

### Description

The T-36C is a rugged-designed, user-friendly, high-precision instrument for rapid functional testing of VOR, LOC/GS, MB, and VHF COMM (AM/FM) avionics equipment.

The T-36C can be operated in either:

- Standard mode utilizing preset frequencies.
- Keyboard mode, providing full function and control over the signals.

The T-36C allows the test set operator to store three pre-selected carrier frequencies and output power levels for each operational mode. The keyboard provides complete control of most parameters, resulting in a high level of unit flexibility.

The T-36C RF output allows testing from the flight deck of most large aircraft using an expandable, omni-directional antenna. Testing of all functions can be performed with the unit-under-test (UUT) directly connected to Test Set.

- Tests VOR, Localizer, Glideslope, Marker Beacon, and VHF COMM
- Test frequencies can be selected using user-programmed switches or keypad
- Simultaneous LOC, G/S and MB output allow testing of autopilot and flight director
- Allows testing of 8.33 KHz channel spacing
- Compliant with European CE requirements
- 2 year limited warranty



### Features

#### VOR

- Allows selection of VOR bearing in 45° steps
- Manual slewing provides capability for checking full-scale ( $\pm 10^\circ$ ) deflection or “sticky” analog meter movements
- 30 and 9960 Hz modulation can be deleted to check flag operation

#### LOC and G/S

- Allows selection of preset DDM deflections
- Full-scale deflection can be tested using manual slewing
- Allows 90 and 150 Hz tones to be deleted
- Simultaneous LOC/GS/MB Mode

#### VHF Communications (COMM)

- AM or FM modulation capability
- VSWR measurement allows testing of antenna system
- Measures power, frequency, and modulation level
- Select frequency or 8.33 KHz channel

#### Marker Beacon and ILS

- User selection of inner, middle, and outer marker
- Simultaneous MB and ILS output signals

## Specifications

### Transmitter

#### Frequency

Function	Preset Frequency	Accuracy
Marker Beacon	74.5 to 75.5 MHz	+100 Hz
VOR	108.0500 to 117.9500 MHz	+100 Hz
Localizer (LOC)	108.1000 to 119.9500 MHz	+100 Hz
Glideslope	329.1500 to 335.0000 MHz	+100 Hz
VHF COMM	109.0000 to 174.0000 MHz	+100 Hz
Channel spacing in 25 and 8.33 KHz steps		

#### RF Characteristics

Function	Direct Connect	Antenna
Marker Beacon	-115 to -25 dBm	-100 to +13 dBm
VOR	-115 to -25 dBm	-100 to + 6 dBm
Localizer (LOC)	-115 to -25 dBm	-100 to + 6 dBm
Glideslope	-115 to -30 dBm	-100 to + 0 dBm
VHF COMM	-115 to -25 dBm	-100 to + 0 dBm
Accuracy ±1dB - Selectable in 1 dB steps		

#### VOR (Degrees)

Preset Selections - 0°, 45°, 90°, 135°, 180°, 225°, 270°, 315°  
Accuracy - +1°

Variable Control – 0 to 360°, 1° Steps  
30 and 9960 Hz Modulation (On Course) – 30%, ±0.5%

#### Localizer (DDM)

Preset Selections (Left/Right) – 0.000, 0.045, 0.091, 0.200  
Accuracy - ±0.001 DDM  
Variable Control – 0 to .200 DDM L/R, .001 DDM Steps  
90 and 150 Hz Modulation (Center) - ±20% / ±0.5%

#### Glideslope (DDM)

Preset Selections (Up/Down) – 0.000, 0.045, 0.091, 0.200  
Accuracy - ±0.001 DDM  
Variable Control – 0 to .400 DDM U/D, .001 DDM Steps  
90 and 150 Hz Modulation (Center) - ±20% / ±0.5%

#### Marker Beacon

400 Hz / ±8 Hz  
1300 Hz / ±8 Hz  
3000 Hz / ±8 Hz  
Modulation – 95%  
Accuracy ±5%



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#### VHF COMM AM Modulation

Frequency– 150 and 1020 Hz (Default)  
Modulation Range – 0 to 95%, 1% Steps  
Accuracy - ±5%

#### VHF COMM FM Modulation

Frequency – 1000 Hz (Default)  
Modulation Range – 0 to 10 kHz, 1 kHz Steps  
Accuracy - ±1 kHz

#### IDENT

Frequency – 1020 Hz  
Modulation – 10%  
Accuracy - ±1%

#### Receiver

#### RF Characteristics

Function	Tolerance/Accuracy
COMM Frequency	±8 kHz of selected frequency
COMM Frequency Tolerance	±0.5 kHz
FM Deviation Range	0 to 15 kHz
FM Accuracy	±1 KHz
Sensitivity (Antenna Port)	AM/-10 dBm, FM/-30 dBm
Sensitivity (Direct Connect) (Freq, Modulation, & VSWR)	+36 dBm
VSWR Ratio	1.0 to 5.0, ±0.5
Modulation Accuracy	±5%
Power Measurement Range (Direct Connect)	0 to 14 dBW / ±1dBW (1 to 25 Watts)

#### Accessories (Supplied)

- AC Power Cord
- Direct Connect Cable Assembly
- Omni Antenna
- Right Angle Antenna Adapter

#### Physical Characteristics

Packaging – MIL-PRF-28800, Style C  
Size: 15.5 x 9.4 x 6.5 inches  
Weight: 19 pounds  
Operating Temperature: -15° to +55° C  
Battery Operation: 8 hours at 20% Duty Cycle  
AC Operation/Charging: 100-240 VAC, 50-400 Hz  
Simultaneous Battery Charging and Operation