

Georgia  D-STAR



D-STAR

An Introduction

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Repeater Status

- Is the Repeater Linked and Where?
 - I (Info) Command from radio
 - <http://repeater.dstargateway.org>
(<http://W4AES.dstagateway.org>)

DPLUS Dashboard | Gateway Status and Control

Registration | W4AES Repeater System | DPLUS version 2.2p

Linked Gateways / Reflectors

Module	Linked to
A	unlinked
B	REF030 C
C	unlinked
D	unlinked
E	unlinked

Remote Users

Callsign	User Message	Last TX on	Type
K2WO B		listening	HotSpot

Last Heard

Callsign	User Message	Last TX on	Time
N9GQA	Coweta Co EC	B	2019/02/07 22:32:44
WA1WOK		B	2019/02/07 21:21:59
W4QED	w4qed.hamshack.info	B	2019/02/07 21:08:17



DPLUS Dashboard | Reflector Status and Control

Registration

REF030 Reflector System

DREFD version 1.42

Linked Gateways

Module A	Module B	Module C	Module D	Module E
	K4GAR B	K6ACS C		
	KA4RVT B	K6SOA C		
	KJ4GGV C	K7RST C		
	KJ4KLD C	KC4GYM C		
	KJ4PXY C	KD8YFZ B		
	KJ4YNR C	KG4NXO B		
	KJ4ZLL C	KI4SAZ B		
	KK4GQ B	KJ4BDF B		
	KK4JPG C	KJ4BWK B		
	KK4SGC C	KJ4GGV B		

Reflectors

What repeaters are connected to the reflector?

REF030.dstargateway.org

Reflectors

What hotspots are connected to the reflector?

Remote Users

Callsign	User Message	Last TX on	Type
GI7ULG		listening	HotSpot
N8QQ		listening	HotSpot
KA9QJT		listening	HotSpot
K9ARV		listening	HotSpot
KA4FHP		listening	DV AP
N4WD		listening	HotSpot
K4MFC		listening	HotSpot
W1CBD D		C	HotSpot
W4RFA		listening	HotSpot
W7PAZ		listening	HotSpot
W4A7VQ		listening	HotSpot

Reflectors

Who is talking on
the reflector?

Last Heard

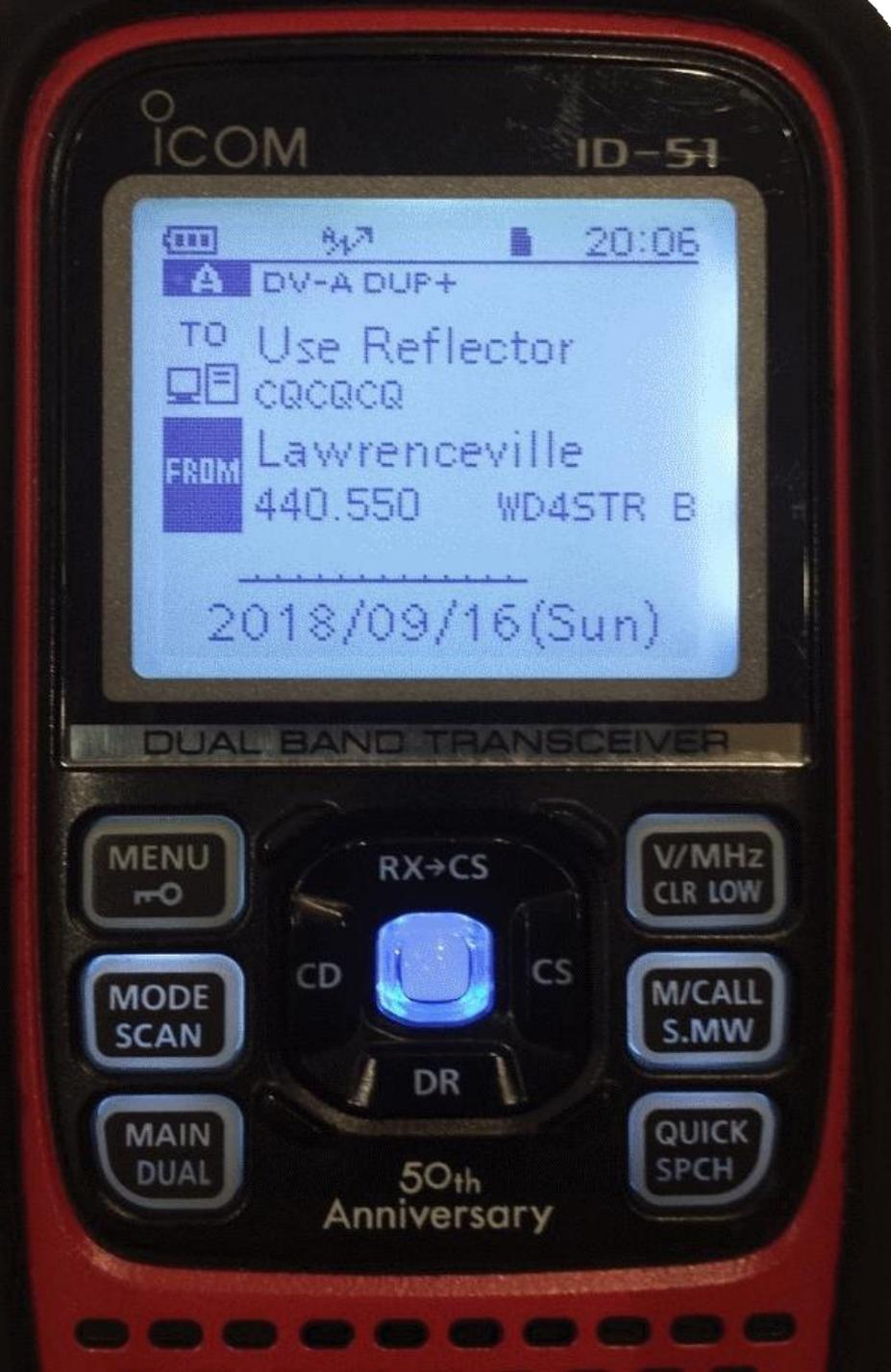
Callsign	User Message	Last TX on	Time
AD4DZ	DAVE MELBOURNE/FL	C	2019/02/03 21:08:55
KC2FZR		C	2019/02/03 21:03:32
KK4ZFT	RC528	C	2019/02/03 21:00:16
KE4JLL	BOB IN NE GEORGIA	B	2019/02/03 20:56:51
KI4WKJ		B	2019/02/03 20:49:47
K4YK		C	2019/02/03 20:45:26
KM6ZED	HAM SOLO	C	2019/02/03 20:45:03
KE0UAR	ICOM IDB00	C	2019/02/03 20:44:28
KG7FXP		C	2019/02/03 20:44:26

