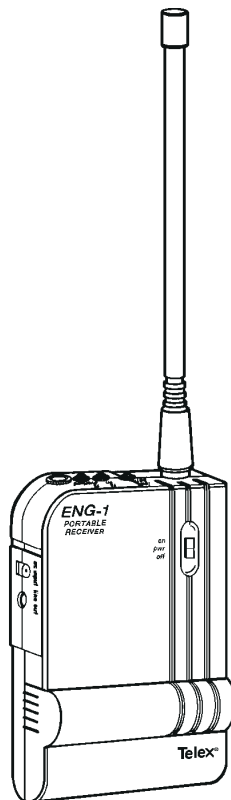


Telex

Operating Instructions



ENG-1
Portable Receiver

TELEX®

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GENERAL INFORMATION

Individual accessories are available to add to your wireless system.

3.5mm Mono Plug to 3.5mm Mono plug 71094-000

3.5mm Mono Plug to 1/4" mono phone plug 71095-000

3.5mm Stereo Plug to XLR Male plug 71096-000

RC-10 Carrying Case 71077-000

The ENG-1 receiver is designed to operate with all Telex brand VHF transmitters, but only one transmitter at a time can be used.

The Telex ENG-1 receiver features a single channel crystal controlled operation. The receiver utilizes a single intermediate frequency. This combination produces highly stable operation with superior interference rejection.

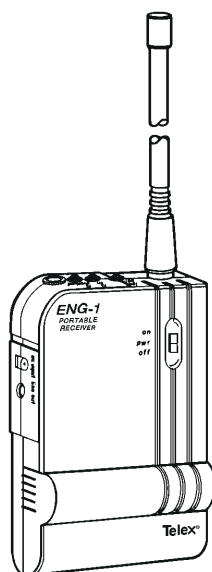
FREQUENCY SELECTION

As with any radio device, interference can occur at any time. The severity of interference varies with the distance to the interfering station. In order to determine whether your selected frequency has minimum interference, Telex recommends that you first temporarily install the receiver only, in your proposed setting, and monitor the channel for interference, as described in the **ENG-1 PORTABLE RECEIVER** section of this manual.

ENG-1 PORTABLE RECEIVER

The ENG-1 receiver is an economical portable receiver intended for wireless speech reception. The receiver features compact construction and user friendly operation. The ENG-1 features both balanced and unbalanced output for interface to any audio system.

Additional features include a headphone output, a squelch level control, audio level control, headphone level control, and a flexible molded VHF antenna.



Receiver Specifications: ENG-1

RF Frequency Range	165 to 216 MHz
RF Sensitivity	0.65 μ V Typical for 12 dB SINAD
Audio Output Level	0 dBm to -40 dBm, adjustable
Audio Frequency Response	50-15,000 Hz +/-3dB
Signal-to-Noise Ratio	90 dB
Distortion	Less than 2%
Input Power	9V Alkaline, Duracell MN1604 or equivalent
Battery Life (Alkaline)	6-8 Hours
External DC	8 to 24 VDC, No battery Charge Capability

Features

Power and Battery Requirements: The receiver is normally powered by a 9V alkaline battery (Mallory MN 1604 or equivalent) or by a heavy duty nickel-cadmium, 8.4 volt rechargeable battery, (Telex Part Number 63912-000). For maximum uninterrupted service, Telex recommends that a fresh battery be installed prior to use.

Average life on an alkaline battery is 6-8 hours and 1 1/2-2 hours per charge on a nickel-cadmium (nicad) battery.

The ENG-1 portable receiver may also be powered by any filtered 8 to 24 VDC source via the DC power jack located on the side of the unit.

