



Singapore Amateur Radio Transmitting Society

60 Paya Lebar Road, #07-54, Paya Lebar Square, Singapore 409051
www.sarts.org.sg



More than just Digital Voice!

BY 9V1LH, 30.05.2025

Scope of the presentation



- A BRIEF INTRODUCTION TO D-STAR
- BEYOND VOICE: PICTURE, TEXT AND POSITION REPORTS VIA D-STAR
- REQUIRED HARD- AND SOFTWARE
- OUTLOOK

A brief introduction to D-STAR

- ▶ Developed by JARL (Japan Amateur Radio League) in the late 1990s
- ▶ First open digital voice & data protocol designed for amateur radio
- ▶ Icom was the first manufacturer to implement D-STAR in radios (early 2000s)
- ▶ Enables digital voice, text, pictures, and position data exchange
- ▶ Works via RF in simplex, repeaters, and through internet gateways

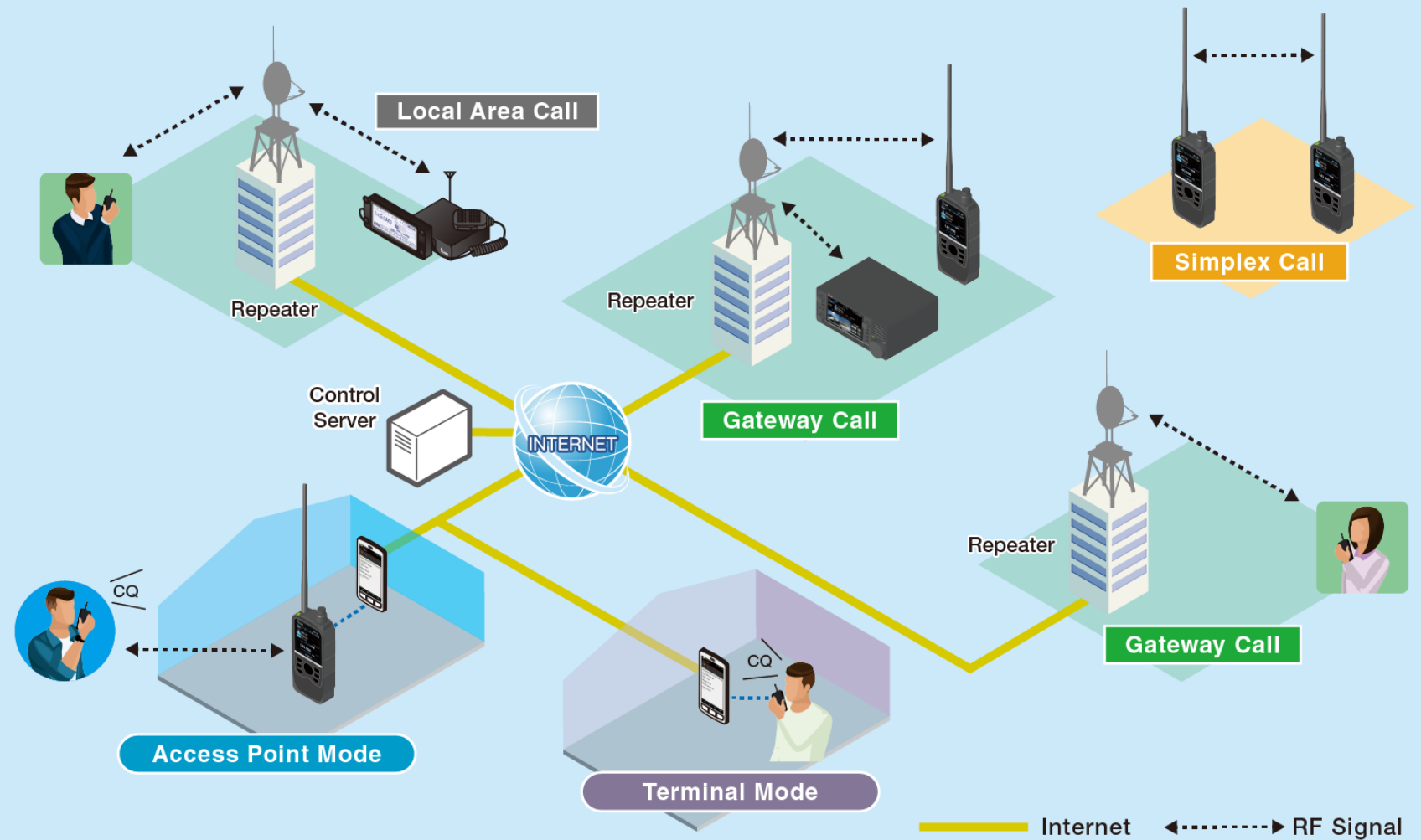


Icom IC-V82 (2004–2014)
Icom's first D-STAR-capable handheld, enabled via the optional **UT-118** add-on module



A brief introduction to D-STAR

Several options to communicate, including callsign routing and linking





A brief introduction to D-STAR



Discover D-STAR from Icom

www.youtube.com/watch?v=ZMMt55Dtp5Q

Beyond voice: Picture, text and position reports via D-STAR



GPS location can be transmitted over RF.



