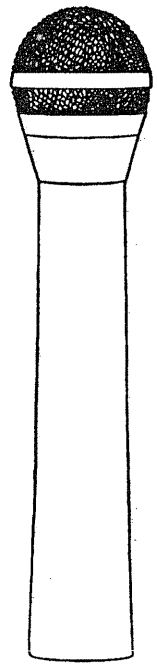
Telex

Operating Instructions



Professional 3 channel Wireless Microphone System HT-150

TELEX®

TELEX.

TELEX COMMUNICATIONS, INC. 9600 I Aldrich Ave. So., Minneapolis, MN 55420, U.S.A.

PN 802728-1 Made in U.S.A. JAN 1997

TECHNICAL INFORMATION

HT-150

GENERAL DESCRIPTION:

The HT-150 Series is a very versatile microphone which expands your selection to four popular microphone models. Its heavy-duty construction provides lightweight durability and its compact design assures reliability in the field.

FEATURES:

- Power Switch
- Low Battery Indicator
- Screwdriver adjustable Gain Control
- Uses Standard 9 Volt Battery
- Rotary Channel Selector Switch

TRANSMITTER SPECIFICATIONS:

Battery	9 Volt alkaline
(NEDA 1604 or equivalent	
or 8.4 Volt NICAD Type)	
Battery Life	10-12 hours typical on alkaline
2 to 3 ours typical on NICAD on one charge	
Current Drain	35 mA
Modulation Limiter	Internal Compressor
Antenna	Integral to unit, omnidirectional
RF Power Output	45 mW typical
Range	1000 ft. (300 m)-Open field conditions, typical
	250 ft. (76 m) - Adverse conditions, typical
Audio	+\- 1 dB, 50-150000 Hz (without head)
Radiated Harmonic and Spurious Emission Minimum	30dB
below Carrier	
Modulation	+/- 12 KHz Deviation, 50 uS pre-emphasis
FCC	Type accepted under Parts 90 and 74
Frequency Range	169-216 MHz

MICROPHONE SPECIFICATIONS

HT-150/65	Telex 65 ELE
Element Type	Condenser
Directional Pattern	Cardioid
Frequency Response	85-15000 Hz
Maximum SPL	140 dB
HT-150/OM-3	Audix OM-3xb
Element Type	Dynamic
Directional Pattern	Hypercardioid
Frequency Response	38-21000 Hz
Maximum SPL	144 dB
HT-150/EV-757	Electro-Voice N/D757
Element Type	Dynamic
Directional Pattern	Super Cardioid
Frequency Response	50-18000 Hz
Maximum SPL	144 dB

HT-200 CONTROLS AND CONNECTIONS

Low Battery Indicator: Located at the bottom of the microphone. The red LED will flash briefly when the microphone is first turned on (with a fresh battery). When the LED stays on, the user has approximately one hour of remaining battery life.

Audio Gain Control: Accessed thru a hole at the bottom of the handle. A screwdriver is provided.

Power OFF/ON Switch: Located at the bottom of the microphone. A low profile slide switch is provided to allow access to power OFF/ON.

Channel Selector Switch: Located at bottom of handle. Set to match receiver with provided screwdriver.

Be sure channel group "dots" are the same color and number on transmitter and receiver.

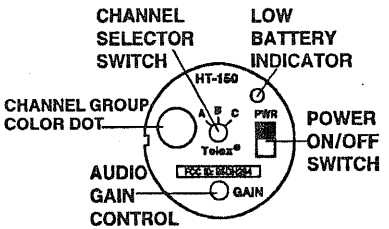


Figure 2
Bottom View-HT-150

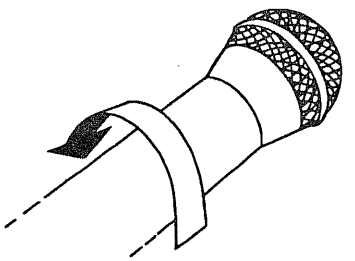


Figure 3
HT-150 Handle Rotation

EQUIPMENT SET-UP

Unpacking: Unpack your Wireless Microphone system. If there is any damage or shortage, refer to the "Warranty Service Information" section in this manual.

RECEIVER SET-UP

NOTE: Refer to the manual supplied with the receiver.

