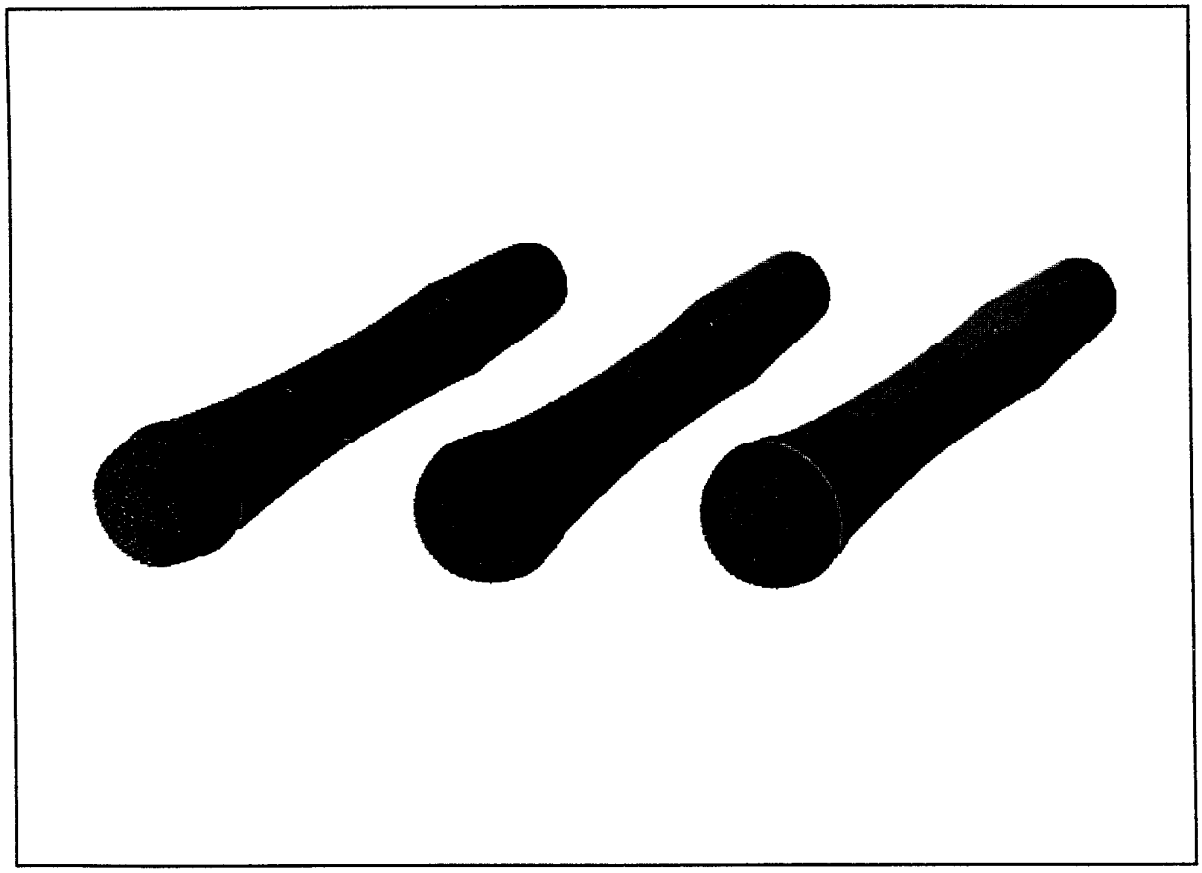
VEGA

T-24, T-28, T-29
Wireless-Microphone Handheld Transmitters
Owner's Manual



099-0061A

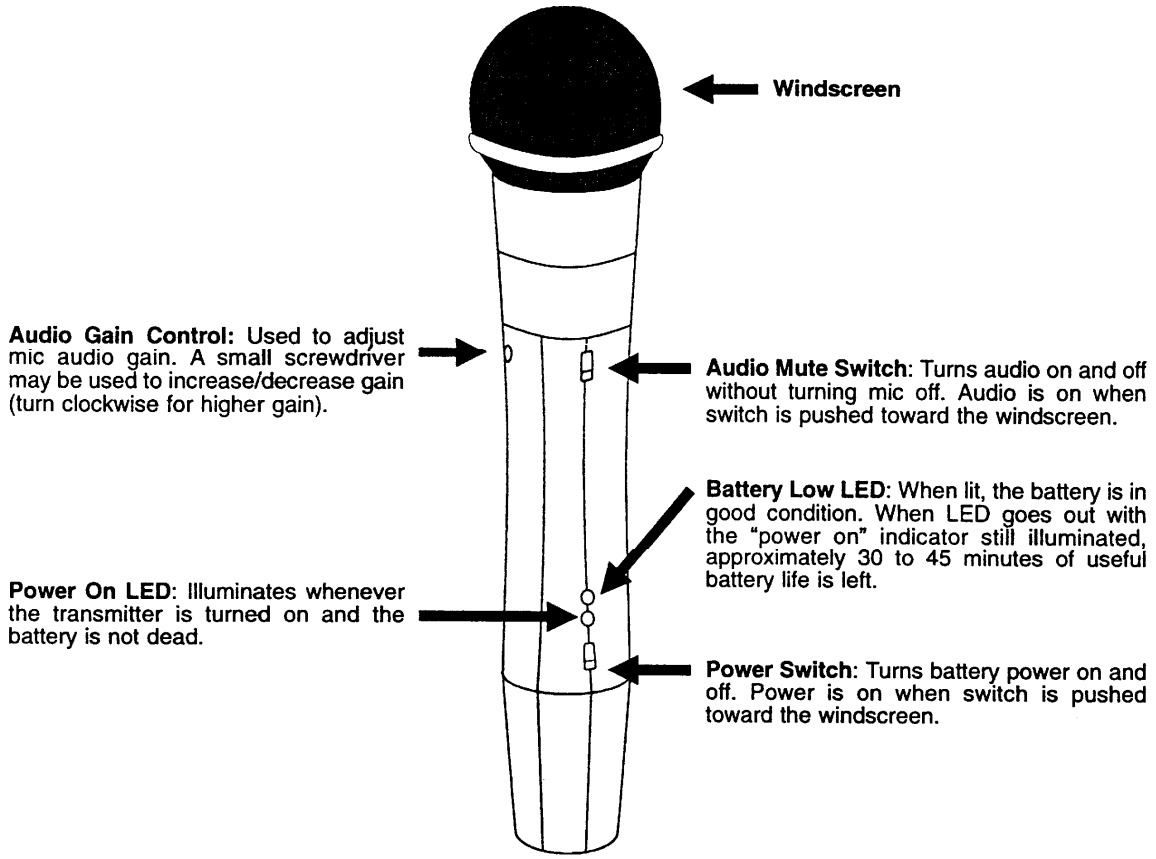
A Word to Vega Users

In selecting Vega wireless microphones, you are in the company of world-famous speakers and entertainers. Leadership for over 30 years has made "Vega" synonymous with wireless microphones. Vega equipment provides superb sound quality, outstanding performance, and durability needed for years of successful operation.

Unpacking

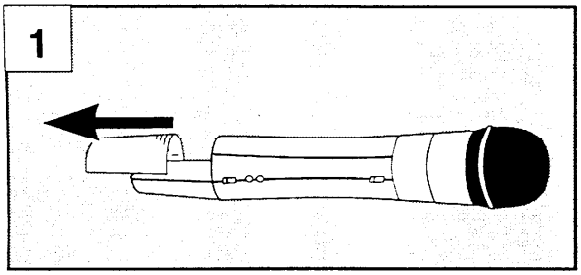
Verify the number of boxes shown as "shipped" has been received in good condition. Unpack and save cartons for storage or reshipping. If, for any reason, you do not find the equipment to be completely satisfactory, please immediately contact your Vega dealer or the Vega factory.

Should service ever be required, remember your authorized Vega service dealer knows your equipment best. They have the training and test equipment necessary to restore your equipment to its peak performance. Please feel free to contact either your authorized Vega dealer or the Vega factory for information or assistance at any time.

