OWNERS MANUAL

AS-62D
COMPACT DMX DIMMER

IMPORTANT:
Please take a moment to read this manual before operating the AS-62D Dimmer

DESCRIPTION

The AS-62D is a compact 4 channel light dimmer. It has a maximum capacity of 1200 Watts per channel and 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 phases. The AS-62D is intended for INDOOR USE ONLY. The unit operates using the USITT DMX-512 protocol or an industry standard three wire multiplex protocol. The AS-62D 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 a suitable safety cable.

POWER CONNECTIONS: Extending from the chassis are two 20 amp line cords for connection to 2 separate 120 VAC, 20 Amp, grounded services in any phase combination. Total capacity of the AS-62D is 4800 Watts.

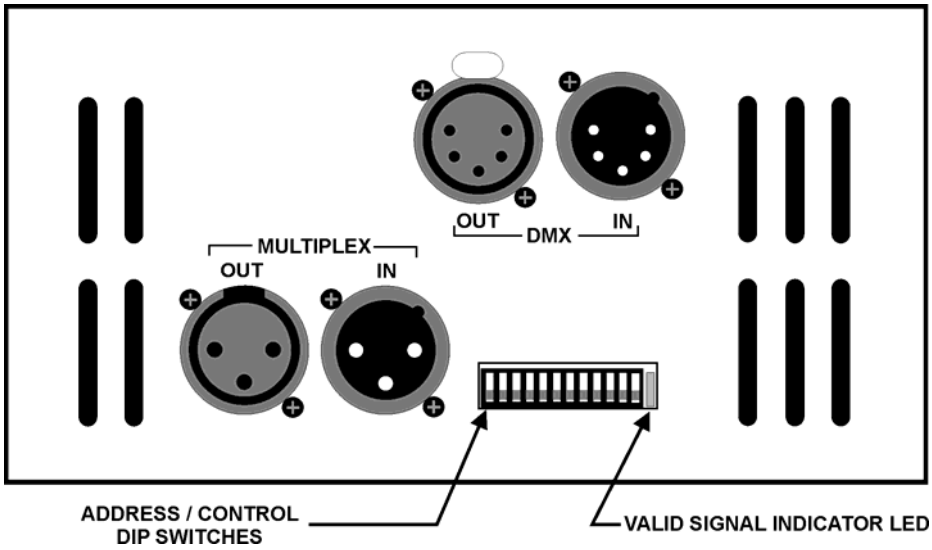
LOAD CONNECTIONS: There are 6 numbered duplex outlets on the top of the unit. Each provides 2 connections for one of the output channels. You can connect up to 1200 Watts of lighting to a single channel. The total load capacity of the AS-62D channels 1, 3, and 5 combined is limited to 2400 Watts. The total load capacity of the AS-62D channels 2, 4, and 6 combined is also limited to 2400 Watts.

CONTROL SIGNAL CONNECTIONS

FOR MULTIPLEX OPERATION: 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-62D dimmer is compatible with the Lightronics 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.

FOR DMX-512 OPERATION: The male five pin XLR connector on the unit end panel connects to the control console. The female connector is for connection to additional dimmers. The AS-62D dimmer is compatible with the USITT DMX-512 protocol. If both multiplex and DMX signals are available to the unit - it will automatically lock on to the DMX signal. Note that the DMX standard does not provide for console power via the dimmer chain. Therefore the DMX console used with AS-62D dimmers must be powered by other means.

AS-62D END VIEW



CONTROL SIGNAL WIRING

Connector Pin #	1	2	3	4	5
LMX-128 (multiplex)	LMX Common	Console Power	Multiplex Signal	Not Used	Not Used
DMX-512	DMX Common	DMX Data -	DMX Data +	Not Used	Not Used

OPERATION

NORMAL MODE (non-chaser)

A green LED in the end panel will indicate that a valid control signal (DMX or multiplex) is applied to the unit. A DIP switch block on the end panel selects the starting channel number of the dimmer. The 8 right hand switches control this function. For example, if all switch positions are down - the dimmer will respond to channels 1-6. Moving the switch position on the far right up will set the dimmer to respond to channels 3-8. A complete table of channel assignments is provided in this manual.

