Remote Base Stations

Repeaters

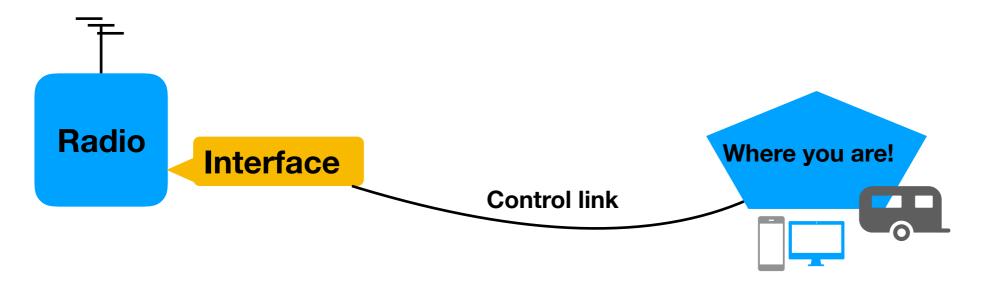
Modes

Radio Links

Nodes

Interfaces

Remote Base



Repeater



Example of Commercial Remote Base Station controlled using VOIP

VOIP REMOTE BASE STATION



With the addition of a Voice over IP (VoIP) adaptor to our standard base station offering, you can create a simple IP Interface from your IP console that allows you to monitor and send audio, as well as change channels remotely.



https://www.codanradio.com/product/voip-base-station/

Your controller could simply be your computer with speaker and Mic.

A Typical Repeater from about 2000



Repeater

Transmits
simultaneously
what it receives;
separate frequencies*

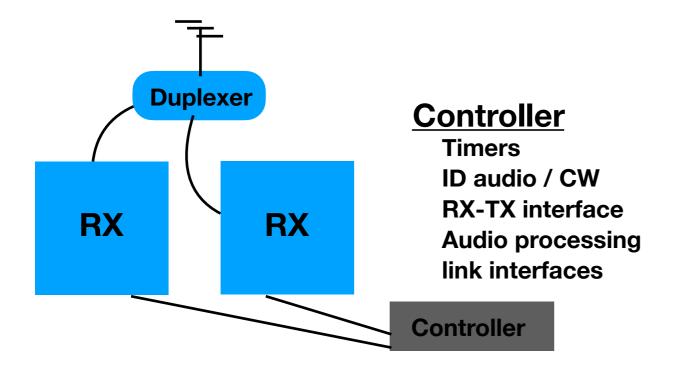
2-way Radio

Controller





Example of Modern duplexer





More Pictures

a duplexer



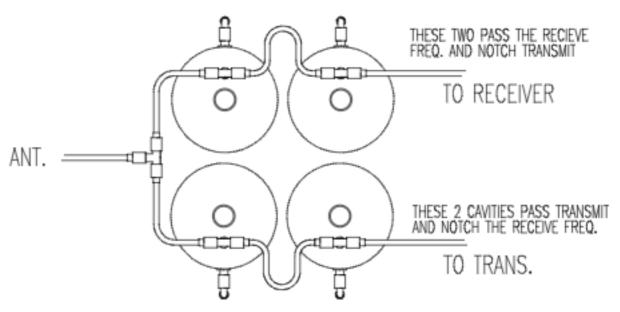
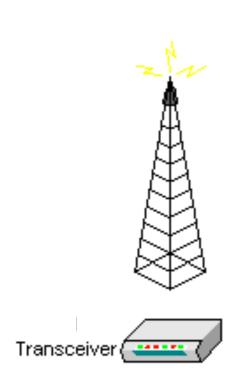
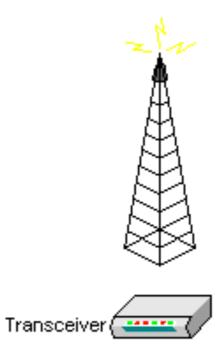


FIG. 1 FOUR CAVITY BP/BR DUPLEXER CONNECTIONS

Interface Links



Echolink - via internet
Custom - "home brew"
Manufacturer Supplied
Allstar - via internet
DSTAR
WIRES - X (Yaesu Fusion)
DMR - MARC





