

# M-12 Magneto Telephone

The magneto telephone continues to play an important role in critical areas either as the main means of communication or as a back-up system. Continual design improvements ensure its usefulness in intensifying situations.

Our vast experience and user feedback from across the world have prescribed the features of our latest model M-12, which includes:

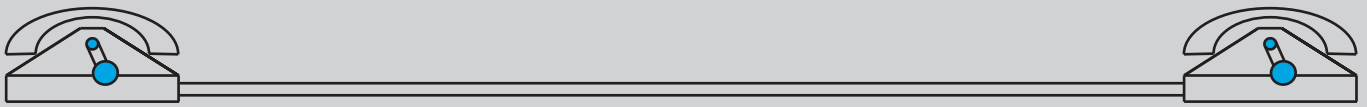
- Durable piezo ringer for efficiency and penetrating sound
- Ringer operates even if handset is left Off-Hook.
- Identical dynamic receiver and transmitter.
- Micro-switch mechanism for generator change-over.



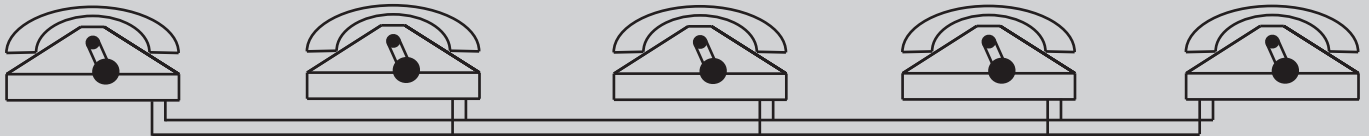
- Two stage protection for circuit against high voltage spikes.
- High insulation resistance for user protection against lightning shock.
- High impedance permits use of more telephones in parallel.
- Flashing multi-coloured LED to indicate Off-Hook condition.
- Ergonomic handle and canted generator for ease of operation.
- PTFE-Graphite bearing to make generator virtually maintenance-free.
- Heavy duty handset and line cords for long life.
- Durable and functional ABS body and handset.
- Hi-tech speech electronics for clarity and low power usage.
- Built-in battery box housing two 'D' type cells for powering speech electronics.
- Can also be powered from external DC source of 1.6 to 16 volts.
- Optionally, can be self powered from own generator (model M-12S).

Endearing features of magneto telephones are long distance capability and ability to work without a centralized exchange, thereby eliminating the chance of total network failure. Even the power supply is local to each telephone, and can be just a pair of flashlight batteries. Optionally, the power required can be produced by it's own generator.

Magneto telephones can form efficient and durable communication networks as follows:

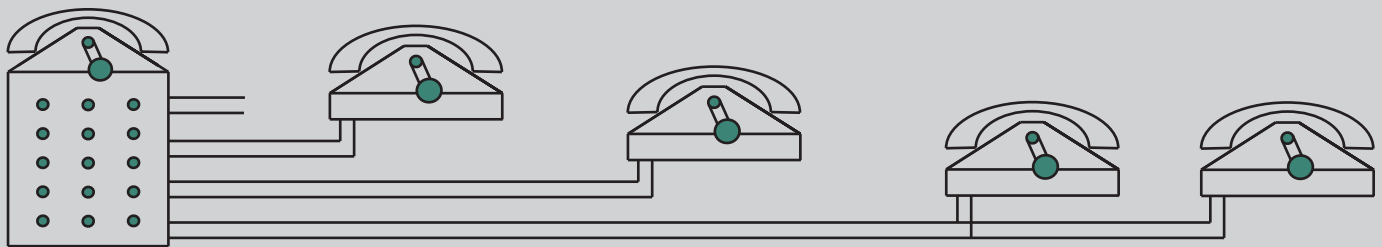


A pair of magneto telephones can establish a simple communication link. The distance can be many kilometers, depending on supply voltage and line conductor.



Many magneto telephones can be connected in parallel to form a simple parallel network. The number of telephones depends on line conductor type and distance.

Calling of particular telephone user is by cadence (ringing pattern) variation.



Up to fifteen lines, each connected to one or more magneto telephones, can be branched radially around a manual exchange or annunciator to form a more elaborate network.

Parameter	Specification	IRS TC 36/97 Limits	M-12 Performance
Power Supply Range	- - -	1.5 to 3 V DC	1.6 to 16 V DC
Nominal Current @ 3V	- - -	< 25 mA	< 20 mA
Insulation @ 500 V DC	- - -	> 5 mega Ohms	> 500 mega Ohms
Send Amplification @ 5 mV	- - -	> 774 mV (+ 43.8 dB)	> 800 (+ 44 dB)
Receive Amplification @ 193 mV	- - -	> 100 mV (- 5.7 dB)	> 137 mV (- 3 dB)
Side-Tone Suppression	- - -	< 100 mV (- 12.0 dB)	< 100 mV (- 12 dB)
Insertion Loss On-Hook	- - -	< 18 mV (0.1 dB)	< 2 mV (0.02 dB)
Insertion Loss Off-Hook	- - -	< 68 mV (0.8 dB)	< 68 mV (0.8 dB)
Generator Output -open	- - -	> 80 V AC	> 80 V AC
Generator Output -max load	- - -	> 28 V AC	> 30 V AC
Dynamic Working Range @ 3Vps	- - -	> 20 dB	> 20 dB

Specifications and features are subject to change due to improvements.

Dedicated accessories:

- Solar/Mains Back-up Power Pack
- Parallel Ringer
- Annunciator Exchange
- Cadence Encoder/Decoder
- Push-Button Caller



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