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Safety Information

The KG-905G Plus 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.
- 1 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.



- 1 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.
- 1 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.
- ⚠ Only the carry accessories supplied with this radio (such as the belt clip) should be used. Use of other accessories may exceed RF exposure guidelines.

Notice

- These tips are important for safe operation of your KG-905G Plus 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-905G Plus is FCC Part 95E type accepted for use on the GMRS. The KG-905G Plus operates on General Mobile Radio Service (GMRS) frequencies according to the Federal Communications Commission (FCC) Rules in the United States. As such, a GMRS license is required to transmit on these frequencies. To obtain an FCC license for the GMRS, please go to the FCC's web site and complete the online application or request FCC Form 605.

Feature Summary

- 30 GMRS Channels
- 8 Built-In GMRS Repeater Channels
- Up to 5 Watts Output Power
- IP66 Waterproof
- USB-C Charging Port (on Battery)
- High Visibility LCD Display
- 7 Selectable Backlight Colors
- Select Different Backlight Colors for TX/RX/Standby
- Bluetooth Audio
- High/Low Power Selectable
- Up to 400 Custom Channels
- Favorite Channels
- Superheterodyne Receiver

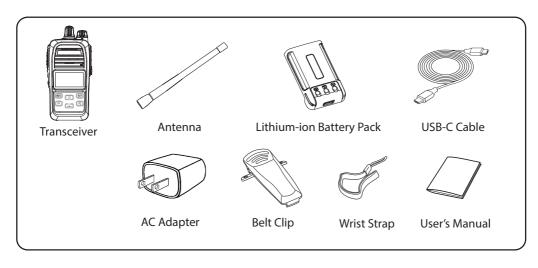
- Standard and Non-Std CTCSS/DCS
- Split CTCSS/DCS Tone Support
- CTCSS/DCS Tone Scan
- Channel Scan
- Priority Channel Scanning
- Display Channel Name, Number, or Frequency
- Receive (RX) Frequency Range: 400-479.9975 MHz
- Transmit (TX) Frequency Range:
 462.550-462.725MHz (GMRS Channels 1-7 and 15-22)
 467.550-467.725MHz (GMRS Channels 8-14 & Repeater 23-30)



- Wide/Narrow Bandwidth Selectable
- Tune Specific Frequencies Directly (Frequency Mode)
- Incoming Caller ID Display
- English Voice Guide
- Descrambler
- Noise Reduction
- Frequency Counter
- DTMF Encode/Decode
- Full Backlit Keypad
- FM Radio
- Stopwatch Timer
- 2 Configurable Side Keys
- 2 Configurable Front Keys
- PC Programming Software Support

What's Included

Carefully unpack the contents of the box and be sure that you have the items in the list below. If any items are missing or damaged, please contact your dealer.



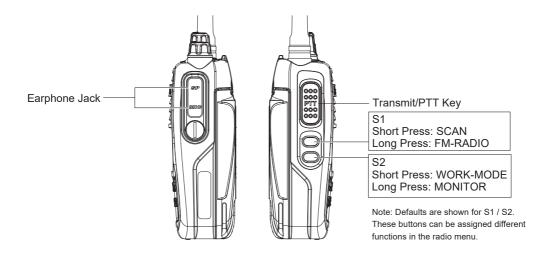


Front Panel Guide



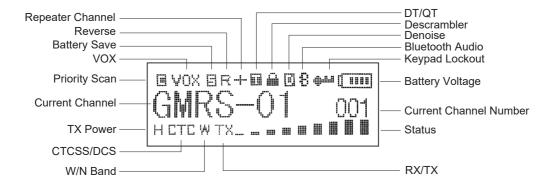
 $Note: Defaults \ are \ shown \ for \ F1\ /\ F2. \ These \ buttons \ can \ be \ assigned \ different \ functions \ in \ the \ radio \ menu.$

Right / Left Side Guide





Display Guide



Dust and Water Protection

The KG-905G Plus 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-905G Plus 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.
- If the screws and/or port covers are removed, the radio is no longer IP66 compliant.
- Use only the supplied screws to seal the port covers.



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-905G Plus features two charging options. It can be charged using the built-in USB-C charging port on the back of the 2600mAh battery pack or with an optional drop-in desktop charger (sold separately).

Using the USB-C Charging Port on the Battery

The KG-905G Plus 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.

Charging with the Desktop Charger

The KG-905G Plus can also be charged with the optional CHA-012 desktop charger (sold separately). 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.

Antenna Information

The KG-905G Plus includes an antenna with an SMA female connector that is tuned for the GMRS frequency range of your radio. Aftermarket antennas may be used, provided they are tuned for the GMRS.

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 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.

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Introducing GMRS and the KG-905G Plus

The General Mobile Radio Service (GMRS) is a two way radio service that offers some powerful benefits. Users are allowed to transmit at high power, up to 50 watts, and use advanced equipment, such as repeaters that enable you to transmit over large areas. The GMRS requires the user to purchase a license, and a single license covers the user and their extended family for 10 years.

The KG-905G Plus was designed to allow you to take advantage of all that GMRS has to offer and more. Right out of the box this radio is configured to allow you to transmit on the 15 high powered GMRS simplex channels and 8 low powered simplex channels, as well as the 8 repeater channels.

Read this chapter to learn the basics of using your new KG-905G Plus 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-905G Plus for the first time, the display will likely show "GMRS-01" on the left side with "001" on the right side. GMRS-01 is the name of the currently selected channel. 001 is the channel number. Turn the Channel Knob or the [UP] / [DOWN] keys to navigate through the list of channels.

