AS-42L
COMPACT DIMMER

IMPORTANT:
Please take a moment to read this manual
before operating the AS-42L Dimmer

DESCRIPTION

The AS-42L is a compact 4 channel light dimmer. It has a maximum capacity of 1200 Watts per channel and a maximum total load capacity of 4800 Watts. It is supplied with 2 input power cord stubs which may be connected to 2 different 120 VAC power services. The AS-42L is intended for INDOOR USE ONLY. The unit operates using the Lightronics LMX-128 multiplex protocol. The AS-42L may be operated in a relay (non-dim) mode. The unit will also function as a chaser and has several preset chase patterns which may be used.

INSTALLATION

LOCATION: Locate the unit in a well ventilated area away from moisture and heat. Two ½" holes are provided on the dimmer top cover to install a lighting bar pipe clamp and suitable safety cables.

POWER CONNECTIONS: Extending from the chassis are two 20 amp line cords for connection to 2 separate 120 VAC grounded services. Total capacity of the AS-42L is 4800 Watts.

LOAD CONNECTIONS: There are 4 numbered duplex outlets on the top of the unit. Each provides 2 connections for each of the output channels. You can connect up to 1200 Watts of lighting to each channel.

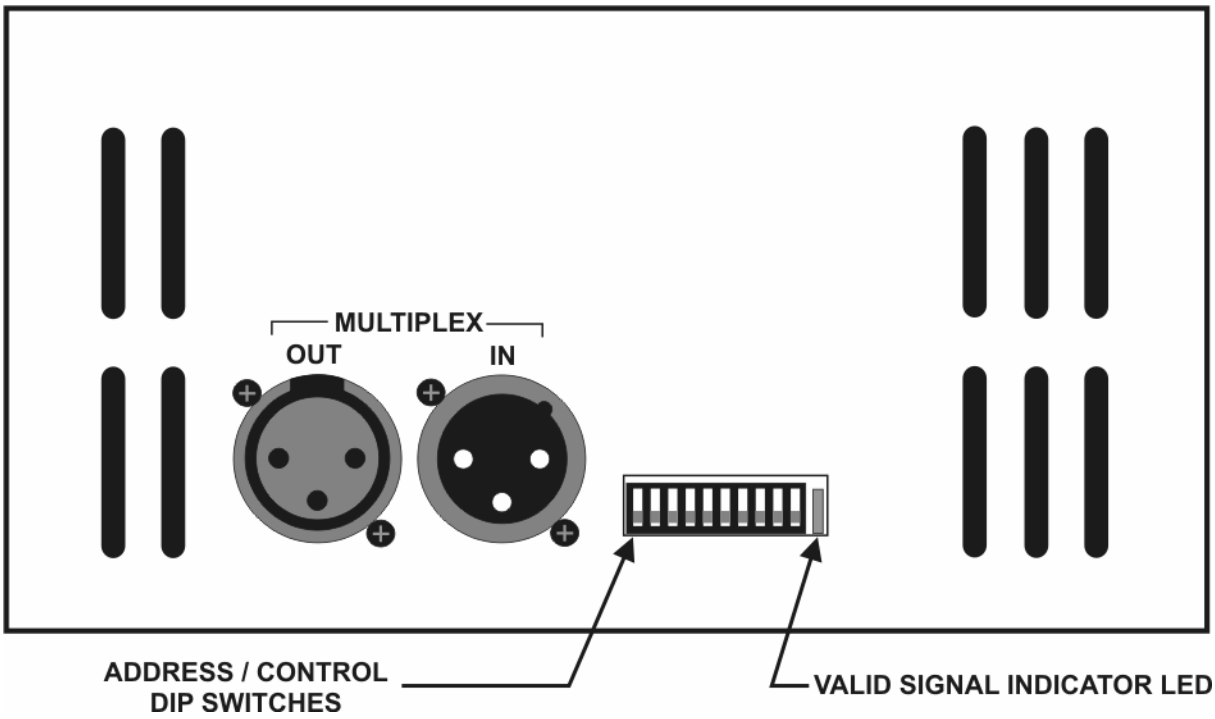
CONTROL SIGNAL CONNECTIONS:

