

Thank you for purchasing the Wouxun KG-935H portable Amateur radio.

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www.buytwowayradios.com

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Safety Information

The KG-935H is an electrical apparatus, as well as a generator of RF (Radio Frequency) energy, and you should exercise all safety precautions as are appropriate for this type of device.

Please read the suggestions and warnings below before using the transceiver.

- ⚠ Keep the transceiver and accessories out of the reach of children.
- ⚠ Do not disassemble the transceiver.
- ⚠ Only use the supplied battery pack and charger or genuine Wouxun branded replacements purchased from an authorized dealer. Using improper batteries and charging accessories can damage the transceiver.
- ⚠ The supplied antenna is tuned for the frequencies supported by this transceiver. Using an aftermarket antenna can damage the transceiver.
- ⚠ Do not leave the transceiver exposed to direct sunlight or in overheated areas for an extended period of time.
- ⚠ Keep the transceiver away from dusty or humid areas.

- ⚠ The transceiver should be cleaned with mild detergents and a soft brush or cloth. Avoid cleaning with aggressive chemicals.
- ⚠ NEVER transmit without a properly connected antenna.
- ⚠ If an abnormal odor or smoke is detected from the transceiver, power it off immediately, then remove the battery pack. Contact your dealer for further assistance.

Notice

- These tips are important for safe operation of your KG-935H radio and its accessories. If the transceiver does not function normally, please get in touch with your dealer immediately.
- If you use components or accessories not produced by the Wouxun Company, Wouxun will not guarantee the safety and usability of the transceiver.

Safety Information

Caution

Please read this manual before using the radio, as it includes important instructions for the safe handling, use and operation of your radio.

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND US FEDERAL LAW.

Radio Operation and EME Exposure

Use only an antenna designed for use with this radio and its operating frequencies. Unauthorized modifications or attachments may damage the radio and violate FCC rules.

DO NOT hold the antenna while the radio is in use.

DO NOT attempt to use the radio with a damaged antenna.

FCC Licensing Information

The Wouxun KG-935H is FCC approved for use on the Amateur Radio Service. The KG-935H operates on Amateur Radio Service (HAM) frequencies according to the Federal Communications Commission (FCC) Rules in the United States. As such, a Amateur radio license is required to transmit on these frequencies. To obtain an FCC license, please go to the FCC's web site and complete the testing and license fee requirements.

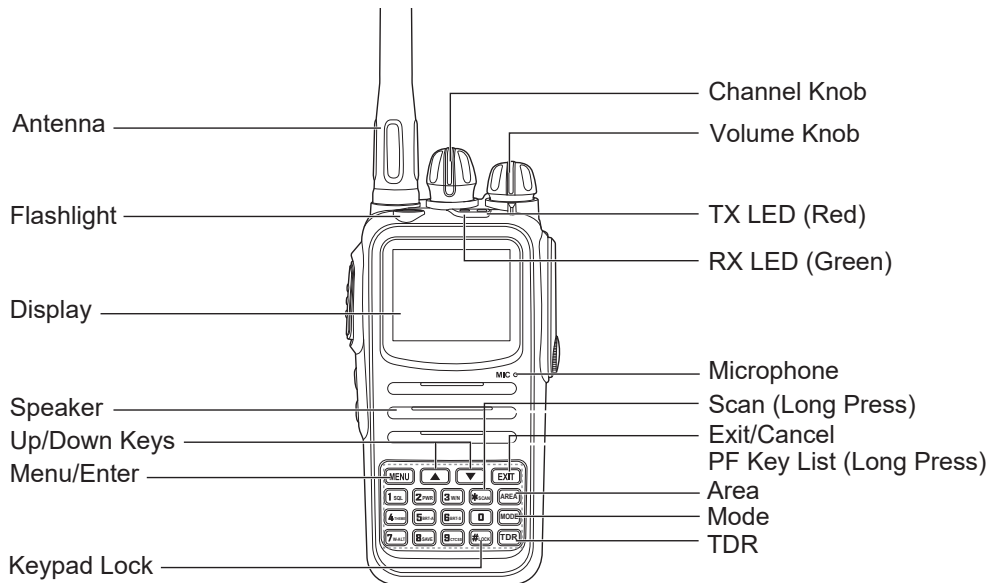
Feature Summary

- Tri Band Transmit (2m/1.25m/70cm)
- Up to 8 Watts Output Power
- IP66 Waterproof
- 7 NOAA Weather Channels
- NOAA Weather Alerts
- 4 Weather Alert Notifications
- Tune Specific Frequencies Directly (Frequency Mode)
- Simultaneous Dual Channel Receive
- Full Color Dual Channel Display
- 10 Colorful Theme Options
- High/Med/Low Power Selectable
- Wide/Narrow Bandwidth Selectable
- USB-C Charging Port
- PF Key Quick Guide
- Up to 999 Custom Channels
- Standard and Non-Std CTCSS/DCS
- Split CTCSS/DCS Tone Support
- CTCSS/DCS Tone Scan
- Channel Scan
- Priority Channel Scanning
- Favorite Channels
- Scan Group Support
- Display Channel Name, Number, or Frequency
- Custom Display Messages
- Incoming Caller ID Display
- Voltage Display

- Selectable Battery Meter
- Compander
- Scrambler
- DTMF Encode/Decode
- Cross Band Repeat
- Group Call/All Call/Select Call
- Receive (RX) Frequency Range:
 - 136-174.995 MHz
 - 222-225 MHz
 - 400-479.995 MHz
- Transmit (TX) Frequency Range:
 - 144-148 MHz
 - 222-225 MHz
 - 420-450 MHz
- FM Radio Mode
- Stopwatch Timer
- English Voice Guide
- Built-in Flashlight
- 2 Configurable Side Keys
- PC Programming Software Support

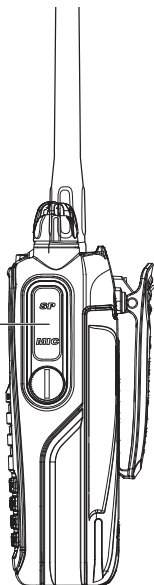
Getting Started

Front Panel Guide



Right / Left Side Guide

Earphone Jack



Transmit/PTT Key

PF1

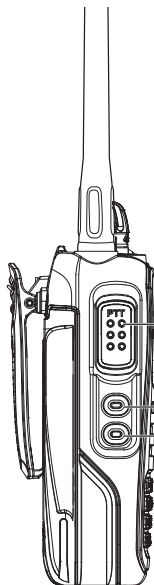
Short Press: FM-RADIO

Long Press: FRQ2-PTT

PF2

Short Press: FLASHLIGHT

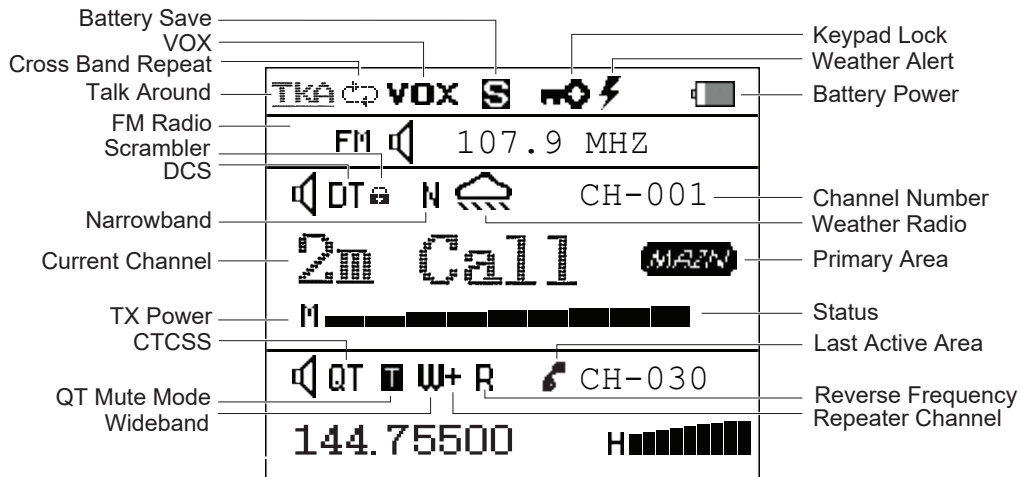
Long Press: MONI



Note: Defaults are shown for PF1 / PF2.
These buttons can be assigned different functions in the radio menu.

Getting Started

Display Guide



Dust and Water Protection

The KG-935H is waterproof to IP66 standards. It is dust resistant and rated to withstand powerful jets of water projected by a nozzle (12.5 mm) against enclosure from any direction for a limited period. This radio is resistant to dust and water only while the battery is properly installed and locked in place with no gaps and the accessory port is completely sealed with the accessory port cover. Use of a headset or other accessory will negate the dust and waterproofing features of this radio. The KG-935H is **NOT** submersible. Do not attempt to operate this radio if it has been submerged.

