APEX MAXMIN I-10 EM SYSTEM

❒ Designed for geoengineering applications and groundwater and mineral exploration, continuing and expanding the concepts of the earlier and highly popular MaxMin models.

❒ Frequency span is extended to ten octavely spaced frequencies from 110 to 56320 Hz, with increased range and number of coil separations. These and other developments result in greater performance, with more applications and enhanced interpretation.

❒ Advanced spheric and powerline interference rejection is still further improved, resulting in faster and more accurate surveys, particularly at the larger coil separations.

❒ MaxMin Computer or MMC, which is described in a separate data sheet, is offered for digital data processing, display, storage and transfer. The MMC displays and stores the in-phase and quadrature readings, their standard deviations, and the corresponding apparent ground conductivity values. Rough terrain surveys are also simplified with the MMC.

❒ Data interpretation and presentation programs are available for layered earth parametric soundings and discrete conductor surveys done with MaxMin EM.

TRANSMITTER

RECEIVER + MMC

MAXMIN I-10 EM SYSTEM SPECIFICATIONS:

FREQUENCIES: 110, 220, 440, 880, 1760, 3520, 7040, 14080, 28160 and 56320 Hz.

COIL SEPARATIONS: SET 1: 12.5, 25, 50, 75, 100, 125, 150, 200, 250, 300 and 400 metres (the standard set).
SET 2: 10, 20, 40, 60, 80, 100, 120, 160, 200, 240 and 320 metres (selected with grid switch in receiver).
SET 3: 50, 100, 200, 300, 400, 500, 600, 800, 1000, 1200 and 1600 feet (selected with grid switch in receiver).

TRANSMITTER DIPOLE MOMENTS:

110 Hz:	200 Atm²	3520 Hz:	80 Atm²
220 Hz:	190 Atm²	7040 Hz:	40 Atm²
440 Hz:	170 Atm²	14080 Hz:	20 Atm²
880 Hz:	140 Atm²	28160 Hz:	10 Atm²
1760 Hz:	110 Atm²	56320 Hz:	5 Atm²

MODES OF OPERATION: MAX 1: Horizontal loop or slingram - transmitter and receiver coil planes horizontal and coplanar.
MAX 2: Vertical coplanar loop mode transmitter and receiver coil planes vertical and coplanar.
MIN 1: Perpendicular mode 1 - transmitter coil plane horizontal and receiver coil plane vertical.
MIN 2: Perpendicular mode 2 - transmitter coil plane vertical and receiver coil plane horizontal.

PARAMETERS MEASURED: In-phase and quadrature componets of the secondary magnetic field, in % of primary field.

READOUTS: Analog direct edgewise meter readouts for in-phase, quadrature and tilt. Additional digital LCD readouts provided in the optional MMC computer. Interfacing and controls are provided for ready plug-in of the MMC.

RANGES OF READOUTS: Switch activated analog in-phase and quadrature scales: 0±4 %, 0±20 % and 0±100 %, and digital 0±199.9 % autorange with optional MMC. Analog tilt 0±75 % and 0±99 % grade with MMC.

RESOLUTION: Analog in-phase and quadrature 0.1 to 1 % of primary field, depending on scale used, digital 0.01 % with autoranging MMC; tilt 1 % grade.

REPEATABILITY: 0.01 to 1 % of primary field, typical, depending on frequency, coil separation and conditions.

SIGNAL FILTERING: Powerline comb filter, continuous spheric noise clipping, autoadjusting time constant, and more.

WARNING LIGHTS: Receiver signal and reference warning lights to indicate potential error conditions.

SURVEY DEPTH PENETRATION: From surface down to 1.5 times coil separation for large horizontal target and 0.75 times coil separation for large vertical target, values typical.

REFERENCE CABLE: Lightweight unshielded 4/2 conductor teflon cable for maximum operating temperature range and for minimum pulling friction.

INTERCOM: Voice communication link provided for operators via the reference cable.

TEMP. RANGE: Minus 30 to plus 60 degrees Celsius, operating.

RECEIVER BATTERIES: Four standard 9 V - 0.6 Ah alkaline batteries. Life 25 hours continuous duty, less in cold weather. Optional 1.2 Ah extended life lithium batteries available (recommended for very cold weather).

TRANSMITTER BATTERIES: Standard rechargeable gel-type lead-acid 6 V -26 Ah batteries (4 x 6 V - 6.5 Ah) in nylon belt pack. Optionally rechargeable long life 6 V - 28 Ah ni-cad batteries (20 x 1.2 V - 7 Ah) with ni-cad chargers - best choice for cold climates.

TRANSMITTER BATTERY CHARGERS: Lead acid battery charger: 7.3 V @ 2.8 A, Ni-cad battery charger: 2.8 A @ 8 V nominal output. Operation from 110 - 120 and 220 - 240 VAC, 50 -60 Hz, and 12 - 15 VDC supplies.

RECEIVER WEIGHT: 8 Kg carrying weight (including the two ferrite cored antenna coils), 9 Kg with MMC computer.

TRANSMITTER WT: 16 Kg carrying weight.

SHIPPING WEIGHT: 60 Kg plus weight of reference cables at 2.8 Kg per 100 metre, plus optional items if any. Shipped in two aluminum lined field / shipping cases.

STANDARD SPARES: Spare transmitter battery pack, spare transmitter battery charger, two spare transmitter retractile connecting cords, spare set of receiver batteries.

OPTIONS AND ACCESSORIES, PLEASE SPECIFY:

- MMC, MaxMin Computer option
- Data interpretation and presentation programs
- Reference cables, lengths as required
- Reference cable extension adapter
- Handheld inclinometer for rough terrain
- Receiver extended life lithium batteries
- Transmitter ni-cad battery & charger option
- Minimal, regular or extended spare parts kit

Specifications subject to changes without notification

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Telephone: (1) 416 852 5875
after Oct.3, 1993: 905 852 5875

Facsimile: (1) 416 852 9688
after Oct.3, 1993: 905 852 9688

P. O. Box 818, Uxbridge,
Ontario, Canada L9P 1N2

APEX PARAMETRICS LIMITED

Cables: Apexpara Toronto
Airport: Toronto International