

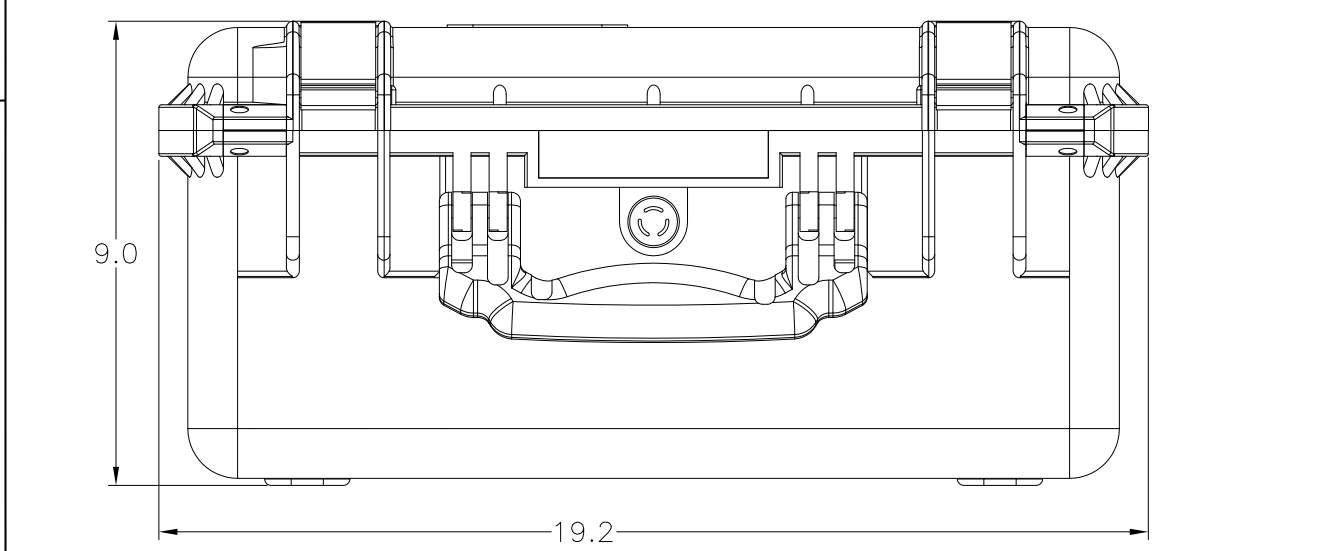
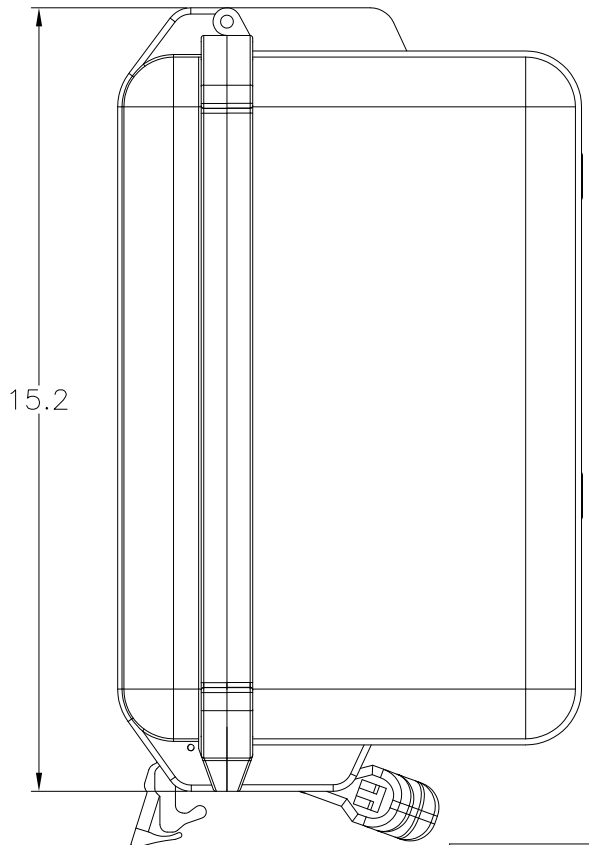
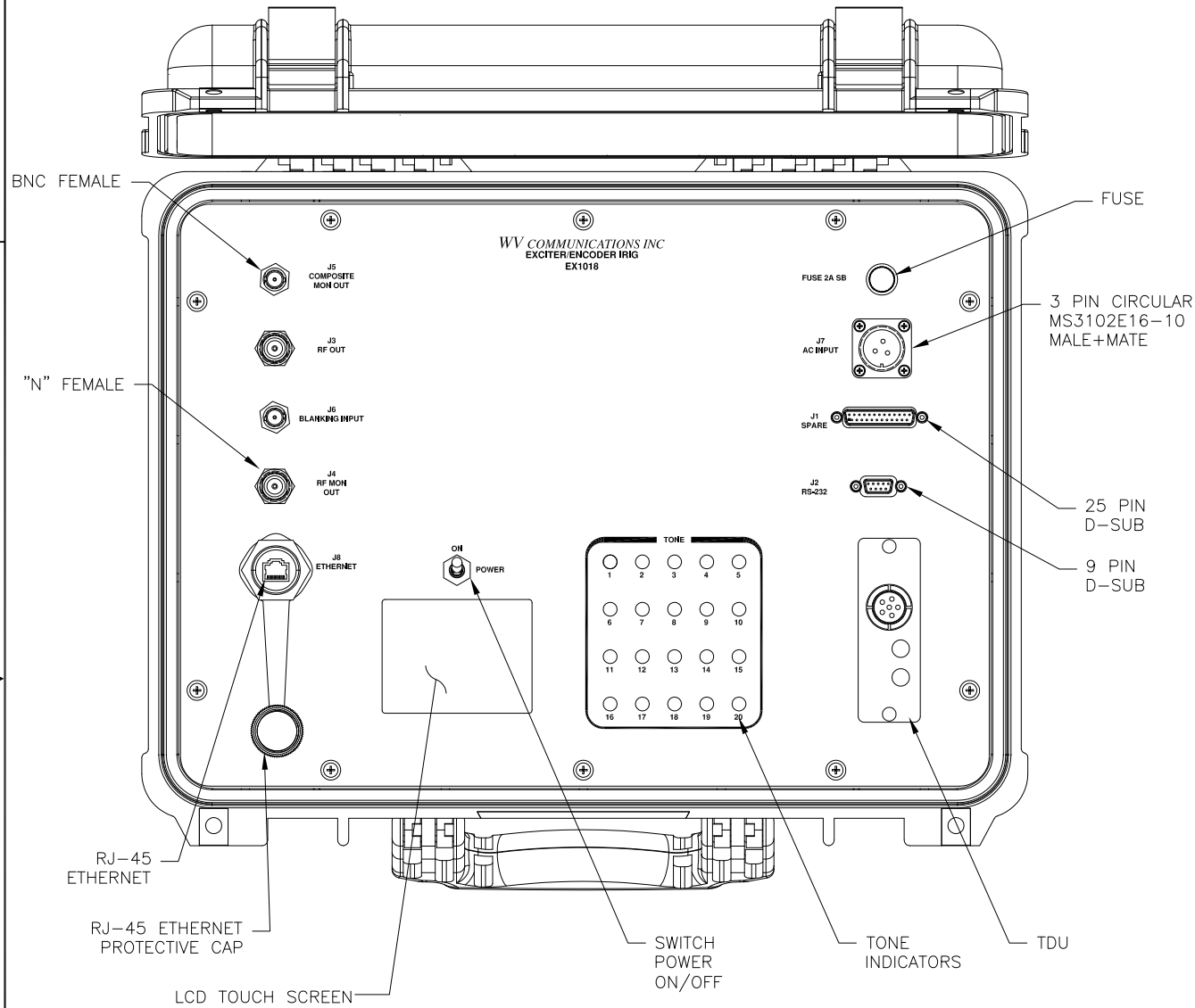
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A		RELEASE	04/4/12	TT

