

XTBA SMART SWITCH 2:1D

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XTBA

Unit 2 The Old Curatage
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The **XTBA Smart Switch 2:1D** is designed to give priority to two streams of DMX data allowing two DMX streams to be on line and switched over in the event of data failure on DMX input 1. If a second DMX control is not available the unit can playback a pre-recorded memory in place of DMX input 2. The Smart Switch 2:1 can be used as an on line back up or simple routing system.



Smart Switch 2:1D main features:

- Change priority so DMX 2 input has control unless 510 on DMX1 input is at full.
- Record and play back a backup memory – if DMX 2 input is not available.
- Remote backup disable – temporarily turn off the backup to turn the desk off.
- Hold last frame option if DMX2 input is not available

POWER SUPPLY

The Smart Switch 2:1D is powered from 230V AC, internally fused at 2A.

Operation

DMX data is connected to the DMX1 input, which is the main data stream and DMX2 input which is the 'backup'. DMX1 input monitors the incoming data for Break, Mab and valid words. In the event of data failure or invalid data on the DMX1 input the Smart Switch will route the output to DMX2.

The front panel LED's display the following DMX1 input good, e.g. Break, Mab and data words OK. DMX2 input good e.g. Break and Mab and data words OK. The backup LED is lit when the DMX1 input has failed due to errors or has been disconnected and the output control is switched to DMX2 input provided this is also valid.

Data on DMX OUT is an exact rebuffed copy of data in, on either DMX1 or DMX2 inputs as the unit solid state switches the data streams.

Option Switches

The Switch 2:1 D has four options as follows:

Option 1 – Enable remote switching

With switch one set down the Smart Switch can be used as a simple data router. Control of the incoming data, switched to the output is controlled by DMX Input 1 channel 510. If channel 510 is set to full on DMX one the incoming data from DMX one will be routed to the output. If DMX1 channel 510 is less than full or not connected the output will switch to the DMX2 input.

In this mode the backup led will be lit when DMX one has control.

By using this option the Smart Switch 2:1D can be used as a on line router to enable a remote control to take over from the main desk on DMX2 in by simply bringing channel 510 to full.

Note in this mode the backup if selected is ignored – see below

Option switch 2 – Hold last frame on input one

If switch two is set down if on loss of DMX input one the last received data on input one will be continuously retransmitted, if there is no DMX on input two. If DMX is received on input two the Switch 2:1 will output that DMX. If DMX two loses data the Switch 2:1 will transmit to the hold last frame data from input one.

If switch 3 backup is also set the backup will be ignored on loss of data.

Option switch 3 – playback memory on data loss. If selected this function will act as a single memory back up on DMX one input in the event of data loss.

If switch 3 is selected in the event of DMX failure on input one and no data on DMX input two the Switch 2D will hold the last frame received and continue checking the data input. If after 3 seconds there is no valid data on either input the switch will seamlessly cross fade to memory one in 5 seconds. The yellow backup LED will slowly flash to indicate the unit is running the backup playback.

If data returns to DMX one the unit will check the data for 3 seconds and if correct will seamlessly cross fade back to the DMX one input in 5 seconds. Once in the backup memory DMX two is ignored until DMX one is re-established.

Note - 'No DMX no backup'

The unit will only go to the backup memory if the unit has seen valid data on DMX input one and then lost it. The switch needs to see 3 seconds of correct

DMX before the backup system is enabled. So if the switch is turned on before the control desk is connected nothing will happen – see installation options to disable this function.

Memory Playback Lockout

If backup (switch 3) is selected normally the switch will run the backup memory on data loss - see above. However this can be overridden from the lighting control desk. If channel 512 on DMX one is set to full and all other channels are set to zero the unit will check this state and then temporarily disable the backup. When data returns the backup system is re-enabled.

Why?

This allows the desks to be turned off without entering the backup or turning off the power to the Switch 2D. So you can go and have your dinner or go home without the Switch 2D entering the backup mode. When you turn the desk back on lightly refreshed from a good sleep or a good dinner on backup is re-enabled.

Option switch 4 – record the backup memory

With the state to be recorded on the control desk on the DMX one set the record switch down.

The data led will turn off and the power led will flash. The output of the switch will be maintained showing the state of the recorded memory. Set the record switch up and the switch will exit record mode.

Installation Option

Beyond the front panel options the Switch 2D had a single installation option. Probably you may never need it – but it is there if you do.

Setting the installation option

With the power to the unit turned off set the record switch to the down position. Set the switch below down to select the option required and then power up the unit. The power and data leds will alternate quickly to show the settings have been recorded. Turn off the unit and set the four switches to where they need to be for normal operation.

The option is only available on power up.

Switch 1 – ‘No DMX no backup’

Setting switch two down will permanently turn off the ‘no DMX no backup’ function. With this function turned off when the Switch 2D is turned on with backup select switch set (switch 3) the unit will play back memory one if there is no valid data on the DMX 1 input. This might be handy to give a basic lighting state before the console is turned on.

Defaulting the unit

By setting all the four switches down and then powering up the Switch 2D the factory defaults are restored e.g. No DMX no backup.

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

CE



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