Reflector Linking

- Reflectors run software called MONLINK
 - Repeater trustee can set a default location to link to (can vary based on time)
 - Users may unlink the repeater
 - Users may link the repeater to another reflector
 - If no local activity after 15 minutes, the Monlink reconnects to the default location



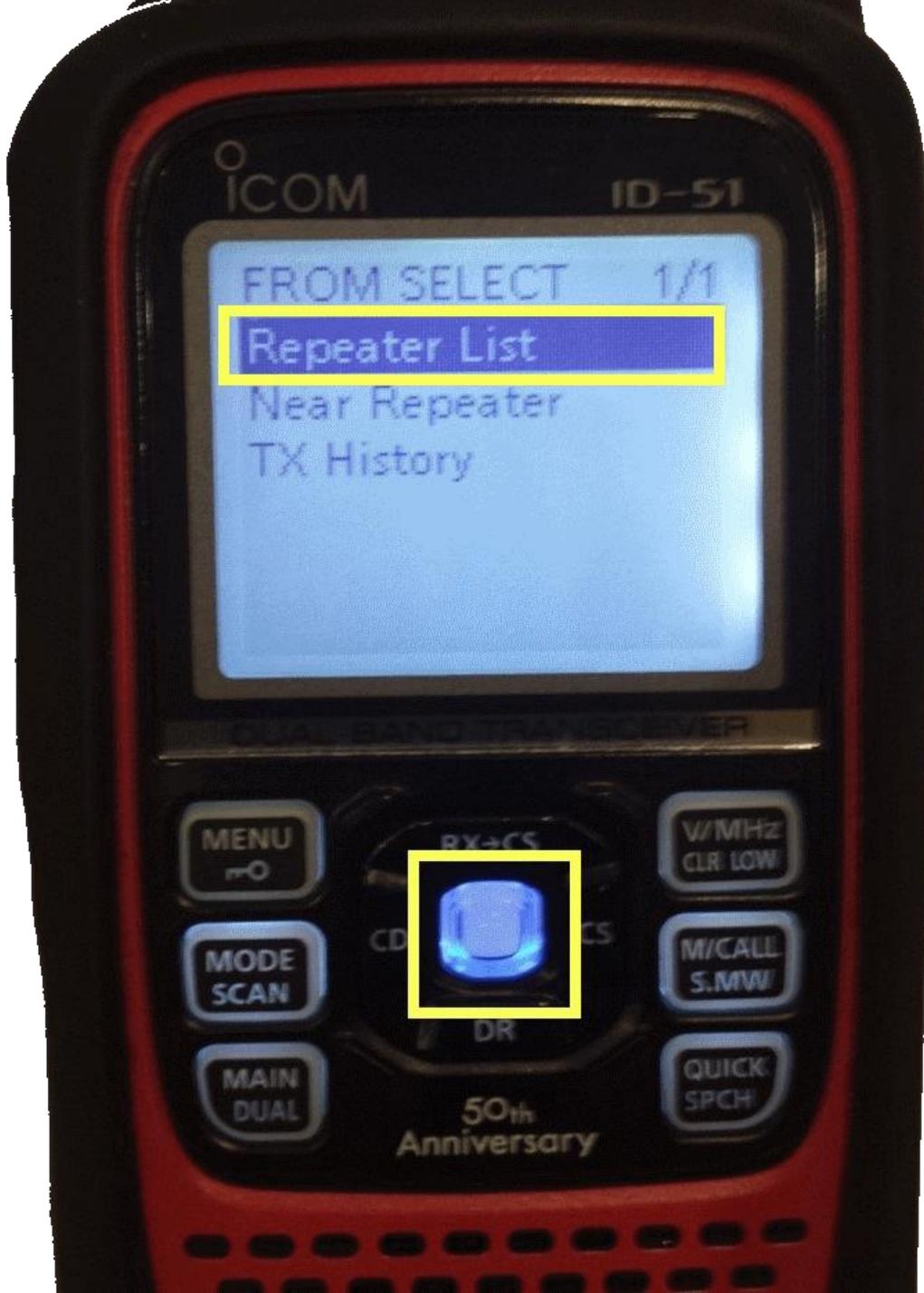
DR Mode
(Digital Repeater)



