

# KENWOOD

Compact Synthesized FM Portable Radios

## TK-272G/372G



- MAX. 32 CHANNEL CAPACITY
- MIL-STD 810 C/D/E
- WEATHER-RESISTANT SEALS
- DIE-CAST CHASSIS
- 8-CHARACTER/13-SEGMENT LCD
- QT/DQT BUILT-IN SIGNALING
- 2-TONE DECODER/ENCODER
- FLASH MEMORY
- MULTI-MODE WIDE/NARROW BANDWIDTH PER CHANNEL
- COMPANDED AUDIO (WIDE AND NARROW)
- PTT ID PER CHANNEL
- SCAN WITH PRIORITY

# A Starring Role in Every Situation



Get a flying start with Kenwood's TK-272G/372G — tough, versatile, and reliable. Integrated QT & DQT signaling, 32-channel memory, and a built-in speaker mic jack are just some of the many features.

## Elements of a Premium Radio Product

### STRENGTH & DURABILITY

A clear demonstration of Kenwood's high standards of design, manufacturing and quality assurance is the fact that our facilities are ISO-9001 certified. Reliability is built into every one of our products from the component level up. So when it comes to choosing the communications equipment on which your business must depend, you can rely on the "Kenwood" brand.

#### VERTICAL LAYERED DESIGN

In a fresh departure from the conventional stacked design, the battery pack forms the entire back of the unit and the transceiver components form the front. This approach results in a stronger chassis and a single PCB, and improves the overall styling and appearance of the radio.

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

The TK-272G/372G are manufactured along Kenwood's demanding technical and industrial standards, meeting or exceeding the tough environmental standards used by the U.S. Department of Defense. These radios pass U.S. MIL-STD 810 C/D/E standards covering shock, vibration, humidity, dust, and rain, for reliable performance in even the toughest conditions.

#### DIE-CAST CHASSIS AND POLYCARBONATE CASE

The monocoque aluminum die-cast chassis heat-sink borrows a principal from aircraft construction for rigid strength. Surrounding this and forming an integral part of the chassis, is the super-tough polycarbonate case to provide years of durability. The heavy-duty belt clip and antenna mount are also integrated into the chassis for strengthened unit construction.



#### WEATHER-RESISTANT

Integrated elements like gasket seals and the polyvinyl speaker cone prevent moisture penetration for confident wet weather use.

### PERFORMANCE

Kenwood employs the latest in surface-mount techniques, multi-layer epoxy PCBs, advanced integrated circuits and hybrid components to ensure that the TK-272G/372G portables provide rugged, power-efficient performance.

#### COMPANDED AUDIO

The compander noise-reduction feature enhances audio clarity on wide and narrow bandwidth systems and is programmable per channel. Voice intelligence components are amplified and compressed at the transmit end then re-expanded on the receive end to reproduce the original audio signal.

#### HEAVY-DUTY ANTENNA MOUNT

The antenna's industry-standard SMA connector provides improved mechanical and electrical performance.

#### HIGH OUTPUT AUDIO

A large 1-3/8 inch speaker provides 500 mW audio output. This enables the user to hear transmissions clearly even in the noisiest environments.

# ation, Every Application

gh portables that offer top performance, operating ease and memory capacity, priority scan, high output (500 mW speaker), ny features that make these radios an unbeatable investment.

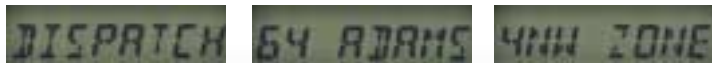


## Use-Friendly Interface

An essential part of performance is operating ease. And thanks to a sophisticated ergonomic layout, with carefully arranged controls, these radios are simple for anyone to use. Setup and maintenance are also easy.

### ALPHANUMERIC LCD DISPLAY

The 8-character display panel provides quick recognition of operating status and present settings with alphanumeric and icon characters. For enhanced nighttime viewing, pressing the backlight key illuminates the LCD display and keypad, and if no other keys are operated, backlighting shuts off after 5 seconds.



### BUSY CHANNEL LOCKOUT

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

### BUILT-IN QT AND DQT SIGNALING

QT and DQT functions segregate talk groups so users only hear calls from their own group for clearer, improved communications.

### BUILT-IN 2-TONE DECODER AND ENCODER

The decoder and encoder functions offer a 2-tone paging code assignable to any channel. An incoming message is signaled with audible and visible alerts.

### CALL ALERT

Notifies you as to whether the call received had DTMF or 2-tone signaling.

### DTMF TRANSPOND

Transmits a code telling the caller that your radio received their DTMF paging signal.

### SIGNALING AND/OR LOGIC

For improved response when using combinations of signaling systems, squelch is opened when either one, or all, signal requirements are met.

### DIALING FEATURES

Convenient dialing functions include Auto-Dial and Redial.

### TWO-COLOR LED

The two-color LED provides traditional transmit/warning (red), receive (green), and alert (orange) visual indications. This LED is recessed to limit omni-directional visibility to everyone except the radio operator.



