

# Communications

the magazine of mobile radio professionals

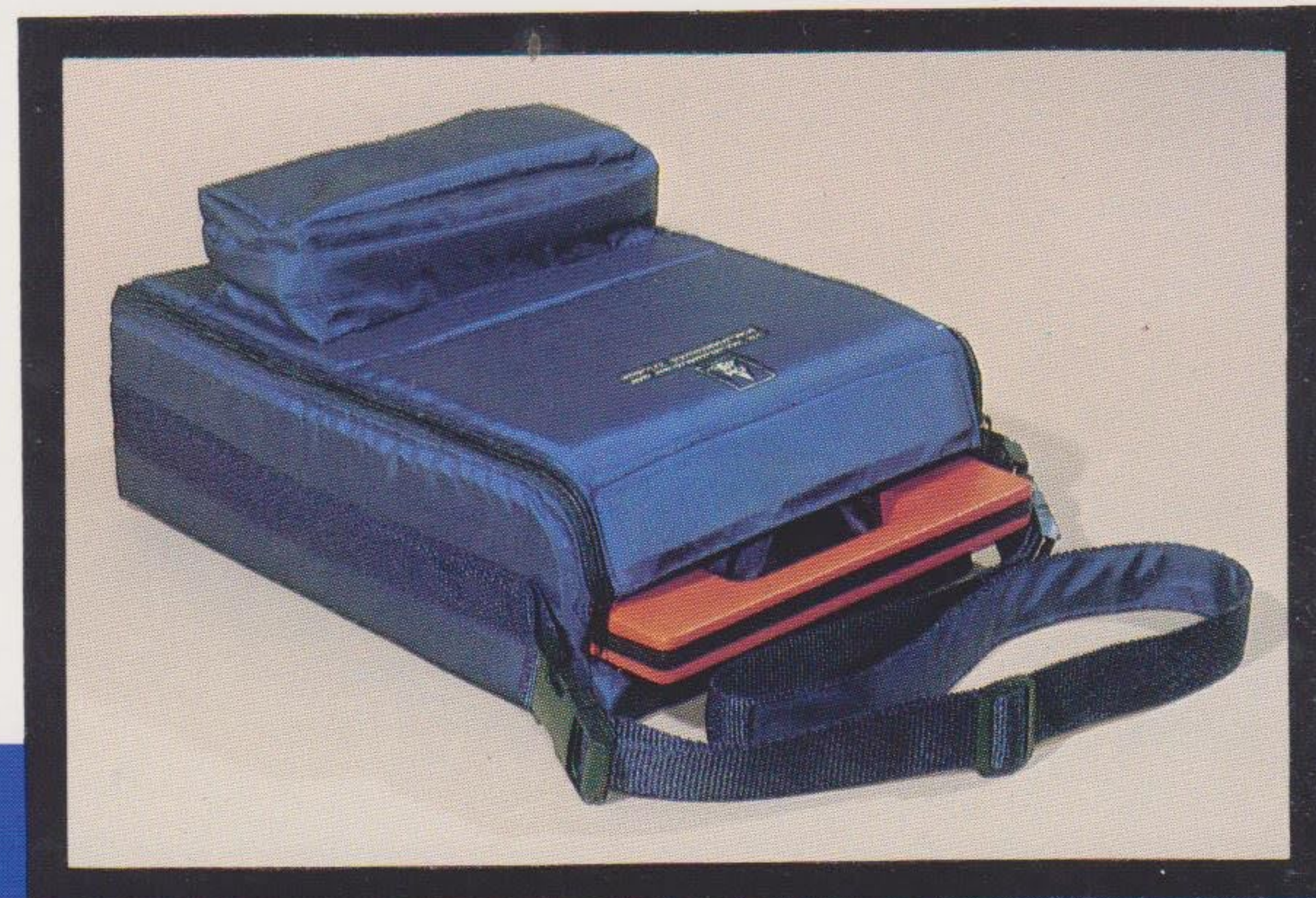
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**EMS Communications  
Marketing Portable Radios  
Providing Quality Trunk Service**

## MODULAR CONSTRUCTION

THE MCI MODEL 3550 WAS DESIGNED TO MINIMIZE DOWN-TIME BY USING A COMPLETELY MODULAR CONSTRUCTION. NEARLY ALL EQUIPMENT IS HOUSED IN SIX MODULES; THE MED PACK, TONE RECEIVER, TRANSMITTER, UHF AMPLIFIER AND DUPLEXER. ANY OF THESE MODULES CAN BE REMOVED AND REPLACED IN A MATTER OF MINUTES. A DOUBLE-SIDED FLEXIBLE CIRCUIT IS USED TO FACILITATE THE INTERCONNECTION BETWEEN THE FRONT PANEL MOTHER BOARD AND THE SIX PLUG-IN MODULES.