The male three pin XLR connector on the unit end panel connects to the control console. The female connector is for connection to additional dimmers. The AS-42L dimmer is compatible with the Lightronics LMX-128 and NSI/Sunn three wire multiplexed protocol. If you have older Lightronics dimmers which run in the obsolete Lightronics mode only, contact Lightronics for information on changing the mode. When using multiple dimmers, ALL dimmers MUST be in the SAME mode.

CONTROL SIGNAL WIRING:

XLR Connector Pin #	Signal Name
1	LMX Common
2	Console Power (+15Volts DC)
3	Multiplex Signal
Applies to input and output connector	

AS-42L END VIEW



OPERATION

NORMAL MODE (Non-Chaser):

A green LED in the end panel will indicate that a valid LMX-128 control signal is applied to the unit. A DIP switch block on the end panel selects the starting channel number of the dimmer. The 7 right hand switches control this function. For example, if all switch positions are down - the dimmer will respond to channels 1-4. Raising the switch on the far right will set the dimmer to respond to channels 5-8. A complete table of channel assignments is provided in this manual. You can address up to 512 channels with multiplex control.

RELAY MODE: Pairs of channels (1/2 and/or 3/4) may be switched into the relay mode. In this mode the output of these channels will be either off or full on depending on the control console channel setting. The trip point for turn on is aprox. 50%. The 2 left hand switches on the DIP switch block control relay mode channel selection. The UP position of the switches invokes RELAY MODE.

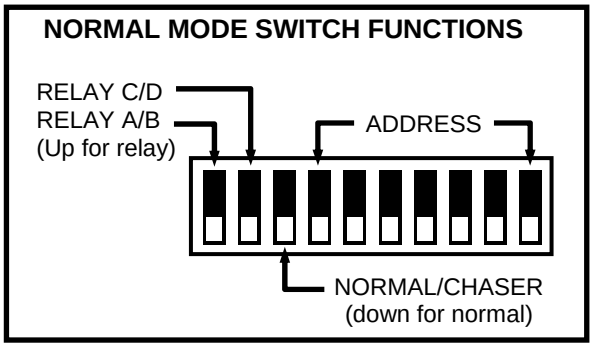
CHASER MODE:

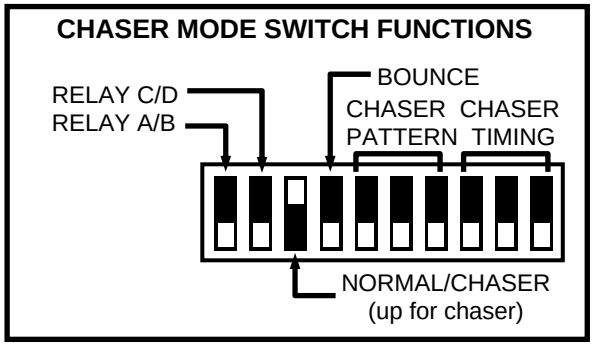
When operating in the chaser mode the AS-42L becomes independent of the control console and other dimmers. The green LED indicator is OUT when in the chaser mode. Chaser mode is turned on and off by one of the DIP switches on the end of the unit. A diagram on the unit cover shows the switch settings for controlling chaser operation.

Eight different chase patterns are available. A "bounce" condition may be imposed on several of the chase patterns by setting one of the DIP switches. The bounce condition causes the chase pattern to run in alternating directions.

The chase step time may be controlled for up to 64 seconds per step. Step fade time is proportional to the step time. If a channel is in the relay mode during chaser operation, it will “snap” on and off (zero fade time). The tables below show the details of chaser settings.

