

# **BridgeCom SYSTEMS BCS-MV65 Walkie Talkie Two Way Radios User Manual**

<u>Home</u> » <u>BridgeCom SYSTEMS</u> » BridgeCom SYSTEMS BCS-MV65 Walkie Talkie Two Way Radios User Manual





## **Contents**

- 1 BCS-MV65 Walkie Talkie Two Way Radios
- 2 User Safety Information
- 3 Preparation
- 4 Getting Familiar with Radio
- **5 Operation**
- 6 Menu Setting
- 7 Warranty and Service
- 8 Documents / Resources
  - 8.1 References

**BCS-MV65 Walkie Talkie Two Way Radios** 



IP65 Approved Waterproof with display License Free! Moors Band Multi – Use Radio Service Model CS-MV65 with flashlight 5 work channels 7 weather channels Helping You Communicate Using Radio

#### Welcome

Thank you for purchasing the Bridegroom BCS-MV65.

MURS two-way radio. The goal of BridgeCom is to provide a cost effective, feature rich, easy to use radio. This owner's manual will acquaint you with the features and operation of the radio. Every effort has been made in the preparation of this manual to properly operate the radio before use.

Multi-Use Radio Service (MURS) uses channels in the 151 - 154 MHz spectrum range. An individual license is not required to operate a MURS transmitter.

The most common use of MURS channels is for short-distance, two way communications using small, portable hand-held radios that func tion similar to walkie-talkies. Your radio has 5 MURS frequencies and 7 NOAA weather channels.

## **MURS Work Channels**

- CH 1 = 151.820 MHz (11.25 kHz)
- CH 2 = 151.880 MHz (11.25 kHz)
- CH 3 = 151.940 MHz (11.25 kHz)
- CH 4 = 154.570 MHz (20.00 kHz)
- CH 5 = 154.600 MHz (20.00 kHz)

## **NOAA** Weather Channels

- WX1 162.550 MHz
- WX2 162.400 MHz

- WX3 162.475 MHz
- WX4 162.425 MHz
- WX5 162.450 MHz
- WX6 162.500 MHz
- WX7 162.525 MHz

## **User Safety Information**

As a user of this radio be fully aware of hazards to RF exposure. The Federal Communications Commission (FCC), with its action in General Docket 93-62, November 7, 1997, has adopted a safety Stan dared for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC regulated equipment. Proper operation of this radio will result in user exposure far below the Occupational Safety and Health act (OSHA) and FCC limits.

DO NOT transmit for more than a 50% duty cycle (example: 1 min. transmitting, 1 min. receiving or in standby) transmitting more than 50% of the time may cause FCC RF exposure compliance require mints to be exceeded. The radio is transmitting when the red LED is illuminated, hold the radio approximately 1 inch (2.5 cm) away from the MIC located on the front of the radio.

The above operating conditions are required for meeting FCC RF exposture compliance, failure to follow these restrictions are considered a violation.

#### **Safety Warning**

Do not transmit the radio with a damaged antenna or touch the antenna while transmitting. Strong electromagnetic waves are emitted from the radio which may damage the radio or cause an RF burn to your skin.

Do not use non-approved accessories with your radio. Unauthorized accessories may create unauthorized RF emissions or cause damage to the radio or may result in illegal operation.

Do not disassemble or modify the radio, doing so will void the warranty and may result in illegal operation.

Do not leave the radio in direct sunlight or around excessive heat, doing so may cause the battery to explode or catch fire.

Do not use radio if it has been immersed in water an electronic shock may occur or permanent damage may occur to the radio.

NOTE: It is important for users to understand and recognize the general risks of using two-way radios.

#### Unpacking

Please take care to remove the radio from the box. We recommend that you confirm the following items in the box before discarding the packaging materials.

#### **■** Supplied Accessories

ITEM	QTY
Radio	1
Antenna	1
7.4V Li-ion battery	1
Charger cup	1
Wall Adaptor	1
Belt Clip	1
Manual	1
Wrist Strap	1

## **Preparation**

#### ■ Charging instructions

- The battery pack is not charged at the factory, charge before use. After purchase or after long-term storage (more than two months), charging the battery pack for the first time does not allow the bat- tery pack to reach its saturated usage capacity. After repeated charging and discharging two or three times, normal charging and battery capacity can be achieved.
- Turn off the power of the radio before charging. A radio that is left powered on in the charger cup may prevent the battery from charging properly.

Once the battery fails to maintain its charge during normal use the battery pack may have reached the end of its life. Replacement with a new battery will be necessary.

#### NOTE:

- Do not recharge the battery pack once it is fully charged. Doing so may cause the life of the battery pack to shorten or the battery pack may be damaged.
- After Recharging the battery pack, remove from the charger cup.
- Do not short the battery terminals or discard batteries in a fire or normal trash waste.

