XTBA DMX8 Relay PCB

XTBA

35 Fernleigh Road London N21 3AN
☎ +44 (0)208 882 0100 ▤ +44 (0)208 882 9326
e. mail dmx@xtba.co.uk   www.xtba.co.uk.

XTBA DMX8 RELAY – P3

Overview

The XTBA DMX8 Relay provides a simple and inexpensive method of interfacing DMX512 to eight relays and only requires an external transformer or PSU and XLRs. In addition (if required) the relay switch level can be set by the user (10% to 90% in 10% steps) and the relays can be changed to normally closed.

Operation

In use the red LED will be lit when power is supplied to the unit. The green data LED will light if valid data is being received and will blink if the address switches are out of range, if the start code is not zero or if the unit is in 600 test mode. If data is lost the green LED will turn off after 1 second and the relay output will be maintained, or lost dependant on the setting of the PCB switch. Both power, data are provided by a single 8 pin molex/HE14 connector.

600 Test Mode - with the hundreds address switch set to six the unit will enter the test mode. The green data LED will flash to indicate the unit is off line. The setting of the units address switch will then switch the appropriate numbered relay. The relay will close if the unit is set for normally open, or open if the unit is set for normally closed. See below:

USER SETTINGS IN POWER UP

These settings are only available on power up. Setting when the unit is powered will have no effect, but the green LED will flash to indicate an invalid address. Default is set for normally open, 50% trigger on, 48% off.

77 1-9 Mode – On power up the unit will check if the hundreds and tens address switches are set for 77, the units address switch will then set the trigger level if between 1 to 9. 1 being 10% and 9 being 90% relay trigger. Following the power up the trigger level will be stored in non volatile memory. The data LED will flash as the unit now has an invalid address, so now change the start address to the first address required in DMX.

The off trigger level is 2% lower than the setting (e.g. 50% on 48% off) This gives a 1% window and allows the DMX8 relay to operate with 'noisy' analogue faders or submasters.

770 Mode – On power up if the address switches are set to 770 the relay outputs will invert. The output mode will also be stored in non volatile memory. If the unit is powered down and powered up again with the switches still set to 770 the outputs will invert back.

If the trigger level and the output mode both need setting. Set one mode, power down, change the address switches and power up again to set the second mode.

000 Mode – On power up if the address switches are set to 000 the unit will default back to the factory settings. e.g. Normally open relays, 50% trigger level.

<u>**Technical Specifications**</u>

Protocol	DMX512 1990 / DMX512 1986
Maximum Update Rate:	44 updates/s
Switch Point	DMX 50% On, DMX 48% Off or user settable
Relay Outputs:	24V DC 0.5A
Hold last frame:	No - switch next to data LED, Yes - next to he14)
Power :	9 -12VAC/DC 280ma all relays on

The regulator must be mounted to case metal work

<u>Dimensions</u>   120mm x 74mm x 25mm

PIN	FUNCTION
1	Data Screen XLR Pin 1 next to PCB Switch
2	DMX -ve XLR Pin 2
3	DMX +ve XLR Pin 3
4	n/c
5	5V loop out
6	AC Centre Tap
7	AC Power In
8	AC Power In

For DC Supply either pin 7 or 8 can be +V Pin 6 Common.