The COM®

# Owner's Manual

## COM-G95 Mobile Radio &

## Premium UTV Communication System

Congratulations on your purchase and welcome to the COMplete Radio InterCOM COMmunication family. We thank you for your purchase with care the unit should give you good service.

Please read these instructions carefully, by doing so you will get full use of the products

This Manual is broken up into parts:

1. Radio manual
2. Intercom manual
3. Connecting and other relevant info

Email if you have any questions or concerns that this manual does not address.

Copyright © 2020 by TheCOM; https://utvcom.com

**www.utvcom.com**

**info@utvcom.com**

# Contents


COM-G95 GMRS Mobile Radio 1
- Features 1
- Info & Warnings 1
- FCC Notice 2
- RF Energy Exposure 2
- Getting to Know The COM-G95 3
  - Front of the Radio 4
  - Back of the Radio 6
  - Hand Mic 7
  - Screen Icons 8
- Antenna 9
  - Mounting Tips 9
- Powering TheCOM 9
  - Turing off the Mobile Radio 10
- Operations 10
  - Adjusting the volume 10
  - Receiving & Transmitting a Call 10
  - Selecting a Channel 10
  - Toggling between Bands A/B/C/D 10
- Function Menu 12
- Other Settings and Options 18
  - Programing 18
  - Keypad Lock-out 18
  - PTT ID 18
  - Scanning Modes 18
  - GMRS Repeaters 18
- Troubleshooting TheCOM-G95 19
- Specifications 20
  - Technical Specifications 20
  - Receiver Specifications 20
  - Transmit Specifications 20
- Frequency List 21

# COM-G95 GMRS Mobile Radio

## Features

TheCOM-G95 mobile 2 way radio is unique for it's compact body, powerful output and frequency range design. It's also designed with new and personalized operation menu to give you easy-to-use and exceptional operation experience. We believe its mini size and cost effective price will allow the off-road community the ability to install the radio in more locations without having to modify their vehicles.

Before operation and to obtain the best performance, we recommend that you read this user manual carefully to become familiar with the features.

- 16 transmittable frequencies (Channels 15-30)
- 8 of which are repeater frequencies (repeaters not available in all areas)
- 32 Receive only frequencies
- 7 weather channels
- Color Display
- Simple plug and play connection to the S4S intercom

## Info & Warnings

IMPORTANT! Changes or modifications to this unit not expressly approved by TheCOM could void your right to operate this unit. Your radio is set up to transmit a regulated signal on an assigned frequency. It is against the law to alter or adjust the settings inside the mobile radio to exceed those limitations. Any adjustment to your radio must be made by qualified technicians.

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

Use only “TheCOM” supplied or approved accessories, cables and headsets.

Turn off your radio prior to entering any area with flammable materials. Do not operate or turn on your mobile radio at a gas station or while fueling your vehicle.

Do not mount your radio in the area over an the air bag deployment area if equipped or in a location that obstructs the drives sight.

Do not expose the radio to direct sunlight for prolonged periods of time, nor place it close to a heat source.

Do not transmit for long intervals, as it may overheat the mobile radio.

Do not pressure wash your COM for any reason. To clean, blow off as much dust and debris then

wipe with a damp cloth while the unit is in the OFF position. Allow to dry for several hours then operations may resume.

If the unit emits smoke or an odor, you should immediately cut off the power supply. Then contact us at info@utvcom.com.

Protect your unit as much as possible from dusty, damp and wet conditions and never submerge TheCOM

Use the correct power supply. TheCOM is designed to operate at about 13.8V; do not use 24V power supply to TheCOM or mobile radio.

If there's any electromagnetic interference, please keep the mobile radio away from the sources such as TV set, engine generator etc.

## FCC Notice

The COM-G95 operates on GMRS (General Mobile Radio Service) frequencies, which require a Federal Communications Commission (FCC) license (learn more here https://www.fcc.gov/general-mobile-radio-service-gmrs ). You must be licensed prior to operating on channels15-30. Serious penalties may result from unlicensed use of GMRS channels, in violation of FCC rules, as stipulated in the Communications Act's Sections 501 and 502 (amended). You will be issued a call sign by the FCC that should be used for station identification when operating your radio on GMRS channels. You should also cooperate by engaging in permissible transmissions only, avoiding channel interference with other GMRS users, and being prudent with the length of your transmission time.

To obtain a license or ask questions about the license application, contact the FCC at 1-888-CALL FCC or go to the FCC's website: https://www.fcc.gov/

Request form 605.

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

The scanning receiver in this equipment is incapable of tuning, or readily altered, by the user to operate within the frequency bands allocated to the Domestic public Cellular Telecommunications Service in Part 22.

WARNING: Modification of this device to receive cellular radiotelephone service signals is prohibited under FCC rules and federal law.