ADDRESS AND CONTROL SWITCH SETTINGS





CHASER PATTERN SELECTION

SWITCHES	PATTERN
⇩⇩⇩	4 chan. sequence
⇩⇩⇧	4 chan. build
⇩⇧⇳	4 chan. build/unbuild
⇩⇧⇧	4 chan. random

SWITCHES	PATTERN
⇧⇩⇩	3 chan. sequence +
⇧⇩⇧	3 chan. build
⇧⇧⇩	3 chan. build/unbuild
⇧⇧⇧	2 chan. alternating

CHASER TIMING SELECTION

SWITCHES	STEP TIME (Duration)
⇩⇩⇩	.5 seconds
⇩⇩⇧	1.0 seconds
⇩⇧⇳	2 seconds
⇩⇧⇧	4 seconds

SWITCHES	STEP TIME (Duration)
⇧⇩⇩	8 seconds
⇧⇩⇧	16 seconds
⇧⇧⇩	32 seconds
⇧⇧⇧	64 seconds

MAINTENANCE AND REPAIR

TROUBLESHOOTING

- Check that you have power applied to the dimmer.
- Check that all light fixtures are functional.
- Check the fuses.
- Check the control signal cable.
- Check the settings of the dimmer DIP switches.
- Check the console setup for correct patching.

REPAIR

The only user serviceable parts are externally accessible fuses. Replace fuses ONLY with 10 Amp, 250VAC, fast blow fuses. Internal service on the unit by other than Lightronics authorized agents will void the warranty. If service is required, contact the dealer from whom you purchased the dimmer, or Lightronics, Service Department, 509 Central Drive, Virginia Beach, VA 23454. Tel: 757 486 3588.

CHANNEL ASSIGNMENT SETTINGS

The DIP Switch Setting column shows the positions of the DIP switches on the dimmer. The Start Channel column shows the resulting channel assignment for the first channel of the dimmer

All Lightronics products using DIP switches for address assignments conform to this table. Some dimmers cannot be set to all 512 channels and will have fewer switches than are shown in the table. If this is the case then match the right end switches in the table to your dimmer switches. NOTE: Some control consoles can be programmed or "patched" to alter their channel order. You may get unexpected results if you are not aware of the console patch condition when you assign channels at a dimmer.

EXAMPLE: If a dimmer's DIP switches are set to ⇩⇧⇩⇧⇩⇧⇧ then the first channel of the dimmer will respond to console channel 173. The remaining dimmer channels will respond to console channels 174, 175, 176 …etc.

