

# TESSERA XD DISTRIBUTION UNIT

Keeping your cabling simple



The Brompton Technology Tessera XD 10G data distribution unit delivers a flexible and sophisticated single box solution designed specifically for the challenges of large LED display systems.

It works seamlessly with the Tessera SX40 LED processor to provide a single box solution for data distribution.

The XD comes in a rugged chassis, with two mounting options; rack ears for mounting in a 2U 19" rack, or use the holes in the chassis for attaching clamps for truss mounting.

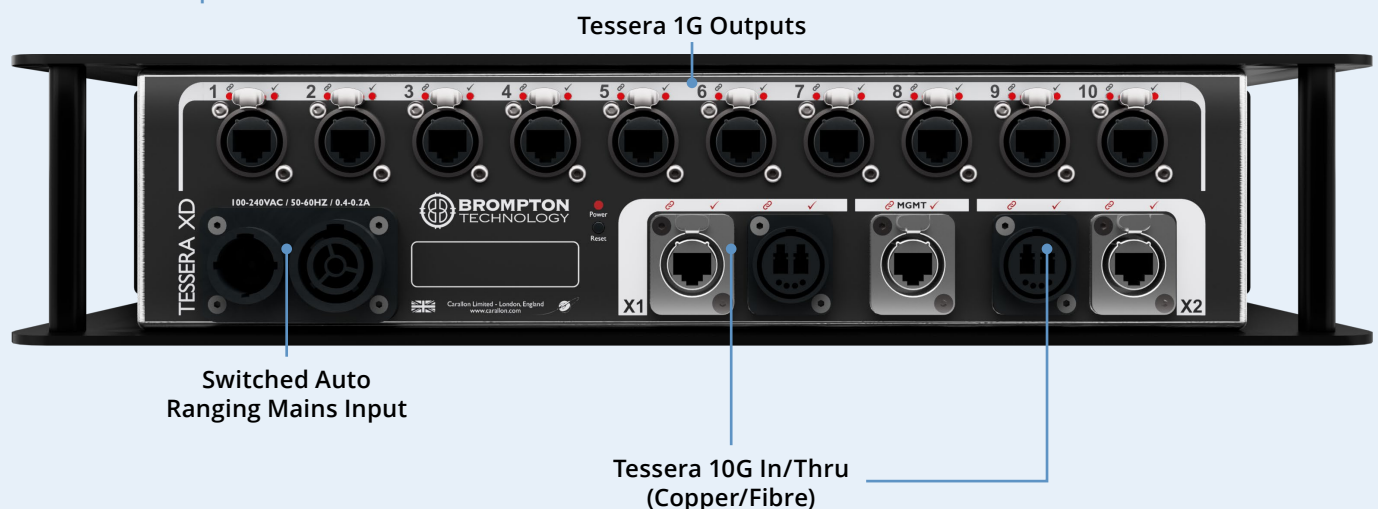
A capacitive touch LCD display provides status information for easy fault finding. This includes link quality monitoring of the 10G connections, link/status indicators for each of the 1G outputs, and the name/port of the connected processor.

Unlike typical managed Ethernet switches, the XD does not require lengthy manual configuration to get the best performance. All configuration is handled automatically by the Tessera processor, and firmware reloads can even be performed from within the Tessera software user interface.

## TESSERA XD | FRONT



## TESSERA XD | REAR



## XD AND SX40

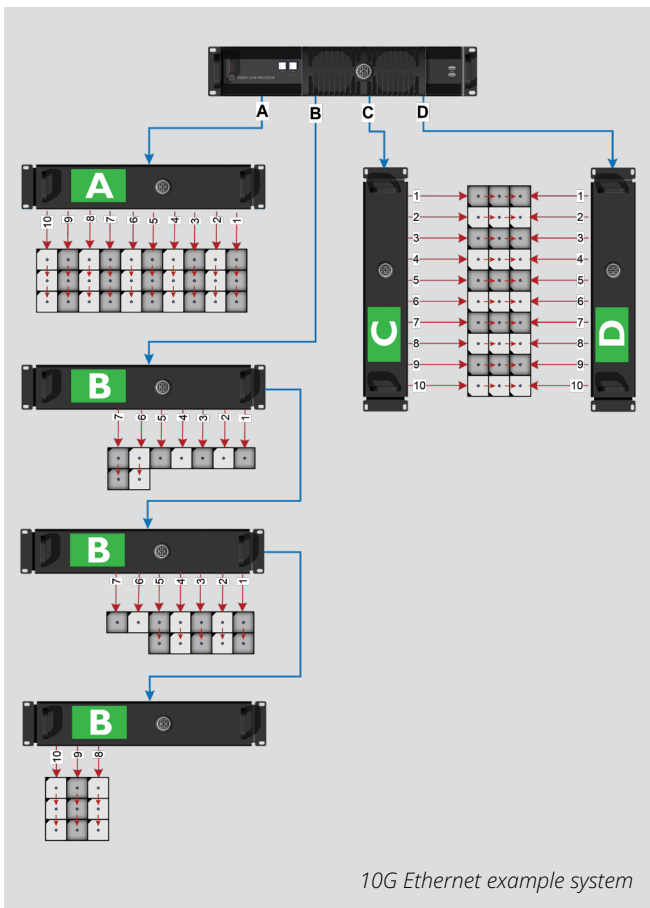


To keep cabling as simple as possible, each 10G trunk supports up to ten independent 1G connections to fixtures, each having the same pixel capacity as a 1G Tessera output, subject to the system capacity. Each is fully Gigabit Ethernet compliant, so off-the-shelf switches can also be used to further split the 1G signals.