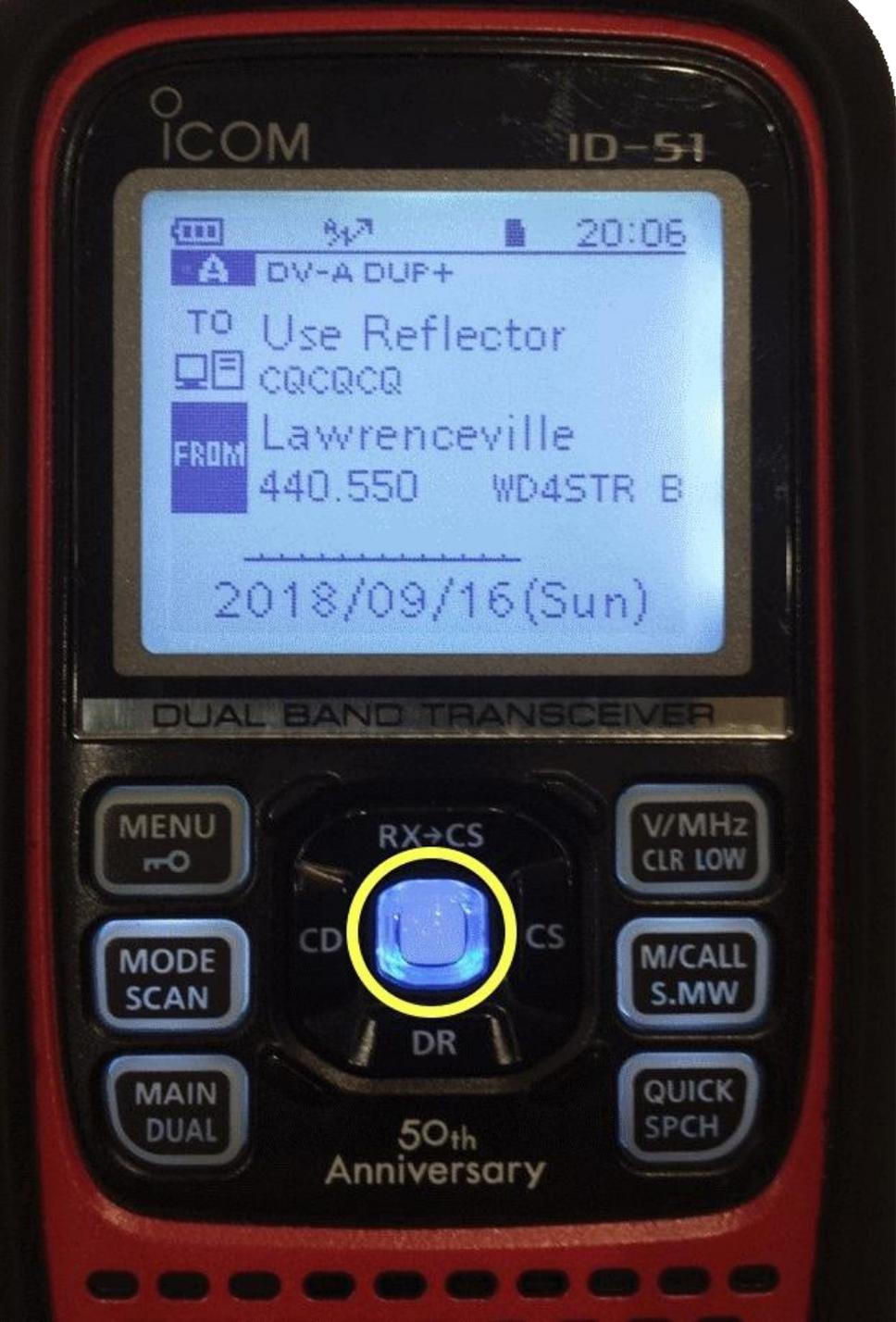
Using DR Mode

- **DR Mode** (Digital Repeater Mode) allows quick selection of repeaters and using linking commands
- Uses stored database of repeaters in memory and on SD card
- Press and hold DR button to activate DR Mode
- **FROM** – Sets local repeater you are using
- **TO** – Determines what you want to do with your signal

Selecting the Repeater (FROM)



