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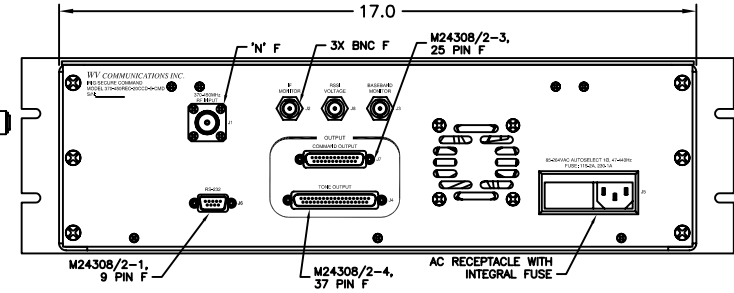
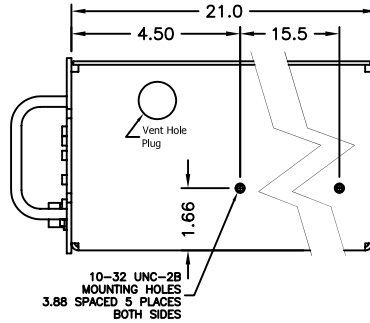
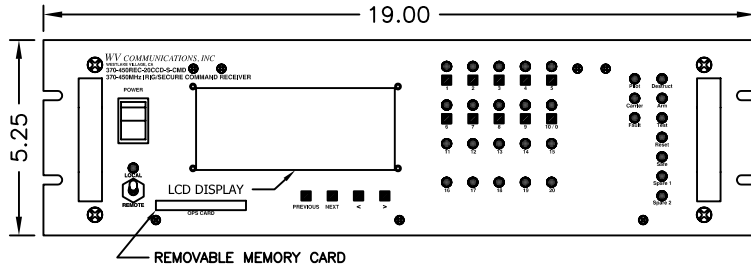
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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	PRELIMINARY RELEASE		



RECEIVER CHARACTERISTICS:

FREQUENCY RANGE: 370-450MHz in 100KHz Steps
FREQUENCY STABILITY: ±0.002% Maximum / 24 Hours
NOISE FIGURE: 60dB Maximum
SPURIOUS & IMAGE REJECTION: -60dBc Maximum
LO RERADIATION: -60dBm Maximum
RF INPUT IMPEDANCE: 50 Ohm Nominal
VSWR INPUT: 2:1 Maximum (Ref 50 Ohm)
RF INPUT DYNAMIC RANGE: -104 to +13dBm
SIGNAL STRENGTH / DEVIATION INDICATION: Via Front Panel LCD & RS-232
SIGNAL STRENGTH REPORTING ACCURACY: ±2dB Maximum Over RS-232C and Rear Panel RSSI Voltage output 40mV/dB Nominal
PEAK DEVIATION REPORTING ACCURACY: ±7% Maximum of Received Carrier Dev. @ +13 to -85dBm
IF 3dB BANDWIDTH: 500±50KHz
IF 60dB BANDWIDTH: 1500±150KHz

IRIG DECODER CHARACTERISTICS:

NUMBER OF IRIG TONES: 20 Channels (See Table for Precise Tones)
-2dB TONE BANDWIDTH: ±1% Minimum
-20dB TONE BANDWIDTH: ±4% Maximum
SIMULTANEOUS TONE DETECTION: 1 to 6 Tones
DECODER CARRIER DEVIATION RANGE: ±30KHz Nominal / Tone (±15 to ±40KHz Range)
DECODER RESPONSE TIME: 5 Milliseconds Maximum
DECODER OUTPUT: SPST 250mA SSR Contact Closure to Common via Rear Panel J4 'D' Connector
DECODER ACTION: Should Not Latch. A Continuous Signal Should Be Emitted While a Tone is Being Received
TONE DURATION: 20 Millisecond Minimum

SECURE DECODER CHARACTERISTICS:

NUMBER OF TONES: 8 Channels (See Table for Precise Tones)
-2dB TONE BANDWIDTH: ±1% Minimum
-20dB TONE BANDWIDTH: ±4% Maximum
SIMULTANEOUS TONE DETECTION: 2 Tones
SECURED TONE COMMAND DETECTION OUTPUT: 5V Differential output via J7
DECODER CARRIER DEVIATION: ±30±3KHz Per Tone
DECODER RESPONSE TIME: 5 Milliseconds Maximum
DECODER JITTER TIME: 1 Millisecond Maximum
COMMAND RESPONSE TIME: 10 Milliseconds Maximum from End-of-Command

ENVIRONMENTAL:

OPERATING TEMPERATURE RANGE: 0 to +50°C
OPERATING RELATIVE HUMIDITY: 0-95%
OPERATING ALTITUDE: 0-10,000 Feet
CALENDAR LIFETIME: 10 Years Minimum
OPERATIONAL LIFETIME: 20,000 Hours Minimum
MTBF: 2,000 Hours Minimum
MTTR (MEAN TIME TO REPAIR): 1 Hour Maximum Down to Card Level
AC INPUT: 85-264VAC, 47-63Hz, Single Phase
FRONT PANEL COLOR: Light Gray per MIL-STD-26307

PIN NO.	OUTPUT	PIN NO.	OUTPUT
1	Destruct+	14	Destruct-
2	Arm+	15	Arm-
3	Test+	16	Test-
4	Reset+	17	Reset-
5	Safe+	18	Safe-
6	Spare1+	19	Spare1-
7	Spare2+	20	Spare2-
8	Pilot+	21	Pilot-
9	GND	22	GND
10	NC	23	NC
11	GND	24	GND
12	GND	25	GND
13	GND	-	-

PIN NO.	TONE/OUTPUT	PIN NO.	TONE/OUTPUT	PIN NO.	TONE/OUTPUT	PIN NO.	TONE/OUTPUT
1	1	11	N/C	21	4	31	N/C
2	3	12	N/C	22	6	32	CARRIER
3	5	13	N/C	23	8	33	N/C
4	7	14	N/C	24	10	34	N/C
5	9	15	N/C	25	12	35	N/C
6	11	16	N/C	26	14	36	N/C
7	13	17	N/C	27	16	37	COMMON
8	15	18	N/C	28	18		
9	17	19	COMMON	29	20		
10	19	20	2	30	N/C		

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

IRIG TONE	FREQUENCY (KHz)	IRIG TONE	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

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE:
 FRACTIONS DECIMALS ANGLES DIMS ± 1/64 .0125 ± 0.005 ± 0.005 ± 0.005 ± 0.005
 MACHINED FINISH: 32 RMS REMOVE BURRS .005 MAX

		APPROVALS	DATE
		DRAWN G. GODDARD	2JUN02
		CHECKED	
		MECH ENGR	
		ELEC ENGR	
		F/PA	
		APPROVED	
NEXT ASSEMBLY	USED ON		
APPLICATION	DO NOT SCALE DRAWING		

WVCommunications 756-A LAKEFIELD RD. WESTLAKE VILLAGE, CA

**COMMAND CONTROL RECEIVER
 MODEL 370-450REC-20CCD-S-CMD
 IRIG 20 CHANNEL/SECURED COMMAND**

SIZE	CAGE CODE	DWG. NO.	REV
C	1GFQ7	050-50294	A

SCALE NONE SHEET 1 OF 1

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PART NO. 050-50294
 REV. A

30-0000-0001-000, REV. C, 04/98