BROMPTON TECHNOLOGY

TESSERA M2 LED PROCESSOR

Unrivalled front-end processing

Brompton Technology's flagship HD processor, the **Tessera M2 LED processor**, offers unrivalled creative and colour management features. Perfect for rental companies, these rugged 2U rack-mount units combine power, flexibility, and performance, with outstanding fixture and front-end processing.

The **M2** has one DVI-I input, and two 3G-SDI inputs. It supports a wide range of input resolutions and formats up to 1080p60, and offers front-side processing, rotation and DMX control. The **M2** eliminates the need to use an external scaler or scan converter, reducing cost, simplifying your system, and offering lower end-to-end system latency.

The **M2** includes a range of broadcast-quality video processing, including motion-adaptive deinterlacing and clipping, as well as two parallel processing pipelines, giving you the ability to cleanly fade or snap between video sources and/or settings.

There are several powerful, flexible options for configuring fixtures within the **full HD** 1920x1080 standard canvas:

- Quick Association for a fast and easy way to associate large numbers of fixtures to a **Brompton** processor
- Pixel mapping that allows free placement and rotation of fixtures regardless of cabling order and includes mapping support for multiple 'sub-fixtures' from a single **Receiver Card**, e.g. for LED strips / small tiles, allowing each one to be independently positioned and rotated
- **Interpolated Mode** that seamlessly and automatically scales your content across all fixture types regardless of pixel pitch

TESSERA M2 | FRONT

TESSERA M2 | REAR

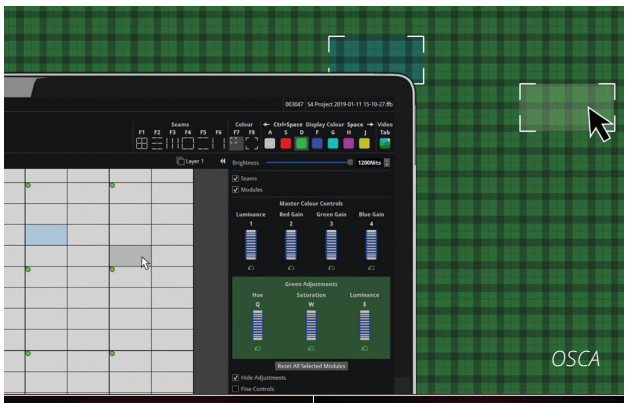
TESSERA MANAGEMENT SOFTWARE

The **M2** is configured using the intuitive and powerful **Tessera Management Software**. It has an extensive proprietary feature set, including **On Screen Colour Adjustment (OSCA)** for colour mismatch corrections, **Dark Magic** for dark-area detailing, and **Chromatune** for video colour replacement. Each input can be fully configured with adjustments to contrast, brightness, gamma, hue, saturation and RGB gain. Inputs can be scaled up or down to suit the LED panel configuration, with clean switching and fading.

Tessera Management Software gives you the option of using a remote PC (**Windows** or **Mac**) or working locally by plugging a mouse, keyboard and monitor directly into the processor.

RECEIVER CARDS

All the processors in the **Tessera** family communicate via Gigabit Ethernet with LED panels fitted with **Tessera** receiver cards. Off-the-shelf Gigabit Ethernet networking equipment and cabling can be used. **Tessera** receiver cards are designed to fit into the vast majority of panel enclosures using a widely available DDR2 SO-DIMM socket.



TESSERA M2 LED PROCESSOR

Full Specifications

PHYSICAL (WxHxL)
Unboxed:
- 482.6mm (19”) x 88.9mm (3.5”) x 508.0mm (20”)
- Rear width: 431.8mm (17”)

Boxed:
- 571.5mm (22.5”) x 215.9mm (8.5”) x 647.7 (25.5”)

WEIGHT
- Unboxed: 9Kg (20lbs)
- Boxed: 12Kg (26.5lbs)

ELECTRICAL
- Switched autoranging power supply
- 100 - 240V AC
- 47Hz - 60Hz
- 1 - 0.5A

DVI-I INPUT
- 1 x DVI-I inputs
- Up to 1920 x 1080 at 60Hz
- Support for RGB and YCbCr colour spaces
- DVI-D
- DVI-A
- VGA/RGBHV
- YPbPr
- HDMI support with suitable adapter
- No HDCP support
- With loop thru

SDI INPUTS
- Two SDI inputs with reclocked loop thrus that support the following:
  - SD-SDI - SMPTE 259M-C:
  - 576i50 4:2:2 10 bit YCbCr
  - 486i59.94 4:2:2 10 bit YCbCr
  - HD-SDI - SMPTE 292M:
  - 720p23.98/24/25/29.97/3050/59.94/60 10 bit YCbCr
  - 1080i50/59.94/60 4:2:2 10 bit YCbCr
  - 1080p23.98/24/25/29.97/30 4:2:2 10 bit YCbCr
  - 3G-SDI - SMPTE 425M-A/B:
  - 1080p50/59.94/60 Level A 4:2:2 10 bit YCbCr
  - 1080p50/59.94/60 Level B DL 4:2:2 10 bit YCbCr
- Two inputs can be used together to support Dual Link SDI - SMPTE 372M:
  - 1080p50/59.94/60 4:2:2 10 bit YCbCr

OUTPUTS
- Four 1 Gigabit Ethernet output ports each capable of a nominal 525K pixels at 8 bits per colour, 60Hz frame rate
- 10 and 12 bits per colour output supported at reduced pixel counts

GENLOCK
- Bi-level and Tri-level sync
- Sync to source
- Processors genlock from source right through to panel refresh
- Frame rates from 23.98 to 60Hz

LATENCY
- 3 frames end-to-end system latency (all features)
- 2 frames end-to-end system latency in low-latency mode (restricted features)

TESSERA MANAGEMENT SOFTWARE:
- Local management using monitor, keyboard and mouse connected directly to processor
- Monitors from 1280x1024 up to 1920x1080
- DP++ monitor output supports HDMI, DVI and VGA using a suitable adapter

TESSERA REMOTE:
- Available free for Windows PC and Mac OS
- Remote management using Windows PC or Mac connected to processor via Ethernet network
- Two Gigabit Ethernet management network ports

REMOTE CONTROL:
- Support for eDMX protocols: Art-Net, Streaming ACN
- DMX-512A on 5-pin XLR in and thru
- Tessera Control application for multi-processor control via management network ports
- IP Control

I/O
- Two USB2.0 ports on front
- Two USB2.0 ports on rear
- One DisplayPort (DP++) monitor output

FRONT PANEL
- Eight status LEDs
- Power LED

WARRANTY
- Two years

CERTIFICATIONS
- CE, ETL/cETL

Brompton Technology is the market leader in LED video processing for live events, film and television. Its Tessera 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.

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