## RF Energy Exposure

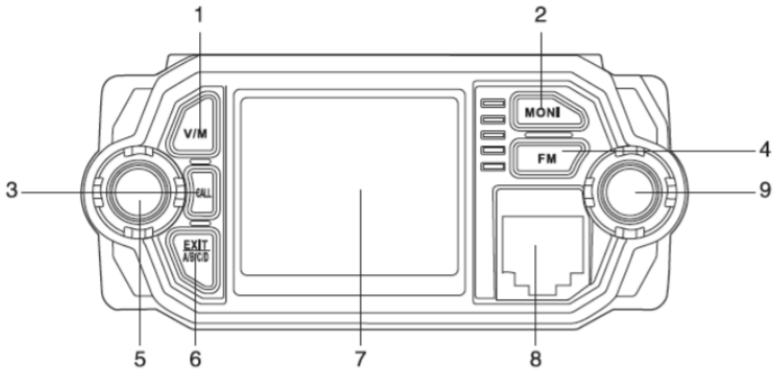
The COM-G95 is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy.

- United States Federal Communications Commission (FCC), Code of Federal Regulations: 47 CFR part 2 sub-part J
- American National Standards Institute (ANSI)/Institute of Electrical & Electronics Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronics Engineers (IEEE) C95. 1-1999 Edition
- National Council on Radiation Protection and Measurements (NCRP) of the United States, Report 86, 1986
- International Commission on Non-lonizing Radiation Protection (ICNIRP) 1998
- To control your exposure and ensure compliance with the general population or uncontrolled environment exposure limits, transmit no more than 50% of the time. The radio generates measurable RF energy exposure only when transmitting.
- The consumer must maintain a minimum safe separation distance of 71.76cm from the antenna when transmitting.
- The height of the antenna to the ground plane shall not exceed 2.5m.

## Getting to Know The COM-G95

Please check the packaging of your radio for any signs of damage. Carefully open the box, if you find the radio or the included accessories are damaged or lost, immediately contact your dealer or us at info@utvcom.com

## Front of the Radio




1. V/M Mode Switch (Channel/Frequency)
2. Monitor (Moni) function
3. Call key
4. FM radio function key
5. Power, On/Off (Press) & Volume Knob (Rotate)
6. Exit Menu, Toggle A/B/C/D bands
7. Display screen
8. RJ-45 Microphone Connector
9. Channel Selector (rotate) Menu Knob (Press) Confirm Key (Press)

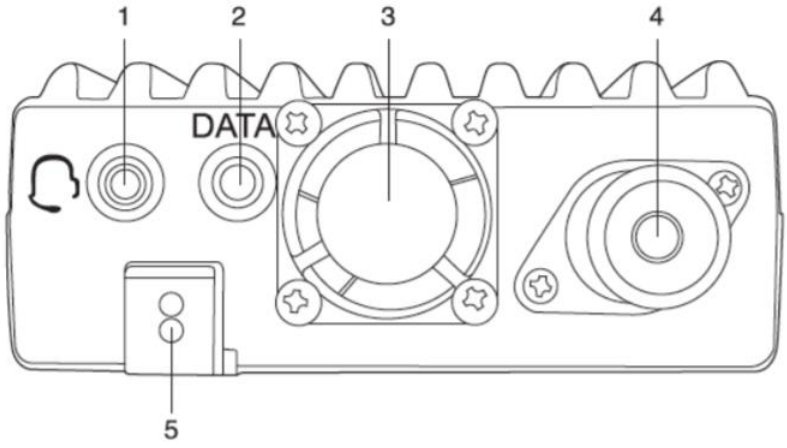
Toggle between Memory & Channel mode (for simple channel driven radio

Current band indicator (similar to AM and FM on your car radio

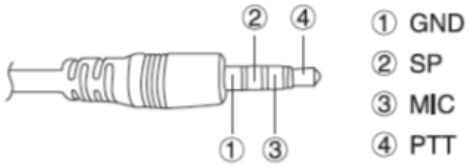
Radio Volume & press and hold to power down or power up

Channel Selector or press to enter radio menu

Back of the Radio



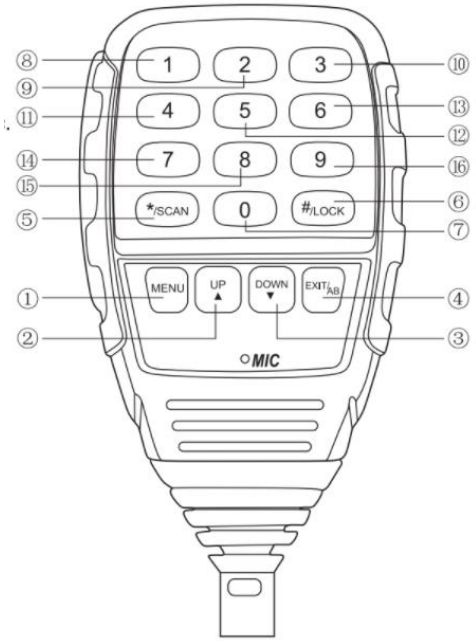

1. TRRS 3.5 mm connection for S4S intercom connection – Pinout diagram below:




2. DATA, Programming Jack TRS 3.5 mm: (Restricted to comply with FCC Part 95)
3. Cooling Fan
4. SO-239 RF Antenna Connector: Connects to PL-259 Antennas
5. 12V DC Power supply (13.8 Volts – 7 Amps peak)