- The radio charger is **NOT** dust or waterproof.
- Charge the radio only under dry conditions.
- **DO NOT** charge the radio when it is wet.
- **DO NOT** expose the radio and charger to wet environments when charging.

Getting Started

Installing and Removing the Battery

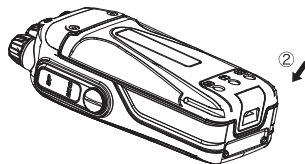
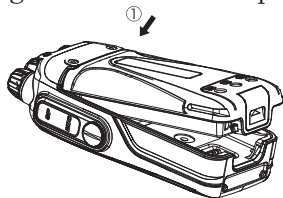
The lithium-ion battery pack included with the radio is not fully charged out of the box. It is recommended to charge it before using the radio for the first time.

Installing the Battery

Slide the battery pack up along the back of the radio until it stops. Then push the bottom of the battery towards the radio until it clicks into place.

Removing the Battery

Slide the release latch at the bottom of the battery pack in the direction of the arrow. While holding the release latch in place, pull the battery pack away from the radio.



Charging the Battery

The KG-935H offers two charging options out of the box, either using the included drop-in desktop charger or through the USB-C charging port on the back of the 2600mAh battery pack included with the radio.

Using the Desktop Charger

The KG-935H includes an intelligent desktop charger. It can charge the battery pack with or without the radio attached.

1. Insert the AC plug into an available 100~240v outlet. The LED light on the charger base will flash red for 2-3 seconds. This indicates the charger is in standby mode.
2. Insert the battery or radio with the battery attached into the charger. The LED light on the charger will turn red to indicate the battery is charging.
3. When the LED light on the charger turns green, charging is complete.

Note

- When a completely drained battery is first inserted into the charger, the charger will switch to trickle charge mode and the LED will flash red continuously.
- After 10-20 minutes the charger will switch to normal charging mode and the light will turn solid red. The LED will turn green when charging is complete.

Using the USB-C Charging Port on the Battery

The KG-935H includes a 2600mAh lithium-ion battery pack with a built-in USB-C charging port. The battery has an LED charging light next to the port to indicate the charging status.

1. Insert the USB-C cable into the USB-C port in the back of the battery. Connect the other end of the cable to the power source. The LED light on the battery will turn red to indicate the battery is charging.

2. When the LED light on the battery turns green, charging is complete.

Antenna Information

The KG-935H includes an antenna with an SMA female connector that is tuned for the amateur frequency ranges of your radio. This tri band antenna is designed to cover the 2 meter, 1.25 meter and 70cm bands. Aftermarket antennas may be used, provided they are tuned for these amateur bands and frequencies.

Warning: To avoid injury, DO NOT attempt to operate your radio if the antenna is damaged or defective.

DO NOT attempt to operate your radio without an antenna connected to the radio. Transmitting without an antenna or a correctly tuned antenna directly and properly connected to the radio may damage the radio and void the warranty.

Installing the Belt Clip

The belt clip attaches to the back of the radio with the two supplied screws. To install the belt clip, press it against the back of the unit and line up the screw holes. Insert each

Getting Started

screw one at a time and tighten until there is no further resistance and the belt clip is firmly attached to the radio. Do not overtighten the screws.

Introducing Amateur Radio and the KG-935H

The Amateur Radio Service (ham radio) is a two way radio service that offers some powerful benefits. Users are allowed to use advanced equipment, such as repeaters that enable you to transmit over large areas. The Amateur Radio Service requires the individual user to study for an exam and purchase a license, and a license covers the individual user for 10 years.

The KG-935H was designed to allow you to take advantage of all that ham radio has to offer and more. This fully configurable, tri band radio is built to transmit on amateur frequencies on the 1.25 meter, 2 meter, and 70cm ham bands, supporting both simplex and repeater capable operation.

Read this chapter to learn the basics of using your new KG-935H radio, such as selecting a channel, transmitting and receiving, and scanning.

Power On/Off and Adjusting Volume

Rotate the volume knob clockwise to power on the radio. To power off the radio, rotate the volume knob counter-clockwise until a click is felt.

To adjust the volume, use the volume knob when the radio is powered on. Turning the knob clockwise increases the volume, counter-clockwise decreases it.

Your First Transmit

Selecting a Channel

When you power on your KG-935H for the first time, the display will likely show the currently selected channel name with a small “CH-001” designating the channel number on the right side. Turn the Channel Knob or the [UP] / [DOWN] keys to navigate through the list of channels.

Transmitting and Receiving

With a channel selected, the radio is actively “listening” for an incoming signal on that

channel. When a signal is detected, the transmission will be heard through the radio's speaker. Please note, the Squelch setting (page 51) determines how strong a signal needs to be in order to be detected.

To transmit, first be sure the channel is clear and then hold the radio a few inches from your mouth. Hold down the PTT button on the side while talking and release the PTT when finished.

For best performance and clarity of transmission, position the radio upright with the front of the radio facing you, hold it several inches away from your mouth and speak directly into the microphone during transmission.

Dual Display: Using Areas “A” and “B”

The KG-935H is two radios in one! The dual display function allows you to monitor two channels at the same time. While this may sound complex, the KG-935H is designed to make this powerful feature easy to use.

The display is divided in half with the top half referred to as “Area A” and the bottom half referred to as “Area B”. Each area controls a separate radio. The current primary

Operation

area will be larger, occupying about two-thirds of the screen. When you perform an operation on the radio, such as changing channels or transmitting, that operation is performed on the currently active area.

Turning the Dual Display On and Off

The dual display is off by default on the KG-935H. Instead of a frequency or channel name, the text “KG-935H” will be displayed in the inactive area when the dual display is off. Use the [TDR] key on the keypad to toggle between a single and dual display.

Changing the Primary Area

With Dual Display on, press the [AREA] key on the keypad to switch the primary area.

With Dual Display off, pressing the [AREA] key will switch the currently active area as well, but will also turn off the previously active area. For example, with Area “A” on and Area “B” off, pressing [AREA] would turn on Area “B” and turn off Area “A”.

Important!

When the A or B area of the screen is the larger, dominate area, this indicates that area is the Primary and the other area is the secondary side. This is very important, as all of the active operations will be performed on the Primary side.

Channel and Frequency Modes

The KG-935H supports tuning frequencies via two methods: channel and frequency modes.

In channel mode, frequencies that have been saved can be selected from the channel list. This is the default mode and is the most convenient way to access commonly used frequencies. The KG-935H is pre-configured with channels programmed to amateur frequencies, but allows users to save custom channels as well (up to 999). In channel mode, turning the Channel/Frequency Knob or pressing the [UP] / [DOWN] keys will tune to the next channel in the list.

Operation

Frequency mode (also referred to as VFO mode) allows you to tune directly to a specific frequency regardless of the frequency having been previously saved. In frequency mode, turning the Channel/Frequency Knob or pressing the [UP] / [DOWN] keys will tune to a higher or lower frequency, depending on which key is pressed. The STEP menu option (page 61) allows you to adjust the step between each frequency. To enter a frequency directly, type the frequency using the keypad.

The KG-935H can only transmit on frequencies in the amateur radio bands. All other available frequencies entered in Frequency mode or through programming software are receive only. The WORK-MODE menu option (page 67) allows you to switch between Channel and Frequency modes. Long press the MODE key to jump between bands in Frequency mode. The KG-935H supports the following frequency bands:

KG-935H Frequency Bands

76 - 108 MHz (FM Radio)

136 - 174 MHz (FM)

222 - 225 MHz (FM)

400 - 480 MHz (FM)

Note: This list includes all of the bands on which the radio can receive. Not all of these bands are available to transmit.

Channels and Tones

The KG-935H supports amateur (ham) frequencies and 155 tones and codes. To successfully communicate between your stations or members of your group, all the connecting radios must be using the same frequency and CTCSS tone or DCS code.

The KG-935H supports both standard and non-standard CTCSS tones and DCS codes. These tones and codes can be enabled and configured in the [RX-CTCSS], [RX-DCS], [TX-CTCSS] and [TX-DCS] menu options (pp 54-55). Instructions for entering non-standard tones and codes can be found in the Advanced Operations section of this manual (page 79).

The KG-935H supports 999 customizable memory channels. Channels can be added, deleted or reordered via the PC programming software.

Using Repeaters

The KG-935H is designed to be used with repeaters. The channels can be fully programmed with repeater offsets and split tones.

What is a Repeater?

