G1 SCBA Radio Pairing Guide for

KENWOOD NEXEDGE®

NEXEDGE NX-5000 Series

NX-5200 | NX-5300 | NX-5400

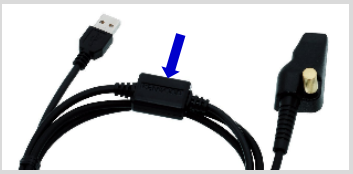
KENWOOD NEXEDGE Configuration Settings

Step 1. Update Kenwood Radio Firmware to 2.10 (or Later) and KPG-D1 Programming Software to 2.10.

Step 2. Open the **KENWOOD KPG-D1 Application**

Step 3. Connect the programming cable to the portable radio:

- Hook the pin end of the connector in the corresponding notch.
- Attach the connector with the UDC screw.
- Ensure the cable's selector switch for UART/USB is set to **UART**.



Step 4. Insert the USB end of the cable in the computer running KPG-D1

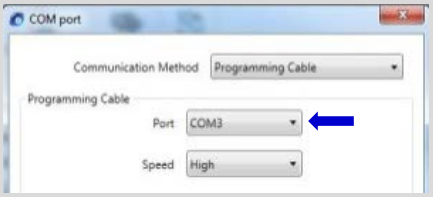
Step 5. Turn on the radio using the volume knob.
Wait a few seconds for it to complete its self-test.

Step 6. The codeplug needs to be manually read into the KPG-D1 software by:

(A) Select the "Setup" Tab"

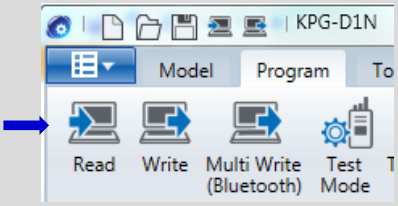
(B) Select the "COM port" Icon.

(C) Select the correct COM port.



Step 7. Once the correct COM port is selected:

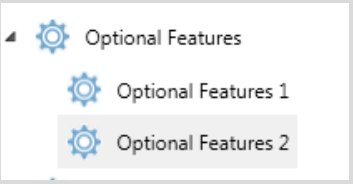
- **Read** the radio's settings into the application.



Step 8. Under Transceiver Settings to the left of the application:

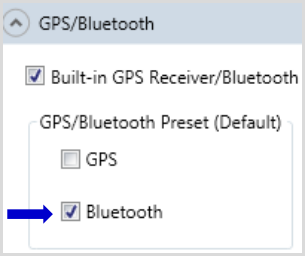
(A) Navigate to and Expand "**Optional Features**"

(B) Under "Optional Features": Select "**Optional Features 2**"



Step 9. Under "**GPS/Bluetooth**" features category in the "**GPS/Bluetooth Preset (default)"** group:

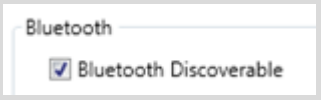
Enable "Bluetooth" (Checkbox is checked).



Step 10. Scroll further down under "GPS/Bluetooth" features category to the "Bluetooth" options group:

- Enable "Bluetooth Discoverable" (Checkbox is checked).

Note: Discoverability is REQUIRED to discover the radio in the MSA A2 software to create a Radio Pairing Tag.



Step 11. In the same "Bluetooth" options group:

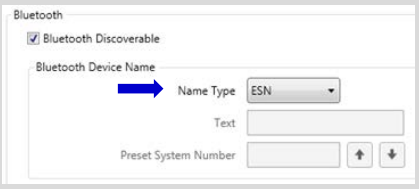
Choose the source of the name which displays during pairing requests by using the "Name Type" option: The following describes the choices:

i. **Text** Uses the value typed in the "**Text**" field.

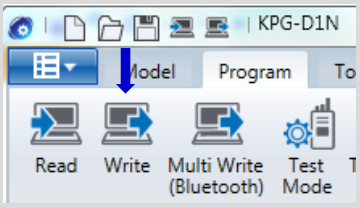
ii. **FleetSync ID** Uses the value typed in the "**Text**" field.

iii. **Unit ID** Uses the value in "**Preset System Number**" field.

iv. **ESN** Uses the Radio's Electronic Serial Number.



Step 12. **Write** the new settings to the radio.



G1 Bluetooth Settings Tag

Creating a G1 SCBA Configuration Tag (for Bluetooth Pair Save Preferences)

The purpose 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 department's preference.

Step 1. Launch the MSA A2 Software.

Step 2. Select the "G1 Tags" Tile on the A2 Dashboard (Under the "G1 Devices" column).

Step 3. Select tag type: "G1 Configurations"

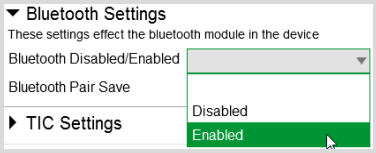
Step 4. Select the Add (+) icon (top-right hand side of A2 application) to create the configuration template, which will be used to change these 2 settings.