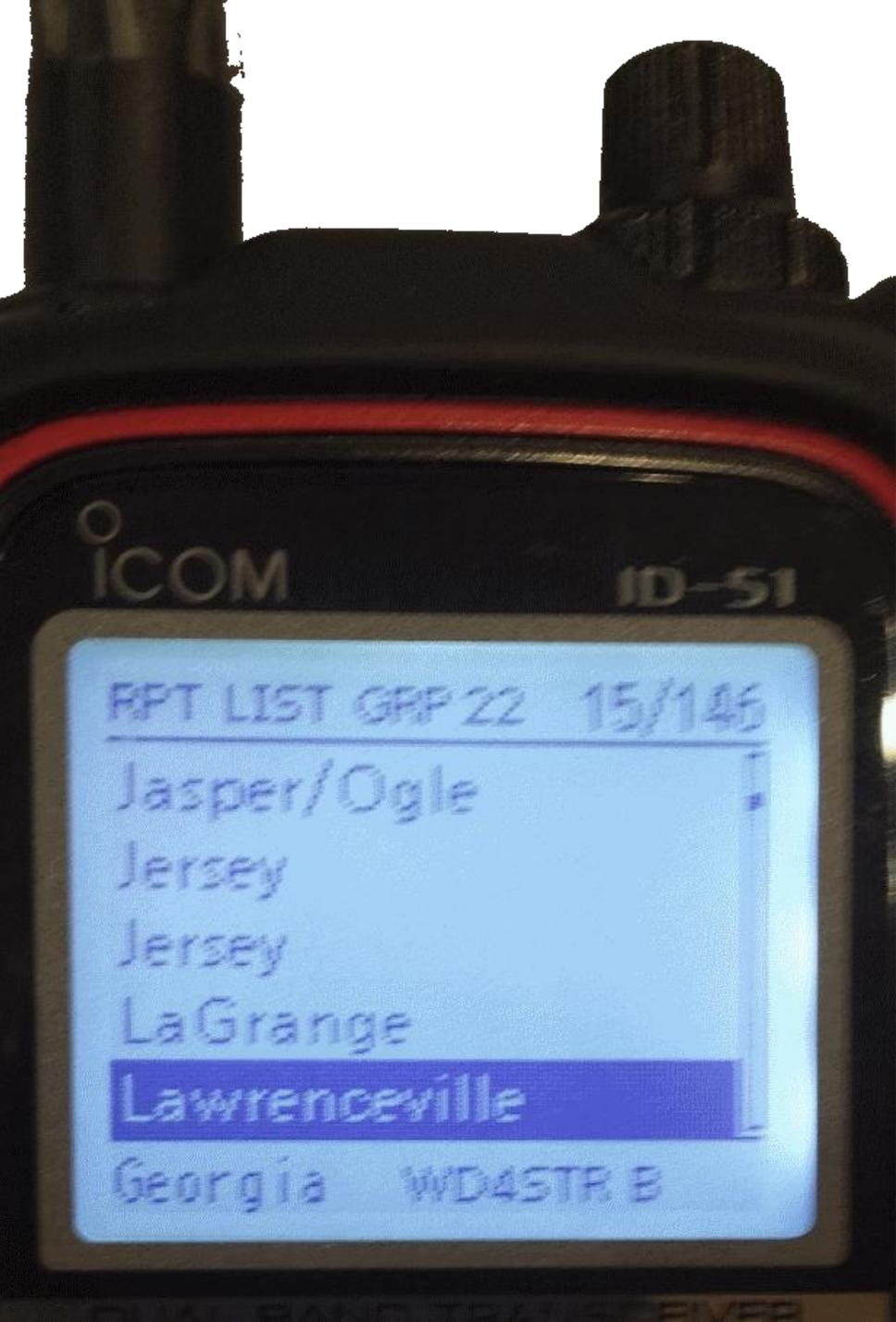
- Highlight FROM and press blue center button
- **Repeater List** – Select repeater (DV or FM) based on region



Using Repeater List

- Press blue center button
- Select region of country (*your list may vary with updated programming*)

Select Repeater



- Scroll through list using top channel knob
- List sorted first by state then city
- Shows callsign and module of highlighted repeater
- Select highlighted repeater with blue center button



What to Do (TO)

- Press top above blue button (RX+CS) to highlight TO



What to Do (TO)

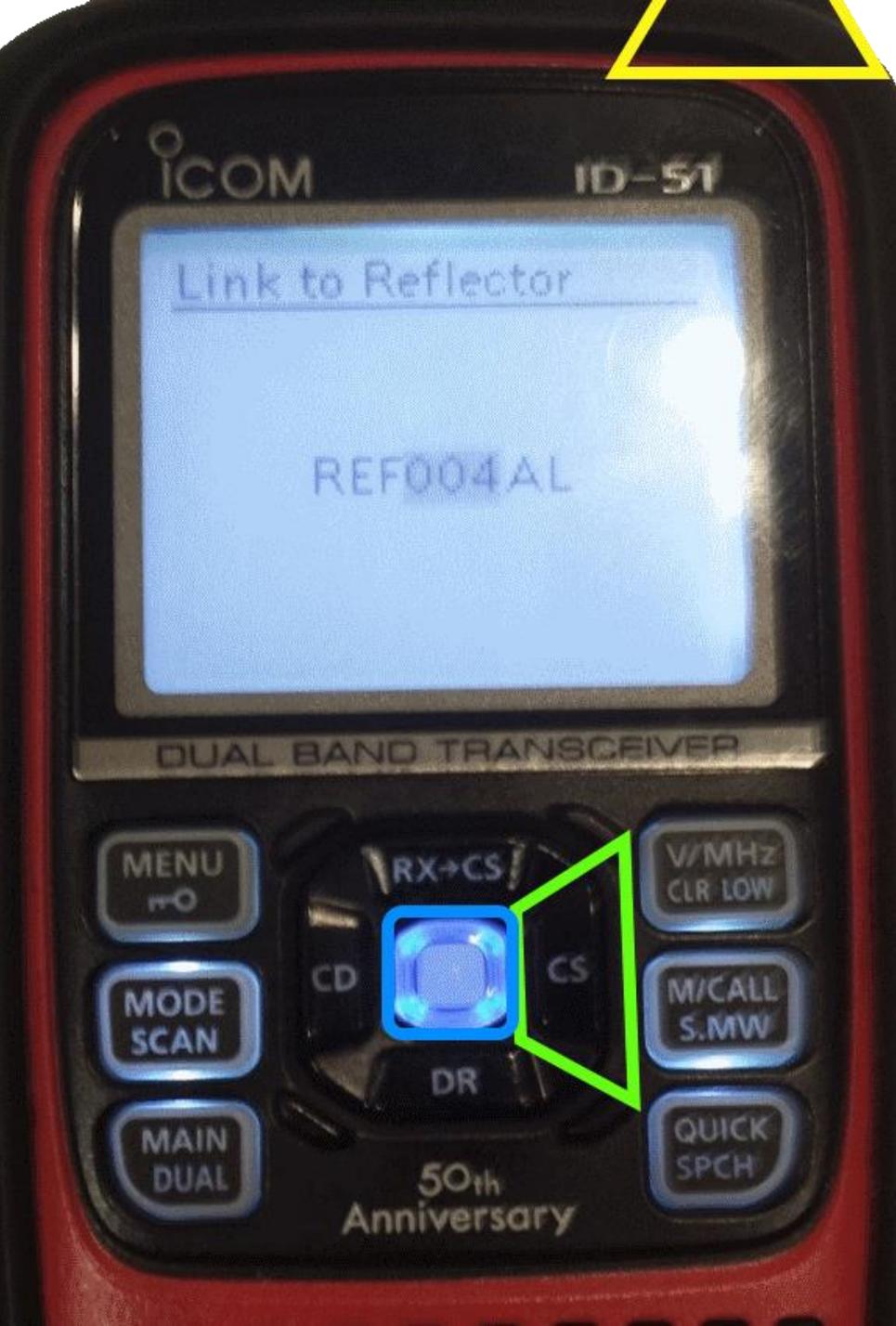
- Most often, select Reflector to use a reflector on the local repeater