In basic terms, a repeater is a device that is used to increase the range of two way radios. Repeaters will receive a transmission on one frequency and simultaneously rebroadcast that transmission on a different frequency. Repeaters are often set up in a fixed location and connected to an antenna that is mounted at a higher elevation to provide better range than is normally available with radio-to-radio (simplex) communications.

Locating a Repeater

Using amateur repeaters can significantly increase the range of your radio, but just tuning to one of the repeater frequencies isn't necessarily going to work. You first have to be sure there is a repeater listening on that frequency, and you have to be within range of that repeater.

One resource for locating amateur repeaters is the website www.repeaterbook.com. This site has an extensive database of ham radio repeaters throughout the world.

Channel Scan

The [*SCAN] key controls the scan function. To activate Channel Scan, press and hold the [*SCAN] key for two seconds or until you hear “Scan Begin”. The radio will scan each channel for activity, starting from the current channel.

Pressing the [UP] / [DOWN] keys while scanning will change the direction of the scan from low to high ([UP]) or high to low ([DOWN]). Press any other key to stop the scan. Refer to the SCAN-MODE menu item (page 57) for more information on the types of scans available.

The scan function can also be assigned to the programmable PF1 or PF2 buttons from the menu (pp. 65-66).

Priority Channel Scan

The KG-935H supports Priority Channel Scanning. With this feature a priority chan-

Operation

nel can be specified that is scanned much more frequently than other channels. This helps prevent missing all or part of a transmission when you are primarily concerned with a single channel.

Priority Channel Scanning works by scanning your priority channel in between all other channels. For example, if your priority channel is 3 the radio would scan your channel list in the following order:

1 ▶ 3 ▶ 2 ▶ 3 ▶ 3 ▶ 3 ▶ 4 ▶ 3 ▶ 5 ▶ 3 ▶ ...

To set a priority channel, use the PRI-CH menu item (page 59). To activate the Priority Channel Scanning feature, use the PRI-SCAN menu item (page 58). Individual channels can be added or removed from the scan list using the Scan Add menu option (page 59).

Scanning CTCSS / DCS Codes

The KG-935H is equipped with the ability to scan an incoming signal for a CTCSS or DCS tone and update the current channel's tone settings once the tone is identified.

To activate CTCSS /DCS scan, press the [MENU] key and navigate to the TONE-SCAN menu item. Choose CTCSS or DCS and press [MENU] when a signal is received to activate the scan. Keep this menu item open to scan.

The scan will begin when a signal is received. The scan will stop when the signal ends and resume from where it left off the next time the signal is received, until it identifies the correct tone. Use the [UP]/[DOWN] arrow keys to scan in a different direction. Use the [PF2] side key to toggle between scanning the standard CTCSS, positive DCS, and negative DCS tone list. See the TONE-SCAN menu item (page 59) for more information.

The TONE-SCAN feature saves the tone to the channel when you press MENU after a tone has been detected. When saving the tone, TONE-SCAN looks at the TONE-SAVE option in the Menu (page 60) to determine if the detected tone is to be saved as the TX tone, RX tone, or both.

NOAA Weather Mode

NOAA Weather Mode allows you to quickly access weather information from a local NOAA broadcast station.

To activate NOAA Weather Mode, hold down the [AREA] key for 2 seconds or press the appropriate PF key if one has been assigned to the WEATHER function. The display will change to show a NOAA broadcast station frequency starting with 162 MHz and a rain cloud icon will appear above it to indicate the radio is in Weather Mode. Use the Channel/Frequency Knob or the arrow keys to navigate to your preferred NOAA station. Your most recently selected station will be remembered each time you enter this mode.

A list of supported NOAA frequencies is included in the Technical Information chapter of this manual (page 99).

To exit Weather Mode, press and hold the [AREA] key for 2 seconds. The radio will return to the last channel or frequency accessed.

To locate the NOAA station closest to your location, visit the following site:

https://www.weather.gov/nwr/station_listing

Note

- Weather Mode is accessible on Area A only.
- While in Weather Mode the menu is not accessible on Area A.

Weather Alert

The KG-935H features a Weather Alert option (page 53). When Weather Alert mode is active and the radio is in standby mode, the KG-935H will monitor the currently selected weather channel for an alert tone (1050Hz) that indicates a weather warning or alert has been issued.

When a weather alert has been detected, the KG-935H will produce an alert according to the option chosen in the WX-NOTIFY menu function (page 60). For all WX-NOTIFY alert options other than WEATHER, pressing any key will acknowledge and

Operation

end the alert.

The five alert options are listed in the following chart.

Alert Option	Alert Description
ICON-ONLY	Displays weather alert icon and radio remains on regular channel.
TONE	Displays weather icon and emits an alert beep every 60 seconds.
FLASH	Displays weather icon and flashlight LED pulses 5 times every 60 seconds.
TONE+FLSH	Displays icon, emits alert and the flashlight LED pulses every 60 seconds.
WEATHER	Displays weather icon and radio instantly tunes to Weather Mode. Hold the AREA key for 2 seconds to exit.

Key Lock

The buttons on the KG-935H can be locked to prevent them from being accidentally pressed. When the Key Lock is enabled, all buttons except the [#LOCK] and PTT keys will be disabled. The Channel knob will also be disabled.

To activate the Key Lock, press and hold the [#LOCK] key for two seconds. The key icon will appear at the top of the display. The buttons are now disabled.

To disable the Key Lock, press and hold the [#LOCK] key for two seconds. The key icon will disappear from the top of the display. The buttons should now be enabled.

Keypad Hotkeys

The keypad features hotkeys for faster access to the first nine menu options. When the radio is in MENU mode, press the desired hotkey to go directly to that option and press the UP / DOWN arrow keys to choose the desired setting. Press [MENU] to confirm, then press [EXIT] to save the setting and exit the menu.

Operation

Key	Hotkey	Function/Menu Item
1	SQL	Squelch menu function (page 51)
2	PWR	Output Power menu function (page 51)
3	W/N	Bandwidth menu function (page 52)
4	THEME	Display Theme menu function (page 52)
5	BRT-A	Active Backlight menu function (page 52)
6	BRT-S	Standby Backlight menu function (page 53)
7	W-ALT	Weather Alert menu function (page 53)
8	SAVE	Battery Saver menu function (page 53)
9	CTCSS	Receive CTCSS Tone menu function (page 54)
0		

Note

For instant access to any menu option while in the menu, simply enter the number of the menu option into the keypad. This is a faster method of locating a specific menu option than by using the [UP] and [DOWN] keys or the Channel Knob.

Keypad Function Keys

The keypad includes 9 function keys to perform specific operations on the radio, from accessing and navigating the menu to the control of various modes.

The chart below lists the keys and what they do.

Key	Function
*SCAN	Short Press: Reverse Frequency (page 45) Long Press: Channel/Frequency Scan (page 33)

Operation

Key	Function
#LOCK	Press 2 seconds to lock/unlock keypad (page 39)
MENU	Enter menu, select options and save to the radio
EXIT	Short Press: Exit the menu or cancel a function Long Press: Current Side Key Assignments (page 43)
AREA	Short Press: Switches primary and secondary areas (page 28) Long Press: Weather Mode (page 36)
MODE	Switches Channel and Frequency Modes (page 29)
TDR	Short Press: Switches single and dual display (page 28) Long Press: Enables/disables Cross Band Repeat (page 85)
UP	Goes to the next channel, frequency or menu item
DOWN	Goes to the previous channel, frequency or menu item

Side Key Functions

The KG-935H has two programmable keys [PF1] and [PF2]. These keys are located on the left side of the radio below the PTT key. Each key can perform two different functions, one activated with a short press and one with a long press. These functions can be assigned to the [PF1] or [PF2] buttons from the menu (pp. 65-66). They can also be assigned via the programming software.

Hold down the EXIT key to display a PF Key Quick Guide to view the current assignment of each key. The following chart lists all available PF Key options.

Short Press	Long Press	Function	Description
X	X	UNDEF	Undefined - Key not assigned
X	X	BACKLIGHT	Activate backlight (page 46)
X	X	DCS-SCAN	Scan for DCS code (page 34)
X	X	CTC-SCAN	Scan for CTCSS tone (page 34)
X	X	REVERSE	Activate reverse frequency (page 45)

Operation

Short Press	Long Press	Function	Description
X	X	TALK-A	Activate talkaround (page 45)
X	X	WEATHER	Activate Weather Mode (page 36)
X	X	STROBE	Activate flashing strobe light (p 47)
X	X	MONI	Monitor channel (page 49)
X	X	FM-RADIO	Activate FM Radio (page 49)
X	X	SOS	Transmit SOS (page 46)
X	X	ALARM	Transmit alarm (page 46)
X	X	FLASHLIGHT	Activate flashlight (page 47)
X	X	SCAN	Activate channel scan (page 33)
X	X	BRIGHT+	Increases brightness by 1
X	X	CH-FAV	Favorite Channels (page 47)
	X	SELE CALL	Selective Call (page 48)
	X	FRQ2-PTT	Secondary frequency PTT (page 48)

Talk Around

The Talk Around function allows the radio to transmit and receive on the output frequency of a repeater, essentially letting you bypass the repeater. This feature is useful when the repeater is nearly out of range, is not operational, or if you are in range of other stations and would prefer to contact them via simplex. The Talk Around function can be assigned to the PF1 or PF2 buttons from the menu (pp. 65-66).