Note: Tag can be written without saving the template, but the template can be saved for future use if given a name: Name BT Radio and Pair Save *The Save Icon (top-right) is enabled when the Name is filled in.*

Step 5. Enabling the G1 SCBA's Bluetooth Radio:

(A) Expand the "Bluetooth Settings" section.

(B) Change "Bluetooth Disabled/Enabled" setting to "Enabled".

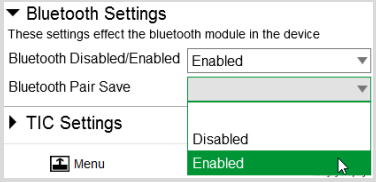


Step 6. Preference Choice: "**Bluetooth Pair Save**" setting options:

(A) Require Radio Pairing Tag every time SCBA is powered on, choose "Disabled"

(B) To retain the Radio Pairing on the SCBA until it's cleared *, choose "Enabled"

** - See "Clearing Radio Pairing Info from the G1 SCBA" page.*



Step 7. Writing the G1 Configuration Tag:

(A) Place RFID Tag on the RFID Reader / Writer

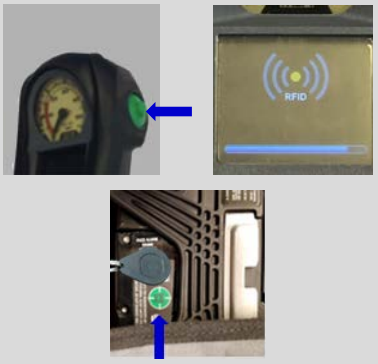
(B) Select the Write G1 Tag icon (top-right hand side of A2 application)

Step 8. Applying the G1 Configuration Tag to the G1 SCBA(s):

(A) Power on the G1 SCBA

(B) **Press & hold** either of the **green** Control Module buttons to activate the RFID mode.
For iTIC Control modules: Press & Hold Both Green Buttons.

(C) Place Bluetooth Pairing Save Tag over G1 Power Module RFID Target.



The **G1 SCBA is now configured** with the settings:
- Bluetooth enabled - The chosen Pair Save option.

And is now prepared to accept Radio Pairing tags.

*Repeat "**Step 8**" for each SCBA to apply the SCBA Bluetooth settings.*

Radio ID Pair Tag

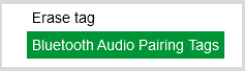
Creating a G1 SCBA KENWOOD NEXEDGE Radio Pairing Tag

To pair the radio to the G1 SCBA, a "Bluetooth Audio Pairing Tag" needs to be created in the A2 Software. Once 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

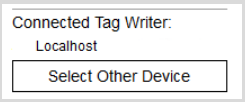
Step 2. Select the "G1 Tags" Tile on the A2 Dashboard (Under the "G1 Devices" column)

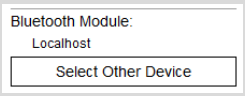
Step 3. Select tag type: "Bluetooth Audio Pairing Tags"



Step 4. Ensure your PC's Bluetooth adapter is on, and selected for use in A2, and your RFID Reader/Writer is connected and ready. (lower left of A2)

- Generally they will appear as the computer's name, or as "localhost".
- If either is not visible there or under "Select Other device": disconnect and reconnect the hardware; Restart the A2 service if necessary.





Step 5. Turn on the Kenwood Radio using the volume knob.

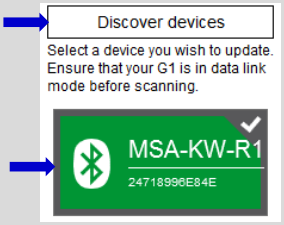
Step 6. Ensure Bluetooth is "ON" (enabled on the Radio) with either: (A) The (Blue) Bluetooth Button or (B) the Bluetooth Menu.

Step 7. Discovering the Kenwood Radio in A2:

(A) Click "Discover Devices"

(B) Select the tile for the discovered Kenwood Radio in A2 to select it.

The radio info will load in the "Discovered Bluetooth Device" section.



Step 8. Writing the Bluetooth Audio Pairing Tag:

(A) Place RFID Tag on the RFID Reader / Writer

(B) Select the Write G1 Tag icon (top-right hand side of A2 application)

(C) Click "OK" on the "Tag was successfully written" dialog.

Note: Hovering over the icons will also show "Write Tag" or "Read Tag".

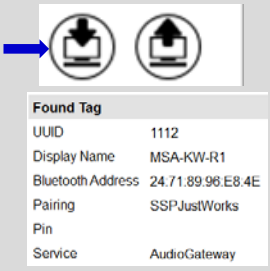
Step 9. Verifying the Information Written to the Tag:

(A) Place RFID Tag on the RFID Reader / Writer

(B) Select the Read G1 Tag 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 G1 & Radio

Pairing a G1 SCBA and KENWOOD NEXEDGE Radio

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

Step 1. Turn on the Kenwood Radio using volume knob.

Step 2. Verify that Bluetooth is enabled on the radio. Bluetooth icon is visible on radio display. (Bluetooth capability is enabled)
If not visible, enable the radio's Bluetooth OR reconfigure radio.

