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## **How to Connect to RI DIGITAL LINK XLX059 with an Icom ID-51 1. Overview**

This guide explains how to connect an Icom ID-51 to RI DIGITAL LINK XLX059 using D-STAR. XLX059 is accessed as DCS059, module A on D-STAR and is bridged to other digital modes on RI DIGITAL LINK.

You will:

- Link your ID-51 (via a D-STAR repeater or hotspot) to DCS059 A.
- Switch back to CQCQCQ to talk through XLX059.
- Unlink cleanly when you are finished.

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## **2. Requirements Before**

you start:

- Your Icom ID-51 is programmed with:
- Your correct callsign.
- At least one working D-STAR repeater or hotspot in DR memories.
- You can already:
- Make a basic D-STAR QSO, and
- Use DR mode (FROM / TO) on the ID-51.

XLX059 on RI DIGITAL LINK is presented as:

- D-STAR reflector: DCS059 A (equivalent to XLX059 module A).

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## **3. Step-by-Step: Link the ID-51 to DCS059 A**

These steps assume you are using DR mode on the ID-51.

### **3.1 Select your D-STAR entry point**

1. Put the ID-51 into DR mode.
2. Set the FROM (RPT1/RPT2) path to your D-STAR repeater or hotspot:

- Use the DR menu to choose the local repeater or hotspot you normally use for D-STAR.
- Confirm you can talk through it (e.g., use an echo or info function) before proceeding.

### **3.2 Set the link command (URCALL / TO)**

You will send a D-STAR link command to connect to the reflector.

Depending on how your ID-51 is set up, you can do this via DR menus or URCALL memories.

Option A – Using DR “Link to Reflector”

1. Press the DR button to access DR mode menus.
2. Set TO: to Link to Reflector (wording may vary slightly).
3. Use Direct Input or reflector list (if available) to enter/select:
  - DCS059 A as the reflector and module.
4. Confirm the “TO” field shows that you are about to link to DCS059 A.

Option B – Using a URCALL memory

If you manage URCALL fields manually:

1. Create a URCALL entry with the link command to DCS059 A, for example:
  - DCS059AL (8-character string with L in the last position for “Link”).

Select this URCALL entry in the ID-51 so it becomes the active command.

### **3.3 Send the link command**

1. With the link command selected (via DR “Link to Reflector” or URCALL), key up briefly.
2. Release PTT and listen for the gateway’s response:
  - A voice announcement or tone indicating you are now linked to DCS059 A / XLX059 A.

If you do not hear a link confirmation, verify:

- You have coverage into the D-STAR repeater/hotspot.
- Your callsign is set correctly.
- The DCS059 reflector is supported by that gateway.

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## 4. Talking on RI DIGITAL LINK (XLX059)

After the link is established, you change back to normal CQCQCQ operation so your audio goes through the linked reflector.

### 4.1 Switch back to CQCQCQ

1. In DR mode, change TO: from “Link to Reflector” to Use Reflector or CQCQCQ, depending on menu wording.
2. If you are using URCALL memories, set URCALL to CQCQCQ.

This tells the system: “Stay linked to DCS059 A, and send my QSOs there.”

### 4.2 Make a QSO

1. Key up and identify clearly, for example:
  - “<CALLSIGN> on RI DIGITAL LINK XLX059, via <REPEATER/HOTSPOT>, listening.”
2. Leave 3–4 seconds between overs:
  - This allows XLX059 and all bridged systems (DMR, YSF, P25, NXDN, etc.) to reset, ensuring audio is not clipped at the beginning of transmissions.

Follow any net control instructions if you arrive during a scheduled net or event.

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## 5. Disconnecting from XLX059

When you are finished, it is good practice to unlink from the reflector, especially on shared gateways.

### 5.1 Use the unlink command

Depending on your gateway and radio setup:

- Many systems use a standard unlink entry in the DR menu or URCALL memories, such as a U command.
- On some radios/gateways, you may have a URCALL like:
  - REF\*\*\*U or a dedicated UNLINK preset.

General process:

1. Set TO: or URCALL to the unlink command used by your gateway.
2. Key up briefly to send the unlink request.
3. Listen for a confirmation that the reflector link has been dropped.

If your local repeater has specific unlink instructions, follow those as the final authority.

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## 6. Operating tips

- **Pause between overs:** Always leave 3–4 seconds between transmissions so D-STAR, XLX059, and all cross-mode bridges can reset cleanly.
  - **Identify clearly:** Include your callsign, location, and entry method (e.g., “via D-STAR on XLX059”).
  - **Be considerate on shared gateways:** Don’t leave long, unattended reflector links active on repeaters or hotspots others depend on.
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