



## G1 SCBA Radio Pairing Guide for

# **BKR 5000**

with the Bluetooth Option (BKR0560)

BKR 5000 Configuration Settings	2
Creating a G1 SCBA Configuration Tag (for Bluetooth Pair Save Preferences)	3
Creating a BKR 5000 Radio Pairing Tag	4
Pairing a G1 SCBA and BKR 5000 Radio	6
Using the G1 SCBA and BKR 5000 Radio	7
Clearing Radio Pair Info from the G1 SCBA	8
Clearing SCBA Pairing Info from the BKR 5000 Radio	9
Troubleshooting	10



BKR 50	BKR 5000 Configuration Settings	
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Step 1.	Download, install, and open the latest version of RES (Radio Editor Software) (BKR0733). Contact your radio dealer for instructions and Serial Key	RES
Step 2.	Connect the programming cable to the BKR 5000 Radio and the computer.	
Step 3.	Turn on the BKR 5000 Radio using the volume knob.	
Step 4.	Wait RES sees the Radio: "Read Radio" will become available under the "Read / Write" section, then click the "Read Radio" button.	Read / Write Read Radio
Step 5.	Under the "Utilities" section, click the "Feature Editing Software" button.	Feature Editing Software
Step 6.	<ul> <li>Verify the BKR 5000 is equipped with the Bluetooth Option (BKR0560).</li> <li>(A) Under the "Hardware Options" section, there should be a check next to "Bluetooth Enabled".</li> <li>(B) If the radio does not have the Bluetooth Option available, contact</li> </ul>	Hardware Options  Mobile High Power Enabled  Continuous Channel Knob  Bluetooth Enabled
	your radio dealer to upgrade the radio.	
Step 7.	Under the "Config" section, click the "Menus" button.	Menus
Step 8.	Under "Menu Items", highlight "Bluetooth".	Menu Items Bluetooth
Step 9.	Under the "Read / Write" section, click the "Write Radio" button.	
	The Radio is now able to control Bluetooth from the menu.	Write Radio
Step 10.	Turn the radio off, then back on using the volume knob.	
Step 11.	Click the "Menu" button	
Step 12.	Select "Bluetooth" from the menu.	Eliketooth     Escklight     Sesklight     Sesklight
Step 13.	If "Bluetooth" is set to "OFF", set it to "ON".	Bluetooth Bluetooth: ON Bluetooth



G1 Blue Setting	creating a G1 SCBA Configuration Tag (for Bluetooth Pa	ir Save Preferences)
The pur	pose of this section is to: (1) enable the Bluetooth radio on the G1 SCBA and (2) to set Bluetooth Pair Save behavior based on the c	department's preference.
Step 1.	Launch the MSA A2 Software.	AZ
Step 2.	Select the "G1 Tags" Tile on the A2 Dashboard (Under the "G1 Devices" column).	G1 Tags read & write G1 Tags
Step 3.	Select tag type: "G1 Configurations"	G1 Configurations
Step 4.	Select the <u>Add</u> (+) icon (top-right hand side of A2 application) to create the configuration template, which will be used to change these 2 settings.	
Note:	Tag can be written without saving the template, but the template can be saved for future use if given a name: Mare BT Radio and Pair Save The Save Icon (top-right) is enabled when the Name is filled in.	
Step 5.	<ul> <li>Enabling the G1 SCBA's Bluetooth Radio:</li> <li>(A) Expand the "Bluetooth Settings" section.</li> <li>(B) Change "Bluetooth Disabled/Enabled" setting to "Enabled".</li> </ul>	Bluetooth Settings These settings effect the bluetooth module in the device Bluetooth Disabled/Enabled Bluetooth Pair Save Disabled TIC Settings Enabled
Step 6.	<ul> <li><u>Preference Choice:</u> "Bluetooth Pair Save" setting options:</li> <li>(Generally, a department's operating procedures will determine its preference)</li> <li>(A) To apply a Radio Pairing Tag every time SCBA is turned on, choose "Disabled"</li> <li>(B) To retain the Radio Pairing on the SCBA until it's cleared *, choose "Enabled"</li> <li>* - See "Clearing Radio Pairing Info from the G1 SCBA" page.</li> </ul>	Bluetooth Settings     These settings effect the bluetooth module in the device     Bluetooth Disabled/Enabled     Enabled
Step 7.	<ul> <li>Writing the G1 Configuration Tag:</li> <li>(A) Place RFID Tag on the RFID Reader / Writer</li> <li>(B) Select the <u>Write G1 Tag</u> icon (top-right hand side of A2 application)</li> </ul>	
Step 8.	<ul> <li>Applying the G1 Configuration Tag to the G1 SCBA(s): <ul> <li>(A) Power on the G1 SCBA</li> <li>(B) Press &amp; hold either of the green Control Module buttons to activate the RFID mode.</li> <li>For iTIC Control modules: Press &amp; Hold Both Green Buttons.</li> <li>(C) Place Bluetooth Pairing Save Tag over G1 Power Module RFID Target.</li> </ul> </li> <li>The G1 SCBA is now configured with the settings: <ul> <li>G1 Bluetooth is now enabled</li> <li>G1 Bluetooth Pair Save (as chosen).</li> </ul> </li> <li>The G1 SCBA is now ready to accept a Radio Pairing tag.</li> </ul>	



