Mini Mobile Transceiver

Radioddity
www.radioddity.com

Radioddity *DB25-G*

GMRS-Transceiver and NOAA-Receiver
With external Speaker-Microphone

Palm Size, PC Programmable, DTMF, 2 Tone, 5 Tone, CTCSS, DCS

462-468MHz Transmit according to GMRS regulations

Radioddity

USER'S MANUAL

About Radioddity

“You, our friend and customer, are at the forefront of what we do.”

Nothing is more important than your time, and your money. When buying radios online, you face a dilemma: Save time and purchase from a reputable website at a high price, or try to save money by purchasing from an unreputable dealer at the cost of your time spent dealing with quality and service issues. At Radioddity.com, you don’t have to choose between low prices and a safe shopping experience. Whether you’re a first time buyer or a seasoned HAM, we hope you’ll find our products, prices, content and resources to be just what you need.

In the past several years, Radioddity has been better serving the needs of two-way radio buyers by creating a safe shopping experience. We do this by providing the highest quality products, at an affordable price, and backing that up with superior quality service. It sounds simple to us.

That is our promise: to improve your buying experience.

Through strong partnerships which allow us to bring you the latest technology from our own brand Radioddity and on behalf of our caring and responsive Customer Support team, we strive to fulfill that promise and better meet your needs every day.

Along with this promise, we hope to give you more value. Be that by offering you the latest and greatest in DMR and analog radios, accessories and related products, by providing superior technical support, or by working with thought leaders in the Amateur Radio Industry to develop enriching content to entertain and assist you in your buying process including our Blog, FAQ, and Newsletter. Your concerns are our concerns.

We do all of this to help you find the highest quality of radios, for low prices, with as little headache to the consumer as possible. If we are failing you in this promise in any way, let us know via email: **support@radioddity.com**

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ATTENTION!

Please observe the following precautions to prevent fire, personal injury, damage to the radio:

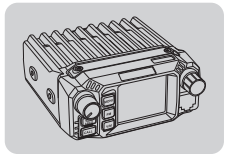
- Don't use this machine when driving, so dangerous.
- This radio is designed to use 13.8 V dc voltage, do not use the 24 V power supply to the the mobile radio.
- Please do not place the machine in the dust, moisture or water splashing.
- If there's any electromagnetic interference, please keep the mobile radio away from the sources such as TV set, engine generator etc.
- Do not expose the mobile radio to long periods of direct sunlight, for example on the dashboard of a vehicle or close to heating appliances.
- If the mobile radio generate any smoke or strange smell, please turn off the power supply immediately and make sure all is safe, then you can send the unit to the nearest after-sale center for inspection or repairment.
- Do not keep transmitting with high power output for too long time, which may lead to overheating and cause auto power off or failure.

PRODUCT INSPECTION

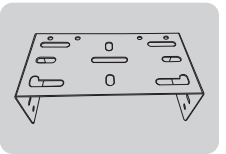
Welcome to use our mobile radio, before operation, it is recommended that you:

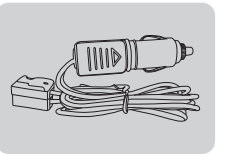
- Please check the package is in good condition without any damage.
- Please unpack the package box carefully and check that all items are included.
- If you find any items are missing or have been damaged during shipment, please contact your dealer immediately.

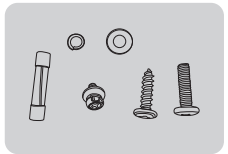
Standard accessories

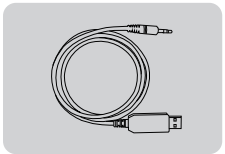

Mobile Radio

Speaker Microphone

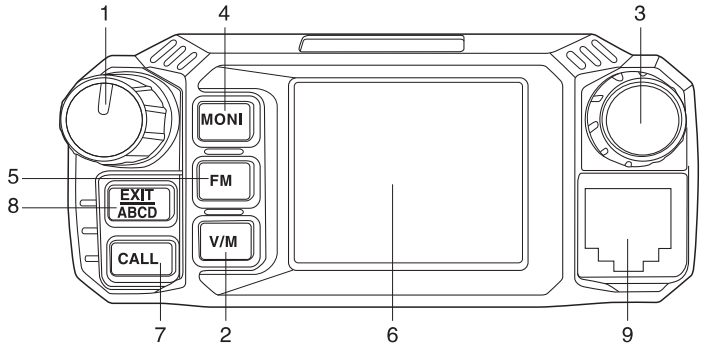

Mounting Bracket


Cigar–plug Power Cable

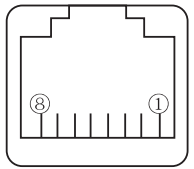

Screws & Fuse


Programming Cable

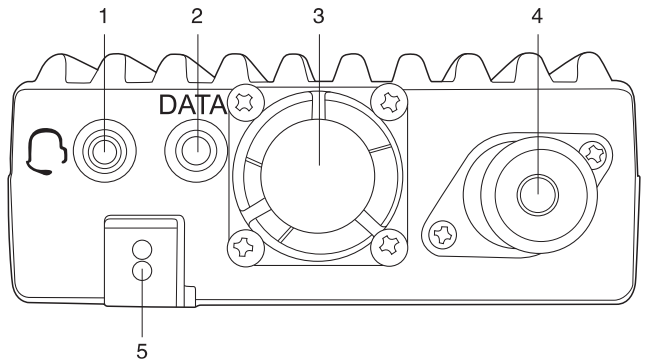
■ PANEL DESCRIPTION



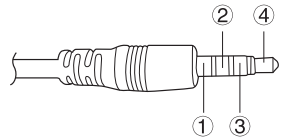
1 Power On/Off, Volume Knob
2 Mode Switch
3 Progress Knob, confirm key
4 Monitor
5 FM Radio
6 Display screen
7 Call key
8 A/B/C/D Switch, Emergency Alarm
9 Microphone Connector



