TELTONE®

M-168-02 and -03 Tone Converter

Tone-To-Pulse Conversion for Step-By-Step Systems

Compact, low cost converter for Central Offices

DESCRIPTION

The M-168 provides conversion from Dual-Tone Multi-Frequency (DTMF) signals to rotary dial type pulses for step-by-step equipment. A single circuit card measuring 3.85 inches by 10.5 inches includes all of the circuitry necessary to convert one linefinder. The fixed output interdigital time of the converter decreases dialing time compared to that of manually operated rotary dialing equipment. The precise make to break ratio improves switch operation for Touch-Tone* calls.

The M-168 detects and translates the two-of-seven frequency signals, given by each digit from a DTMF telephone, as they appear on its Tip and Ring IN leads from the linefinder. It then outpulses the corresponding number of break pulses to the forwarding switch equipment wired to its Tip and Ring OUT leads.

The M-168 will not affect rotary dial calls, even if the battery is not connected.

Simple installation of the M-168 cards permit fast and economical modernization of step equipment. Wiring is on wire-wrap terminals. Relay rack mounting card files, measuring 19 and 23 inches, are available for 20 and 25 converters. These files measure 12 inches deep overall to fit any rack and extend forward 5 inches from mounting flanges for aisle clearance. Housing for up to four converters is also available for mounting directly behind linefinder banks.

An LED indicator gives visual indication of whether the M-168 is idle, enabled, inhibited, or outpulsing. A visual check of the LED will show whether a call would be interrupted by converter card removal. Dial pulse feedback provides the calling party an indication that his call is being processed.

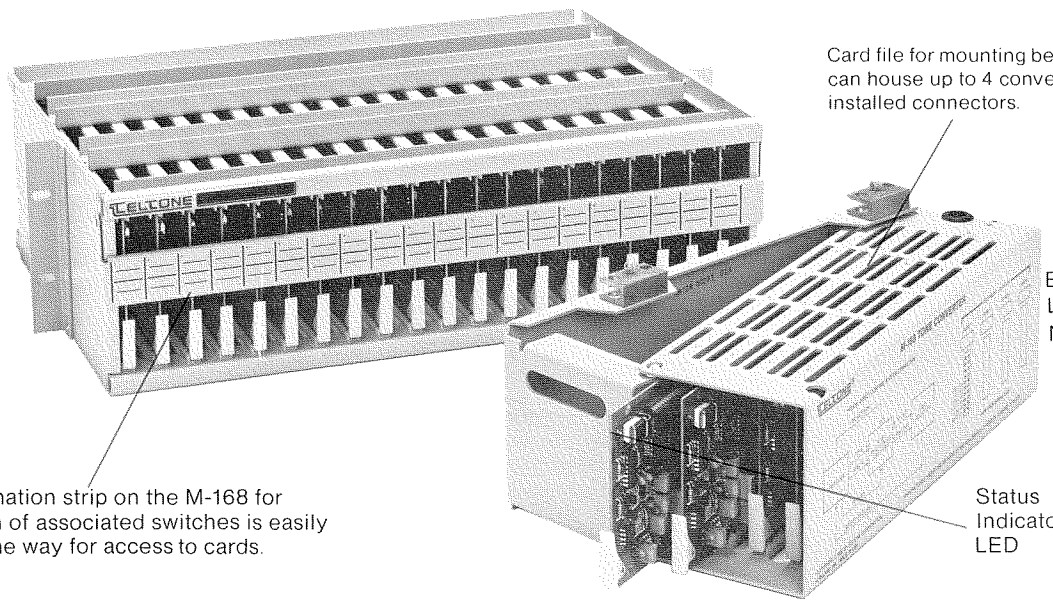
Another feature of the M-168 is the End-of-Dial inhibit, which assures that the converter is prevented from recognizing digits following a DTMF * or # character signal. Answer supervision also puts the unit in the inhibit mode.

A factory option provides for inhibiting the converter following receipt of an MF signal.