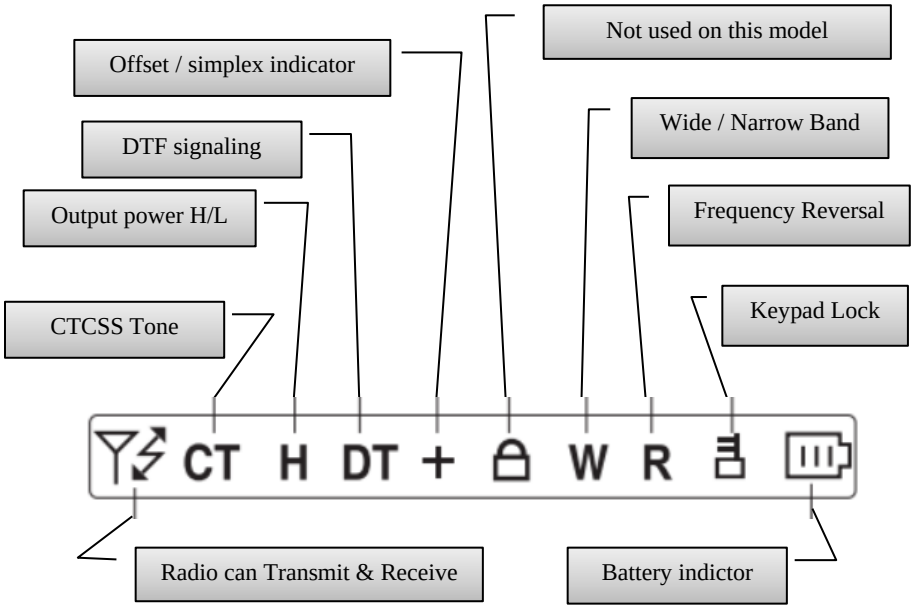
# Hand Mic

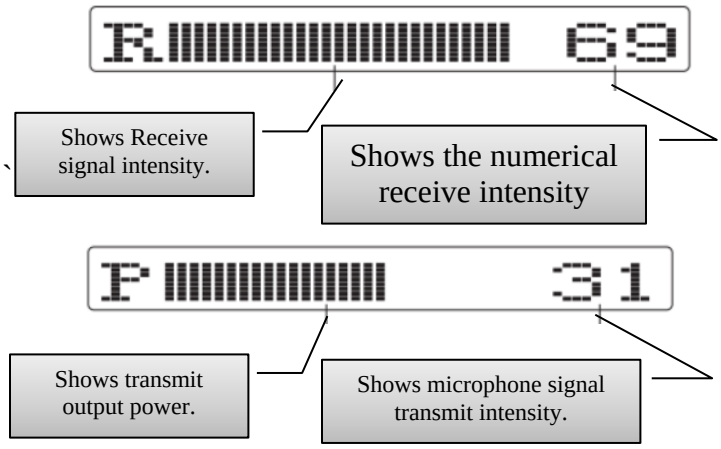
1. “MENU” - Function key VFO/MR Toggle (Long Press)
2. “UP”: - Toggle up
3. “DOWN” - Toggle down
4. “EXIT” - Exit the ABCD band selection, activate alarm (Long Press)
5. “*/SCAN” - Scanning function
6. “#/LOCK” - High / Low Power Toggle, Keypad Lock (Long Press)




7. “0” - Number 0
8. “1” - Number 1
9. “2” - Number 2
10. “3” - Number 3
11. “4” - Number 4
12. “5” - Number 5
13. “6” - Number 6
14. “7” - Number 7
15. “8” - Number 8
16. “9” - Number 9

# Screen Icons



# Antenna

Do not transmit without an antenna attached to the mobile radio. This can cause stress and harm to the internal transmitter and damage the mobile radio.

Choose an antenna suitable for transmitting on GMRS frequencies (462-467MHz) with and impedance of 50 ohm. If an antenna is not properly tuned for the frequency you transmit on this could cause reflective damage to the radio. Target an SWR of 1.5:1 and never exceed a SWR of 2.5.

## Mounting Tips

It is best to mount the antenna to the vehicle's roof, roll bar or similar location. Specific installation requirements vary between vehicles. Use the following guidelines to install the antenna.

