

KENWOOD

Listen to the Future



TK-690/790/890

VHF/UHF FM Mobile Radios

FleetSync[®]
by KENWOOD

GENERAL FEATURES

- 45W & 110W (136-156, 148-174 MHz)
- 40W (403-430, 450-490, 480-512 MHz)
- 110W-75W (450-480 MHz)
- 110W (29.7-37.0, 35.0-43.0, 39.0-50.0 MHz)
- 160 Channels
- Dual Priority Scan
- Single / Multi Group Scan
- QT / DQT
- Operator Selectable Tone
- Two-Tone Decode¹
- DTMF Encode/ Decode / Stun²
- Encryption / ANI Board Control³
- Emergency Call Features
- Companded Audio
- Intercom⁴
- Public Address
- Time Out Timer
- Busy Channel Lockout
- Ignition Sense⁵
- Timed Power Off
- DB-25 Accessory Connector⁶
- 7 Programmable AUX Inputs⁶

- 6 Programmable AUX Outputs⁶
- Windows[®] Programming & Tuning⁷
- Windows[®] Firmware Uploading⁷
- Panel Tuning
- Cloning
- MIL-STD-810 C/D/E/F
- MIL-Spec Noise-Cancel Mic (included)
- MIL-Spec 12-Key DTMF Mic Option

FleetSync[®]

- PTT ID Digital ANI
- Emergency Status

MOUNTING CONFIGURATIONS

- Dash Mount
- Single Head Remote Mount
- Dual Head Remote Mount
- Dual Band Remote Mount
- Dual Head / Dual Band Remote Mount

FRONT PANELS / CONTROL HEADS

- Backlit Dot Matrix LCD
- 3-Digit Sub-Display
- Function/Status LCD Icons

- Transmit LED
- Busy, Call Alert, Warn LED
- LCD Dimmer Control
- Power On/Off Switch
- Rotary Volume Knob
- Rotary Selector Knob
- Backlit Keys
- PF Key Label Inserts
- Microphone Jack
- MILSTD 810 512.X Driven Rain

KCH-10 FRONT PANEL

- 8-Character Alphanumeric Aliases
- 5 PF Keys
- UP/DOWN Keys
- Built-in Front Speaker

KCH-11 FRONT PANEL

- 14-Character Alphanumeric Aliases
- 13 PF Keys
- UP/DOWN Keys
- External Speaker Required



Options

- KMC-9B**
Desktop Microphone
- KMC-27**
Microphone
(MIL-SPEC noise-canceling)
- KMC-28**
Keypad Microphone
(MIL-SPEC noise-canceling)
- KCT-18**
Ignition Sense Cable
- KCT-22**
Remote Control Cable
- KCT-23**
DC Power Cable
- KES-5**
External Speaker (20W)
- KCH-10**
Basic Remote Control Head
- KCH-11**
Full-Featured Remote Control Head
- KRK-5**
Single Control Head Remote Kit
- KRK-6DH**
Dual Control Head Remote Kit
- KRK-7DB**
Dual Band Remote Kit
- KRK-8DBH**
Dual Band & Dual Control Head Remote Kit