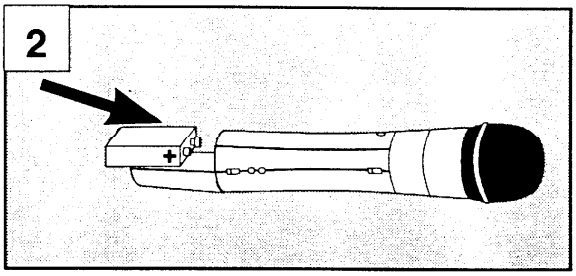


Quick Start

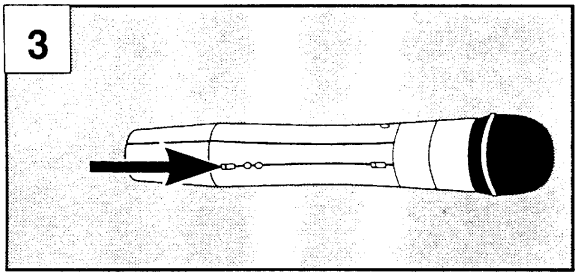
See the previous page for a description of transmitter controls and below for setup. If this is the first time you are setting up a wireless, system carefully read all manuals furnished with your equipment to ensure optimal performance.



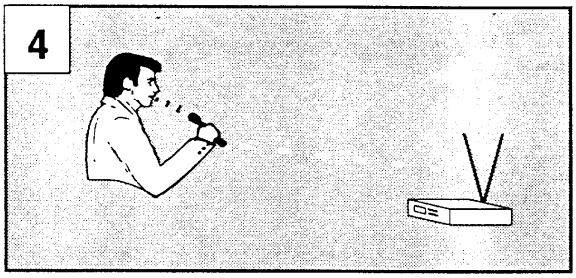
Slide the battery cover off.



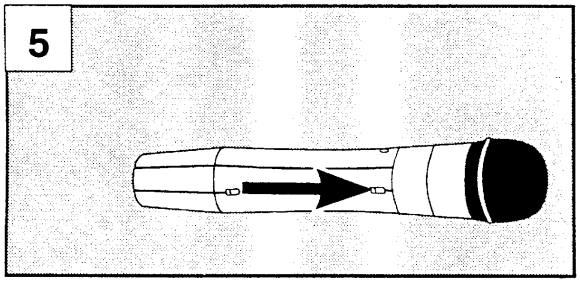
Slide 9-volt battery into compartment with the plus "+" terminal as shown above. Slide cover back on.



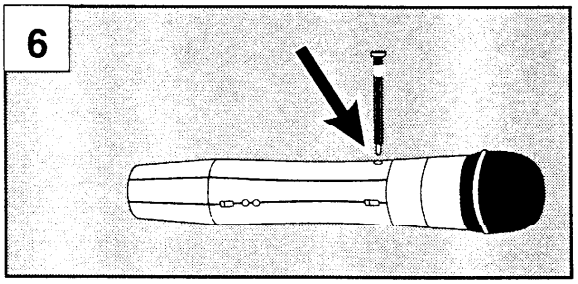
Turn the mic "ON" by sliding the power switch (nearest the battery compartment) forward.



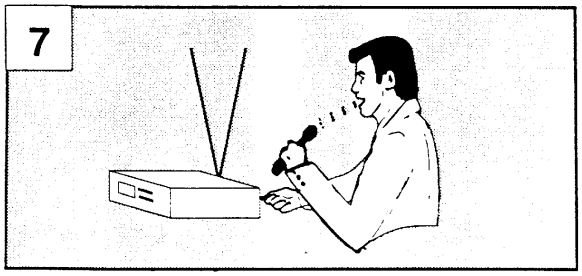
In the area covered by the wireless system, verify the receiver is receiving by observing its indicators (see receiver instructions for details).