GPS Location

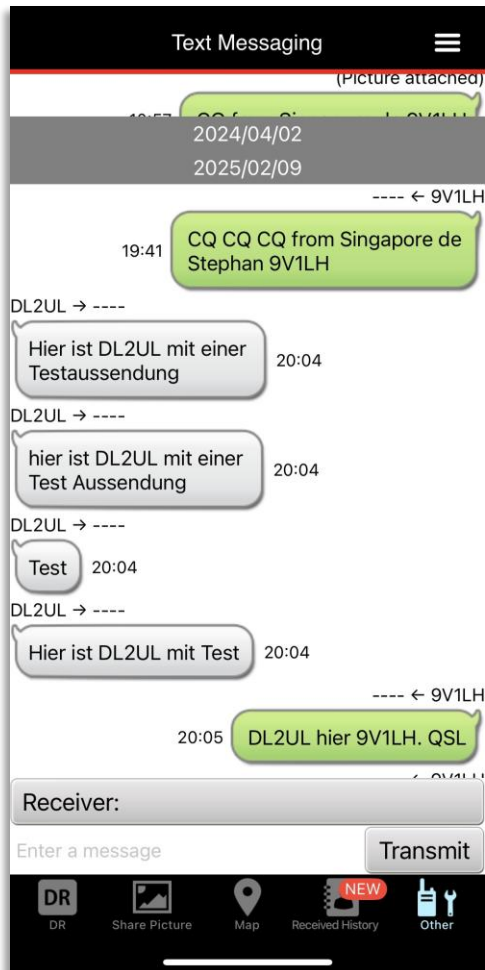
You can track D-STAR stations and messages in real time using D-PRS!



GPS POSITION 1/5

 47° 40.13'N
122° 12.75'W
48° GL: CN87VQ
ALT: 94ft
SPEED: 0.5mph
MY TIME: 14:05:04

Beyond voice: Picture, text and position reports via D-STAR



Remote control your radio from your smartphone!



Bluetooth



RS-MS1A for Android
RS-MS1I for iOS

ID-52A/E PLUS

Typing messages is so much easier on a smartphone!



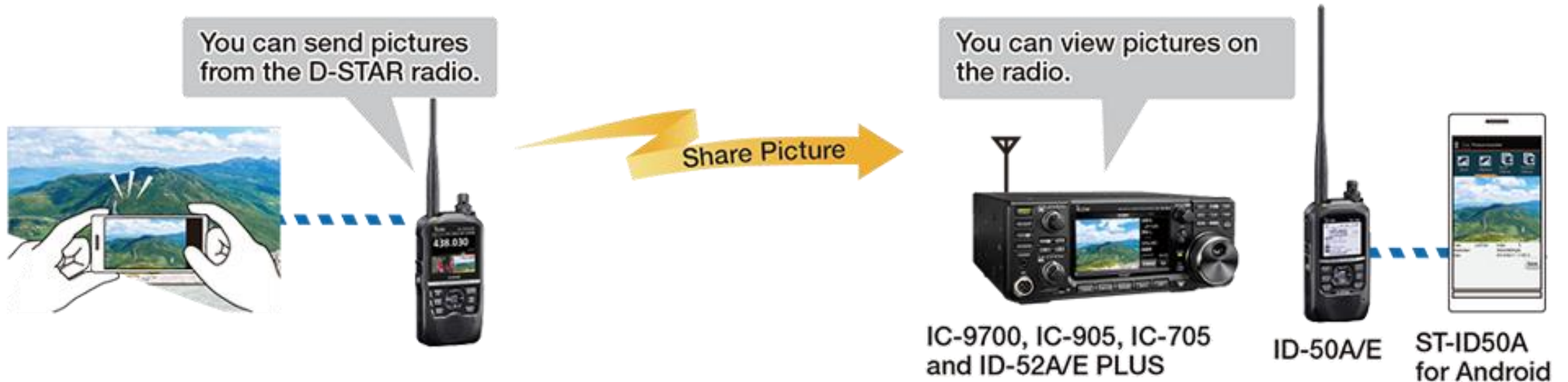
Bluetooth
(or USB cable)



