Fox Delta

Amateur Radio Projects & Kits

Kit Building Guide by Frank / K7SFN

Note:

FoxDelta kits are not Heathkits *TM, and not suggested for beginners, unless noted. Step-by-step instructions are not provided! It is assumed you have some experience with kit building and proper soldering techniques. This GUIDE suggests steps that should be followed to insure your kit will work properly.

Kit Assembly Steps:

Prior to beginning assembly, examine the circuit board under a magnifier to verify there are no obvious defects. We do this prior to shipment, but there is always the chance something could get missed. If you encounter any problems, please contact FoxDelta.

Any surface mounted IC's or small components are installed at FoxDelta to assist the kit builder.

Inventory all of the components to make sure you have everything necessary to assemble your kit. Contact FoxDelta if you are missing any parts or have questions.

Read any documentation listed on the FoxDelta website thoroughly, before starting your kit assembly.

Proper soldering techniques are essential for constructing FoxDelta kits. Read the Soldering tips listed below before beginning.

First: Install all resistors on the board. Due to color variations, it is advisable to check each resistor for the proper value using an ohmmeter prior to soldering.

Many problems have resulted from placing an incorrect value resistor in the wrong location.

Install all capacitors. Verify the component value prior to soldering. Capacitors may be marked several ways. If you are not sure of the capacitor value, do not solder it until you know for sure. Some capacitors are polarity sensitive (Tantalum & Electrolytics). Make sure you observe the proper polarity before soldering these capacitors.

Install any diodes and transistors. Make sure you follow the silk-screening on the circuit board for proper alignment. If you have any doubts about positioning a diode or transistor, consult a picture of a completed board on FoxDelta's website or post a request on FoxDelta's Yahoo Forum.

You're almost done…..before installing any IC's, perform any initial voltage or resistance tests that are recommended.

Install any remaining IC's, taking care in positioning Pin 1 properly. Per Step 7, if you have any doubts, get help before you proceed.
We hope your kit building experience was fun and you enjoy building future projects.

Soldering Tips:

NOTE: Soldering is an acquired skill. We are not born with this ability. Understanding the proper technique will insure you learn how to assemble a beautiful kit that performs properly.

It is very important to use a good quality soldering iron/pencil when assembling our kits. Poor soldering & cold solder joints are probably the leading problems we encounter. We suggest a 25-35 Watt pointed tip soldering iron. If you have availability of a temperature controlled soldering iron, that is even better.

If the soldering iron tip is covered with burned rosin, it cannot heat your connection very well. Use an old rag or tip cleaner to keep your tip shiny before soldering components.

If you heat only the wire, and not the wire and PC trace together, a "cold" or, bad connection is likely.

If your soldering tip is big enough to bridge two adjoining connections, it probably will! Use an iron designed for assembling small electronic kits.

Dirty, grubby solder will contribute to dirty, grubby connections. Use high quality rosin core, or no “No-Clean” flux solder to assemble FoxDelta kits.

Any use of acid core (plumbers!) solder in electronics work will destroy everything...DON’T USE IT! EVER !!!!!!!!

A connection in a large area of PC-board copper requires more heat than one pin of an IC. Apply the proper amount of heat to cause the solder to “flow” evenly. If your connection looks dull or brittle, it's no good.

If your connection looks like a ball instead of a shiny cone, it's no good. Pre-tin any stranded hook up wires.

Consult experienced friends or the Internet for additional suggestions on how to create perfectly soldered connections.

Good Luck and have fun with your FoxDelta kit.

Frank / K7SFN