Reverse Frequency

When Reverse Frequency is activated, the transmit and receive frequencies of the active channel are exchanged or reversed, allowing the radio to transmit on the receive frequency and receive on the transmit frequency. This feature is useful for checking if you are within simplex range of other units before activating Talk Around.

Press the [*SCAN] key on the active channel to activate or deactivate this feature. When activated, an “R” icon will appear above the channel name, frequency or number. The Reverse Frequency function can also be assigned to the PF1 or PF2 buttons from the menu (pp. 65-66). Available in Channel Modes only.

SOS

The radio can transmit an SOS alarm to other stations on the same channel. When SOS is activated, the radio will emit an oscillating alarm. After 2 seconds, the radio will transmit the alarm. To activate the SOS function, it must first be assigned to the [PF1] or [PF2] key (pp. 65-66).

Alarm

The radio features an alarm function with an ANI ID code. When activated, the radio will emit an oscillating alarm and transmit an ANI ID code plus the numbers “110” on the active channel for 10 seconds. After 5 minutes, the alarm will repeat. Press any key to deactivate the alarm. To activate the alarm function, it must first be assigned to the [PF1] or [PF2] key (pp. 65-66).

Display Backlight

The KG-935H allows you to activate the backlight for the display using a programmable key. When activated, the backlight will remain on for the duration of the time set in the BACKLIGHT menu option (page 56). It can be assigned to the [PF1], [PF2] or

[TOP] key using the System Menu (pp. 65-66).

Flashlight/Strobe

The KG-935H has a built-in LED flashlight at the top of the radio. It can operate in two modes. [FLASHLIGHT] provides steady illumination. [STROBE] functions as a flashing strobe light. To access one or both of these features, they must first be assigned to the [PF1] or [PF2] key (pp. 65-66).

Favorite Channels

The KG-935H allows you to access specific channels marked as favorite channels. When assigned to a programmable key, pressing that key will change channels to the next highest channel marked as Favorite. Pressing the key again will go to the next favorite channel on the list. When the highest channel is reached, the radio will cycle back to the first favorite channel on the list. If no channels are marked as favorites, pressing the key will produce an error beep.

Channels 1-3 are favorite channels by default.

Operation

The current channel can be activated or deactivated as a Favorite Channel by using the CH-FAV menu option (page 68).

The Favorite Channels function can be assigned to the [PF1] or [PF2] key using the menu (pp. 65-66).

Selective Call

This function allows you to send a call to a specific calling group. When Select Call is assigned to one of the programmable keys, pressing the key will automatically transmit the pre-programmed PTT-ID of the select group so you don't have to key it into your keypad manually when you begin to transmit. Call groups are set in the [CALL-CODE] menu option (page 75). The selective call function [SELEC CALL] can be assigned to the PF1 or PF2 buttons from the menu (pp. 65-66) or through the programming software.

Secondary Frequency PTT

The KG-935H features an alternative push-to-talk (PTT) button that transmits on the secondary area. For example, if Area A is primary, using the alternative PTT will trans-

mit on Area B. This is useful when monitoring traffic on two separate channels and you want to transmit on both without having to change the primary channel. The secondary frequency PTT function [FRQ2-PTT] can be assigned to a long press of the PF1 or PF2 buttons from the menu (pp. 65-66) or through the programming software.

Monitor

The MONI function opens squelch on the currently active area allowing you to listen to all traffic on the current frequency. This is useful for listening for weak transmissions. To use the MONI function, it must first be assigned to the [PF1] or [PF2] key (pp. 65-66).

FM Radio

The KG-935H features a 76.02-108MHz commercial broadcast FM Radio. To access the FM Radio, it must first be assigned to the [PF1] or [PF2] key (pp. 65-66). When active, the current FM radio frequency will appear near the top of the display above Area A. To find an active broadcast station, press [*SCAN] to begin the FM Radio scanning function. Press any key to stop the scan.

Operation

To enter a specific radio frequency directly, press and hold down the [TDR] key for 2 seconds while the FM radio is on. Enter the desired frequency into the FM radio area using the keypad.

Up to 20 FM radio stations can be stored on the radio using the [FM-MEM] menu option (page 77).

Stopwatch Timer

The KG-935H has a built-in stopwatch timer. It can be enabled using the TIMER menu option (page 76). Once enabled, Press [#LOCK] on the radio to activate the stopwatch. Press any key or turn the channel knob to stop the timer. When stopped, press [#LOCK] to clear and restart the timer, or press any key to deactivate the stopwatch and return to standby mode.

The timer will stop and the radio will exit timer mode if a signal is received on an active channel.

[01: SQL] Squelch

Function: The squelch function mutes the speaker when no signal is detected. Adjusting the squelch sensitivity allows you to control how strong of a signal is required in order to unmute the speaker. Selecting a lower number will allow weaker signals to be heard, higher numbers require a stronger signal. Selecting [0] will unmute the speaker at all times. Squelch is set independently for each area.

Options: 0-9

Default: 5

[02: TX-POWER] Output Power

Function: Sets the transmit power of the radio. The radio has three power options: Low, Mid and High. Low power is 2 watts, Mid power is 5 watts and High power is 8 watts. Power levels can be set for each individual channel in the radio or through the programming software.

Options: HIGH/MID/LOW

Default: (Varies by channel)

Menu Functions

[03: W/N] Bandwidth

Function: Sets the bandwidth for the current channel.

Options: WIDE/NARROW

Default: (Varies by channel)

[04: THEME] Display Theme

Function: Sets the theme of the LCD display to one of 10 display themes.

Options: WHITE-1/WHITE-2/BLACK-1/BLACK-2/COOL/RAIN/NotARubi/
SKY/BTWR/CANDY

Default: BLACK-2

[05: BRT-ACTV] Active Backlight

Function: Sets the brightness of the LCD display backlight while the radio is transmitting, receiving, or otherwise active. There are 10 brightness levels from lowest (1) to highest (10).

Options: 1-10

Default: 8

[06: BRT-STBY] Standby Backlight

Function: Sets the brightness of the LCD display backlight while the radio is in standby. There are 10 brightness levels from lowest (1) to highest (10). The backlight can also be turned off.

Options: OFF/1-10

Default: 3

[07: WX-ALERT] Weather Alert

Function: Enables and disables the weather alert. Sets the alert for the currently selected NOAA weather channel.

Options: ON/OFF

Default: OFF

[08: BAT-SAVER] Battery Saver

Function: Activate the battery saver feature. When active, the radio will scan less frequently for signals, improving battery life.

Options: ON/OFF

Menu Functions

Default: ON

[09: RX-CTCSS] Receive CTCSS Tone

Function: Sets the receiving CTCSS tone for the selected channel. Use the arrow keys to select your preferred code and then MENU to confirm. Pressing the [*] key will clear the tone.

Options: OFF/50 CTCSS Tones

Default: OFF

[10: TX-CTCSS] Transmit CTCSS Tone

Function: Sets the transmitting CTCSS tone for the selected channel. Use the arrow keys to select your preferred code and then MENU to confirm. Pressing the [*] key will clear the tone.

Options: OFF/50 CTCSS Tones

Default: OFF

[11: RX-DCS] Receive DCS Code

Function: Sets the receiving DCS code for the selected channel. Use the arrow keys to

select your preferred code and then MENU to confirm. Pressing the [*] key will clear the tone.

Options: OFF/105 DCS+ Codes/105 DCS- Codes

Default: OFF

[12: TX-DCS] Transmit DCS Code

Function: Sets the transmitting DCS code for the selected channel. Use the arrow keys to select your preferred code and then MENU to confirm. Pressing the [*] key will clear the tone.

Options: OFF/105 DCS+ Codes/105 DCS- Codes

Default: OFF

[13: SHIFT] Frequency Shift Direction

Function: Allows you to adjust the direction of the offset frequency set in Menu Option 14 (page 56) . Available only in Frequency mode.