#### Radio ID Pair Tag

### Creating a BKR 5000 Radio Pairing Tag

To pair the radio to the G1 SCBA, a "Bluetooth Audio Pairing Tag" needs created in the A2 Software. Once the Pairing Tag is created, it can be applied to the SCBA, which "programs" the SCBA to connect to that specific radio.

Step 1.	Launch the MSA A2 Software	CE CELTAGS read & write G1 Tags	
Step 2.	Select the "G1 Tags" Tile on the A2 Dashboard (Under the "G1 Devices" column)		
Step 3.	Select tag type: "Bluetooth Audio Pairing Tags"	Special G1 Tags Copy Tag Erase tag Bluetooth Audio Pairing Tags	
Step 4.	Ensure that your PC's Bluetooth adapter is on, and selected for use in A2, and that your RFID Reader/Writer is connected and ready.	Connected Tag Writer:	
	<ul> <li>Both modules appear in lower left of A2 display. Generally they will appear as the computer's name, or as "localhost".</li> </ul>	Localhost Select Other Device	
	<ul> <li>If either is not visible there or under "Select Other device": disconnect and reconnect the hardware;</li> </ul>	Bluetooth Module: Localhost Select Other Device	
	Restart the A2 service if necessary.		
Step 5.	Turn on the BKR 5000 Radio using the volume knob.		
Step 6.	Ensure <b>Bluetooth is "ON"</b> : A white Bluetooth icon will appear with no slash "/" and no connection dots "".	P1 88 * #	
	If not visible, enable the radio's Bluetooth OR reconfigure radio.	1	
Step 7.	Discovering the Radio in A2:	Discover devices	
	<ul> <li>(A) Click "Discover Devices"</li> <li>You may have to scan twice if the Friendly name doesn't appear.</li> </ul>	Select a device you wish to update. Ensure that your G1 is in data link mode before scanning.	
	(B) Select the tile for the discovered Radio in A2 to select it. The discovered device info will load on the screen.	→ S MSA-KW-R1 24718990E84E	
Step 8.	Writing the Bluetooth Audio Pairing Tag:		
	(A) Place RFID Tag on the RFID Reader / Writer		
	(B) Select the <u>Write G1 Tag</u> icon (top-right hand side of A2 application)		
	(C) Click "OK" on the "Tag was successfully written" dialog.	<u>Note:</u> Hovering over the icons will also show "Write Tag" or "Read Tag".	



#### Step 9. Verifying the Information Written to the Tag:

- (A) Place RFID Tag on the RFID Reader / Writer
- (B) Select the <u>Read G1 Tag</u> icon (top-right hand side of A2 application)
- (C) The "Found Tag" screen will appear.
- (D) Confirm the tag's Bluetooth Address matches the Radio.

The Radio Pairing tag is now created & can be used to pair this radio with a G1 SCBA.







### Pairing a G1 SCBA and BKR 5000 Radio

Ensure the BKR 5000 Radio is programmed correctly to connect with the G1 SCBA. Necessary and recommended settings are listed in the "BKR 5000 Configuration Settings" page. Consult with your Radio Technician.

