AC612 XL

120 channel houselight / architectural controller

including new functions:

- showSTORE remote control
- Daisy chain of multiple units (from software 2.2)

ELC lighting: AC 612 XL

AC 612 XL: Architectural Lighting Controller
The AC 612 XL is an extended version of the original AC612. The unit has a 512 channel merger built in, in stead of the 192 channel version in the original, and has the capability to control 120 channels. All scenes are captured from a DMX source, like a lighting desk or a focusBRAIN. The unit can store 12 scenes and has a blackout function, all with their own fade times. There is also is an output master working proportional in a range from 0% to 200%. The built in merger can operate in 4 modes: LTP, HTP, Replace or Priority.
The unit can control the ELC showSTORE in an advanced way, as a direct remote control panel.
An external power supply is needed with an output voltage ranging from +8V to +30V with 200mA output.

Applications:

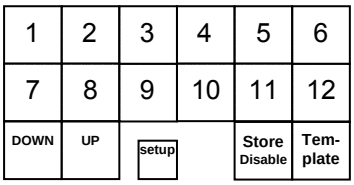
- Architectural lighting control
- Houselight control
- showSTORE controller
- many more

Installation

The AC612 XL is a hardwired lighting controller for wall mounting. Installing has to be done by a qualified technician.

Installation steps:

1) Open the AC612 XL, unscrew the 4 phillips screws on the top and bottom side.
2) Connect the power supply on the PCB connectors indicated with –PWR+. There are 2 power connections, these are for linking multiple controllers together.
3) Connect the DMX input and output, indicated with –IN+ and –OUT+.
4) Switch on the power. Press the SETUP button, small button on the bottom.
5) When the SETUP button is lit the 16 key/led indicate merger mode, startup scene, chase speed and privileges.



Wiring

The best cable to use is CAT-5 network cable, because CAT-5 has perfect electrical characteristics for transporting DMX512. Further it has 4 wire pairs, 2 can be used for power, one for DMX in and one for DMX out.

Programming the unit

Template

The unit can control up to 120 channels. These channels can be placed anywhere in the 512 DMX channels. To select these channels you need to create a template. To create the template:

- Press SETUP
- Press the template button
- Open the selected dmx channels on the control desk (min intensity 25%)
- Press SETUP

The template is created. The AC612XL now controls only these channels.

Creating scenes

12 Scenes can be created on the AC612XL, by capturing the DMX input. To create a scene:

- Press Store, the DMX from the control desk is passed thru, to view the creation of the scene
- Press the selected scene button (1-12)
- Select the fadetime for the scene, using the next table

Fadetimes

Key		Fadetime
Down	Up	
○	○	0 seconds
☼	○	1 second
○	☼	2 seconds
☼	☼	5 seconds

- Press Store

Blackout / Fadeout

The Out button is used for a fade out, to set the fadeout time:

- Press Store
- Press Out
- Select the fadetime using the previous table
- Press Store

Recalling Scenes

To recall a scene press key 1 – 12 to select the scene

Fadeout / Chase

If the chase function is set to no chase, the OUT function is used as blackout/fadeout. If the chase function is set to a chase time, the OUT button starts the chase. The chase will recall scene 1 to 12 and restart after scene 12.

Intensity Master

The DOWN / UP keys can be used to control the intensity. The master works proportional from 0% to 200%. When a scene is selected (recalled) the master is set to 100%.

- To dim the scene press and hold DOWN
- To brighten the scene press and hold UP

Startup scene (scene on power on)

Key				Function	Key				Function
1	2	3	4		1	2	3	4	
○	○	○	○	No startup scene	☼	☼	☼	○	Scene 7
☼	○	○	○	Scene 1	○	○	○	☼	Scene 8
○	☼	○	○	Scene 2	☼	○	○	☼	Scene 9
☼	☼	○	○	Scene 3	○	☼	○	☼	Scene 10
○	○	☼	○	Scene 4	☼	☼	○	☼	Scene 11
☼	○	☼	○	Scene 5	○	○	☼	☼	Scene 12
○	☼	☼	○	Scene 6	☼	○	☼	☼	Chase (if enabled)

Chase Function / speed

Key			Function (Determines the function of the OUT button)
7	8	9	
○	○	○	no chase (= blackout / fadeout)
☼	○	○	1 second step (chase function)
○	☼	○	2 seconds
☼	☼	○	5 seconds
○	○	☼	10 seconds
☼	○	☼	15 seconds
○	☼	☼	30 seconds
☼	☼	☼	60 seconds

Merger mode

Key			Function Only has effect on the controlled channels (up to 120)
10	11	12	
○	○	○	LTP (last channel changed is on the output)
☼	○	○	HTP (highest value of the channel is on the output)
○	☼	○	REPLACE (channels are replaced by the AC612XL)
☼	☼	○	PRIORITY (only outputs channels, when no dmx on the input)
-	-	☼	showSTORE control (special mode)

