



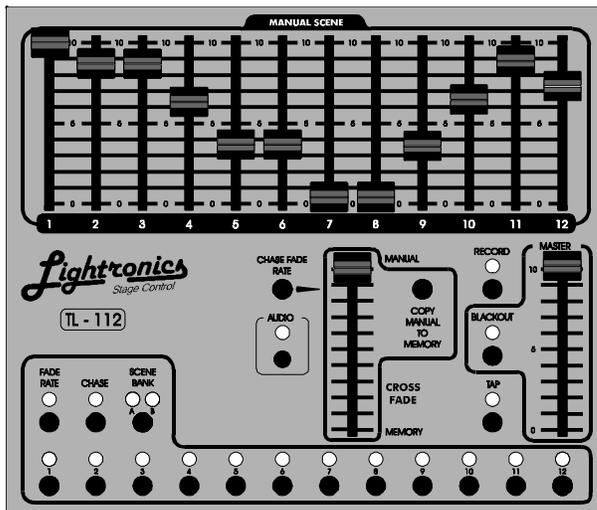
TL - 112

MEMORY CONTROL CONSOLE

OWNERS MANUAL

Version 1.0

05/12/2002



IMPORTANT: Please take time to read this manual before operating the TL-112 Control Console

DESCRIPTION

The TL-112 is a compact, portable, digital dimmer controller. It provides 12 channels of LMX (industry standard multiplex) control on a 3 wire cable. It can optionally provide DMX output. The TL-112 operates in a 2 scene manual mode or can provide 24 preset scenes organized in 2 banks of 12 scenes each. Twelve user defined chase patterns are always available. Scene fade rate, chase rate and chase fade rate are user controlled. Audio may also be used as a chase rate control. Other features of the TL - 112 include: Master fader, momentary buttons, and blackout control.

INSTALLATION

The TL - 112 control console should be kept away from moisture and direct sources of heat. The unit is intended for indoor use only.

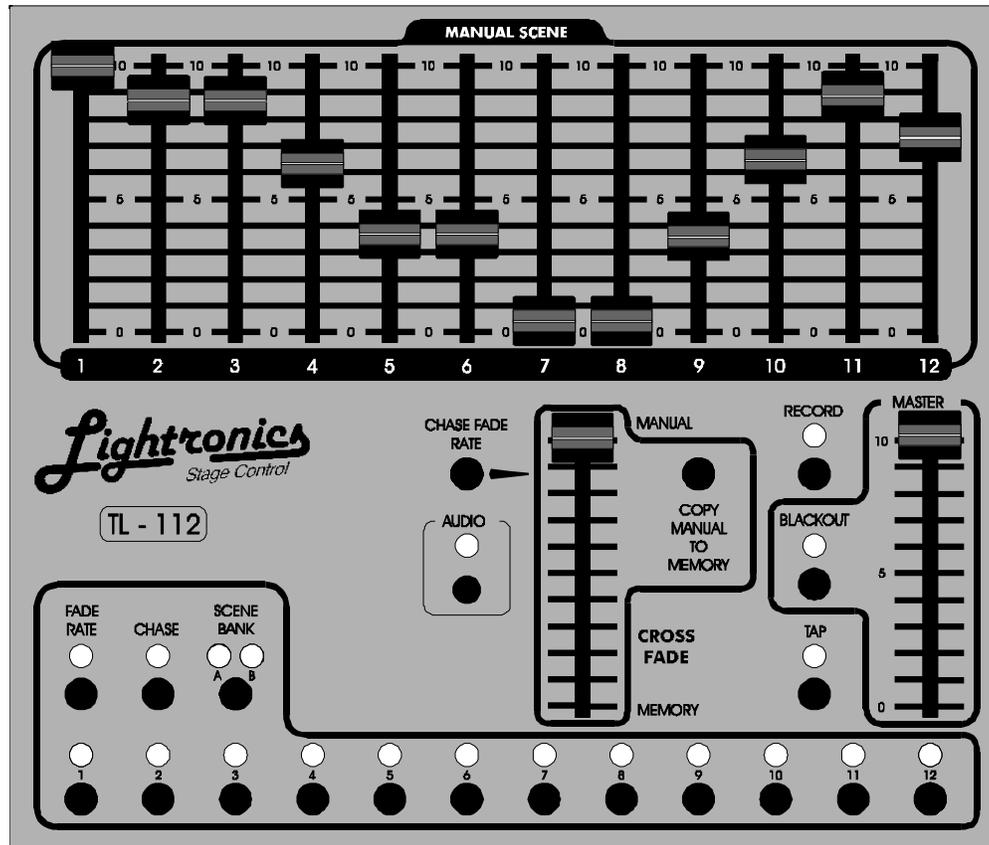
Connect the unit to a Lightronics (or compatible) dimmer using a multiplex control cable with 3 pin XLR connectors. The TL - 112 is powered by the dimmer which it is connected to. It may also be powered via an optional external power 13 VAC supply. If you are using audio for chase control - ensure that the microphone holes on the back of the unit are not covered.