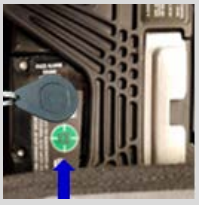
Step 3. Power on the G1 SCBA.

Step 4. **Press & hold** either of the **green** Control Module buttons to **activate the RFID mode**.

For iTic Control modules: Press & Hold Both Green Buttons.

Step 5. **Register the Radio to the SCBA:**
Place the Kenwood Radio **Pairing Tag** over the G1 Power Module **RFID Target**.

After the pairing tag is successfully read, a Bluetooth enabled G1 SCBA will search for a pairing partner for 8 minutes. The pairing process should be repeated if 8 minutes is exceeded.

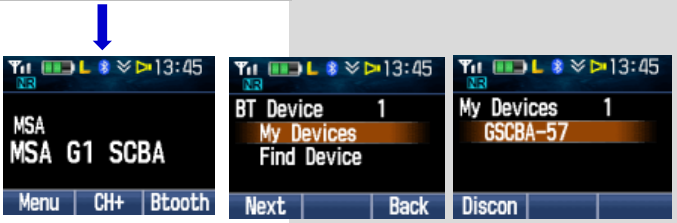


Step 6. **Verifying** the pair:

a) Radio's Bluetooth Icon should now be Blue

b) Select "Menu" → "Bluetooth" → "BT Device" → "My Devices"

c) the G1 SCBA should be listed.



The G1 SCBA & Kenwood Radio is now paired and ready for use.

- *After a successful pairing, 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 reconnect to the radio when the end user opens the G1 regulator & breathes.*

Using Paired G1 & Radio

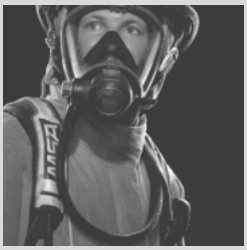
Using the G1 SCBA and KENWOOD NEXEDGE Radio

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 Kenwood Radio using volume knob.

Step 2. Don the G1 SCBA and securely attach the G1 Facepiece to your face.

A poor facepiece seal can cause improper microphone performance, such as intermittent audio.



Step 3. Turn on the G1 SCBA via pressurization.

- The G1 SCBA will try to establish a Bluetooth connection to the **currently paired radio** for up to 8 minutes.
- When found, it will quickly connect and disconnect, (and is now ready to automatically activate when breathing.)

If the connection is not established, repeat the pairing process described in the previous section.

Step 4. Begin breathing (with the regulator attached).
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 before you turn on the G1 SCBA.
- If the regulator is shut off, The G1 SCBA will not remain connected to the radio. The radio can be used by itself (no Bluetooth connection) when the regulator is shut off. The G1 SCBA will automatically reconnect to the Kenwood radio when breathing on the G1 regulator resumes.
- Verify both the incoming and outgoing audio functionality after you have established the Bluetooth wireless connection.

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 Pairing 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".**

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 → "Clearing Radio Pairing Info from the Kenwood Radio" in the next section.

Method 2 – Pair New Radio

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

Bluetooth audio pair info on the G1 SCBA is changed to the pair info for the new radio.
Next → "Clearing Radio Pairing Info from the Kenwood Radio" in the next section.

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 → "Special G1 Tags" → expand "Reset Tags" list → 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 → "Clearing Radio Pairing Info from the Kenwood Radio" in the next section.

Clearing Radio Pair

Clearing Radio Pairing Info from the KENWOOD NEXEDGE Radio

Step 1. Enter the menu and select **BT Device.**

Step 2. Select **My Devices** sub-menu.

Step 3. Select the stored G1 SCBA device pair, press "Discon" button if still connected.

Step 4. Press Delete button. Press OK to Delete the Paired G1 SCBA device.

Bluetooth audio pair info is cleared from the Kenwood Radio.

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

Troubleshooting

Topic	Problem/Issue	Diagnosis	Possible Solution	Expected Result
Audio	Intermittent Audio	Facepiece may not be properly sealed	Adjust the facepiece until a proper seal is formed	Outgoing audio will function as expected
	Incoming and/or outgoing audio from G1 is not working	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.
			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 via A2 Software	Improved G1 outgoing audio quality
Pairing	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 Paring Save settings.	Bluetooth pairing information will no longer be cleared on every battery removal.
	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 on and off to reset the auto connect.	
			If power cycling the radio does not result in a successful connect, clear the G1 & Radio pairing history. Re-pair the G1 & Radio.	
		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: *Red* = enabled/unpaired OR enabled/paired, not connected *Green* = enabled/connected
		Radio is a not a Kenwood NEXEDGE NX-5000 Series (or Kenwood VIKING VP5000 or VP6000 Series) Bluetooth Radio	G1 is compatible with Kenwood NEXEDGE NX-5000 Series (or Kenwood VIKING VP5000 or VP6000 Series) Bluetooth Radios.	To use G1 Bluetooth audio, pair with a Kenwood NEXEDGE NX-5000 Series Bluetooth Radio. (Or Kenwood VIKING Series radio, and Refer to the VIKING Series Pairing Guide).
	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