① Data Input
② Null
③ MIC
④ MIC Ground
⑤ PTT.
⑥ GND
⑦ +8V DC Output
⑧ Null



1 PTT/Microphone/GND
2 DATA
3 Fan
4 Antenna connector
5 DC power supply



① GND
② SP
③ MIC
④ PTT

Hotkey function guide

Power/Volume: Press the key to turn on the radio. Hold on the key for seconds to turn off the radio. Switch the knob to adjust the volume.

[CALL] : In standby mode, press to send caller ID at selected signaling mode, in transmit mode, press to send repeat activate signaling.

[MONI] : Press to turn on or turn off the squelch.

[V/M] : Press to select radio mode. Hold on for seconds to select power output at this mode.

[EXIT A/B/C/D] : Press to exit function menu setting. In standby mode, press to select A, B, C, D frequency.

[FM] : Press to enter and exit FM radio function.

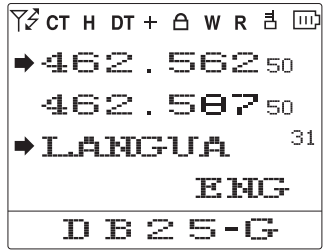
Coder/Function Key: Press to enter menu function setting mode. Hold on for seconds to exit function setting mode.

Read and Write the Password Function

Choose a password, reading, and writing (set password, please remember, once set, after software to read and write all need password to work)

LCD Description

Top place show spec at present working frequency/channel mode.



Addition transmit frequency under frequency mode.

Present channel have available DTMF signaling.

Present channel at High output power mode.

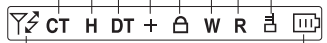
Present channel have set CTCSS.

Present channel scrambler available.

Present channel work at wide band mode.

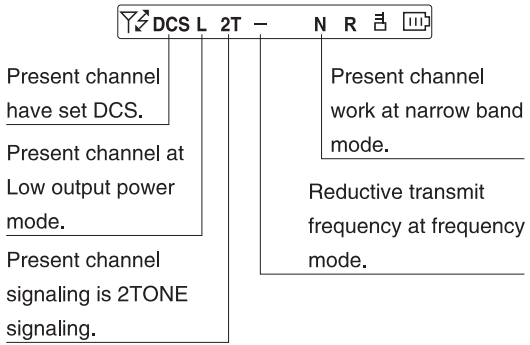
Shows present transmit and receive frequency reversal.

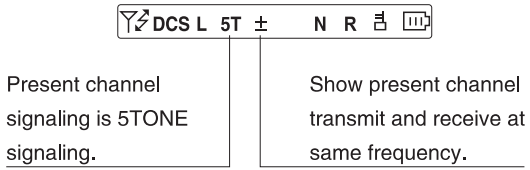
Shows keypad is locked.

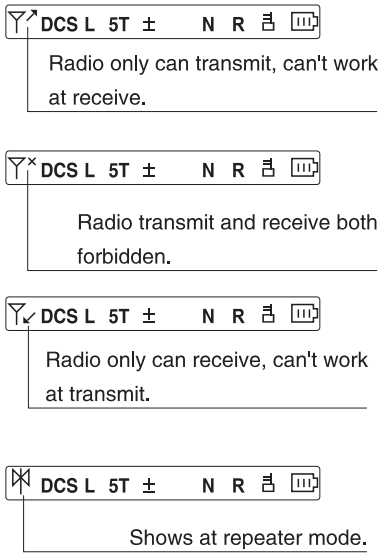


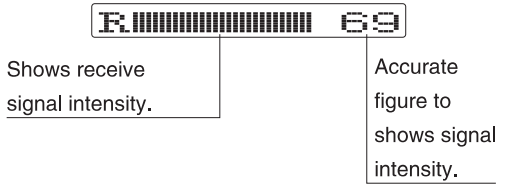
Shows the radio if at correct working.

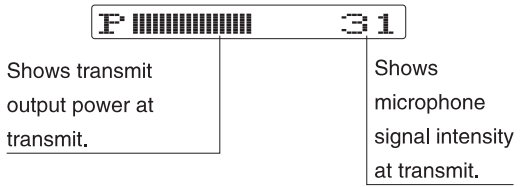
Shows battery capability.

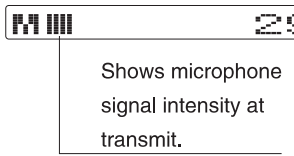

DCS L 2T – N R
Present channel have set DCS.
Present channel at Low output power mode.
Present channel signaling is 2TONE signaling.
Present channel work at narrow band mode.
Reductive transmit frequency at frequency mode.