Step 1.	Turn on the BKR 5000 Radio using the volume knob.	
Step 2.	Ensure <b>Bluetooth is "ON"</b> : A white Bluetooth icon will appear with no slash "/" and no connection dots "…".	P1 🛞 8 H
	If not visible, enable the radio's Bluetooth OR reconfigure radio.	1
Step 3.	Power on the G1 SCBA.	
Step 4.	<b>Press &amp; hold</b> either of the <b>green</b> Control Module buttons to activate the RFID mode.	
	For iTic Control modules: Press & Hold Both Green Buttons.	
Step 5.	<b>Register the Radio to the SCBA:</b> Place the <b>Radio Pairing Tag</b> over the G1 Power Module <b>RFID Target</b> .	
	After the pairing tag is successfully read, the SCBA should chirp, and the BT will disconnect.	
The G1	SCBA & BKR 5000 Radio is now paired and ready for use.	<b>F</b>
• Afte	er a successful pairing, if the regulator is shut off, the G1 SCBA will not remain nected to the radio, and the radio is available for non-Bluetooth use.	
• The the	G1 SCBA will automatically re-connect to the radio when the end user turns on G1 regulator & breathes.	

If you encouter difficulty pairing the radio:

- Clear the pair information stored on the radio, as described in the "Clearing SCBA Pairing Info from the BKR 5000 Radio" section in the pages hereafter.
- For good measure clear the pairing information on the SCBA, as described in the "Clearing Radio Pair Info from the G1 SCBA" section in the pages hereafter.
- Repeat the "Pairing a G1 SCBA and BKR 5000 Radio" procedure above.



#### Using Paired G1 & Radio

### Using the G1 SCBA and BKR 5000 Radio

Confirm that the G1 SCBA, and Radio, are paired together: Radio Tag has been applied (or applied previously and pair is saved)

Step 1.	Turn on the BKR 5000 Radio using volume knob.	
Step 2.	Don the G1 SCBA and G1 Facepiece.	A A A A A A A A A A A A A A A A A A A
Step 3.	Turn on the G1 SCBA via pressurization.	
	• The G1 SCBA will try to establish a Bluetooth connection to the <b>currently paired radio</b> for up to 8 minutes.	20
	• When found, it will quickly connect and disconnect, (and is now ready to automatically activate when breathing.)	
	<i>If the connection is not established, the pairing process described in the previous section should be repeated.</i>	
Step 4.	Begin breathing (with the regulator attached) and the radio and SCBA will connect automatically (approx. 20 seconds).	

#### All SCBA voice communication will now go from the SCBA through the portable radio.

Use Notes & Tips:

- Turn on the radio prior to the G1 SCBA.
- If the regulator is shut off, the G1 SCBA will not remain connected to the radio, and the radio is available for non-Bluetooth use. The G1 SCBA will automatically re-connect to the radio when breathing on the G1 regulator.
- Verify both the incoming and outgoing audio functionality after the Bluetooth wireless connection is established.



# **Best practice** is to: Clear the pairing information **from both devices**—the radio & the G1 SCBA. This prevents the G1 SCBA from connecting to a previously-paired Bluetooth radio during the next start-up.

**Clearing G1 SCBA Pair** 

#### **Clearing Radio Pair Info from the G1 SCBA**

There are 3 methods for removing stored Radio pairing information from the G1 SCBA.

- All three methods are effective on G1 SCBAs configured with "Bluetooth Pair Save" being "Disabled"
- The "Battery Removal Method" is a popular method, however, note that this method is NOT effective when the G1 SCBA is configured with the "Bluetooth Pair Save" setting set to "Enabled".

**G1 Pairing Removal Method 1 – Battery Removal** (Only effective when the G1 "Bluetooth Pair Save" setting is "Disabled")

Step 1. Remove G1 SCBA Battery

#### Bluetooth audio pair info is cleared from the G1 SCBA.

Next  $\rightarrow$  "Clearing SCBA Pairing Info from the BKR 5000" section, hereafter.

#### G1 Pairing Removal Method 2 – Pair New Radio

Step 1. Pair a different Bluetooth BKR 5000 Radio with the G1 SCBA using the new radio's Bluetooth Audio Pairing Tag, as described in the "Pairing a G1 SCBA and BKR 5000 Radio" section.

