

# Synapse

# U4U100

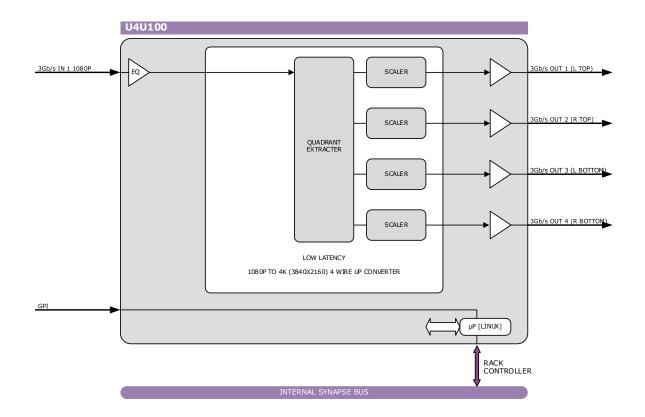
**1080p to 4K (3840x2160) Ultra HD 4 wire up converter** A Synapse<sup>®</sup> product

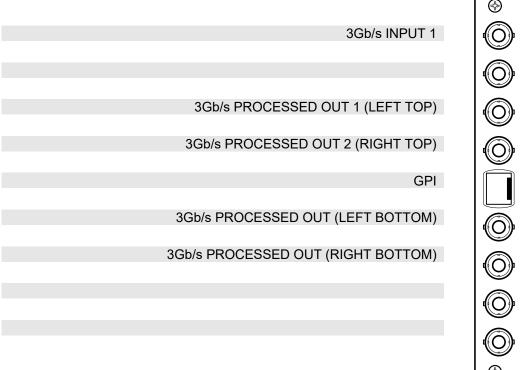






# Block schematic & I/O panel







BPH17

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#### **Features**

The U4U100 is a 1080p to 4k (4 wire) up-converter.

The low latency unit extracts four quadrants out of a 1080p (1920x1080) and scales each individual part into to 4 full 1920x1080 pictures

- One 1080p 50 or 59.94 input (level B compliant)
- 4 outputs
- Low Latency (1 1080p Frame 20ms @ 50Hz, 16.7ms @ 59.94 Hz)
- 4K 4 wire (3840 x 2160)
- Compatible with the following formats (auto selecting)
  - 1080p/59.94
  - 1080p/50
- Transparent for 16 channels of embedded audio
- The BPH17 can optionally be fitted with up to two fiber I/O modules (inputs or outputs)
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)

# **Applications**

Up conversion for 4K production sets

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# **Ordering information**

#### Module:

• U4U100: 4k (4 wire) Up converter

#### Standard I/O:

BPH17\_U4U100: I/O-panel for U4X100

### **Specifications**

#### **Serial Video Input**

Standard 3Gb/s SDI:SMPTE424/5 (Level B)

Number of Inputs 1
Connector BNC

**Equalization** Typical maximum equalized length of Belden 1694A cable: 90m at

2.97Gb/s, 120m at 1.485Gb/s,

**Return Loss** > 15dB up to 1.5GHz

#### **Serial Video Output**

Number of Outputs 4

**Connector** BNC

Signal Level800mV nominalDC Offset $0V \pm 0.5V$ Rise/Fall Time135ps nominalOvershoot< 10% of amplitude

**Return Loss** > 15dB up to 1.5GHz (typ.)

> 10dB up to 3GHz (typ.)

Wideband Jitter < 0.2UI

#### **Miscellaneous**

Weight Approx. 450g Operating Temperature  $0 \,^{\circ}\text{C}$  to +40  $^{\circ}\text{C}$ 

**Dimensions** 137 x 296 x 20 mm (HxWxD)

#### **Electrical**

Voltage +24V to +30V Power <15 Watts

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