# KENWOOD

#### Compact VHF Low Band FM Mobile Transceiver

# **TK-6110**



# **Answering Your Every**

The search for absolutely reliable communications is over. Kenwood's TK-6110 mobile transceiver features a redesigned heat-sink that provides exceptional strength and heat dissipation in all operating conditions. 70 watts of

high-power output and compact dimensions for easy mounting in limited-space installations make this rugged unit the first choice for today's demanding applications.



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#### SERIOUS RADIO FOR SERIOUS BUSINESS

# Strength & DURABILITY

#### LIGHTWEIGHT & COMPACT CONSTRUCTION

The newly designed aluminum diecast heat-sink provides exceptional strength and heat dissipation to handle the unit's 70 W high-power output. And the TK-6110's compact dimensions (6-1/4 (W) x 2 (H) x 6-1/4 (D) in.) allow mounting even in tight spaces.



#### MIL-STD 810 C/D/E

The TK-6110 meets or exceeds tough U.S. Department of Defense MIL-STD 810 C, D & E environmental standards in several categories, in addition to passing Kenwood's own stringent tests based on technical and industrial standards.

# VERSATILITY

#### **32-CHANNEL CAPACITY**

The 32-channel capacity ensures plenty of room for basic and multi-channel applications.

#### **CHANNEL SCAN FEATURES & PRIORITY SCAN**

Scan, channel add/delete, and priority channel checking are some of the parameters that can be set to accommodate any channel scanning need. Talk-back scan allows users to respond immediately to calls regardless of the pre-programmed or selected scan revert channel. Additionally,

undesired channels can be deleted temporarily with the nuisance delete feature.



# Call

#### **7 PROGRAMMABLE FUNCTION KEYS (PF KEYS)**

Every key is programmable for virtually any radio feature. This allows the unit to be fully customized to fit different user needs.

#### **BUILT-IN QT AND DQT SIGNALING**

The encoder/decoder function segregates talk groups so that users only hear calls from their own group.

#### **DTMF SIGNALING**

PTT ID provides a DTMF ANI for business and industrial applications.

#### **BUSY CHANNEL LOCKOUT**

Lockout further improves channel management by preventing transmission if another talk group is already on the air.

#### **OPERATOR SELECTABLE TONE/CODE (OST)**

The OST feature provides a programmable bank of 16 user-selectable tones (QT & DQT) for accessing different repeaters. Each tone can have an assigned alpha-tag and be directly accessed by radio controls.

#### **BUILT-IN SELECTIVE CALLING (TWO-TONE & DTMF)**

Two-tone decode allows for three code pairs, each with individual paging settings. DTMF selective calling provides individual call, and over-the-air disable/enable. Both signaling types can be assigned on a per channel basis and have audio-visual call alerting.

#### FLASH MEMORY ADVANTAGE

Flash memory permits updates and advanced feature set upgrades and to be made electronically without ever opening the unit. This means faster upgrades and less downtime for users.

# **E**ASY USER INTERFACE

#### **EIGHT-CHARACTER ALPHANUMERICS & ICONS**

The large, front panel display provides eight alphanumeric channel aliases and non-cryptic easy-to-read operational icons. Special operational modes are also displayed providing positive visual feedback. Besides ensuring user-friendly operation on a daily basis, these features help to

facilitate fast, effective training for new users.

**PROGRAMMABLE TWO-COLOR LED** 

The two-color LED provides tradition-

al transmit (red), receive (green), and

alert (orange) visual indications.



# SECURITY

#### **ENCRYPTION CONTROL**

Secure voice communications represent an attractive choice for law enforcement use. An internal port permits the addition of optional modules to provide voice scrambling — from low-level inversion to high-level encryption. The radio's programming provides both automatic and manual control for clear and coded modes.

#### **DIGITAL ANI AND EMERGENCY CONTROL**

Unit ID and emergency ANI for computer-aided dispatch operations can be added with optional modules. Any PF key can be programmed as an Emergency key to trigger an ANI option. The emergency call feature switches the radio automatically to a pre-programmed channel for dispatcher alert.

#### PASSWORD-PROTECTED PROGRAMMING AND CLONING

Cloning enables the duplication of radios in the field via a simple interface cable — no need for a PC or special test jig. For users who do not require this capability, a secure password can be programmed to prevent the cloning of a lost or stolen radio. Additionally, all radios can have the programming password protected to prevent unauthorized extraction and duplication.

#### **DEAD BEAT DISABLE (DBD)**

DTMF Dead Beat Disable permits over-the-air immobilization — of either transmit or transmit/receive audio — to prevent the unauthorized use of stolen or compromised units.

#### **EMBEDDED MESSAGE**

Within the flash memory of the radio, an electronic message can be stored containing owner identification, property I.D. numbers, user and department names, service records, etc.. A radio can thus be electronically identified even if external labels, markings or factory serial numbers have been removed.

#### PC PROGRAMMING AND TUNING

To save both time and expense, radio parameter programming and tuning can be performed via the mic connector using a PC. There is no need to even open the radio. (Optional software and cable required.)

#### OTHER FEATURES

■ HOME CHANNEL ■ HORN ALERT ■ TALK AROUND ■ TIME OUT TIMER (TOT) ■ TIMED POWER OFF ■ IGNITION SENSE ■ NOISE BLANKER ■ MINIMUM VOLUME ■ DIRECT CHANNEL SELECT ■ LCD BACKLIGHT ON/OFF ■ SQUELCH LEVEL

### **Options**



Not all accessories may be available in all countries where this product is sold, please contact a Kenwood Authorized dealership for details.

### **Specifications**

	TK-6110			
GENERAL				
Frequency range Type 1 Type 2	29.7 ~ 37.0 MHz 35.0 ~ 50.0 MHz			
Number of channels	32			
Channel spacing	20 kHz / 25 kHz			
PLL channel stepping	5 kHz			
Operating voltage	13.6 V DC			
Current drain Standby Receive Transmit	Less than 0.6 A Less than 2.4 A Less than 15 A			
Duty cycle	Transmit: 20%			
Operating temperature range	-22°F~ +140° F (-30°C ~ +60°C)			
Frequency stability (-22°F ~ +140 °F )	±0.0005%			
Antenna impedance	50 Ω			
Dimensions (W x H x D)	6-1/4 x 2 x 6-1/4 in. (160 x 50 x 160 mm)			
Weight (Body only)	3.5 lbs. (1.6 kg)			
FCC ID Type 1 Type 2	ALH29351110 ALH29351120			
FCC compliance Type 1 Type 2	FCC parts 90 FCC parts 90			
IC certification Type 1 Type 2				

	TK-6110		
RECEIVER (Measurements made per EIA/TIA-603)			
Sensitivity (12 dB SINAD)	0.25 μV		
Selectivity	75 dB		
Intermodulation distortion	70 dB		
Spurious response	70 dB		
Audio output	10 W at less than 5% distortion		
Band spread Type 1 Type 2	7.3 MHz 15.0 MHz		
TRANSMITTER (Measurements made per EIA/TIA-603)			
RF power output	70 W		
Type of emission	16K0F3E		
Harmonics	62 dB		
FM noise	50 dB		
Microphone impedance	600 Ω		
Audio distortion	Less than 3%		
Band spread Type 1 Type 2	7.3 MHz 15.0 MHz		

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

## **Applicable MIL-STD**

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV

#### KENWOOD CORPORATION

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JQA-1205 ISO 9001 Communications Equipment Division Kenwood Corporation ISO9001 certification