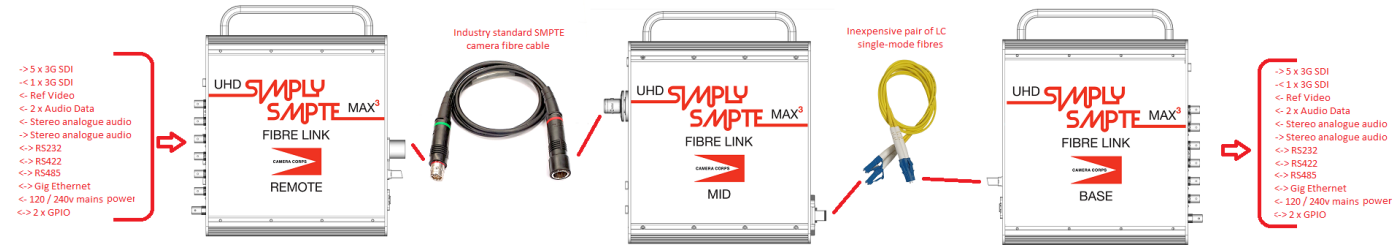
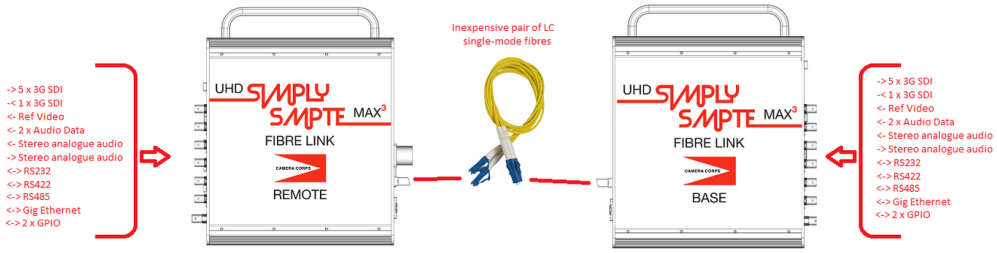
CAMERA CORPS UHD SIMPLY SMPTE MAX^3





Designed to cope with the demands of the latest UHD format cameras, the Camera Corps Simply SMPTE UHD Max^3 system allows the operation of 4K cameras & large robotic heads via a single SMPTE 311M hybrid camera cable, single mode fibre, or a combination of both.

When using SMPTE hybrid cable, the Simply SMPTE UHD Max^3 is capable of providing 70W of 12VDC power and up to 450W of AC mains to the remote system, the power is fully transformer isolated, fused & safety inter-locked. High power is only supplied to the remote following recognition of a unique digital code from the remote and constant monitoring provides instant disconnection should the cable become damaged or disconnected.

Video connectivity is provided for 5 x 3G-SDI signals from the remote to the base. One 3G-SDI video circuit from the base to the remote is provided for a return viewfinder feed, along with an analogue video circuit for providing a genlock reference to the camera.

Control data signals in every common format are provided for with links for Gigabit Ethernet, bi-directional RS422, RS485 & RS232, as well as two independent circuits for Camera Corps audio data and dual bi-directional GPI circuits for tallies or signalling.

To complete the package, a full bandwidth bi-directional stereo audio circuit is provided for talkback or audio signals.

It is possible to separate the mid unit from the base, creating a link that is part single mode fibre and part SMPTE Hybrid cable. Single mode fibre runs of 10km+ are possible, while the SMPTE hybrid cable may be up to 1km or more depending on power requirements at the remote end.

The Mid unit accepts AC mains to power the remote via the SMPTE Hybrid cable.

The system is also capable running with only single mode fibre linking the base and remote. In this case the Mid box is not required and both base and remote should be powered with external PSUs.

The remote unit will automatically switch its optical circuits to use the single mode LC duplex port instead of the SMPTE ST304 connector.

AC mains output is not available on the remote unit in this configuration, however the 12VDC outputs will be active. If these are used, care should be taken that the total power drawn does not exceed the limits of the external PSU.

