# Wouxun

# **Two Way Radio KG-805 Series** Owner's Manual

**GMRS Radio** 



# KG-805G

Thank you for buying the KG-805 transceiver. This radio offers a professional design, enhanced features, solid performance and easy accessibility. We think you will be pleased with its high quality and reliability for your short range radio communications. FCCID: WVTWOUXUN16

# **Important Information**

#### **Caution:**

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

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 THIE DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIZBITED UNDER FCC RULES AND 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

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

#### **Safety and General Use:**

DO NOT use external power connections or batteries not specifically designed for or approved for use with this radio.

DO NOT use the radio in potentially hazardous areas or where there are potentially explosive atmospheres (gas, dust, etc.).

DO NOT operate your radio while your vehicle is being refueled or parked at a gas station.

# **FCC Licensing Information**

The KG-805G 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 at https://www.fcc.gov/wireless/support/fccform-605 and request FCC Form 605.

# **Unpacking and Checking Your** Equipment

Carefully unpack the radio. We recommend that you identify the following items before discarding the packing material. If any items are missing or have been damaged during shipment, please notify your dealer immediately.

#### **Included Accessories:**

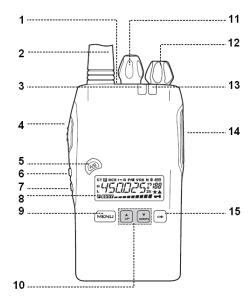
- 1 KG-805G Radio
- 1 High Gain Antenna
- 1 Li-ion Battery Pack
- 1 Desktop Charger
- 1 Belt Clip
- 1 Hand Strap
- 1 Owner's Manual

# **Description of Features**

- 1. 22 GMRS Channels
- 8 GMRS Repeater Channels
- Output Power: Up to 4W
- 4. VOX
- Calling Ring Function
- 155 CTCSS/DCS Privacy Codes
- 7. Voice Prompts
- 8. Three Color Backlight Display
- 9. Multi-Display Modes
- 10. Alarm Function
- 11. Multiple Scanning Modes
- 12. Priority Scan Function
- 13. FM Radio w/ Frequency Display
- 14. High Capacity Li-ion Battery Pack
- 15. Intelligent Charger
- 16. Busy Channel Lockout
- 17. Multiple Display Modes at Power On
- 18. Low Voltage Prompt

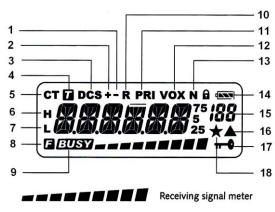
- 19. Transmit Overtime Prompt
- 20. Key Lock
- 21. Channel Scan
- 22. Power Save
- 23. PC Programmable
- 24. IP55 Waterproof

# **Radio Controls**



- 1. Alarm/PF2
- 2. Antenna
- 3. Transmit LED
- 4. PTT Button
- 5. A/B Button
- 6. PF1
- 7. **Monitor Button**
- 8. LCD Display
- 9. Menu Button
- 10. Up/Down Buttons
- 11. Channel Knob
- 12. Power/Volume Knob
- 13. Receive LED
- 14. Audio/Accessory Port
- 15. Exit Button

# **LCD Display**



1. Split (N/A)

- 2. Split (N/A)
- 3. DCS
- 4. DTMF (N/A)
- 5. CTCSS
- 6. High Power
- 7. Low Power
- 8. Menu Setting Mode

- 9. BCL
- 10. Reverse Frequency (N/A)
- 11. Priority Scan
- 12. VOX Transmit
- 13. Bandwidth Indicator
- 14. Battery Status
- 15. Menu / Channel Number
- 16. With Memory Channel
- 17. Key Lock
- 18. FM Radio Activated

# **Getting Started**

#### Waterproof

The KG-805 is waterproof to IP55 standards. It is dust resistant and rated to withstand water projected by a nozzle (6.3 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-805 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.

#### Installing the battery

To install the Lithium-ion battery pack:

- 1. Be sure the radio is off.
- 2. Slide the battery pack down the back off the radio until the three tabs on the bottom of the battery slide into the slots at the bottom of the radio.
- 3. Push forward on the battery until it is securely locked in place on both sides.

