BROMPTON TECHNOLOGY

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**.

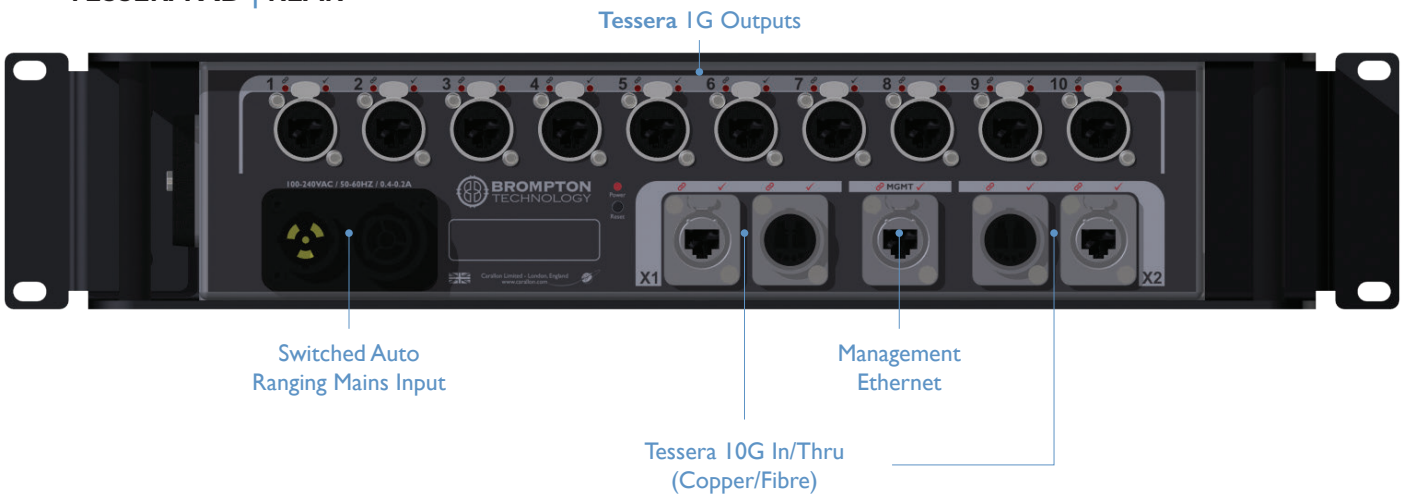
The **XD** comes in a rugged chassis, with two mounting options; rack ears for mounting in a 2U 19" rack, or use the holes in the chassis for attaching clamps for truss mounting.

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.

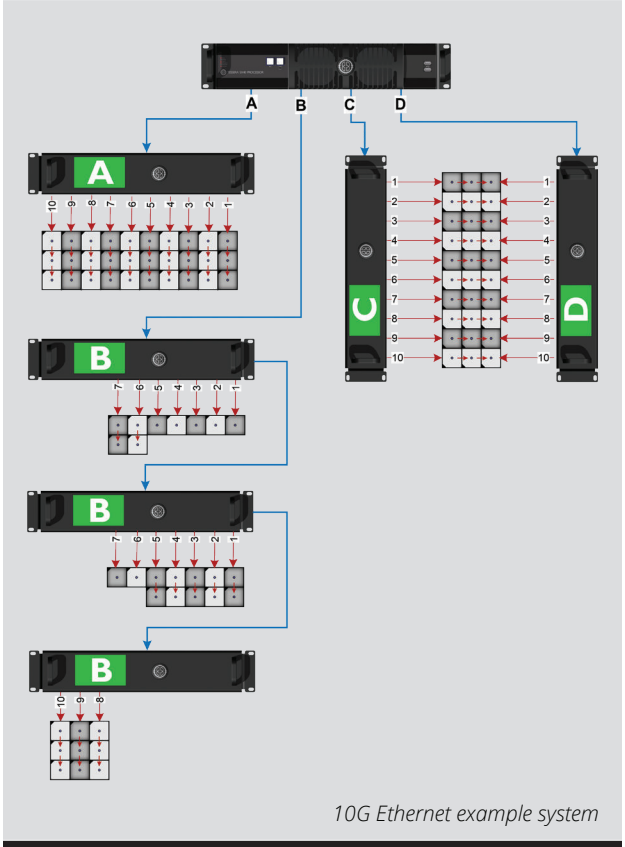
Trunk connections between **SX40** and **XD**, or between **XD** units, use a 10G Ethernet-based backbone to reduce the number of home-run connections required. We use a proprietary multiplexing algorithm, built on top of standard 10G Ethernet, to ensure that tight timing constraints are met and all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

XD and SX40



10G Ethernet example system

Back ISO

TESSERA XD DISTRIBUTION UNIT

Full Specifications

PHYSICAL (WxHxL)
Unboxed:
- 431.8mm (17") x 88.5mm (3.486") x 209.6mm (8.25")

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 Tessera 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 Tessera 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 Tessera 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 Tessera 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

Established in 2012, Brompton Technology is part of the Carallon group of companies based in West London. It operates in the rapidly expanding LED Video display sector, and product designs come from years of industry and engineering experience, and an acute understanding of the current marketplace. This has resulted in it fast become a globally known and respected brand within this sector. More information can be found at www.bromptontech.com.

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