RELAY MODE

Pairs of channels (1/2 and/or 3/4 and/or 5/6) 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 3 left hand switches on the DIP switch block control relay mode channel selection.

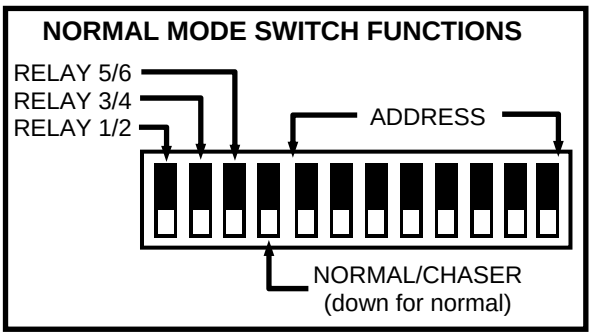
CHASER MODE

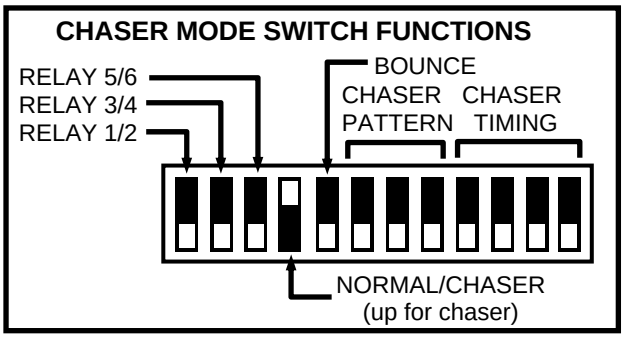
When operating in the chaser mode the AS-62D becomes independent of the control console and other dimmers. The green LED indicator is OFF when in the chaser mode. Chaser mode is turned on and off by one of the DIP switches on the end of the unit. A diagram on the unit cover shows the switch settings for controlling chaser operation.

Eight different chaser 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 128 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 following tables show the details of chaser settings.

ADDRESS AND CONTROL SWITCH SETTINGS





CHASER PATTERN SELECTION

SWITCHES	PATTERN
⇩⇩⇩	6 chan. sequence
⇩⇩⇧	6 chan. build
⇩⇧⇩	6 chan. build/unbuild
⇩⇧⇧	6 chan. random

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

CHASER TIMING SELECTION

SWITCHES	STEP TIME
⇩⇩⇩⇩	0.5 seconds
⇩⇩⇩⇧	1.0 seconds
⇩⇩⇧⇩	2 seconds
⇩⇩⇧⇧	4 seconds
⇩⇧⇩⇩	6 seconds
⇩⇧⇩⇧	8 seconds

SWITCHES	STEP TIME
⇩⇧⇧⇩	12 seconds
⇩⇧⇧⇧	16 seconds
⇧⇩⇩⇩	24 seconds
⇧⇩⇩⇧	32 seconds
⇧⇩⇧⇩	40 seconds
⇧⇩⇧⇧	48 seconds

SWITCHES	STEP TIME
⇧⇧⇩⇩	56 seconds
⇧⇧⇩⇧	64 seconds
⇧⇧⇧⇩	96 seconds
⇧⇧⇧⇧	128 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 multiplex and/or DMX 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 AS-62 dimmer. The Start Channel column shows the resulting channel assignment for channel 1of the dimmer. The remaining dimmer channels will automatically be assigned the next 5 consectutive control channels.

EXAMPLE: If the dimmer's DIP switches are set to ⇩⇩◖⇩◖⇩◖◖ then the first channel of the dimmer will respond to console channel 87. The remaining dimmer channels will respond to console channels 88, 89, 90, …etc.