SX40 and XD support both copper and single mode optical fibre trunk connections, and XD can be used to convert between the two media. They use ruggedised Neutrik etherCON and opticalCON DUO connectors, compatible with standard RJ45 and LC-duplex connectors respectively.

Together with the SX40 processor, XD provides a powerful toolkit for easily and cost-effectively supporting the biggest LED projects.

Trunk connections between SX40 and XD, or between XD units, use a 10G Ethernet-based backbone to reduce the number of home-run connections required. We use a proprietary multiplexing algorithm, built on top of standard 10G Ethernet, to ensure that tight timing constraints are met and all fixtures remain in sync.



Additional XD units can be daisy-chained together to extend the signal, allowing screens in different locations to be connected to a single 10G trunk. All ten 1G outputs on each XD can be used, as long as the combined pixel load on all ports of the same number does not exceed the pixel capacity of a single 1G link.

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## Full Specifications



### PHYSICAL (WxHxL)

#### Unboxed:

- 482.6mm (19") x 88.5mm (3.486") x 209.6mm (8.25")
- Rear width: 425.5mm (16.75")

#### Boxed:

- 540mm (21.26") x 350mm (13.78") x 220mm (8.66")



### WEIGHT

- Unboxed: 3.7Kg (8.16lbs)
- Boxed: 4.7Kg (10.36lbs)



### ELECTRICAL

- Switched autoranging power supply
- 100 – 240V AC
- 50Hz – 60Hz
- 0.4 – 0.2A
- PowerCON TRUE1 Input and Thru: The input is auto ranging from 100-240v/50-60Hz. Rated at 5 XD Units 2A max
- PowerCON TRUE1 locking connector with through port for daisy-chaining power (16A maximum)



### INPUTS

- One 10G Tesseract Protocol copper input for connection from SX40
- Supports Neutrik etherCON Cat 6A / etherCON (CAT5e) connectors
- Compatible with standard Cat6A / Cat5e RJ45 connectors
- Requires Cat6A cable (up to 60m) or Cat5e cable (upto 30m)
- One 10G Tesseract Protocol fibre input for connection from SX40



### OUTPUTS

- 10 x 1G Tesseract Protocol output ports for connection to fixtures
- Neutrik etherCON connectors, compatible with standard RJ45
- Each 1G output is capable of 525K pixels at 8bpc, 60Hz
- Pixel capacity per 1G port scales according to selected bit depth and framerate



### FRONT PANEL

- Capacitive touch LCD display



### WARRANTY

- Two years

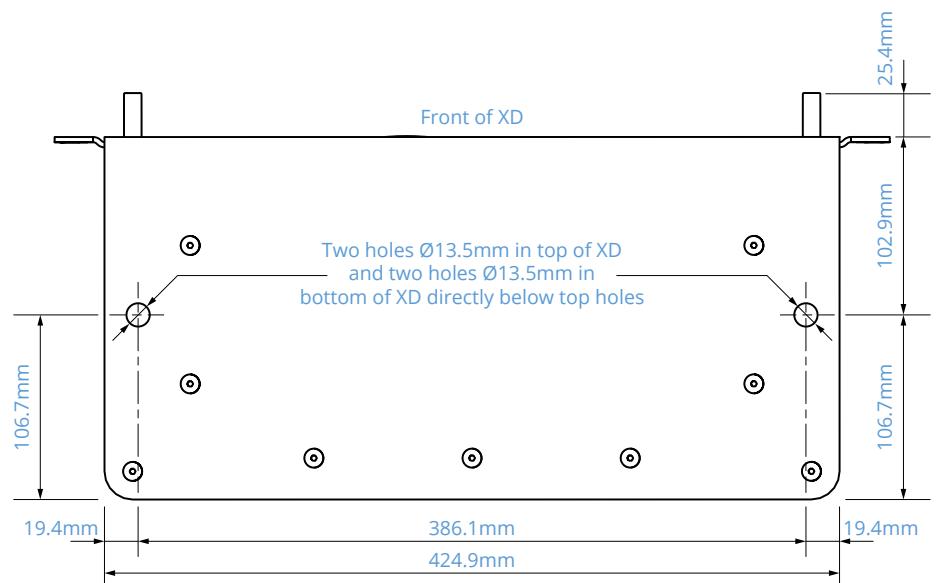


### CERTIFICATIONS

- CE, ETL/cETL
- TAA
- NDAA

## Details of XD Mounting Holes

The Tesseract XD features two 13.5mm holes on the top and two 13.5mm holes on the bottom for M12 bolts for use with half-couplers (cheeseborroughs) for mounting on truss and scaffold pipes.



Top view of Tesseract XD highlighting the location of 13.5mm holes

Brompton Technology is the market leader in LED video processing for the most demanding applications across key sectors including Virtual Production & ICFVFX, Live Events & Touring, Corporate & Education, Broadcast & Studio and Esports. The company has won multiple awards and become a globally respected brand, known for the quality and reliability of its products and exceptional technical support. For more information, visit [www.bromptontech.com](http://www.bromptontech.com).