

**GODDARD DESIGN COMPANY DMX512 DATA
DISTRIBUTION PRODUCTS:
SMART SPLITTER - Part number: FX SM SPLITTER**

SMART SPLITTER: The SMART SPLITTER is a single input, five output data distribution with loop through isolation and buffer amplifier designed for use with lighting/moving light controls using USITT DMX512 (1990/1986) protocol. In addition to the five buffered outputs the unit also has a data loop through so in the event of power failure data will still pass through the unit. Opto isolation is provided between the input and the five outputs. The five outputs are fully buffered. The SMART SPLITTER has an automatic termination system thus cutting out the need for termination switches, which if understood, can get switched to the wrong position causing potential data problems. The Smart Splitter is available in three formats 1U 19" Rack front or rear connectors and 'Cased' for use with a hook clamp. Both types are identical in connectors and all internal electronics. Power for the 19" rack unit is via a fused (2A a/s) Euro chassis plug and trailing socket. The case type has a fixed lead and is fused via a front panel fuse holder.

SYSTEM OPERATION

DISPLAYS: The Smart Splitter will display the following.

- ★ **MAINS ON SWITCH** will be lit when the unit is powered and switched on.
- ★ **POWER ON** via the red led. Show that the on board power supply is active.
- ★ **DATA** active via the green LED. In normal operation the data led may flash as it detects the data breaks. Slow data or long breaks will also make the data led flash. The data led tells you their is something happening on the line. It will not tell you if the data is good or indeed DMX512.
- ★ **TERMINATED** via the amber led (led not fitted on rear connector units). The Smart Splitter will normally run terminated and the led will be lit. If the LOOP THROUGH is used the unit will switch out the termination as it is no longer the last unit in the line. Thus the incoming line will always be correctly terminated.

LOOP THROUGH: The loop through XLR is hard wired e.g. un-buffered (including pins 4+5) from the input thus data will still pass through the Smart Splitter in the event of power failure.

Looped through data can also be taken from any of the five isolated outputs, gaining the isolation, but data will be lost in the event of power failure.

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

19" RACK MOUNTING: The rack version of the Smart Splitter 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.

**GODDARD DESIGN COMPANY
51 NASSAU AVE - BROOKLYN NY 11222
718 599 0170 - 718 599 0172 FAX
<http://www.goddarddesign.com>**

Technical Specifications:

Case:	19" Rack Front or Rear connectors
Dimensions:	230/265mm inc.front handles x 430mm x 32mm
Weight:	4.0 Kg
Power:	190/250V AC Nominal 2A 240V AC
Data:	DMX512 1986/1990
XLR wiring:	Pin 1 Common, Pin 2 minus data, Pin 3 plus data. Pins 4 and 5 are not connected on the buffered outputs, but are looped through on data input to data through.

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.

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

File = L:\word_p\wp6doc\lit\spec_smart_split.wpd
November 4, 2004
© GDC 2005

GODDARD DESIGN COMPANY
51 NASSAU AVE - BROOKLYN NY 11222
718 599 0170 - 718 599 0172 FAX
<http://www.goddarddesign.com>