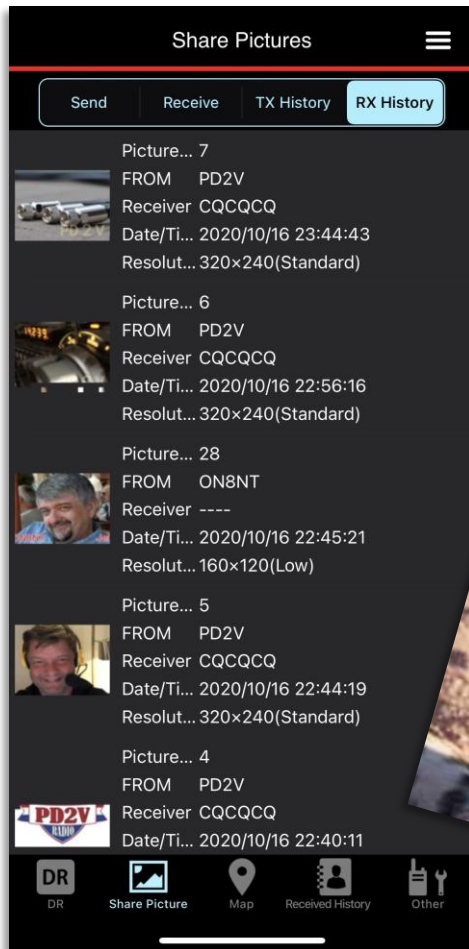
ID-5100A/E
(with UT-133A)
or other models