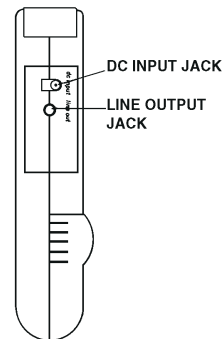
CAUTION

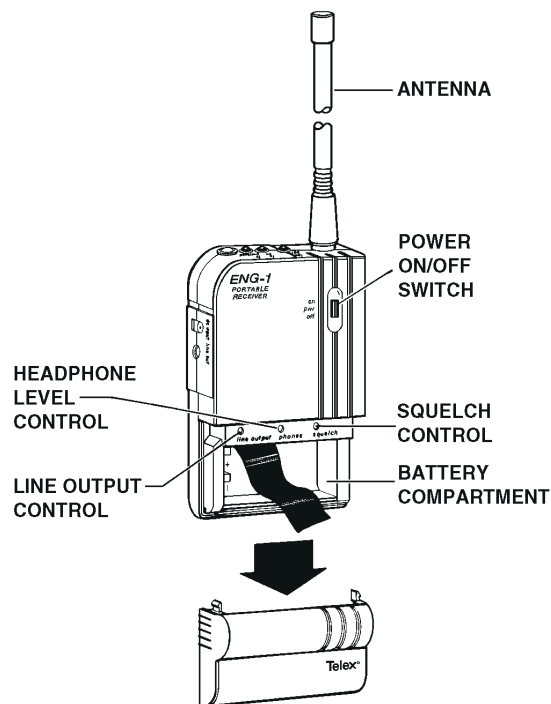
The DC input is not intended for recharging NiCad batteries.

DC Power “dc input” Jack: 1.1mm I.D.,
3.5mm O.D., Shaft 9mm



Line Output Jack: 3.5mm O.D. male,
Stereo Jack





Power ON\OFF: A slide switch allows the user to switch power On or Off.

Line Output Control: This control allows the user to adjust the volume or output level of the receiver audio to the line or auxilliary device input.

Squelch Control: This control allows the user to squelch (reject) minor noise or interference that might exist on a channel in your area.

CAUTION

This control is factory set for average conditions. If the control is fully advanced, short range or excessive drop-outs can occur.

Headphone “PHONES” Level Control: This control allows the user to adjust the volume or output level of the monitoring headset audio. The control is factory set for typical headset output level.

CAUTION

If the ENG-1 Receiver is powered by external batteries that are also common with other auxilliary equipment, connecting the phones jack to the auxilliary jack can cause damage to the ENG-1 Receiver.

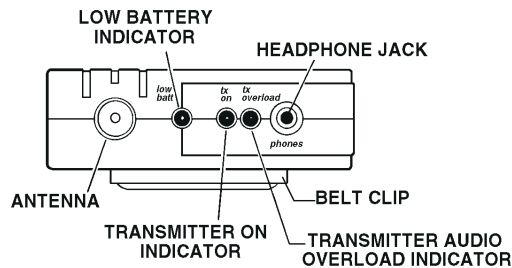
Headphone “PHONES” Jack: 3.5mm O.D. Male, Mono Jack.

NOTE

Telex recommends that a 32 to 600 ohm headset be used.

Low Battery Indicator: A yellow LED flashes when power is applied to indicate a good battery. Lights when the battery is low.

TX ON Indicator: A green LED displays when the ENG-1 is receiving a transmitted signal.



TX Overload Indicator: A red LED displays when the modulation (Audio Output) of the transmitter used is too high. Refer to the “Audio/Gain Adjustment” of your transmitter for proper setting.

Antenna: A molded VHF antenna is supplied with the ENG-1. This antenna is matched to the receiver frequency of your unit.

CAUTION:

DO NOT Grip the antenna while attached to the ENG-1 case. Using the Antenna as a “Handle” may cause damage to the ENG-1 Receiver.

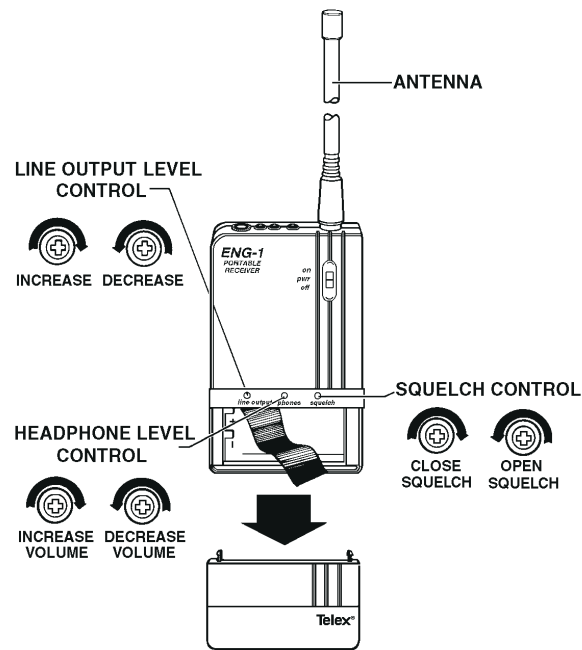
Belt Clip: The belt clip can be removed for application of the supplied “adhesive backed Velcro” for application to a camera or other equipment.

