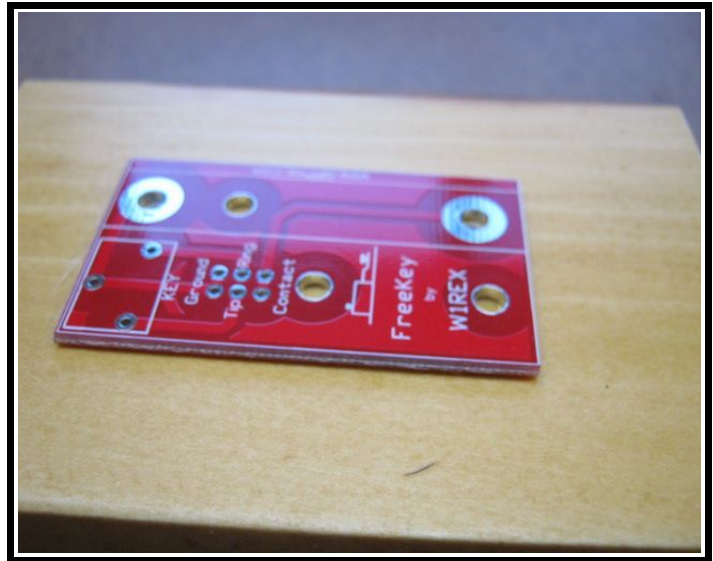
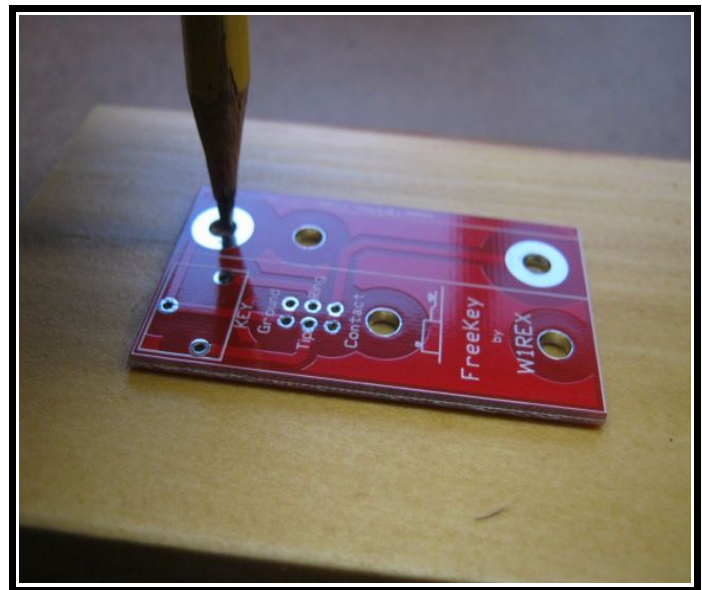


# FReeKey

FIND A BASE....



MARK THE HOLES...  
THE 2 BIG PADS FOR THE KEY CONTACTS, 3 HOLES FOR THE KEY JACK (IF USED) AND THE 6 HOLES FOR THE CONFIGURATION JUMPERS OR SOLDERED CONNECTIONS...

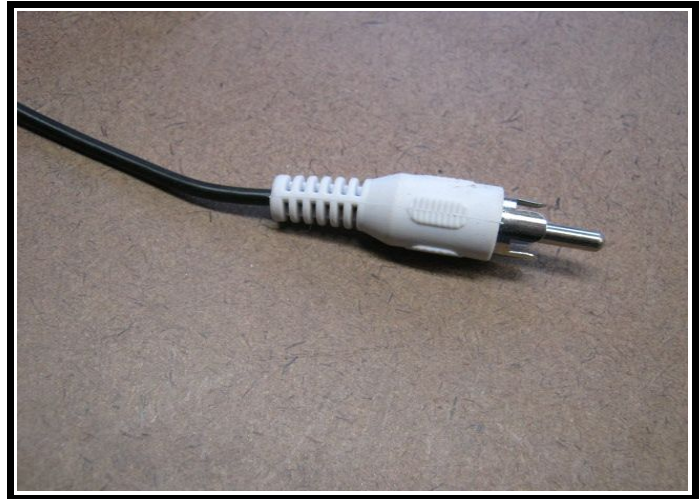


USING A NAIL, MAKE SOME DENTS FOR KEY CONTACT LOCATIONS AND THE SOLDERED LEAD STUBBLE TO FIT INTO...

USE A 1/16" DRILL TO MAKE THROUGH HOLES FOR THE 2 KEY CONTACTS. THEY WILL BE RECEIVING #4 SCREWS WHICH ARE EASIER TO INSERT WITH PILOT HOLES...



