The GR1225 Repeater relays both 12.5 kHz and 25 kHz, and Motorola made it hard to hear a difference.
This latest innovation in design not only eliminates one of the internal mobile radios and the basic repeater controller that modular repeaters require, it cuts the cost to build a repeater by nearly a third. This more stylish, compact, desktop unit relies on a single, full duplex transceiver to transmit and receive.
COMPACT STYLING MAKES IT IDEAL FOR DESKTOP USE. The GR1225 accommodates a built-in power supply as well as numerous internally-housed accessories. With the capacity to house options like duplexers, battery revert and an enhanced controller within, the modest space it occupies is even more impressive.

YOU SET THE TIME OUT TIMER TO 1-255 SECONDS OR OFF, IF DESIRED. This automatic shut-off feature prevents a user from monopolizing the repeater with a single transmission. This equitable feature governs the unit itself when used as a base station.

RELAY DELAY KEEPS THE REPEATER TRANSMITTER KEYED A SHORT TIME AFTER A RADIO USER RELEASES THE PTT SWITCH. This allows a user group to conduct a normal conversation without delays from re-activating the repeater. This “polite pause” or Relay Delay can be set from 0 to 7 seconds.

BECAUSE OF CWID, YOU DON’T HAVE TO I.D. YOURSELF. International Morse Code is used to automatically send out the station ID periodically to identify the owner of the transmitting repeater. This satisfies the requirements of FCC.

COURTESY BEEP SIGNIFIES WHEN A PERSON IS THROUGH TALKING. You don’t have to say “over” to complete your transmission—the other people in the group are now cleared to talk or respond.

THE BATTERY BACK-UP TONE SENDS A WARNING. When the battery revert kit is installed, this heads-up alert notifies users during conversations that they’re using the back-up battery supply for the GR1225.

THE ADVANTAGE Port ALLOWS EXPANSION OF THE REPEATER’S CAPABILITIES UNDER FULL PROTECTION OF ITS ORIGINAL WARRANTY. Your dealer can quickly and safely install a wide range of capabilities from scrambling to signaling—which-ever features you designate.

X-PAND 12.5 OR 25 kHz
• Compresses your voice at one end
• Expands it at the other
• SIGNIFICANTLY reduces noise level in the process

WITH THE FCC SYSTEMATICALLY RESTRICTING TWO-WAY RADIOS TO 12.5 kHz, MOTOROLA’S NEWLY DESIGNED X-PAND TECHNOLOGY PROVIDES THE KIND OF AUDIO QUALITY YOU EXPECT FROM MOTOROLA’S 25 kHz.

The GR1225 is ideal for desktop use in an office setting. It can also become a base station allowing a dispatch operator to communicate with other radios in the field. It has built-in basic repeater capabilities. Optional controllers can be added for enhanced features such as telephone interconnect, multiple PL/DPL codes and signaling.

X-PAND
12.5 OR 25 kHz
• Compresses your voice at one end
• Expands it at the other
• Significantly reduces noise level in the process
For more information, please contact

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**CONVERSION KIT FOR GR400/900** Allows you to use the R1225 transceiver to create a 12.5/25 kHz switchable repeater for rack mount or wall mount applications.

**OPTIONAL ACCESSORIES**

**DUPLEXER** Can be internally installed to allow a single antenna to be used instead of two separate antennas to transmit and receive simultaneously.

**DESK MICROPHONE** This converts a desktop repeater into a dispatch radio for office personnel use.

**PORTABLE CARRY CASE** Allows easy transport for use as a back-up or emergency repeater.

**DESKSETS** DC or Tone Remote model allows user to control a remotely located repeater. Extended Local model provides base station control for dispatch operations. RapidCall model provides the dispatcher with features such as Push-to-Talk ID, Emergency Alarm Decode, Call Alert, Radio Check and Voice Selective Call.

**BATTERY REVERT** Automatic back-up power allows continued use when power goes down. Also includes float maintenance charger to keep battery charged when not in use.

**ONE OF THE FOLLOWING CONTROLLERS CAN BE INSTALLED INSIDE THE REPEATER TO PROVIDE ENHANCED FEATURES:**

**i20R ONSITE REPEATER CONTROLLER** Provides up to 10 PL/DPL single code or cross code combinations for multiple group repeater operations with CWID and enhanced community repeater operation capabilities.