1. Mount the antenna as high on the vehicle as possible. The higher the better.
2. Metal surfaces covered by fiberglass or vinyl may affect radio range. Avoid these locations.
3. If possible, mount the antenna in the center of whatever surface you choose.
4. Coax cable and connectors should be rated for 50 ohm.
5. Choose the proper length coax cable for your application. We offer many lengths that typically fit most UTV's.
    a. If you have extra length try to re rout the coax to use up the extra length.
    b. Never coil the coax in a coil or coil the extra around the antenna.
6. Route the antenna cable through an accessible entry point, such as a firewall grommet or kick panel.
7. When routing the coax cable, avoid noise sources that create RF energy, such as the ignition system, gauges, power wires, rotation shafts, etc.
8. Prevent cable damage, such as pinching the coax, sharp edges or right angles. Use sweeping curves .and avoid pinch points between seams. Make use of existing gaskets, grommets and weather stripping to protect the cable along its route or drill relief holes.
9. Additional grounding of the coax cable may be necessary. To achieve this simply connect a ground wire to a ground location on the vehicle (such as the bodies bare metal) then to the underside of the base of the NMO connector.

# Powering TheCOM

It is preferred that TheCOM be connected (the positive lead RED wire) directly to the positive post of the vehicle's battery. If this is not available a fuse block may be used. If external noises are heard through the radio such as "alternator wine" (could be from pumps, switches, lights, clutch fans, other accessories) it is recommended that the power be re-rout directly to the battery posts.

Turning on the Mobile Radio

Press and hold the volume knob down until the display lights up.

### Turing off the Mobile Radio

Press and hold the volume knob down until the display powers down.

## Operations

### Adjusting the volume

The volume control on the mobile radio affects the overall volume to TheCOM users. It is typically set a half a turn from the bottom. Turning the volume clockwise will increase the radio volume and counterclockwise will lower the volume. It is best to adjust the volume while someone else is broadcasting. For best results we suggest setting the radio to the local weather channel (see below common channels for weather frequency) and slowly turn the radio volume clockwise until desired volume is clear. Sometimes backing the volume on the radio slightly will give a clearer communication from outside signals. After the radio is set, fine tune the volume with the individual volume controls found on the intercom.

### Receiving & Transmitting a Call

Both the receiving radio and the transmitting radio need to be on the same GMRS frequency (channel) that includes privacy codes (CTCSS or DCS codes).

To make a call, press and hold the PTT button wait a moment before speaking and speak into the microphone. If using a headset, make sure that mic is right against your lips. If using a hand mic, hold the hand mic about 1-2 inches from your mouth.

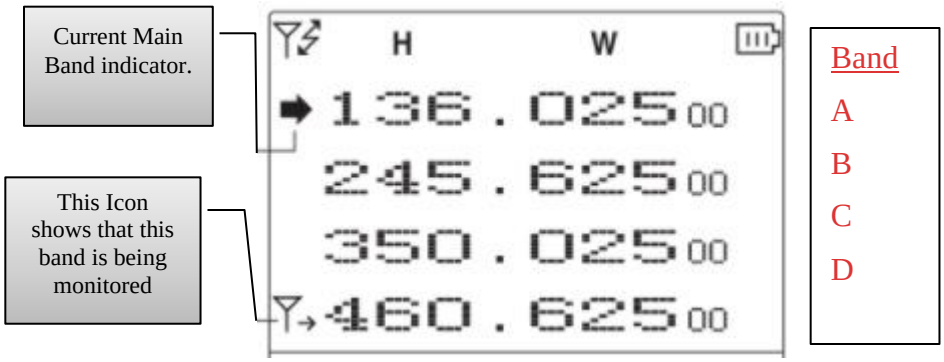
To receive a call release the PTT and listen for the transmission to come through. Adjusting your volume as necessary.

### Selecting a Channel

Turn the selector knob to select your desired channel.  Alternatively, the up and down arrows on the mic will change the channel as long as the keypad is not locked. Note that this model has been restricted to transmit on GMRS frequencies only. Additional frequencies are programed into the radio like the weather channels, but they are receive only.

### Toggling between Bands A/B/C/D

Pressing the “Exit/ABCD” will toggle between the four different band on the radio.




- Channel programing has been disabled on this model to comply with FCC Part 95.

## Function Menu

Note that due to part 95 requirements many of the menu functions have been restricted or deactivated.