#### Removing the battery

To remove the battery pack:

- 1. With your thumb and forefinger, slide down the latches on each side of the battery near the top of the battery pack simultaneously
- 2. While holding down the latches, pull the battery pack away from the radio.

# Installing the antenna

The KG-805 includes an antenna with an SMA female connector that is tuned for the GMRS frequency range of your radio. After market 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.

#### **Belt Clip**

The belt clip attaches to the back of the battery pack on the radio.

To install the belt clip, simply slide it down onto the back of the battery until it snaps in place.

To remove the battery, depress the lock release on the back of the belt clip, and while holding it down, slide the belt clip up and away from the

## **Turning the Radio On and Off**

Turn the radio on, turn the power/volume knob clockwise until it clicks and the radio powers on. To turn the radio off, turn the power/volume knob counter-clockwise until it clicks and stops.

# **Adjusting the Volume**

Turn the power/volume knob to adjust the volume to the desired level.

# **Changing Channels**

To change the channel, turn the channel knob or press the UP/DOWN buttons to go to the desired channel.

# **Basic Operation**

## **Transmitting and Receiving**

Note: to effectively 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.

- 1. To transmit, press and hold down the PTT button on the side of the radio.
- When transmission is finished, release the PTT button to receive.

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

# **Scanning Channels**

To activate Channel Scan, press and hold the A/B button for two seconds until you hear "Scan Begin". To stop the scan, press and hold the A/B button for two seconds until you hear "Scan Stop" and the channel number on which it stopped.

# **Backlight**

Press the A/B button to turn the LCD and key backlight on and off.

# **Menu Options**

The squelch level function allows you to set the threshold of the signal strength received. The

lower squelch settings allow a weaker signal to be heard, a higher setting blocks out noise and allows only stronger signals to be heard.

The squelch levels are adjustable from 0-9. Setting it to 0 turns off squelch, while 9 is full squelch. The default squelch level setting is 5.

# Power Save (SAVE) – MENU 2

To reduce battery consumption, the SAVE function cuts off power to the receiver momentarily, then re-activates it to detect signals If a signal is detected, the radio will be activated immediately and exit from SAVE mode.

To activate the SAVE function, Press MENU and the UP/DOWN buttons to navigate to SAVE (3) and press MENU to access the function. Then press UP/DOWN to choose ON, and press MENU to confirm. Press the EXIT button to exit the menu.

# Roger Beep (ROGER) - MENU 3

The KG-805 allows you to set a tone prompt at the start of your transmission, at the end of transmission, or both. The menu choices are Beginning of Transmission (BOT), End of Transmission (EOT), Both (BOTH) or None (OFF).

With the radio in Standby, Press MENU and the UP/DOWN buttons and navigate to ROGER (menu item 3). Press MENU, then press the UP/DOWN buttons to choose Beginning of Transmission (BOT), End of Transmission (EOT), Both (BOTH) or None (OFF). Press MENU to confirm, then press EXIT to return to standby

# Timeout Timer (TOT) – MENU 4

To reduce battery consumption and protect the radio from over transmission, the Timeout Timer ends the transmission when the transmission has exceeded a predetermined time limit, after which the transmission is interrupted. The timer can bet set in 40 levels between 15 and 600 seconds, in 15 second increments.

In standby, Press MENU and the UP/DOWN buttons and navigate to TOT (menu item 4). Press MENU to enter, and press the UP/DOWN buttons to select the desired transmission level from 15 to 6000. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# **VOX Function (VOX) – MENU 5**

activates transmission when the radio detects a voice or other noise. It allows for hands-free operation when transmitting without physically pushing the Push-To-Talk (PTT) switch to do so. The KG-805 has 10 levels of sensitivity to detect sound, from 1 (most sensitive) to 10 (least sensitive). The higher the level, the more sound is needed to activate VOX.