DIP Switch Setting	Start Channel	DIP Switch Setting	Start Channel	DIP Switch Setting	Start Channel	DIP Switch Setting	Start Channel
⇩⇩⇩⇩⇩⇩⇩	1	⇩⇧⇩⇩⇩⇩⇩	129	⇧⇩⇩⇩⇩⇩⇩	257	⇧⇧⇩⇩⇩⇩⇩	385
⇩⇩⇩⇩⇩⇩⇧	5	⇩⇧⇩⇩⇩⇩⇧	133	⇧⇩⇩⇩⇩⇩⇧	261	⇧⇧⇩⇩⇩⇩⇧	389
⇩⇩⇩⇩⇩⇧⇩	9	⇩⇧⇩⇩⇩⇧⇩	137	⇧⇩⇩⇩⇩⇧⇩	265	⇧⇧⇩⇩⇩⇧⇩	393
⇩⇩⇩⇩⇩⇧⇧	13	⇩⇧⇩⇩⇩⇧⇧	141	⇧⇩⇩⇩⇩⇧⇧	269	⇧⇧⇩⇩⇩⇧⇧	397
⇩⇩⇩⇩⇧⇩⇩	17	⇩⇧⇩⇩⇧⇩⇩	145	⇧⇩⇩⇩⇧⇩⇩	273	⇧⇧⇩⇩⇧⇩⇩	401
⇩⇩⇩⇩⇧⇩⇧	21	⇩⇧⇩⇩⇧⇩⇧	149	⇧⇩⇩⇩⇧⇩⇧	277	⇧⇧⇩⇩⇧⇩⇧	405
⇩⇩⇩⇩⇧⇧⇩	25	⇩⇧⇩⇩⇧⇧⇩	153	⇧⇩⇩⇩⇧⇧⇩	281	⇧⇧⇩⇩⇧⇧⇩	409
⇩⇩⇩⇩⇧⇧⇧	29	⇩⇧⇩⇩⇧⇧⇧	157	⇧⇩⇩⇩⇧⇧⇧	285	⇧⇧⇩⇩⇧⇧⇧	413
⇩⇩⇩⇧⇩⇩⇩	33	⇩⇧⇩⇧⇩⇩⇩	161	⇧⇩⇩⇧⇩⇩⇩	289	⇧⇧⇩⇧⇩⇩⇩	417
⇩⇩⇩⇧⇩⇩⇧	37	⇩⇧⇩⇧⇩⇩⇧	165	⇧⇩⇩⇧⇩⇩⇧	293	⇧⇧⇩⇧⇩⇩⇧	421
⇩⇩⇩⇧⇩⇧⇩	41	⇩⇧⇩⇧⇩⇧⇩	169	⇧⇩⇩⇧⇩⇧⇩	297	⇧⇧⇩⇧⇩⇧⇩	425
⇩⇩⇩⇧⇩⇧⇧	45	⇩⇧⇩⇧⇩⇧⇧	173	⇧⇩⇩⇧⇩⇧⇧	301	⇧⇧⇩⇧⇩⇧⇧	429
⇩⇩⇩⇧⇧⇩⇩	49	⇩⇧⇩⇧⇧⇩⇩	177	⇧⇩⇩⇧⇧⇩⇩	305	⇧⇧⇩⇧⇧⇩⇩	433
⇩⇩⇩⇧⇧⇩⇧	53	⇩⇧⇩⇧⇧⇩⇧	181	⇧⇩⇩⇧⇧⇩⇧	309	⇧⇧⇩⇧⇧⇩⇧	437
⇩⇩⇩⇧⇧⇧⇩	57	⇩⇧⇩⇧⇧⇧⇩	185	⇧⇩⇩⇧⇧⇧⇩	313	⇧⇧⇩⇧⇧⇧⇩	441
⇩⇩⇩⇧⇧⇧⇧	61	⇩⇧⇩⇧⇧⇧⇧	189	⇧⇩⇩⇧⇧⇧⇧	317	⇧⇧⇩⇧⇧⇧⇧	445
⇩⇩⇧⇩⇩⇩⇩	65	⇩⇧⇧⇩⇩⇩⇩	193	⇧⇩⇧⇩⇩⇩⇩	321	⇧⇧⇧⇩⇩⇩⇩	449
⇩⇩⇧⇩⇩⇩⇧	69	⇩⇧⇧⇩⇩⇩⇧	197	⇧⇩⇧⇩⇩⇩⇧	325	⇧⇧⇧⇩⇩⇩⇧	453
⇩⇩⇧⇩⇩⇧⇩	73	⇩⇧⇧⇩⇩⇧⇩	201	⇧⇩⇧⇩⇩⇧⇩	329	⇧⇧⇧⇩⇩⇧⇩	457
⇩⇩⇧⇩⇩⇧⇧	77	⇩⇧⇧⇩⇩⇧⇧	205	⇧⇩⇧⇩⇩⇧⇧	333	⇧⇧⇧⇩⇩⇧⇧	461
⇩⇩⇧⇩⇧⇩⇩	81	⇩⇧⇧⇩⇧⇩⇩	209	⇧⇩⇧⇩⇧⇩⇩	337	⇧⇧⇧⇩⇧⇩⇩	465
⇩⇩⇧⇩⇧⇩⇧	85	⇩⇧⇧⇩⇧⇩⇧	213	⇧⇩⇧⇩⇧⇩⇧	341	⇧⇧⇧⇩⇧⇩⇧	469
⇩⇩⇧⇩⇧⇧⇩	89	⇩⇧⇧⇩⇧⇧⇩	217	⇧⇩⇧⇩⇧⇧⇩	345	⇧⇧⇧⇩⇧⇧⇩	473
⇩⇩⇧⇩⇧⇧⇧	93	⇩⇧⇧⇩⇧⇧⇧	221	⇧⇩⇧⇩⇧⇧⇧	349	⇧⇧⇧⇩⇧⇧⇧	477
⇩⇩⇧⇧⇩⇩⇩	97	⇩⇧⇧⇧⇩⇩⇩	225	⇧⇩⇧⇧⇩⇩⇩	353	⇧⇧⇧⇧⇩⇩⇩	481
⇩⇩⇧⇧⇩⇩⇧	101	⇩⇧⇧⇧⇩⇩⇧	229	⇧⇩⇧⇧⇩⇩⇧	357	⇧⇧⇧⇧⇩⇩⇧	485
⇩⇩⇧⇧⇩⇧⇩	105	⇩⇧⇧⇧⇩⇧⇩	233	⇧⇩⇧⇧⇩⇧⇩	361	⇧⇧⇧⇧⇩⇧⇩	489
⇩⇩⇧⇧⇩⇧⇧	109	⇩⇧⇧⇧⇩⇧⇧	237	⇧⇩⇧⇧⇩⇧⇧	365	⇧⇧⇧⇧⇩⇧⇧	493
⇩⇩⇧⇧⇧⇩⇩	113	⇩⇧⇧⇧⇧⇩⇩	241	⇧⇩⇧⇧⇧⇩⇩	369	⇧⇧⇧⇧⇧⇩⇩	497
⇩⇩⇧⇧⇧⇩⇧	117	⇩⇧⇧⇧⇧⇩⇧	245	⇧⇩⇧⇧⇧⇩⇧	373	⇧⇧⇧⇧⇧⇩⇧	501
⇩⇩⇧⇧⇧⇧⇩	121	⇩⇧⇧⇧⇧⇧⇩	249	⇧⇩⇧⇧⇧⇧⇩	377	⇧⇧⇧⇧⇧⇧⇩	505
⇩⇩⇧⇧⇧⇧⇧	125	⇩⇧⇧⇧⇧⇧⇧	253	⇧⇩⇧⇧⇧⇧⇧	381	⇧⇧⇧⇧⇧⇧⇧	509

