



# Remote Operation of a Ham Radio Station

## A Choice of Solutions

Newport County Radio Club

April 13, 2015

# Remote Operation of a Ham Radio Station

- The concept, the purpose and the issues

Willy MacLean, W1LY

- The free “Do It Yourself” solution, Ham Radio Deluxe

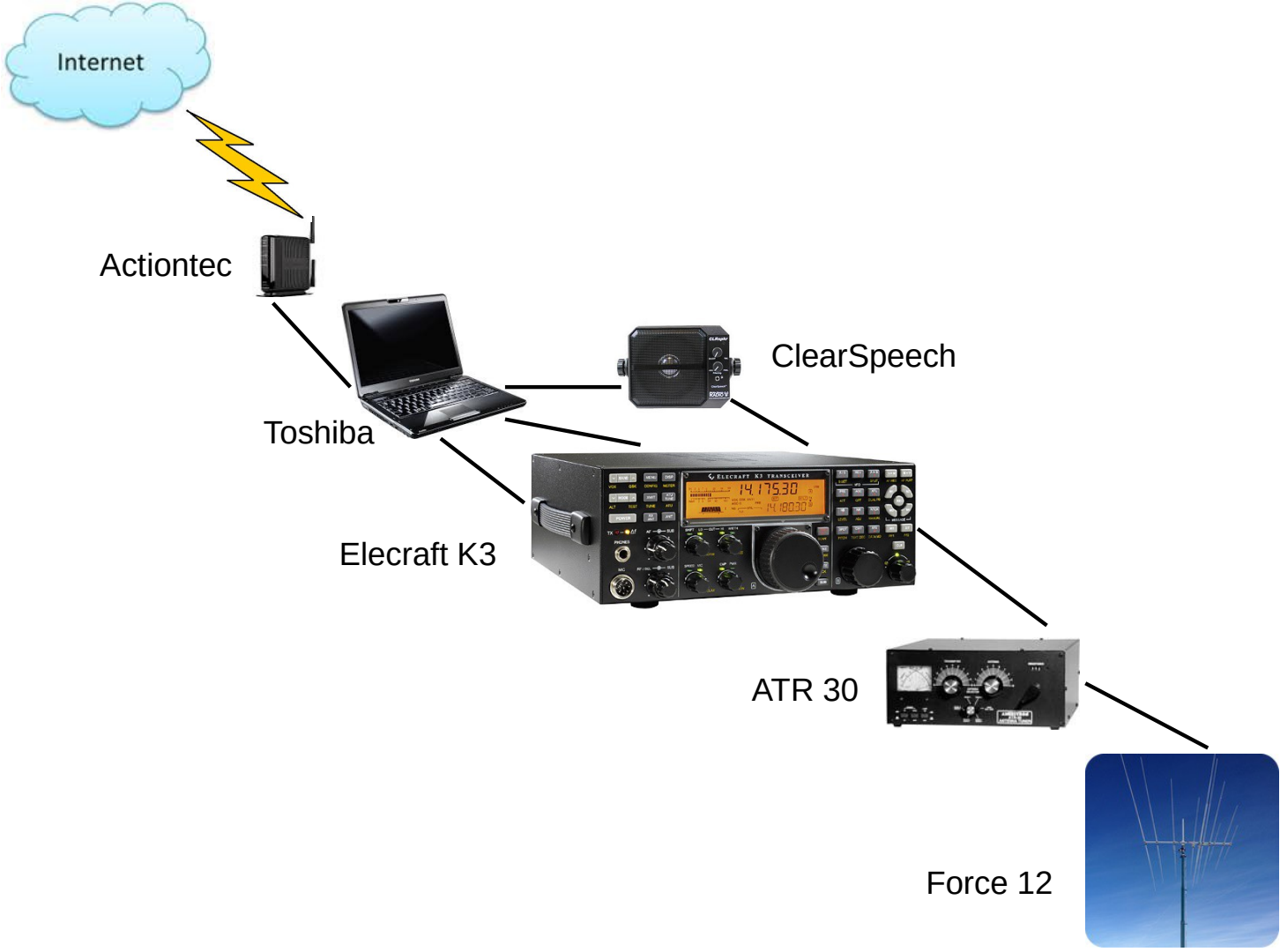
Pete Lawson, W1LAB

- A simple “Pay as you Go” solution, Remote Ham Radio

Bob Beatty, WB4SON

# Remote Operation of a Ham Radio Station

## Basic Layout using HRD





# Remote Operation of a Ham Radio Station

## Operating System and Software

Operating System and Software at Radio

Operating System and Software at Remote



Any Operating System  
Windows, Mac, Linux



Radio Control



Audio Link



Computer Link

# Remote Operation of a Ham Radio Station

## Live Demonstration

The screenshot displays the HamRadioDeluxe software interface running on a remote PC (MARSHALL-PC - VNC Viewer). The window title is "HamRadioDeluxe - [K3]" and the system clock shows "10:58:20 AM - April 09, 2015".