Fade time tables

Key		Fade time tables				
Down	Up	Table	Fadetime 1	Fadetime 2	Fadetime 3	Fadetime 4
○	○	1	0 seconds	1 second	2 seconds	5 seconds
☼	○	2	0 seconds	5 seconds	10 seconds	15 seconds
○	☼	3	1 second	10 seconds	15 seconds	20 seconds
☼	☼	4	5 seconds	10 seconds	20 seconds	30 seconds

Store Disable

If the store disable is on then it's not possible to create or modify scenes.

showSTORE control mode

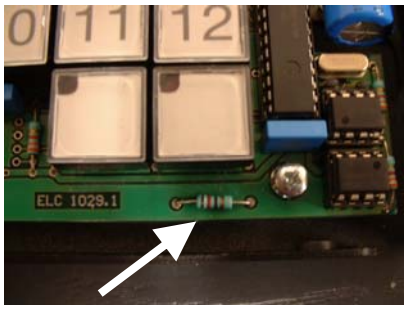
The AC612XL can control the ELC showSTORE in direct mode. The showSTORE needs software version 3.0 or higher. The 16 key of the AC621XL function like contact closure inputs (GPI) on the showSTORE. The functions they can control are for example:

- start a show
- loop a show
- select the next show
- hold / continue
- etc

The leds on keys 1 – 12 and the OUT key will display the last selected key, even when multiple units are used.

Instalation

The installation in showSTORE control mode is different from the normal DMX operation. The DMX input of the AC612XL must be connected in parallel to the DMX input of the showSTORE. Also when using multiple units the cabling must run from the showSTORE to the input of the first AC612XL, then in parallel to the next and so on. Allways IN to IN. Star wiring is NOT allowed. Also it's needed to remove the termination resistor on all AC612 units that are between the showSTORE and the LAST unit in the line.



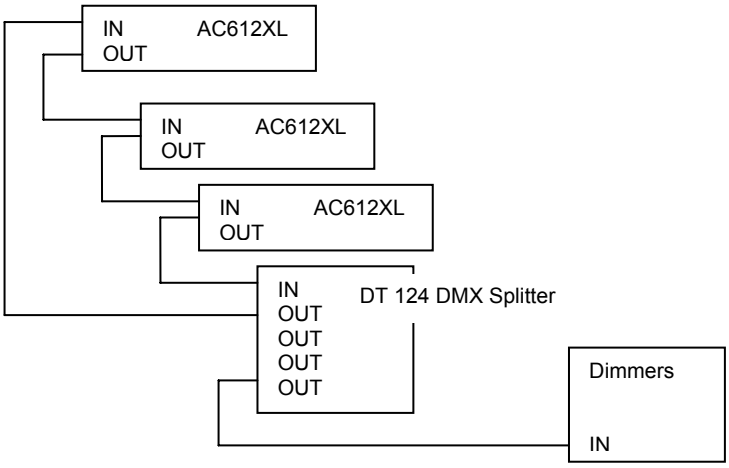
ELC: AC 612 XL

Software version 2.2

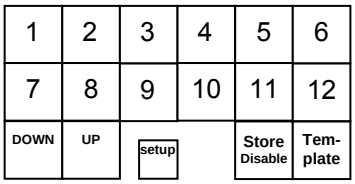
master / slave operation

To use multiple AC-612XL together, you can set them in master/slave mode.
This mode will allow slaves AC612XL to recall scenes stored in the master AC612XL.
In this case, the LED status of each unit will also follow the status of the master,

1) Connect the units as described in the following schematic overview.



2) set of the AC612XL's as a master and the other ones as slave devices.
Do this in the setup menu (press the setup key).



3) use the merger mode keys to set the master / slave mode:

Key			Function Only has effect on the controlled channels (up to 120)
10	11	12	
○	○	○	LTP (last channel changed is on the output)
☼	○	○	HTP (highest value of the channel is on the output)
○	☼	○	REPLACE (channels are replaced by the AC612XL)
☼	☼	○	PRIORITY (only outputs channels, when no dmx on the input)
○	○	☼	showSTORE control (special mode)
☼	○	☼	Slave mode
○	☼	☼	Master, with replace merge
☼	☼	☼	Master, with LTP merge

To record the template and the scenes, connect a DMX source to the input of the master.
Record the scenes like described in page 4.
After recording reconnect the input of the master into the loop.

Please note that when using master/slave mode, channel 512 of the DMX stream is used for communication between master and slaves.

General Information

CE – Product

The **AC612XL** System permits to the CE requirements set up by the European Community. This can be recognized by this label on the outside of the product.

Technical Specifications

AC612XL:

Output:	DMX 512 (1990)
Input:	DMX 512 (1990)
Signalisation:	17 Leds in buttons
Power:	8-30VDC 200mA max.
Dimensions	180x80x23 mm
Weight:	450 g

Designed and manufactured in the Netherlands by:

***ELC** lighting*

Distributed by:

Worldwide distribution:

ANIMA lighting Ltd
Stand 20
CH-1897 Bouveret
Switzerland
Tel: (+41) (0)21-967 2001
Fax: (+41) (0)21-960 4282
URL: www.elclighting.com