

DESCRIPTION

The TX-30 is a very compact in-line translator which receives USITT DMX-512 signals and transmits the Lightronics (LMX-128) multiplex protocol. This is the industry standard multiplex protocol. The unit is powered by the dimmer chain to which it is connected or may optionally be powered by an external plug-in power supply.



CONNECTIONS

DMX input is received via a 5 pin male XLR connector. LMX output is via a 3 pin female XLR connector. A 5 pin female XLR is also provided for the DMX signal "pass thru". LED indicators display power and input signal status.



OPERATION

The TX-30 translates and sends LMX-128 automatically when power is applied and a DMX signal is present. LED indicators show the power and DMX incoming signal status.

CHANNEL ASSIGNMENT

The TX-30 translates 192 channels at a time. Eight of the DIP switches on the front of the unit are used to select the starting channel of the 192 channel block. When all switches are down, channels 1 - 192 are selected. Channel selection is incremented two channels at a time. A table of address switch settings is included at the back of this manual.

HOLD FUNCTION

DIP switch number 2 activates a "hold" function. If this switch is in the up position, channel outputs will remain at their current levels indefinitely upon loss of DMX signal.

DMX TERMINATOR

DIP switch number 1 will terminate the DMX input bus when it is in the DOWN position.

TX192 OPTION

The TX-30 may be optionally supplied to transmit the AMX-192 protocol. This model transmits both LMX and AMX simultaneously. An external power supply is included and is needed with this option. The AMX-192 output signal is transmitted from a 4 pin, male, XLR connector located at the rear of the unit.

CAUTION: Some AMX dimmer equipment uses a 4 pin MINI-DIN connector for the control signal. That connector is NOT wired the same as the 4 pin XLR connector. The following table provides the information needed to make an adapter cable.

AMX-192 CONNECTOR WIRING

Signal Name	XLR Connector Pin #	MINI-DIN Connector Pin #
Common	1	2
Clock +	2	3
AMX Signal	3	4
Clock -	4	1

EXTERNAL POWER SUPPLY INFORMATION

Input Voltage: 120VAC
Output Voltage: 13.5 VAC
Output Current: 800 Milliamps
Connector: 2.1mm female connector

The TX-30 will operate using an alternative external power supply which can provide anywhere from 13 to 24 Volts AC or DC. The supply must be rated at 600 ma. If a DC supply is used, the center pin of the connector **MUST BE THE NEGATIVE** output terminal of the supply.

MAINTENANCE AND REPAIR

TROUBLESHOOTING

- Verify the cables (a very common source of problems!).
- Ensure that all system units are powered - particularly the dimmer to which the translator is connected.
- Check address settings at dimmers, console, and translator. Check console patch configuration.

REPAIR

There are no user servicable parts in the unit. Internal service by other than Lightronics authorized agents will void the warranty. If service is required, contact the dealer from whom you purchased the unit or contact the Lightronics Service Dept..

TX - 30 PROTOCOL TRANSLATOR

ADDRESS SETTINGS TABLE

The DIP Switch Setting column shows the positions of the DIP switches on the TX-30. The Start Channel column shows the resulting DMX channel assignment for the first TX-30 LMX output channel (channel 1). The left end two DIP switches are not included in the table since they do not affect the address settings.

NOTE: Some control consoles and dimmers can be programmed or "patched" to alter their channel order. You may get unexpected results if you are not aware of the patch condition when you set the TX-30 address switches.