Options: OFF/+/-

Default: OFF

[14: OFFSET] Offset Frequency

Function: Sets the offset frequency for accessing a repeater. Frequency must be typed in from the keypad of the radio. Offset works in conjunction with the Shift setting (option 13) to set the transmit frequency of the radio when transmitting to a repeater. If Shift is set to + or -, the MHz specified by Offset will be added to or subtracted from the active frequency when PTT is pressed to determine the transmit frequency. For example, if the current frequency is 442.000 MHz with SHIFT set to '+' and OFFSET set to '5.000', the radio will transmit on 447.000 MHz. Available only in Frequency mode.

Options: None

Default: None

[15: BACKLIGHT] Backlight Timeout

Function: Sets the amount of time (in seconds) that the LCD display remains in active mode before returning to standby mode. The timer can be set from 1-20 seconds in one second increments. It can also be set to turn off immediately or always remain on.

Options: ALWAYS OFF/ALWAYS ON/1-20S

Default: 15 Seconds

[16: SCAN-MODE] Scan Mode

Function: Scan mode settings. Note: Scan can be stopped by pressing any key on the radio.

Options: TO/CO/SE

Default: SE

TO: When a signal is detected, scanning stops. Scan will pause for 5 seconds and then resume. Pressing PTT will transmit on the currently selected channel.

CO: When a signal is detected, scanning stops and resumes 5 seconds after the signal is lost. Pressing PTT will transmit on the currently selected channel.

SE: When a signal is detected, scanning stops. Pressing PTT will transmit on the channel where the signal was detected.

[17: SCANGRP-A] Scan Group A

Function: Allows selection of a specific channel group in Area A for scan, or all groups. When a group number is selected, only channels in that group will be

Menu Functions

scanned when the Scan feature is activated.

Options: ALL/1-10

Default: ALL

[18: SCANGRP-B] Scan Group B

Function: Allows selection of a specific channel group in Area B for scan, or all groups.

When a group number is selected, only channels in that group will be scanned when the Scan feature is activated.

Options: ALL/1-10

Default: ALL

[19: PRI-SCAN] Priority Scan

Function: Activates scanning of the Priority Channel. During scan, the priority channel will be scanned more frequently. Read the “Channel Scan” section on page 33 to learn more.

Options: ON/OFF

Default: OFF

[20: PRI-CH] Priority Channel

Function: Selects the priority channel. This is used during scanning when the Priority Scan (menu option 19) feature is enabled. To select a priority channel, use the [UP] and [DOWN] keys to select a channel number.

Options: 999 channels

Default: CH-001

[21: SCAN-ADD] Scan Add / Delete

Function: Add or remove a channel to/from the list of channels to scan.

Options: ON/OFF

Default: ON

[22: TONE-SCAN] CTCSS/DCS Scanning

Function: Scans the incoming signal for CTCSS or DCS tones to identify or confirm the correct tone. This function must be activated while receiving a signal.

Options: 1. CTCSS/2. DCS

Default: None. Choose the function and press [MENU] to activate the scan.

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Note: The scan will stop when the signal ends and resume from where it left off the next time the signal is received, until it identifies the correct tone. Use the [UP]/[DOWN] arrow keys to scan in a different direction.

[23: TONE-SAVE] CTCSS/DCS Tone Save Options

Function: This item determines how a CTCSS or DCS tone is saved to a channel after a CTCSS/DCS scan.

Options: Rx/Tx/Tx+Rx

Default: Rx

RX: Saves the scanned tone to the RX-CTCSS/DCS setting

TX: Saves the scanned tone to the TX-CTCSS/DCS setting.

Tx/Rx: Saves the scanned tone to both.

[24: WX-NOTIFY] Weather Alert Notification Setting

Function: Sets type of notification for the alert when a NOAA weather alert signal is received.

Options: WEATHER/ICON-ONLY/TONE/FLASH/TONE+FLASH

Default: WEATHER

ICON-ONLY: Displays weather alert icon and radio remains on regular channel.

TONE: Displays weather icon and emits an alert beep every 60 seconds.

FLASH: Displays weather icon and flashlight LED pulses 5 times every 60 seconds.

TONE+FLSH: Displays icon, emits alert and flashlight LED pulses.

WEATHER: Displays weather icon and radio instantly tunes to Weather Mode.

[25: STEP] Frequency Step

Function: Allows you to adjust the steps between frequencies. Available only in Frequency mode.

Options: 2.5K/5K/6.25K/10K/12.5K/25K/50K/100K

Default: 5K

[26: ROGER] Roger Beep

Function: Enables an audible roger beep prompt during transmission.

Options: OFF/BOT/EOT/BOTH

Default: OFF

BOT: Sets the roger beep prompt at the beginning of transmission

EOT: Sets the roger beep at the end of transmission

Menu Functions

BOTH: Sets the roger beep at the beginning and end of transmission

[27: TOT] Transmit Overtime Timer

Function: When the transmission time exceeds the time set by the Transmit Overtime Timer, the unit will emit an error prompt and stop transmitting.

Options: 15-900 seconds (15 second increments)

Default: 60 seconds

[28: TOA] Transmit Overtime Alarm

Function: The Transmit Overtime Alarm warns when the Transmit Overtime Timer (TOT) is about to be exceeded. The red TX indicator LED (top of the radio) flashes to indicate an alarm. The alarm can be set to a maximum time limit of 10 seconds and indicates the amount of time prior to the Transmit Overtime Timer expiring that the warning will begin.

Options: OFF/1S-10S

Default: 5S

[29: VOX] Voice Activated Transmit

Function: The VOX function allows you to transmit without pressing the PTT key. The VOX function will detect that you are speaking into the microphone and then automatically begin transmitting. VOX gain levels of 1-10 are provided to allow you to adjust the voice detection sensitivity.

Options: OFF/1-10 (level)

Default: OFF

[30: VOICE] Voice Guide

Function: Enable or disable voice prompts.

Options: OFF/ON

Default: ON

[31: BEEP] Button Beeps

Function: Enables an audio prompt to alert the operator of a key press, input or fault.

Options: ON/OFF

Default: ON

Menu Functions

[32: BUSY-LOCK] Busy Channel Lockout

Function: Enabling Busy Channel Lockout prevents the transceiver from transmitting on a selected channel while another station or group is transmitting on it.

Options: ON/OFF

Default: OFF

[33: VOLTAGE] Battery Voltage

Function: Displays the current battery voltage.

Options: NONE

Default: NONE

[34: BAT-TYPE] Battery Level Display Type

Function: Select the type of indicator that is shown in the battery level area of the display. Icon displays a battery icon, filled to a level that is roughly indicative of the remaining battery charge. Voltage displays the current battery voltage. Percent displays the percentage of battery life that remains.

Options: ICON/VOLTAGE/PERCENT

Default: ICON

[35: PF1-SHORT] Side Key PF1 Short Press Assignment

Function: Assigns a function to a short button press of the [PF1] side key.

Options: UNDEF/BACKLIGHT/DCS-SCAN/CTC-SCAN/REVERSE/TALK-A/
WEATHER/STROBE/MONI/FM-RADIO/SOS/ALARM/FLASH-
LIGHT/SCAN/BRIGHT+/CH-FAV

Default: RADIO

[36: PF1-LONG] Side Key PF1 Long Press Assignment

Function: Assigns a function to a long button press of the [PF1] side key.

Options: UNDEF/BACKLIGHT/DCS-SCAN/CTC-SCAN/REVERSE/TALK-A/
WEATHER/STROBE/MONI/FM-RADIO/SOS/ALARM/FLASH-
LIGHT/SCAN/BRIGHT+/CH-FAV/SELEC CALL/FRQ2-PTT

Default: FRQ2-PTT

[37: PF2-SHORT] Side Key PF2 Short Press Assignment

Function: Assigns a function to a short button press of the [PF2] side key.

Menu Functions

Options: UNDEF/BACKLIGHT/DCS-SCAN/CTC-SCAN/REVERSE/TALK-A/
WEATHER/STROBE/MONI/FM-RADIO/SOS/ALARM/FLASH-
LIGHT/SCAN/BRIGHT+/CH-FAV

Default: FLASHLIGHT

[38: PF2-LONG] Side Key PF2 Long Press Assignment

Function: Assigns a function to a long button press of the [PF2] side key.

Options: UNDEF/BACKLIGHT/DCS-SCAN/CTC-SCAN/REVERSE/TALK-A/
WEATHER/STROBE/MONI/FM-RADIO/SOS/ALARM/FLASH-
LIGHT/SCAN/BRIGHT+/CH-FAV/SELEC CALL/FRQ2-PTT

Default: MONI

[39: SMUTESET] Secondary Area Mute Setting

Function: The Secondary Mute function mutes the speaker on the secondary area when the primary area is actively receiving. This prevents conflicting audio from both sides simultaneously when the radio is in dual receive mode.