Voice Operated Transmit (VOX) automatically

# Setting Squelch Level (SQL-LE) – MENU 1

To activate VOX, press MENU and the UP/DOWN buttons and navigate to VOX (menu item 5). Press MENU to enter, and press the UP/DOWN buttons to select the desired transmission level from 1 to 10. Press MENU to confirm your choice, then press EXIT to return to standby mode.

To deactivate VOX, press MENU and the UP/DOWN buttons and navigate to VOX (menu item 5). Press MENU to enter, and press the UP/DOWN buttons to select OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Transmit Overtime Alarm (TOA) – MENU 6

You can set the KG-805 to display a prompt to warn you when the transmit time limit set in the Timeout Timer (TOT) is about to be exceeded. The alarm has 10 levels, from 1 to 10.

To activate the Transmit Overtime Alarm, press MENU and the UP/DOWN buttons and navigate to TOA (menu item 6). Press MENU to enter, and press the UP/DOWN buttons to select the desired transmission level from 1 to 10. Press MENU to confirm your choice, then press EXIT to return to standby mode. The default level is 5.

To deactivate the Transmit Overtime Alarm, press MENU and the UP/DOWN buttons and navigate to TOA (menu item 6). Press MENU to enter, and press the UP/DOWN buttons to select OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Voice Prompt (VOICE) – MENU 7

The KG-805 supports voice prompts in English and Chinese languages. The default is English.

To choose the language, press MENU and the UP/DOWN buttons and navigate to VOICE (menu item 7). Press MENU to enter, and press the UP/DOWN buttons to select English or Chinese. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Beep Prompt (BEEP) - MENU 8

To activate or deactivate the Beep prompt, press MENU and the UP/DOWN buttons and navigate to BEEP (menu item 8). Press MENU to enter, and press the UP/DOWN buttons to select ON or OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode. The default is ON.

# Power On Message (PONMSG) – MENU 9

The KG-805 displays an initial message on the screen for several seconds when powered on. You can choose from three message options. OFF flashes the full screen display, BATT-V displays the battery voltage, and MSG displays the message "WELCOM". The default is OFF.

To choose the Power On message, press MENU and the UP/DOWN buttons and navigate to PONMSG (menu item 9). Press MENU to enter,

and press the UP/DOWN buttons to select OFF, BATT-V or MSG. Press MENU to confirm your choice, then press EXIT to return to standby mode.

#### Busy Channel Lockout (BCL) – MENU 10

To prevent interference, The KG-805 can sound an alarm if another radio is already transmitting on same channel when the PTT is pressed. The default is OFF.

Note: This item is available in the menu for display only. It can be modified through optional programming software.

# Key Lock (AUTOLK) – MENU 11

The buttons on the KG-805 can be automatically locked to prevent them from being accidentally pressed. When the automatic key lock is enabled, the buttons on the radio will automatically locked within 15 seconds if there is no operation while in standby. The default is OFF.

To activate or deactivate the Automatic Key Lock, press MENU and the UP/DOWN buttons and navigate to AUTOLCK (menu item 11). Press MENU to enter, and press the UP/DOWN buttons to select ON or OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode. The default is OFF.

# Set Receiving CTCSS (R-CTC) – MENU 12

The KG-805 has 50 CTCSS tones and 105 DCS codes for a total of 155 privacy code settings. The default is OFF.

To set the receiving CTCSS tone for a channel, go to the channel for which you want to set the tone. In standby, Press MENU and the UP/DOWN buttons and navigate to R-CTC (menu item 12). Press MENU to enter, and press the UP/DOWN buttons to select the desired CTCSS tone. Press MENU to confirm your choice, then press EXIT to return to standby mode.

To deactivate the receiving CTCSS tone, go to the channel. In standby, Press MENU and the UP/DOWN buttons and navigate to R-CTC (menu item 12). Press MENU to enter, and press the UP/DOWN buttons to select OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Set Transmit CTCSS (T-CTC) – MENU 13

To set the transmit CTCSS tone for a channel, go to the channel for which you want to set the tone. In standby, Press MENU and the UP/DOWN buttons and navigate to T-CTC (menu item 13). Press MENU to enter, and press the UP/DOWN buttons to select the desired CTCSS tone. Press MENU to confirm your choice, then press EXIT to return to standby mode.