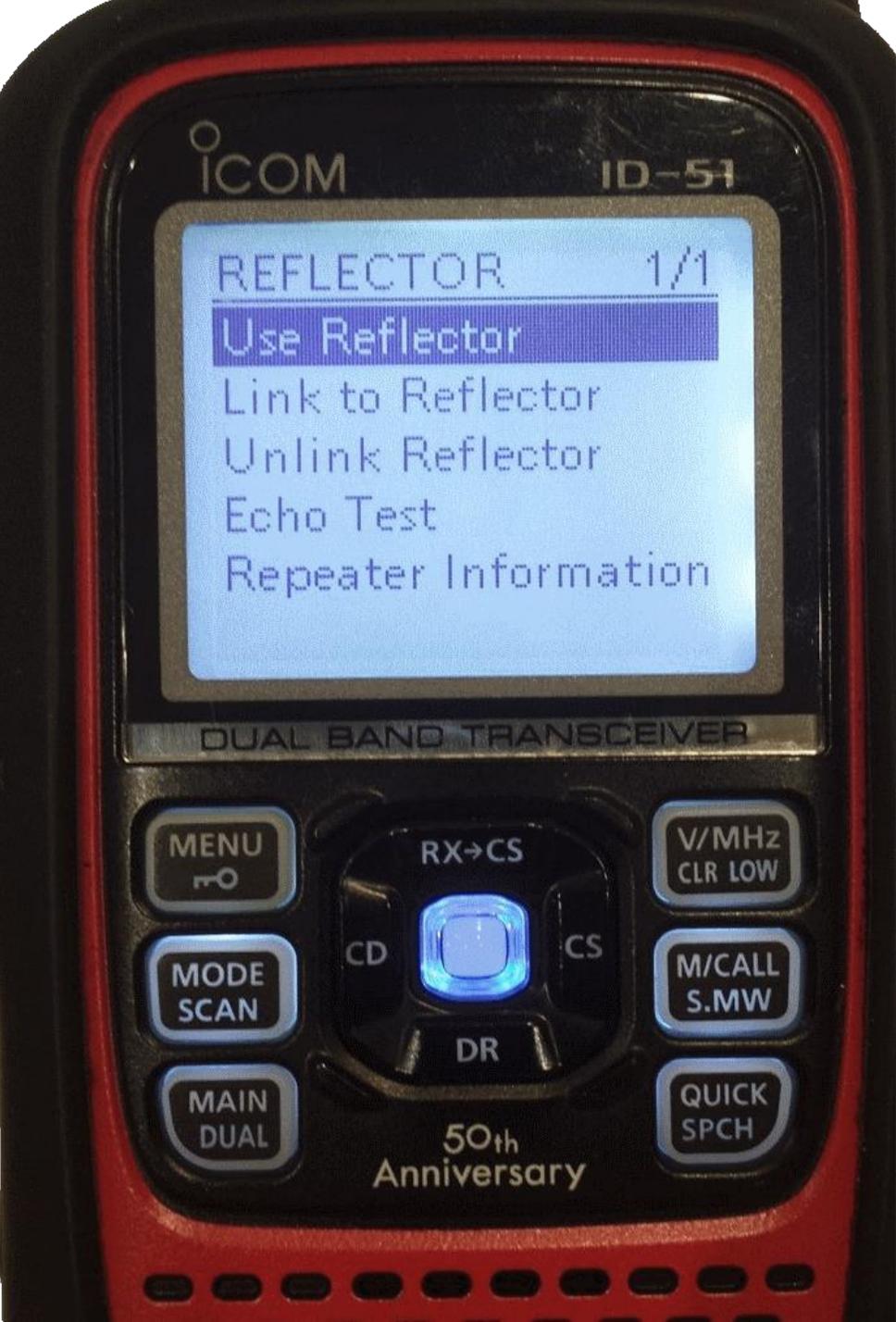
What to Do (TO)

- **Use Reflector** to use a reflector on the local repeater (Talk)
- **Link to Reflector** – select to choose a reflector to link
- **Unlink Reflector** – select to unlink the local repeater from the reflector
- **Echo Test** – Plays back last transmission
- **Repeater Information** – Causes repeater to announce its callsign

