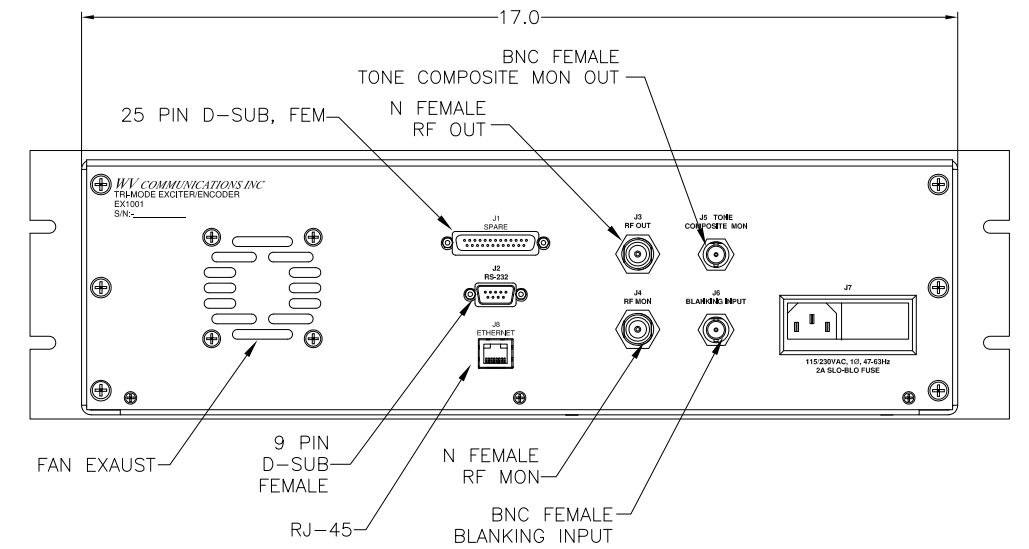
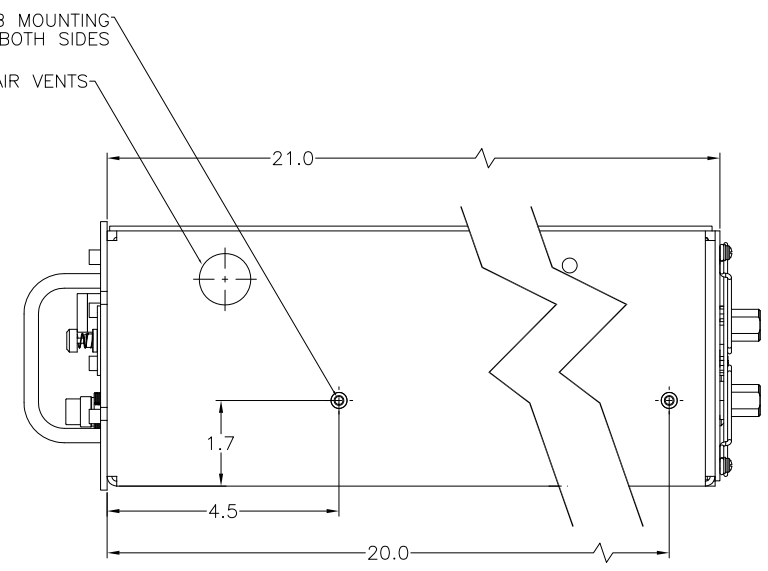
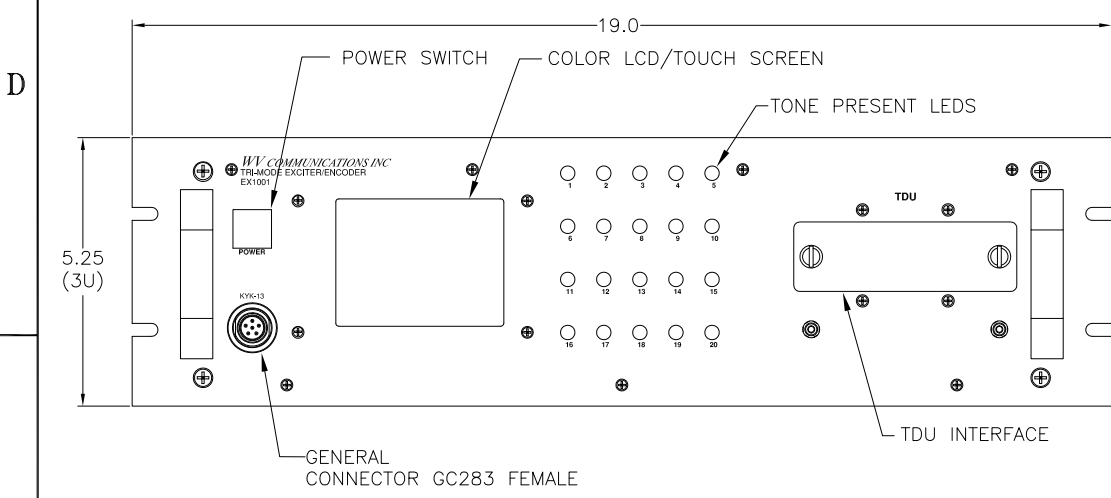