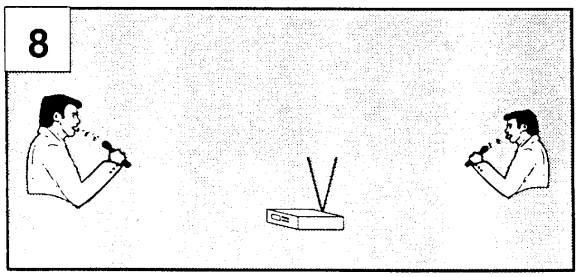
Turn the transmitter audio on.



With a small screwdriver, adjust transmitter mic-level so the receiver's "AUDIO LEVEL" LED flashes only when speaking very loudly. If it flashes frequently, turn it counterclockwise. If it doesn't flash at all, turn it clockwise.



Adjust mixer/preamp/amplifier to its normal setting. Speak into mic. If necessary, adjust receiver audio output level until wireless system volume matches wired system volume (see receiver instructions for details).



"Walk" the coverage area to check for problems. If there is a problem, check mic batteries (fresh?); ensure antennas aren't touching each other or any metal objects. Path between transmitter and receiver must be clear for proper operation.

Compatibility

T-24s, T-28s, and T-29s use DYNEX®III audio processing and may only be used with receivers equipped with DYNEX®III audio processing. They are not compatible with DYNEX®, DYNEX®I, DYNEX®II, or CVX™ processing, or with other manufacturers' receivers.

These transmitters were designed to work with Vega R-22 and R-27 receivers. Though they may be used with Vega's high-end professional products, they will limit a high-end system's overall performance.

T-24s, T-28s, and T-29s work in the 169 to 216 MHz VHF range. Each mic's frequency must precisely match that of its receiver. Exact frequency is marked on the data label inside the transmitter's battery compartment.

If the transmitter and receiver frequencies are not precisely the same, the frequency of one of the units must be changed. It is usually easier to change the transmitter's frequency; however, it's advisable to return both units to the factory or authorized service location when changing frequencies, to ensure the best results. Because of the very high performance of these units and the specialized test equipment required to adjust them properly, users should not try to change frequency themselves.

If two or more systems are used at the same location, proper frequency selection and spacing are required to avoid possible interference.

Vega offers a free frequency-coordination service for purchasers of its equipment. Frequencies are selected by computer to avoid any possible interference from other wireless systems and broadcast stations. To take advantage of this free service, contact the Vega factory or your local sales representative.

In Case of Difficulty

Most users of Vega equipment enjoy years of trouble-free operation from their wireless microphones. However, as with all electronic devices, problems may be encountered eventually. If you have trouble with Vega equipment within the first year of operation, it will be repaired under warranty (see below). Service for older units may also be obtained from Vega; contact the factory or your sales representative for information.

Most difficulties with Vega wireless microphones are not due to equipment failure. Vega equipment is fully tested before leaving the factory. Quite often, problems are due to equipment application.

The following paragraphs describe the most commonly encountered application problems. If you are having difficulties, please review this information and take any necessary corrective action. If you still experience difficulties, contact the Vega factory or your sales representative.

Often, the problem can be resolved by phone, avoiding downtime for unnecessary returns. However, should repairs be necessary, Vega will promptly correct the problem and return the unit. Return of both transmitter and receiver is recommended, allowing us to perform a complete checkout and test of the entire system. This can be especially helpful for elusive or intermittent problems.

CAUTION: T-24 transmitter microphone cartridges are easily damaged when not properly removed. If you need to remove the cartridge, please contact Vega Technical Services or the Service Department for proper instructions. Please phone toll free: (800) 877-1771 extension 545 or 546.

Battery

The most common problems with wireless microphones are related to the transmitter battery. Vega recommends only new, fresh Duracell MN1604 or Eveready alkaline batteries be used in the transmitter. Despite advertising claims, no other batteries tested by Vega provide equal life and equivalent reliability. Others will work, but battery life may be short and current inadequate. Lithium 9-volt batteries may also be used when extended operating time is necessary.