DIP Switch # and Setting	Start Channel	DIP Switch # and Setting	Start Channel	DIP Switch # and Setting	Start Channel	DIP Switch # and Setting	Start Channel
5 6 7 8 9 10 11 12		5 6 7 8 9 10 11 12		5 6 7 8 9 10 11 12		5 6 7 8 9 10 11 12	
⇩⇩⇩⇩⇩⇩⇩⇩	1	⇩⇩◖⇩⇩⇩⇩⇩	65	⇩◖⇩⇩⇩⇩⇩⇩	129	⇩◖◖⇩⇩⇩⇩⇩	193
⇩⇩⇩⇩⇩⇩⇩◖	3	⇩⇩◖⇩⇩⇩⇩◖	67	⇩◖⇩⇩⇩⇩⇩◖	131	⇩◖◖⇩⇩⇩⇩◖	195
⇩⇩⇩⇩⇩⇩◖⇩	5	⇩⇩◖⇩⇩⇩◖⇩	69	⇩◖⇩⇩⇩⇩◖⇩	133	⇩◖◖⇩⇩⇩◖⇩	197
⇩⇩⇩⇩⇩⇩◖◖	7	⇩⇩◖⇩⇩⇩◖◖	71	⇩◖⇩⇩⇩⇩◖◖	135	⇩◖◖⇩⇩⇩◖◖	199
⇩⇩⇩⇩⇩◖⇩⇩	9	⇩⇩◖⇩⇩◖⇩⇩	73	⇩◖⇩⇩⇩◖⇩⇩	137	⇩◖◖⇩⇩◖⇩⇩	201
⇩⇩⇩⇩⇩◖⇩◖	11	⇩⇩◖⇩⇩◖⇩◖	75	⇩◖⇩⇩⇩◖⇩◖	139	⇩◖◖⇩⇩◖⇩◖	203
⇩⇩⇩⇩⇩◖◖⇩	13	⇩⇩◖⇩⇩◖◖⇩	77	⇩◖⇩⇩⇩◖◖⇩	141	⇩◖◖⇩⇩◖◖⇩	205
⇩⇩⇩⇩⇩◖◖◖	15	⇩⇩◖⇩⇩◖◖◖	79	⇩◖⇩⇩⇩◖◖◖	143	⇩◖◖⇩⇩◖◖◖	207
⇩⇩⇩⇩◖⇩⇩⇩	17	⇩⇩◖⇩◖⇩⇩⇩	81	⇩◖⇩⇩◖⇩⇩⇩	145	⇩◖◖⇩◖⇩⇩⇩	209
⇩⇩⇩⇩◖⇩⇩◖	19	⇩⇩◖⇩◖⇩⇩◖	83	⇩◖⇩⇩◖⇩⇩◖	147	⇩◖◖⇩◖⇩⇩◖	211
⇩⇩⇩⇩◖⇩◖⇩	21	⇩⇩◖⇩◖⇩◖⇩	85	⇩◖⇩⇩◖⇩◖⇩	149	⇩◖◖⇩◖⇩◖⇩	213
⇩⇩⇩⇩◖⇩◖◖	23	⇩⇩◖⇩◖⇩◖◖	87	⇩◖⇩⇩◖⇩◖◖	151	⇩◖◖⇩◖⇩◖◖	215
⇩⇩⇩⇩◖◖⇩⇩	25	⇩⇩◖⇩◖◖⇩⇩	89	⇩◖⇩⇩◖◖⇩⇩	153	⇩◖◖⇩◖◖⇩⇩	217
⇩⇩⇩⇩◖◖⇩◖	27	⇩⇩◖⇩◖◖⇩◖	91	⇩◖⇩⇩◖◖⇩◖	155	⇩◖◖⇩◖◖⇩◖	219