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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		RELEASED	1/10/2011	TT



EXCITER
 Carrier RF Frequency: 370.0- 450.0MHz in 100.0KHz Steps
 RF Output Power: -5 to +10dBm in 0.5dB Steps
 Carrier Frequency Stability: ±0.0005% (±5PPM) Maximum over 24 hours
 RF Output Impedance: 50Ω Nominal
 RF Output VSWR: 2.0:1 Maximum
 Deviation Level: IRIG/Secure Tone: ±30KHz / Tone Adjustable
 EFTS: ±50KHz Adjustable
 RF Output Harmonics/Spurious: 60dBc Minimum rejection
 FM Deviation Response: ±0.5dB Maximum over 5-75KHz Tones

ENCODER
 Types: IRIG, Secure Tone (HA) & EFTS
 Number of Tones: IRIG: 20 Tones, Up to 6 Simultaneous
 Secure: 2 tones (pairs) out of 8 Tones
 Tone Frequency Stability: ±0.01% Maximum
 Turn On Stability: Frequency Stable within 0.1% after 1 second
 Optional Discrete Tone Activation Input: TTL levels, ON < 0.8Vdc, OFF > 2.4Vdc
 Tone Monitor Output Level: 1V Pk-Pk for ±30KHz Deviation/50 Ohm Load
 Tone Output Amplitude Variation: 15% Maximum
 Tone Output Distortion: 1% Maximum with any Tone Enabled
 Tone Output Signal Delay: 5mSec Max from ACS to Stable Output within 0.1%sec.
 Tone Output Monitor Impedance: 50Ω Nominal
 EFTS Command Format: 64-bit Digital word per RCC 208-06
 EFTS Message Format: 144-bit message frame per RCC 208-06
 EFTS Bit & Message Rate: 50 messages per second
 EFTS Encoding: Manchester Bi-Phase Level Encoding per IRIG 106
 EFTS Pre-Modulation Filtering: 4-pole linear phase filter with a bandwidth of 14.4KHz at the -3dB points.
 EFTS Bit Rate Stability: 1,000 ppm Maximum
 Encryption Device: Triple Data Encryption Standard (DES) Unit (TDU)
 Status & Control: Local via Color LCD Touchscreen, Remote via Serial RS-232 and Ethernet UDP/IP

ENVIRONMENTAL:
 Operating Temperature Range: 0 to +50°C
 Operating relative Humidity: 0 - 95 %
 Operating Altitude: 0-10,000 Feet
 MTBF: 20,000 hours Minimum
 MTTR: 1 Hour Maximum down to card level
 AC Input: 115/230 VAC Auto-Switch, 1Ø 47-63Hz at 3/1.5 Amp Maximum
 Front Panel Color: Gray per FED-STD-595 - 26307

TONE	IRIG FREQUENCY (KHz)	SECURE FREQUENCY (KHz)	TONE	IRIG FREQUENCY (KHz)
1	7.50	7.35	11	25.01
2	8.46	8.40	12	28.21
3	9.54	9.45	13	31.83
4	10.76	10.50	14	35.90
5	12.14	11.55	15	40.49
6	13.70	12.60	16	45.68
7	15.45	13.65	17	51.52
8	17.43	15.45	18	58.12
9	19.66	--	19	65.56
10	22.17	--	20	73.95

PIN NO.	PIN NAME
1	N/C
2	RX
3	TX
4	N/C
5	GND
6	N/C
7	N/C
8	N/C
9	N/C

PIN NO.	PIN NAME
1	TX+
2	TX-
3	RX+
4	N/C
5	N/C
6	RX-
7	N/C
8	N/C

PIN LTR.	PIN NAME
A	REF/RTN
B	N/U
C	REQUEST
D	DATA
E	CLOCK
F	N/U

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMALS ANGLES HOLES ± 1/64 .XXX.01 ±0°30' .XXX+.005 .XXX.005 .XXX+.003 MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX		APPROVALS	DATE	WV Communications 1176 Tourmaline Dr. Newbury Park, CA EXCITER/ENCODER TRI-MODE EX1001-XXX (IRIG, SECURE (HA), EFTS) SIZE CAGE CODE DWG. NO. REV D 1GFQ7 050-50705 A SCALE NONE SHEET 1 OF 1	
900-50253	EX1001	DRAWN	G. GODDARD		6/10/2009
		CHECKED	GUY G.		10JUN09
		MECH ENGR	GG		10JUN09
		ELEC ENGR	JT		10JUN09
		PRODUCTION	AM		10JUN09
		Q.A.	UY	10JUN09	

REV. NO. 050-50705
 DC-PFORM-0011-3, REV. C, 06/08