As a licensed GMRS user you are allowed to use any of the channels. The channel you choose isn't as important as making sure it's the same channel the rest of your group is using. Be sure the channel you select is also supported by the equipment everyone else

in your group is using.

Most rules for GMRS are the same for all channels, but there are a few differences, particularly concerning output power. The GMRS channels on the KG-905G Plus consist of 4 groups, with the following differences:

- Transmitting on GMRS channels 1-7 is limited to 5 watts of output power. These channels can transmit at up to High power on the KG-905G Plus.
- Transmitting on channels 8-14 is limited to a half watt of output power and is for use on Low power only.
- Transmitting on channels 15-22 is allowed at High power on the KG-905G Plus. These channels are authorized for up to 50 watts of output power.
- Channels 23-30 receive on the same frequencies as channels 15-22, but transmit on a special offset frequency set aside for repeaters. See page 31 for more information about using the KG-905G Plus with repeaters.

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 46) 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.

Channel and Frequency Modes

The KG-905G Plus supports tuning frequencies via two methods: channel and frequency modes.

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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-905G Plus is pre-configured with 30 GMRS channels, but allows users to save custom channels as well (up to 400). In channel mode, turning the Channel/Frequency Knob or pressing the [UP] / [DOWN] keys will tune to the next channel in the list.

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 48) allows you to adjust the step between each frequency.

The KG-905G Plus supports the following frequency band:

KG-905G Plus Frequency Band

400.000 - 480.000 MHz

The KG-905G Plus can only transmit on GMRS frequencies. All other available frequencies entered in Frequency mode or through the programming software are receive only. The WORK-MODE menu option (page 47) allows you to switch between Channel and Frequency modes.

Channels and Privacy Codes

The KG-905G Plus supports 30 built-in GMRS channels and 155 privacy tones and codes. To successfully communicate between your stations or members of your group, all the connecting radios must be using the same channel and privacy (CTCSS or DCS) code.

The KG-905G Plus 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. 49-50). Instructions for entering non-standard tones and codes can be found in the Advanced Operations section of this manual (page 73).

The KG-905G Plus supports 400 customizable memory channels. Instructions for add-

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ing and deleting channels are located in the Advanced Operations section (page 74).

Using the Repeater Channels

The KG-905G Plus is pre-configured with 8 GMRS repeater channels. The channels are named RPT-15 through RPT-22.

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

range of that repeater.

The best resource for locating GMRS repeaters is the website www.myGMRS.com. This site has an extensive database of GMRS repeaters throughout the United States. It is important to keep in mind that a GMRS repeater is not necessarily intended for public use. They are owned by individuals and are sometimes intended for private use or require permission to use.

Before connecting to a GMRS repeater, be sure that you have permission or that the owner is fine with public use. The description on the myGMRS website usually indicates if permission is required and provides a way to get in touch with the owner.

KG-905G Plus Repeater Channels

RPT-15 through RPT-22 have the same receive frequency as channels GMRS-15 through GMRS-22. However, the transmit frequency for these channels is assigned to a frequency specifically designated as a GMRS repeater input frequency.

The following chart lists the default frequencies for these channels.

Number	Channel	Receive Frequency	Transmit Frequency
023	RPT-15	462.5500	467.5500
024	RPT-16	462.5750	467.5750
025	RPT-17	462.6000	467.6000
026	RPT-18	462.6250	467.6250
027	RPT-19	462.6500	467.6500
028	RPT-20	462.6750	467.6750
029	RPT-21	462.7000	467.7000
030	RPT-22	462.7250	467.7250

Accessing a Repeater in Frequency Mode

The REPEATER menu option (page 49) allows you to transmit to a repeater while in Frequency Mode. If you are tuned to a GMRS receive frequency that is valid for repeater use and turn the REPEATER menu option ON, the KG-905G Plus will transmit to the repeater input frequency when the PTT is pressed. The REPEATER

menu option is ignored when the radio is not tuned to one of the 8 GMRS repeater transmit frequencies.

Channel Scan

The KG-905G Plus has a channel scan feature, which is assigned to a short press of the [S1] key by default. To activate Channel Scan, press the [S1] key. You should 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 52) for more information on the types of scans available.

The scan function can also be assigned to any of the programmable [F1], [F2], [S1], or [S2] keys from the menu (pp. 67-70).

Priority Channel Scan

The KG-905G Plus supports Priority Channel Scanning. With this feature, a priority

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channel 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:

To set a priority channel, use the [PRI-CH] menu item (page 54). To activate the Priority Channel Scanning feature, use the [PRI-SCAN] menu item (page 53). Individual channels can be added or removed from the scan list using the Scan Add [SCAN-ADD] menu option (page 53).

Scanning CTCSS / DCS Codes

The KG-905G Plus 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 go to the TONESCAN menu item. Choose to scan CTCSS or DCS and press the [MENU] key again to enter the choice and start 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. See the TONESCAN menu item (page 54) for more information.

To save the identified tone to the currently selected channel or frequency, press the [MENU] key while the tone is displayed on the screen. The tone will be saved as the TX tone, RX tone, or both depending on the TONESAVE menu setting (page 55). When saving a tone, any existing tones will be overwritten.

Key Lock

The buttons on the KG-905G Plus can be locked to prevent them from being accidentally pressed. When the Key Lock is enabled, all keys and controls selected in the LOCKMODE menu option (page 66) will be disabled.