EXAMPLE: If the dimmer's DIP switches are set to $\downarrow\downarrow\uparrow\downarrow\uparrow\downarrow\uparrow\uparrow$: 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 Chan	DIP Switch # and Setting		Start Chan	DIP Switch # and Setting		Start Chan	DIP Switch # and Setting		Start Chan																				
3	4		5	6		7	8		9	10		3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6
$\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow$	1	65	$\downarrow\downarrow\uparrow\downarrow\downarrow\downarrow\downarrow\downarrow$	65	$\downarrow\uparrow\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow$	129	$\downarrow\uparrow\uparrow\downarrow\downarrow\downarrow\downarrow\downarrow$	193																							
$\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow\uparrow$	3	67	$\downarrow\downarrow\uparrow\downarrow\downarrow\downarrow\downarrow\uparrow$	67	$\downarrow\uparrow\downarrow\downarrow\downarrow\downarrow\downarrow\uparrow$	131	$\downarrow\uparrow\uparrow\downarrow\downarrow\downarrow\downarrow\uparrow$	195																							
$\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow\uparrow\downarrow$	5	69	$\downarrow\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\downarrow$	69	$\downarrow\uparrow\downarrow\downarrow\downarrow\downarrow\uparrow\downarrow$	133	$\downarrow\uparrow\uparrow\downarrow\downarrow\downarrow\uparrow\downarrow$	197																							
$\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow\uparrow\uparrow$	7	71	$\downarrow\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow$	71	$\downarrow\uparrow\downarrow\downarrow\downarrow\downarrow\uparrow\uparrow$	135	$\downarrow\uparrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow$	199																							
$\downarrow\downarrow\downarrow\downarrow\downarrow\uparrow\downarrow\downarrow$	9	73	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\downarrow\downarrow$	73	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\downarrow\downarrow$	137	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\downarrow\downarrow$	201																							
$\downarrow\downarrow\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow$	11	75	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\downarrow\uparrow$	75	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow$	139	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\downarrow\uparrow$	203																							
$\downarrow\downarrow\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow$	13	77	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow\downarrow$	77	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow$	141	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow\downarrow$	205																							
$\downarrow\downarrow\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow$	15	79	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow$	79	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow$	143	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow$	207																							
$\downarrow\downarrow\downarrow\downarrow\uparrow\downarrow\downarrow\downarrow$	17	81	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\downarrow\downarrow$	81	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\downarrow\downarrow$	145	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\downarrow\downarrow$	209																							
$\downarrow\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow\downarrow$	19	83	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\downarrow\uparrow$	83	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow$	147	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\downarrow\uparrow$	211																							
$\downarrow\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow\uparrow$	21	85	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow\downarrow$	85	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow$	149	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow\downarrow$	213																							
$\downarrow\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow\uparrow$	23	87	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow$	87	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow$	151	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow$	215																							
$\downarrow\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow\downarrow$	25	89	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow\downarrow$	89	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow$	153	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow\downarrow$	217																							
$\downarrow\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow\uparrow$	27	91	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow\downarrow$	91	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow$	155	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow\downarrow$	219																							
$\downarrow\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow\downarrow$	29	93	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow$	93	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow$	157	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow$	221																							
$\downarrow\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow\uparrow$	31	95	$\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow$	95	$\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow$	159	$\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow$	223																							