All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

Specifications

| Model | TK-690H | TK-790H | TK-790 | TK-890H | TK-890 |
|--|--|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|
| GENERAL | | | | | |
| Frequency Range | | | | | |
| Type 1 | 29.7-37.0 MHz | 148-174 MHz | 148-174 MHz | 450-480 MHz | 450-490 MHz |
| Type 2 | 35.0-43.0 MHz | | 136-156 MHz | | 480-512 MHz |
| Type 3 | 39.0-50.0 MHz | | | | 403-430 MHz |
| Number of Channels | 160 | | | | |
| Channel Spacing | | | | | |
| Wide | 20 kHz | 25, 30 kHz | 25, 30 kHz | 25 kHz | 25 kHz |
| Narrow | | 12.5, 15 kHz | 12.5, 15 kHz | 12.5 kHz | 12.5 kHz |
| Channel Step | 5 kHz | 2.5 / 5 / 6.25 / 7.5 kHz | 2.5 / 5 / 6.25 / 7.5 kHz | 5 / 6.25 kHz | 5 / 6.25 kHz |
| Operating Voltage | 13.4 V DC ±15% | 13.4 V DC ±15% | 13.6 V DC ±15% | 13.4 V DC ±15% | 13.6 V DC ±15% |
| Current Drain | | | | | |
| Standby | < 0.6 A | < 0.6 A | < 0.6 A | < 0.6 A | < 0.6 A |
| Receive | < 2.2 A | < 2.2 A | < 2.2 A | < 2.2 A | < 2.2 A |
| Transmit | < 25 A | < 25 A | < 12 A | < 28 A | < 12 A |
| Duty Cycle | Transmit: 20% | | | | |
| Operating Temperature Range | -22°F ~ +140°F (-30°C ~ +60°C) | | | | |
| Frequency Stability (-22° F - +140° F) | ±0.0005% | ±0.0002% | ±0.0002% | ±0.0002% | ±0.0002% |
| Antenna Impedance | 50 Ω | | | | |
| Dimensions (W x H x D) (w/ KCH-10) | 7x2-1/4x14 1/8in. (178x60x360 mm) | 7x2-1/4x14 1/8in. (178x60x360 mm) | 7x2-1/4x9 in. (178x60x228 mm) | 7x2-1/4x14 1/8in. (178x60x360 mm) | 7x2-1/4x9 in. (178x60x228 mm) |
| Weight (net) | 7.9 lbs. (3.6kg) | 7.9 lbs. (3.6kg) | 5 lbs. (2.3kg) | 7.9 lbs. (3.6kg) | 5 lbs. (2.3kg) |
| FCC ID | | | | | |
| Type 1 | ALH22923110 | ALH22933210 | ALH22933110 | ALH22943210 | ALH22943110 |
| Type 2 | ALH22923120 | | ALH22933120 | | ALH22943120 |
| Type 3 | ALH22923130 | | | | ALH22943130 |
| IC Certification | | | | | |
| Type 1 | 282195519A | 282195450A | 282195451A | 282195446A | 282195447A |
| Type 2 | 282195532A | | 282195510A | | |
| Type 3 | 282195520A | | | | |
| RECEIVER (Measurements made per EIA/TIA-204-D) | | | | | |
| Sensitivity (12dB SINAD) (20dB Quieting) | 0.25µV / 0.35µV | 0.25µV / 0.35µV | 0.25µV / 0.35µV | 0.25µV / 0.35µV | 0.25µV / 0.35µV |
| Selectivity | | | | | |
| Wide | 85 dB | 85 dB | 85 dB | 85 dB | 85 dB |
| Narrow | | 80 dB | 80 dB | 77 dB | 77 dB |
| Intermodulation Distortion | | | | | |
| Wide | 80 dB | 80 dB | 80 dB | 80 dB | 80 dB |
| Narrow | | 75 dB | 75 dB | 75 dB | 75 dB |
| Spurious Response | 90 dB | 90 dB | 90 dB | 90 dB | 90 dB |
| Audio Output | 13W at 4Ω with less than 5% distortion (12W 4Ω with less than 3% distortion) | | | | |
| TRANSMITTER (Measurements made per EIA/TIA-152-C) | | | | | |
| RF Output Power | 110-45 W | 110-45 W | 45-5 W | 100-40 W (75-40W in 470-480 MHz) | 40-5 W |
| Type of Emission | | | | | |
| Wide | 16K0F3E | 16K0F3E | 16K0F3E | 16K0F3E | 16K0F3E |
| Narrow | | 11K0F3E | 11K0F3E | 11K0F3E | 11K0F3E |
| Spurious Response | 80 dB | 80 dB | 80 dB | 80 dB | 80 dB |
| FM Hum & Noise | | | | | |
| Wide | 55dB | 53dB | 53dB | 50dB | 50dB |
| Narrow | | 47dB | 47dB | 44dB | 44dB |
| Microphone Impedance | 600 Ω | | | | |
| Audio Distortion | Less than 2% at 1000 Hz | | | | |

Kenwood follows a policy of continuous advancement in development. For this reason specifications may be changed without notice.

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Applicable MIL-STD

| Standard | MIL 810C Methods/Procedures | MIL 810D Methods/Procedures | MIL 810E Methods/Procedures | MIL 810F Methods/Procedures |
|-------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Low Pressure | 500.1/Procedure I | 500.2/Procedure I, II | 500.3/Procedure I, II | 500.4/Procedure I, II |
| High Temperature | 501.1/Procedure I, II | 501.2/Procedure I, II | 501.3/Procedure I, II | 501.4/Procedure I, II |
| Low Temperature | 502.1/Procedure I | 502.2/Procedure I, II | 502.3/Procedure I, II | 502.4/Procedure I, II |
| Temperature Shock | 503.1/Procedure I | 503.2/Procedure I | 503.3/Procedure I | 503.4/Procedure I, II |
| Solar Radiation | 505.1/Procedure I | 505.2/Procedure I | 505.3/Procedure I | 505.4/Procedure I |
| Rain | 506.1/Procedure I*, II | 506.2/Procedure I*, II | 506.3/Procedure I*, II | 506.4/Procedure I*, III |
| Humidity | 507.1/Procedure I, II | 507.2/Procedure II, III | 507.3/Procedure II, III | 507.4 |
| Salt Fog | 509.1/Procedure I | 509.2/Procedure I | 509.3/Procedure I | 509.4 |
| Dust | 510.1/Procedure I | 510.2/Procedure I | 510.3/Procedure I | 510.4/Procedure I, III |
| Vibration | 514.2/Procedure VIII, X | 514.3/Procedure I | 514.4/Procedure I | 514.5/Procedure I |
| Shock | 516.2/Procedure I, II, V | 516.3/Procedure I, IV | 516.4/Procedure I, IV | 516.5/Procedure I, IV |

* Control head only

footnotes from Front:

- ¹ Two-Tone Decode (3 sets x 2 pairs each), Operator Selectable Tone (16 QT.DQT code pairs)
- ² DTMF Encode: PTT ID, Emergency ANI, Manual Encode (KMC-28), Auto-Dial (9 numbers); DTMF Decode: Primary/Secondary ID, Stun (a.k.a. dead beat disable)
- ³ Encryption/ANI Board: PCB lands for wire harness connectors.
- ⁴ Intercom: Dual Head & Dual Head/Dual Band remote mounts only
- ⁵ KCT-18 Ignition sense option required.
- ⁶ DB-25 ACC: I/O's for dispatch consoles, desktop remotes, vehicle intercom/PA units, motorcycle PTT/headset kits, PC Laptop /Data Modems, GPS/AVL Modems.
- ⁷ KPG-44D Software required (Windows*98/NT/2000/Me/XP compatible)

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