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

Keypad Function Keys

The keypad includes 6 function keys to perform specific operations on the radio, from accessing and navigating the menu to the control of various functions. The chart below lists the keys and what they do.

Key	Function		
MENU	Enter menu, select options and save to the radio		
F1	Programmable Front Key 1 (page 69)		
UP	Goes to the next channel, frequency or menu item		
DOWN	Goes to the previous channel, frequency or menu item		

Operation

Key	Function	
EXIT	Short Press: Exit the menu or cancel a function	
	Long Press: Press 2 seconds to lock/unlock keypad (page 36)	
F2	Programmable Front Key 2 (page 69)	

Programmable Key Functions

The KG-905G Plus has four programmable keys. The two keys labeled [F1] and [F2] are located on the front of the radio. The [S1] and [S2] 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 keys from the menu (pp. 67-70). They can also be assigned via the programming software.

Default Key	Function	Description
	OFF	Disable the function key press
F2 Short	BACKLIGHT	Activate backlight (page 41)

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Default Key	Function	Description
F1 Long	BLUETOOTH	Activate Bluetooth function (page 83)
	CALL	Sends a call ID (page 79)
	CLR-STDBY	Change standby backlight color (page 51)
	CLR-RX	Change receive backlight color (page 51)
	CLR-TX	Change transmit backlight color (page 52)
	DENOISE	Activate noise reduction function (page 67)
F1 Short	FAVORITE	Favorite Channels (page 42)
S1 Long	FM-RADIO	Activate FM Radio (page 43)
	FREQ-CNT	Activate Frequency Counter (page 44)
S2 Long	MONITOR	Monitor channel (page 41)
	REVERSE	Activate reverse frequency (page 40)
S1 Short	SCAN	Scan function (page 34)
	TALK-A	Activate talkaround (page 41)

Operation

Default Key	Function	Description
F2 Long	TX-POWER	Switch Low/High Power (page 46)
	VOX	Activate VOX (page 55)
S2 Short	WORK-MODE	Channel or frequency mode switch (page 47)

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.

To use Reverse Frequency, it must first be assigned to a programmable key. Press the assigned programmable 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 be assigned to the [F1], [F2], [S1] or [S2] buttons from the menu (pp. 67-70). Available in Channel Modes only.

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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. To activate the Talk Around function, it must first be assigned to the [F1], [F2], [S1] or [S2] buttons from the menu (pp. 67-70).

Monitor

The MONITOR function opens squelch on the current channel or frequency. This is useful when listening for weak transmissions. To use the MONITOR function, it must first be assigned to the [F1], [F2], [S1] or [S2] key (pp. 67-70). It is assigned to a long press of the [S2] key by default.

Display Backlight

The KG-905G Plus 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

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time set in the BACKLIGHT menu option (page 48). It can be assigned to the [F1], [F2], [S1] or [S2] key using the menu (pp. 67-70). It is assigned to a short press of the [F2] key by default.

Favorite Channels

The KG-905G Plus 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.

Channel 19 (travel channel) is a favorite channel by default.

The current channel can be activated or deactivated as a Favorite Channel by using the CH-FAV menu option (page 59).

The Favorite Channels function can be assigned to the [F1], [F2], [S1] or [S2] key using the menu (pp. 67-70). It is assigned to a short press of the [F1] key by default.

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Transmit Power

This function sets the transmit power of a channel on the radio. The transmit power can be set for each individual channel. The KG-905G Plus has two power options: Low (0.5W) and High (5W). Wattage is approximate. It is preset to 0.5 watts on channels 8-14 and cannot be changed. This function can be assigned to the [F1], [F2], [S1] or [S2] key using the menu (pp. 67-70). It is assigned to a long press of the [F2] key by default.

FM Radio

The KG-905G Plus features a commercial broadcast FM Radio. To access the FM Radio, it must first be assigned to the [F1], [F2], [S1] or [S2] key (pp. 67-70). It is assigned to a long press of the [S1] key by default. When active, the current FM radio frequency will appear in the center of the display. To find an active broadcast station, press [EXIT] key to begin the FM Radio scanning function. Press any key to stop the scan.

To store an FM radio station in memory, locate the desired station, press [MENU], go

Operation

to FM-RADIO 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 a 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.

Up to 20 FM radio stations can be stored on the radio using the [FM-RADIO] menu option (page 71).

Frequency Counter

The KG-905G Plus features a frequency counter. When activated, it can detect strong radio signals that are very close by, along with any CTCSS tone or DCS code that is being transmitted with them. Press MENU after the frequency detection to go the CH-ADD option and add it as a channel.

The frequency counter feature can be activated by pressing the [S1] key after entering the menu. This function can be assigned to the [F1], [F2], [S1] or [S2] key using the

menu (pp. 67-70).

Stopwatch Timer

The KG-905G Plus has a built-in stopwatch timer. It can be enabled using the TIMER menu option (page 65). Once enabled, Press [EXIT] on the radio to activate the timer. Press the [MENU] key to pause the timer. Press the [MENU] key again to resume. Press any other key to stop the timer. When stopped, press [EXIT] to reset the timer and start again. When stopped, pressing any key other than [MENU] will deactivate the timer and return to standby mode.

When the timer is activated, it will appear on the display in place of the current channel information. The channel knob, programmable keys and [PTT] key will only stop the timer. If the radio receives a signal while the timer is active, it will stop and exit the timer. The menu is not accessible while the timer is active.

[01: SQUELCH] 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.