Selecting Reflector for Linking

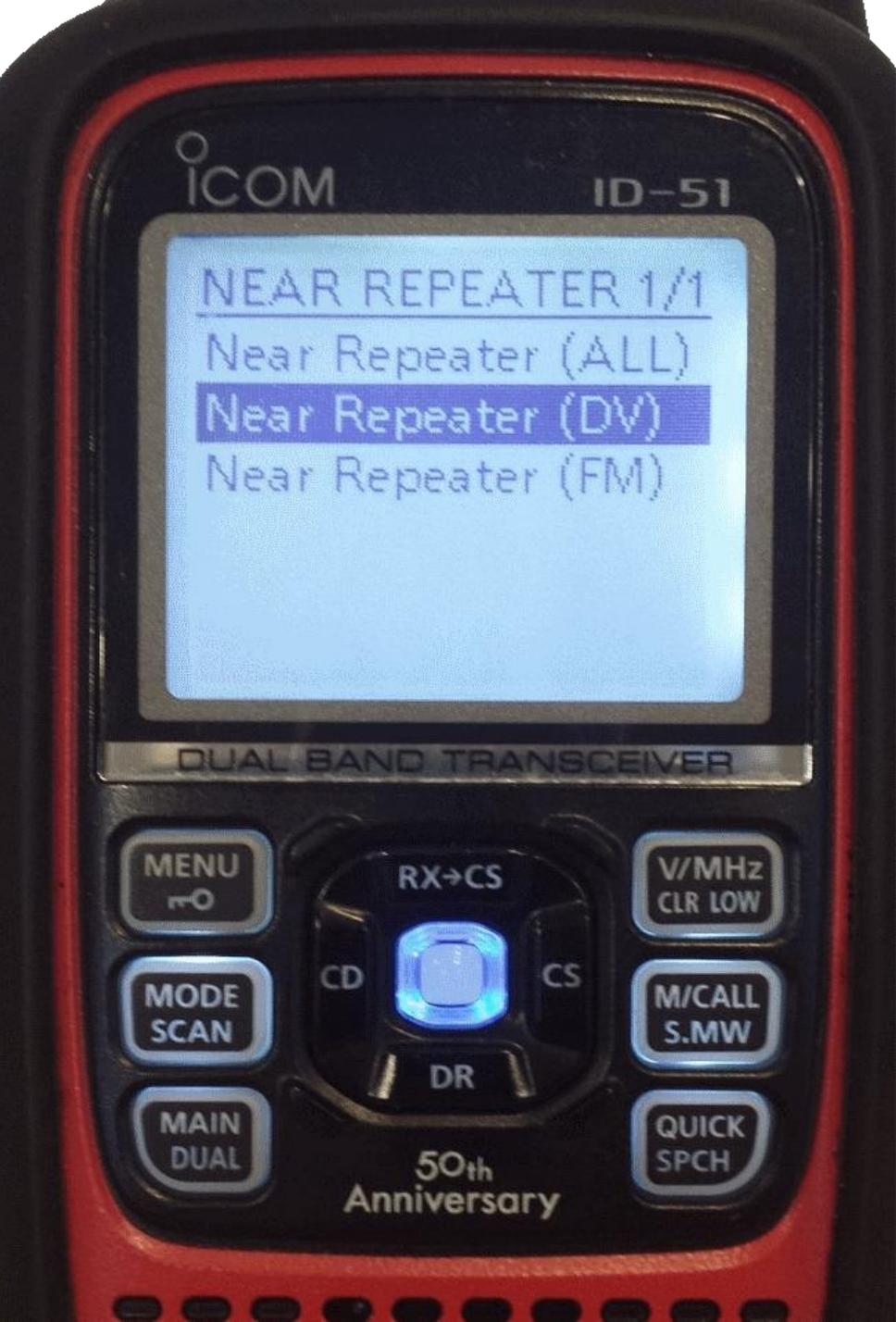


- Select Direct Input to select a reflector and module
- Turn top channel knob to select reflector number
- Press right side of center (CS) to highlight and select module
- Press blue center button to make selection



Simple Rules for Linking / Unlinking

- If a repeater is already linked to a reflector, your radio follows the link
- You must unlink before linking to another reflector
- Once a **Link** command is issued, go back to **Use Reflector** to talk



Nearest Repeater

- With FROM highlighted, press the center blue button to get to this screen
- Select **Near Repeater**
(*GPS is on and locked to satellites*)