## Versatility

In a fast-moving world, technology has to remain flexible. And the TK-272G/372G portables have been expressly designed to allow you to develop your communications capabilities.

### FLASH MEMORY ADVANTAGE

Flash memory permits updates, advanced feature sets and system architectural changes to be made electronically without ever opening the unit. This means fast changes for the system operator and less down time for users.

### UNIT CLONING

Cloning enables duplication of radios in the field via a simple interface cable without the use of a PC or special equipment.

### WIDE/NARROW CHANNEL BANDWIDTH

The TK-272G/372G can be programmed for wide or narrow bandwidth operation per channel to accommodate all channel allocations now and in the future.

### HIGH-CHANNEL CAPACITY

32-channel capacity (semi-duplex) ensures plenty of room for applications today and tomorrow. And once programmed, users can select specific channels within the set range.

### DTMF SIGNALING

This feature adds another dimension to paging with convenient 3- to 10-digit DTMF code combinations available. 3-digit ID plus 1-digit intermediate code Sel Call, and a 1- to 5-digit status code are also supported, as is DTMF group calling.

### PC PROGRAMMING AND TUNING

Radio parameter programming and tuning can be accomplished via the accessory connector from a PC-compatible computer without ever having to open the radio to save both time and expense (requires optional programming cable and software).

### POWER OUTPUT SETTINGS

Programmable power levels provide one of two settings (High/ Low) for each of the channels so the radio can be tailored for mixed transmit range requirements. Output levels can be programmed at 5W/1W on VHF and 4W/1W on UHF.

### ANI FUNCTION

Two types of ANI — PTT ID (per channel) and DIAL ID — send connect and disconnect ID information. Repeater/RIC access is enabled through key operation or ID transmit with PTT set to On.

### SCAN WITH PRIORITY

Channel scanning provides users with an easy way to monitor multiple channels for activity. Priority Scan enables the radio to automatically check for activity on an important main channel during the channel scan sequence and while receiving a call on another non-priority channel. Multi-group and single group scans are available to limit scanning to the currently selected group or to scan all channel groups.

### DEAD BEAT DISABLE (D.B.D)

Useful when functions of the radio need to be rendered unusable, reception of a pre-determined DTMF signal can either disable the unit's signal transmission, or prohibit signal transmission, while muting signal reception volume.

### EMBEDDED MESSAGE

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










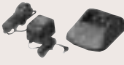










### SmarTrunk™ OMNI BOARD COMPATIBLE

Expand to conventional and conventional system capacity with the OMNI Board, available from the SmarTrunk™ Corporation.

### OTHER FEATURES:

- TIME-OUT TIMER ■ BATTERY POWER SAVE ■ LOW BATTERY ALERT ■ MONITOR
- TALK AROUND ■ BUSY LED CONTROL ■ MULTI-FUNCTION DIAL ■ KEY LOCK

# Options

<p><b>KNB-14</b> Ni-Cd Battery (7.2 V, 600 mAh)</p> 	<p><b>KVC-3</b> Regular Rate Vehicular Charger Adapter (for KSC-15/16)</p> 	<p><b>KHS-7</b> Lightweight Single Speaker Headset</p> 	<p><b>KRA-14</b> VHF Helical Antenna</p> 
<p><b>KNB-15A</b> Ni-Cd Battery (7.2 V, 1100 mAh)</p> 	<p><b>KVC-4</b> Rapid Rate Vehicular Charger Adapter (for KSC-15)</p> 	<p><b>KHS-7A</b> Lightweight Single Muff Headset</p> 	<p><b>KRA-15</b> UHF Whip Antenna</p> 
<p><b>KBP-1</b> Battery Case</p> 	<p><b>KMC-17</b> Speaker Microphone</p> 	<p><b>KHS-8BL</b> 2 Wire-Palm Mic with Earphone (Black)</p> 	<p><b>KRA-16</b> VHF Stubby Antenna</p> 
<p><b>KSC-15</b> Regular Rate Charger</p> 	<p><b>KMC-21</b> Compact Low-Profile Speaker Microphone</p> 	<p><b>KHS-8BE</b> 2 Wire-Palm Mic with Earphone (Beige)</p> 	<p><b>KRA-17</b> UHF Stubby Antenna</p> 
<p><b>KSC-16</b> Rapid Charger</p> 	<p><b>KEP-2</b> Earphone Coil Cord Kit (for KMC-17/21)</p> 	<p><b>KHS-9BL</b> 3 Wire-Lapel Mic with Earphone (Black)</p> 	<p><b>KBH-8</b> Spring-Action Belt Hook</p> 
<p><b>KMB-14</b> Multi-Charger Adapter (for KSC-15/16)</p> 	<p><b>KHS-1</b> Headset with VOX/PTT</p> 	<p><b>KHS-9BE</b> 3 Wire-Lapel Mic with Earphone (Beige)</p> 	<p><b>KLH-83</b> Heavy-duty Carrying Case with Bungee Cord</p> 
			<p><b>KLH-84</b> Nylon Case</p> 
			<p><b>KLH-6SW</b> Swivel Case Adapter</p> 
			<p><b>KBH-8DS</b> Swivel Belt Loop with D-stub Backplate</p> 
			<p><b>KWR-1</b> Water-Resistant Bag</p> 

Not all accessories may be available. Please contact your dealer for details.