Options: 0-9
Default: 5

[02: TX-POWER] Output Power

Function: Sets the transmit power of the radio. The radio has two power options: Low (0.5W), and High (5W). Wattage is approximate. Note, the transmit power for GMRS channels 8-14 are restricted by the FCC to 0.5 watts and can be used on low power only. The transmit power of channels 1-7 are limited to 5 watts and can be used on Low or High power. The KG-905G Plus will automatically adjust the power to the FCC limits.

Options: HIGH/LOW

Default: (Varies by channel)

[03: W/N] Bandwidth

Function: Sets the bandwidth for the current channel.

Options: WIDE/NARROW Default: (Varies by channel)

[04: REPEATER] Repeater

Function: Sets the offset frequency for a repeater channel. When this option is activated the KG-905G Plus will transmit to the repeater input frequency when the radio is tuned to a frequency that has a valid GMRS repeater offset. This option is only available in frequency mode and will be ignored on frequencies that do not have a GMRS repeater offset. The offset is fixed to 5.000 MHz.

Options: OFF/ON Default: OFF

[05: WORK-MODE] Work Mode

Function: Changes the working mode of the radio. This function can be assigned to the

[F1], [F2], [S1] or [S2] programmable keys on the radio.

Options: CH-NAME/CH-NUM/FREQ/CH-FREQ

Default: CH-NAME

CH-NAME: Channel Mode. Displays the channel name (Example: GMRS-01)

FREQ: Frequency Mode. Allows directly tuning any frequency in the wide receive range of the KG-905G Plus. The radio transmits on GMRS frequencies only.

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

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

[06: BACKLIGHT] Backlight Timeout

Function: Sets the timeout of the LCD display backlight while the radio is in standby. The timer can be set from 1-30 seconds in one second increments. It can also be set to turn off immediately or always remain on.

Options: OFF/1-30S/ALWAYS ON

Default: 10 Seconds

[07: STEP] Frequency Step

Function: Allows you to adjust the steps between frequencies. Available only in Fre-

quency mode.

Options: 2.5K/5K/6.25K/8.33K/10K/12.5K/25K/50K/100K

Default: 12.5K

[08: BAT-SAVE] Battery Saver

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

Options: ON/OFF

Default: ON

[09: RX-CTCSS] Receive CTCSS Tone

Function: Sets the receiving CTCSS tone for the selected channel. Use the arrow keys to scroll through the list of tones and select your preferred tone or choose OFF and then press MENU to confirm.

Options: OFF/50 CTCSS Tones

Default: OFF

[10: RX-DCS] Receive DCS Code

Function: Sets the receiving DCS code for the selected channel. Use the arrow keys to scroll through the list of codes and select your preferred code or choose OFF and then press MENU to confirm.

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

Default: OFF

[11: TX-CTCSS] Transmit CTCSS Tone

Function: Sets the transmitting CTCSS tone for the selected channel. Use the arrow keys to scroll through the list of tones and select your preferred tone or choose OFF and then press MENU to confirm.

Options: OFF/50 CTCSS Tones

Default: OFF

[12: TX-DCS] Transmit DCS Code

Function: Sets the transmitting DCS code for the selected channel. Use the arrow keys to scroll through the list of codes and select your preferred code or choose

OFF and then press MENU to confirm.

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

Default: OFF

[13: CLR-STBY] Standby Backlight Color

Function: Selects one of seven customizable backlight colors when the backlight is activated while the radio is in standby.

Options: RED/BLUE/PURPLE/GREEN/YELLOW/CYAN/WHITE

Default: WHITE

[14: CLR-RX] Receive Backlight Color

Function: Selects one of seven customizable backlight colors when the backlight is activated while the radio receives a signal.

Options: RED/BLUE/PURPLE/GREEN/YELLOW/CYAN/WHITE

Default: BLUE

[15: CLR-TX] Transmit Backlight Color

Function: Selects one of seven customizable backlight colors when the backlight is activated while the radio transmits.

Options: RED/BLUE/PURPLE/GREEN/YELLOW/CYAN/WHITE

Default: RED

[16: SCANMODE] Scan Mode

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

Options: TO/CO/SE

Default: TO

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: SCAN-QT] Tone Scanning Compatibility Check

Function: Determines if the incoming transmissions are filtered by CTCSS/DCS tones during scan mode.

Options: ON/OFF

Default: OFF

[18: SCAN-ADD] Scan Add / Delete

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

Options: ADD/DEL

Default: ADD

[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 34 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: 400 channels

Default: CH01

[21: TONESCAN] 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: None. Choose CTCSS or DCS and press [MENU] to activate the scan.

Default: 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. See page 35 for more information.

[22: TONESAVE] 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. See page 35 for more information.

Options: BOTH/RX/TX

Default: TX

BOTH: Saves the scanned tone to both.

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

[23: 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 1-9 are provided to allow you to adjust the voice detection sensitivity.

Options: OFF/1-9 (level)

Default: OFF

[24: VOX-DLY] VOX Delay

Function: Sets the number of seconds to delay turning off transmit after the VOX function no longer detects audio.

Options: OFF/1-5 (seconds)

Default: 1S

[25: 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

[26: 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

[27: 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

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

[28: BEEP] Button Beeps

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

Options: ON/OFF

Default: ON

[29: VOICE] Voice Guide

Function: Enable or disable voice prompts.

Options: OFF/ON

Default: ON

[30: BUSYLOCK] 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

[31: DESCRAMB] Descrambler

Function: Activating this function will descramble incoming signals that are scrambled using one of 8 supported protocols.