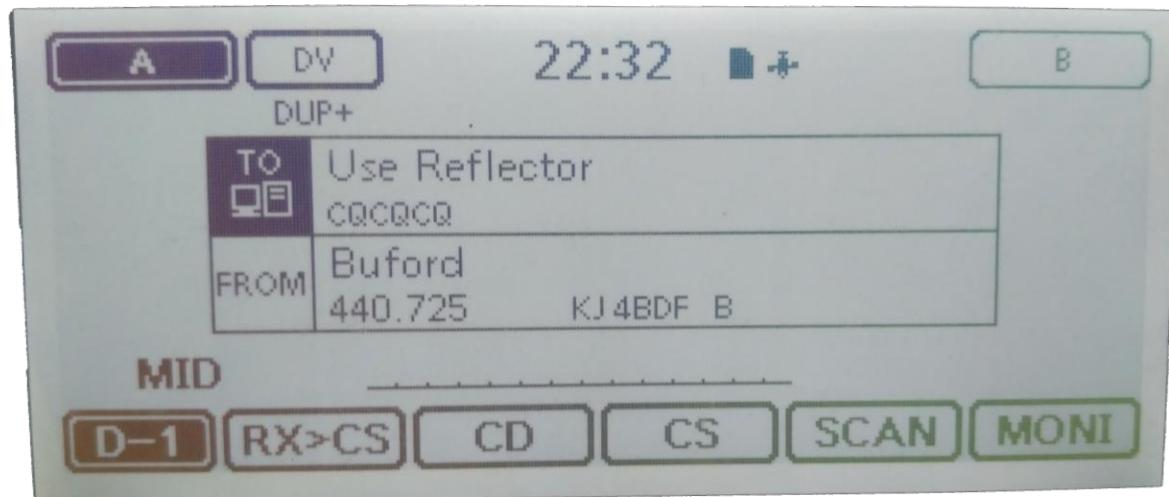
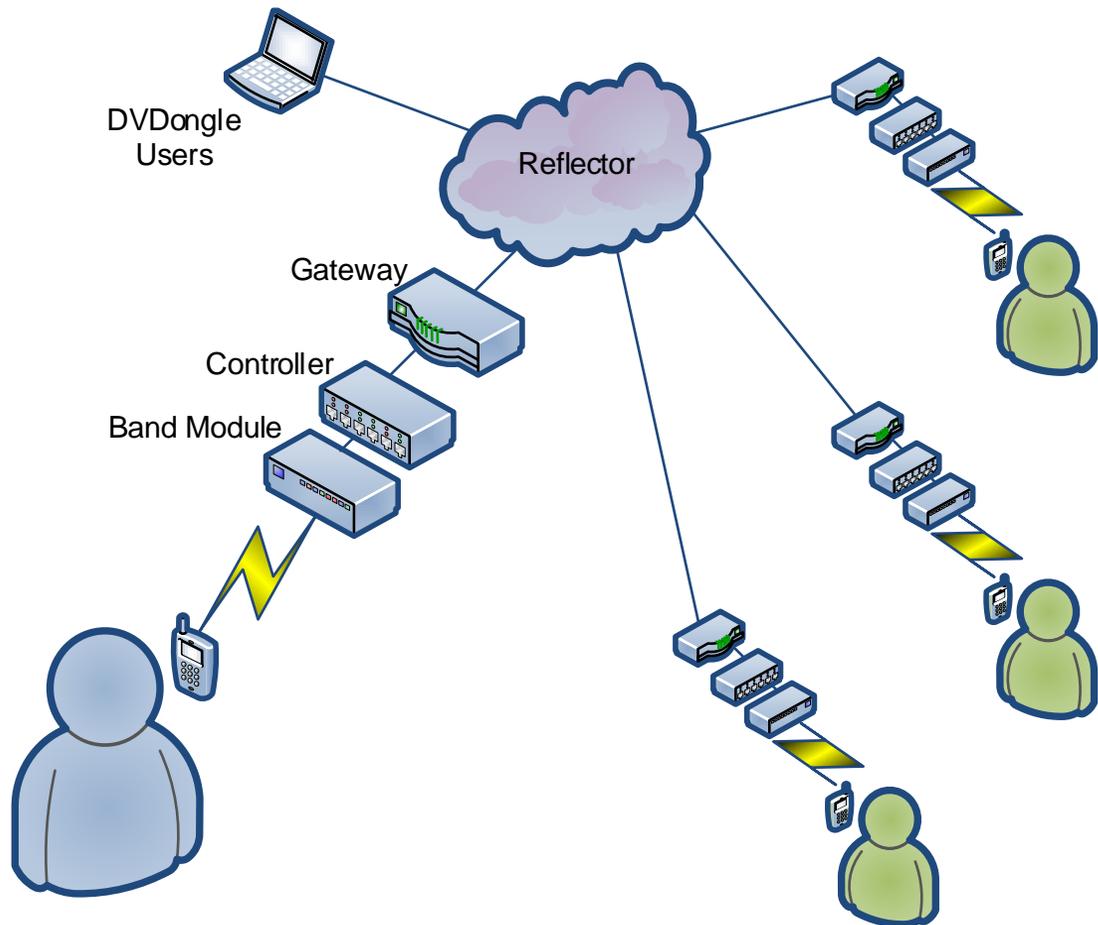
Nearest Repeater

- Select type of nearest repeater
 - **Near Repeater (ALL)** to show both FM and D-STAR repeaters
 - **Near Repeater (DV)** to show only D-STAR repeaters
 - **Near Repeater (FM)** to show only FM repeaters



