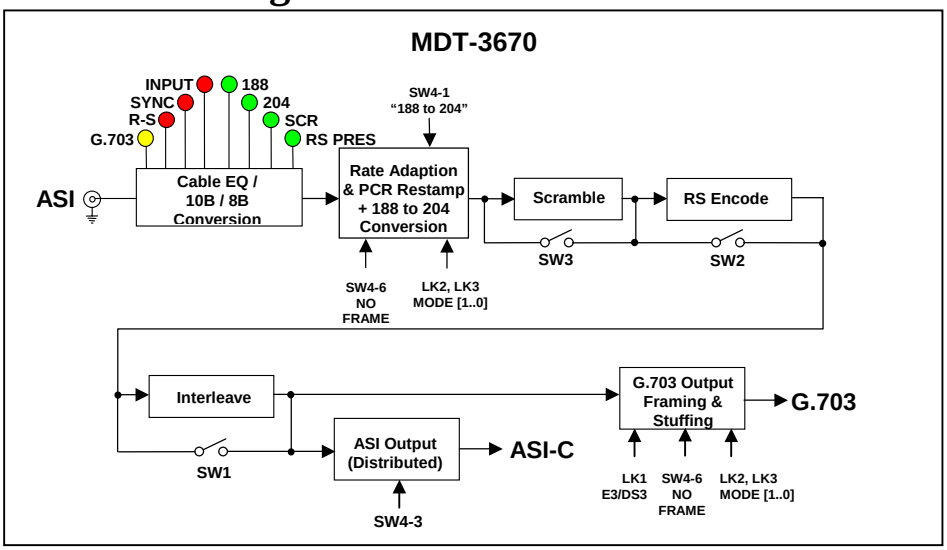
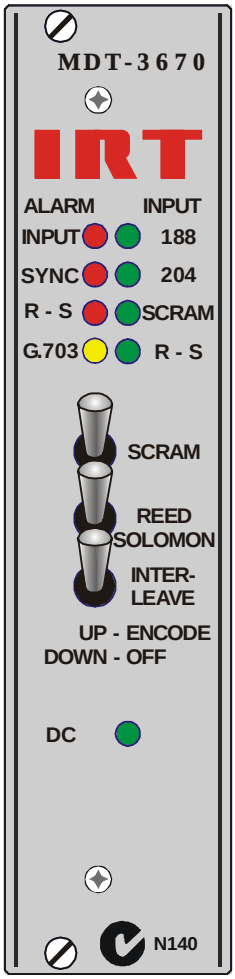
I R T Electronics Pty Ltd A.B.N. 35 000 832 575
26 Hotham Parade, ARTARMON N.S.W. 2064 AUSTRALIA
National: Phone: (02) 9439 3744 Fax: (02) 9439 7439
International: +61 2 9439 3744 +61 2 9439 7439
Email: sales@irtelectronics.com
Web: www.irtelectronics.com

ASI to ASI & G.703 Network Interface Adapter Types MDT-3670

Functional diagram:





Features:

- **Wide range of ASI to ASI & G.703 conversions**
- **E3, DS3 or "Special" DS3 operation**
- **Reed Solomon encoding**
- **Interleaving**
- **Scrambling**
- **Packet length indication**
- **Selectable 188 to 204 byte conversion**
- **Packet stuffing with or without PCR restamping**

General:

The MDT-3670 is part of a family of data transcoders for converting between the commonly used MPEG2 Transport Stream formats in the broadcast industry for video distribution.

The MDT-3670 can operate at ASI rates from 2 Mb/s to 50 Mb/s. The input ASI stream can be rate adapted (and optionally PCR restamped) to an E3, DS3 or framed DS3 rate. Front panel switches allow Read Solomon encoding, Interleaving and Scrambling (energy dispersal). The input signal can be converted from 188 byte packet size to 204 prior to encoding.

After encoding, two outputs are provided. An ASI output and a G.703 output, which may be at E3 or DS3 (framed or unframed) rate for interfacing to Telco type of systems.

There are several industry modes of encoding that can be encoded by the MDT-3670. They are loosely classified as follows:

Standard: Full rate [no rate adaption]
Upstream: Rate adapted input (PCR restamping)
Downstream: Packet stuffed [no PCR restamping]
Compatible: Legacy framing

This range covers most of the ASI/G.703 transmission methods from both IRT and most other equipment manufacturers.

The MDT-3670 is fabricated in IRT's standard Eurocard format and may be housed in a variety of IRT's frames.

MDT-3670 Technical Specifications

Input:

Type	1 x ASI-C 75Ω, 800 mVp-p, BNC connector. (Distributed or contiguous)
Rate	2 Mb/s to 50 Mb/s
Equalisation	Automatic, better than 300metres at 270 Mb/s for Belden 8281 or equivalent cable.

Outputs:

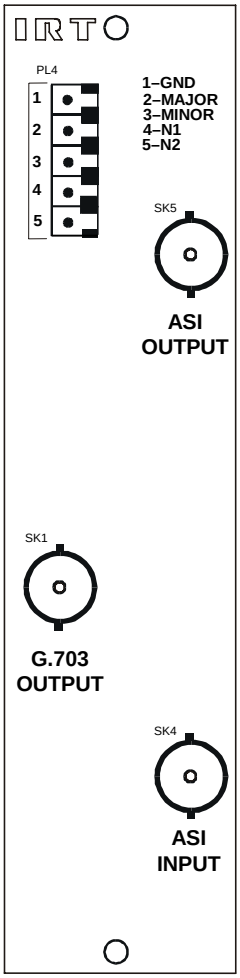
Type 1	1 x ASI-C 75Ω, 800 mVp-p, BNC connector. (Distributed)
Type 2	1 x G.703, 75Ω BNC connector.
G.703 Rate	E3 (34.368 Mb/s), Framed or unframed DS3 (44.736 Mb/s), HDB3 at 34 Mb/s or B3ZS at 45 Mb/s.

Alarms:

Major	Relay NO/NC link selectable, (Relay energised when Input Sync is obtained).
Minor	Relay NO/NC link selectable, (Relay energised when there are no G.703 output rate errors).
Power Requirements	28 Vac CT (14-0-14) or ± 16 Vdc.
Power consumption	<5.5 VA.

Other:

Temperature range		0 - 50° C ambient.
Mechanical		Suitable for mounting in IRT 19” rack chassis with input, output and power connections on the rear panel.
Finish:	Front panel	Grey background, silk-screened black lettering & red IRT logo.
	Rear assembly	Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals.
Dimensions		6 HP x 3 U x 220 mm IRT Eurocard
Supplied accessories		Rear connector assembly including matching connector for alarm output.
Optional accessories		TME-6 module extender card



Due to our policy of continuing development, these specifications are subject to change without notice.

Detailed specifications available from:

Manufacturer:

IRT Electronics Pty Ltd

26 Hotham Parade
ARTARMON
N.S.W. 2064 AUSTRALIA
Phone: +61 2 9439 3744
Fax: +61 2 9439 7439
Email: sales@irtelectronics.com

Local Agent:

IRT can be found on the Internet at:

http://www.irtelectronics.com