ENG-1 Set-up

Power/Low Battery Indication: Install a fresh alkaline battery in the ENG-1 receiver or connect the ENG-1 to any filtered 8-24 VDC source via the DC jack on the side of the unit. Turn the receiver power on. Note that the low battery (yellow) LED should flash on. If the battery LED stays illuminated, this indicates a weak battery. If the battery LED does not come on at all, the battery is dead.

Antenna: Screw the antenna (hand tighten) onto the receiver.
For best performance, place the unit in “Clear and Visible” sight of the transmitter.

Audio Output: Insert a 3.5mm O.D. plug into the Line Output jack on the side of the ENG-1. Adjust the Line Output control located in the battery compartment, to the desired level output your system requires.



Interference: As with any radio device, interference can occur at any time. There are basically two types of interference, mild and severe. Before using the ProStar System, Telex recommends that you monitor the channel for interference. To do so, install your ENG-1 receiver only, in the desired location. **DO NOT** turn on any other receiver or transmitter at this time.

The ProStar system is shipped pre-adjusted for the average installation and will normally not require any further adjustment.

Mild interference will cause the ENG-1 receiver's "tx on" green LED to be on or flicker, along with audible noise. This type of interference can usually be "squelled out" by advancing the squelch control located inside the battery compartment, clockwise until the LED goes off. If the squelch control cannot cause the LED to go off, check to see if a transmitter has been accidentally left on.

CAUTION:

Advancing the squelch control too far can result in short operating range.

Severe interference will cause the "tx on" green LED to stay on all the time. Audible interference can be present or if the interfering signal is simply a "carrier", no audio will be heard. If the squelch control is advanced full on and the "tx on" light is still lit, the interference is severe and an alternate frequency/channel should be used.

If the interference is mild, a reduction in the level of interference can often be had by simply moving the receiver to a different location. Monitor the channel periodically for interference.

NOTE: If, after adjusting the ENG-1 or Telex transmitter and the audio is weak, or distorted, this would indicate a level mismatch between the ENG-1 and the amplifier/mixer. This problem must be corrected at the amplifier/mixer.

FCC INFORMATION

The Telex Model ENG-1 receiver has notification under Part 15 of the Federal Communications Commission. Licensing of Telex equipment is the user's responsibility and licensability depends upon the user's classification, and frequency selected. Telex strongly urges the user to contact the appropriate telecommunications authority before ordering and choosing frequencies.

CAUTION

Any changes or modifications made to the above equipment could void the user's authority to operate the equipment.

WARRANTY SERVICE INFORMATION

If your receiver or transmitter should need servicing under the warranty, please contact:

Warranty Service Department
TELEX COMMUNICATIONS, INC.
8601 East Cornhusker Highway,
P.O. Box 5579,
Lincoln, Nebraska 68505-5579 U.S.A.
Phone: (402) 467-5321 or 465-7021

All claims of defect or shortage should be sent to the above address. When returning items for service, you must provide date and proof of purchase, such as a copy of the sales receipt, to establish warranty. A letter should be included outlining all symptoms and claimed defects. Information on how the equipment was installed and used is very helpful. Please include your phone number and return address in case our service technicians need to contact you.

Units that have been modified cannot be accepted for repair.

Include all information requested by the Service Center. Then pack the unit as follows:

Check the unit to see that all parts and screws are in place. Then wrap it in heavy paper or put it in a plastic bag. If the original carton is not available, place the unit in a strong carton that is at least six inches bigger in all three dimensions than the unit. Fill the carton equally around the unit with resilient packing material (shredded paper, excelsior, etc.). Seal it with gummed paper tape, tie it with a strong cord, and ship it by prepaid express, United Parcel Service or insured parcel post to the Hy-Gain Service Center.

It is very important that the shipment be well-packed and fully insured. Damage claims must be settled between you and the carrier and this can delay repair and return of the unit to you.

Telex reserves the right to make changes in design and improvement on its product without assuming any obligation to install the same on any of its products previously manufactured. Further Telex reserves the right to ship new and/or improved products which are similar to the form, fit and function of products originally ordered.



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