⇩⇩⇩⇩◖◖◖⇩	29	⇩⇩◖⇩◖◖◖⇩	93	⇩◖⇩⇩◖◖◖⇩	157	⇩◖◖⇩◖◖◖⇩	221
⇩⇩⇩⇩◖◖◖◖	31	⇩⇩◖⇩◖◖◖◖	95	⇩◖⇩⇩◖◖◖◖	159	⇩◖◖⇩◖◖◖◖	223
⇩⇩⇩◖⇩⇩⇩⇩	33	⇩⇩◖◖⇩⇩⇩⇩	97	⇩◖⇩◖⇩⇩⇩⇩	161	⇩◖◖◖⇩⇩⇩⇩	225
⇩⇩⇩◖⇩⇩⇩◖	35	⇩⇩◖◖⇩⇩⇩◖	99	⇩◖⇩◖⇩⇩⇩◖	163	⇩◖◖◖⇩⇩⇩◖	227
⇩⇩⇩◖⇩⇩◖⇩	37	⇩⇩◖◖⇩⇩◖⇩	101	⇩◖⇩◖⇩⇩◖⇩	165	⇩◖◖◖⇩⇩◖⇩	229
⇩⇩⇩◖⇩⇩◖◖	39	⇩⇩◖◖⇩⇩◖◖	103	⇩◖⇩◖⇩⇩◖◖	167	⇩◖◖◖⇩⇩◖◖	231
⇩⇩⇩◖⇩◖⇩⇩	41	⇩⇩◖◖⇩◖⇩⇩	105	⇩◖⇩◖⇩◖⇩⇩	169	⇩◖◖◖⇩◖⇩⇩	233
⇩⇩⇩◖⇩◖⇩◖	43	⇩⇩◖◖⇩◖⇩◖	107	⇩◖⇩◖⇩◖⇩◖	171	⇩◖◖◖⇩◖⇩◖	235
⇩⇩⇩◖⇩◖◖⇩	45	⇩⇩◖◖⇩◖◖⇩	109	⇩◖⇩◖⇩◖◖⇩	173	⇩◖◖◖⇩◖◖⇩	237
⇩⇩⇩◖⇩◖◖◖	47	⇩⇩◖◖⇩◖◖◖	111	⇩◖⇩◖⇩◖◖◖	175	⇩◖◖◖⇩◖◖◖	239
⇩⇩⇩◖◖⇩⇩⇩	49	⇩⇩◖◖◖⇩⇩⇩	113	⇩◖⇩◖◖⇩⇩⇩	177	⇩◖◖◖◖⇩⇩⇩	241
⇩⇩⇩◖◖⇩⇩◖	51	⇩⇩◖◖◖⇩⇩◖	115	⇩◖⇩◖◖⇩⇩◖	179	⇩◖◖◖◖⇩⇩◖	243
⇩⇩⇩◖◖⇩◖⇩	53	⇩⇩◖◖◖⇩◖⇩	117	⇩◖⇩◖◖⇩◖⇩	181	⇩◖◖◖◖⇩◖⇩	245
⇩⇩⇩◖◖⇩◖◖	55	⇩⇩◖◖◖⇩◖◖	119	⇩◖⇩◖◖⇩◖◖	183	⇩◖◖◖◖⇩◖◖	247
⇩⇩⇩◖◖◖⇩⇩	57	⇩⇩◖◖◖◖⇩⇩	121	⇩◖⇩◖◖◖⇩⇩	185	⇩◖◖◖◖◖⇩⇩	249
⇩⇩⇩◖◖◖⇩◖	59	⇩⇩◖◖◖◖⇩◖	123	⇩◖⇩◖◖◖⇩◖	187	⇩◖◖◖◖◖⇩◖	251
⇩⇩⇩◖◖◖◖⇩	61	⇩⇩◖◖◖◖◖⇩	125	⇩◖⇩◖◖◖◖⇩	189	⇩◖◖◖◖◖◖⇩	253
⇩⇩⇩◖◖◖◖◖	63	⇩⇩◖◖◖◖◖◖	127	⇩◖⇩◖◖◖◖◖	191	⇩◖◖◖◖◖◖◖	255

