

Specifications

Optical Performance

Fiber Type	Multimode	Singlemode
Optical Core Diameter	50 μ or 62.5 μ	8/10 μ
Operating Wavelength	850 nm	1310/1550 nm
Optical Power Source	Laser (VCSEL)	Laser
Optical Power Output	-3 dBm	-3 dBm
Receiver Sensitivity	-20 dBm	-22 dBm
Optical Connectors	ST, SC	FC, ST or SC
Maximum Length of Fiber	0.8 -1 km	20 km

Video Performance

Video Bandwidth @1dB	7 MHz
Video Input	75 Ω balanced
Video Input Level	NTSC: 1.0 V p-p, PAL: 1.3 V p-p
Signal-to-Noise Ratio	64 dB
Differential Gain	< 0.5 %
Differential Phase	< 0.5 °
Field Tilt	< 0.5 %
Luminance Non-Linearity	< 0.5 %
Chrominance/Luminance Delay	< 20ns
K-2T Factor	< 1.0 %

Audio Performance

Audio Bandwidth @ 3dB	20 Hz - 20 kHz
Audio Input	600 Ohm or 10 kOhm balanced/unbalanced
Audio Input Level (max)	+18 dBm
Audio Output Level (max)	+18 dBm/balanced or +12 dBm/unbalanced
Audio THD	< 0.05 %
Audio S/N Ratio (weighted)	< 85 dB

Data Interface

Data Format	RS-232, RS-422, TTL/CMOS (optional), Contact Closure
Data Rate	Up to 1.6 Mbit/sec

Electromechanical & Environmental

Power Requirements	12V DC @ 0.7 A
Operating Temperature	-30°C to +70°C (-22°F to +158°F)
Dimensions	11.55"(293 mm) x 5.23"(133 mm) x x 2.0"(50.8 mm)

ECT5484

Fiber Optic Digital Video, Audio & Data Multiplexer/Demultiplexer

Single Fiber Operation

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Introduction :

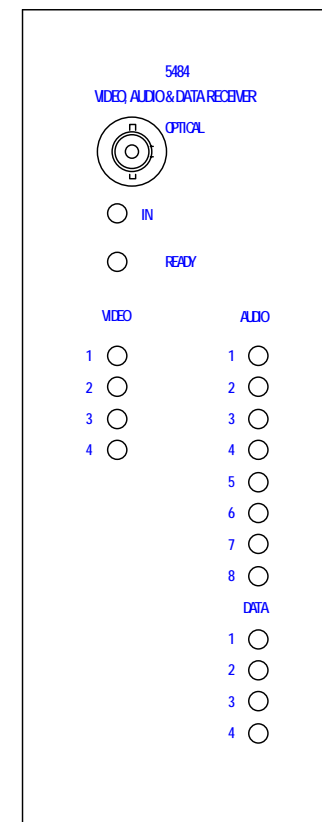
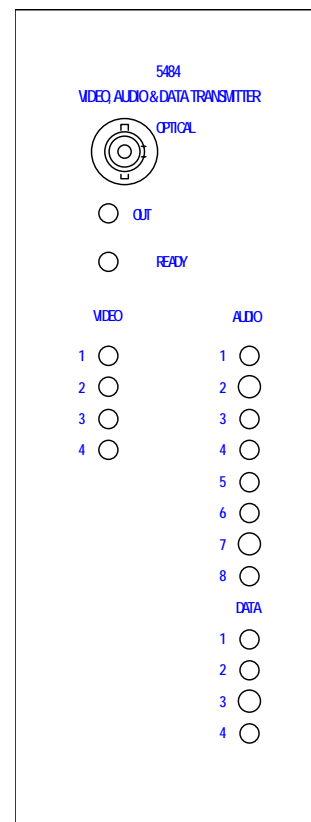
The ECT5484 system provides a high performance link for transmitting up to four unidirectional composite video signals, 4 Hi-Fi stereo (8 mono) audio channels and 4 multiformat data channels over a single fiber optic cable per single wavelength.

