



communications

General Electric's NEW CONCEPT IN TWO-WAY RADIO COMMUNICATIONS THE HIGH POWER Porta-Mobil



When it's on your desk,
it's your
BASE STATION



When it's by your side,
it's your
PORTABLE



When it's in your car,
it's your
MOBILE

It's your Porta-Mobil

Another Solid-State Progress Line Product

Porta-Mobil

- the mobile with portability
- the base station



IT'S A PORTABLE

You have a choice of two portable battery power packs—a rechargeable nickel-cadmium battery pack or a “D” cell pack. Both packs are interchangeable with the mobile packs and with each other. Your rechargeable pack will give you an eight-hour day of service and can be recharged overnight. Your “D” cell pack will give you five eight-hour days of service before the batteries must be replaced. With either portable pack, it's—pick up and GO!

The All-Solid-State General Electric Porta-Mobil is an entirely new concept in two-way radio communications employing the newest SILICON transistor circuit techniques throughout the transmitter, receiver and associated options. For the first time you can have high-power, solid-state, full mobile performance, two-way communications wherever you go. Porta-Mobil provides transmit power up to 18 watts low-band and up to 10 watts high-band—sensitivity down to .25 microvolts—voltage regulation for superior circuit stability throughout the battery life—and continuous transmit duty cycle capability. Porta-Mobil sets new standards of reliability and performance to meet your communication needs.

IT'S A MOBILE

With its convenient under-dash mounting frame and mobile power pack, your Porta-Mobil tucks neatly under the instrument panel of your vehicle and is a true mobile unit. The mobile power pack connects to your vehicle's battery and supplies a constant, electronically regulated voltage to your Porta-Mobil. If you want to take your unit with you when you leave your vehicle, unsnap it from its mobile power pack and snap on a portable power pack. Your mobile pack remains secure in the mounting frame.

Unexcelled

• the portable with mobile specifications
with Porta-Mobil advantages

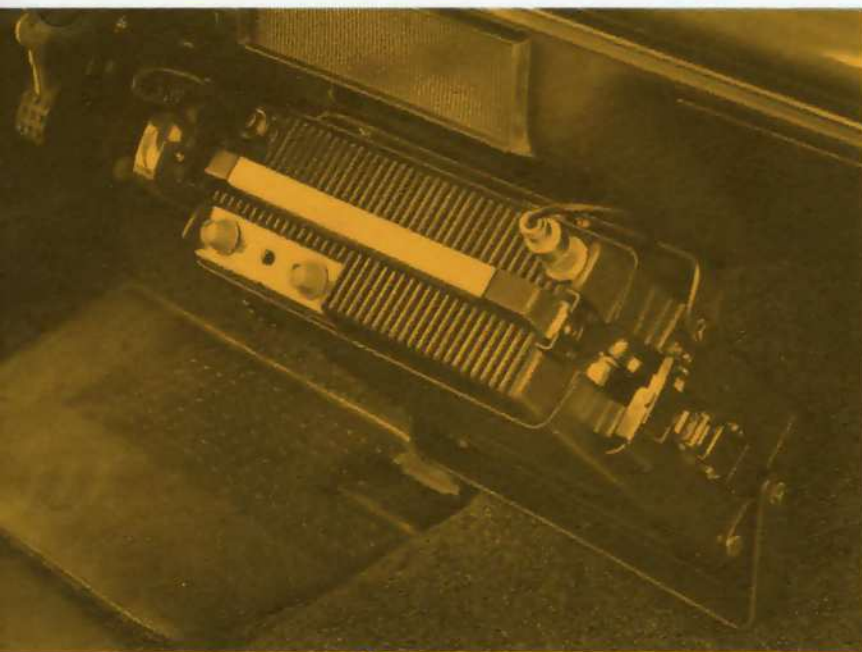


PORTABLE

- *size* • *weight*
- *versatility* • *durability*
- *power sources*

MOBILE

- *sensitivity* • *selectivity*
- *audio quality* • *range*
- *audio & RF power*
- *power sources*
- *mounting*



IT'S A PORTA-MOBIL



Versatility

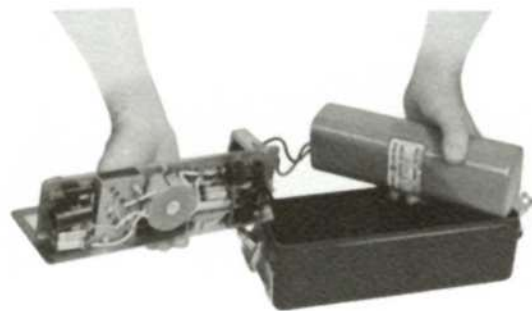
Porta-Mobil

• offers you a choice of interch

The power packs available for use with your Porta-Mobil provide you with high-power performance for either mobile or portable application. For mobile applications, power packs are available for ± 6 volt and ± 12 volt vehicles.