$\downarrow\downarrow\downarrow\uparrow\downarrow\downarrow\downarrow\downarrow$	33	97	$\downarrow\downarrow\uparrow\uparrow\downarrow\downarrow\downarrow\downarrow$	97	$\downarrow\uparrow\downarrow\uparrow\downarrow\downarrow\downarrow\downarrow$	161	$\downarrow\uparrow\uparrow\uparrow\downarrow\downarrow\downarrow\downarrow$	225																							
$\downarrow\downarrow\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow$	35	99	$\downarrow\downarrow\uparrow\uparrow\downarrow\downarrow\downarrow\uparrow$	99	$\downarrow\uparrow\downarrow\uparrow\downarrow\downarrow\downarrow\uparrow$	163	$\downarrow\uparrow\uparrow\uparrow\downarrow\downarrow\downarrow\uparrow$	227																							
$\downarrow\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\downarrow$	37	101	$\downarrow\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\downarrow$	101	$\downarrow\uparrow\downarrow\uparrow\downarrow\downarrow\uparrow\downarrow$	165	$\downarrow\uparrow\uparrow\uparrow\downarrow\downarrow\uparrow\downarrow$	229																							
$\downarrow\downarrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow$	39	103	$\downarrow\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow$	103	$\downarrow\uparrow\downarrow\uparrow\downarrow\downarrow\uparrow\uparrow$	167	$\downarrow\uparrow\uparrow\uparrow\downarrow\downarrow\uparrow\uparrow$	231																							
$\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow\downarrow\downarrow$	41	105	$\downarrow\downarrow\uparrow\uparrow\downarrow\uparrow\downarrow\downarrow$	105	$\downarrow\uparrow\downarrow\uparrow\downarrow\uparrow\downarrow\downarrow$	169	$\downarrow\uparrow\uparrow\uparrow\downarrow\uparrow\downarrow\downarrow$	233																							
$\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow\downarrow\uparrow$	43	107	$\downarrow\downarrow\uparrow\uparrow\downarrow\uparrow\downarrow\uparrow$	107	$\downarrow\uparrow\downarrow\uparrow\downarrow\uparrow\downarrow\uparrow$	171	$\downarrow\uparrow\uparrow\uparrow\downarrow\uparrow\downarrow\uparrow$	235																							
$\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow\uparrow\downarrow$	45	109	$\downarrow\downarrow\uparrow\uparrow\downarrow\uparrow\uparrow\downarrow$	109	$\downarrow\uparrow\downarrow\uparrow\downarrow\uparrow\uparrow\downarrow$	173	$\downarrow\uparrow\uparrow\uparrow\downarrow\uparrow\uparrow\downarrow$	237																							
$\downarrow\downarrow\downarrow\uparrow\downarrow\uparrow\uparrow\uparrow$	47	111	$\downarrow\downarrow\uparrow\uparrow\downarrow\uparrow\uparrow\uparrow$	111	$\downarrow\uparrow\downarrow\uparrow\downarrow\uparrow\uparrow\uparrow$	175	$\downarrow\uparrow\uparrow\uparrow\downarrow\uparrow\uparrow\uparrow$	239																							
$\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow\downarrow\downarrow$	49	113	$\downarrow\downarrow\uparrow\uparrow\uparrow\downarrow\downarrow\downarrow$	113	$\downarrow\uparrow\downarrow\uparrow\uparrow\downarrow\downarrow\downarrow$	177	$\downarrow\uparrow\uparrow\uparrow\uparrow\downarrow\downarrow\downarrow$	241																							
$\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow$	51	115	$\downarrow\downarrow\uparrow\uparrow\uparrow\downarrow\downarrow\uparrow$	115	$\downarrow\uparrow\downarrow\uparrow\uparrow\downarrow\downarrow\uparrow$	179	$\downarrow\uparrow\uparrow\uparrow\uparrow\downarrow\downarrow\uparrow$	243																							
$\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow\uparrow\downarrow$	53	117	$\downarrow\downarrow\uparrow\uparrow\uparrow\downarrow\uparrow\downarrow$	117	$\downarrow\uparrow\downarrow\uparrow\uparrow\downarrow\uparrow\downarrow$	181	$\downarrow\uparrow\uparrow\uparrow\uparrow\downarrow\uparrow\downarrow$	245																							
$\downarrow\downarrow\downarrow\uparrow\uparrow\downarrow\uparrow\uparrow$	55	119	$\downarrow\downarrow\uparrow\uparrow\uparrow\downarrow\uparrow\uparrow$	119	$\downarrow\uparrow\downarrow\uparrow\uparrow\downarrow\uparrow\uparrow$	183	$\downarrow\uparrow\uparrow\uparrow\uparrow\downarrow\uparrow\uparrow$	247																							
$\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow\downarrow\downarrow$	57	121	$\downarrow\downarrow\uparrow\uparrow\uparrow\uparrow\downarrow\downarrow$	121	$\downarrow\uparrow\downarrow\uparrow\uparrow\uparrow\downarrow\downarrow$	185	$\downarrow\uparrow\uparrow\uparrow\uparrow\uparrow\downarrow\downarrow$	249																							
$\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow\downarrow\uparrow$	59	123	$\downarrow\downarrow\uparrow\uparrow\uparrow\uparrow\downarrow\uparrow$	123	$\downarrow\uparrow\downarrow\uparrow\uparrow\uparrow\downarrow\uparrow$	187	$\downarrow\uparrow\uparrow\uparrow\uparrow\uparrow\downarrow\uparrow$	251																							
$\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow\uparrow\downarrow$	61	125	$\downarrow\downarrow\uparrow\uparrow\uparrow\uparrow\uparrow\downarrow$	125	$\downarrow\uparrow\downarrow\uparrow\uparrow\uparrow\uparrow\downarrow$	189	$\downarrow\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow\downarrow$	253																							
$\downarrow\downarrow\downarrow\uparrow\uparrow\uparrow\uparrow\uparrow$	63	127	$\downarrow\downarrow\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow$	127	$\downarrow\uparrow\downarrow\uparrow\uparrow\uparrow\uparrow\uparrow$	191	$\downarrow\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow$	255																							



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.