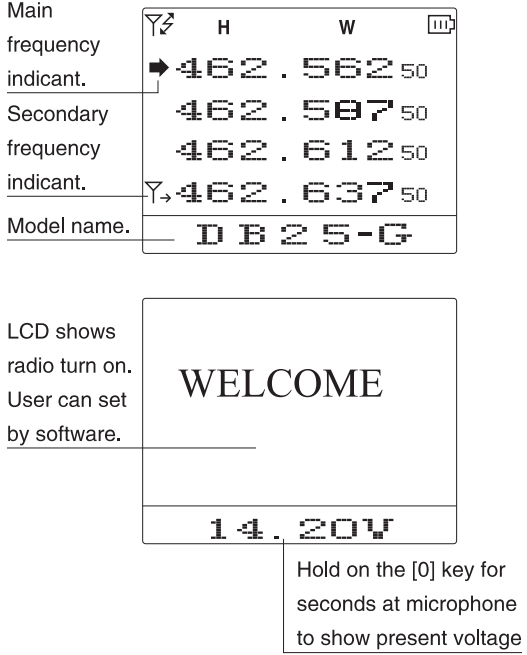

DCS L 5T ± N R
Present channel signaling is 5TONE signaling.
Show present channel transmit and receive at same frequency.


DCS L 5T ± N R
Radio only can transmit, can't work at receive.
DCS L 5T ± N R
Radio transmit and receive both forbidden.
DCS L 5T ± N R
Radio only can receive, can't work at transmit.
DCS L 5T ± N R
Shows at repeater mode.


R 69
Shows receive signal intensity.
Accurate figure to shows signal intensity.


P 31
Shows transmit output power at transmit.
Shows microphone signal intensity at transmit.


M 29
Shows microphone signal intensity at transmit.


Main frequency indicant.
Secondary frequency indicant.
Model name.
H W
462.562 50
462.587 50
462.612 50
462.637 50
DB25-G
LCD shows radio turn on. User can set by software.
WELCOME
14.20V
Hold on the [0] key for seconds at microphone to show present voltage

■ SAME TX RX FREQUENCY, DIFFERENT TX RX FREQUENCY CHANNEL MEMORY

Same TX RX frequency channel memory

① Use keypad write require frequency, for example 462.5625, press microphone **[MENU]** key (or Progress/confirm key)

② Menu select 44.

③ Press microphone **[MENU]** key (or Progress/confirm key) to select channel 050. Press **[MENU]** key (or Progress/confirm key) again to memory it to CH-050.

If before setting already shows CH-050 (not 001) means channel 1 is memorized.

Delete this memorized channel: select menu 45, press **[MENU]** key (or Progress/confirm key), select channel CH-050 press **[MENU]** key (or Progress/confirm key) again to delete, LCD shows 050 is empty channel.

④ Press **[MENU]** key (or Progress/confirm key) to memory it, LCD shows CH-050.

⑤ Press **[MENU]** key (or Progress/confirm key) back to main menu, select 27, A– channel setting the frequency, channel number, channel name, press **[MENU]** key (or Progress/confirm key) to confirm.

⑥ Same use menu 28, 29, 30 to setting the B, C, D frequency.

⑦ Hold on the **[MENU]** key (or Progress/confirm key) for seconds to exit. Or **[EXIT/AB]** key.

⑧ At frequency mode, press **[MENU]** key enter or exit the channel.

Different TX RX frequency channel (CTCSS/DCS) memory (connect repeater)

① Press **[MENU]** key (or Progress/confirm key), select menu 10.

② Press **[MENU]** key (or Progress/confirm key), setting the receive DCS figure.

③ Press **[MENU]** key (or Progress/confirm key) to confirm.

select menu 11 to setting the receive CTCSS

④ Press **[MENU]** key (or Progress/confirm key), setting the receive CTCSS figure.

⑤ Press **[MENU]** key (or Progress/confirm key) to confirm.

Select menu 12 setting transmit DCS.

⑥ Press **[MENU]** key (or Progress/confirm key), to setting the transmit DCS figure.

⑦ Press **[MENU]** key (or Progress/confirm key) to confirm.

⑧ Select menu 13. Press **[MENU]** key (or Progress/confirm key) to select transmit CTCSS figure.

⑨ Press **[MENU]** key (or Progress/confirm key) to confirm.

⑩ Press **[EXIT]** to exit.

If no need DCS/CTCSS then no then these steps.

Use microphone keypad press require frequency, for example 462.7125.

① Press microphone **[MENU]** key (or Progress/confirm key) enter menu.

② Menu select 44.

③ Press microphone **[MENU]** key (or Progress/confirm key) to select channel 051. Press **[MENU]** key (or Progress/confirm key) again to memory it to CH-051.

If before setting already shows CH-051 (not 051) means channel 2 is memorized.

Delete this memorized channel: select menu 45, press **[MENU]** key (or Progress/confirm key), select channel CH-051 press **[MENU]** key(or Progress/confirm key) again to delete, LCD shows 051 is empty channel.

④ Press **[MENU]** key (or Progress/confirm key) to memory it, LCD shows CH-051.

⑤ Press **[EXIT/AB]** key to exit.

Microphone press frequency for example 430.6250.

⑥ Press microphone **[MENU]** key (or Progress/confirm key) select menu 44.

⑦ Press **[MENU]** key (or Progress/confirm key) select channel CH-051.

⑧ Press **[MENU]** key (or Progress/confirm key) memory this frequency to transmit channel.

Back to main menu, select 27, A–channel setting the frequency, channel number, channel name, press **[MENU]** key (or Progress/confirm key) to confirm.

⑨ Same use menu 28, 29, 30 to setting the B, C, D frequency.

⑩ Hold on the **[MENU]** key (or Progress/confirm key) for seconds to exit. Or **[EXIT/AB]** key.

At frequency mode, hold on **[MENU]** key for seconds to enter or exit channel.