To deactivate the receiving CTCSS tone, go to the channel. In standby, Press MENU and the

UP/DOWN buttons and navigate to T-CTC (menu item 13). Press MENU to enter, and press the UP/DOWN buttons to select OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

#### Set Receiving DCS (R-DCS) - MENU 14

To set the receiving DCS code for a channel, go to the channel for which you want to set the code. In standby, Press MENU and the UP/DOWN buttons and navigate to R-DCS (menu item 14). Press MENU to enter, and press the UP/DOWN buttons to select the desired DCS tone. Press MENU to confirm your choice, then press EXIT to return to standby mode.

To deactivate the receiving DCS code, go to the channel. In standby, Press MENU and the UP/DOWN buttons and navigate to R-DCS (menu item 14). Press MENU to enter, and press the UP/DOWN buttons to select OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Set Transmit DCS (T-DCS) – MENU 15

To set the transmit DCS code for a channel, go to the channel for which you want to set the code. In standby, Press MENU and the UP/DOWN buttons and navigate to T-DCS (menu item 15). Press MENU to enter, and press the UP/DOWN buttons to select the desired DCS tone. Press MENU to confirm your choice, then press EXIT to return to standby mode.

To deactivate the transmit DCS code, go to the channel. In standby, Press MENU and the UP/DOWN buttons and navigate to T-DCS (menu item 15). Press MENU to enter, and press the UP/DOWN buttons to select OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Setting Scan Mode (SC-REV) – MENU 16

The KG-805 will pause channel scan when a signal is detected on a specific channel. The scan will resume or stop completely when the signal is no longer detected, depending on the scan mode you choose. The default is TO.

There are three scan modes.

**TO** – After detecting the signal on a channel, the radio will resume scanning if no operation is performed within 5 seconds.

**CO** – When a signal is detected, the radio stops scanning and will resume scanning 3 seconds after the signal disappears.

**SE** – When a signal is detected, scanning stops.

To choose the scan mode, press MENU and the UP/DOWN buttons and navigate to SC-REV (menu item 16). Press MENU to enter, and press the UP/DOWN buttons to select TO, CO, or SE. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Setting Function Key 1 (PF1) – MENU 17

The KG-805 has two function keys, one on the side of the radio and one on top, both of which

are configurable in the menu. Programmable Function Key 1 (PF1) can be configured to perform one of three functions. RADIO allows access to the built-in FM radio, SCAN accesses the channel scan function, and LAMP controls the backlight for the LCD display and keys. The default is RADIO.

To choose the function of the PF1 key, press MENU and the UP/DOWN buttons and navigate to PF1 (menu item 17). Press MENU to enter, and press the UP/DOWN buttons to choose RADIO, SCAN, or LAMP. Press MENU to confirm your choice, then press EXIT to return to standby mode.

To deactivate the PF1 key, press MENU and the UP/DOWN buttons and navigate to PF1 (menu item 17). Press MENU to enter, and press the UP/DOWN buttons to select OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Setting Alarm Button (PF2) – MENU 18

Programmable Function Key 2 (PF2) is an Alarm button and is configured to sound an alarm when pressed. This key can be disabled in the radio.

To enable or disable the PF2 alarm button, press MENU and the UP/DOWN buttons and navigate to PF2 (menu item 18). Press MENU to enter, and press the UP/DOWN buttons to choose ALARM or OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Setting Display Mode (CH-MDF) – MENU 19

The KG-805 allows you to choose how to display the label for each channel. You can select to display the channel name (NAME), channel number (CH), or the actual GMRS frequency for the active channel (FREQ). The default is NAME.

To choose the display mode, press MENU and the UP/DOWN buttons and navigate to CH-MDF (menu item 19). Press MENU to enter, and press the UP/DOWN buttons to choose CH, FREQ, or NAME. Press MENU to confirm your choice, then press EXIT to return to standby mode.

