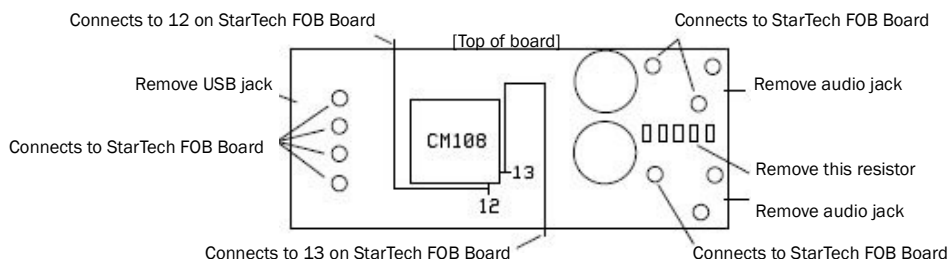
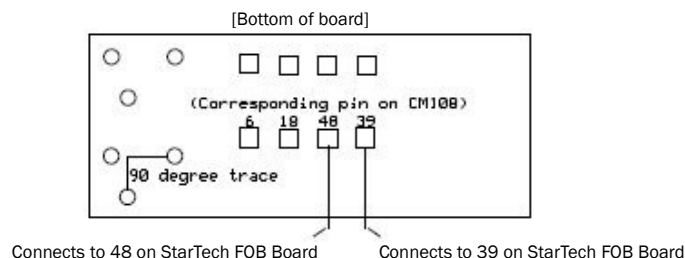


Converting and Installing StarTech FOB to Interface Board for use on AllStar Server Node by Chuck Kelsey, WB2EDV

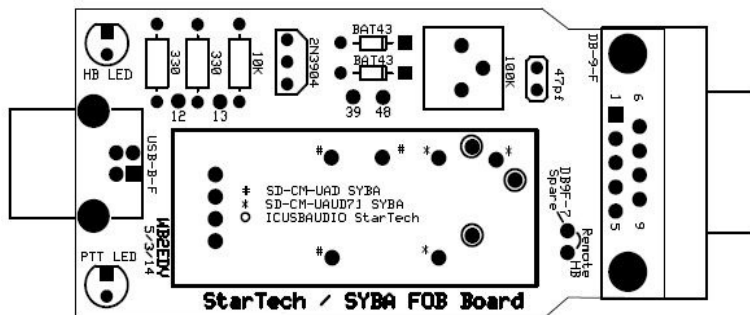
- Proceed with modifications and construction at your own risk -



Use 30-ga. Kynar wire to connect to pins 12 & 13 and route it under pins of CM108 to hold in place for soldering.
Use bare solid wire to connect 4 USB pads and 3 audio pads to pads on the StarTech FOB Board, stand board off slightly.



Use insulated wire to make the connections to the two pads on the bottom of the board.



PARTS LIST:

1	USB-B Jack	Mouser 649-61729-1011BLF
1	DB-9 Female	Mouser 152-3409
1	100K Trimmer	Mouser 652-3362P-1-104LF
1	2N3904 Transistor	Mouser 2N3904TFR
2	BAT43 Diode	Mouser 511-BAT43
1	47pF Capacitor	Mouser 140-100N5-470J-RC
1	330 ohm Resistor	Mouser 660-CF1/4C331J
1	10K Resistor	Mouser 291-10K-RC
1	LED Red	Mouser 696-SSL-LX5093ID125
1	LED Green	Mouser 696-SSL-LX5093PGD
1	Sound FOB	Newegg StarTech ICUSBAUDIO
1	Circuit Board	WB2EDV StarTech/Syba FOB Board
1	Cover	PC Slot Expansion cover w/DB-9 cutout (optional)
1	Plastic Case	Mouser 616-73094-510-000 (optional)

(Mouser parts listed for convenience)

DB-9 PINOUT:

- 1 - Encode sub-audible tone to TX ¹
 - 2 - Audio to TX
 - 3 - COS logic from RX ²
 - 4 - CTCSS logic from decoder ²
 - 5 - PTT to TX
 - 6 - Discriminator audio from RX
 - 7 - Spare (could use to remote heartbeat (HB) LED)
 - 8 - Ground
 - 9 - Ground
- ¹ Not used if transmitter encoder is utilized.
² Not used when utilizing DSP.

Option - LED's can be mounted on PC slot cover.
HB LED (green) blinks when device recognized by PC.
PTT LED (red) on when transmitter is keyed.