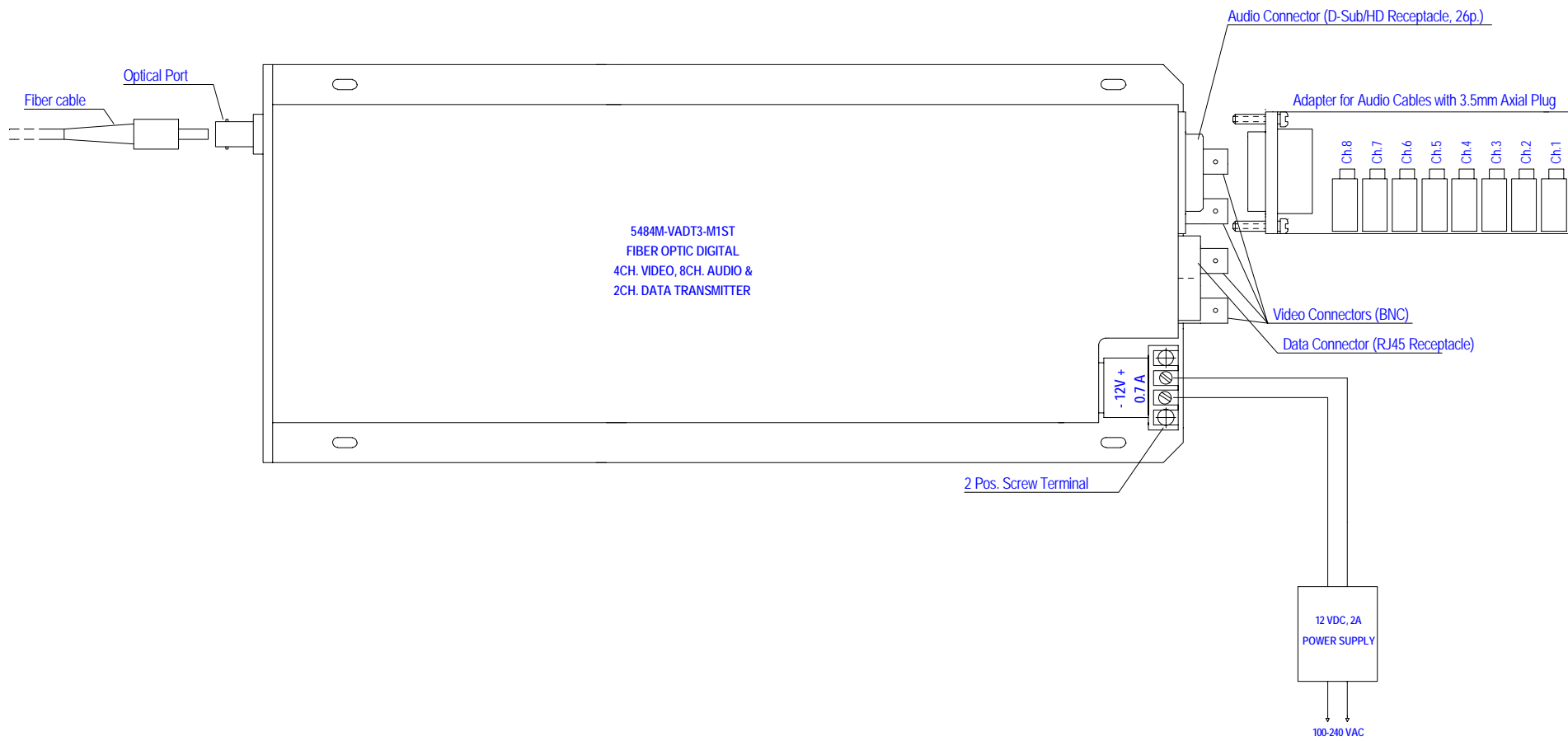
ECT5484 utilizes high speed analog-to-digital and digital-to-analog conversion, digital signal processing, time division multiplexing/demultiplexing and fiber optic transmission.

Indicators : All indicators are located on the front of the units.