# Specifications

	TK-272G	TK-372G
<b>GENERAL</b>		
Frequency range		
Type 1	150 – 174 MHz	450 – 470 MHz
Type 2	136 – 150 MHz	470 – 490 MHz
Type 3		490 – 512 MHz
Type 4		403 – 430 MHz
Number of channels	Max. 32	Max. 32
Channel spacing		
Wide / Narrow	25, 30 kHz / 12.5, 15 kHz	25 kHz / 12.5 kHz
PLL step	2.5, 5, 6.25, 7.5 kHz	5, 6.25 kHz
Channel frequency spread		
Type 1	24 MHz	20 MHz
Type 2	14 MHz	20 MHz
Type 3		22 MHz
Type 4		27 MHz
Antenna impedance	50 Ω	50 Ω
Operating voltage	7.5 V DC (±20%)	7.5 V DC (±20%)
Battery life (5-5-90 duty cycle with battery saver off) with KNB-14 (600mAh) with KNB-15A (1100mAh)	More than 4 hours More than 8 hours	More than 4 hours More than 8 hours
Operating temperature range	-22° F ~ +140° (-30° C ~ +60° C)	-22° F ~ +140° F (-30° C ~ +60° C)
Frequency stability	±3 ppm (-22° F ~ +140° F)	±2.5 ppm (-22° F ~ +140° F)
Dimensions (W x H x D)	2-5/16 x 5-5/16 x 1-1/4 in. (58 x 135 x 32 mm) with KNB-14 battery 2-5/16 x 5-5/16 x 1-3/8 in. (58 x 135 x 35 mm) with KNB-15A battery	2-5/16 x 5-5/16 x 1-1/4 in. (58 x 135 x 32 mm) with KNB-14 battery 2-5/16 x 5-5/16 x 1-3/8 in. (58 x 135 x 35 mm) with KNB-15A battery
Weight (net)	0.49 lbs. (220 g), main body only without antenna 0.88 lbs. (400 g) with KNB-14 battery & antenna	0.49 lbs. (220 g), main body only without antenna 0.88 lbs. (400 g) with KNB-14 battery & antenna
FCC ID		
Type 1	ALH29463110	ALH29473110
Type 2	ALH29463120	ALH29473120
Type 3		ALH29473130
Type 4		ALH29473140
FCC compliance		
Type 1	FCC parts 22, 74, 90, 90.210	FCC parts 22, 74, 80, 90, 90.210, 95A
Type 2	FCC parts 90, 90.210	FCC parts 90, 90.210
Type 3		FCC parts 22, 90
Type 4		FCC parts 90, 90.210
IC certification	282195581A	282195580A

	TK-272G	TK-372G
<b>RECEIVER</b> (Measurements made per EIA-RS 316B)		
Sensitivity (12 dB SINAD)		
Wide / Narrow	0.25 μV / 0.28 μV	0.25 μV / 0.28 μV
Selectivity		
Wide / Narrow	70 dB / 65 dB	70 dB / 65 dB
Intermodulation distortion		
Wide / Narrow	65 dB / 60 dB	65dB / 60 dB
Spurious response	65 dB	60 dB
Audio output	500 mW at less than 10% distortion	500 mW at less than 10% distortion
<b>TRANSMITTER</b> (Measurements made per EIA-RS 316B)		
RF power output (Hi/Low)	5 W/1 W	4 W/1 W
Spurious & harmonics	Less than 70 dB	Less than 70 dB
Modulation		
Wide / Narrow	16KøF3E / 11KøF3E	16KøF3E / 11KøF3E
FM noise		
Wide / Narrow	45 dB / 43 dB	45 dB / 40 dB
Modulation distortion	Less than 5%	Less than 5%

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
<b>Rain</b>	506.1/Procedure II	506.2/Procedure II	506.3/Procedure II
<b>Humidity</b>	507.1/Procedure II	507.2/Procedure II	507.3/Procedure II
<b>Dust</b>	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I
<b>Vibration</b>	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I
<b>Shock</b>	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV

# KENWOOD CORPORATION

14-6, 1-chome, Dogenzaka, Shibuya-ku, Tokyo 150-8501, Japan

## KENWOOD COMMUNICATIONS CORPORATION Headquarters

3975 Johns Creek Court, Suwanee, GA 30024-1265

Order Administration/Customer Support/Distribution  
P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745

## KENWOOD ELECTRONICS CANADA INC. Canadian Headquarters and Distribution

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