RS-MS1A for Android

Beyond voice: Picture, text and position reports via D-STAR



Beyond voice: Picture, text and position reports via D-STAR



Pictures received by 9V1LH via DCS421EL

Required Hard- and Software



- IC-7100
- IC-905



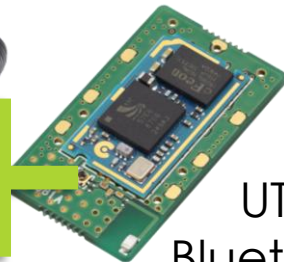
ID-50



ID-52 PLUS



ID-5100



UT-133A
Bluetooth Unit



IC-705



IC-9700



Required Hard- and Software

KENWOOD



TM-D750



TH-D75

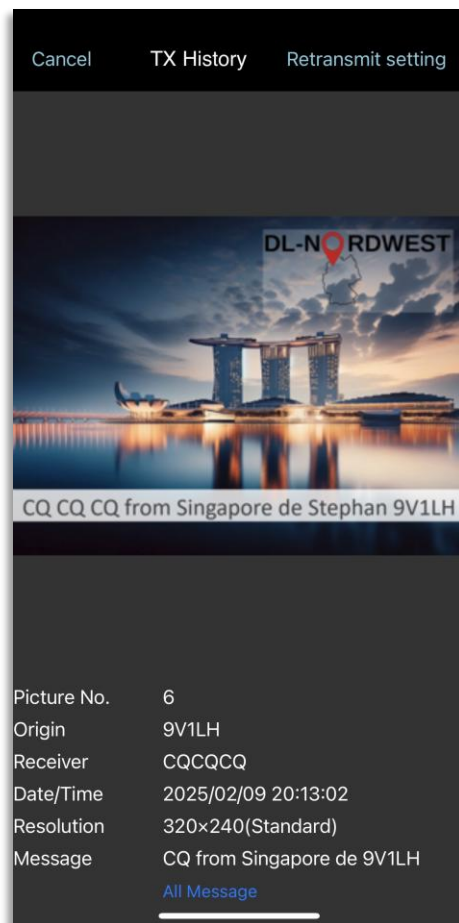


[github.com/yeckel/](https://github.com/yeckel/D-StarBeacon)
D-StarBeacon

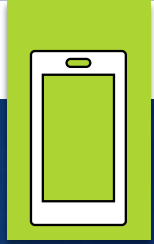




Picture preparation



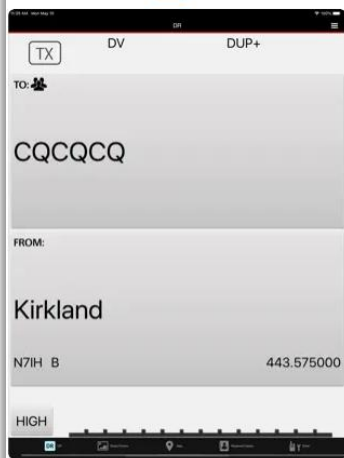
Required Hard- and Software



RS-MS11 4+
ICOM INCORPORATED
Designed for iPad
★★★★★ 1.9 • 68 Ratings
Free



Screenshots iPad iPhone



RS-MS1A

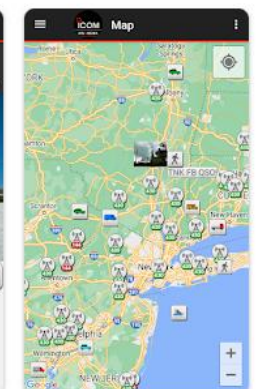
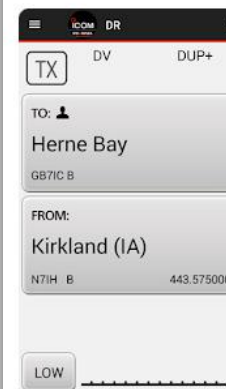
Icom Inc.

3.5★ 444 reviews ⓘ 50K+ Downloads USK: All ages ⓘ

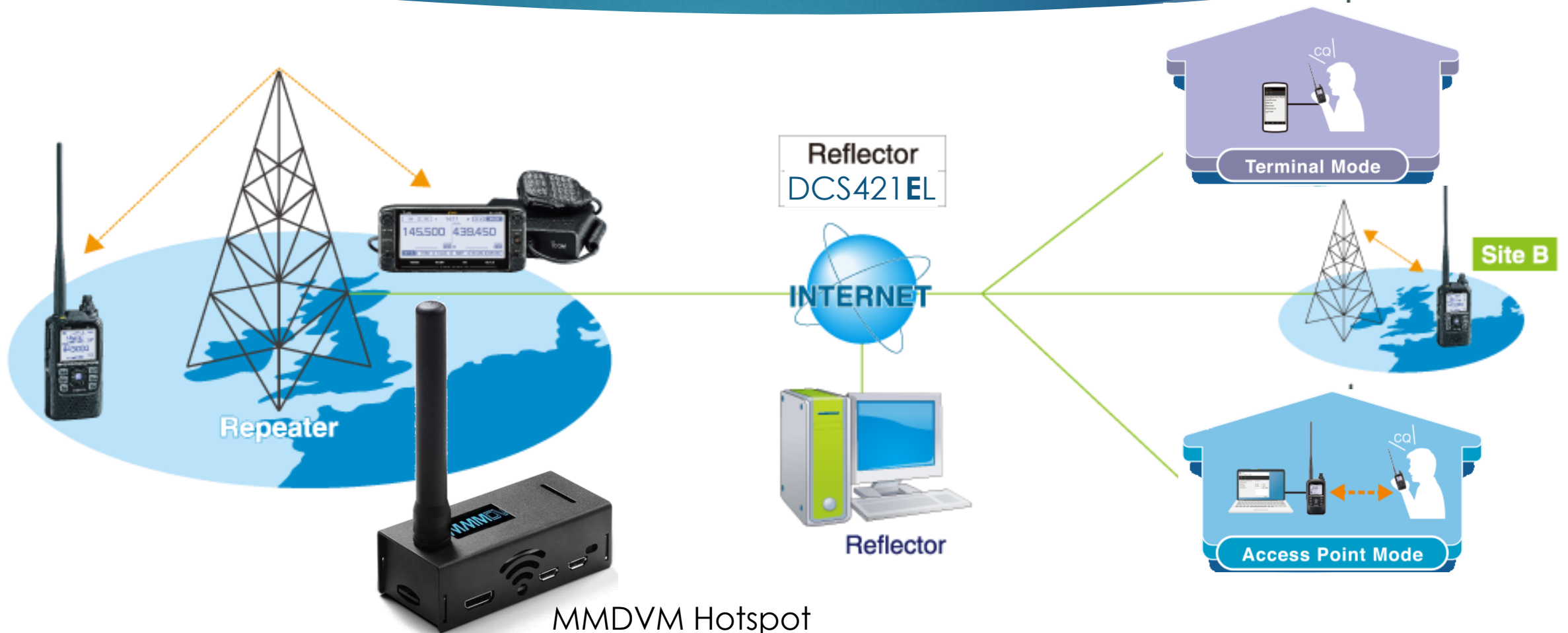
Install on more devices

Share

You don't have any devices



Required Hard- and Software



Beyond voice: Picture, text and position reports via D-STAR



You can browse websites even while you're outdoors!