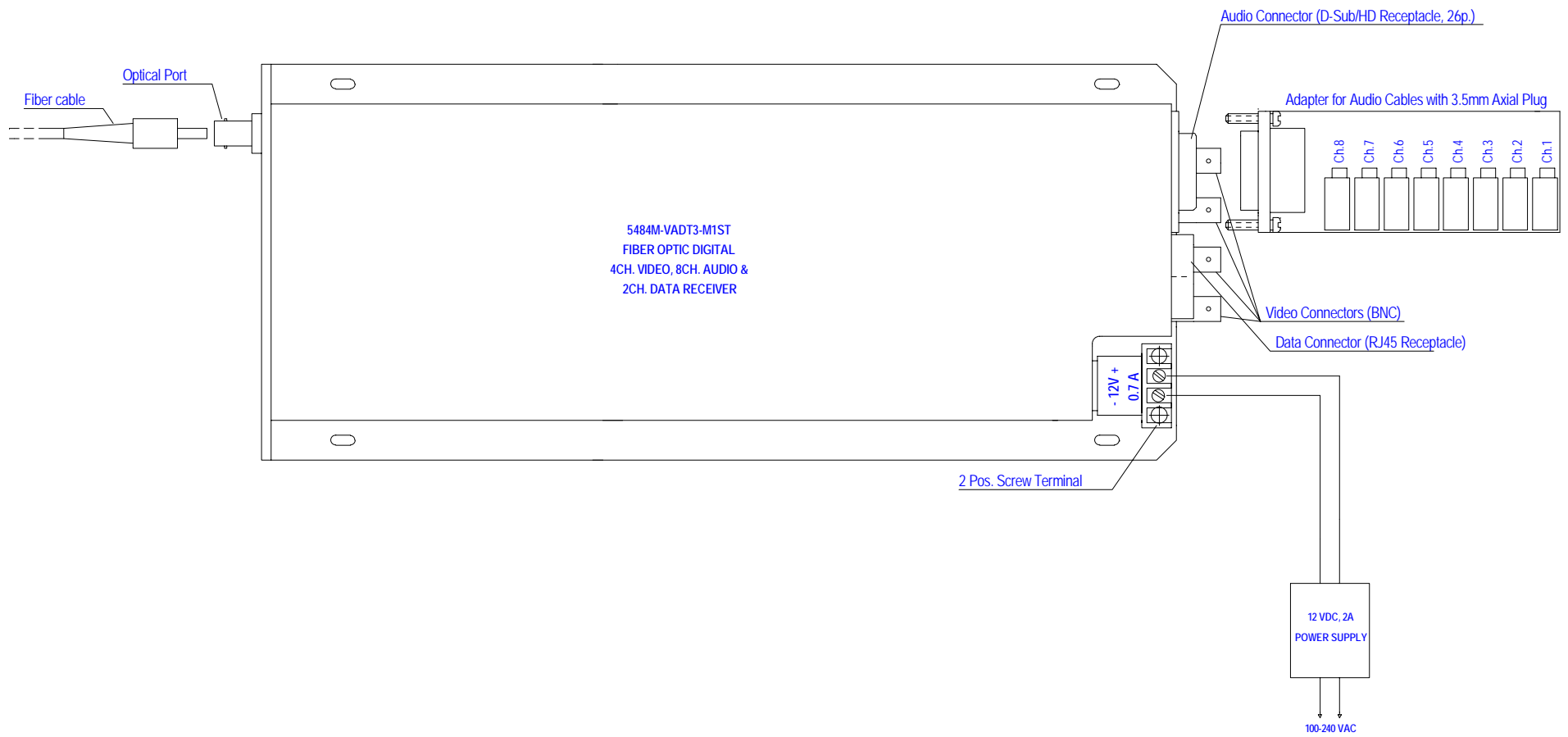
Indicator	Status	Description
Optical In / Out	red	Transmitter: laser is not operational Receiver: serial data is not present on the input
	green	Transmitter: laser is operational Receiver: serial data is present on the input
Ready	red	Transmitter: serializer is not operational Receiver: deserializer has not captured serial data stream
	green	Transmitter: serializer is operational Receiver: deserializer has captured serial data stream
Video Transmitter (Ch.1 - Ch.4)	red	Video signal is not present
	green	Video signal is present
Video Receiver (Ch.1 - Ch.4)	off	Video signal is not present
	red	Video sync is present
	green	Complete video signal is present
Audio (Ch.1 - Ch.8)	off	Audio signal is not present
	green	Audio signal is present
	red	Audio signal is out of range
Data Transmitter (Ch.1 - Ch.4)	off	Data signal is not present
	red	Data signal is present
Data Receiver (Ch.1 - Ch.4)	off	Data signal is not present
	green	Data signal is present

5484 Front Panels





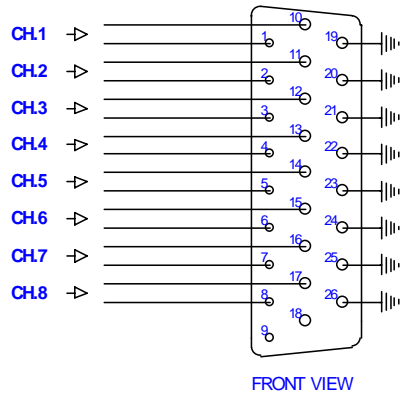
5484 Digital 4Ch. Video, 8Ch. Audio & 2Ch. Data Transmitter
Connections Diagram



