

# XTBA SMART MERGE 2

11/07/2011

# XTBA

35 Fernleigh Road London N21 3AN

 +44 (0)208 882 0100  +44 (0)208 882 9326

E.mail [dmx@xtba.co.uk](mailto:dmx@xtba.co.uk) [www.xtba.co.uk](http://www.xtba.co.uk).

The XTBA Smart Merge 2 will multiplex two DMX512 input signals to two DMX512 outputs. Each dimmer channel from the two input signals is compared and the higher channel level will be outputted. The second DMX inputs start address may be altered by setting the offset address on the three front panel code switches.

The two DMX512 signals to be merged are connected to inputs one and two. The outputs are connected to DMX512 out 1 and 2, and to the equipment to be controlled. Input one effectively will pass the DMX data straight through the unit. Input two allows for the second input start address to be moved relative to input one.

When power is applied to the unit the green SYSTEM OK LED will flash. When valid DMX512 data is being received on input one or two the inputs yellow LED will light. If the data is not DMX512, invalid data or intermittent, the yellow LED will flash.

By use of the three code switches on the front panel it is possible to move the start address of input two. This will prove to be most useful when two control systems need to be joined together e.g. a lighting control and a moving light control. If the lighting control for example has 250 channels, by setting the address on the front panel to 251 channel one/input two will appear at 251 on the merged DMX output. Any overlapping channels will be treated as highest takes precedent e.g. the highest value will be outputted. Offset channels over the 512 output 1 limit (e.g. 512) will be outputted to DMX OUT 2.

#### OFFSET CALCULATION

If the Smart Merge2 is being used for channel shifting the offset can be calculated by subtracting the offset number from 512 and adding 2 to the result. e.g. if the offset switches are set for 413, then  $512 - 413 = 99$ , add two = 101. Therefore channel one on DMX OUT 2 will be controlled from channel 101 on DMX IN 2.

**or**

To get the required offset setting to output a channel onto DMXOUT 2, take the channel number required and subtract from 512 and then add 2. e.g. We need channel 101 on DMXIN 2 to appear as channel one on DMXOUT 2.  $512 - 101 = 411$  plus 2 = 413. So the offset address should be set for 413.

#### OFFSET ERROR

The Offset Error led will flash if channels are potentially being lost from the system e.g. if the off set switches are set above 513. Thus if input two has 512 channels and the offset is more than 513 channels will be lost.

#### POWER SUPPLY

The mains input to the transformer is via a 2A a/s fuse and the transformer may be switched to 120 volt operation via on board switch. A spare fuse is provided in the input connector block on the rack unit.

## 19" RACK MOUNTING

The rack version of the XTBA Smart Merge 2 is provided with a pair of 'ears' for fitting into a 19" rack frame. The ears are fitted to the unit by removing the two screws on either side at the front of the unit. The stick on rubber feet (used when the unit is free standing) will need to be removed from the underside of the unit.

### Technical Specifications 19" Rack, Front or Rear connectors

Dimensions	230/270mm inc.front handles x 430mm x 40mm
Weight	4.0 Kg
Power	190/250V AC Nominal 2A 240V AC
Data	DMX512 1986/1990
Pin Configuration	Pin 1 Common, Pin 2 minus data, Pin 3 plus data. Pins 4 and 5 are not connected.

### General Information

**This product may only be used for controlling dimmers and moving lights. It must not be used in DMX512 applications for stage machinery or pyrotechnics. Using the product out of these specifications will remove all responsibility from the supplier.**

### CE Declaration of conformity

XTBA declares that the following equipment meets the requirements of the EMC Directive 89/366/EEC.



WEE/FC2753ZS