SOME TUNA CAN KITS USE AND RCA PLUG FOR THE KEY... I USE ABUNDANT AND CHEAP RCA TO RCA STEREO CABLES. SOME RIGS REQUIRE EITHER A MONO OR STEREO PLUG. SO FIND A CABLE YOU WANT TO USE FOR YOUR RIG...



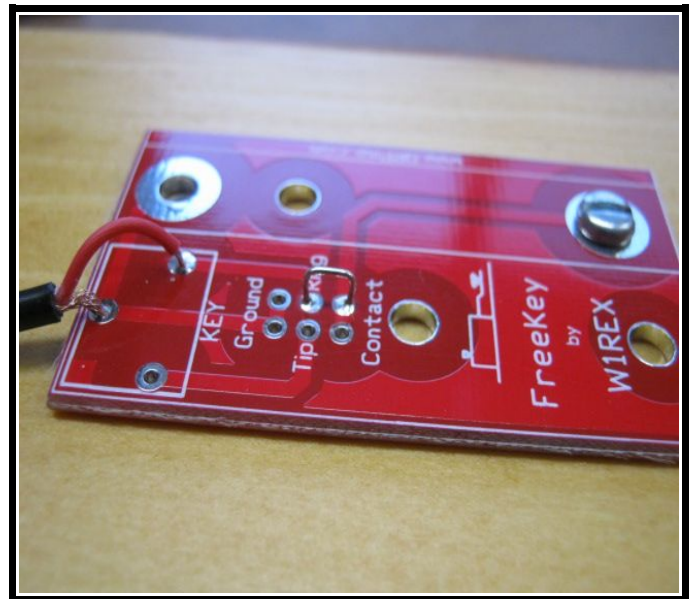
EXAMPLES OF WIRING THE KEY UP FOR YOUR PARTICULAR RIG'S CONNECTIONS:

MONO PLUG INTO RIG WITH NO INTERNAL KEYS:

(NO OPTIONAL STEREO JACK)  
WIRE DIRECTLY TO THE RING AND GROUND CONNECTIONS OF THE STEREO JACK PADS...

A CLIPPED LEAD JUMPER IS SOLDERED BETWEEN THE CONTACT & RING CONFIGURATION PADS.

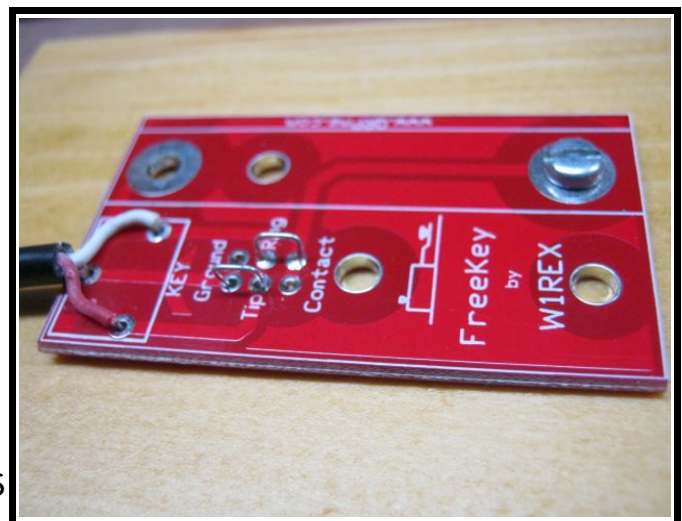
BOARD IS SCREWED TO THE BASE USING THE SHORT PAN HEAD SCREW AND A THIN #4 BRASS WASHER.



STEREO PLUG INTO RIG WITH AN INTERNAL KEYS:

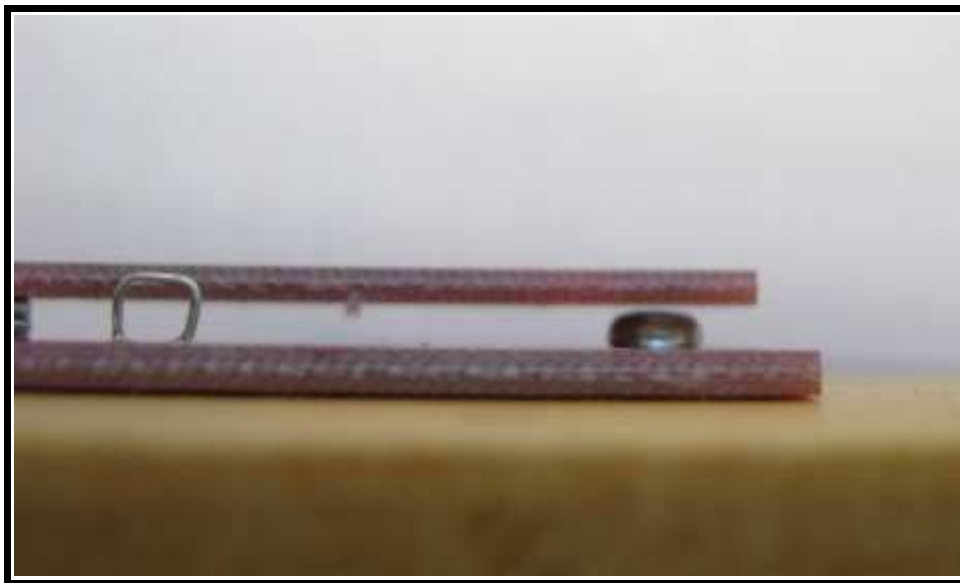
(NO OPTIONAL STEREO JACK)  
WIRE DIRECTLY TO THE TIP, RING & GROUND CONNECTIONS OF THE STEREO JACK PADS...