5484 Digital 4Ch. Video, 8Ch. Audio & 2Ch. Data Receiver
Connections Diagram

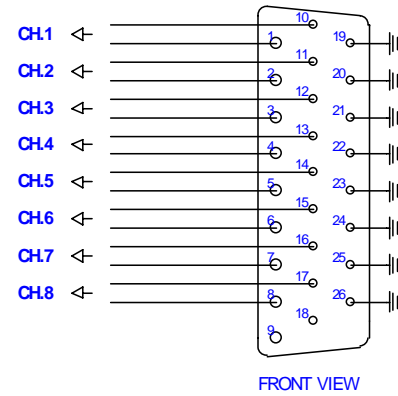
AUDIO TRANSMITTER CONNECTOR D-SUB/HD-26p.

8 BALANCED/UNBALANCED INPUTS



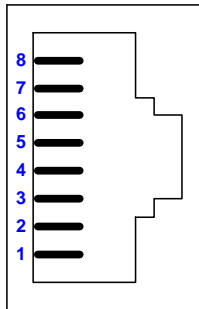
AUDIO RECEIVER CONNECTOR D-SUB/HD-26p.

8 BALANCED OUTPUTS



DATA TRANSMITTER CONNECTOR RJ45

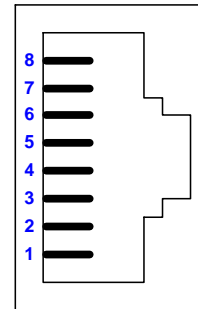
FRONT VIEW



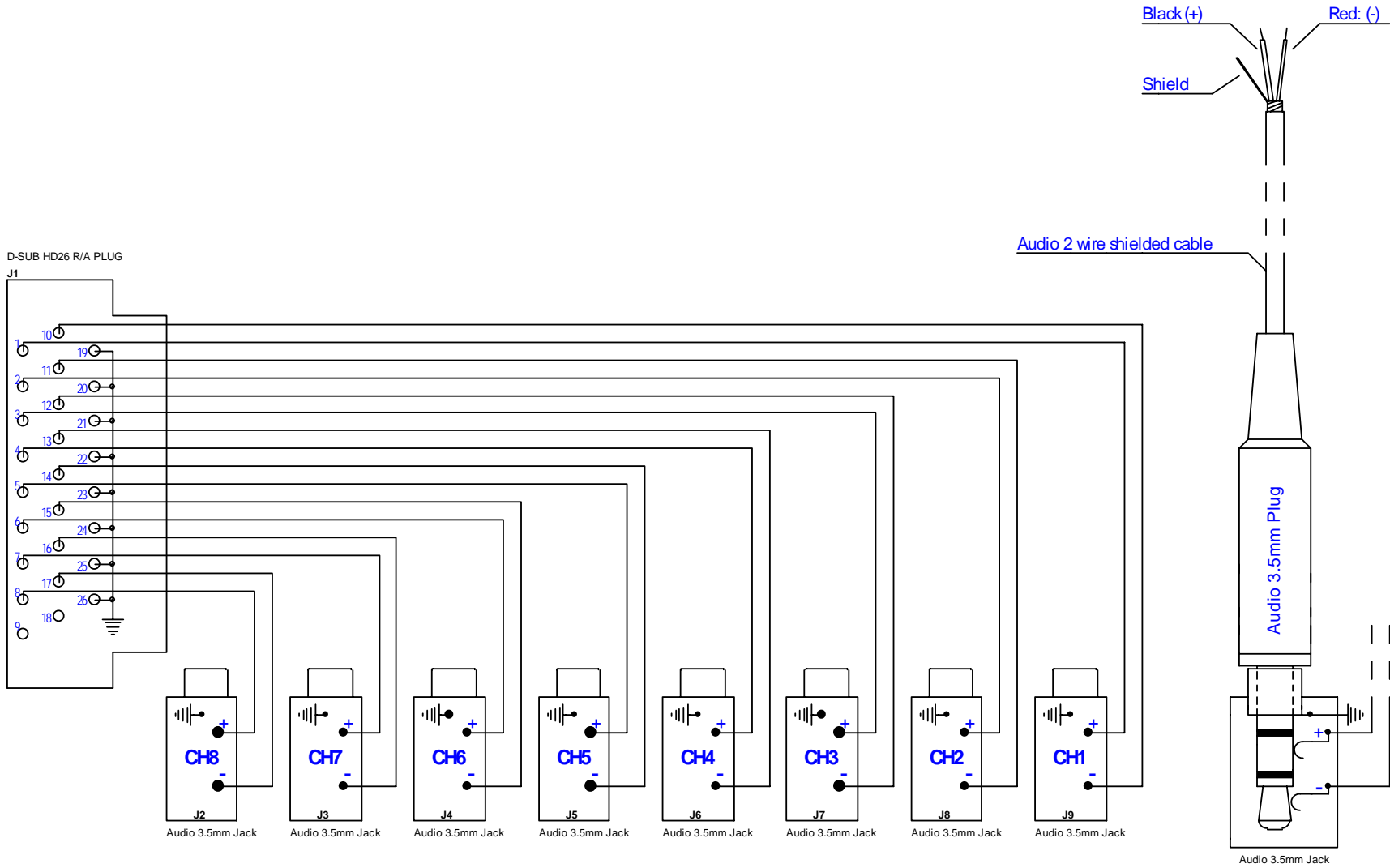
	CONT.#	RS-422	RS-232 TTL/CMOS	CONTACT CLOSURE
CHANNEL 1	8	IN-	GND	GND
	7	IN+	IN	IN
CHANNEL 2	6	IN-	GND	GND
	5	IN+	IN	IN
CHANNEL 3	4	IN-	GND	GND
	3	IN+	IN	IN
CHANNEL 4	2	IN-	GND	GND
	1	IN+	IN	IN