WARRANTY

All Lightronics products are warranted for a period of TWO/FIVE YEARS from the date of purchase against defects in materials and workmanship.

This warranty is subject to the following restrictions and conditions:

A) If service is required, you may be asked to provide proof of purchase from an authorized Lightronics dealer.

B) The FIVE YEAR WARRANTY is only valid if the warranty card is returned to Lightronics accompanied with a copy of the original receipt of purchase within 30 DAYS of the purchase date, if not then the TWO YEAR WARRANTY applies. Warranty is valid only for the original purchaser of the unit.

C) This warranty does not apply to damage resulting from abuse, misuse, accidents, shipping, and repairs or modifications by anyone other than an authorized Lightronics service representative.

D) This warranty is void if the serial number is removed, altered or defaced.

E) This warranty does not cover loss or damage, direct or indirect arising from the use or inability to use this product.

F) Lightronics reserves the right to make any changes, modifications, or updates as deemed appropriate by Lightronics to products returned for service. Such changes may be made without prior notification to the user and without incurring any responsibility or liability for modifications or changes to equipment previously supplied. Lightronics is not responsible for supplying new equipment in accordance with any earlier specifications.

G) This warranty is the only warranty either expressed, implied, or statutory, upon which the equipment is purchased. No representatives, dealers or any of their agents are authorized to make any warranties, guarantees, or representations other than expressly stated herein.

H) This warranty does not cover the cost of shipping products to or from Lightronics for service.

I) Lightronics Inc. reserves the right to make changes as deemed necessary to this warranty without prior notification.