Technical Specification

SDI

Configuration	5 x 3G-SDI remote to base, 1 x 3G-SDI base to remote
Standards	SMPTE 424M, SMPTE 292M, SMPTE 259M, DVB-ASI
Input Equalisation	Automatic to 100m @ 2.97 Gbps

Analogue Video (Reference)

Configuration	1 x Channel base to remote
Standards	Bi-level / Tri-Level Sync

Analogue Audio

Configuration	2 x Bi-directional stereo audio circuits
Standards	Balanced audio, 20 Hz to 20 kHz +/- 0.2 dB, Max Level +6 dBu
Latency	< 2 uS

Audio Data

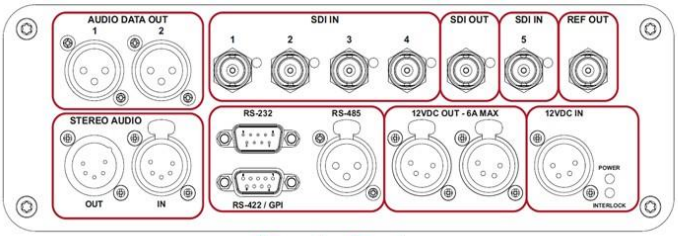
Configuration	2 x Channels base to remote
Standards	Balanced audio, Max level +18dBu

Data

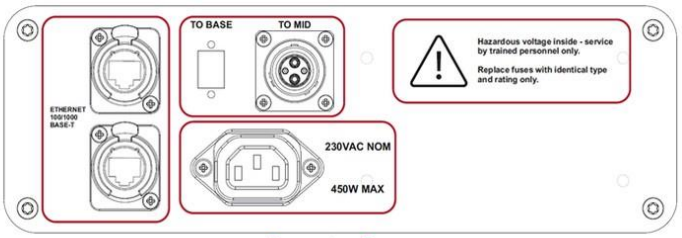
Ethernet	1 x Gigabit Ethernet (100/1000Base-T)
RS232	1 x Bi-directional (Max Data Rate 250kbps)
RS422	1 x Bi-directional (Max Data Rate 10Mbps)
RS485	1 x Bi-directional (Max Data Rate 10Mbps)
GPI Configuration	2 x Bi-directional (V_{OL} = 0.8V max 24mA, V_{OH} = 5.5V max)

Power

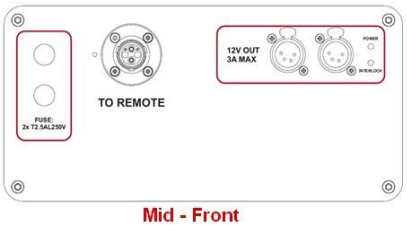
Mid AC Input	110VAC / 230VAC 50-60Hz, 600W Max
Remote AC Output	110VAC / 230VAC NOM, 450W Max
Remote DC Output	12V, 6A Max, 2x XLR4
Protection	AC sent on SMPTE hybrid cable is fully isolated, fused & safety inter-locked (AC is only enabled when the correct remote unit is connected). AC is shut off immediately if the SMPTE hybrid cable is disconnected.



Remote - Front

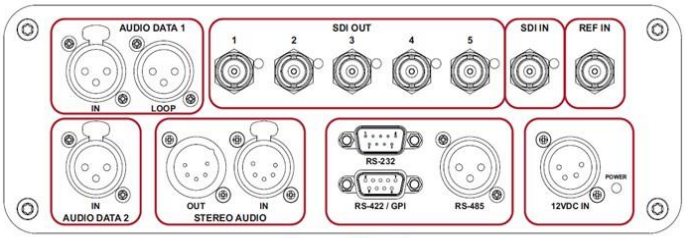


Remote - Rear

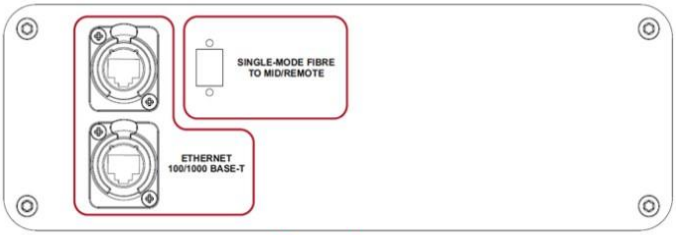


Mid - Front

Mid - Rear



Base - Front



Base - Rear