faders are not covered by the TL4016 warranty. If you mark on them with any permanent ink, paint etc. it is likely that you will be unable to remove the markings without damaging the strips.

There are no user serviceable parts in the unit. Service by other than Lightronics authorized agents will void your warranty.

**OPERATING AND MAINTENANCE ASSISTANCE**

Dealer and Lightronics personnel can help you with operation or maintenance problems. Please read the applicable parts of this manual before calling for assistance. If service is required - contact the dealer from whom you purchased the unit or contact Lightronics Service Dept., 509 Central Drive, Virginia Beach, VA 23454 TEL: (757) 486-3588.

**WARRANTY INFORMATION AND REGISTRATION – CLICK LINK BELOW**

[www.lightronics.com/warranty.html](http://www.lightronics.com/warranty.html)