■ MENU FUNCTION SETTING OPERATION

Operation For Manual Channel Memory And Delete

Channel memory:

1. Directly input frequency by keypad under frequency mode. Example: 435.125 MHz input 4,3,5,1,2,5.
2. Setting CTDCS frequency (manual page 10, 11). Setting transmit CTDCS frequency (manual page 12,13). For example: receive CTDCS 67.0HZ, transmit CTDCS 67.0HZ. Press **[MENU]** Key + **[1]** Key + **[1]** Key + **[MENU]** + **[UP]** Key. Select 67.0HZ + **[MENU]** Key.

   Transmit CTDCS 67.0HZ. Press **[MENU]** Key + **[1]** Key + **[3]** Key + **[MENU]** + **[UP]** Key. Select 67.0HZ +[MENU] Key. Press **[MENU]** Key again to save and exit. (If no need CTDCS all select OFF)
3. Select manual 44 to memory the channel, press **[MENU]** Key + **[4]** Key + **[4]** Key + **[MENU]** Key + **[UP]** (DOWN) select channel + **[MENU]** Key to memory the channel information.

Delete channel:

Select menu 45. Press **[MENU]** + **[4]** + **[5]** + **[MENU]**+ **[UP]** (DOWN) select the channel number + **[MENU]** Key to delete.

Preconfigured Channels 1-7

According to GMRS, Channels 1…7 are limited for a maximum output power of 5W with a bandwidth of 20kHz.

Channel	Frequency	Name
1	462.5625 MHz	GMRS-1
2	462.5875 MHz	GMRS-2
3	462.6125 MHz	GMRS-3
4	462.6375 MHz	GMRS-4
5	462.6625 MHz	GMRS-5
6	462.6875 MHz	GMRS-6
7	462.7125 MHz	GMRS-7

Preconfigured Channels 8-14

Channels 8…14 are receive only channels with a bandwidth of 12.5kHz

Channel	Frequency	Name
8	467.5625 MHz	GMRS-8
9	467.5875 MHz	GMRS-9
10	467.6125 MHz	GMRS-10
11	467.6375 MHz	GMRS-11
12	467.6625 MHz	GMRS-12
13	467.6875 MHz	GMRS-13
14	467.7125 MHz	GMRS-14

Preconfigured NOAA Channels

Channels CH190 up to CH199 are preassigned for NOAA-reception and may not be altered by the user.

Channel	Frequency	Name
190	162.5500 MHz	NOAA 1
191	162.4000 MHz	NOAA 2
192	162.4750 MHz	NOAA 3
193	162.4250 MHz	NOAA 4
194	162.4500 MHz	NOAA 5
195	162.5000 MHz	NOAA 6
196	162.5250 MHz	NOAA 7
197	161.6500 MHz	NOAA 8
198	161.7750 MHz	NOAA 9
199	161.7500 MHz	NOAA 10

Memory FM Radio Channel

Use PC software to edit FM radio channel. (Software FM option). Under transmit send DTMF code by microphone keypad. Press microphone **[*]** Key to search FM channel under FM mode.

Keypad Lock-out

Hold the microphone **[#]** key for 2 seconds at standby to turn on/off the keypad lock–out function.

Transmit Transit Signal

Select transit signal frequency (out radio have 4 kind transit signal frequency). Press **[MENU]** + **[5]** + **[0]** + **[MENU]** + **[UP]**(DOWN) select transit signal frequency + **[MENU]** key to save setting. Hold **[PTT]** and press **[CALL]** Key to transmit setting transit signal.

PTT ID Setting

Use PC software to edit PTT–ID code.

1. Manual 18, select signal. Press **[MENU]** + **[1]** + **[8]** + **[MENU]** + **[UP]**(DOWN) select signal + **[MENU]** save the setting.
2. Manual 20, setting PTT launch. Press **[MENU]** + **[2]** + **[0]** + **[MENU]** + **[UP]**(DOWN) select signal + **[MENU]** save the setting.
3. Manual 21, setting PTT transmit delay time. Press **[MENU]** + **[2]** + **[1]** + **[MENU]** + **[UP]** (DOWN) select delay time + **[MENU]** save thesetting.
4. Press **[PTT]** to send setting ID code.

Optional Signalling Setup

DTMF Signalling Setup

This radio is capable of DTMF encode/decode feature, users can program the desired DTMF code by PC program.

DTMF Signalling

If the radio is pre-programmed with DTMF signalling code, when it receive a matched code it will alert and display the corresponding code, also radios can communicate with each other in valid time. (ID code is programmable by PC software)

Patrol Function

When receiving matched DTMF signalling which is same as pre-programmed patrol code, the radio will emit self ID code which will display on master controll radio.

This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling. (Patrol code is programmable by PC software)

Monitor Function

When receiving matched DTMF signalling which is same as pre-programmed monitor code, the radio will transmit to monitor the surrounding voice. This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling. (Monitor code is programmable by PC software)

Remote Stun

When receiving matched DTMF signalling which is same as pre-programmed remote stun code, transmitting is disabled, it will also alert on the display mode. The radio will restore to work normally only after remote revived. This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling. (Remote stun code is programmable by PC software)

Remote Kill

When receiving matched DTMF signalling which is same as pre-programmed remote kill code, transmitting, receiving and all activities will be disabled, it will also alert on the display mode. The radio will restore to work normally only after remote revived. This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling. (Remote kill code is programmable by PC software)

Remote Revive

When receiving matched DTMF signalling which is same as pre-programmed remote revive code, the radio will be revived and restore to work normally. This function is able to select to be or not to be controlled by master ID code, this function is not controlled by RX signalling.(Remote revive code is programmable by PC software)

Emergency Alarm

When receiving matched DTMF signalling which is same as pre-programmed emergency alarm code, the radio will emit emergency alarm. Emergency alarm mode and channel is PC programmable. This function is not controlled by master ID code and RX signalling. (Emergency alarm code is programmable by PC software)

Signalling controlled by master ID: Function will be implemented only when both signalling and mater ID matched.