You should check the address settings of the dimmers before proceeding with TL - 112 operation.

CONTROLS AND INDICATORS

MANUAL SCENE faders:	Control individual channel levels
CROSS FADER:	Controls selection of faders or stored manual scenes.
COPY MANUAL TO MEMORY	Transfers fader settings to memory.
Momentary buttons:	Activate associated channels at full intensity while pressed. Also used for chase and scene selection.
TAP button:	Press three or more times at desired rate to set chase speed
TAP indicator:	Shows the chase step rate
BLACKOUT button:	Turns on and off console output from all scenes, channels and chases
BLACKOUT indicator:	Lighted when blackout is active.
MASTER fader:	Adjusts output level of all console functions
RECORD button:	Used for recording scenes and chase patterns
RECORD Indicator:	Flashes when Chase or scene recording is active.
AUDIO control:	Adjusts chase sensitivity to internal audio microphone.
AUDIO Indicator:	Indicates that audio chase control is active.
FADE RATE button:	Enables momentary button use as fade rate selection controls.
CHASE button:	Enables momentary buttons use as chase number selection controls.
SCENE BANK button:	Toggles between scene banks A and B.
CHASE FADE RATE:	Reads the CROSS FADER setting as a chase fade rate setting.

TL - 112 FACE VIEW



OPERATING MODES

The TL - 112 has 3 basic modes of operation: (1) Two Scene Manual Mode. (2) Preset Scene Mode. (3) Chase mode.

Two Scene Manual Mode: Start by moving the "CROSS FADER" up (to the MANUAL position). The upper 12 faders will control the output channels. If you push "COPY MANUAL TO MEMORY" the fader settings will be stored by the unit. At this point you can move the "CROSS FADER" to the MEMORY position. The channel information is now being provided by the memory data which you copied from the faders. The 12 upper faders can now be moved without disturbing the output channels since the memory is now providing the channel information. Now you can set your next scene or channel settings on the upper 12 faders. When you move the "CROSS FADER" back up to the MANUAL position - the unit will again take its channel information from the faders. By proceeding this way you can always create your next scene and then fade to it with the CROSS FADER

The "COPY MANUAL TO MEMORY" function records at the end of the currently set scene fade rate. You must leave the "MANUAL SCENE" faders in a stable state for this duration or you may not record the scene correctly.

Preset Scene Mode: In this mode you can activate a series of up to 24 scenes which you have programmed or preset ahead of time. The inter-scene fade rate is controllable and you can activate the scenes in any desired order. Specific scene recording and playback instructions are given further on in this manual.

Chase Mode: In this mode a series of light patterns is automatically sent to the dimmers. Up to 12 chase patterns can be created by the operator. The chase step rate and step fade time may also be controlled. Step times may be set quite long. This will result in what appears to be an automatic slow scene progression. Specific Instructions for creating and playing chases are provided further on in this manual.

