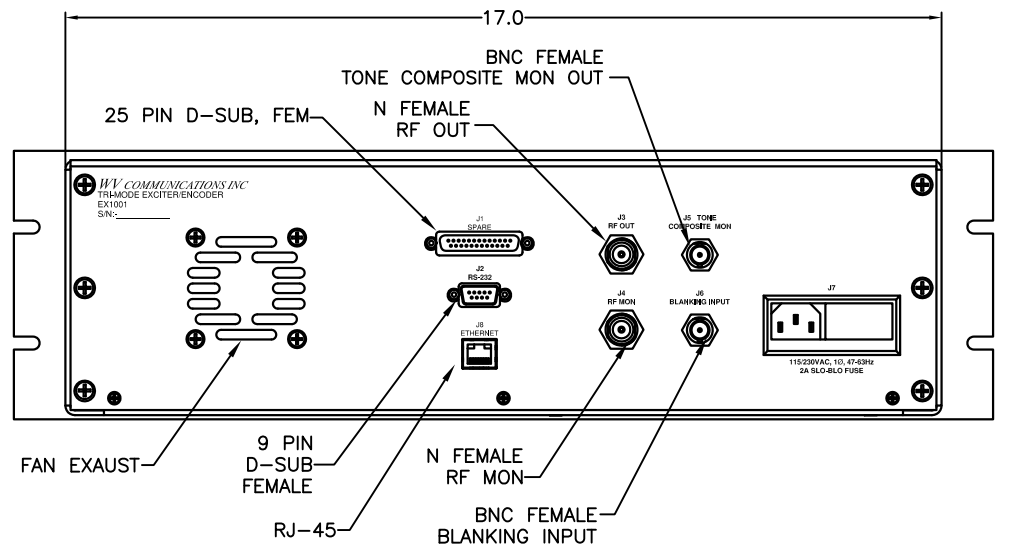
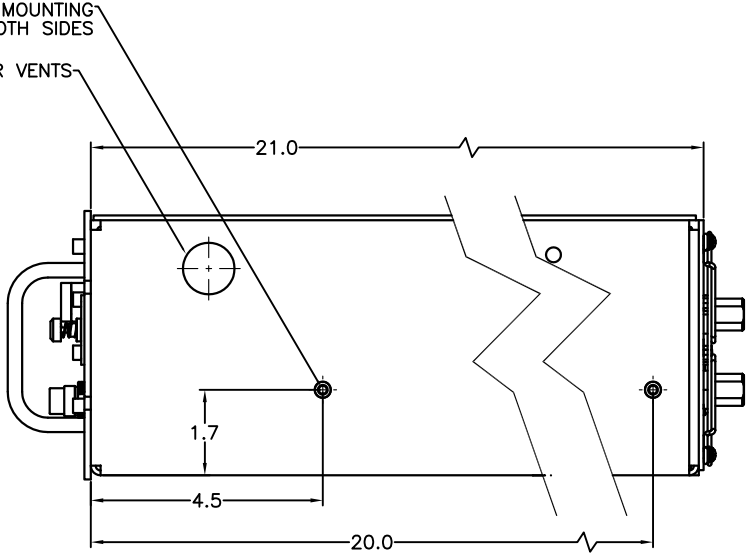
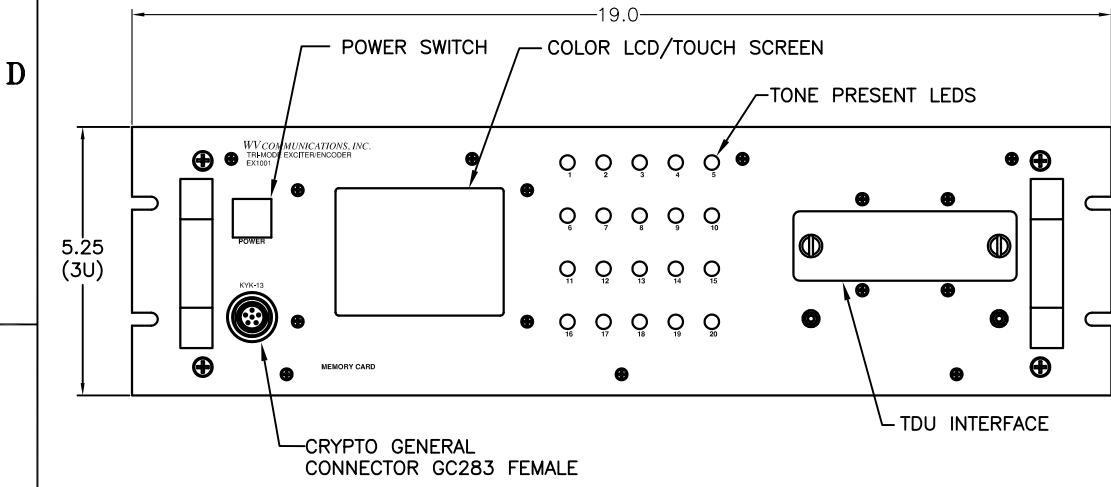


**** PROPRIETARY DATA ****
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		RELEASED	10JUN09	GG



EXCITER
 RF Output Power: -5.5 to +10dBm IN 0.5dB Steps
 Carrier Frequency: 370.0- 450.0MHz in 100.0KHz Steps
 Carrier Frequency Stability: ±0.002% Maximum over 24 hours
 RF Output Impedance: 50Ω Nominal
 RF Output VSWR: 2.0:1 Maximum
 Deviation Level: IRIG: ±30KHz / Tone Adjustable
 EFTS: ±50KHz Adjustable
 RF Output Harmonics/Spurious: 60dBc Minimum
 FM Deviation Response: ±0.5dB Maximum over 5-75KHz Tones

ENCODER
 Types: IRIG, Secure & 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 Tone Activation Input: TTL levels, ON < 0.8Vdc, OFF > 2.4Vdc
 Tone Monitor Output Level: 150mV Pk-Pk, ±11.2mV Nominal
 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: 600Ω 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, 1Ø 47-63Hz Auto-Switch at 2/1 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 .001 10°-90° .005 .XXX±.005 .XXX±.001 MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX		APPROVALS DRAWN G. GODDARD CHECKED GUY G. MECH ENGR GG ELEC ENGR JT PRODUCTION AM Q.A. UY	DATE 10JUN09 10JUN09 10JUN09 10JUN09 10JUN09	1176 Tourmaline Dr. Newbury Park, CA WV Communications EXCITER/ENCODER TRI-MODE (IRIG, SECURE, EFTS) EX1001 SIZE CAGE CODE DWG. NO. REV D 1GFQ7 050-50705 A SCALE NONE SHEET 1 OF 1
900-50253	NEXT ASSEMBLY USED ON	APPLICATION DO NOT SCALE DRAWING		

DWG NO. 050-50705 REV A