Signalling no controlled by master ID format:signalling + # + Information Code

Signalling controlled by master ID format: signalling + # + Master ID code + # + Information Code

DTMF Transmit By Call Key Setting

1. Select DTMF signal, press **[MENU]** + **[1]** + **[8]** + **[MENU]** + **[UP]** (DOWN) select DTMF signal + **[MENU]** save setting.
2. Select signal information code. Press **[MENU]** + **[2]** + **[2]** + **[MENU]** + **[UP]** (DOWN) select decode signal information code group (1–15) + **[MENU]** save the setting. (Can use PC software set DTMF code).
3. Press **[Call]** Key transmit selected DTMF code group at standby.

2 TONE And 2 TONE Signal Transmit by Call Key Setting

1. Press **[MENU]** select 18 OPTSIG, press **[MENU]** select 2 TONE function.
2. Press **[MENU]** select 22 S–INFO, press **[MENU]** select pre–code signal group (1–16). (Can use PC software setting 2 TONE).
3. Corresponding function will turn on when receive 2 TONE signal is same as pre–set 2 TONE code.

4. Press **[Call]** to send 2 TONE group code at standby.

5 TONE Signal Setting

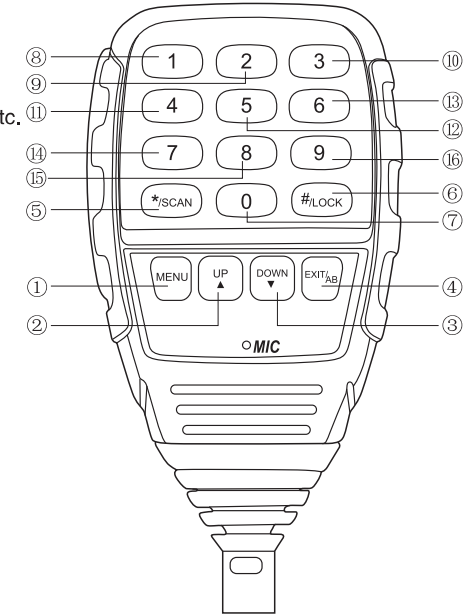
This radio have 5 TONE coding/decode function. You can use PC software to input signal information code. (enter software signal edit select 5 TONE and setting). Receiver set 5 TONE signal, then after receive same 5 TONE signal (code must 5 bit) receiver turn on the ring function and display the information code. Speech at effective time is available. (ID code can use PC software to setting).

Press **[Call]** Key to transmit 5 TONE.

1. Press **[MENU]** key, select 18 OPTSIG press **[MENU]** select 5 TONE function, press **[MENU]** to confirm setting.
2. Press **[MENU]** , select 22 S–INFO press **[MENU]** key to select pre–code signal group 1–15. (Can use PC software setting 5 TONE information code, each group can transmit 3 group 5 TONE code for optional).
3. Press **[Call]** key transmit pre–set 5 TONE code group at standby.

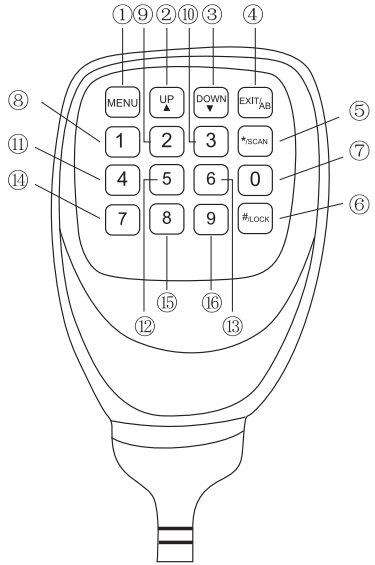
■ SPEAKER MICROPHONE DESCRIPTION (optional)

① "MENU": Function key
② "UP": Tune up channel step
③ "DOWN": Tune down channel step
④ "EXIT": Exit A/B channel switch, emergency alarm etc.
⑤ "*/SCAN": Offset function, scan, digital "*"
⑥ "#/LOCK": Keypad lockout function, digital "#"
⑦ "0": Number 0
⑧ "1": Number 1
⑨ "2": Number2
⑩ "3": Number3
⑪ "4": Number4
⑫ "5": Number5
⑬ "6": Number6
⑭ "7": Number7
⑮ "8": Number8
⑯ "9": Number9



SPEAKER MICROPHONE DESCRIPTION (optional)

① "MENU": Function key
② "UP": Tune up channel step
③ "DOWN": Tune down channel step
④ "EXIT": Exit A/B channel switch, emergency alarm etc.
⑤ "*/SCAN": Offset function, scan, digital "*"
⑥ "#/LOCK": Keypad lockout function, digital "#"
⑦ "0": Number 0
⑧ "1": Number 1
⑨ "2": Number2
⑩ "3": Number3
⑪ "4": Number4
⑫ "5": Number5
⑬ "6": Number6
⑭ "7": Number7
⑮ "8": Number8
⑯ "9": Number9



