Pro-Bel’s Halo family is perfect for ASI/SDI and HD/SD switching applications requiring a cost effective but reliable solution. Halo addresses a wide range of digital routing requirements with a special focus on redundancy switching in digital cable and satellite applications.

The Halo range is based on the latest switching technology to fully support HD, SDI and ASI switching. The router can either be supplied with 8 inputs and 8 outputs, 16 inputs and 16 outputs or 32 inputs and 32 outputs.

The flexibility to select different operating modes, including dual outputs, plus removable redundant power supplies mounted on the rear makes this an ideal choice for redundancy switching requirements. As an example, in dual operation one router could switch SDI into MPEG encoders and the second could switch the ASI outputs from the encoders.

Halo is more than just a standalone routing system. The editable database releases the router’s full potential, permitting the control ports to be configured as either panel ports, supporting a mixture of up to 32 control panels and under monitor display, or as remote control ports. With the editable database, Halo can be configured to provide control for up to 8 breakaway levels.

Full control and compatibility with the parallel control bus used on Pro-Bel’s Freeway and Sirius routers, and the use of Pro-Bel general switcher protocol on the remote control ports, guarantees operation with all Pro-Bel control systems, allowing Halo routers to be seamlessly incorporated with existing and new router installations. The addition of an Ethernet port allows control of the router in remote locations.

### FEATURES
- HD/SD router available in sizes from 8 x 8 to 32 x 32
- High performance SDI and ASI compatible
- Flexible operating modes - single or dual outputs. One or two routers in a frame
- Removable dual redundant power
- Supports control from management systems and control panels

**Control using:**
- BPX or XY control panels
- Pro-Bel General Switcher protocol via RS485 or Ethernet
- SNMP
- Various OEM protocols - contact Pro-Bel for details
- Slave from Sirius, Freeway, other Halo or Axis routers.

The 32 x 32 unit can be configured for:
- 32 x 32 operation
- Dual 16 x 16 operation
- 32 x 16 operation with dual outputs

The 16 x 16 unit can be configured for:
- 16 x 16 operation

The 8 x 8 unit can be configured for:
- 8 x 8 operation
Halo Digital Video

**Inputs**
- Number and type: 32 Unbalanced NRZI coded serial data
- Standard: Serial EBU Tech 3267E SMPTE 259M-ABCD
- Impedance: 75 Ω
- Data rate: 50—622Mbps
- Return loss: >15dB 10MHz to 360MHz
- Amplitude: 800mV p-p nominal
- DC offset: >5V

**Equaliser**
- Automatic for up to 250m cable (Belden 8281, PSF 1/2M)

**Outputs**
- Type: 32 Unbalanced NRZI coded serial data
- Standard: Serial EBU Tech 3267E SMPTE 259M-ABCD
- Impedance: 75 Ω
- Data rate: 50—622Mbps
- Return loss: >15dB 10MHz to 360MHz
- Amplitude: 800mV p-p ±10%
- DC offset: 0V ± 0.5V

Halo HD

**Inputs**
- Number and type: 32 unbalanced serial data
- Standard: HD/SDI to SMPTE 292M and SDI to SMPTE 259M
- Return loss: >13dB @ HD rates
- Equaliser: >100m Belden 1694A @ HD rate

**Outputs**
- Number and type: 32 unbalanced serial data
- Return loss: >13dB @ HD rates
- Amplitude: 800mV ± 10%

Specifications subject to change

**Note:** The 8 x 8 family will appear as a 16 x 16 router to any external controller.