To enter the menu press the knob to the right of the screen. Menus may be quickly jumped to by typing the menu number in on the hand mic.

| Menu # | Menu Name | Description | Secondary Menu | Notes |
|---|---|---|---|---|
| 0 | TMR | Transmit Multi Receive - This mode selects what displays are monitored in the background besides the primary selected channel | Off | Disable TMR |
| | | | M+A | Main band + A band standby |
| | | | M+B | Main band + B band standby |
| | | | M+C | Main band + C band standby |
| | | | M+D | Main band + D band standby |
| | | | M+A+B | Main band +A & B band standby |
| | | | M+A+C | Main band + A & C band standby |
| | | | M+A+D | Main band + A & D band standby |
| | | | M+B+C | Main band + B & C band standby |
| | | | M+B+D | Main band + B & D band standby |
| | | | M+C+D | Main band + C & D band standby |
| | | | M+A+B+C | Main band + A, B & C band standby |
| | | | M+A+C+D | Main band + A, C & D band standby |
| | | | M+B+C+D | Main band + B, C & D band standby |
| | | | A+B+C+D | All bands are monitored on standby |
| 1 | STEP | Frequency Step Size Setup | 2.50k | In frequency step in VFO (frequency) mode, press (up) and (down) to select step figure. |
| | | | 5.00k | |
| | | | 6.25k | |
| | | | 10.00k | |
| | | | 12.50k | |
| | | | 25.00k | |
| 2 | SQL | Squelch Level | 00 > 09 | 10 Squelch levels |
| | | | | 00 = minimum / normally open |
| 3 | TXP | Transmit Power | High | Full Power ~20W |
| | | | Low | Reduced power ~7W |
| 4 | SCR | Scrambler | On | Scrambler Function Enabled |
| | | | Off | Scrambler Function Disabled |
| 5 | TOT | TX Time Out Timer | 15 > 600 sec | 15 Second Steps |
| 6 | APO | Auto Power Off | 30, 60 > 300 Minutes | Time set that the radio will power down after the last signal is received |
| | | | Off | Turns off APO option |

| Menu # | Menu Name | Description | Secondary Menu | Notes |
|---|---|---|---|---|
| 7 | WN | Bandwidth | Wide Band | 25.0 kHz (disabled in this version) |
| | | | Narrow Band | 12.5 kHz |
| 8 | ABR | Unused Setting | -- | -- |
| 9 | Beep | Keypad audible tone | On/Off | Turn On/ Off keypad tone |
| 10 | R-DCS | Receive - Analog Tone Squelch | D023N > D754I | Squelch opens when proper DCS code is detected |
| | | | Off | No DCS code required |
| 11 | R-CTCS | Receive - Analog Tone Squelch | 67.0 > 254.1 Hz | Squelch opens when proper CTCSS tone is detected |
| | | | Off | No CTCSS tone required |
| 12 | T-DCS | Transmit - DCS Code | D023N > D754I | Transmits specified code |
| | | | Off | No DCS codes transmitted |
| 13 | T-CTCS | Transmit - CTCSS Code | 67.0 > 254.1 Hz | Transmits specified code |
| | | | Off | No CTCSS codes transmitted |
| 14 | DTMFST | Determines when DTMF codes are heard through speaker | Off | No DTMF tone heard |
| | | | DS-ST | Only manually keyed DTMF codes are heard |
| | | | ANI-ST | Only automatically keyed DTMF codes are heard |
| | | | DT-ANI | All DTMF codes are heard |
| 15 | BCL | Busy Channel Lockout | On | Prevents transmit if active signal on the channel |
| | | | Off | No lockout |
| 16 | SC-ADD | Add Scan Channel | On | Add channel to scan list |
| | | | Off | Remove channel from scan list |
| 17 | SC-REV | Scan Resume Method | TO | (Time Operations) Scan stops when a signal is detected the scan resumes after approximately 5 seconds (even if the channel is still active). |
| | | | CO | (Carrier Operation) Scan stops when a signal is detected. Scan resumes when signal disappears |
| | | | SE | (Search Operation) Scan stops when signal is detected. Scanning will not resume. |
| 18 | OPTSIG | Optional Signaling | Off | No Optional signaling |
| | | | DTMF | DTMF signaling selected |
| | | | 2 Tone | 2 Tone signaling selected |