Echolink

Initially a system to provide remote access to repeaters and base stations Now expanded ... a lot

Computer based software (smart devices also)

Links the user to a server which validates the callsign ... and then forwards the connection to the selected

repeater

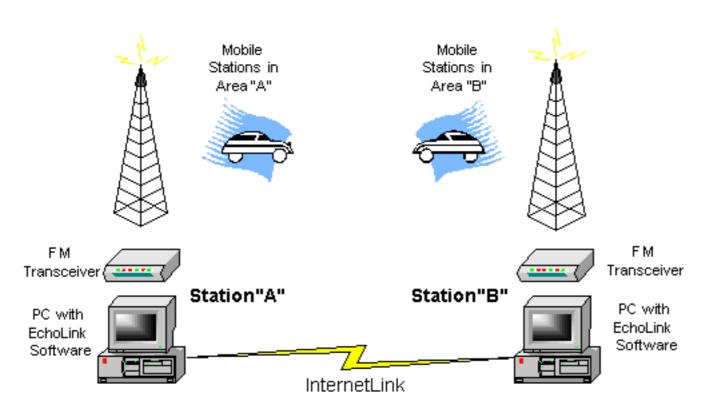
node

base station

other individual user

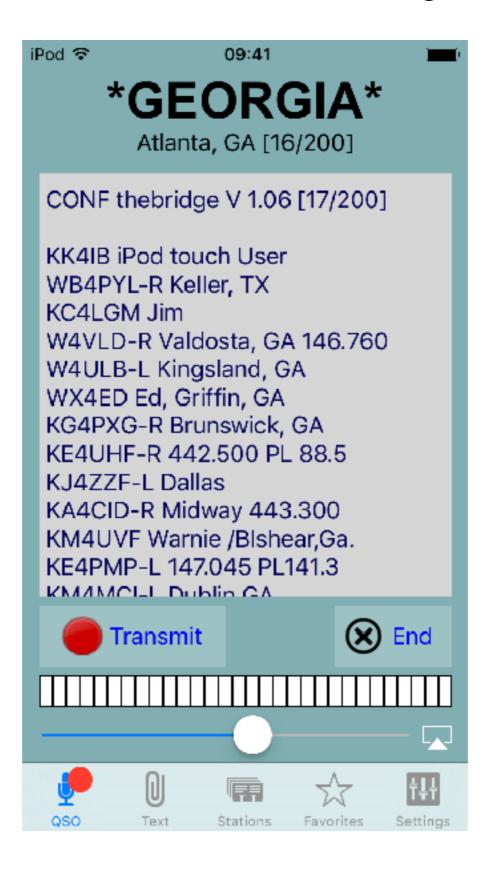
conferences [*GEORGIA* conference]

Linking Example

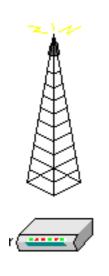


Echolink Conference Example

Screen Shot of iPod Touch running Echolink



Remote Link



Microwave RF link Echolink UHF link Allstar link Separation Kit



Separation Kit

www.SwapMyRigs.com

All-Rig, VGA-Cable, Mobile & Home Separation Kit



Radios & Tested Separation

<u>Yaesu</u>		Kenwoo	<u>d</u>	<u>ICOM</u>	
FT-891	100'	TM-D710A/	G 75'	ID-880H	15' †
FT-857	75'	TM-V71	75'	IC-2720/30H	100'
FTM-350	75'	TS-480	100'	IC-2820H	25'
FTM-100/400	90'	TM-D700	100'	ID-5100	100'
FT-7-8xxx*	100'	TS-2000	100'	ID-4100	65'
* Control & APRS				IC-7100 #	(175')

onitor a Air No

† Tested with 15' VGA cable only

*SMRs for all Radios with mic jacks on control heads can be configured to carry other outputs, such as the IC-7100 USB-to-computer link.

THE ONLY SEPARATION KIT YOU WILL EVER NEED AE4S, LLC

References

http://www.hawaiirepeaters.net/emercom/repeaters.html

https://www.codanradio.com/product/voip-base-station/

http://idaco.com/pdffiles/24-66_voip-rc_color.pdf

http://www.remotehamradio.com/

http://www.dmr-marc.net/

https://systemfusion.yaesu.com/