Options: OFF/TX/RX/TX+RX

Default: OFF

TX: Mutes the speaker on the Secondary area when transmitting on the Primary area.

RX: Mutes the speaker on the Secondary area when receiving on the Primary area.

TX+RX: Mutes the speaker on the Secondary area when transmitting or receiving on the Primary area.

[40: WORK-MODE] Work Mode

Function: Changes the working mode of the radio. This is equivalent to pressing the [MODE] button on the keypad.

Options: CH-NAME/FREQUENCY/CH-NUMBER/CH-FREQ

Default: CH-NAME

CH-NAME: Channel Mode. Displays the channel name (Example: 2m-Call)

FREQUENCY: Frequency Mode. Allows directly tuning any frequency in the wide receive range of the KG-935H.

CH-NUMBER: Channel Mode. Displays the channel number (Example: CH-001)

CH-FREQ: Channel Mode. Displays the channel frequency (Example: 462.56250)

Menu Functions

[41: CH-NAME] Channel Name

Function: Allows you to edit the name for the currently active channel. To edit a channel name, press [MENU] and choose the CH-NAME option. The name of the current channel will be in edit mode and the first character will flash to indicate it is currently being edited. Press the [UP] and [DOWN] keys to select the desired character, then press the [PF1] key to move to the next position. Press the [PF2] key to move to the previous position. When you finish editing the name, press [MENU] to save. Pressing the [*] key will clear the channel name field. This option is only available in Channel Mode.

Options: 8 Characters

Default: None

[42: CH-FAV] Favorite Channel

Function: Select if the current channel should be marked as a favorite. Favorite channels can be activated quickly by using the FAVORITE function. Channels 1-3 are favorite channels by default.

Options: OFF/ON

Default: OFF

[43: CH-ADD] Add Memory Channel

Function: Adds a channel to the memory channel list.

Options: None

Default: None

[44: CH-DELETE] Delete Memory Channel

Function: Deletes a channel from the memory channel list.

Options: None

Default: None

[45: SCRAMBLE] Scrambler

Function: Activating this function will scramble/descramble signals using one of 8 supported protocols.

Options: OFF/SCRAM 1-8

Default: OFF

Menu Functions

[46: COMPANDER] Compander

Function: The compander minimizes noise. Useful when transmitting over long distances.

Options: ON/OFF

Default: OFF

[47: SP-MUTE] Speaker Mute

Function: Selects the method to filter transmissions received on the current channel.

Options: QT/QT+DTMF/QT*DTMF

Default: QT

QT: Only those signals with a CTCSS tone or DCS code matching the selected channel will be heard through the speaker.

QT+DTMF: Transmissions will be filtered by both CTCSS/DCS tones AND a DTMF tone of the current radio ID (followed by a # sign).

QT*DTMF: Transmissions will be filtered by either CTCSS/DCS tones OR a DTMF tone of the current radio ID (followed by a # sign).

[48: RPT-SET] Repeater Mode

Function: Set the type of repeater function when enabled as a cross band repeater. Requires the KG-935H to be in cross-band repeater mode for this to function.
See page 85 for more information.

Options: X-DIRPT/X-TWRPT

Default: X-DIRPT

X-DIRPT: The receiving frequency in the Primary Area is the receiving frequency of the cross-band repeater and the transmitting frequency in the Secondary Area is the transmitting frequency.

X-TWRPT: Both Primary and Secondary Areas are receivers, and the area that receives the signal first will serve as the receiving area, while the other area will operate as the transmitting area.

[49: RPT-SPK] Repeater Speaker Setting

Function: When the KG-935H is configured as a cross-band repeater, enabling this option will unmute the speaker. This will allow you to hear any cross-band repeater activity.

Menu Functions

Options: ON/OFF

Default: OFF

[50: RPT-PTT] Repeater PTT Setting

Function: When the KG-935H is configured as a cross-band repeater, enabling this option will allow you to use the radio's Push-To-Talk button to transmit.

Options: ON/OFF

Default: OFF

[51: ANI-SW] Radio ID On/Off

Function: When activated, the radio will transmit the 3-6 digit Caller ID specified in menu option 52.

Options: ON/OFF

Default: OFF

[52: ANI-EDIT] Edit Radio ID

Function: Sets the numeric radio ID that is sent during transmissions if the ANI-SW menu option is enabled. This ID must be a number and contain at least 3

digits and no more than 6 digits. The first digit cannot be 0. The default is 101.

Options: 0-9

Default: 101

[53: SIDETONE] Sidetone Setting

Function: Determines when DTMF tones transmitted by the radio are heard from the speaker. It can be configured if you want to hear all tones, only tones transmitted for a radio ID, or only tones other than those transmitted for a radio ID. Regardless of the setting, tones are still transmitted over the air and will be heard by other radios.

Options: OFF/DTMF/ANI/DTMF+ANI

Default: DTMF

DTMF: Only non-radio ID tones will be heard through the speaker.

ANI: Only radio ID tones will be heard through the speaker. Tones entered manually from the keypad will not be heard.

DTMF+ANI: All tones transmitted will be heard from the speaker.

Menu Functions

[54: ALERT] Tone Alert

Function: Activates the tone alert. Some relay systems used for single-tone pulse transmissions need a single-tone pulse signal to activate.

Options: 1750Hz/2100Hz/1000Hz/1450Hz

Default: 1750Hz

Special Reminder: When in transmit mode, you can send the single-tone pulse frequency you've selected by pressing the [PF2] key on the side of the radio.

[55: PTT-DLY] PTT-Delay

Function: Delays transmission of the Caller ID code for a specified time. This delay time can be set to one of 30 levels in 100ms increments.

Options: 100~3000ms

Default: 300ms

[56: PTT-ID] Radio ID Setting

Function: Determines at what point the radio will send its Radio ID during transmit. Only used if ANI-SW is set to ON.

Options: BOT/EOT/BOTH

Default: BOT

BOT: Radio ID will be sent at the beginning of the transmission.

EOT: Radio ID will be sent at the end of the transmission.

BOTH: Radio ID will be sent at both the beginning and end of transmission.

[57: RING] Ring Time

Function: Sets the amount of time a ring alert is emitted after receiving a DTMF tone that matches the radio ID. This is used when the SP-MUTE setting is QT+DTMF or QT*DTMF.

Options: OFF/1S-10S

Default: 3S

[58: CALLCODE] Call Code

Function: Sets Selective Group Call codes. Selective Call Codes 3 to 6 digits. Call Codes can be set up through the programming software.

Options: 1-20 Groups

Default: None

Menu Functions

[59: RPT-TONE] Squelch Tone

Function: Enables or disables the squelch tail sent to the receiving radio at the end of a transmission.

Options: OFF/ON

Default: ON

[60: TIMER] Stopwatch Timer

Function: Activates the radio's stopwatch feature. If ON, activate the stopwatch by short pressing [#LOCK] in standby mode.

Options: ON/OFF

Default: OFF

[61: SIM-RX] Simultaneous Receive

Function: Specify if receiving on both areas at the same time should be enabled. Disabling Simultaneous Receive can improve sensitivity and performance.

Options: OFF/ON

Default: ON

[62: AUTOLOCK] Auto Lock

Function: Automatically locks the keypad after 15 seconds.

Options: OFF/ON

Default: OFF

Note: To unlock the radio, hold the [#LOCK] key for 2 seconds.

[63: PONMSG] Power On Message

Function: Select the item displayed when the radio is powered on.

Options: BITMAP/BATT-V

Default: BITMAP

BITMAP: Wouxun logo

BATT-V: Battery voltage

[64: FM-MEM] FM Radio Memory

Function: Save up to 20 FM radio stations into memory.

Options: MEMORY/RECALL

Default: MEMORY

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Note: To store an FM radio station in memory, press [SCAN] to scan and stations.

Once the desired station is found, press [MENU], go to FM-MEM and press [MENU] to activate the radio storage function. Press the [UP] and [DOWN] keys to choose MEMORY. Use the channel knob or the [UP] and [DOWN] keys to select an open memory channel, then press [MENU] to confirm. To Recall a station, press [MENU] to activate the radio storage function. Press the [UP] and [DOWN] keys to choose RECALL. Use the channel knob or the [UP] and [DOWN] keys to select a memory channel to recall, then press [MENU] to confirm. Refer to page 49 for more about the FM radio.

[65: RESET] Factory Reset

Function: Resets the transceiver to factory defaults.

Options: VFO/ALL

Default: VFO

VFO: Resets function settings to factory defaults but retains channel parameters.

ALL: Resets all of the function settings and channel parameters to factory defaults.