Microphone Keypad Operation

1. Hold on microphone **[MENU]** key for seconds can switch select channel mode or frequency mode.
2. Press **[#]** key to switch High/Low transmit output power.
3. Hold on **[#]** key for seconds to Lock/Unlock the keypad.
4. Hold on **[EXIT/AB]** key for seconds to active Alarm mode.
5. Press **[EXIT/AB]** key select present working frequency.
6. Press **[*]** key to reverse the transmit frequency and receive frequency.
7. Hold on **[*]** key to start Scan function.
8. Hold on **[0]** key for seconds, to display present power supply voltage

■ FUNCTION MENU

Menu	Primary Menu Icon	Secondary Menu Icon	Secondary Function Description
0	TMR	OFF	Disable TMR (multiple standby function)
		M+A	Enable TMR, main frequency and A frequency standby
		M+B	Enable TMR, main frequency and B frequency standby
		M+C	Enable TMR, main frequency and C frequency standby
		M+D	Enable TMR, main frequency and D frequency standby
		M+A+B	Enable TMR, main frequency A and B frequency standby
		M+A+C	Enable TMR, main frequency A and C frequency standby
		M+A+D	Enable TMR, main frequency A and D frequency standby
		M+B+C	Enable TMR, main frequency B and C frequency standby
		M+B+D	Enable TMR, main frequency B and D frequency standby
		M+C+D	Enable TMR, main frequency C and D frequency standby
		M+A+B+C	Enable TMR, main frequency A B and C frequency standby
		M+A+C+D	Enable TMR, main frequency A C and D frequency standby
		M+B+C+D	Enable TMR, main frequency B C and D frequency standby
		A+B+C+D	Enable TMR, A B C and D frequency standby
1	STEP	2.50K	In frequency mode, press [UP] and [DOWN] to select step figure.
		5.00K	
		6.25K	
		10.00K	
		12.50K	
		25.00K	

2	SQL	0,⋯,9	Squelch level 0–9 selective
3	TXP	HIGH	High power output
		LOW	Low power output
4	M-GAIN	0,…,127	Microphone Gain
5	TOT	15,30,⋯600	Time out timer, 15–600s selective, step is 15s.
6	APO	OFF, 30, 60, 90 ⋯ 300	Auto power off time (no signal, no operation)
7	WN	WIDE	Wide band
		NARR	Narrow band
8	ABR	OFF	backlight always on
		1, 2, 3, 4, 5	Auto backlight off time (Color screen unavailable)
9	BEEP	OFF	Alert tone off
		ON	Alert tone on
10	R–DCS	OFF	None DCS tone programmed
		D023N, ⋯, D754I	Desired DCS tone programmed
11	R–CTCS	OFF	None CTCSS tone programmed
		67.0HZ, ⋯, 254.1HZ	Desired CTCSS tone programmed, and can directly input by keypad.
12	T–DCS	OFF	None DCS tone programmed
		D023N, ⋯, D754I	Desired DCS tone programmed
13	T–CTCS	OFF	None CTCSS tone programmed
		67.0HZ, ⋯, 254.1HZ	Desired CTCSS tone programmed, and can directly input by keypad.
14	DTMFST	OFF	Radio will not emit code tone when transmitting DTMF code

		KEY	Radio emit code tone when manually transmitting DTMF code by key
		ID	Radio emit code tone when auto transmitting the DTMF code
		BOTH	Radio emit code tone in both conditions
15	BCL	OFF	Radio can transmit at any time
		ON	Raido cannot transmit when the selected channel is busy
16	SC–ADD	OFF	Deletes the Channel from the SCAN list
		ON	Adds the Channel to the SCAN list
17	SC–REV	TO	Scan by time
		CO	Scan by carrier
		SE	Scan by search
18	OPTSIG	OFF	Disable optional signalling
		DTMF	DTMF as optional signalling
		2TONE	2 TONE as optional signalling
		5TONE	5 TONE as optional signalling
19	SPMUTE	QT	Speaker unmutes when receiveing matched QT/DQT
		AND	Speaker unmutes when receiveing both matched optional signalling and QT/DQT
		OR	Speaker unmutes when receiveing either matched optional signalling or QT/DQT
20	PTT–ID	OFF	Disable PTT–ID transmit
		BOT	Press PTT to transmit signalling code (set by software)
		EOT	Release PTT to transmit signalling code
		BOTH	Press PTT and Release PTT to transmit signalling code

21	PTT–LT	0, 1, ···, 30	Delay time before PTT–ID transmit
22	S–INFO	1, ···, 15	Signalling code can be programmed by PC software only
23	EMC–TP	ALARM	Radio emit emergency alarm tone
		ANI	Radio emit emergency alarm code and ANI code
		BOTH	Radio emit emergency alarm tone, alarm code and ANI code
24	EMC–CH	000, ···, 199	Radio will emit emergency alarm from specified emergency alarm channel
25	SIG–BP	OFF	Signalling available not prompt
		ON	Signalling available prompt
26	CHNAME		In channel mode to edit the channel name
27	CA–MDF	FREQ	Frequency mode
		CH	Channel display mode
		NAME	Channel name display mode (name set by software)
28	CB–MDF	FREQ	Frequency mode
		CH	Channel display mode
		NAME	Channel name display mode (name set by software)
29	CC–MDF	FREQ	Frequency mode
		CH	Channel display mode
		NAME	Channel name display mode (name set by software)
30	CD–MDF	FREQ	Frequency mode
		CH	Channel display mode
		NAME	Channel name display mode (name set by software)

