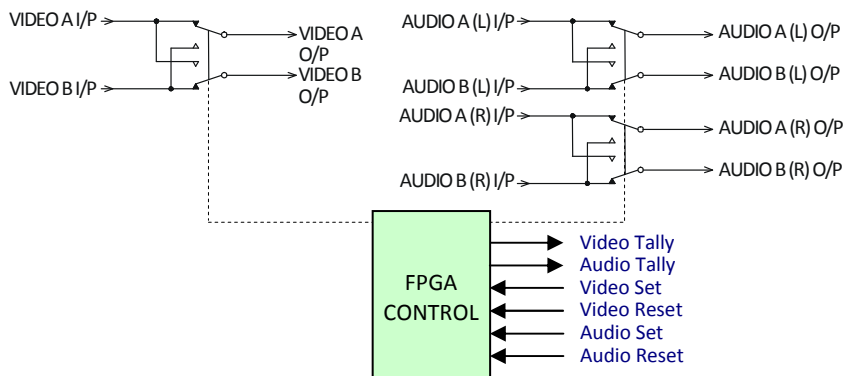


## 3G/HD/SD-SDI, ASI, G.703, Video, Audio Relay Changeover Switch

### FEATURES

- One video and two audio changeover switches in one package.
- Video path suitable for 3G/HD/SD-SDI, Analogue video, ASI, G.703 signals @ 2, 8, 34, 45, 144, 155 Mb/s, and unbalanced AES.
- Audio path suitable for 2 balanced, or 4 unbalanced, audio or data signals, and balanced AES.
- Married or independent operation.
- Momentary Set/Reset control.
- No path change on power fail.
- Local or remote control.
- DashBoard™ software monitoring and control.

### BLOCK DIAGRAM IRT-6170-AMS SIGNAL PATH



### GENERAL

The IRT-6170-AMS consists of one “video” and two “balanced audio” switches arranged as a changeover set with two inputs and two outputs. No terminations are provided on the board allowing the switcher to be used in a wide variety of applications and with signals of various types and impedances.

The “video” path uses enhanced performance relays to provide switching capabilities for high-speed data signals up to 2.97 Gb/s and may be used with analogue video, 3G/HD/SD/ASI or G.703 data signals.

The “audio” path may be used for balanced or unbalanced audio or control signals (RS232, RS422, RS485 etc).

The magnetic latching characteristic of the high performance relays allows momentary control and also provides for no change of path during power loss.

The IRT-6170-AMS is ideally suited to applications where a simple choice between two inputs or outputs is required and may be easily driven by detector circuits for automatic path selection.

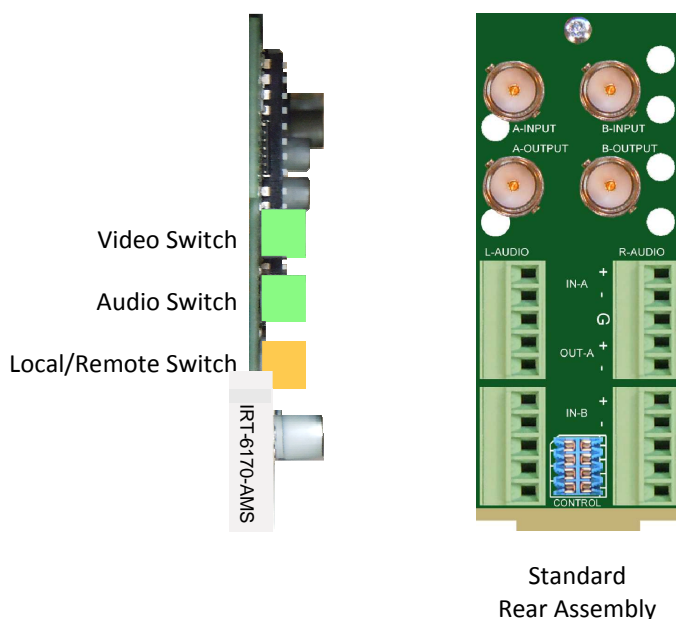
Local switching is possible using front edge push button switches. Remote switching is possible using external normally open or normally closed alarms.

Front edge switches use a small delay to avoid accidental switching if bumped. After a period of about a minute, the IRT-6170-AMS automatically switches back into remote mode.

Remote indication of tally status is provided for integration into central alarm and monitoring systems.

The IRT-6170-AMS is designed to fit the openGear® standard 2RU frames which allow a mixture of cards from various manufacturers to be mounted within the same frame.

The DashBoard™ control software is available as a free download.



## TECHNICAL SPECIFICATIONS

### Video Signal path:

**Signal types** 3G-SDI/HD-SDI/SD-SDI/ASI/G.703/Video/unbalanced AES.

**Impedance** Non-terminating, designed for 75  $\Omega$  use.

**Switching characteristic** Magnetic latching 4 port changeover relay.

**Video crosstalk between channels** < -75 dB to 10 MHz (measured input terminated by 75  $\Omega$ );  
< -45 dB to 270 MHz;  
< -40 dB to 1.5 GHz;  
< -25 dB to 3.0 GHz.

**Frequency response** +0/-1.5 dB 0 Hz to 3.0 GHz.

### Audio/Low speed Data:

**Audio Crosstalk** < -90 dB (20 Hz - 20 kHz, input terminated by 600  $\Omega$ ).

### Control:

**Mode** Momentary ground or open circuit, switch selectable.

**Gnd** Pins 1 & 2.

**Video SET** Pin 3 (Video Standby).

**Video RESET** Pin 4 (Video Main).

**Audio SET** Pin 5 (Audio Standby).

**Audio RESET** Pin 6 (Audio Main).

**NOTE:** Separate Audio & Video controls, or  
Audio follows Video, switch selectable.  
Non-momentary contacts required in Toggle modes.

**Tally** Switch to Ground – Standby; Switch to Open Circuit - Main.

**Video Tally** Pin 7.

**Audio Tally** Pin 8.

**Front edge switches** Momentary illuminated push button.  
Automatic remote default setting after about a minute.

### Connectors:

**Video** BNC.

**Audio** 5 pin Phoenix pluggable screw block.

**Control & Tally** 8 pin HE-14 IDC.

### Relay:

**Contact rating** 30 Vdc – 0.5 A.

### Power Requirements:

**Voltage** + 12 Vdc.

**Power consumption** < 4VA.

### Other:

**Temperature range** 0 - 50° C ambient.

**Mechanical** Suitable for mounting in an openGear® 2RU rack chassis.

**Dimensions (openGear® standard)** 33.6 mm x 2U x 325 mm;

**Supplied accessories** Rear connector assembly with matching connectors for audio and control input & tally outputs.

**Ordering** **IRT-6170-AMS** IRT-6170-AMS, programmed with DashBoard™ control.

**NOTE:** **Main:** IN A to OUT A, IN B to OUT B (green switch indication);  
**Standby:** IN A to OUT B, IN B to OUT A (orange switch indication).