## REPEAT MODE

THE 12 WATT MCI MODEL 3550 IS CAPABLE OF BEING USED AS A PORTABLE REPEATER. INCOMING VOICE AND ECG SIGNALS FROM A LOW POWER HAND-HELD PORTABLE WILL BE TRANSMITTED ON AN EXTENDED RANGE WITH 12 WATTS OF RF POWER.

## DTMF KEYPAD

SENDS STANDARD DUAL TONE MULTIFREQUENCY SIGNALING MANUALLY OR THROUGH AUTOMATIC NUMBER IDENTIFICATION, ANI.

**VOICE MODE** — SWITCH MODE TO PUSH TO TALK INDICATED ON THE HANDSET TO TRANSMIT. IN VOICE MODE, TRANSMISSION IS CONTINUOUS.

ECG SIGNALS ARE TRANSMITTED IN THIS MODE. BOTH VOICE AND ECG MULTIPLEX OPTIONS ARE AVAILABLE.

## ECG LEAD SELECT

THE LEAD SELECTOR SWITCH ALLOWS ECG TRANSMISSION FOR LEAD I, II AND LEAD III. WHEN SWITCHED TO LEAD CHECK, THE SYSTEM WILL CHECK THE INTEGRITY OF THE ELECTRODE CONNECTION TO THE PATIENT. THE APPROPRIATE LED LAMP WILL FLASH, INDICATING A FAULTY RA, LA, LL CONNECTION.

**ECG-CAL** A 1 mV SQUARE WAVE IS INJECTED INTO THE ECG AMPLIFIER TO CALIBRATE THE HOSPITAL EQUIPMENT PRIOR TO AN ECG TRANSMISSION.



## ACOUSTIC TELEPHONE COUPLER

IN THE EVENT OF TOTAL LOSS OF RF COVERAGE, THE COUPLER CAN BE USED TO COUPLE THE RADIO AUDIO TO A LOCAL TELEPHONE FOR FULL DUPLEX TRANSMISSION OF VOICE AND ECG. WHEN THE COUPLER IS USED, THE RADIO TRANSMITTER AND RECEIVER ARE DISABLED.



## BATTERY CHARGER

THE MCI MODEL 3552 AC LINE RAPID CHARGER IS DESIGNED TO FULLY CHARGE THE POWER PACK IN LESS THAN 30 MINUTES. IT WILL AUTOMATICALLY SWITCH TO A TRICKLE CHARGE RATE ONCE THE BATTERY IS COMPLETELY CHARGED. HOT BATTERY PROTECTION IS ALSO BUILT INTO THE SYSTEM. AN OPTIONAL 12 VOLTS DC VEHICULAR CHARGER IS ALSO AVAILABLE.

## BATTERY PACK

THE POWER PACK IS DESIGNED TO PROVIDE THE USER WITH MORE THAN 80 MINUTES OF UNINTERRUPTED RF TRANSMISSION AT 12 WATTS. WHEN THE VOLTAGE DROPS TO A CERTAIN PRESET LEVEL, THE POWER LAMP WILL FLASH INDICATING THAT THE BATTERY IS READY FOR A RECHARGE, AND GIVING THE USER AN EXTRA 10 MINUTES OF TRANSMISSION TIME.

OCOM., dba



**MEDICAL COMMUNICATIONS  
AND INSTRUMENTATION**



# MCI MODEL 5000

## DESCRIPTION

THE MODEL 5000 MEDICAL COMMUNICATIONS AND TELEMETRY CONSOLE PROVIDES THE USER WITH ALL THE FUNCTIONS NECESSARY TO OPERATE A BASE STATION HOSPITAL.

- 1 RADIO CONTROLLER**  
PROVIDES CONTROL OF UP TO FOUR CTCSS FOUR FREQUENCY TONE CONTROLLED BASE STATIONS.
- 2 TELEMETRY DEMODULATOR**  
DEMODULATES INCOMING EKG SIGNALS FROM THE RADIO OR PHONE LINES. ALSO PROVIDES VARIOUS FILTERS TO ELIMINATE UNWANTED NOISE ARTIFACTS AS WELL AS QRS INVERSION AND AUTOMATIC GAIN CONTROL FOR EKG WAVEFORMS.
- 3 DISPLAY OF EKG WAVEFORMS**  
EIGHT SECONDS OF EKG WAVEFORMS ARE DISPLAYED ON TWO CHANNEL DIGITAL STORAGE SCOPE WITH FREEZE CAPABILITY. ALL INFORMATION IS ALSO PERMANENTLY RECORDED ON A TWO SPEED STRIP CHART RECORDER WHILE A DIGITAL PANEL METER DISPLAYS HEART RATE.

- 4 CASSETTE RECORDING**  
2-WAY VOICE COMMUNICATION AND EKG TELEMETRY ARE RECORDED ON A RUGGED VOICE OPERATING CASSETTE RECORDER.

PROVISIONS ARE ALSO MADE FOR REVIEWING TAPES FOR INSTRUCTIONAL PURPOSES.

# MCI



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