CHANNEL ASSIGNMENT SETTINGS (continued)

DIP Switch # and Setting 5 6 7 8 9 10 11 12	Start Channel	DIP Switch # and Setting 5 6 7 8 9 10 11 12	Start Channel	DIP Switch # and Setting 5 6 7 8 9 10 11 12	Start Channel	DIP Switch # and Setting 5 6 7 8 9 10 11 12	Start Channel
⇧⇩⇩⇩⇩⇩⇩⇩	257	⇧⇩⇧⇩⇩⇩⇩⇩	321	⇧⇧⇩⇩⇩⇩⇩⇩	385	⇧⇧⇧⇩⇩⇩⇩⇩	449
⇧⇩⇩⇩⇩⇩⇩⇧	259	⇧⇩⇧⇩⇩⇩⇩⇧	323	⇧⇧⇩⇩⇩⇩⇩⇧	387	⇧⇧⇧⇩⇩⇩⇩⇧	451
⇧⇩⇩⇩⇩⇩⇧⇩	261	⇧⇩⇧⇩⇩⇩⇧⇩	325	⇧⇧⇩⇩⇩⇩⇧⇩	389	⇧⇧⇧⇩⇩⇩⇧⇩	453
⇧⇩⇩⇩⇩⇩⇧⇧	263	⇧⇩⇧⇩⇩⇩⇧⇧	327	⇧⇧⇩⇩⇩⇩⇧⇧	391	⇧⇧⇧⇩⇩⇩⇧⇧	455
⇧⇩⇩⇩⇩⇧⇩⇩	265	⇧⇩⇧⇩⇩⇧⇩⇩	329	⇧⇧⇩⇩⇩⇧⇩⇩	393	⇧⇧⇧⇩⇩⇧⇩⇩	457
⇧⇩⇩⇩⇩⇧⇩⇧	267	⇧⇩⇧⇩⇩⇧⇩⇧	331	⇧⇧⇩⇩⇩⇧⇩⇧	395	⇧⇧⇧⇩⇩⇧⇩⇧	459
⇧⇩⇩⇩⇩⇧⇧⇩	269	⇧⇩⇧⇩⇩⇧⇧⇩	333	⇧⇧⇩⇩⇩⇧⇧⇩	397	⇧⇧⇧⇩⇩⇧⇧⇩	461
⇧⇩⇩⇩⇩⇧⇧⇧	271	⇧⇩⇧⇩⇩⇧⇧⇧	335	⇧⇧⇩⇩⇩⇧⇧⇧	399	⇧⇧⇧⇩⇩⇧⇧⇧	463
⇧⇩⇩⇩⇧⇩⇩⇩	273	⇧⇩⇧⇩⇧⇩⇩⇩	337	⇧⇧⇩⇩⇧⇩⇩⇩	401	⇧⇧⇧⇩⇧⇩⇩⇩	465
⇧⇩⇩⇩⇧⇩⇩⇧	275	⇧⇩⇧⇩⇧⇩⇩⇧	339	⇧⇧⇩⇩⇧⇩⇩⇧	403	⇧⇧⇧⇩⇧⇩⇩⇧	467
⇧⇩⇩⇩⇧⇩⇧⇩	277	⇧⇩⇧⇩⇧⇩⇧⇩	341	⇧⇧⇩⇩⇧⇩⇧⇩	405	⇧⇧⇧⇩⇧⇩⇧⇩	469
⇧⇩⇩⇩⇧⇩⇧⇧	279	⇧⇩⇧⇩⇧⇩⇧⇧	343	⇧⇧⇩⇩⇧⇩⇧⇧	407	⇧⇧⇧⇩⇧⇩⇧⇧	471
⇧⇩⇩⇩⇧⇧⇩⇩	281	⇧⇩⇧⇩⇧⇧⇩⇩	345	⇧⇧⇩⇩⇧⇧⇩⇩	409	⇧⇧⇧⇩⇧⇧⇩⇩	473
⇧⇩⇩⇩⇧⇧⇩⇧	283	⇧⇩⇧⇩⇧⇧⇩⇧	347	⇧⇧⇩⇩⇧⇧⇩⇧	411	⇧⇧⇧⇩⇧⇧⇩⇧	475