#### ■ Charging step

Attach the NC wall adapter to the charger cup by inserting the barrel connector into the socket located on back of the charger cup. Plug the NC wall adapter in a 110V wall outlet the charger will show a green light.

Insert the battery pack or the radio with the battery pack into the charger card slot.

The red light of the charger flashes to start charging; after the full charge, the green light is on and charging is complete.

#### Installation I Removal of lithium battery

Ensure the radio is powered off before attaching or removing the battery by using the control knob on top of the radio. Rotate the knob counter clockwise until you hear a click and the knob no longer rotates

### **◊ Installation**

Using your thumb press and hold the belt clip into its open position. Align the battery pack tabs with the corresponding position on the aluminum frame by holding the battery slightly up and pushing the battery forward and into the two frame slots by using the other end of the battery pushing downward and into the frame. Ensure the battery is properly seated prior to pushing the main battery latch into place (Do not force the battery or latch into position). You should hear a firm click once the battery is latched and properly installed.

Turn on the radio using the control knob on top of the radio by rotating clockwise. A click will be heard to indicate power has been applied, once the radio has completed its power on sequence it is ready to use.

## **◊ Removal**

To remove the battery, turn off the radio using the control knob on top of the radio per previous installation step. Lift up on the release tab indicated by OPEN until the main latch opens located just below the release tab (Do not pull the release tab past its stopping point). Hold the belt clip up per previous in struct ion, slightly lift and pull the battery out and way from the radio.

#### ■ Antenna Installation I Removal

Ensure the radio is powered off per previous instruction.

#### **♦ Installation**

Align the antenna onto the treaded location on top of the radio by holding at the base of the antenna. Screw the antenna into place by rotating in a clockwise direction being careful not cross thread the antenna until firmly seated (Do not overtighten the antenna).

#### ♦ Removal

Remove the antenna by holding the antenna at the base and un screw the antenna counterclockwise until completely out of the threaded connector.

**NOTE:** Do not use the antenna as a handle, Hang a key- chain or external speaker microphone on the antenna. This will dam age the antenna and reduce the performance of the radio.

#### ■ Installation I Removal of belt clip

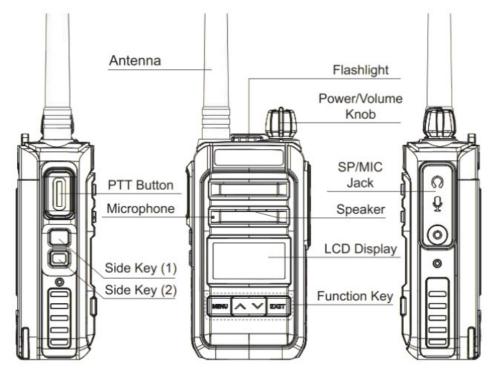
The belt clip should be preinstalled at the factory. To remove the belt clip, use a small Phillips head screw driver to remove the two screws holding the clip to the frame. To install the belt press and hold the belt clip in place and align the screws into the frame holes being careful not to cross thread the screws (Do not over tighten the screws

or risk stripping the screw holes).

## ■ Installing external speakers I Microphone headphones

Remove the accessory dust cover using a coin or slotted screwdriver (keep the cover in a safe place for use when an attached accessory is not being used). Insert the accessory into appropriate jack, press and release top side key (1) to open the radio squelch/monitor function and adjust the volume control to a comfortable listening level prior to inserting an ear accessory. Press and release side key (1) again to close the squelch.

## **Getting Familiar with Radio**



## ■ Function key explanation [MENU] Key

- Short press: enters menu selection mode;
   [UP] Key
- Short press: Moves up to the next channel or the next menu selection;
- Long press: Rapidly traverses up the selections; [DOWN] Key
- Short press: Moves down to the next channel or the next menus lection;
- Long press: Rapidly traverses down the selections; [EXIT] Key
- Short press: exits the menu mode;
- Long press: Lock/unlock all buttons and keys with exception of PTT;

#### **■ LCD display**

On the display are various indicators that indicate selected function.



7.03 <sup>W</sup>	battery voltage
M	noise cancelling
CH1-CH5	Selected operating channel
WX1-WX7	Selected NOAA weather channel
****	Key lock
diiii	Battery indication
H/L	power (High /H, Low/L)
M/N	bandwidth (Width/W, Narrow IN)
CT/DT	CTCSS/DCS
V	vox
C	Compand

## ■ Main function

- 151 154 MHz
- Output power High 2W, Low 1W
- Waterproof IP65 rating driven rain
- Flashlight
- CTCSS/DCS
- Compand function
- Scanning function
- vox
- Voice Prompt
- Vibration
- Noise cancelling

## ■ Side key functions

Side Key1	: Push-to-Talk Switch Each side key has two functions depending on a short press and release or a long press and hold.
PTT	Short press Monitor function SQL on/off; long press Flashlight on/off.
Side Key2	Short press Scanning on/off; long press Noise Cancelling on/off.

