**FD - RUS-0113** 

Project Info, Schematic and Parts List: PIC18F2550 Remote USB Switch

This project is developed for Amateur Radio Community by:

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Remote USB Switch: RUS-0113



The FoxDelta RUS-1112 Remote USB Switch utilizes an 18F2550 PIC, connected to a ULN 2803 Buffer, driving eight small PCB 5V Relays. Each Form A Relay circuit is rated for 30vdc/2A and 120vac/1A. Power is supplied by your computer's USB Port. No external power source is required.

Four onboard LEDs provide a local indication of the relay status'. In addition, a manual Reset push button is located on the rear of the unit, should it ever be needed.

Installation is straight forward: Simply, plug the "Remote USB Switch" to an unused USB port on your computer, load a small application program to your Desktop, and you are ready to go.

The small PC application program by <u>Tony/I2TZK</u> graphically depicts the status of each of the switch positions. Internal memory in the Remote USB Switch remembers switch settings even when the application program is closed, or in the event of a power failure. If a power failure occurs, the switch

settings will be restored when power returns. Most PCs continue to provide USB power even when turned off.

Remote Control of your computer can easily be accomplished using either "<u>TEAMVIEWER</u>" or "<u>LOGMEIN</u>", which have Free download versions. These programs allow you to remotely access your home PC and the FoxDelta Remote USB Switch application program.

The applications for use of this device are almost limitless and basically whatever the user can dream up.

For example; Integrating the switch with a commercial antenna switch will let you change antennas from anywhere you happen to be. Using the small reed relays to control larger relays would allow you to turn on/off power supplies, equipment, control audio control circuits, and many other devices.

Hope you enjoy your NEW Fox Delta "Remote USB Switch"

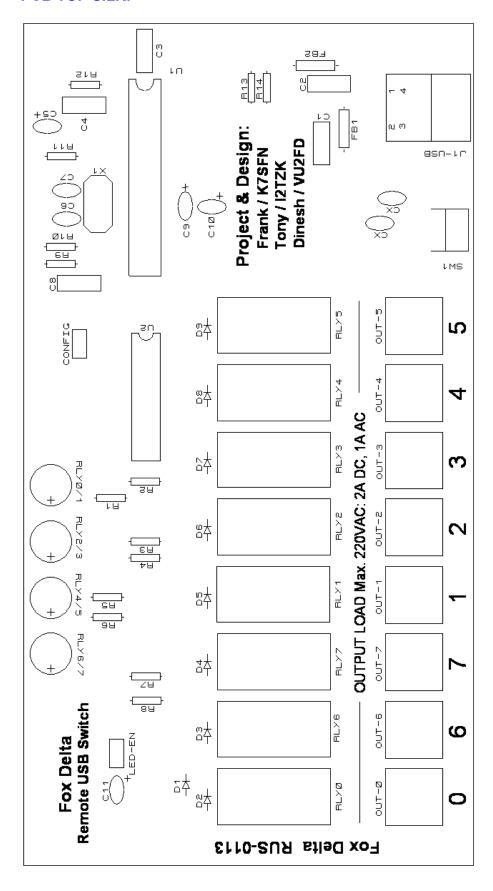




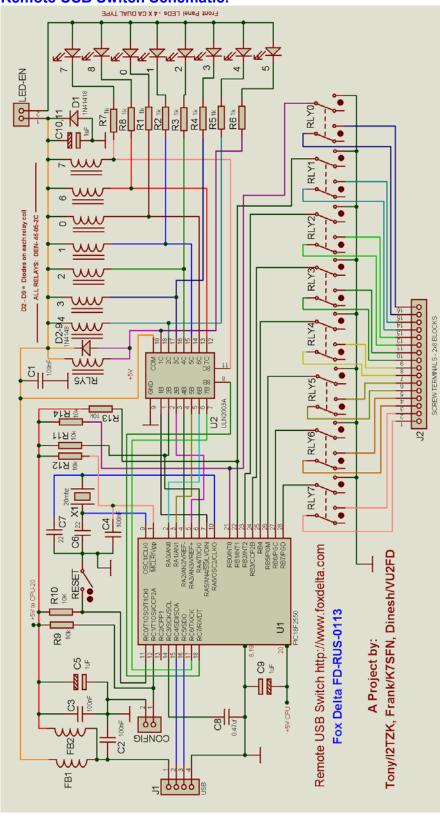
## **Remote USB Switch Kit Parts List:**

Quantity	Check	Part ID	Details
1			PIC18F2550
1			ULN2803A
1			USB Connector
4			LEDs DUAL CA Type 3mm
1			18PIN IC Socket
1			40PIN IC Socket
8			Relays OEN 46-05-2CO
8			2PIN Screw Terminals
8			1K Resistors ¼ W
6			10K Resistors 1/4 W
4			1uf Tantalum Capacitors
1			Reset Switch
4			0.1uF Capacitors
2			2Pin Headers
2			Ferrite Bead Fair rite 26433000301
1+1			RUS-0113 PCB with Free Metal Case

## **PCB TOP SILK:**



## **Remote USB Switch Schematic:**



73s Dinesh Gajjar 08<sup>th</sup> February 2013