

V-304 ANALOG 4.5 MHz AIRBORNE CASSETTE RECORDER/ REPRODUCER



The V-304 Recorder/Reproducer has been specifically designed to record and reproduce both standard and non-standard 60 Hz field rate video formats. Its rugged construction, compact size, and 4.5 MHz bandwidth capability make the V-304 an ideal recorder when video, FLIR or linescanner recording under severe environmental conditions is required. When using the optional signal formatter, the V-304 is capable of recording an even greater range of signals, such as Radar and other field/line rate sensors, without further system modification.

RECORDER TYPE

2-Head Rotary Helical Scan, Cassette

MEDIA

T-120 (650 Oe) and ST-120 (850 Oe)
1/2" Magnetic Tape Cassette

RECORD/PLAYBACK TIME

120 Minutes with T-120 and ST-120 Cassettes

PHYSICAL CHARACTERISTICS

Size: 8.4" Wide x 4.5" High x 13.6" Deep (Less Tray)
Weight: Less Than 16 lbs. (Less Cassette and Tray)

POWER REQUIREMENTS

Source: 28 VDC per MIL-STD-704D
Consumption: Under 33 Watts, Less Heaters

FEATURES

- High Analog Bandwidth: 4.5 MHz
- Video Signal to Noise Ratio: > 40 dB
- Digital Automatic Tracking Control
- Three Audio Channels
- Command/Status via RS-422
- Event Marking, Detection, Search
- Performance Monitoring Built-In-Test
- Designed for MIL-E-5400 Class 1 Environment
- Qualified in accordance with MIL-STD-810D
- Power & EMI Tested in accordance with MIL-STD-461C/462 and 704D

SPECIFICATIONS

CHANNELS

- Video - Single Channel
 - 4.5 MHz Bandwidth
- Audio - Three Channels
 - Two Hi-Fi Deep-Layer
 - 80 Hz - 20 kHz Bandwidth
 - One Longitudinal
 - 80 Hz - 8 kHz

SIGNAL TO NOISE RATIO

- Video - Greater than 40 dB
- Audio - Greater than 50 dB (Hi-Fi)
- Greater than 38 dB (Long.)

INPUT/OUTPUT IMPEDANCE

- Video - 75Ω/75Ω DC
- Audio - 10kΩ/600Ω AC

RESOLUTION

- Greater than 400 TVL

COMMAND/STATUS INTERFACE

- RS-422-A Serial
- Discrete Parallel

POWER

- In Accordance with MIL-STD-704D

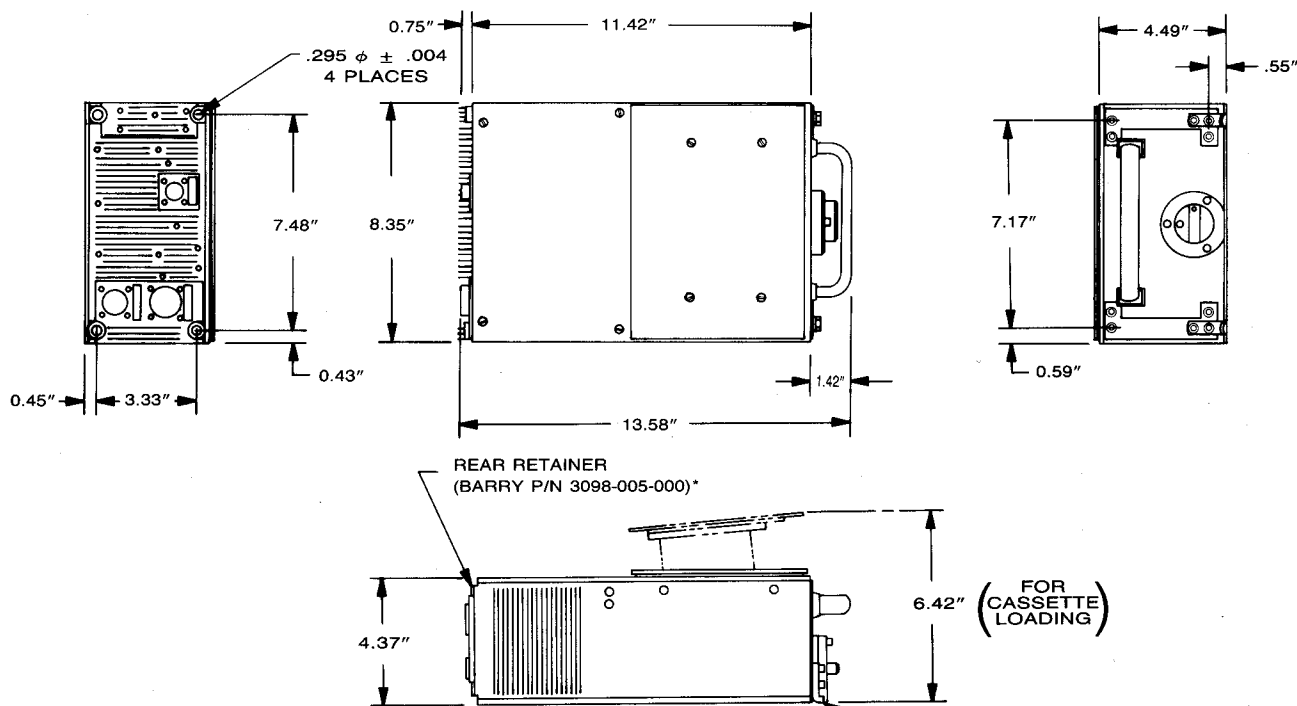
BUILT-IN-TEST

- Initiated and Continuous BIT

ENVIRONMENTAL PERFORMANCE

- Vibration*
 - Functional: 5.3 grms
 - Endurance: 15 grms
- Gunfire Vibration*
 - F-14: 4000/6000 rpm
 - F-16: 20 mm
- Acceleration
 - Operational: 9.0 g (4g -z axis)
- Shock*
 - Operational: 29 g, 11 msec
 - Crash Safety: 40 g, 11 msec
- Temperature
 - Operating: -40° to +55°C
 - Storage: -55° to +85°C
- Temperature Shock
 - Operating: -57° to +71°C
- Altitude
 - Operating: 0 - 50,000 feet
- Explosive Atmosphere
 - Method 511.2, Procedure I
- Humidity
 - 95%, 10 days
- Salt Fog
 - 48 Hours
- Electromagnetic Interference
 - In Accordance with MIL-STD-461C, 462

* With Barry T22-4B-5 Isolators



* FOR OPTIONAL BARRY CONTROLS
SHOCK MOUNT TRAY P/N 94077-1

FRONT HOOK
(BARRY P/N 43-9507-01-901)*