MICROPHONE SET-UP

ALL HT-150 SERIES MODELS

Battery Installation: Insure that the power switch is in the "OFF" position. To access the battery compartment, turn the handle of the microphone counterclockwise (See Figure 3) and slide the handle down to expose the battery compartment.

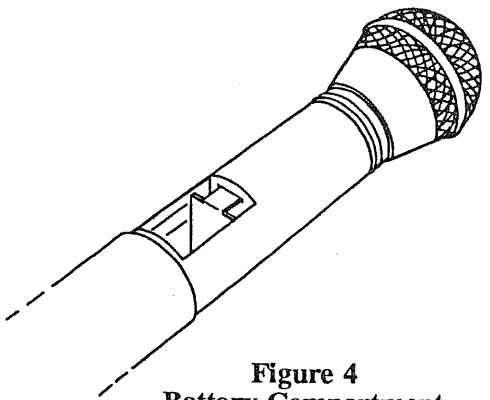


Figure 4
Battery Compartment

The handle will "lock" into place, allowing convenient battery compartment access (See Figure 4).

The battery can be inserted in only one direction in order to prevent incorrect battery polarity.

Battery Check: Set the power switch to the "ON" position. Note that the battery LED, located on the bottom of the microphone, should flash one time for a good battery. A low power battery will cause the LED to be illuminated continuously and a bad or unusable battery will not cause any illumination at all. Set the power switch to the "OFF" position.

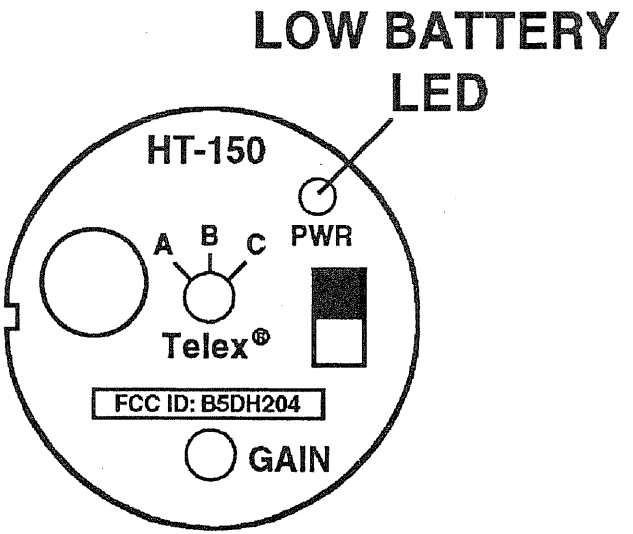


Figure 5
Battery Check - LED Location

SETTING THE SYSTEM GAIN LEVELS

ALL HT-150 SERIES MODELS

Introduction: If you have followed the instructions up to this point, you should now be ready to turn both the transmitter and the receiver "ON" and set optimum signal gain on each unit.

Place the power switch on the receiver to the "ON" position. Refer to your receiver manual.

NOTE: Make sure the channel of the receiver matches the channel of the microphone transmitter.

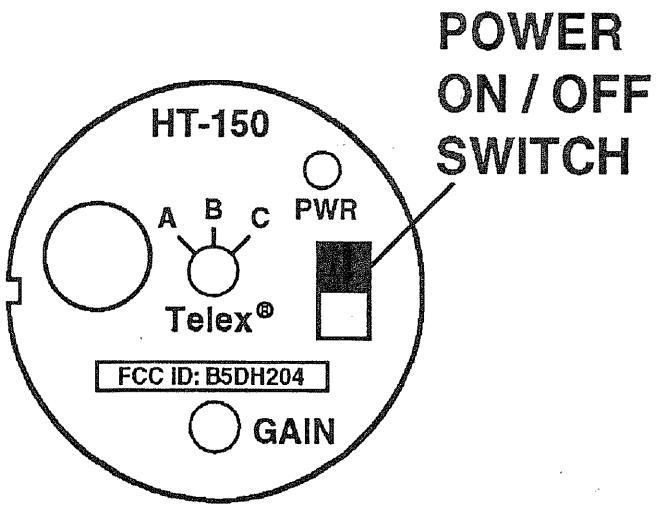


Figure 6
Power ON/OFF Switch - HT-150

Transmitter Gain Setting: To set the gain on the transmitter, proceed as follows:

Set the HT-150 Power Switch to the "ON" position. The "Active Bar" of the RF field strength meter should now be illuminated GREEN on the FMR-150.