The interface features a menu bar (File, Edit, View, Bands, Favorites, Quick Save, Macros, Logbook, Scanning, Tuning, Tools, Voice, Window, Help) and a toolbar with various icons for Connect, Selection, Favorite, Quick Save, Full Screen, Logbook, Satellites, SW Data, Sliders, Customize, Options, Forums, Add, DM780, Synch, Remote, Serial, and Programs.

The main display area shows the call sign "K3" and the mode "USB". The frequency is set to 14.343.000 MHz. The interface includes a TX section with parameters: DSP: 02.83, Aux: ---, MCU: 04.86, DVR: ---, Front: 01.15, PA (KPA3). The TX section also has buttons for TX-A, M > V, TX-B, FL1, A/B, FL2, A > B, FL3, Split, FL4, V > M, FL5, and S3. The RX section has buttons for AF Play, ANT1, DISP, NR, RIT Clr, Mode A: USB, AF Rec, ANT2, Fine, NT-Man, RX ANT, Mode B: USB, AGC-F, ATT, Lock, Notch, Rate, Message, AGC-Off, ATU, Menu, Pre, TX, AGC-S, Center, Meter, QSK, Test, ALT, Coarse, NB, RIT, and Tune.

The frequency display shows 14.343.000 MHz and 14.300.000 MHz. The interface also displays the date "Thursday, April 9, 2015" and the region "160m - 10m (Region 1)".

The interface includes a frequency scale from 14.341.8 to 14.344.2 MHz. Below the frequency scale are buttons for band selection: ALT, BSP, 160m, 80m, 60m, 40m, 30m, 20m, 17m, 15m, 12m, and 10m.

The interface also displays the text "LIVE DEMONSTRATION" in large yellow letters.

The interface includes a status bar at the bottom with the Windows taskbar and system tray. The system tray shows the time "10:58 AM".

# Remote Operation of a Ham Radio Station

## HRD Supported Radios

Icom			Yaesu			Ten Tec		
IC-7000	IC-703	IC-706	FT-100	FT-450	FT-450D	TT-ARGONAUT	TT-JUPITER	TT-EAGLE
IC-706MkII	IC-707	IC-7100	FT-600	FT-767GX	FT-817	TT-ORION	TT-RX-350	
IC-718	IC-7200	IC-725	FT-840	FT-847	FT-857	TT-OMNI VII (RADIO)	TT-OMNI VII (REMOTE)	
IC-726	IC-728	IC-729	FT-857D	FT-890	FT-897			
IC-735	IC-736	IC-737	FT-900	FT-920	FT-950	Alinco		
IC-738	IC-7400	IC-7410	FT-990	FT-1000D	FT-1000MP mkV	Alinco DX-77	Alinco DXS R8	
IC-746	IC-746 PRO	IC-751A	FT-2000	FT-2000D	FTDX-9000	Alinco DXS R9		
IC-751A (Piexx)	IC-756	IC-756 PRO	FTDX-5000	FTDX-3000	FTDX-1200			
IC-756 PRO II	IC-756 PRO III	IC-7600	FT 8x7	FT 8x7D	Yaesu FT-991	Flex		
IC-761	IC-765	IC-7700				1500	3000	5000
IC-775DSP	IC-7800	IC-781	Kenwood			6000	6300	6500
IC-821H	IC-9100	IC-910H	TS-50S	TS-602	TS-1402	6700		
IC-R10	IC-R20	IC-R7000	TS-440S	TS-450S	TS-480			
IC-R75	IC-R8500	IC-R9000	TS-480HX	TS-480SAT	TS-680S	Elecraft		
IC-9500	ID-31-AE	ID-51-AE	TS-690S	TS-570	TS-590	K2	K3	KX3
ID-5100	PCR-1000		TS-590S	TS-590SG	TS-790			
			TS-850	TS-870	TS-940S	Other Radios		
			TS-950	TS-990	TS-2000	NRD-535	DZ Company - Sienna	
			TS-B2000	TS-2000X	R-5000	Microtelcom - Perseus		
						Soon to be Supported		
						Icom 7850	TT-PEGASUS	

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## Resources

- Ham Radio Deluxe  
[www.ham-radio-deluxe.com](http://www.ham-radio-deluxe.com) - Version 6.29.354 - \$99.95\*  
[www.dxzone.com/dx28789/ham-radio-deluxe-5-24-38-download.html](http://www.dxzone.com/dx28789/ham-radio-deluxe-5-24-38-download.html) - Free
- Skype [www.skype.com](http://www.skype.com) - Free
- VNC [www.realvnc.com](http://www.realvnc.com) - Free
- ClearSpeech Speaker <http://www.westmountainradio.com> - \$219.95\*
- Startech External Sound Card [www.pcconnection.com](http://www.pcconnection.com) \$21.09\*
- Solution for Dynamic IP Address - Free

\* *Optional*



# Remote Operation of a Ham Radio Station

## Need Help?

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