



# 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.

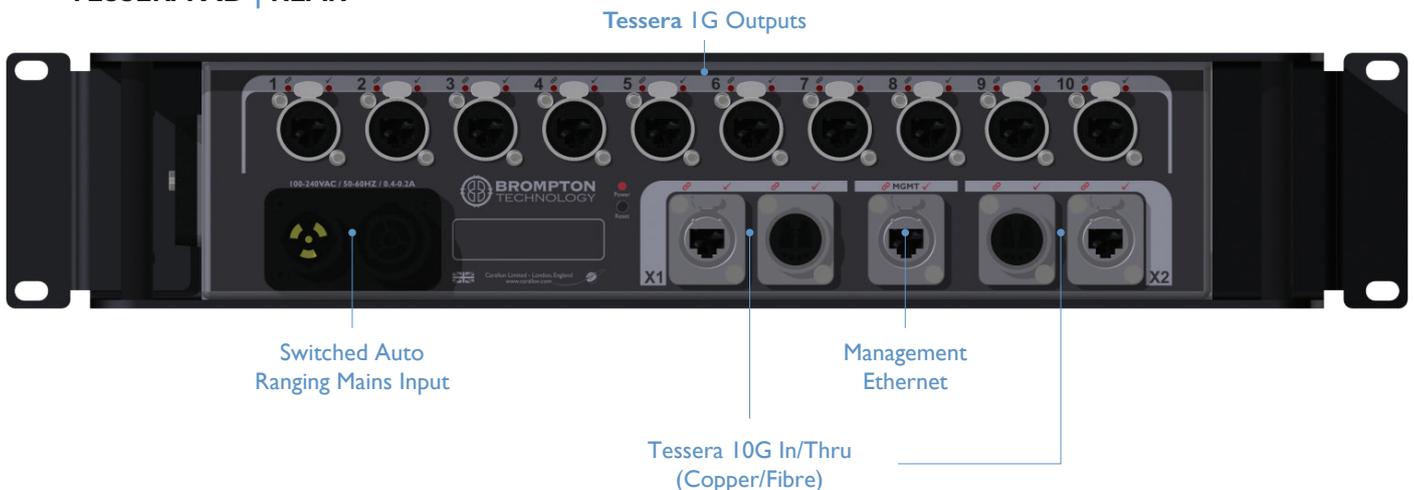
A capacitive touch LCD display provides status information for easy fault finding. This includes link quality monitoring of the 10G connections, link/status indicators for each of the 1G outputs, and the name/port of the connected processor.

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

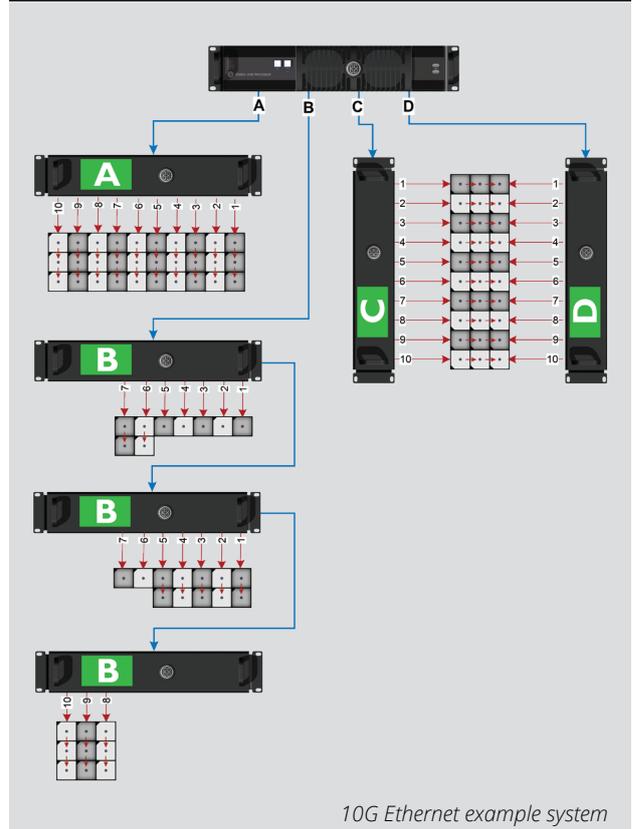
Together with the **SX40** processor, **XD** provides a powerful toolkit for easily and cost-effectively supporting the biggest LED projects.

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.

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.

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 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
- Supports Neutrik opticalCON DUO / DUO ARMORED / DUO X-TREME / DUO LITE connectors
- Compatible with standard LC-Duplex connectors
- Requires 1310nm, 9/125um single-mode fibre (up to 2KM) with PC or UPC connectors
  
- 10G Tesseract Protocol thru for daisy-chaining of up to five additional XDs with shared bandwidth
  
- Auto-switching between fibre and copper
- Thru port auto-switches independently from input



### 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

Brompton Technology is the market leader in LED video processing for live events, film and television. Its Tesseract system sets the standard for the industry and is used on everything from huge global world tours to pioneering virtual production and XR studios. Based in London, the brand is known worldwide and respected for the quality and reliability of its products and its exceptional technical support. More information can be found at [www.bromptontech.com](http://www.bromptontech.com).