For portable application, two types of power packs are available. The dry-battery power pack operates on 16 "D" cell batteries. Alkaline cells are recommended for longer life although the pack will operate with any type "D" cell including the kind available from your drug or hardware store. Original equipment is shipped with heavy-duty (5-day) alkaline cells.

The rechargeable power pack contains a nickel-cadmium battery and has a built-in battery charger to let you charge your battery from a 117 volt AC outlet. This feature allows your Porta-Mobil to be used as a truly portable base station wherever AC power is available. An optional cord is available to provide a trickle charge from the cigarette lighter in your vehicle.



RECHARGEABLE POWER PACK

Shipped standard with General Electric heavy-duty nickel-cadmium battery.

- (1) High-efficiency, easy-access transistorized power converter and battery charger.
- (2) Heavy-duty General Electric ventable nickel-cadmium battery.
- (3) Weather-proof charging-cord receptacle.



Interchangeable power supplies



MOBILE POWER PACK

Three solid-state mobile power packs are available permitting you to use your vehicle's battery as a power source for your Porta-Mobil. They are exactly the same size and in every way interchangeable with the dry-cell or rechargeable battery packs. The 12-volt (negative ground) is offered for the great majority of vehicles built today.

The 12-volt (negative/positive ground) pack is available for automobiles, trucks or buses where interchangeability from one vehicle to another is to be accomplished regardless of polarity.

A 6-volt (negative/positive ground) pack is also available for vehicles such as certain foreign-made small cars, scooters, fire trucks, earth-moving equipment or other vehicles not yet standardized on 12-volt ignition systems.



DRY-BATTERY POWER PACK

Shipped standard with heavy-duty (5-day) alkaline D-cells.

- (1) Simple and quick battery replacement with any type "D" cell.
- (2) Mylar-coated alignment tubes protect against electrolyte and water damage.
- (3) Positive-pressure spring contacts for battery base.
- (4) Wear-proof, rhodium plated contacts for battery tip.
- (5) No polarity confusion—all batteries load in one direction.
- (6) Plug-in, battery-equalizing relay.



Your Porta-Mobil can be transferred from one power pack to another by releasing the retaining snap-locks, separating it from the pack, reseating it on another and re-securing the snap-locks. It takes only seconds.

The Porta-Mobil Package...

Designed for compactness...convenience...and flexibility

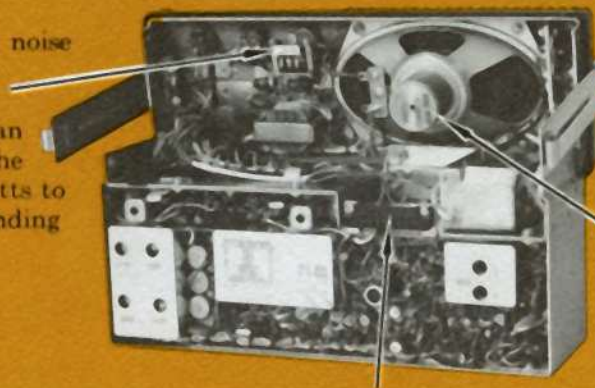


Your Porta-Mobil package is fully weather resistant including the speaker and microphone—needs no weather protecting case.



Preventive maintenance is greatly simplified by a snap-off power supply, snap-open/slide-out case and hinged control head section exposing all circuit, test and alignment points. Centralized metering sockets are provided for rapid checking of transmitter and receiver circuits.

For use in relatively low noise areas such as office, fire towers and emergency communication centers, an internal switch reduces the audio power from 1.5 watts to 100 milliwatts, thus extending battery life.



The 3" x 5" oval speaker with its heavy, high-density magnet gives you loud and clear audio at a power level not previously available in hand-carried units.

A Centralized Metering socket is provided for rapid checking of transmitter and receiver circuits.

The General Electric EX-3-A Portable Test Set provides an easy and fast method of tuning and troubleshooting your G-E equipment including your Porta-Mobil. A few of its features are:



- Off-center zero to facilitate system netting
- Voltage range scale—1 through 1000 volts DC
- Rotary switch for selection of equipment metering points
- Discriminator reverting switch facilitates receiver tune-up
- Meter polarity reversing switch
- Audio input/output jack
- Push to test transmitter switch

With Porta-Mobil flexibility, it's easy to change operating styles... mobile to portable / portable to mobile

No matter how you have ordered your basic Porta-Mobil—to operate as a portable or to operate as a mobile—you can get extra use from your mobile to serve as a portable; or, your portable to serve as a mobile unit.