RECORDING SCENES

- 1) Adjust the MANUAL SCENE faders to the desired levels (create the scene).
- 2) Push "SCENE BANK" to toggle to the desired scene bank (A or B).
- 3) Press "RECORD".
- 4) Press the momentary button (1 -12) below the fader you wish to record the scene to.

SCENE BANK SCENE PLAYBACK

NOTE: The "CROSS FADER" must be in the MEMORY position to activate preset scenes.

- 1) Push "SCENE BANK" button to toggle to the desired (A or B) scene bank.
- 2) Push the momentary button (1-12) for the scene you want to activate.

SCENE FADE RATE

The fade rate for scenes may be set between 0 and 12 seconds and applies universally to all preset scenes. The scene fade rate may be set at anytime .

- 1) Push "FADE RATE". The FADE RATE indicator will light.
- 2) Push one of the momentary buttons (1-12) to set the rate. The left button is 1 second. The right one is 12 seconds. You can set a 0 second fade rate (instant on) by pushing the momentary button which has its indicator lighted.
- 3) Once you have selected a fade rate - push "FADE RATE". The FADE RATE indicator indicator will go out and the unit will return to normal operation.

RECORDING CHASES

- 1) Press "RECORD", the record LED will begin flashing.
- 2) Press "CHASE" to activate the momentary buttons (1-12) as chase number selectors.
- 3) Press a momentary button (1-12) to select the chase number for recording.
- 4) Create the chase step pattern (scene) for the first chase step using the MANUAL SCENE faders.
- 5) Press "RECORD" to store the created scene as the first chase step.
- 6) Repeat steps 4 and 5 for the next and following steps until all desired steps are recorded (up to 12 steps).
- 7) Press the momentary button (1-12) for the chase being programmed to end the recording process. If you record all 12 steps then Press the "CHASE" button to end the recording process.

CHASE PLAYBACK

- 1) Press the "TAP" button 3 or more times at the desired rate to set the chase speed.
- 2) Press "CHASE" to activate the momentary buttons as chase number selectors.
- 3) Press the momentary button (1-12) for the chase you want to activate. The chase will begin running.

The chase step fade time is controllable as follows: While the chase is running - move the CROSS FADER to set a fade time (Up = faster) then push "CHASE FADE RATE" to read the fader and lock in the rate.

To turn off a chase: Push "CHASE". The Chase indicator and one of the momentary indicators will be lighted. Push the momentary button associated with the indicator. The chase will stop and the indicator will go out. Push "CHASE" to deselect chase setup. The amber chase indicator will go out. The "BLACKOUT" function will inhibit chases when it is active.

AUDIO DRIVEN CHASE

Chase rate may be controlled by an internally mounted microphone. Rotate the "AUDIO" control clockwise to increase the sensitivity of the microphone. This control is disabled when turned fully counterclockwise.

MAINTENANCE AND REPAIR

TROUBLESHOOTING

Check that the multiplex cable is not defective.

To simplify troubleshooting - set the unit to provide a known set of conditions.

Make sure that the dimmer address switches are set to the desired channels.

OWNER MAINTENANCE

The best way to prolong the life of your TL - 112 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 IMMERSE 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.

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 Factory 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 their unit or contact Lightronics, Service Dept., 509 Central Drive, Virginia Beach, VA 23454 TEL: (757) 486-3588.

SPECIFICATIONS

Number of channels	12
Operating modes	Two Scene Manual Mode Preset Scene Playback Mode Chase Mode
Scene memory	24 scenes total in 2 banks of 12 scenes each.
Chase	12 programmable 12 step chases
Control protocol	Multiplexed (optional DMX-512)
Output connector	3 pin mic. XLR connector (5 pin mic. XLR for DMX-512)
Compatibility	Multiplex protocol compatible with other 3 pin multiplexed systems
Power input	18VAC or 15VDC (Optional external power supply)
Power consumption	70ma
Dimensions:	9.25" Wide X 8.5" Deep X 2.25" High
Weight:	4 Pounds