#### Set Standby Backlight (WT-LED) MENU 20

The KG-805 allows you to select one of three customizable backlight colors. When the backlight is activated while the radio is in standby, the display backlight will activate in color you choose. The choices are blue (BLUE), purple (PURPLE) or orange (ORANGE). You can also turn the backlight off when receiving a call.

To choose the receiving backlight color, press MENU and the UP/DOWN buttons and navigate to WT-LED (menu item 20). Press MENU to enter, and press the UP/DOWN buttons to choose BLUE, PURPLE, ORANGE, or OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Setting Receive Backlight (RX-LED) MENU 21

The KG-805 allows you to select one of three customizable backlight colors during receive. When the radio receives a signal, the display backlight will activate in color you choose. The choices are blue (BLUE), purple (PURPLE) or orange (ORANGE). You can also turn the backlight off when receiving a call.

To choose the receiving backlight color, press MENU and the UP/DOWN buttons and navigate to WT-LED (menu item 21). Press MENU to enter, and press the UP/DOWN buttons to choose BLUE, PURPLE, ORANGE, or OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Setting Transmit Backlight (TX-LED) MENU 22

The KG-805 allows you to select one of three customizable backlight colors during transmit. When the radio transmits a signal, the display backlight will activate in color you choose. The choices are blue (BLUE), purple (PURPLE) or orange (ORANGE). You can also turn the backlight off when receiving a call.

To choose the receiving backlight color, press MENU and the UP/DOWN buttons and navigate to WT-LED (menu item 22). Press MENU to enter, and press the UP/DOWN buttons to choose BLUE, PURPLE, ORANGE, or OFF. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Editing Channel Name (CHNAME) – MENU 23

The KG-805 allows you to customize the name of each channel. The channel name can consist of 26 letters (A to Z) and 10 numerals (0-9) with a maximum length of 6 characters. Selecting the (-) symbol will leave a blank character (space).

To edit a channel name, press MENU and the UP/DOWN buttons and navigate to CHNAME (menu item 23). Press MENU to enter, press EXIT to browse the channels, and press the UP/DOWN buttons to choose the channel to edit. Press the UP button to search and select the desired letter or numeral you want to change, then press the DOWN button to move to the next character place and use the UP button to search and select the desired letter or numeral. Repeat the process until the sixth character is edited. Press MENU to confirm your choice, then press EXIT to return to standby mode.

# Channels and Frequencies

CH	FREQ	CH	FREQ	CH	FREQ
1	462.562	11	467.637	21	462.700
2	462.587	12	467.662	22	462.725
3	462.612	13	467.687	RPT15	462.550
4	462.637	14	467.712	RPT16	462.575
5	462.662	15	462.550	RPT17	462.600
6	462.687	16	462.575	RPT18	462.625
7	462.712	17	462.600	RPT19	462.650
8	467.562	18	462.625	RPT20	462.675
9	467.587	19	462.650	RPT21	462.700
10	467.612	20	462.675	RPT22	462.725