Options: OFF/SCRAM 1-8

Default: OFF

[32: 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 [S2] key to move to the next position. Press the [S1] key to move back to the previous position. When you finish editing the name, press [MENU] to save. This option is only available in Channel Mode.

Options: 8 Characters

Default: None

[33: 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. This feature is assigned to a short press of the [F1] key by default. Channel 19 (travel channel) is the favorite channel by default.

Options: YES/NO

Default: NO

[34: CH-ADD] Add Memory Channel

Function: Adds a channel to the memory channel list. Refer to the section Adding and Removing Channels (page 74) for details.

Options: None

Default: Current channel

[35: CH-DELETE] Delete Memory Channel

Function: Deletes a channel from the memory channel list. Refer to the sub-section How to Delete a Channel (page 77) for details.

Options: None

Default: Current channel

[36: SP-MUTE] Speaker Mute

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

Options: QT/QT+DT/QT*DT

Default: QT

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

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

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

[37: 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: OFF

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.

[38: ALERT] Tone Alert

Function: Allows selection of the specific hertz of the tone burst. 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 [S2] key on the side of the radio.

[39: ID-EDIT] Edit Radio ID

Function: Sets the numeric radio ID that is sent during transmissions if the PTT-ID 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

[40: ID-DELAY] ID Delay

Function: Determines the amount of time in milliseconds to wait before sending the PTT-ID. This only applies to the ID that is sent at the beginning of the transmission. It is ignored when PTT-ID is set to EOT (end of transmission).

Options: 100~3000ms

Default: 1300ms

[41: PTT-ID] Radio ID Setting

Function: Determines if the radio will send its Radio ID during transmit, and at what point it will be sent.

Options: BOT/EOT/BOTH

Default: OFF

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.

[42: 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 (seconds)

Default: 5S

[43: CALL-CODE] Select Call ID

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

Options: 1-20 Groups

Default: 1

[44: STARTUP] Power On Message

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

Options: MESSAGE/VOLTAGE

Default: MESSAGE

MESSAGE: Customized Message

VOLTAGE: Battery voltage

[45: ST-MSG] Custom Power On Message

Function: Allows you to customize the Power On Message. To edit the message, press [MENU] and choose the ST-MSG option. the current message 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 [S2] key to move to the next position. Press the [S1] key to move back to the previous position. When you finish editing the message, press [MENU] to save.

Options: 8 Characters

Default: None

[46: TIMER] Stopwatch Timer

Function: Activates the timer feature. If ON, activate the timer by short pressing [EXIT] in standby mode.

Options: ON/OFF

Default: OFF

[47: 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

[48: AUTOLOCK] Auto Lock

Function: Automatically locks the keypad after a specified time. This can be set from 10 to 60 seconds, in 10 second increments.

Options: OFF/10-60S

Default: OFF

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

[49: LOCKMODE] Lock Mode

Function: Select which keys are disabled when the radio is locked.

Options: KEY/KEY+PTT/KEY+ENC/ALL

Default: KEY

KEY: Locks the front keypad and [S1] and [S2] side keys.

KEY+PTT: Locks the front keypad, [S1] and [S2] side keys, and [PTT].

KEY+ENC: Locks the front keypad, [S1] and [S2] side keys, and channel knob.

ALL: Locks the front keypad, [S1] and [S2] side keys, [PTT], and channel knob.

Note: To lock or unlock the radio, hold the [EXIT] key for 2 seconds.

[50: DENOISE] Noise Reduction

Function: Enables or disables the voice noise reduction feature. Denoise minimizes background noise and hiss for quiet reception when listening to an incoming signal.

Options: OFF/ON

Default: OFF

[51: S1-SHORT] Side Key S1 Short Press Assignment

Function: Assigns a function to a short press of the [S1] side key.

Options: OFF/BACKLIGHT/BLUETOOTH/CALL/CLR-STDBY/CLR-RX/CLR-TX/DENOISE/FAVORITE/FM-RADIO/FREQ-CNT/MONI-

TOR/REVERSE/SCAN/TALK-A/TX-POWER/VOX/WORK-MODE

Default: SCAN

[52: S1-LONG] Side Key S1 Long Press Assignment

Function: Assigns a function to a long press of the [S1] side key.

Options: OFF/BACKLIGHT/BLUETOOTH/CALL/CLR-STDBY/CLR-RX/ CLR-TX/DENOISE/FAVORITE/FM-RADIO/FREQ-CNT/MONI-TOR/REVERSE/SCAN/TALK-A/TX-POWER/VOX/WORK-MODE

Default: FM-RADIO

[53: S2-SHORT] Side Key S2 Short Press Assignment

Function: Assigns a function to a short press of the [S2] side key.

Options: OFF/BACKLIGHT/BLUETOOTH/CALL/CLR-STDBY/CLR-RX/CLR-TX/DENOISE/FAVORITE/FM-RADIO/FREQ-CNT/MONI-TOR/REVERSE/SCAN/TALK-A/TX-POWER/VOX/WORK-MODE

Default: WORK-MODE

[54: S2-LONG] Side Key S2 Long Press Assignment

Function: Assigns a function to a long press of the [S2] side key.

Options: OFF/BACKLIGHT/BLUETOOTH/CALL/CLR-STDBY/CLR-RX/CLR-TX/DENOISE/FAVORITE/FM-RADIO/FREQ-CNT/MONI-TOR/REVERSE/SCAN/TALK-A/TX-POWER/VOX/WORK-MODE

Default: MONITOR

[55: F1-SHORT] Front Key F1 Short Press Assignment

Function: Assigns a function to a short press of the [F1] side key.