Setting Non-Standard CTCSS or DCS

How to Set Non-Standard CTCSS

The KG-935H supports non-standard CTCSS codes in the range of 65.0-255.0Hz with a minimum spacing of 0.1Hz.

After selecting the CTCSS menu setting (RX-CTCSS or TX-CTCSS), enter the desired CTCSS code via the keyboard and then press [MENU] to confirm.

For example, to set the receiving CTCSS tone to 100.5Hz:

In standby, press [MENU] + [9], the screen will display: RX-CTCSS, press MENU, and input [1] + [0] + [0] + [5], then press [MENU] to confirm, and [EXIT] to return to standby.

How to Set Non-Standard DCS

The KG-935H supports non-standard DCS codes ranging from 000-766, except any code with the digit 8 or 9. For example, 680.719 is not a valid non-standard DCS code.

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After setting a non-standard DCS code, press the [LOCK] key to set it as a Positive or Negative code, or press the [SCAN] key to select OFF.

After selecting the DCS menu setting (RX-DCS or TX-DCS), enter the desired DCS code from the keypad on the hand microphone, press [LOCK] to select the Positive or Negative code, and then press MENU to confirm.

Example 1: Set the receive DCS as D105N

In standby, press [MENU] + [1] + [1] and the screen will display: RX-DCS. Press [MENU] and input [1] + [0] + [5], then press [LOCK] to select the Positive code. The screen will display D105N. Press [MENU] to confirm, and then press [LOCK] to return to standby.

Example 2: Set the receive DCS as D105I

In standby, press [MENU] + [1] + [1] and the screen will display: RX-DCS. Press [MENU] and input [1] + [0] + [5], then press [LOCK] to select the Negative code. The screen will display D105I. Press [MENU] to confirm, and then press [EXIT] to return to standby.

Adding and Removing Channels

The KG-935H allows you to add and delete channels directly from the keypad of the radio using the CH-ADD and CH-DEL options in the menu. New channels can be created from scratch in Frequency mode or cloned from existing channels in Channel mode.

How to Clone an Existing Channel

When creating a new channel, it is often easier to start by cloning an existing channel. This is particularly true with repeater channels. To clone an existing channel:

1. Be sure that your radio is in Channel mode by using the WORK-MODE menu option (page 67).
2. Tune to the channel that you would like to clone.
3. Press [MENU] + [4] + [3] to enter the CH-ADD function.
4. Turn the channel knob or press the [UP] and [DOWN] keys to select an available

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channel number, then press [MENU] to save it and return to standby mode. Channels that are unassigned or available to program will be white in color.

Channel name and channel scan settings will not be cloned. To modify settings for the cloned channel, select the channel and then use the menu settings to select the options you wish to change.

How to Add a Channel in Frequency Mode

New channels can also be created from scratch, including a “Receive-Only” channel. To create a new channel:

1. Be sure that your radio is in Frequency mode by using the WORK-MODE menu option (page 67).
2. Tune to the desired channel by entering the receive frequency.
3. Update any settings that you would like applied to the channel by updating the menu options.

4. Once the frequency is working as desired, save the new channel by pressing [MENU] + [4] + [3] to enter the CH-ADD function.

5. Turn the channel knob or press the [UP] and [DOWN] keys to select an available channel number, then press [MENU] to save it and return to standby mode. Channels that are unassigned or available to program will be white in color.

For example, to save a channel in Frequency mode with a 146.520 receive frequency and a 67.0 receive CTCSS tone:

1. While in Frequency mode, tune to the frequency 146.520 or type it into the radio from the keypad, press [MENU] + [9] to enter the Receive CTCSS setting, press [UP] / [DOWN] to select the 67.0 tone, and then press [MENU] to confirm.

2. Press [MENU] + [4] + [3] to enter the CH-ADD function, turn the channel knob or press the [UP] and [DOWN] keys to select an available channel, then press [MENU] to save it and return to standby mode.

Tip

For faster navigation, use the [PF1] or [PF2] keys instead of the [UP] and [DOWN] keys to skip through the list of channels that are already in use or assigned. Press [PF1] key to instantly go to the next unassigned channel on the list. Press the [PF2] key go to the last unassigned channel on the list.

How to Delete a Channel

1. Select the CH-DELETE menu option (page 69) by pressing [MENU] + [4] + [4], and then press [MENU] to confirm.
2. Turn the channel knob or press the [UP] and [DOWN] keys to select the desired channel number, then press [MENU] to delete it and return to standby mode. Channels that are unassigned or available to program will be white in color.

Cross Band Repeat

The KG-935H features a cross band repeater. It can be configured either as a directional cross band repeater or a two way cross band repeater.

There are three options in the Menu related to configuring the cross band repeat function: RPT-SET (page 71), RPT-SPK (page 71), and RPT-PTT (page 72).

To set up cross band repeat, long press [MENU] + [4] + [8] to enter the RPT-SET function in the system menu. There are two options, X-DIRPT and X-TWRPT.

X-DIRPT: The receiving frequency in the Primary Area is the receiving frequency of the cross-band repeater and the transmitting frequency in the Secondary Area is the transmitting frequency.

X-TWRPT: Both Primary and Secondary Areas are receivers, and the area that receives the signal first will serve as the receiving area, while the other area will operate as the transmitting area.

Choose the type of cross band repeater you want and press [MENU] to confirm your

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choice.

Note: Frequencies for the primary and secondary areas must be on different bands.

The following settings are optional:

If you want to hear cross band activity on the speaker, you can choose whether or not to unmute it. While still in the system menu, press [4] + [9] to select the RPT-SPK option and press [MENU]. Turn the channel knob or press the [UP] and [DOWN] keys to select ON or OFF, then press [MENU] to save it and return to the system menu.

To transmit with the PTT key while in cross band repeat mode, enable the RPT-PTT function. While still in the system menu, press [5] + [0] to select RPT-PTT and press [MENU]. Turn the channel knob or press the [UP] and [DOWN] keys to select ON or OFF, then press [MENU] to save it and return to the system menu..

Press the [TDR] key for two seconds to activate cross band repeat mode. The repeater icon will appear at the top of the display to indicate the cross-band repeat mode is active.

To exit cross band repeat mode, long press the [TDR] key.

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DTMF Encoding

The KG-935H features dual-tone multi-frequency (DTMF) encoding. This enables the radio to perform a number of useful signaling operations.

Using the DTMF Keypad

The KG-935H has a full function DTMF keypad. While pressing the [PTT] key to transmit, press the key on the keypad that corresponds to the DTMF tone that you wish to send. The number keypad on the radio corresponds to DTMF codes as follows:

MENU			EXIT		A	B	C	D
1 SQL	2 PWR	3 W/N	*SCAN		1	2	3	*
4 THEME	5 BRT-A	6 BRT-S	0		4	5	6	0
7 W-ALT	8 SAVE	9 CTCSS	#LOCK		7	8	9	#

Sending a Radio ID

The KG-935H is capable of automatically sending a radio ID number using DTMF functionality. When activated, the radio ID will be sent during a transmission. When the radio ID is transmitted, radios capable of displaying a radio ID will typically show the ID number on the display while receiving the transmission. A radio ID could be referred to as an ANI or a PTT ID.

The KG-935H has four menu options related to configuring the radio ID: ANI-SW (page 72), PTT-ID (page 74), ANI-EDIT (page 72), and PTT-DLY (page 74).

To set a radio ID, press [MENU] + [5] + [2]. The screen will display: ANI-EDIT (page 72). Press [MENU], use the keypad to enter the Radio ID, then press [MENU] to confirm and [EXIT] to return to standby.

The ANI-SW function must first be enabled before you can transmit the radio ID. To enable the radio ID, press [MENU] + [5] + [1]. The screen will display: ANI-SW (page 72). Press [MENU], input the desired number, then press [MENU] to confirm and

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[EXIT] to return to standby.

To transmit the radio ID, press [MENU] + [5] + [6]. The screen will display: PTT-ID (page 74). Press [MENU], choose whether to transmit the ID at the beginning of transmission (BOT), end of transmission (EOT), or both beginning and end (BOT). Press [MENU] to confirm and [EXIT] to return to standby.

You can delay transmission of the radio ID for a specific time using the PTT-DLY menu option (page 74). This delay time can be set to one of 30 levels in 100ms increments.

Calling a specific radio using an ID

The KG-935H also supports the ability to call another radio directly, using its Radio ID. To enable this function, you must activate and configure all radios in your fleet to transmit the Radio ID (see Sending a Radio ID on page 89) and select either the QT, QT+DTMF or QT*DTMF filter option in SP-MUTE (page 70).