The only acceptable rechargeable batteries known to Vega are Varta and Plainview batteries, which are true 9-volt designs. Even here, the usable life will be much less than for a Duracell (usually 2 to 2.5 hours).

Exhausted batteries will cause many problems, including distortion, audible squeals and howls, poor range, and off-frequency operation. Most Vega transmitters provide a means of checking battery condition prior to use. It is strongly recommended that the battery be checked prior to each use, and that it be replaced if there is any question about its condition.

It is also good practice to replace batteries with new ones when any system problems occur, since a low battery may affect system operation in subtle ways.

Interference

Problems with RF noise (fluorescent lights, digital effects generators, industrial equipment, etc.) are quite rare. However, problems may occur.

Defective fluorescent lighting fixtures can generate astonishing amounts of RF energy. Usually, repairing the fixture will cure the problem. Normally functioning fixtures almost never cause trouble.

Some digital audio, video signal processing equipment, and effects generators also can generate substantial amounts of broadband noise. When this situation occurs, position the wireless-receiver antennas away from these sources of RF noise to minimize the effect of this interference or, if possible, turn the equipment off.

Another source of interference may be due to frequency intermodulation. Proper initial frequency selection should avoid this problem. If the problem does occur, changing frequencies will usually correct any such problem.

Vega offers a free computerized frequency selection service to purchasers of our equipment. If the frequency of other wireless equipment to be used in a given area is known, interference-free frequencies can be chosen. However, if equipment is added later without frequency coordination, it is likely that an interference problem will occur. Should this happen, contact the Vega factory or your sales representative for assistance.

Many wireless systems may be used in an area. However, careful frequency coordination is essential.

Suggestions or Comments

If you have suggestions or comments concerning this manual, please mail or fax them to the Vega factory in care of Vega's documentation manager.

Warranty (Limited)

All Vega wireless products are guaranteed against malfunction due to defects in materials and workmanship for one year, beginning at the date of original purchase. If such a malfunction occurs, the product will be repaired or replaced (at our option) without charge during the one-year period, if delivered to the Vega factory. Warranty does not extend to damage due to improper repairs, finish or appearance items, malfunction due to abuse or operation under other than the specified conditions, nor to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives the customer specific legal rights, and there may be other rights which vary from state to state.

Vega authorized service centers enable Vega to give customers immediate service on repairs. These service centers are fully qualified and equipped to handle the servicing of Vega equipment, and turnaround time is excellent. To obtain the address of your nearest authorized warranty service center, contact your dealer or the factory.

If you should require service, pack the equipment carefully and return it to the factory service center or the nearest authorized service center.

Important:

Be sure the exact return address and a description of the symptoms are enclosed inside the package with your equipment.

It's also advisable to return the transmitter and receiver for full system performance test when practical.

Factory Service Center:

Vega
9900 E. Baldwin Place
El Monte, CA 91731-2294
(818) 442-0782

Claims

No liability will be accepted for damages directly or indirectly arising from the use of our materials or from any other causes. Our liability shall be expressly limited to replacement or repair of defective materials.

Models T-24, T-28, and T-29 Specifications

Power Output: 45-50 mW

Frequency Range: 169-216 MHz

Frequency Stability: ±0.005%

Spurious Radiation: 45 dB below carrier, minimum; typically 55 to 60 dB below carrier

Microphone Element: T-24, Electro-Voice N/D 757B Series III supercardioid dynamic;
T-28, Electro-Voice BK-1 condenser;
T-29, Vega K4 condenser

Controls: Power on/off, mic on/off, mic gain

Indicators: Power LED, low-battery LED

Modulation Limiting: (Compressor) Per FCC requirements: "soft" compressor action, 25 dB range (minimum); typically system distortion is less than 0.4% at 25 dB compression

Antenna: Patented internal dipole

Battery: 9 V (Duracell MN1604 or Eveready Energizer recommended)

Battery Life: 8 hours typical

Dimensions: Varies by model, from 10.1 in (25.7 cm) to 10.5 in (26.7 cm)

Weight: Varies by model, from 9.5 oz (270 g) to 11 oz (310 g), including battery

VEGA

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