DATA RECEIVER CONNECTOR RJ45

FRONT VIEW



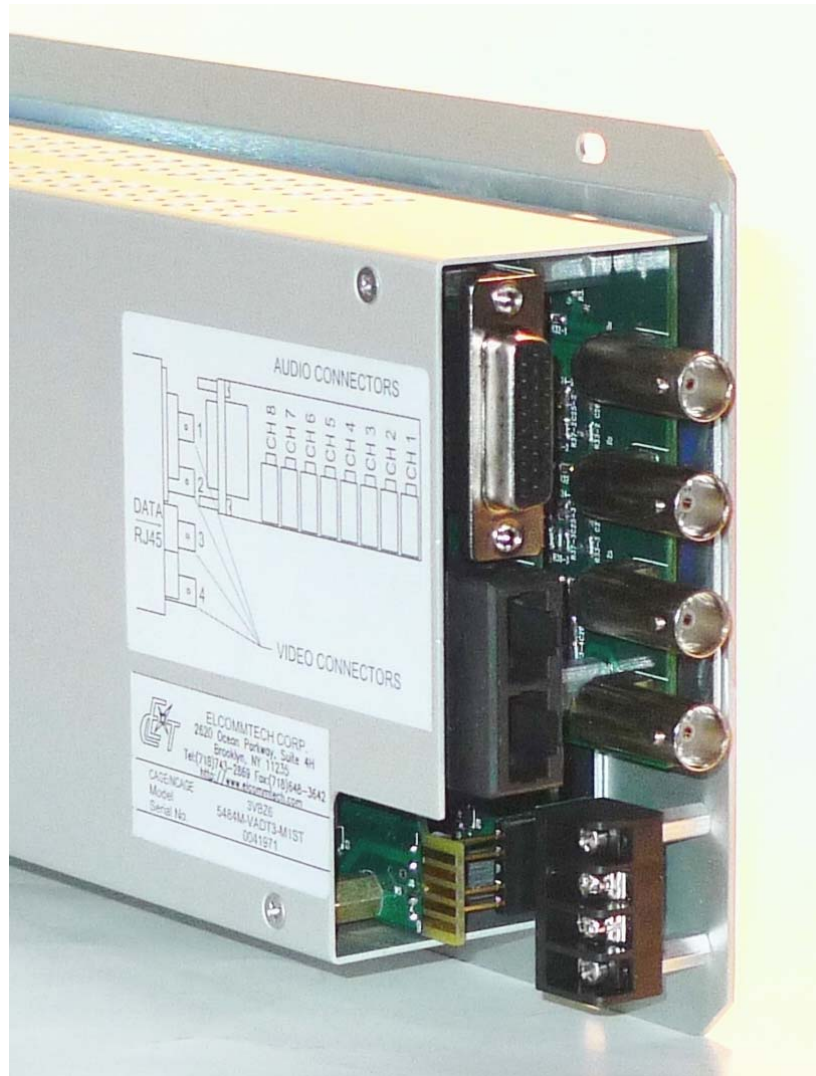
	CONT.#	RS-422	RS-232 TTL/CMOS	CONTACT CLOSURE
CHANNEL 1	8	OUT-	GND	DRY CONTACT
	7	OUT+	OUT	DRY CONTACT
CHANNEL 2	6	OUT-	GND	DRY CONTACT
	5	OUT+	OUT	DRY CONTACT
CHANNEL 3	4	OUT-	GND	DRY CONTACT
	3	OUT+	OUT	DRY CONTACT
CHANNEL 4	2	OUT-	GND	DRY CONTACT
	1	OUT+	OUT	DRY CONTACT



