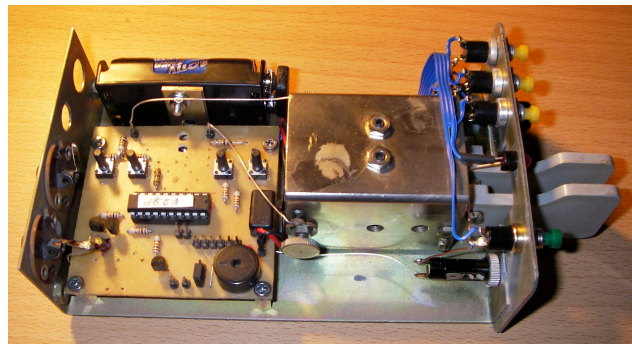
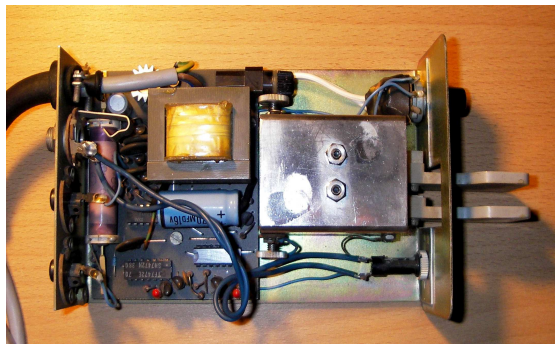


FROG-2P
For PADDLE operation modified CW-Electronic Keyer versions
with PIC16F690

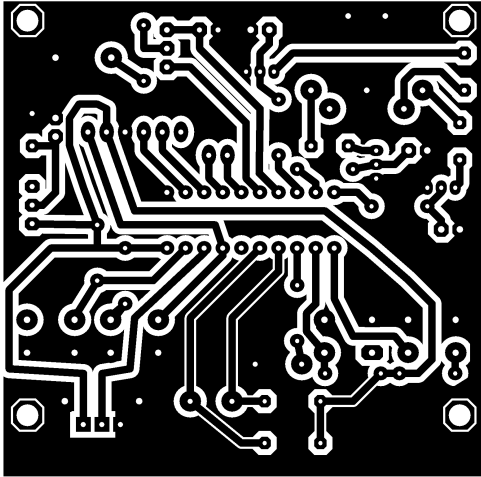
For little money I could bid an old ETM-3 Keyer at EBAY. I put the ETM on modern standards with the FROG-2 electronic. In the shown picture below, you see the modified original FROG-2 sensor circuit board. To make the electronic "PADDLES-able" C1, C2, D1 to D4, R2, R3, and K5 were removed. The PIC's inputs RC3 and RC4 were each connected via 10k resistors with VCC. The firmware has been slightly adjusted for hardware paddles. After switching on, the key reports "p", followed by a version letter.



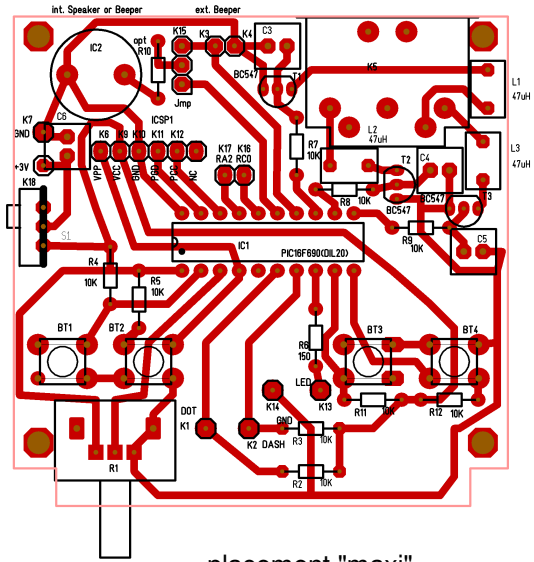
before

after

I have designed two simplified circuit boards. The "maxi-version" keeps the 4 buttons, the potentiometer and the 5-pin DIN-connector. The "mini" version is designed for mounting the 4 buttons and speed-potentiometer into the housing and has only a keyer output pin. All basic functions of the sensor version FROG-2S (see description) are also valid for the paddle version.