## Operation

### · Power ON I Adjust volume

Power on radio by rotating the volume switch clockwise; power off by rotating the volume switch counterclockwise.

#### Channel Select

Press the [UP / DOWN] key to select the required channel.

## • Transmit I Receive

Press and hold the PTT key to transmit, LED indicator light is RED, you may begin speaking into the microphone. Release pTT key, the indicator light is off and the radio is in receive mode waiting for a response. If the receive signal is properly matched the squelch of the radio will open the speaker and voice will be heard. LED indicator is BLUE when receiving a carrier only frequency or matched CTCSS or DCS tone. If no voice response is heard verify all radio CTCSS or DCS tone are correctly matched for the channel selected. A press and release of side key 1 will open tone squelch to monitor a toned channel.

## **Menu Setting**

#### ■ Menu usage

The menu contains the settings of the various functions of the radio.

You can manually change the settings in the menu.

Press the [Menu] key to enter the menu system

- Select the [UP/DOWN] key to step thru the menu selection list;
- Press the [Menu] key to enter the menu selection setting;
- Press the [UP / DOWN] key to select the setting, then press the [Menu] key to confirm.
- Press [Exit] key to exit the menu system and return to the original working mode.
- If no selection is made within 10 seconds, the radio will automatically return to the original working mode.

#### **Menu List**

Num	Menu options	Secondary menu selectio n choice options	Secondary menu function description		
0	Power	Low power / High power	Low power equals 1W / high power equals 2V		
1	Веер	Close/Open	Turn off/on beep tones		
2	Scan	On/ press EXIT to stop sca	Enters scan mode, at least 2 channels are required to start scanning		
3	VOX	Close/Open	Turn off/on automatic PTT voice control for han ds free operation.		

Num	Menu options	Secondary menu selectio n choice options	Secondary menu function description			
		Off	No limit to transmission talk time.			
4	TOT (Time-out- tim er)	15sec//270sec	Sets the maximum time limit for allowed transmi ssion, once timed out a release of the PTT is re quired to begin another transmission.			
5	SQL	Level 0-9	Adjust level between 0-9 the higher the level, a e stronger the receive signal is required to ope the speaker audio.  The lower the level enables the radios ability to pick up weak signals.			
		Close	Backlight is off until a key, button press or signal I is received.			
6	Backlight	Open	Backlight is always on.			
		Automatic 5 seconds/ / 6 0 seconds	Backlight turns off after the set timer expires.			
	VOX Level (used in	Close	Disables VOX operation.			
7	conjunction with VOX setting)	Level 0-9	Sets sensitivy of the microphone for hands free operation with or without a VOX accessory attached.			
8	Compand	Close/Open	Compresses the signal transmitted from the mic rophone and expands it again at the receiver m aximizing the audio signal's dynamic range and minimizes noise.			

Num	Menu options	Secondary menu selectio n choice options	Secondary menu function description		
		Manual unlock.	Press and hold the EXIT key to lock keys and buttons. Press and hold a second press to		
9	Key Lock Mode	Automatic 5 seconds / / 30 seconds	Automatically locks keys and button after the timer setting expires. Press and hold the EXIT key to remove the timer.		
		Off			
10	Dec-CTDCS (Recei	CTC-67.0 // 254.1	Press [EXIT] key to select: Off, CTCSS, DCSN,		
	ver decode tone)	DCS-D023N// DCS- D754I	DCSI;		
		Off			
11	Enc-CTDCS (Trans	CTC-67.0 // 254.1	Press [EXIT] key to select: Off, CTCSS, DCSN,		
	mitter encode tone)	DCS-D023N// DCS- D754I	DCSI;		
		Off	Battery power save is turned off		
12	Save Mode (Battery usage)	1:1//1:10	Extends daily battery life between charges. The higher the ratio the longer the radio can be used during the day. Note: a high ratio may result in missed calls or words.		
13	Power on tone	Off/Beep tone/ Chord tone	Turn off or select the desired tone feature upon t urning on radio power.		
14	Scan Add/ Delete	Delete/Add	Delete or add the selected channel to the radio scan list.		

Num	Menu options	Secondary menu selectio n choice options	Secondary menu function description			
15	Roger	Close/Open	Beep tone signal sent to notify other users a transmission has ended.			
		Picture				
16	Boot Screen	Voltage	Chosen feature is displayed upon radio power up.			
		Information				
17	Wait Light	Close/Open	Blue flashing LED indicates the radio is powere d on waiting for activity when display is not active.			
18	Voice Sort	Close/Open	Used to active voice prompts to navigate radio settings.			
19	Vibration	Close/Open	Used to alert channel activity with a low volume setting.			
20	Reset	Close/Open	Reset radio to factory default.			