31	LANGUA	ENG	English menu
		CHS	Chinese menu
32	AUTOLK	OFF	Disable keypad auto lockout function
		ON	Enable keypad auto lockout function
33	MAINFC	BLACK	Setting main LCD figure color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
34	MAINBC	BLACK	Setting main LCD back color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
35	MENUFC	BLACK	Setting Menu figure color
		WHITE	
		RED	

		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
36	MENUBC	BLACK	Setting Menu back color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
37	STA–FC	BLACK	Setting top figure front color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	

38	STA–BC	BLACK	Setting top figure back color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
39	SIG–FC	BLACK	Setting bottom signal figure color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
40	SIG–BC	BLACK	Setting bottom signal figure back color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	

		PURPLE	
		GRAY	
41	RX–FC	BLACK	Set receiving figure color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
		PURPLE	
		GRAY	
42	TX–FC	BLACK	Set transmitting figure color
		WHITE	
		RED	
		BLUE	
		GREEN	
		YELLOW	
		INDIGO	
43	TXDISP	POWER	Bottom signal shows output power at transmit
		MIC–V	Bottom signal shows volume at transmit
44	MEM–CH	000, ···, 199	Select a channel (000–199) to store desired frequency, the channel (000–199) with "CH" was already programmed with frequency
45	DEL–CH	000, ···, 199	Delete the channel information, if the channel number without "CH" means no programmed

46	SFT–D	OFF	Offset is turn off, TX RX frequency is same
		+	Plus offset, means TX frequency is higher then RX
		–	Minus offset, means TX frequency is lower then RX
47	OFFSET		Offset frequency range is 00.000–69.990MHz sel–ective. In VFO mode, the offset between TX and RX
48	ANI		ANI code, programmed by PC software only
49	ANI–L	3, 4, 5	Length of ANI code
50	REP–S	1000	Transmitting press CALL to send 1000Hz to activate repeater function
		1450	Transmitting press CALL to send 1450Hz to activate repeater function
		1750	Transmitting press CALL to send 1750Hz to activate repeater function
		2100	Transmitting press CALL to send 2100Hz to activate repeater function
51	REP–M	OFF	Disable repeater transponder function
		CARRI	Repeater transpond when receiving matched carrier
		CTDCS	Repeater transpond when receiving matched CTCSS/DCS
		TONE	Repeater transpond when receiving matched tone
		DTMF	Repeater transpond when receiving matched DTMF code
52	TMR–MR	OFF, 1, 2, 3, ··· 50	Delay time for main frequency back, at multi standby
53	STE	OFF	Disable squelch tail–eliminated function
		ON	Enable squelch tail–eliminated function

54	RP–STE	OFF, 1, 2, 3, ···10	1–10 indicate squelch tail length, used to eliminate squelch tail noise produced
55	RPT–DL	OFF, 1, 2, 3, ···10	1–10 select delay time to receive repeater tail noise
56	DTMF–G	0, 1, 2, 3, ··· 60	Set DTMF gain
57	PONYEY	OFF	manual power on/off (long press of volume knob)
		ON	automatic power on/off
58	RESET	VFO	Reset the menu mode to factory default setting
		ALL	Reset all memories and other setting to factory default setting

Supported CTCSS and DCS codes

The DB25-G does support the following CTCSS and DCS codes for encoding and decoding.

■ GENERAL SPECIFICATIONS

General Specifications

Frequency range	TX: GMRS RX: 136-174MHz/ 400-480MHz
Channel capacity	200 channels
Channel Spacing	25KHz /12.5KHz
Channel step	2.5KHz / 5KHz / 6.25KHz / 10KHz / 12.5KHz / 25KHz
Working Voltage	13.8V DC ± 15%
Squelch way	CARRIER / CTCSS / DCS / 5Tone / 2Tone / DTMF
Frequency stability	± 2.5ppm
Operating temperature	–20~+60℃
Dimension	98 (W) x 44 (H) x128 (D) mm
Weight	448g

Receiver (ETSI EN 300 086 Standardized.Test)

	Wide Band	Narrow Band
Sensitivity	≤0.25μV	≤0.35μV
Adjacent Channel Selectivity	≥70dB	≥60dB
Intermodulation	≥65dB	≥60dB
Spurious Rejection	≥70dB	≥70dB
Audio response	+1~–3dB (0.3~3KHz)	+1~–3dB (0.3~2.55KHz)
Hum & Noise	≥45dB	≥40dB
Audio Distortion	≤5%	
Audio output power	≥2W@10%	

Transmit (ETSI EN 300 086 Standardized.Test)

	Wide Band	Narrow Band
Output power	5W/ 25W GMRS	
Modulation Mode	16KΦF3E	11KΦF3E
Adjacent Channel Selectivity	≥70dB	≥60B
Hum & Noise	≥40dB	≥36dB
Spurious Emission	≥60dB	≥60dB
Audio response	+1~–3dB (0.3~3KHz)	+1~–3dB (0.3~2.55KHz)
Audio distortion	≤5%	

Attention: Above specifications are subject to change without any notice due to technology enhancement.