⇧⇩⇩⇩⇧⇧⇧⇩	285	⇧⇩⇧⇩⇧⇧⇧⇩	349	⇧⇧⇩⇩⇧⇧⇧⇩	413	⇧⇧⇧⇩⇧⇧⇧⇩	477
⇧⇩⇩⇩⇧⇧⇧⇧	287	⇧⇩⇧⇩⇧⇧⇧⇧	351	⇧⇧⇩⇩⇧⇧⇧⇧	415	⇧⇧⇧⇩⇧⇧⇧⇧	479
⇧⇩⇩⇧⇩⇩⇩⇩	289	⇧⇩⇧⇧⇩⇩⇩⇩	353	⇧⇧⇩⇧⇩⇩⇩⇩	417	⇧⇧⇧⇧⇩⇩⇩⇩	481
⇧⇩⇩⇧⇩⇩⇩⇧	291	⇧⇩⇧⇧⇩⇩⇩⇧	355	⇧⇧⇩⇧⇩⇩⇩⇧	419	⇧⇧⇧⇧⇩⇩⇩⇧	483
⇧⇩⇩⇧⇩⇩⇧⇩	293	⇧⇩⇧⇧⇩⇩⇧⇩	357	⇧⇧⇩⇧⇩⇩⇧⇩	421	⇧⇧⇧⇧⇩⇩⇧⇩	485
⇧⇩⇩⇧⇩⇩⇧⇧	295	⇧⇩⇧⇧⇩⇩⇧⇧	359	⇧⇧⇩⇧⇩⇩⇧⇧	423	⇧⇧⇧⇧⇩⇩⇧⇧	487
⇧⇩⇩⇧⇩⇧⇩⇩	297	⇧⇩⇧⇧⇩⇧⇩⇩	361	⇧⇧⇩⇧⇩⇧⇩⇩	425	⇧⇧⇧⇧⇩⇧⇩⇩	489
⇧⇩⇩⇧⇩⇧⇩⇧	299	⇧⇩⇧⇧⇩⇧⇩⇧	363	⇧⇧⇩⇧⇩⇧⇩⇧	427	⇧⇧⇧⇧⇩⇧⇩⇧	491
⇧⇩⇩⇧⇩⇧⇧⇩	301	⇧⇩⇧⇧⇩⇧⇧⇩	365	⇧⇧⇩⇧⇩⇧⇧⇩	429	⇧⇧⇧⇧⇩⇧⇧⇩	493
⇧⇩⇩⇧⇩⇧⇧⇧	303	⇧⇩⇧⇧⇩⇧⇧⇧	367	⇧⇧⇩⇧⇩⇧⇧⇧	431	⇧⇧⇧⇧⇩⇧⇧⇧	495
⇧⇩⇩⇧⇧⇩⇩⇩	305	⇧⇩⇧⇧⇧⇩⇩⇩	369	⇧⇧⇩⇧⇧⇩⇩⇩	433	⇧⇧⇧⇧⇧⇩⇩⇩	497
⇧⇩⇩⇧⇧⇩⇩⇧	307	⇧⇩⇧⇧⇧⇩⇩⇧	371	⇧⇧⇩⇧⇧⇩⇩⇧	435	⇧⇧⇧⇧⇧⇩⇩⇧	499
⇧⇩⇩⇧⇧⇩⇧⇩	309	⇧⇩⇧⇧⇧⇩⇧⇩	373	⇧⇧⇩⇧⇧⇩⇧⇩	437	⇧⇧⇧⇧⇧⇩⇧⇩	501
⇧⇩⇩⇧⇧⇩⇧⇧	311	⇧⇩⇧⇧⇧⇩⇧⇧	375	⇧⇧⇩⇧⇧⇩⇧⇧	439	⇧⇧⇧⇧⇧⇩⇧⇧	503
⇧⇩⇩⇧⇧⇧⇩⇩	313	⇧⇩⇧⇧⇧⇧⇩⇩	377	⇧⇧⇩⇧⇧⇧⇩⇩	441	⇧⇧⇧⇧⇧⇧⇩⇩	505
⇧⇩⇩⇧⇧⇧⇩⇧	315	⇧⇩⇧⇧⇧⇧⇩⇧	379	⇧⇧⇩⇧⇧⇧⇩⇧	443	⇧⇧⇧⇧⇧⇧⇩⇧	507
⇧⇩⇩⇧⇧⇧⇧⇩	317	⇧⇩⇧⇧⇧⇧⇧⇩	381	⇧⇧⇩⇧⇧⇧⇧⇩	445	⇧⇧⇧⇧⇧⇧⇧⇩	509
⇧⇩⇩⇧⇧⇧⇧⇧	319	⇧⇩⇧⇧⇧⇧⇧⇧	383	⇧⇧⇩⇧⇧⇧⇧⇧	447	⇧⇧⇧⇧⇧⇧⇧⇧	511

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.