



For live sound, stage, conferencing, and all of your professional wireless applications, the best choice is a Vega AX-20 system. Whether you install, rent, or own wireless systems, the AX-20 is designed to provide years of dependable service under the most adverse conditions, and it sounds great every time. The system consists of the true-diversity R-22 receiver and the T-25 bodypack, T-24 handheld, T-28 handheld, or T-29 handheld transmitter.

DYNEX[®] III audio processing makes the AX-20 one of the best sounding systems available, with low distortion and a very high signal-to-noise ratio. Factory-matched systems provide dynamic range comparable only to wired systems, and their sound is clear, transparent, and natural.

The lightweight, smoothly contoured T-25 bodypack transmitter case is constructed of durable, impact-resistant ABS. The transmitter's input can accept virtually any lapel microphone via the miniature XLR connector. Fifty milliwatts of RF power and an efficient flexible whip antenna maximize operating range.

The T-24 handheld transmitter features an Electro-Voice N/D757B neodymium dynamic element, while the T-28 offers an Electro-Voice BK-1 cardioid condenser element, and the T-29 has a Vega K4 cardioid condenser element. Both handheld transmitters feature Vega's professional contoured shape and patented* internal dipole antenna.

The affordable true dual-diversity R-22 receiver incorporates features usually found only in top-of-the-line wireless systems. High-reliability, dual-mode squelch circuits, multipole RF preselectors, and extensive IF filtering make the R-22 the most selective and sensitive receiver in its class. You can expect outstanding audio and flawless RF performance every time.

Other features include:

- Dual-mode squelch circuit that largely prevents false squelch noise bursts
- External squelch adjustment
- Enhanced diversity selection circuits
- Front-panel headphone monitor circuit
- XLR mic-level audio output
- Terminal-strip line-level output
- Full rack width for easy installation
- Internal power supply, selectable 120/240 V_{ac}
- Low-battery indicator on transmitters

The AX-20 system was designed for professional wireless system users who require exceptional audio quality in a reliable, rugged configuration. Experience, dependability, and attention to detail are just a few of the reasons why Vega wireless systems are the choice of professionals worldwide.

*U.S. Patent No. 4,334,184, issued August 10, 1982



Vega Wireless

AX-20 Professional Live-Sound Wireless Microphone System Specifications

Overall System Performance

Working Range: Up to 1000 ft under ideal conditions; usually somewhat less in typical applications

Audio Processing: DYNEX[®] III

Emission/Modulation: Direct FM, crystal-controlled, 60F3 or 54F3

System Frequency Response: 45 Hz to 15 kHz, +1.5 dB; 100 Hz to 10 kHz, ± 0.75 dB

System Harmonic Distortion: 0.5%, maximum, below transmitter limiting; 0.25% typical at 1 kHz

System Ultimate S/N: 100 dB (flat) minimum (104 dB typical A-weighted), excluding microphone electronics and/or element noise

Model R-22 Receiver

Equipment Type: Single-frequency, crystal-controlled, dual-receiver-diversity receiver

Frequency Range: 169-216 MHz

Frequency Stability: $\pm 0.005\%$

Sensitivity: 1.6 μ V, typical, for 50 dB S/N (20-kHz bandwidth)

LO Leakage: < -80 dBm at antenna input

Spurious/Image Rejection: 75 dB, typical

IF Filtering: 6 poles ceramic, 1 pole LC per channel

Squelch Quieting: 105 dB, typical, A-weighted

Power: 115/230 V_{ac}, 50-60 Hz, internal supply

Packaging: Full 1RU, detachable ears

Dimensions: 16.75 in (42.5 cm) wide x 1.75 in (4.45 cm) high x 10.5 in (26.7 cm) deep

Weight: 5 lbs (2.3 kg)

Internal Controls: 115/230 V selector switch

Front-Panel Controls and Indicators: Power on/off switch; power on/off LED indicator; 8-segment VU meter; 8-segment RF meter; diversity LEDs (ch A, ch B); monitor volume control

Front-Panel Connector: 1/4-in (6.3 mm) monitor (stereo/mono) phone jack

Rear Panel: Detachable AC power cord; line-out terminal strip; AC power fuse; XLR mic-out audio connector; squelch adjustment; screwdriver-accessed audio level adjustment

Models T-24, T-25, T-28, T-29 Transmitters

Power Output: 45-50 mW

Frequency Range: 169-216 MHz

Frequency Stability: $\pm 0.005\%$

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

Audio Input (T-25): -35 dBm (13 mV) to -3 dBm (0.55 V) for full deviation (gain pot range is 32 dB)

Input Impedance (T-25): 3.2 k Ω , minimum

Input Connector (T-25): Four-pin miniature XLR (Tini "Q-G")

Microphone Bias (T-25): Accepts most positive- or negative-bias electret microphones

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

Indicators (T-25 Bodypack): Audio-compression and low-battery LED (single)

Indicators (T-24, T-28, T-29 Handhelds): Power LED, low-battery LED

Microphone Element: T-24, Electro-Voice N/D757B neodymium; T-28, Electro-Voice BK-1; T-29, Vega K4; all cardioid pattern

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 (T-25): 1/4-wavelength flexible wire whip, permanently attached

Antenna (T-28, T-29): Patented internal dipole*

Battery: 9 V heavy-duty alkalines

Battery Life: 8 hours, typical

Dimensions (T-25 Bodypack): 3.8 in (9.6 cm) long, 2.8 in (7.1 cm) wide, 1.0 in (2.6 cm) thick

Dimensions (T-24, T-28, T-29 Handhelds): Varies by model, from 10.1 in (25.7 cm) to 10.5 in (26.7 cm) long

Weight (T-25 Bodypack): 6 oz (170 g), including battery

Weight (T-24, T-28, T-29 Handhelds): Varies by model, from 9.5 oz (270 g) to 11 oz (310 g), including battery

Warranty:

The above Vega wireless products are guaranteed against malfunction due to defects in materials and workmanship for a period of 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. If delivered prepaid to the Vega factory or an authorized warranty service center, the unit will be returned prepaid. Warranty does not extend to finish, appearance items, or malfunction due to abuse or operation under other than the specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Vega or its authorized service agencies will void this guarantee. Information on authorized service agencies is available from the Vega factory.

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.

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9900 East Baldwin Place, El Monte, California 91731-2294, Phone (818) 442-0782, Toll-free 800-877-1771, Fax (818) 444-1342

Mark IV Audio Canada, Inc., 345 Herbert St., Gananoque, Ontario, Canada K7G 2V1, Phone (613) 382-2141, Fax (613) 382-7466

Mark IV Audio A.G., Kettenstrasse 5, CH 2563 IPSACH, Switzerland, Phone (41) 325 16833, Fax (41) 325 11221

Mark IV Audio Japan, Ltd., 2-5-60 Izumi, Suginami-ku, Tokyo, Japan 168, Phone (81) 3-325-7900, Tlx 781 232 2494, Fax (81) 3-325-7878

Mark IV Vertriebs GmbH, Lärchenstrasse 99, 6230 Frankfurt/Main 80, Germany, Phone (49) 69-380 100, Tlx 841 413 847, Fax (49) 69-386-959

Electro-Voice Pty., Ltd., Unit 24, Block C, Slough Business Park, Slough Ave., Silverwater, N.S.W. 2141, Australia, Phone (61) 2-648-3455, Fax (61) 2-648-5585

Audio Consultants Co., Ltd., Flat E&F, 21 F1, Luk Hop Industrial Bldg, 8, Luk Hop St., San Po Kong, Kowloon, Hong Kong, Phone (85) 2-712-5251, Fax (85) 2-351-3329