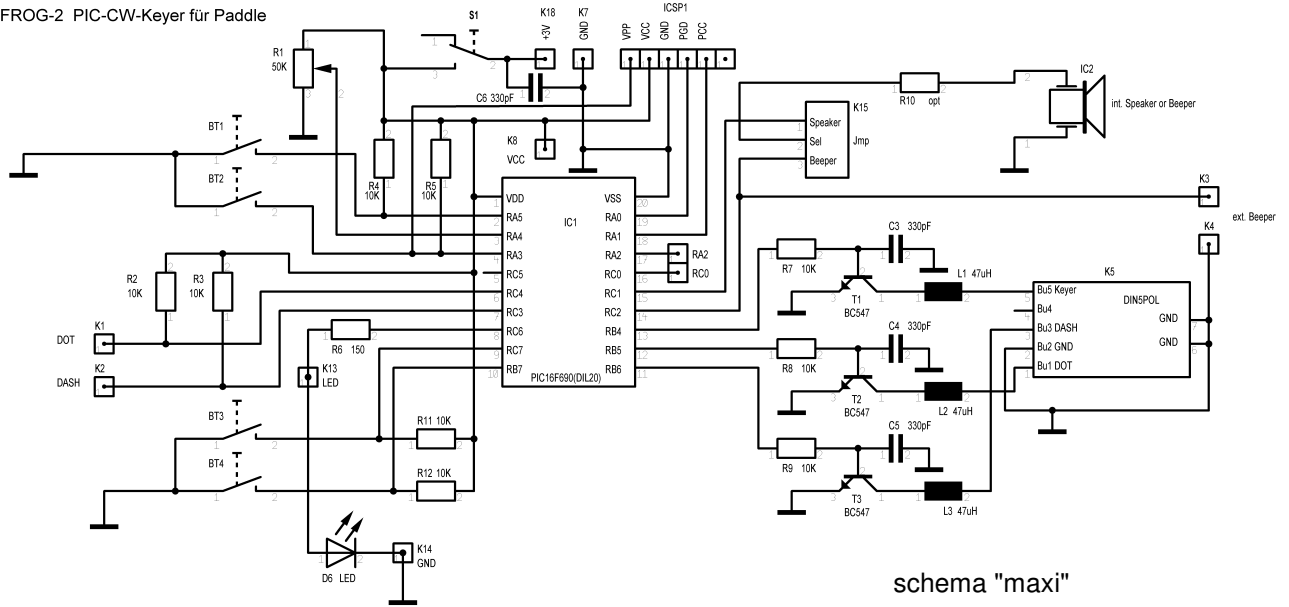


circuit "maxi" (top view)

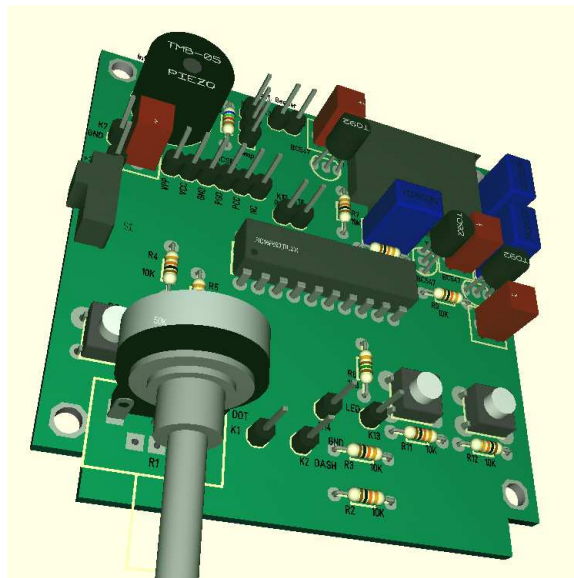


placement "maxi"

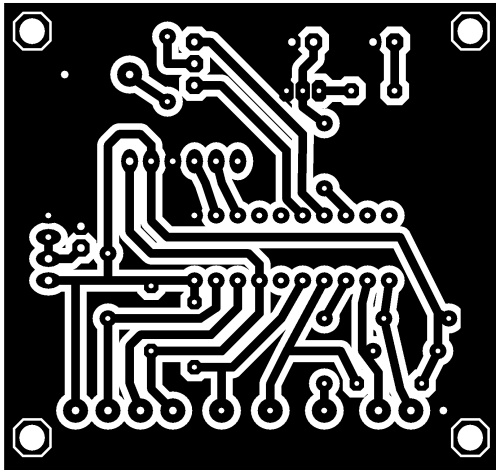
FROG-2 PIC-CW-Keyer für Paddle



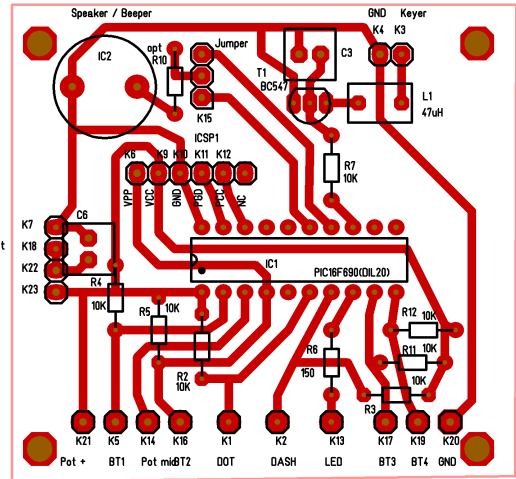
schema "maxi"



structure "maxi"

