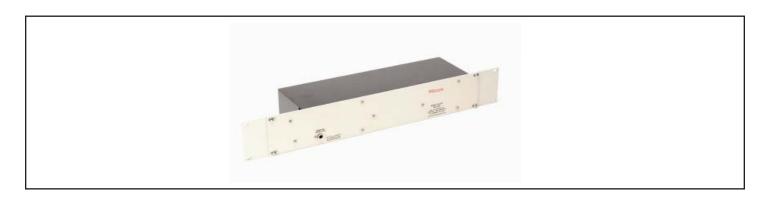
combined test line



Features

- The T164-02 Combined Test Line uses the ringing voltage as a start and provides a timed disconnect.
- Rack Mounted
- 1010 Hz mW Tone
- ±.03 dB Stability for all Conditions
- Oscillator and Balance Termination Impedance

- Automatic Changeover from Tone to Balance Termination
- Test Jack Provided
- Tone Delay after Initial OFF HOOK
- 24 V or 48 V Operation Standard

Description

The Model T164-02 is a combined test line which provides a stable mW, 1010 Hz reference tone for an 8 to 10 second period followed by a quiet termination.

It is designed for installation in a remote office or PBX, and provides means for making one-way transmission and noise measurements as required for connection appraisal surveys. The unit is available as rack mount equipment.

The T164-02 is designed for use with 101 ESS PABX or similar equipment where a test line control lead, such as the S lead, is not available, and where a dry circuit cannot be provided. In these cases, the call is initiated by ringing voltage on the pair.

The T164-02 will answer a call in approximately one half of a ring cycle. Once answered, the line circuit will remain OFF HOOK for a timed period of 16 to 20 seconds, then it will disconnect, ready for another call.

The T164-02 has a stable 1010 Hz tone generator with a nominal output of 0 dBm, and a quiet termination of 900 ohms +2.16 μ F, which is automatically connected across the line when the tone is not present.



The Model T164-02 provides the following sequence of events after a call is received:

> TIMEOUT INTEVAL 16-20 SECONDS

Idle Quiet Term Ring Ring Tone 8-10 Sec 8-10 Sec 1 Sec Trip

Ouiet 1 Sec

OFF DISCONNECT

NOTE: Above figure applies when strapped for combined (Tone and Quiet Termination) operation. If arranged for Continuous Tone, tone would be present for 16 to 20 seconds.

Application of the milliwatt tone is delayed 1 second after OFF HOOK to avoid interference with any equipment which may still be in the line circuit when the OFF HOOK condition is first established.

The milliwatt tone stays on for 8 to 10 seconds, after which it is removed and the quiet termination is connected across the line. The circuit remains in this state until disconnect occurs at the end of the timed period.

The T164-02 may be connected internally for continuous tone following the initial 1 second delay.

Specifications

Reference Tone:

Frequency 1010 Hz ±1/2%

Output

Level 0 dBm

Stability ±0.03 dB under all

conditions

Harmonic Distortion At least 40 dB below

fundamental

Output Impedance 900 ohms $\pm 2\% + 2.16 \,\mu\text{F}$ Output Jack: For external use of

reference tone or for checking level setting.

Balance Termination:

Impedance 900 ohms +2.16 μF

Hold Circuit: Electronic Start Operation: Ringing Voltage

Timing Interval:

Answer Approximately 1 second of

ring

Tone Delay 1 second

Tone Interval 8-10 seconds or continuous

during OFF HOOK interval

OFF HOOK Interval 8-10 seconds

Balance Term. Interval From end of tone to end of

OFF HOOK interval

Environmental Conditions:

Storage Temperature

Operating Temperature 0° C to 50° C Humidity 95% at 35°C 40% at 50°C

-55°C to 70°C Altitude(non-operating) 50,000 feet

Power:

DC Voltage 22 to 55 VDC Current (typ) 75 mA operated

40 mA idle

Physical:

Dimensions (HWD) 3.5 in. x 19 in. or 23 in. x

4.75 in. (9 cm x 48.3cm or

58.4 cm x 12 cm)

Specify rack panel mount length when ordering

Weight Approx. 2 1/2 lbs. (1.13kg)

Ordering Information

T164-02 30164057



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