Options: OFF/BACKLIGHT/BLUETOOTH/CALL/CLR-STDBY/CLR-RX/CLR-TX/DENOISE/FAVORITE/FM-RADIO/FREQ-CNT/MONI-TOR/REVERSE/SCAN/TALK-A/TX-POWER/VOX/WORK-MODE

Default: FAVORITE

[56: F1-LONG] Front Key F1 Long Press Assignment

Function: Assigns a function to a long press of the [F1] side key.

Options: OFF/BACKLIGHT/BLUETOOTH/CALL/CLR-STDBY/CLR-RX/

CLR-TX/DENOISE/FAVORITE/FM-RADIO/FREQ-CNT/MONITOR/REVERSE/SCAN/TALK-A/TX-POWER/VOX/WORK-MODE

Default: BLUETOOTH

[57: F2-SHORT] Front Key F2 Short Press Assignment

Function: Assigns a function to a short press of the [F2] side key.

Options: OFF/BACKLIGHT/BLUETOOTH/CALL/CLR-STDBY/CLR-RX/CLR-TX/DENOISE/FAVORITE/FM-RADIO/FREQ-CNT/MONI-TOR/REVERSE/SCAN/TALK-A/TX-POWER/VOX/WORK-MODE

Default: BACKLIGHT

[58: F2-LONG] Front Key F2 Long Press Assignment

Function: Assigns a function to a long press of the [F2] side key.

Options: OFF/BACKLIGHT/BLUETOOTH/CALL/CLR-STDBY/CLR-RX/ CLR-TX/DENOISE/FAVORITE/FM-RADIO/FREQ-CNT/MONI-TOR/REVERSE/SCAN/TALK-A/TX-POWER/VOX/WORK-MODE

Default: TX-POWER



[59: VOLTAGE] Voltage

Function: Displays the current battery voltage.

Options: None Default: None

[60: FM-RADIO] FM Radio

Function: Save and recall up to 20 FM radio stations to and from memory. Refer to page 43 for more about the FM radio. Accessible only in FM Radio Mode.

Options: RECALL/MEMORY

Default: RECALL

[61: BLUETOOTH] Bluetooth Audio

Function: Enables connectivity with Bluetooth devices such as wireless headsets and earpieces. Refer to page 83 for more information about pairing the radio with a Bluetooth device.

Options: ON/OFF

Default: OFF

[62: 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-905G Plus supports non-standard CTCSS tones in the range of 65.0-255.0Hz with a minimum spacing of 0.1Hz. CTCSS tones are enabled and assigned to a channel using the user programming software.

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

In the programming software, select the desired channel row and choose the RX-CTCSS column. Highlight the current tone, press the backspace key to remove it, enter 100.5 using your computer keyboard and press return.

How to Set Non-Standard DCS

The KG-905G Plus 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 legitimate non-standard DCS code. DCS codes are enabled and assigned to a channel using the user programming software.

When entering a non-standard DCS code, add the letter I after the code number to set it as a positive code or the letter N to set it as a negative code.

Example 1: Set the receive DCS as D105N

In the programming software, select the desired channel row and choose the RX-DCS column. Highlight the current code, press the backspace key to remove it, enter D105N using your computer keyboard and press return.

Example 2: Set the receive DCS as D105I

In the programming software, select the desired channel row and choose the RX-DCS column. Highlight the current code, press the backspace key to remove it, enter D105I using your computer keyboard and press return.

Adding and Removing Channels

The KG-905G Plus allows you to add and delete channels directly from the keypad of the radio using the CH-ADD and CH-DELETE options in the menu. New channels can be created 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 47).
- 2. Tune to the channel that you would like to clone.
- 3. Press [MENU] and enter the CH-ADD function.
- 4. 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 a different color from channels that are already assigned.

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 "Receive-Only" channels for frequencies supported by the KG-905G Plus but outside of the frequencies allowed for GMRS use. To create a new channel:

- 1. Be sure that your radio is in Frequency mode by using the WORK-MODE menu option (page 47).
- 2. Tune to the desired 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] and 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 available to program will be a different color from channels already assigned.



For example, to save a channel in Frequency mode with a 462.5625 receive frequency and a 67.0 receive CTCSS tone:

- 1. While in Frequency mode, tune to the frequency 462.5625 using the channel knob or the [UP] and [DOWN] keys, press [MENU], enter the Receive CTCSS menu option, press [UP] / [DOWN] to select the 67.0 tone, and then press [MENU] to confirm.
- 2. Press [MENU], 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.

How to Delete a Channel

- 1. Select the CH-DEL menu option by pressing [MENU], choose the CH-DELETE menu option 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 available to program will be a different color from channels already assigned.

Note

If a channel is unnamed and WORK-MODE is set to CH-NAME mode, the frequency will be displayed instead.

DTMF Encoding

The KG-905G Plus 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-905G Plus has a 6-key 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 keypad on the radio corresponds to DTMF codes as follows:

MENU	ÛP	EXIT	1	Α	В	D
F1	DOWN	F2		*	С	#

Sending a Radio ID

The KG-905G Plus 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-905G Plus has three menu options related to configuring the radio ID: PTT-ID (page 63), ID-EDIT (page 62), and ID-DELAY (page 63).