| Menu # | Menu Name | Description | Secondary Menu | Notes |
|---|---|---|---|---|
| | | | 5 Tone | 5 Tone signaling selected |
| 19 | SPMUTE | Speaker Mute Setting | QT | Squelch opens for CTCSS/DCS tones only. |
| | | | AND | Squelch opens when CTCSS/DCS tone is recognized along with the optional signaling. |
| | | | OR | Squelch opens when either the CTCSS/DCS tone or the optional signaling is recognized. |
| 20 | PTT-ID | PTT-ID- When to send | Off | Do not send |
| | | | BOT | Send at beginning of transmission |
| | | | EOT | Send at the end of transmission |
| | | | Both | send at both beginning and end |
| 21 | PTT-LT | PTT ID - transmit Delay | 0 > 30 | Set delay time before transmitting PTT-ID |
| 22 | S-INFO | Auto Group Dialing | Group Signal Code Memory | 1 > 15 (Can only be set with software) |
| 23 | EMC-TP | Alarm Mode | ALARM | Turn on alarm sound |
| | | | ANI | Send alarm code and ID Code |
| | | | Both | Both of the above |
| | | | Off | Alarm mode completely disabled |
| 24 | EMC-CH | Alarm Channel | 000 > 199 | Specified Alarm Channel |
| 25 | SIG-BP | Signal Beep | On | Pager ring at reception of matching 2Tone / 5Tone / DTMF |
| | | | Off | |
| 26 | CHNAME | Channel Name edit | | Channel Mode, edit the current name |
| 27 | CA-MDF | Channel A Display Mode | FREQ | In channel mode, display the selected format in display A |
| | | | CH | |
| | | | NAME | |
| 28 | CB-BDF | Channel B Display Mode | FREQ | In channel mode, display the selected format in display B |
| | | | CH | |
| | | | NAME | |
| 29 | CC-MDF | Channel C Display Mode | FREQ | In channel mode, display the selected format in display C |
| | | | CH | |
| | | | NAME | |
| 30 | CD-BDF | Channel D Display Mode | FREQ | In channel mode, display the selected format in display D |
| | | | CH | |

| Menu # | Menu Name | Description | Secondary Menu | Notes |
|---|---|---|---|---|
| | | | NAME | |
| 31 | LANGUA | Language | English | Screen prompts display language |
| | | | Chinese | |
| 32 | AUTOLK | Auto Keypad Lock | On | Keypad Auto Lock Enabled |
| | | | Off | Keypad Auto Lock Disabled |
| 33 | MAINFC | Main LCD display foreground color (Text) | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 34 | MAINBC | Main LCD display background color | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 35 | MENU FC | On screen menu foreground color (text) | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 36 | MENU BC | On screen menu background color | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 37 | STA-FC | Status (Top) bar display foreground color (text) | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 38 | STA-BC | Status (Top) bar display background color | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 39 | SIG-FC | Bottom bar display foreground color (text) | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 40 | SIG-BC | Bottom bar display background color (text) | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 41 | RX-FC | Main LCD receiving color foreground color (text) | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |
| 42 | TX-FC | Main LCD TX color foreground color (text) | Select Color | Black, White, Red, Blue, Green, Yellow, Indigo, Purple, Gray |

| Menu # | Menu Name | Description | Secondary Menu | Notes |
|---|---|---|---|---|
| 43 | TXDISP | Transmit Display | Power | Display Power level on bottom display bar |
| | | | MIC-V | Display Mic Audio level on bottom display bar |
| 44 | MEM-CH | Program Channel | 000 > 199 | Indicates channel number to be stored to memory (Disabled) |
| 45 | DEL-CH | Delete Channel | 000 > 199 | Indicates channel number to be deleted from memory |
| 46 | SFT-D | Frequency shift direction | Off | No offset (simplex) |
| | | | + | Plus frequency shift |
| | | | - | Minus frequency shift |
| 47 | OFFSET | Frequency shift offset amount | 00.00 > 69.99 | frequency shift in MHz |
| 48 | ANI | ANI ID Code | | Can only be set with software |
| 49 | ANI-L | ANI Length | 3, 4, 5 | Length of ANI ID code |
| 50 | REP-S | Repeater Activation Tone | 1000Hz, 1450Hz, 1750Hz, 2100Hz | Audible tone for repeater activation |
| 51 | REP-M | Repeater forwarding Mode | Off | Function Off |
| | | | CARRI | Forward after receiving carrier |
| | | | CTDCS | Forward after receiving correct CTDCS |
| | | | TONE | Forward after receiving correct mono audio (Menu 42) |
| | | | DTMF | Forward after receiving assigned DTMF code (ANI) |
| 52 | TMR-MR | TMR - Return time delay to primary channel; this is the time delay before returning indicator to the primary channel for TMR (Menu # 0). | Off | Function Off - Transmits always on Primary channel |
| | | | 1 > 50 seconds | This is the delay time before returning to the primary channel after secondary signal is clear |
| 53 | STE | Squelch tail elimination requires both radios to have function "ON" | Off | Function Off |
| | | | On | Eliminates squelch tail at end of transmission |
| 54 | RP-STE | Repeater Squelch Tail Elimination Requires a repeater using this function | Off | Function Off |
| | | | 1 > 10 | Delay time (sec) |
| 55 | RPT-DL | Repeater squelch tail delay | Off | Function Off |
| | | | 1 > 10 | Delay time (sec) |
| 56 | DTMF-G | DTMF Gain / Audio level | 0 > 60 | 0 = Lowest Audio Gain;<br>60 = Highest Gain |

| Menu # | Menu Name | Description | Secondary Menu | Notes |
|---|---|---|---|---|
| 57 | PONKEY | Turn on radio by connected power supply | Off | After energizing, radio powers on automatically |
| | | | On | After energizing, you must press the power button to power on |
| 58 | RESET | Reset the radio to factory defaults | VFO | Menu reset |
| | | | ALL | Menu and channel reset |

# Other Settings and Options

## Programing

Adding or removing frequencies and programing has be locked out of this model even with programing software to comply with FCC regulations.