Adding the Portable Function to Your Mobile Porta-Mobil

If you now own a low- or high-band mobile unit and want to be able to use it as a portable with a dry-cell power pack, an optional kit will provide you with the power pack, batteries and the proper portable antenna.

Similarly, optional kits are available to provide you with the rechargeable power pack, proper portable

antenna and your AC charging cable. It's as easy as that.

Adding the Mobile Function to Your Portable Porta-Mobil

If you have a portable unit and wish to convert to mobile operation, it's just as easy. To convert your low- or high-band portable to a ± 6 volt mobile, optional kits provide you with the power supply, cable, mounting frame, mobile antenna and all the appropriate hardware.

Similarly, optional kits provide you with the 12 volt system accessories required for ± 12 volt operation or -12 volt operation only. Again—it's as easy as that for the versatile Porta-Mobil.

Other individual accessories or options, shown below, can be ordered as needed or desired.

Porta-Mobil Accessories / Options



Handset: For special applications where messages received and transmitted must be kept confidential, or in areas where the noise level is exceptionally high, the Porta-Mobil is also available in a telephone handset model. When the handset is lifted from its holder, the standard internal speaker is automatically muted.

Locking Vehicular Mounting Frame:

The locked, tamper-proof mounting frame provides "theft insurance" for your whole unit. When you loosen the frame clamping lock to disengage the Porta-Mobil from the mobile power pack so that a portable power pack can be snapped on, the mobile pack remains secure in the frame by re-engaging your lock.



DC Trickle Charge Cable: This vehicular cord plugs into the 12 volt DC cigarette lighter outlet of your vehicle to help maintain the nickel-cadmium battery charge.



Gutter Mount Clip-on Antenna: Quick and easy to install or transfer, this clip-on antenna (high-band only) with its cord gives you mobile range and signal strength regardless of the power pack you are using.



Leather Field Jacket and Back Pack Harness

Pictured left is the Porta-Mobil in its Leather Field Jacket to protect its surfaces from marks and scratches that might occur in rough field use and strapped into the Back Pack Harness that secures the unit snug to the wearer's body and leaves his arms free.

CHARACTERISTICS

Dimensions	9 $\frac{1}{4}$ " H x 3 $\frac{5}{8}$ " W x 11" L				
Frequency Ranges	25-42 MC	42-50 MC	132-165 MC	165-174 MC	
Power Output*	18-15 watts	15-12 watts	10-8 watts	8-6 watts	
Sensitivity:					
20 db quieting	0.35 uv		0.5 uv		
EIA—12 db SINAD	0.25 uv		0.3 uv		
Selectivity:					
EIA—2-signal	-60 db @ \pm 20 KC		-80 db @ \pm 30 KC		
Audio Output Power:					
@ 13.8 volts	1.5 watts (at less than 10% distortion)				
Operating Ambient Temperatures:					
Portable unit	-30°C to +70°C (-22°F to +158°F)				
Mobile unit	-30°C to +65°C (-22°F to +149°F)				
Weight:					
Portable unit	Less than 13 lbs.				
Mobile unit	Combination—16 lbs.				
Current Drain:					
Mobile units					
	Power Source	Power Supply Pack Number	Receiver Squelched	Receiver at Full Audio	Transmit
	-13.8 VDC	4EP47A11	0.03 amps	0.30 amps	4.5 amps
	\pm 13.8 VDC	4EP47A10	0.60 amps	0.60 amps	4.5 amps
	\pm 6.5 VDC	4EP48A10	0.60 amps	1.0 amps	11.0 amps
Portable units	13.8 volts	EP44A10 (rechargeable)	0.029 amps	0.28 amps	3.8 amps @ 12.5 volts
		EP42A10 (dry cell)			
Battery Life:					
Rechargeable battery model	one 8-hour day				
Dry cell battery model	five 8-hour days				

*Power characteristics are shown as typical for rechargeable and mobile power supplies

Your Porta-Mobil provides complete system flexibility because of these built-in options.

- Two frequency transmit plus two frequency receive
- Channel Guard transmit only
- Channel Guard receive only
- Two-way Channel Guard
- Selective Calling—Individual or Individual plus All Call
- Selective Calling plus Channel Guard transmit

GENERAL ELECTRIC

COMMUNICATION PRODUCTS DEPARTMENT, LYNCHBURG, VIRGINIA
(In Canada, Canadian General Electric Company, Ltd., 830 Lansdowne Rd., Toronto, Ontario)