Appendix A. - GMRS Frequency Chart (MHz)

CH.No	CH.Freq.(MHz)	Name	CH.No	CH.Freq.(MHz)	Name
1	462.5625	GMRS-1	12	467.6625	GMRS-12
2	462.5875	GMRS-2	13	467.6875	GMRS-13
3	462.6125	GMRS-3	14	467.7125	GMRS-14
4	462.6375	GMRS-4	15	462.5500	GMRS-15
5	462.6625	GMRS-5	16	462.5750	GMRS-16
6	462.6875	GMRS-6	17	462.6000	GMRS-17
7	462.7125	GMRS-7	18	462.6250	GMRS-18
8	467.5625	GMRS-8	19	462.6500	GMRS-19
9	467.5875	GMRS-9	20	462.6750	GMRS-20
10	467.6125	GMRS-10	21	462.7000	GMRS-21
11	467.6375	GMRS-11	22	462.7250	GMRS-22

* Channels 8~14 are low-power FRS license free channels.

CH.No	CH.Freq.(MHz)	Name	CH.No	CH.Freq.(MHz)	Name
23	462.5500 / 467.5500	RPT-1	27	462.6500 / 467.6500	RPT-5
24	462.5750 / 467.5750	RPT-2	28	462.6750 / 467.6750	RPT-6
25	462.6000 / 467.6000	RPT-3	29	462.7000 / 467.7000	RPT-7
26	462.6250 / 467.6250	RPT-4	30	462.7250 / 467.7250	RPT-8

Appendix B. - DCS Table

DCS CODE LIST

Number	Code	Number	Code	Number	Code	Number	Code	Number	Code
1	D023N	2	D025N	3	D026N	4	D031N	5	D032N
6	D036N	7	D043N	8	D047N	9	D051N	10	D053N
11	D054N	12	D065N	13	D071N	14	D072N	15	D073N
16	D074N	17	D114N	18	D115N	19	D116N	20	D122N
21	D125N	22	D131N	23	D132N	24	D134N	25	D143N
26	D145N	27	D152N	28	D155N	29	D156N	30	D162N
31	D165N	32	D172N	33	D174N	34	D205N	35	D212N
36	D223N	37	D225N	38	D226N	39	D243N	40	D244N

Number	Code	Number	Code	Number	Code	Number	Code	Number	Code
41	D245N	42	D246N	43	D251N	44	D252N	45	D255N
46	D261N	47	D263N	48	D265N	49	D266N	50	D271N
51	D274N	52	D306N	53	D311N	54	D315N	55	D325N
56	D331N	57	D332N	58	D343N	59	D346N	60	D351N
61	D356N	62	D364N	63	D365N	64	D371N	65	D411N
66	D412N	67	D413N	68	D423N	69	D431N	70	D432N
71	D445N	72	D446N	73	D452N	74	D454N	75	D455N
76	D462N	77	D464N	78	D465N	79	D466N	80	D503N
81	D506N	82	D516N	83	D523N	84	D526N	85	D532N
86	D546N	87	D565N	88	D606N	89	D612N	90	D624N
91	D627N	92	D631N	93	D632N	94	D645N	95	D654N
96	D662N	97	D664N	98	D703N	99	D712N	100	D723N
101	D731N	102	D732N	103	D734N	104	D743N	105	D754N
106	D023I	107	D025I	108	D026I	109	D031I	110	D032I
111	D036I	112	D043I	113	D047I	114	D051I	115	D053I
116	D054I	117	D065I	118	D071I	119	D072I	120	D073I
121	D074I	122	D114I	123	D115I	124	D116I	125	D122I
126	D125I	127	D131I	128	D132I	129	D134I	130	D143I
131	D145I	132	D152I	133	D155I	134	D156I	135	D162I

Number	Code	Number	Code	Number	Code	Number	Code	Number	Code
136	D165I	137	D172I	138	D174I	139	D205I	140	D212I
141	D223I	142	D225I	143	D226I	144	D243I	145	D244I
146	D245I	147	D246I	148	D251I	149	D252I	150	D255I
151	D261I	152	D263I	153	D265I	154	D266I	155	D271I
156	D274I	157	D306I	158	D311I	159	D315I	160	D325I
161	D331I	162	D332I	163	D343I	164	D346I	165	D351I
166	D356I	167	D364I	168	D365I	169	D371I	170	D411I
171	D412I	172	D413I	173	D423I	174	D431I	175	D432I
176	D445I	177	D446I	178	D452I	179	D454I	180	D455I
181	D462I	182	D464I	183	D465I	184	D466I	185	D503I
186	D506I	187	D516I	188	D523I	189	D526I	190	D532I
191	D546I	192	D565I	193	D606I	194	D612I	195	D624I
196	D627I	197	D631I	198	D632I	199	D645I	200	D654I
201	D662I	202	D664I	203	D703I	204	D712I	205	D723I
206	D731I	207	D732I	208	D734I	209	D743I	210	D754I

Appendix C. - CTCSS Table

CTCSS CHART (Hz)

Number	Frequency	Number	Frequency	Number	Frequency	Number	Frequency	Number	Frequency
1	67.0	2	69.3	3	71.9	4	74.4	5	77.0
6	79.7	7	82.5	8	85.4	9	88.5	10	91.5
11	94.8	12	97.4	13	100	14	103.5	15	107.2
16	110.9	17	114.8	18	118.8	19	123.0	20	127.3
21	131.8	22	136.5	23	141.3	24	146.2	25	151.4
26	156.7	27	159.8	28	162.2	29	165.5	30	167.9
31	171.3	32	173.8	33	177.3	34	179.9	35	183.5
36	186.2	37	189.9	38	192.8	39	196.6	40	199.5
41	203.5	42	206.5	43	210.7	44	218.1	45	225.7
46	229.1	47	233.6	48	241.8	49	250.3	50	254.1