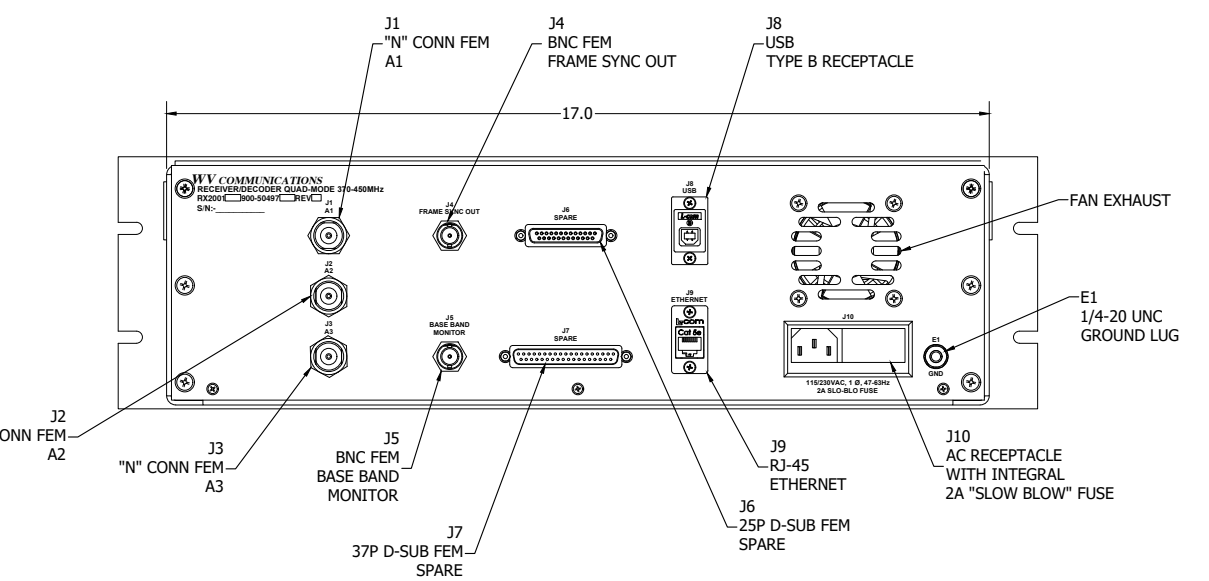
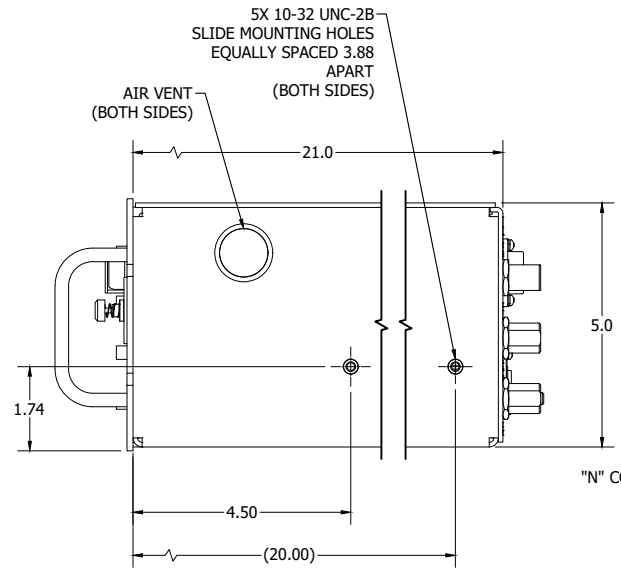
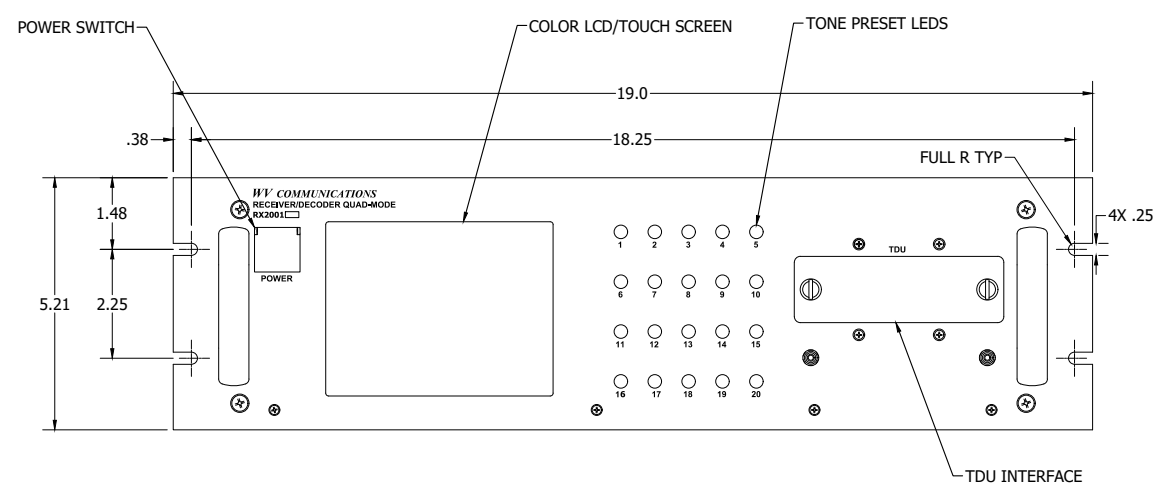
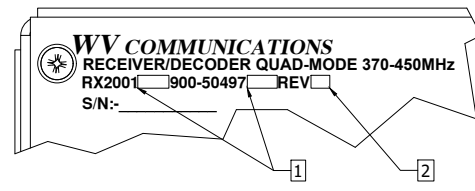