GMRS channels 015 – 030 are programed to transmit and receive. All other loaded frequencies are receive only. See the frequency chart for more information.

## Keypad Lock-out

Hold the microphone "#" for 2-3 seconds to turn on / off the keypad lock-out. Once locked a lock icon appears in the radio menu bar.

## PTT ID

Requires programing software to change the PTT ID code. Refer to Function menu to display PTT ID.

## Scanning Modes

The scanner is configurable to one of three ways of operation: Time, carrier or search, each of which is explained in further details in their respective section below.

1. Press the (Menu) key to enter the menu.
2. Enter "17" on your numeric keypad to come to scanner mode.
3. Press the (Menu) key to select.
4. Use the and (UP ↑) and (DOWN ↓) keys to select scanning mode.
5. Press the (MENU) key to confirm and save.
6. Press the (EXIT/AB) key to exit the menu.

See the function menu for the different scanning mode options and how each function operates.

## GMRS Repeaters

Memory channels 23 – 30 contain GMRS repeater channels. These channels should be operated with permission form your local repeater operators.

For more local information seek out your local frequency coordinator.
http://www.sbe.org/sections/freq_local.php

# Troubleshooting TheCOM-G95

If you experience difficulties using your COM we have many technical help references, videos, blogs and self-help on our website https://utvocm.com or the below chart can help t correct common operation problems. If you have a problem which you believe requires service, please call first and speak with a service technician at (208) 779-2891. Many problems can be remedied over the phone without returning the unit for service.

| Issue | Check |
|---|---|
| Radio will not power on | Check the vehicles battery to ensure that it is properly working and is charged |
| | Check the inline fuses and replace if needed. |
| | Check the input power connections, replace if needed. |
| Keypad is not responding or radio is not changing | Make sure the keypad and radio is not locked (look for the lock icon in the radio display). Refer to the function menu to unlock the keypad/radio. |
| | Power down the radio and power it back on |
| | Make sure the hand mic is plugged in the RJ-45 all the way. |
| Cannot transmit | Make sure you are on GMRS channels 15-30. All other channels are restricted to receive only to comply with FCC Part 95 |
| | If you have an intercom, check that your PTT is connected properly into the intercom “PTT” port and that intercom is connected to the radio via the proper TRRS (22 gauge wire shielded or larger) jumper wire |
| Cannot Receive | Verify both radios are on the same frequency / channel. |
| | Make sure you are in range of the other radio, repeater or incoming transmission. |
| | Make sure your signal is not obstructed by mountains, buildings or other obstructions. |

# Specifications

## Technical Specifications

| Description | Spec |
|---|---|
| Frequency Range (MHz) | VHF: 136-174 MHz Rx only<br>UHF: 400-470 MHz Rx only<br>GMRS (Channels 015-030) Tx/Rx<br>GMRS (Channels 01-014) Rx Only |
| Memory Channels | 200 |
| Frequency Stability | ±2.5ppm |
| Frequency Step (kHz | 2.5k/5.0k/6.25k/10.0k/12.5k/25.0k |
| Squelch Setup | CARRIER / CTCSS / DCS / 5Tone / 2 Tone / DTMF |
| Antenna Impedance | 50 Ohm |
| Operating Temperature | -20 ºC (-4 ºF) to 60 ºC (140 ºF) |
| Supply voltage | 13.8V DC±15% |
| Dimension | 5.7(W) x 1.85 (H) x 7.5 (D)in |
| Weight | 998 g (2.2 lb) |

## Receiver Specifications

| Description | Broadband | Narrow Band |
|---|---|---|
| Sensitivity | ≤ 0.25 µV | ≤ 0.35 µV |
| Channel Choice | ≥ 70 dB | ≥ 60 dB |
| Intermodulation | ≥ 65 dB | ≥ 60 dB |
| Spurious Rejection | ≥ 70 dB | ≥ 70 dB |
| Audio response | +1~-3dB (0.3-3KHz) | +1~-3dB (0.3-2.55KHz) |
| Signal to noise ratio | ≥ 45 dB | ≥ 40 dB |
| Audio distortion | ≤ 5% | |
| Audio output power | ≥ 2W ± 10% | |