To call a specific radio, you must know its radio ID. After pressing PTT and allowing your radio time to transmit its radio ID, use a PF key (see Transmitting DTMF Tones

on page 91) to send the pre-programmed radio ID that you are calling or enter the radio ID manually using the keypad while holding PTT. Enter the # symbol after the ID when the ID is shorter than six digits.

Once a KG-935H receives a DTMF signal matching its radio ID, it will play a ring sound and then open the speaker to allow the incoming transmission to be heard. The length of the ring sound can be set using the RING menu option (page 75) or in the programming software.

Up to 20 Radio IDs can be assigned using the programming software.

Transmitting DTMF Tones

The KG-935H provides a way to send pre-configured Call Codes via a programmable function (PF) key. First, assign a PF key to the SELEC CALL option (pp. 65-66). The programming software allows the defining of up to 20 Call Codes. Each channel can be assigned a Call Code using the CALLCODE menu item (page 75).

Pressing the assigned SELEC CALL key will transmit the Call Code defined for the channel. There is no need to hold the PTT while pressing the SELEC CALL key.

Advanced Operation

Custom DTMF tones can be transmitted using the keypad while holding the PTT (see Using the DTMF Keypad section on page 88).

Alert Tone (Single-Tone Pulse Frequency)

Some repeaters require a tone burst to be transmitted to signal the repeater to transmit. This is not often used in the United States and is more common in Europe.

The KG-935H supports this functionality. Use the ALERT menu option (page 74) to select the specific hertz of the tone that is needed (1750Hz is most common and is the default). To send the tone, press the [PF2] side key while transmitting.

Before assuming your KG-935H is defective, please check the following list of possible problems and solutions. The RESET option provided in the menu can be used to restore factory standard settings and programming, and will often solve issues.

Problem	Solution
Receive indicator is on but no sound is heard.	<ul style="list-style-type: none">■ Check volume level.■ Disable CTCSS/DCS or be sure setting matches incoming transmission.■ Check squelch settings.
Keypad is unresponsive	<ul style="list-style-type: none">■ Check if keypad has been locked.■ Check if other keys are currently pressed
Unwanted interference is being received	<ul style="list-style-type: none">■ Enable CTCSS or DCS tone to filter out unwanted transmissions.■ Use a different channel
Transceiver transmits without PTT being pressed	Check if the VOX hands-free mode is active. If intentionally using VOX mode, adjust the sensitivity level.

Troubleshooting

Problem	Solution
Cannot power on	<ul style="list-style-type: none">■ Check that the battery pack is attached correctly.■ Check that the battery pack is fully charged.
Battery life lower than expected	<ul style="list-style-type: none">■ Be sure the charger indicates the battery is fully charged.■ The battery pack capacity will naturally diminish over a number of charge cycles. This is the case with all lithium batteries.

Specifications

Entire Radio	
Frequency Range	RX: 400-480 MHz (UHF) RX: 76-108 MHz / 136-174 MHz / 222-225 MHz (VHF) TX: 144-148 MHz / 222-225 MHz / 420-450 MHz
Memory Channels	999
Work Mode	F2D / F3E
Work Temperature	-20°C~40°C / -4°F~104°F
Antenna Impedance	50Ω
Power Supply	7.4VDC
Weight	17.28oz / 490g
Size	4.9 × 2.42 × 1.33 (in) / 124.5 × 61.49 × 33.88 (mm)

Technical Information

Receiver	Wide Band	Narrow Band	Transmitter	Wide Band	Narrow Band
Adjacent Channel Selectivity	≤70dB	≤60dB	Modulation	16K F3E	11K F3E
Inter-modulation	≤65dB	≤60dB	Adjacent Channel Power	≥70dB	≥60dB
Spurious Response	≤70dB	≤70dB	Spurious	≥60dB	≥60dB
Audio Response	+1~3dB (0.3~3KHz)	+1~3dB (0.3~2.55KHz)	Audio Response	+1~3dB (0.3~3KHz)	+1~3dB (0.3~2.55KHz)
Audio Distortion	≤5%		Max Frequency Offset	±5KHz	±2.5KHz
Output Power	≤500mW		Frequency Stability	±2.5ppm	
Sensitivity	UHF/VHF : 0.25μV (12dB SINAD)		Audio Distortion	≤5%	

Standard CTCSS and DCS Tones

The following is a list of the standard CTCSS and DCS tones supported by the KG-935H. Many radios display a number instead of a specific tone. The number to the left of the tone matches what is used by most manufacturers.

CTCSS									
1	67.0	11	94.8	21	131.8	31	171.3	41	203.5
2	69.3	12	97.4	22	136.5	32	173.8	42	206.5
3	71.9	13	100.0	23	141.3	33	177.3	43	210.7
4	74.4	14	103.5	24	146.2	34	179.9	44	218.1
5	77.0	15	107.2	25	151.4	35	183.5	45	225.7
6	79.7	16	110.9	26	156.7	36	186.2	46	229.1
7	82.5	17	114.8	27	159.8	37	189.9	47	233.6
8	85.4	18	118.8	28	162.2	38	192.8	48	241.8
9	88.5	19	123.0	29	165.5	39	196.6	49	250.3
10	91.5	20	127.3	30	167.9	40	199.5	50	254.1

Technical Information

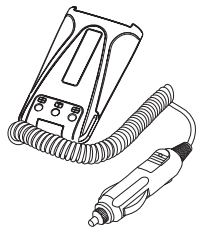
DCS codes ending in *N* are positive. Negative DCS codes end in *I*. The KG-935H includes 105 positive and 105 negative codes.

DCS													
1	D023N	16	D074N	31	D165N	46	D261N	61	D356N	76	D462N	91	D627N
2	D025N	17	D114N	32	D172N	47	D263N	62	D364N	77	D464N	92	D631N
3	D026N	18	D115N	33	D174N	48	D265N	63	D365N	78	D465N	93	D632N
4	D031N	19	D116N	34	D205N	49	D266N	64	D371N	79	D466N	94	D645N
5	D032N	20	D122N	35	D212N	50	D271N	65	D411N	80	D503N	95	D654N
6	D036N	21	D125N	36	D223N	51	D274N	66	D412N	81	D506N	96	D662N
7	D043N	22	D131N	37	D225N	52	D306N	67	D413N	82	D516N	97	D664N
8	D047N	23	D132N	38	D226N	53	D311N	68	D423N	83	D523N	98	D703N
9	D051N	24	D134N	39	D243N	54	D315N	69	D431N	84	D526N	99	D712N
10	D053N	25	D143N	40	D244N	55	D325N	70	D432N	85	D532N	100	D723N
11	D054N	26	D145N	41	D245N	56	D331N	71	D445N	86	D546N	101	D731N
12	D065N	27	D152N	42	D246N	57	D332N	72	D446N	87	D565N	102	D732N
13	D071N	28	D155N	43	D251N	58	D343N	73	D452N	88	D606N	103	D734N
14	D072N	29	D156N	44	D252N	59	D346N	74	D454N	89	D612N	104	D743N
15	D073N	30	D162N	45	D255N	60	D351N	75	D455N	90	D624N	105	D754N

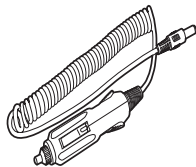
NOAA Weather Channels

Ch.	Frequency	Ch.	Frequency
1	162.4000	5	162.5000
2	162.4250	6	162.5250
3	162.4500	7	162.5500
4	162.4750		

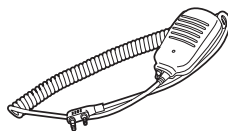
Optional Accessories



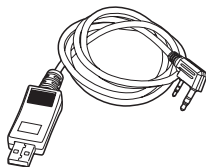
Eliminator



Car charger



Speaker/Mic



USB programming cable



Headset

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We warrant this product against defects in material and workmanship as follows:

Radio and its original primary components for a period of one (1) year from date of purchase.

Accessories (including battery, charger, belt clip, antenna and adapter) for a period of six (6) months from date of purchase.

This warranty is limited to the repair and replacement of the defective components and is not valid if the radio has been tampered with, misused, abused, used with unapproved accessories, subjected to unauthorized disassembly, unauthorized repair, replacement of unauthorized parts, unavoidable conditions, human destruction, water damage or environmental damage. This warranty is void if the serial number is defaced or altered.

If service, repair or replacement is required within the warranty period, such repair or replacement will be made free of charge by the dealer through whom the equipment was purchased. If the owner requires any service or repair from any dealer through whom the equipment was not purchased, the cost of repair must be made by the owner.

This warranty is valid for the original purchaser or owner of the product and is not

Limited Warranty

transferable.

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Note: Product features, specifications and warranty terms are subject to revision by the manufacturer without notice. We are not responsible for unintentional errors or omissions on product packaging.

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