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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A	RELEASE		7/22/19	TT/UY/DB
B	PER ECO #20-0007 - COMBINED DASH NO'S IN TABLE		06/26/20	UY/DB/tt



Receiver
 Frequency Range: 370.0 – 450.0MHz in 1.0kHz steps
 Noise Figure: 6dB Maximum
 Spurious & Image Rejection: -60dBc Maximum
 LO Frequency Stability: ±1.5PPM Maximum Over 0-50°C
 LO Re-radiation: -60dBm Maximum
 RF Input Impedance: 50Ω Nominal
 VSWR Input: 2:1 Maximum (Ref 50Ω)
 RF Input Dynamic Range: -104 to +13dBm
 Signal Strength/Deviation Indication: Via front panel LCD & Serial/Ethernet
 Signal Strength Reporting Accuracy: ±2dB Maximum
 Peak Deviation Reporting Accuracy: ±7% Maximum of received carrier deviation @ RF Input Level +13 to -85dBm
 IF 3 dB Bandwidth: 500±50kHz
 IF 60 dB Bandwidth: 1500±150kHz
 IF Monitor level: +6dBm±4dB over RF input -100 to +13dBm
 Baseband Monitor level: 1.4Vp-p ±10% at 30kHz Pk Deviation / 50Ω Load
 Communication: Via RS-232 & Ethernet Command/Monitoring of Tones, RF Input Power, Tone Deviation, Messaging Status
 Number of RF Inputs: 3ea.

IRIG Decoder
 Number of IRIG Tones: 20 Channels (See Tone Frequency Table)
 -2 dB Tone Bandwidth: ±1% Minimum
 -20 dB Tone Bandwidth: ±4% Maximum
 Simultaneous Tone Detection: 1 to 6 Tones
 Decoder Carrier Deviation Range: ±30kHz Nom/Tone (±20 to ±35kHz range)
 Decoder Response Time: 10mSec Maximum
 Decoder Output: Via front panel LED & J9 Ethernet
 Optional Decoder Output: Via rear panel J7 TTL Levels
 Decoder Action: Should not latch. A continuous signal should be emitted while a tone is being received
 Tone Duration: 20mSec Minimum
 LED Action: Should not latch since IRIG tones are continuous
 LED's are illuminated while tones are present

Secure Decoder
 Number of Tones: 8 Channels (See Table for Precise Tones)
 -2 dB Tone Bandwidth: ±40Hz Minimum
 -20 dB Tone Bandwidth: ±600Hz Maximum
 Simultaneous Tone Detection: 2 Tones
 Secured Tone Detection: Ethernet via J9
 Decoder Carrier Deviation: ±30kHz to ±3kHz for each tone
 Decoder Response Time: 10 mS Maximum (5 mS Typical)

EFTS Decoder
 Three modes:
 Encrypted, Error corrected raw Decrypted Decoded to commands and fields
 64-bit digital word per RCC 208-06
 144-bit message frame per RCC 208-06
 50 messages per second
 Manchester Bi-Ø Level Decoding per IRIG 106
 Triple Data Encryption Standard (DES) Unit (TDU)
 TDU support, including key selection and zeroing

FSK Decoder
 FSK Tone Frequency: 15kHz-Mark '1', 10kHz-Space '0' (Factory setting)
 Tones Frequency setting: User configurable Tones 5-75kHz in 10Hz increments (remotely settable)

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	DESCRIPTION
1	VCC	+5VDC
2	D-	DATA-
3	D+	DATA+
4	GND	GROUND

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

[2] STAMP THE TOP ASSY (900#) REV IN SPACE PROVIDED.
 [1] STAMP THE UNIT DASH# IN SPACE PROVIDED.

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMALS ANGLES HOLES ± 1/64 .005 ±.01 ±0.30 .005 .005 .005 .005 .005 MACHINED FINISH: .02 RMS REMOVE BURRS .005 MAX MATERIAL: - FINISH: -				APPROVALS	DATE	WV Communications 1125 A Business Center Circle Newbury Park, CA RECEIVER/DECODER QUAD-MODE (IRIG/HIGH ALPHA/FSK/EFTS) COMMAND VERIFICATION 370-450MHz MODEL: RX2001 SIZE: CAGE CODE DWG. NO. REV D 1GFQ7 050-51090 B SCALE: NONE SHEET 1 OF 1
	TT	7/22/2019	DRAWN			
	TT	7/22/2019	CHECKED			
	TT	7/22/2019	MECH ENGR			
	JT	7/22/2019	ELEC ENGR			
	AM	7/22/2019	PRODUCTION			
	SG	7/22/2019	Q.A.			
DASH NO.	TITLE	NEXT ASSEMBLY	USED ON			
DASH NUMBER TITLE		APPLICATION		DO NOT SCALE DRAWING		