

---

## **DMR How-To: RI DIGITAL LINK (TG 31444)**

### **1. Overview**

RI DIGITAL LINK is accessible on DMR using talkgroup 31444 on both the BrandMeister and TGIF networks.

If your hotspot is on BrandMeister, use 31444 on BrandMeister; if your hotspot is on TGIF, use 31444 on TGIF.

---

### **2. Talkgroups in Use**

- BrandMeister
  - Talkgroup: 31444 – RI DIGITAL LINK (main talkgroup for the system)
- TGIF Network
  - Talkgroup: 31444 – RI DIGITAL LINK (same group number, different network)

---

### **3. Hotspot Setup – BrandMeister**

These steps assume a Pi-Star or MMDVM-based hotspot, but the values apply to most DMR hotspots.

#### **3.1 Enable DMR Mode**

1. Open the hotspot web dashboard in your browser.
2. Click Configuration.
3. In the MMDVMHost Configuration section, turn DMR Mode ON.
4. Click Apply Changes and wait up to a minute for the hotspot to restart.

#### **3.2 BrandMeister Basic Settings**

In the DMR Configuration section:

1. DMR Master
  - Select a nearby BrandMeister server (servers starting with “BM\_”, such as 3102, 3103, 3104 in the U.S.).

## 2. DMR ID

- Enter your assigned DMR ID from RadioID.net (usually 7 digits).

## 3. Hotspot Security / Password

- Log in to the BrandMeister website (SelfCare / Security section).
- Create or note your hotspot password.
- Enter the same password into the hotspot's BrandMeister password field.

## 4. ESSID (if shown)

- This is a suffix for multiple hotspots on one DMR ID.
- If this is your only hotspot, you can leave it blank or set it to 01.
- If you add more hotspots later, each one should use a unique ESSID (01–99).

## 5. DMR Color Code

- Choose a color code (commonly 1).
- Remember this value – it must match your radio channel's color code.

Click Apply Changes again and wait for the hotspot to reconnect.

On the main dashboard you should see DMR Net showing as connected/green.

### **3.3 Static vs Dynamic Talkgroup on BrandMeister**

BrandMeister supports three behaviors for talkgroups:

- **Dynamic**
  - The talkgroup activates when you key up on it.
  - It usually times out after about 15 minutes of local inactivity.
- **Static**
  - The talkgroup is always active on that timeslot until you remove it in the BrandMeister dashboard.
- **Auto-static**
  - A special case on some duplex hotspot setups; not needed for most simplex hotspots.

For a dedicated RI DIGITAL LINK channel on a hotspot, static on Timeslot 2 (TS2) is usually best.

To make 31444 static on TS2:

1. Log into the BrandMeister dashboard.
2. Go to My hotspots and select your hotspot (matching your DMR ID/ESSID).
3. Find the Static Talkgroups section for Timeslot 2.
4. Add talkgroup 31444 to the static list for TS2.

Now your hotspot will always listen for RI DIGITAL LINK on TS2 until you remove it.

---

## **4. Programming Your DMR Radio – BrandMeister**

You'll create:

1. A Group Call Contact (31444).
2. A Channel that uses that contact.
3. A Zone containing the channel.

### **4.1 Create the RI DIGITAL LINK Contact**

In your radio's CPS (programming software):

1. Open the Digital Contacts or DMR Contacts section.
2. Add a new contact:
  - Name: RI DIGITAL LINK
  - Call Type: Group Call
  - Call ID: 31444

Save the contact.

### **4.2 Create the Hotspot Channel**

Create a new Digital Channel:

- Channel Name: RI DL 31444 BM (or any name that's clear to you).
- RX Frequency: Your hotspot receive frequency (e.g., 433.xxxx or 446.xxxx MHz).

- TX Frequency: Same as RX for simplex hotspots.
- Color Code: Set to the same color code you used in the hotspot (for example, 1).
- Time Slot: Use TS2 if that's where you made 31444 static (or match your BrandMeister setup).
- Contact / Group: Select the RI DIGITAL LINK group call contact (ID 31444).
- Admit Criteria / In-Call: For a simple hotspot channel, "Color Code Free" or "Always" typically works fine.

Save the channel.

#### **4.3 Add the Channel to a Zone**

1. Open the Zone configuration in the CPS.
2. Either create a new zone (for example, HOTSPOT) or use an existing one.
3. Add RI DL 31444 BM to that zone.
4. Write the updated codeplug to your radio.

On the radio, select the zone and then the RI DL 31444 BM channel.

---

## **5. Hotspot Setup – TGIF Network**

The TGIF network is configured similarly to BrandMeister but uses TGIF masters and its own login.

### **5.1 Configure the Hotspot for TGIF**

On your hotspot:

1. Ensure DMR Mode is enabled in Configuration.
2. In DMR Configuration:
  - DMR Master: Select a TGIF master server from the available list.
  - DMR ID: Typically your normal DMR ID (follow TGIF's instructions if they specify otherwise).
  - Password / Security:
    - Register or log in at the TGIF portal.

- Create or note your hotspot password.
- Enter that password in the hotspot's TGIF password/security field.
- DMR Color Code: Choose a color code (often 1), and remember this for your radio.

Apply the changes and confirm the hotspot shows as connected to TGIF.

## **5.2 Program the Radio for TGIF 31444**

You can reuse your existing 31444 contact or create a TGIF-specific one.

### 1. In Digital Contacts:

- Name: RI DL 31444 TGIF (to distinguish it).
- Call Type: Group Call
- Call ID: 31444

### 2. Create a TGIF Channel:

- Channel Name: RI DL 31444 TGIF
- RX/TX Frequency: The simplex frequency of your TGIF hotspot.
- Color Code: Same as the TGIF hotspot (e.g., 1).
- Time Slot: Use the time slot expected by your TGIF setup (often TS2 on simplex).
- Contact Name: RI DL 31444 TGIF

### 3. Add this channel to a TGIF Zone (for example, TGIF HOTSPOT) and write the codeplug to the radio.

## **6. On-Air Use and Operating Tips**

### **6.1 Bringing RI DIGITAL LINK Up**

- On BrandMeister:
  - If 31444 is static:
    - Simply select the RI DL 31444 BM channel and transmit; the talkgroup is already active on TS2.

- If 31444 is dynamic only:
  - Key up once briefly on the RI DL 31444 BM channel to activate the talkgroup.
  - It will remain active for a period after local activity, then time out.
- On TGIF:
  - Select the RI DL 31444 TGIF channel.
  - Key up briefly to bring the talkgroup active on your TGIF hotspot.

Give a short test call and listen for any reply or dashboard activity.

## 6.2 Operating Etiquette

- When first arriving, call:
  - “<CALLSIGN> on RI DIGITAL LINK, listening on DMR.”
- Leave 3–4 seconds between transmissions to allow all linked systems and bridges to reset and avoid clipped audio.
- During nets or scheduled events, follow net control’s instructions and local guidelines.

## 6.3 Basic Troubleshooting

If you key up but hear nothing back and see no activity:

- Confirm:
  - Your DMR ID is correct.
  - The color code in the radio matches the hotspot.
  - The time slot in the radio matches the time slot used for 31444 on the hotspot.
  - The talkgroup number is 31444, and the call type is Group Call.
- Check the hotspot dashboard to see if it shows:
  - The radio’s transmission.
  - Any BrandMeister or TGIF network errors.

If everything looks correct and it is still quiet, try again later or during a published net time to confirm you can hear traffic.

---