A CLIPPED LEAD JUMPER IS SOLDERED BETWEEN THE CONTACT AND RING CONFIGURATION PADS AND ANOTHER BETWEEN THE TIP & GROUND. THIS PRESENTS A SHORTED PADDLE TO THE KEYS CHIP WHICH USUALLY DEFAULTS TO STRAIGHT KEY OPERATION.



CONVERSELY, YOU COULD SOLDER THE TIP AND CONTACT CONNECTIONS TOGETHER AND GROUND THE RING PAD. THIS IS WHAT HAPPENS (AUTOMATICALLY BY THE PHYSICAL DIMENSIONS OF A MONO PLUG. WHEN YOU PLUG AN 1/8" MONO PLUG INTO AN 1/8" STEREO JACK, THE JACK'S RING CONNECTION IS SHORTED TO THE BODY (GROUND) OF THE MONO PLUG.

COMPLETE THE ASSEMBLY BY ATTACHING THE KEY LEVER USING THE LONGER SCREW WITH 3 OF THE LARGER WASHERS FOR A STANDOFF. WITH THIS CONFIGURATION, THE KEY GAP AT THE CONTACT END IS VERY NARROW AND A LIGHT ACTION ON THE LEVER IS ALL THAT IS REQUIRED.

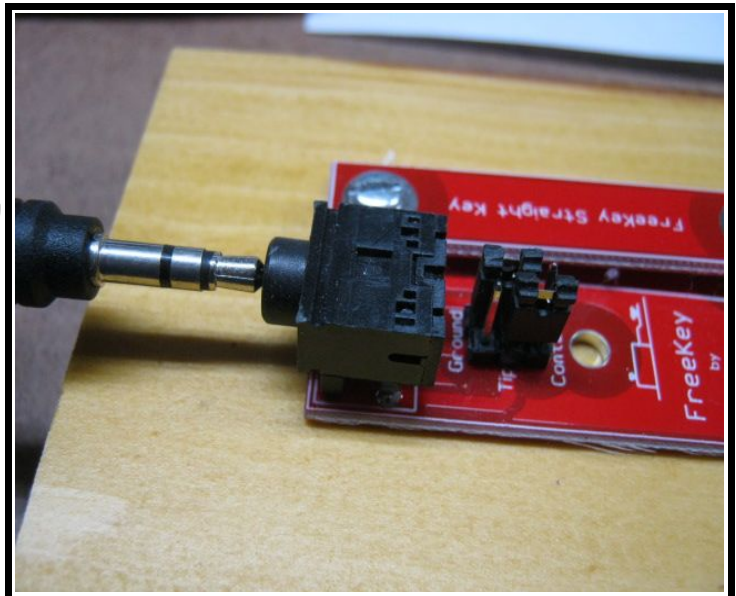


ADDING DIFFERENT THICKNESS WASHERS OR SHIMS WILL ALLOW YOU TO CUSTOM 'TUNE' THE GAP TO GET THE KEY ACTION TO YOUR LIKING.....

AND OPTIONAL 3 PIN 1/8 STEREO JACK, TWO 1x3x.1" SIP HEADERS OR A SINGLE 2x3x.1" DUAL ROW HEADER MAKES THE FREEKEY EASY TO CONFIGURE TO THE NEEDS OF ANY RIG. USE 2 HEADER JUMPERS WHICH CAN BE FOUND IN MOST JUNK HARD DRIVES.



OBVIOUSLY, WITH A STEREO CABLE PLUGGED INTO A STEREO JACK, YOU CAN EASILY SET THE CONFIGURATION JUMPERS TO MEET THE REQUIREMENTS OF MOST ANY QRP RIG....



A FULLY CONFIGURED MINI STRAIGHT KEY  
READY TO TRANSMIT...

**ENJOY!**

**REX W1REX**