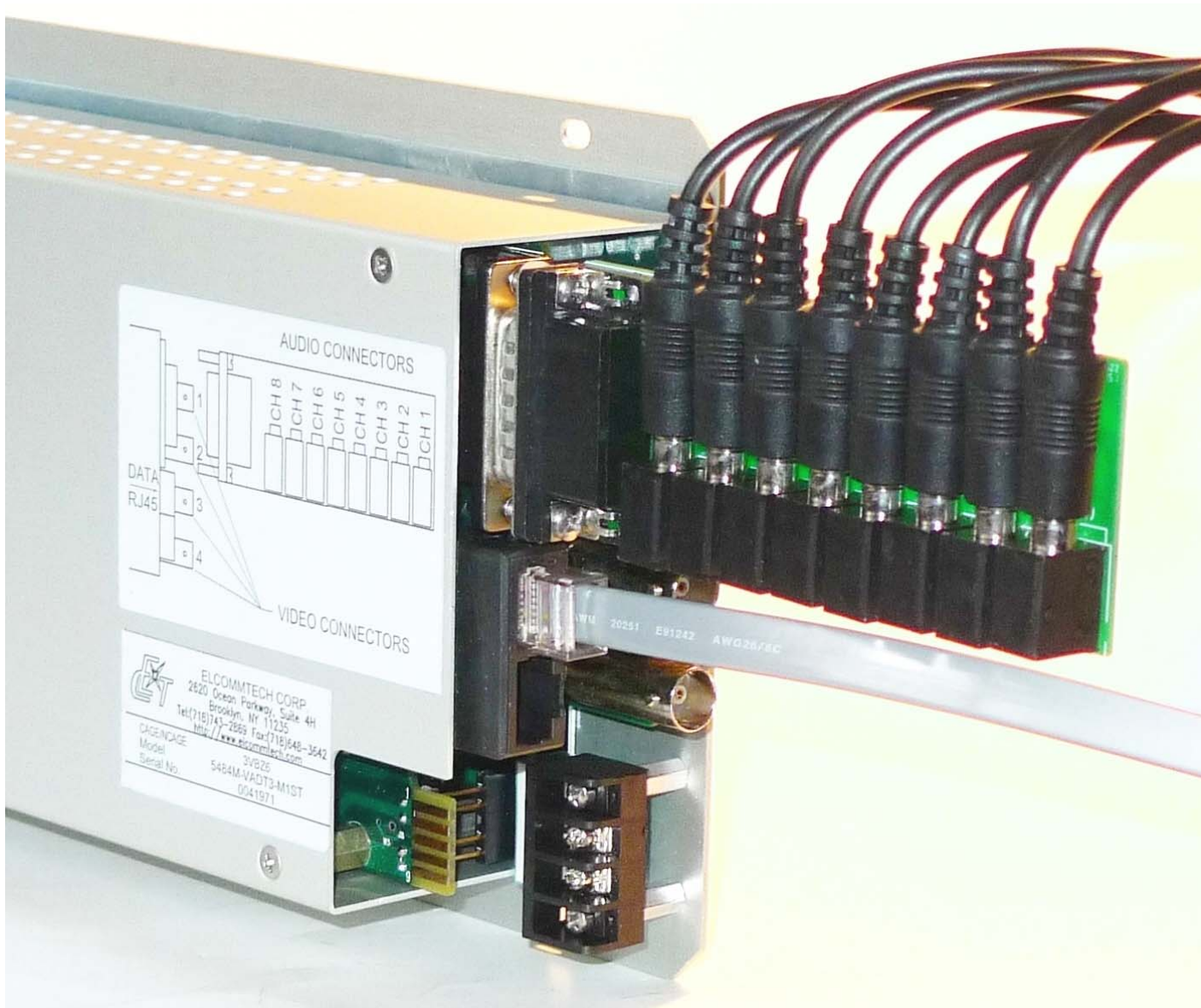
5484 Audio Interconnector



5484 Front view



5484 connectors side view



5484 audio & data connectors with adapter & cables