To set a radio ID, press [MENU] and navigate to the ID-EDIT menu option (page 62). Press [MENU] and turn the Channel Knob or press the [UP] / [DOWN] keys to select the first digit of the desired number. Use the [S2] side key to move to the next character and select the next digit.

The [S1] side key will move to the previous character. When you finish entering the number, press [MENU] to save and [EXIT] to return to standby. The radio ID must be at least 3 digits and a maximum of 6 digits in length.

To transmit the radio ID, press [MENU] and navigate to the PTT-ID menu option (page 63). Press [MENU], choose whether to transmit the ID at the beginning of transmission (BOT), end of transmission (EOT), or both beginning and end (BOTH). Press [MENU] to confirm and [EXIT] to return to standby.

You can delay transmission of the radio ID for a specific time using the ID-DELAY menu option (page 63). This delay time can be set to one of 30 levels in 100ms increments.

Calling a specific radio using an ID

The KG-905G Plus 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 79) and select either the QT, QT+DT or QT*DT filter option in SP-MUTE (page 60).

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 Programmable Function key (see Transmitting DTMF Tones on page 82) to send the pre-programmed radio ID that you are calling.

Once a KG-905G Plus 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 64) or in

the programming software.

Up to 20 Call ID tones can be assigned using the programming software.

Transmitting DTMF Tones

The KG-905G Plus provides a way to send pre-configured DTMF tones via via a programmable function key. First, assign a programmable key to the CALL option (page 67-70). This is available as an option for the [F1], [F2], [S1] or [S2] key. The programming software allows the defining of up to 20 Call ID tones. Each channel can be assigned a Call ID tone using the CALL-CODE menu item (page 64) or in the programming software.

Holding the PTT will transmit the Call Code sequence defined for the Call Group assigned to the channel.

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-905G Plus supports this functionality. Use the ALERT menu option (page 62) 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 [S2] side key while transmitting.

Bluetooth Function

The KG-905G Plus allows you to connect the radio to Bluetooth audio devices such as earpieces, headsets and speakers.

How to Connect a Bluetooth Device

To connect a device, press [MENU] to enter the BLUETOOTH menu option (page 71), turn the channel knob or press the [UP] and [DOWN] keys to select ON, then press [MENU] to save it and return to standby mode. The Bluetooth function will be active for approximately one minute while waiting for a device to pair.

If no Bluetooth device is detected or connected during this time, detection will end and the Bluetooth function will automatically turn off. To re-enable it, go back into the BLUETOOTH menu option and turn it back on.

When a Bluetooth device is connected to the radio, it will remain connected until the Bluetooth function is powered off. When the radio is powered off while a Bluetooth device is connected, it will automatically attempt to reconnect to the device the next time it is powered on. Allow 5-10 seconds for the radio to connect before attempting to use the Bluetooth device.

Important!

The PTT button on the radio is disabled when the Bluetooth function is active. If you want to transmit from a connected Bluetooth device, the connected device must support push-to-talk functionality.

Remote Control

The Remote Control function allows some settings of the KG-905G Plus to be modified remotely. The remote control function must be configured using the PC programming software, and the radio used to control the KG-905G Plus remotely must have DTMF support.

Programming Software Settings

Open the Wouxun PC programming software and select the Configuration Settings tab. You will see a box on the right side with the following six entry fields: ANI-EDIT (Radio ID), SCC-EDIT (Control Code), Kill, Monitor, Stun and Inspection.

ANI-EDIT (Radio ID): The ID of the radio. This setting has uses other than within the remote control function and can be changed via the radio menu also (see ID-EDIT, page 62). Generally when using radio IDs, each radio in your group should have a unique value.

SCC-EDIT (Control Code): The Control Code value determines if the radio will allow requests to be controlled remotely. The control code is a value that you determine. This

number works like a password. The remote radios must send the matching code in order to activate remote control functions. The control code must be between 3-6 digits and cannot begin with 0.

Stun, Kill, Monitor and Inspect

The following details how to perform the Stun, Kill, Monitor, and Inspect remote control functions.

In the following example, assume a Control Code of 654321 and a Radio ID of 123456 have been configured in the programming software.

Stun

Stun prevents a radio from transmitting.

To activate the stun function on a remote radio, perform the following steps. From the controlling radio, transmit a DTMF sequence matching the following: Control Code + CB (DTMF stun code) + Radio ID. Using our example, the transmitted sequence would be: 654321 CB 123456. On the controlled radio, if the received Control Code



matches the Control Code and the DTMF ID matches, the stun function will be activated.

To reactivate a stunned radio, send the stun sequence again.

Kill

Kill prevents a radio from transmitting or receiving.

To activate the stun function on a remote radio, perform the following steps. From the controlling radio, transmit a DTMF sequence matching the following: Control Code + AB (DTMF kill code) + Radio ID. Using our example, the transmitted sequence would be: 654321 AB 123456. On the controlled radio, if the received Control Code matches the Control Code and the DTMF ID matches, the kill function will be activated.

To reactivate a killed radio, send the kill sequence again.

Monitor

Monitor opens the microphone on a remote radio, forcing the radio to transmit for 15 seconds. No input is needed on the remote radio.

To activate the monitor function on a remote radio, perform the following steps. From the controlling radio, transmit a DTMF sequence matching the following: Control Code + DA (DTMF monitor code) + Radio ID. Using our example, the transmitted sequence would be: 654321 DA 123456. On the controlled radio, if the Control Code matches the Control Code and the DTMF ID matches, the monitor function will be activated for 15 seconds.