Bluetooth audio pair info on the G1 SCBA is changed to the pair info for the new radio.

Next  $\rightarrow$  "Clearing SCBA Pairing Info from the BKR 5000 Radio" section, hereafter.

#### G1 Pairing Removal Method 3 – Use a "Reset Bluetooth Pairing" Tag

If not yet created, create a **"Reset Bluetooth Pairing" Tag** in the A2 software, under "G1 Tags" tile  $\rightarrow$  "Special G1 Tags"  $\rightarrow$  expand "Reset Tags" list  $\rightarrow$  Select "Reset Bluetooth Pairing"

Step 1. Press & hold either of the green Control Module buttons to access the RFID mode display.

Step 2. Place the "Reset Bluetooth Pairing" Tag over the G1 Power Module RFID Target.

#### Bluetooth audio pair info is cleared from the G1 SCBA.

Next  $\rightarrow$  "Clearing SCBA Pairing Info from the BKR 5000 Radio" section, hereafter.



#### Clearing Radio Pair

### **Clearing SCBA Pairing Info from the BKR 5000 Radio**

Step 1. On the BKR5000 Radio, select "Menu" -> "Bluetooth".

Step 2. Select "Forget All Devices" and press "ENT".

Bluetooth audio pair info is cleared from the BKR 5000 Radio.

If not done already: Clear the pairing info from the previously connected G1 SCBA's pair history using the process described in the "Clearing Radio Pair Info from the G1 SCBA" section, above.





## Troubleshooting

Торіс	Problem/Issue	Diagnosis	Possible Solution	Expected Result
	Intermittent Audio	Facepiece may not be properly sealed	Adjust the facepiece until a proper seal is formed	Outgoing audio will function as expected
		Bluetooth icon is visible on the Radio	Power the portable radio on and off to reset the auto connect.	Radio will automatically connect to G1 and emit an audible indication for success.
Audio	Incoming and/or outgoing audio from G1 is not working		If power cycling the radio does not result in a successful connect, clear the G1 & Radio pairing history and re-pair the G1 & Radio.	G1 & Radio will now connect and audio will function as expected
	Poor audio quality from G1 to Radio	G1 has Firmware SW 2.003 or prior SW version	Update G1 to Firmware SW 3.0 or higher via A2 Software	Improved G1 outgoing audio quality
	Bluetooth pairing information lost from G1	Pairing information is cleared when the battery G1 battery is removed. (When G1 "Bluetooth Pair Save" is not set to enabled.)	G1 with SW 3.0 or higher is configurable to retain pairing information across battery removals. Review instructions for "G1 SCBA Configuration Tag" and Bluetooth Pair Save settings.	Bluetooth pairing information will no longer be cleared on every battery removal.
	ring Radio will not pair with G1	Bluetooth icon is NOT visible on the radio	Turn Bluetooth on, on the Radio.	Bluetooth icon is visible on Radio and pairing is now successful.
			Power the portable radio off and on to reset the auto connect	
			If turning on Bluetooth on the radio does not work: clear the G1 & Radio pairing history. Re-pair the G1 & Radio.	
Pairing		Bluetooth Discoverable is set to "NO"	Go to Radio Bluetooth Settings and Set Discoverable to "YES" and <b>STAY ON THIS SCREEN</b> <b>DURING PAIRING.</b> Re-apply the Pairing Tag to the G1.	Paring will successfully complete.
		G1 is not Bluetooth enabled, icon on control module is gray.	Enable Bluetooth on the G1 using a G1 Configuration tag that enables Bluetooth.	Bluetooth icon on the G1 control module will be: <i>Red</i> = enabled/unpaired OR enabled/paired, not connected <i>Green</i> = enabled/connected
		Radio is a not a BKR 5000 with Bluetooth Option	Contact your Radio dealer to get the Bluetooth Option (BKR0560).	To use G1 Bluetooth audio, pair with a BKR 5000 with Bluetooth Option
	Radio is paired to an incorrect G1	Radio and/or G1 was previously paired to a different radio or G1	Clear the pairing information on both the G1 & Radio. Pair desired G1 & Radio	Desired G1 and Radio will be paired together