Nearest Repeater

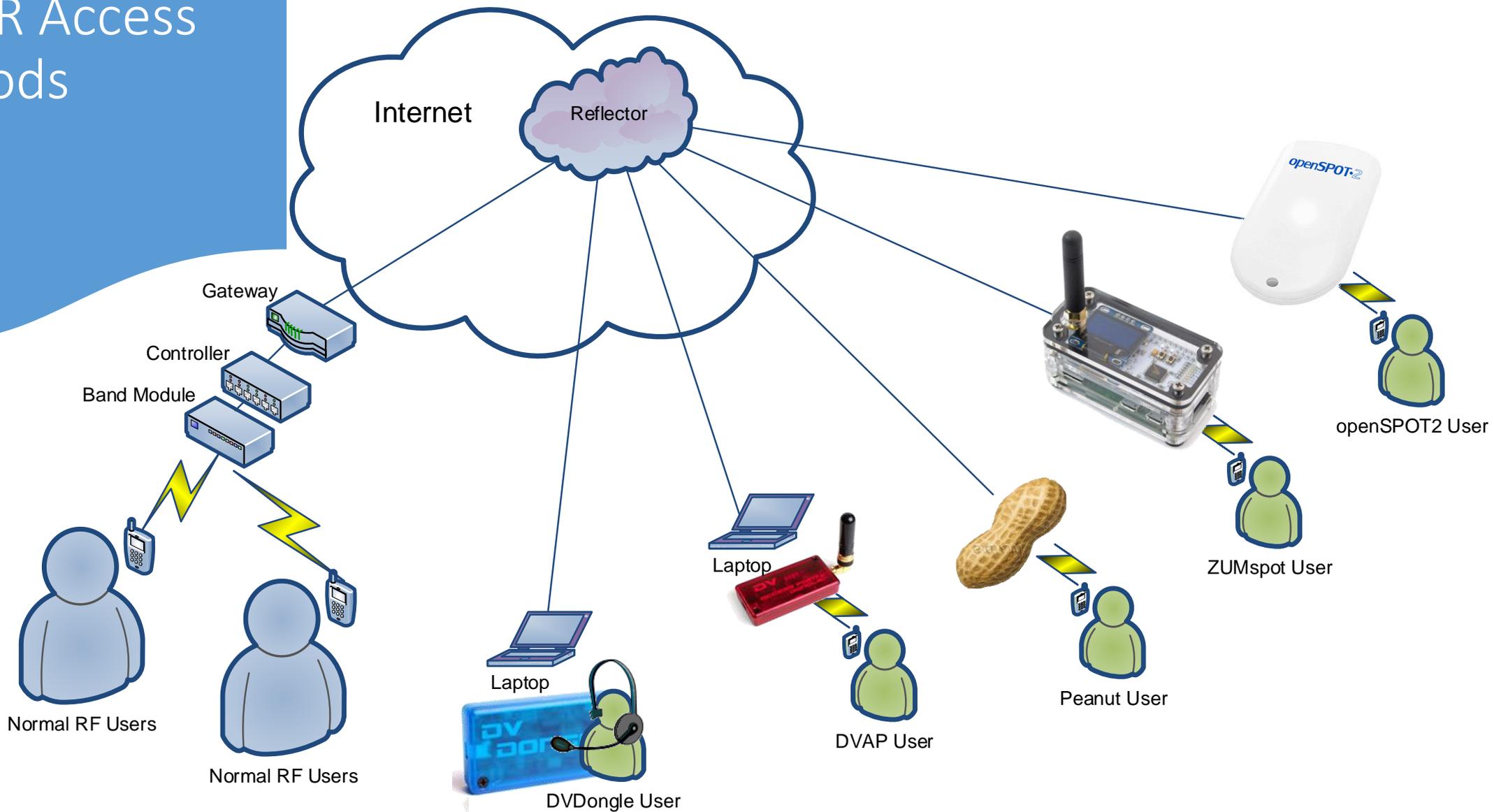
- Nearest repeaters displayed sorted by distance to repeater
- Distance to repeater shown at bottom left of screen
- Callsign and module shown at lower left of screen
- Select repeater with blue center button



Programming for talking on WD4STR (port DV B) to (port DV B)
 YOUR.: **CQCQCQ**
 RPT1: **WD4STR#B**
 RPT2: **WD4STR#G**
 Set Radio To: **440.5500 MHz Offset +5.0000 MHz**
 "•" represents a space

Talking on the Repeater

D-STAR Access Methods





Hotspots

- Support multiple digital modes
- Much easier to use when radio is in DR mode

Group No	Group Name	Sub Name	Repeater Call Sign	Gateway Call Sign	Call Frequency	Offset	Mod	TON	Repeater Tone	RPT1U SE	Position	Latitude	Longitude	UTC Offset
21	HotSpots	Blue DV	Blue	WA4YIH G	WA4YIH G	439.6+	DUP	0	DV	OFF	88.5Hz	YES	Approximate	34.11 -84.92 -4:00

No.	Type	Name	Sub Name	Call Sign		Frequency			
				Repeater Call Sign	Gateway Call Sign	Operating Freq	DUP	Offset Freq	Mode
0	DV Repeater	Blue DV Blue	Blue	WA4YIH G	WA4YIH G	439.600000	+DUP	0.000000	DV



Reflector Etiquette

REF001C and REF030C are some of the busiest reflectors in D-STAR

Each reflector commonly has 50+ repeaters and 500+ hotspots connected from all over the world

Please don't experiment or play with hotspots on these and other really busy reflectors

Don't connect two hotspots on the same frequency or computer

Registration

 You do NOT have to be registered to talk

 Registration allows Linking a repeater
Access D-STAR network from Internet (i.e. Hotspot)

 Get on the air and start talking, then go through the registration process.

 Registration: Registration.DSTARgateway.org

 Buy a radio and talk on D-STAR TODAY!!!

Icom IC-9700



- RF direct sampling receiver for 2m and 70cm
- All mode, tri-band transceiver covering 144, 430/440 as well as 1200MHz
- Supports CW/AM/SSB/SM/RTTY and D-STAR DV and DD modes
- Digital Data (DD) mode provides 128 kbps data communication
- PA provides a powerful 100W (144 MHz), 75W (430/440 MHz) and 10W (1200 MHz) output
- 4.3" touch screen color TFT LCD
- Smooth satellite operation with normal/reverse tracking and 99 satellite channels
- Dual D-STAR receive (decodes two voice streams simultaneously)



www.DSTARUsers.org

Recently heard list

W4AES.DSTARGateway.org

Repeater recently heard list

REF030.DSTARGateway.org

Reflector recently heard list

www.DSTARInfo.com

Information about D-STAR and radio database updates

Tools



Questions?