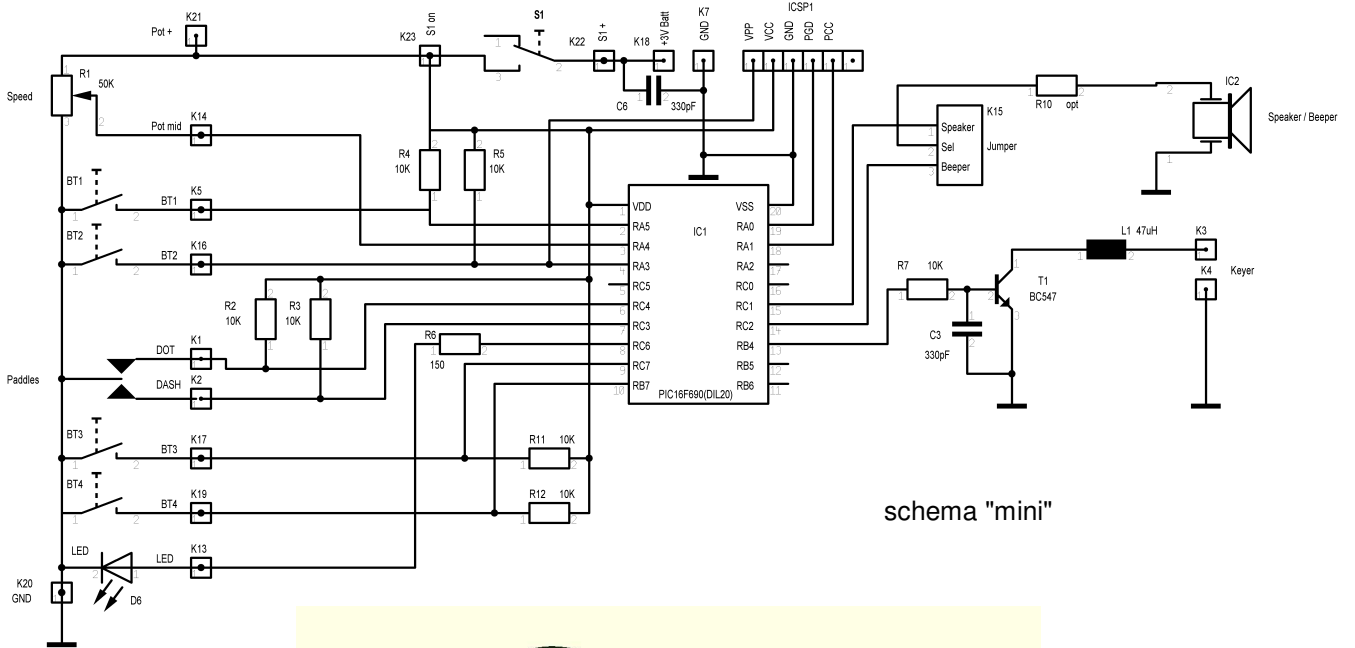


circuit "mini" (top view)

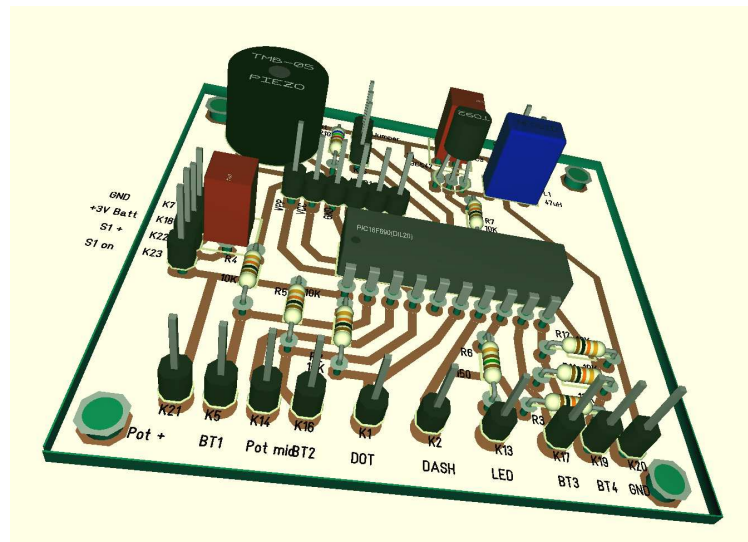


placement "mini"

FROG-2 PIC-CW-Keyer Paddle Version



schema "mini"



structure "mini"