**i750R ADVANCED SELECTIVE CALLING INTERCONNECT CONTROLLER** Provides advanced telephone interconnect capability with stored telephone numbers, access/override codes, dialing restrictions, call timers, direct-air access and CWID.

**ZR340 ADVANCED INTERCONNECT CONTROLLER** Provides advanced telephone interconnect capability with stored telephone numbers, access/override codes, dialing restrictions, call timers, direct-air access and CWID.

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**DESKTOP MICROPHONE**

- This converts a desktop repeater into a dispatch radio for office personnel use.

**DESKSETS**

- DC or Tone Remote model allows user to control a remotely located repeater.
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- Automatic back-up power allows continued use when power goes down. Also includes float maintenance charger to keep battery charged when not in use.

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**PROGRAMMABLE POWER:**

- **VHF**
  - 1-10W
  - 25-50W
  - 25-45W

- **UHF**
  - 1-10W
  - 25-45W

**MODEL SERIES:**

- M32GRC
- M43GRC
- M44GRC

**FREQUENCY BANDWIDTH:**

- VHF: 146-174 MHz
- UHF: 444-474 MHz

**CHANNEL CAPACITY:**

- 16 Channels

**DIMENSIONS:**

- 8”H x 10”W x 14”D (203 x 254 x 356 mm)

**WEIGHT:**

- 35 lbs. (15.9 Kilos)

**DUTY CYCLE:**

- Continuous @ 25W and 1-10W
- 50% @ 45/50W (5 min. on / 5 min. standby)

**INPUT VOLTAGE:**

- **Repeater:**
  - 115/230 Vac ± 10%
  - 13.8 Vdc ± 10%

- **Transceiver:**
  - 6 Aac (maximum) @ 115 Vac
  - 1.3 Aac (maximum) @ 230 Vac

**IN PUT CURRENT:**

- **Repeater:**
  - 6.6 Aac (maximum) @ 115 Vac
  - 1.3 Aac (maximum) @ 230 Vac

- **Transceiver:**
  - Standby: 0.45 Adc
  - RX @ 7.5W: 1.5 Adc
  - TX @ 50 / 45W: 14.0 Adc
  - CWID: 12.5 Adc

**SQUELCH CODE CAPABILITIES:**

- TPL / DPL / CSQ

**TRANSMITTER**

- **RF Output:**
  - 1-10 W
  - 25-50 W
  - 25-45 W

- **Frequency Stability:**
  - ± 2.5 ppm (-30°C to +60°C)
  - ± 1.5 ppm (-30°C to +60°C)

- **Spurs/Harmonics:**
  - -23 dBm
  - -23 dBm

- **Audio Response:**
  - TIA/EIA-603
  - (From a 6 dB/Octave Pre-emphasis 300 to 3000 Hz)

- **Audio Distortion:**
  - <3% E.E.
  - @ 1000 Hz 60% rated Maximum Deviation

- **Modulation Sensitivity:**
  - 80 mV (rms for 60% deviation @ 1000 Hz)

- **FM Noise:**
  - 12.5 kHz: -40 dB
  - 20 / 25 / 30 kHz: -40 dB
  - 20 / 25 / 30 kHz: -40 dB

- **FM Modulation:**
  - 11KOF3E
  - 16KOF3E
  - 11KOF3E
  - 16KOF3E

**FM MODULATION:**

- ABZ99FT3024
- ABZ99FT3023
- ABZ99FT4024
- ABZ99FT4023

**RECEIVER**

- **Sensitivity:**
  - 12.5 kHz: -12 dB SINAD: 0.35 µV (-116.1 dBm)
  - 20 / 25 / 30 kHz: -20 dB

- **Internal Squelch (SINAD):**
  - 10 dB nominal setting; Adjustable from off to 20 dB

- **Selectivity:**
  - 12.5 kHz: -45 dB
  - 20 / 25 / 30 kHz: -45 dB

- **Intermodulation:**
  - -80 dB

- **Usable Bandwidth:**
  - 1.2 kHz

- **Spur Rejection:**
  - -40 dB

- **Audio Output:**
  - Internal Speaker: 3 Watts
  - External Speaker: 7.5 Watts with 8Ω speaker

- **Audio Response:**
  - TIA/EIA-603
  - (From a 6 dB/Octave De-emphasis 300 to 3000 Hz)

- **Input Impedance:**
  - 50Ω

**Typical specifications. All measurements per TIA/EIA-603.**