IC-9700 or
IC-905

128 kbps data

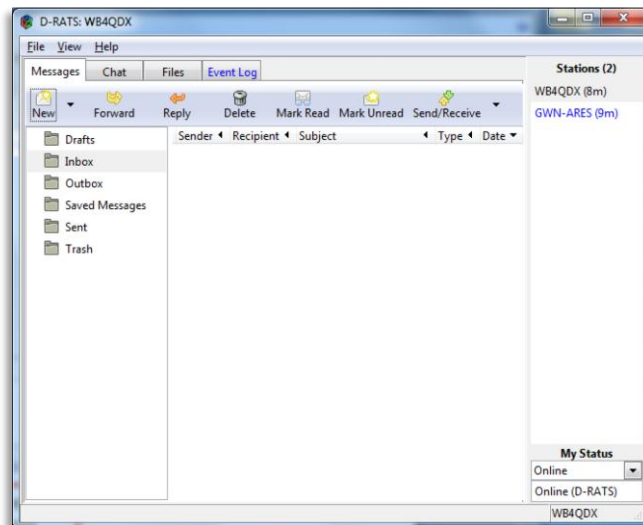
Supports
Fast Data DD
on 23 cm
(1.2 GHz)

3rd party applications



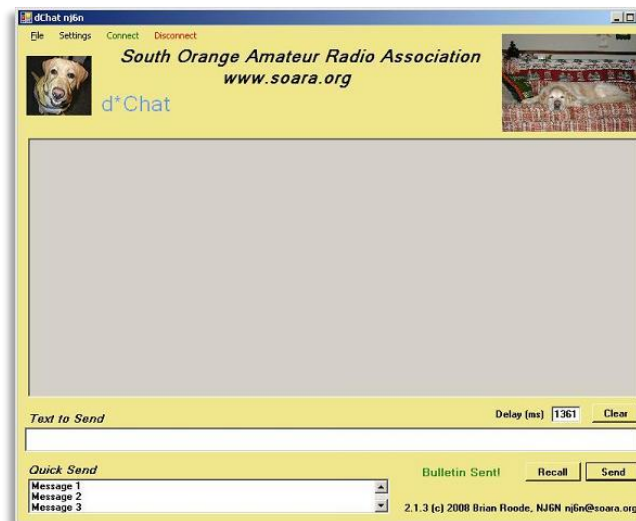
D-RATS

www.dstarinfo.com/drats.aspx



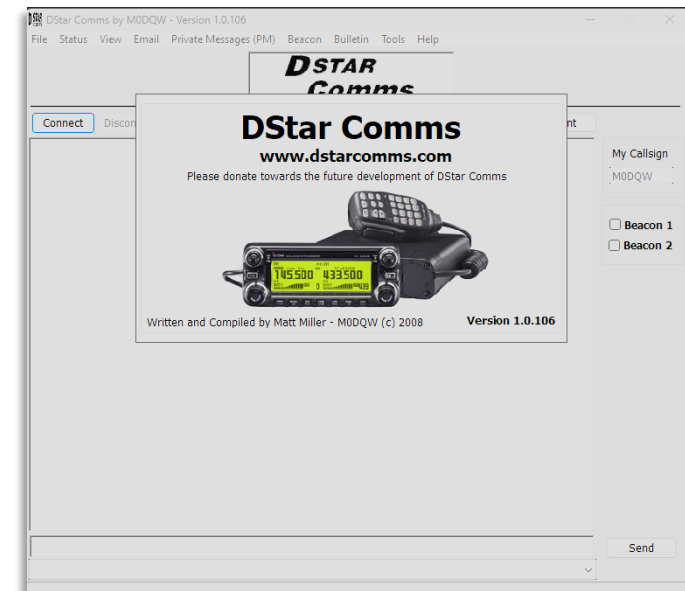
D*Chat by NJ6N

nj6n.com/dstar/dstar_chat.html



DSTAR Comms by M0DQW

dstarcomms.com/dstarcomms-software/





Sources

Websites

- ▶ www.icomjapan.com/explore/d-star/
- ▶ en.wikipedia.org/wiki/D-STAR
- ▶ www.dstarinfo.com

Videos

- ▶ [W7NWH YouTube Channel \(ARES, D-CHAT\)](#)

9V1LH

SINGAPORE
AMATEUR RADIO
STATION

*Johor Straits Lighthouse,
Raffles Marina*



Stephan [9V1LH](#),
([9M2](#))/[DG1BGS](#)

dl-nordwest.com

Op: Stephan • Loc: OJ11XJ • ITU Zone: 54 • CQ Zone: 28 • IOTA: AS-019