Inspect

Inspect forces the remote radio to transmit a DTMF sequence. This is useful for confirming that the radio is in range and is responding to commands.

To activate the monitor function on a remote radio, perform the following steps. From the controlling radio, transmit a DTMF sequence matching the following: Control Code + DB (DTMF inspect code) + Radio ID. Using our example, the transmitted sequence would be: 654321 DB 123456. On the controlled radio, if the received Control Code matches the Control Code and the DTMF ID matches, the inspect function will be activated.

Troubleshooting



Before assuming your KG-905G Plus 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.	 Check volume level. Disable CTCSS/DCS or be sure setting matches incoming transmission. Check squelch settings.
Keypad is unresponsive	Check if keypad has been locked.Check if other keys are currently pressed
Unwanted interference is being received	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	Check that the battery pack is attached correctly.			
	Check that the battery pack is fully charged.			
Battery life lower than expected	 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. 			



Entire Radio	
Frequency Range	RX: 400-480 MHz (UHF) TX: GMRS Frequencies (462-467 MHz)
Memory Channels	400
Work Mode	F2D / F3E
Work Temperature	-20°C~+40°C / -4°F~104°F
Antenna Impedance	50Ω
Power Supply	7.4VDC
Weight	11.28oz / 320g
Size	5.19 × 2.44 × 1.45 (in) / 132 × 62 × 37 (mm)

Technical Information

Receiver	Wide Band	Narrow Band	
Adjacent Channel Selectivity	≤70dB	≤60dB	
Inter-modulation	≤65dB	≤60dB	
Spurious Response	≤70dB	≤70dB	
Audio Response	+1~3dB (0.3~3KHz)	+1~3dB (0.3-2.55KHz)	
Audio Distortion	≤5	5%	
Output Power	≤500mW		
Sensitivity		5μV SINAD)	

Transmitter	Wide Band	Narrow Band	
Modulation Mode	16K F3E	11K F3E	
Adjacent Channel Power	≥70dB	≥60dB	
Spurious	≤60dB	≤60dB	
Audio Modulation	+1-3dB (0.3~3KHz)	+1-3dB (0.3-2.55KHz)	
Max Frequency Offset	±5KHz	±2.5KHz	
Audio Distortion	≤5%		
Output Power	5V	V/0.5W	



Standard CTCSS and DCS Tones

The following is a list of the standard CTCSS and DCS tones supported by the KG-905G Plus. Many FRS or GMRS radios display a number instead of a specific tone. The number to the left of the tone matches what is used by most manufacturers.

СТС	SS								
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-905G Plus includes 105 positive and 105 negative codes.

DC	S												
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



Default GMRS Channels and Frequencies

Simplex Channels

Ch.	Name	Frequency	Power
001	GMRS-01	462.5625	Н
002	GMRS-02	462.5875	Н
003	GMRS-03	462.6125	Н
004	GMRS-04	462.6375	Н
005	GMRS-05	462.6625	Н
006	GMRS-06	462.6875	Н
007	GMRS-07	462.7125	Н
008	GMRS-08	467.5625	L
009	GMRS-09	467.5875	L
010	GMRS-10	467.6125	L
011	GMRS-11	467.6375	L

Ch.	Name	Frequency	Power
012	GMRS-12	467.6625	L
013	GMRS-13	467.6875	L
014	GMRS-14	467.7125	L
015	GMRS-15	462.5500	Н
016	GMRS-16	462.5750	Н
017	GMRS-17	462.6000	Н
018	GMRS-18	462.6250	Н
019	GMRS-19	462.6500	Н
020	GMRS-20	462.6750	Н
021	GMRS-21	462.7000	Н
022	GMRS-22	462.7250	Н

Technical Information

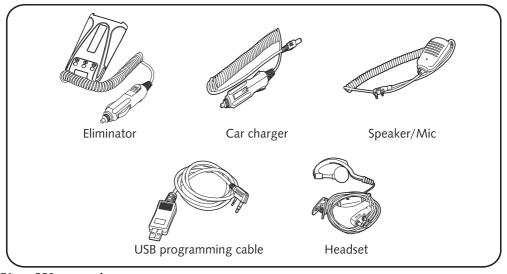
Repeater Channels

Ch.	Name	Receive Frequency	Transmit Frequency	Max Power
023	RPT-15	462.5500	467.5500	HIGH
024	RPT-16	462.5750	467.5750	HIGH
025	RPT-17	462.6000	467.6000	HIGH
026	RPT-18	462.6250	467.6250	HIGH
027	RPT-19	462.6500	467.6500	HIGH
028	RPT-20	462.6750	467.6750	HIGH
029	RPT-21	462.7000	467.7000	HIGH
030	RPT-22	462.7250	467.7250	HIGH

KG-905G Plus Maximum Power levels: L=0.5W / H=5W

Note: Power levels are approximate.





Shop Wouxun Accessories:

www.buytwowayradios.com/accessories/by-radio-brand/wouxun-radio-accessories.html

Limited Warranty

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

transferable.

THIS LIMITED WARRANTY IS THE ENTIRE WARRANTY FOR THIS PRODUCT AND IS IN LIEU OF ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF ANY DAMAGES, INCLUDING INCIDENTAL OR CONSEQUENTIAL DAMAGES RELATED TO THE USE OF THIS PRODUCT. Some states do not allow this exclusion or limitation of damages so the above limitation or exclusion may not apply to you. This warranty is valid only within the United States of America.

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.

Version: KG-905G Plus-2503-V2