# CTCSS Tones

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

# **DCS Codes**

1     D023N     36     D223N     71     D445N       2     D025N     37     D225N     72     D446N       3     D026N     38     D226N     73     D452N       4     D031N     39     D243N     74     D454N       5     D032N     40     D244N     75     D455N       6     D036N     41     D245N     76     D462N       7     D043N     42     D246N     77     D464N       8     D047N     43     D251N     78     D456N       9     D051N     44     D252N     79     D466N       10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D5	DCS	CODE	DCS	CODE	DCS	CODE
3     D026N     38     D226N     73     D452N       4     D031N     39     D243N     74     D454N       5     D032N     40     D244N     75     D455N       6     D036N     41     D245N     76     D462N       7     D043N     42     D246N     77     D464N       8     D047N     43     D251N     78     D456N       9     D051N     44     D252N     79     D466N       10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86	1	D023N	36	D223N	71	D445N
4     D031N     39     D243N     74     D454N       5     D032N     40     D244N     75     D455N       6     D036N     41     D245N     76     D462N       7     D043N     42     D246N     77     D464N       8     D047N     43     D251N     78     D456N       9     D051N     44     D252N     79     D466N       10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87 <td< td=""><td>2</td><td>D025N</td><td>37</td><td>D225N</td><td>72</td><td>D446N</td></td<>	2	D025N	37	D225N	72	D446N
5     D032N     40     D244N     75     D455N       6     D036N     41     D245N     76     D462N       7     D043N     42     D246N     77     D464N       8     D047N     43     D251N     78     D456N       9     D051N     44     D252N     79     D466N       10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88 <t< td=""><td>3</td><td>D026N</td><td>38</td><td>D226N</td><td>73</td><td>D452N</td></t<>	3	D026N	38	D226N	73	D452N
6     D036N     41     D245N     76     D462N       7     D043N     42     D246N     77     D464N       8     D047N     43     D251N     78     D456N       9     D051N     44     D252N     79     D466N       10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     <	4	D031N	39	D243N	74	D454N
7     D043N     42     D246N     77     D464N       8     D047N     43     D251N     78     D456N       9     D051N     44     D252N     79     D466N       10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90	5	D032N	40	D244N	75	D455N
8     D047N     43     D251N     78     D456N       9     D051N     44     D252N     79     D466N       10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91	6	D036N	41	D245N	76	D462N
9     D051N     44     D252N     79     D466N       10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92	7	D043N	42	D246N	77	D464N
10     D053N     45     D255N     80     D503N       11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93	8	D047N	43	D251N	78	D456N
11     D054N     46     D261N     81     D506N       12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94	9	D051N	44	D252N	79	D466N
12     D065N     47     D263N     82     D516N       13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95	10	D053N	45	D255N	80	D503N
13     D071N     48     D265N     83     D523N       14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96	11	D054N	46	D261N	81	D506N
14     D072N     49     D266N     84     D526N       15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97	12	D065N	47	D263N	82	D516N
15     D073N     50     D271N     85     D532N       16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D12N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98	13	D071N	48	D265N	83	D523N
16     D074N     51     D274N     86     D546N       17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99	14	D072N	49	D266N	84	D526N
17     D114N     52     D306N     87     D565N       18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D12N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100	15	D073N	50	D271N	85	D532N
18     D115N     53     D311N     88     D606N       19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101	16	D074N	51	D274N	86	D546N
19     D116N     54     D315N     89     D612N       20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102	17	D114N	52	D306N	87	D565N
20     D122N     55     D325N     90     D624N       21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103	18	D115N	53	D311N	88	D606N
21     D125N     56     D331N     91     D627N       22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104	19	D116N	54	D315N	89	D612N
22     D131N     57     D332N     92     D631N       23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	20	D122N	55	D325N	90	D624N
23     D132N     58     D343N     93     D632N       24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	21	D125N	56	D331N	91	D627N
24     D134N     59     D346N     94     D645N       25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	22	D131N	57	D332N	92	D631N
25     D143N     60     D351N     95     D654N       26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	23	D132N	58	D343N	93	D632N
26     D145N     61     D356N     96     D662N       27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	24	D134N	59	D346N	94	D645N
27     D152N     62     D364N     97     D664N       28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	25	D143N	60	D351N	95	D654N
28     D155N     63     D365N     98     D703N       29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	26	D145N	61	D356N	96	D662N
29     D156N     64     D371N     99     D712N       30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	27	D152N	62	D364N	97	D664N
30     D162N     65     D411N     100     D723N       31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	28	D155N	63	D365N	98	D703N
31     D165N     66     D412N     101     D731N       32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	29	D156N	64	D371N	99	D712N
32     D172N     67     D413N     102     D732N       33     D174N     68     D423N     103     D734N       34     D205N     69     D431N     104     D743N	30	D162N	65	D411N	100	D723N
33 D174N 68 D423N 103 D734N 34 D205N 69 D431N 104 D743N	31	D165N	66	D412N	101	D731N
34 D205N 69 D431N 104 D743N	32	D172N	67	D413N	102	D732N
	33	D174N	68	D423N	103	D734N
35 D212N 70 D432N 105 D754N	34	D205N	69	D431N	104	D743N
35   5212N   70   5432N   103   5734N	35	D212N	70	D432N	105	D754N