FEATURES

Card file has designation strip for quick location of associated switches
LED indicates functions, status of call
Digital receiver
Tip-party identification (ANI) forwarding
Dial pulse feedback
*End of dialing controlled by * or # (# release)*

FOUR-YEAR WARRANTY



SPECIFICATIONS

POWER:	
Voltage:	−43 to −56 VDC
Current:	
idle/inhibited	55 ma typical
enabled	90 ma typical
outpulsing	200 ma max.
TONE RECEIVER:	
Input impedance	75K ohms min., AC coupled
Input level	0.062 to 1.55 VRMS (−22 to +6 dBm)
Bandwidth	±1.5% +2 Hz.
Fusing requirements	⅓ ampere
Outpulse rate	10 ± 0.5 PPS
Outpulse ratio	58% to 62% break
Outpulse interdigital	740 ± 40 ms
ENVIRONMENTAL:	
Temperature	0° to 55°C

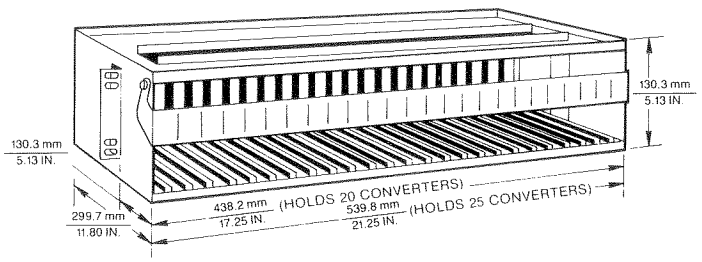
ORDERING INFORMATION

ITEM ORDERING NUMBER	DESCRIPTION
M-168-02	Tone converter
M-168-03	Tone converter with MF shutdown
CF-168-12	Card file for 19-inch rack, holds 20 converters, with connectors installed.
CF-168-22	Card file for 23-inch rack, holds 25 converters, with connectors installed.
CF-168-31	Card file for mounting behind the linefinders holds 4 converters, with connectors installed.

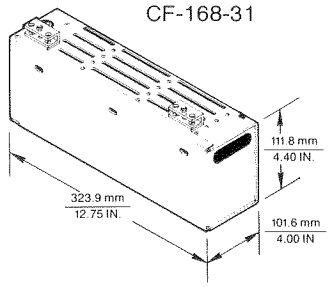
Teltone offers a complete line of special mounting brackets and adapters for all of your applications.

DIMENSIONS

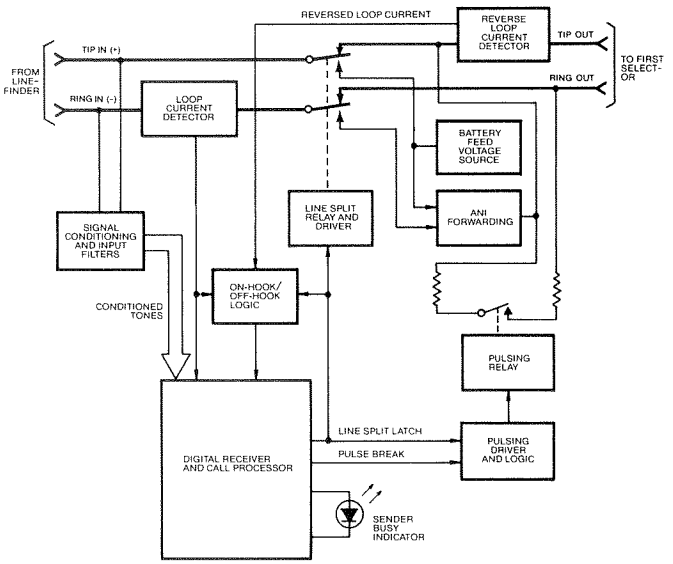
CF-168-12,-22



CF-168-31



SIMPLIFIED BLOCK DIAGRAM



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