NOTE: Transmitter gain settings differ slightly depending on the receiver you are using. Refer to your receiver Owner's Manual.

The microphone "GAIN" Control on your HT-150 has been factory set for normal or average audio levels.

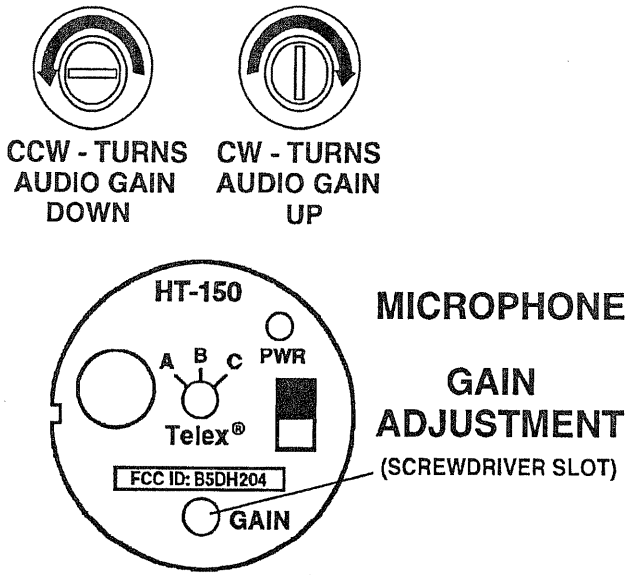


Figure 7
Adjusting Microphone Gain

High Level Setting: if your application is in a high SPL (Sound Pressure Level) area such as singing or instrumentation, the factory gain setting is probably too high and will result in overloading your receiver which will result in distortion.

Low Level Setting: If your application is low level, such as a very soft spoken individual or a situation where the handheld transmitter is not going to be "close talked:, the factory gain setting may be too low and could result in poor overall signal-to-noise ratio.

To correct either a too high, or too low setting, obtain access to the screwdriver slot on the bottom of the HT-150 Figure 7. Adjust the Microphone Gain Control so that average audio causes the meter to indicate in the middle area of your meter. An occasional overshoot into the RED area is allowable.

BATTERY INFORMATION

General: Improper battery selection, use, installation and care are the cause of numerous wireless system failures.

Alkaline Batteries: Alkaline batteries such as Mallory's DURACELL® or Eveready's Energizer® provide the most reliable operation in wireless transmitters. The use of low cost carbon-zinc batteries is NOT RECOMMENDED.

Nickel-Cadmium Batteries: These batteries can save you money in the long run, as they can be recharged, but they can also cause disappointing wireless performance. If you want to use rechargeable nickel-cadmium batteries, you must select a heavy duty 8.4 volt nickel-cadmium. Most "9 volt size" nickel-cadmiums are only capable of providing 7.2 volts, which is not sufficient to power the Telex HT-150 Transmitter.

BATTERY TYPE	VOLTS	EXPECTED LIFE
Conventional "RAY-O-VAC" Carbon Zinc	9	Not Recommended
Alkaline "Mallory" MN 1604 or Equivalent	9	10 to 12 Hours
Most Nickel-Cadmium Rechargeable	7.2	Does Not Work
Varta or Gould "Again and Again" Nickel-Cadmium Rechargeable	8.4	2 to 3 Hours per charge

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.

FCC INFORMATION

The TELEX HT-150 Transmitter is Type Accepted under United States Federal Communications Commision Parts 90 and 74. Licensing of TELEX equipment is the user's responsibility and licensability depends upon the user's classification, , user's application, and frequency selected. TELEX strongly urges the user to contact the appropriate telecommuications authority for any desired clarification.

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

ACCESSORIES

Nickel-Cadmium Battery - for HT-150
Mic/Transmitter 8.4 Volts
Order No. 63912-000

BC-2 Battery Charger - For charging nickel-cadmium battery used in HT-150.
Order No. 64267-000