#### CTCSS/DCS

50 group CTCSS and 105 groups DCS.

CTCSS(Hz)							
67.0	85.	107.	137.	166.	186.	211.	254.
69.	89.	111.	141.	168.	190.	218.	
72.	92.	115.	146.	171.	193.	226.	
74.	95.	119.	151.	174.	197.	229.	
77.0	97.	123.0	157.	177.	200.	234.	
80.	100.0	127.	160.	180.	204.	242.	
83.	104.	132.	162.	184.	207.	250.	

DCS C	DCS Code								
23	65	132	205	255	331	413	465	612	723
25	71	134	212	261	332	423	466	624	731
26	72	143	223	263	343	431	503	627	732
31	73	145	225	265	346	432	506	631	734
32	74	152	226	266	351	445	516	632	743
36	114	155	243	271	356	446	523	645	754
43	115	156	244	274	364	452	526	654	
47	116	162	245	306	365	454	532	662	
51	122	165	246	311	371	455	546	664	
53	125	172	251	315	411	462	565	703	
54	131	174	252	325	412	464	606	712	

### **Warranty and Service**

Limited Warranty This product is warranted by BridgeCom Systems, Inc. to be free of defects in materials and workmanship for a period of one year from the date of purchase. If a defective part causes this product to operate improperly during the one-year warranty period, we will service it to the original owner free of charge if shipped to BridgeCom Systems at the owner's expense.

This warranty does not apply to any parts damaged due to improper use or violation of instructions. It does not extend to damage incurred by misuse or abuse, unauthorized modifications, natural causes such as lightning, fire, floods, and other such catastrophes; nor to damage caused by environmental extremes, such as power surges and/or tran sients, theft, or accidents.

All warranties must be performed at BridgeCom Systems, Inc. No credit will be given for unauthorized repair work attempted by the customer. Bridegroom Systems, Inc. will repair or replace the equipment and return to the customer freight pre-paid, within the continental United States. Equipment found not to be defective will be returned at the customer's expense, and it will include the cost to ship, test, and return the equipment.

Equipment returned for repair must have a return merchandise authorization (RMA) number. To obtain an RMA contact our Technical Sup port Department at (636)-205-1736 or email <a href="mailto:techsupport@Bridge.Com">techsupport@Bridge.Com</a>

Systems.com. All returned equipment must have the RMA number listed on the outside of the shipping container. Ship all returns to: BridgeCom Systems, Inc. Attn: Repair 113 South Bridge Street Smithville, MO 64089 Out of warranty repairs and ser vice charges are billed at the current hourly rate plus parts. PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

This document contains information proprietary to Bridge Embedded Systems, Inc., Bridge, LLC and BridgeCom Systems, Inc. Its con Otents may not be reproduced, in whole or in part, without express writ ten permission from either Bridge Embedded Systems, Inc., Bridge, LLC or Bridgeroom Systems, Inc. The information is provided "AS IS" without warranty of any kind, either expressed or implied.

Bridegroom Systems, Inc. does not assume any liability for damages. Technical information and specifications in this document are subject to change without notice. Changes or modifications to this device not expressly approved by BridgeCom Systems could void the user's au thorization to operate this device.

#### **FCC Statement:**

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment0.

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.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part I5 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radiofTV technician for help.

SAR tests are conducted using standard operating positions accepted by CC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is a available for sale to the public, it must be tested and certified to the FCC that is does not exceed the exposure limit

established by the FCC. Tests for each product are performed in positions and locations as required by the FCC. For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with and accessory designated for this product or when used with and accessory that contains no metal To maintain compliance with FCC RF exposure guidelines hold the transmitter and antenna at least 1 inch (2.5 centimeters] from your face and speak in a normal voice, with the antenna pointed up and away from the face.

The equipment complies with FCC radiation exposure limits set forth for and uncontrolled environment. In order to comply with the FCC RF exposure requirement, the antenna installation must comply with following:

Users must be fully aware of the hazards of the exposure and able to exercise control over their RF exposure to qualify for the higher exposure limits.

Your wireless hand-held portable transceiver contains a low power transmitter. This product sends out radio frequency (RF) signals when the Push-to-Talk(PTT) button is pressed. The device is authorized to operate at a duty factor not to exceed 50%



## **Documents / Resources**



BridgeCom SYSTEMS BCS-MV65 Walkie Talkie Two Way Radios [pdf] User Manual BCS-MV65 Walkie Talkie Two Way Radios, BCS-MV65, Walkie Talkie Two Way Radios, Talkie Two Way Radios, Two Way Radios, Way Radios

## References

• User Manual

Manuals+,