

## BALBOX SDI / Cat 5 / SDI Interfaces



### FEATURES

#### SVC5010

- Dual channel serial video interface to Cat 5/6
- Re-clocked SDI output on each channel
- Automatic equalization on inputs
- ASI compatible

#### C5SV012

- Dual channel Cat 5/6 to serial video interface
- Two SDI outputs per channel
- ASI compatible
- Passes pathological test patterns

The *BALBOX SVC5012* and *C5SV012* are designed to be used in pairs to allow serial digital video to be sent over Cat5 and Cat6 UTP cable. This allows the structured cabling within a building to be used to provide full broadcast quality serial digital links where no provision for coaxial cables exists. Two serial digital video signals may be sent over one Cat5 or Cat6 cable.

The inputs of the serial video to Cat 5/6 converter, *SVC5012*, provide automatic cable equalisation capable of handling up to 275m of suitable coaxial cable, and a re-clocked SDI output is provided on each channel. The balanced outputs from the two channels are taken out through a single screened RJ45 socket.

The inputs of the Cat 5/6 to serial video converter, *C5SV012*, are through a single shielded RJ45 socket, and two BNC outputs are provided for each channel.

The interfaces ensure impedance matching and balancing to enable Cat 5 UTP cable to be used over lengths of up to 115 metres with no errors with pathological test signals, while maintaining low radiation. Greater distances will be achieved through the lower loss Cat 6 UTP cable.

It should be noted that the interfaces are not intended to be incorporated into a LAN, simply to enable the use of UTP cabling in place of coax.

These interfaces are also suitable in certain Outside Broadcast applications where low cost UTP cable may be more appropriate.

# SPECIFICATIONS – SVC5012 and C5SV012

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## SVC5012 – Dual Channel Serial Digital Video to Cat 5/6 Interface

### INPUT

Input signals: 144, 177, 270 Mb/s serial NRZI to SMPTE RP259M. Compatible with ASI.  
Equalisation: Automatic, up to 275m of Belden 8281 coax cable, or similar  
Impedance: 75ohm terminating on all inputs  
Connector: BNC, one per channel

### OUTPUTS

SDI Output: One re-clocked per input channel  
Impedance: 75ohm  
Connector: BNC, one per channel  
UTP Output: Balanced 144, 177, 270 Mb/s serial  
Connector: RJ45 socket for two channels  
Impedance: 100ohm, balanced

## C5SV012 – Dual Channel Cat 5/6 to Serial Digital Video Interface

### INPUT

Input signals: Balanced 144, 177, 270 Mb/s serial (compatible with *SVC5012*)  
Equalisation: Automatic, typically to 115m of Cat 5E UTP cable  
Impedance: 100ohm terminating on both channels  
Connector: RJ45 socket (one socket shared for the two channels)

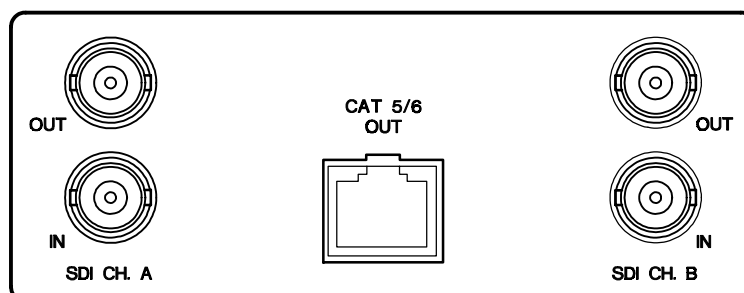
### OUTPUTS

Output: 144, 177 or 270 Mb/s serial NRZI to SMPTE RP259M  
No of Outputs: 2 per channel  
Impedance: 75ohm  
Connectors: BNC x 2

### INSTALLATION DATA

Package: Each interface is housed in a standard *BALBOX*, with four 75ohm BNC signal connectors and one RJ45 8/8 UTP socket.  
UTP pinout: Pins 1,2 of the RJ45 connector are assigned to channel A and pins 3,6 to channel B. Cross-over cables are not required when connecting an *SVC5012* to a *C5SV012*.  
Size: 184 x 103 x 42.4mm.  
Weight: 950g.  
Mains supply: 90 – 250Vac  
Consumption: <15VA

Refer to *BALBOX* data sheet for information on 1U mounting tray - **BOXRACK**



Rear Connectors

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### ORDER CODE

**SVC5012**

**C5SV012**

**BOXRACK**

### DESCRIPTION

BALBOX Dual Channel Serial Video to Cat 5/6 Converter

BALBOX Dual Channel Cat 5/6 to Serial Video Converter

Tray to hold up to 4 *BALBOXes* in 1U 19" rack.

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