## Transmit Specifications

| Description | Broadband | Narrow Band |
|---|---|---|
| Output Power | 20W UHF (VHF is disabled) | |
| Modulation Mode | 16KΦF3E | 11KΦF3E |
| Channel Power | ≥ 70 dB | ≥ 60 dB |
| Signal to Noise Ratio | ≥ 40 dB | ≥ 36 dB |
| Parasitic Harmonic | ≥ 60 dB | ≥ 60 dB |
| Audio Response | +1~-3dB (0.3-3KHz) | +1~-3dB (0.3-2.55KHz) |
| Audio Distortion | ≤ 5% | |

# Frequency List

| Channel | Band | Frequency Rx | Frequency Tx |
|---|---|---|---|
| 1 | UHF | 462.5625 | |
| 2 | UHF | 462.5875 | |
| 3 | UHF | 462.6125 | |
| 4 | UHF | 462.6375 | |
| 5 | UHF | 462.6625 | |
| 6 | UHF | 462.6875 | |
| 7 | UHF | 462.7125 | |
| 8 | UHF | 467.5625 | |
| 9 | UHF | 467.5875 | |
| 10 | UHF | 467.6125 | |
| 11 | UHF | 467.6375 | |
| 12 | UHF | 467.6625 | |
| 13 | UHF | 467.6875 | |
| 14 | UHF | 467.7125 | |
| 15 | UHF | 462.5500 | 462.5500 |
| 16 | UHF | 462.5750 | 462.5750 |
| 17 | UHF | 462.6000 | 462.6000 |
| 18 | UHF | 462.6250 | 462.6250 |
| 19 | UHF | 462.6500 | 462.6500 |
| 20 | UHF | 462.6750 | 462.6750 |
| 21 | UHF | 462.7000 | 462.7000 |
| 22 | UHF | 462.7250 | 462.7250 |
| 23 | UHF | 462.5500 | 467.5500 |
| 24 | UHF | 462.5750 | 467.5750 |
| 25 | UHF | 462.6000 | 467.6000 |
| 26 | UHF | 462.6250 | 467.6250 |
| 27 | UHF | 462.6500 | 467.6500 |
| 28 | UHF | 462.6750 | 467.6750 |
| 29 | UHF | 462.7000 | 467.7000 |
| 30 | UHF | 462.7250 | 467.7250 |
| 31 | VHF | 151.6250 | |
| 32 | VHF | 151.7150 | |
| 33 | VHF | 154.9800 | |
| 34 | VHF | 151.6850 | |
| 35 | VHF | 151.9250 | |
| 36 | VHF | 150.8600 | |
| 37 | VHF | 153.1100 | |

| Channel | Band | Frequency Rx | Frequency Tx |
|---|---|---|---|
| 38 | VHF | 152.9600 | |
| 39 | VHF | 151.5050 | |
| 40 | VHF | 153.3950 | |
| 41 | VHF | 153.3800 | |
| 42 | VHF | 155.1600 | |
| 43 | VHF | 153.2450 | |
| 44 | VHF | 151.7750 | |
| 45 | VHF | 151.4900 | |
| 46 | VHF | 154.5150 | |
| 47 | VHF | 156.6750 | |
| 48 | VHF | 152.5100 | |
| 49 | VHF | 157.4500 | |
| 50 | VHF | 153.1850 | |
| 51 | VHF | 162.5500 | |
| 52 | VHF | 162.4000 | |
| 53 | VHF | 162.4750 | |
| 54 | VHF | 162.4250 | |
| 55 | VHF | 162.4500 | |
| 56 | VHF | 162.5000 | |
| 57 | VHF | 162.5250 | |

*UHF = Ultra High Frequency (TX limited to GMRS 15-22 and where available repeater channels 23-30)*

*VHF = Very High Frequency (Listen only)*

____ *=Transmission disabled.*

*For GMRS radio licensing help: https://www.fcc.gov/general-mobile-radio-service-gmrs*

*We hope you enjoy your new COM, We offer self-help tech support on our website at https://utvcom.com/issue-resolution/ or please contact TheCOM if you require any additional help. info@utvcom.com*

TheCOM is a registered trademark of Stingray UTV LLC

Our Stingray UTV LLC radio generators RF electromagnetic energy during transmit mode.This radio is designed for and classified as“Occupational Use Only”,meaning it must be used only during the course of employment by individuals aware of the hazards,and the ways To Minimize Such hazards.

This radio is NOT intended for use by the“General Population” in an uncontrolled environment. This radio has been tested and complies with the FCC RF exposure limits for“Occupational Use Only”. Inaddition, our Stingray UTV LLC radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

---IEEE Std. 1528:2013 and KDB447498, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
---American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
---American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields-RF and Microwave.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to as-sure that this radio operates with the FCC RF exposure limits of this radio.
Electromagnetic Interference/Compatibility

During transmissions, Stingray UTV LLC radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use
The radio transmitter is used in situations in which persons are exposed as consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.