**EXCITER**  
 Carrier Frequency: 370.0- 450.0MHz in 100.0KHz Steps  
 Optional 5.00KHz Steps  
 RF Output Power: -5.5 to +10dBm IN 0.5dB Steps  
 Optional 0 to -127dBm  
 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: ±30KHz / Tone Adjustable  
 EFTS: ±50KHz Adjustable  
 RF Output Harmonics/Spurious: 60dBc Minimum  
 FM Deviation Response: ±0.5dB Maximum over 5-75KHz Tones  
 Blanking Input: TTL-'0' - RF=ON, TTL-'1' - RF=OFF

**ENCODER**  
 Types: IRIG & EFTS  
 Number of Tones: IRIG: 20 Tones, Up to 6 Simultaneous  
 Tone Frequency Stability: ±0.01% Maximum  
 Turn On Stability: Frequency Stable within 0.1% after 1 second  
 Optional Discrete Tone Activation Input: TTL '0' Tone-ON, TTL '1' Tone-OFF  
 Tone Monitor Output Level: 1V Pk-Pk Nominal/50Ω load for ±30KHz Pk Deviation  
 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%  
 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, 1Ø 47-63Hz Auto-Switch at 2/1 Amp Maximum  
 Front Panel Color: Grey per FED-STD-595-26307/Black lettering



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

25 PIN D-SUB			
PIN NO.	PIN NAME	PIN NO.	PIN NAME
1	N/C	14	N/C
2	N/C	15	N/C
3	N/C	16	N/C
4	N/C	17	N/C
5	N/C	18	N/C
6	N/C	19	N/C
7	N/C	20	N/C
8	N/C	21	N/C
9	N/C	22	N/C
10	N/C	23	N/C
11	N/C	24	N/C
12	N/C	25	N/C
13	N/C		

9 PIN D-SUB	
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

N FEMALE

N FEMALE

BNC FEMALE

BNC FEMALE

MS3102E16-10	
PIN NO.	PIN NAME
1	LINE
2	NEUTRAL
3	GROUND

RJ45	
PIN NO.	PIN NAME
1	TX+
2	TX-
3	RX+
4	N/C
5	N/C
6	RX-
7	N/C
8	N/C

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS: DECIMALS: ANGLES: HOLEES ± 1/64 .XXX1 .XXX1 ±0°30' .XXX1 .XXX1 .005 .XXX1 .005 .XXX1 .005 MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX		APPROVALS	DATE	<b>WV Communications</b> 1125 A Business Center Circle Newbury Park, CA <b>EXCITER/ENCODER/IRIG/(20 TONE) &amp; EFTS</b> 370.0-450.0MHz 100.0 KHz STEPS PORTABLE MODEL EX1018
DRAWN: TONY T. 04/4/12 CHECKED: TONY T. 04/14/14 MECH ENGR: T. TERRANOVA 04/14/14 ELEC ENGR: J. TRANOVICH 04/14/14 PRODUCTION: A. MEDINA 04/14/14 Q.A.: D. BRENNAN 04/14/14		SCALE: NONE SHEET: 1 OF 1		
MATERIAL: _____ FINISH: _____ NEXT ASSEMBLY: EX1018 USED ON _____ APPLICATION: _____ DO NOT SCALE DRAWING		SIZE: D CAGE CODE: 1GFQ7 DWG. NO.: 050-50936 REV: A SCALE: NONE SHEET: 1 OF 1		