

# EK-1B (2013) 3 Band CW QRP Transceiver

## Operating manual



### Specification:

Size:120\*51\*103mm

Weight: about 420g (without battery pack)

Working voltage:9-16VDC.

Current consumption: RX= 120-130mA TX=0.8A (12VDC)

Working Frequency

RX:13.9-22MHz

TX: 14.0-14.35MHz、18.068-18.168MHz、21.0-21.45MHz。

IF DDS: 60MHz

Display: 0802 LCD

Power output: 4-5W (12VDC)

Sidetone:700Hz

Keyer: builtin speed adjustable

Freq MEM: 10

# Connection

## External power supply

Any 9-16V DC voltage or battery can be connect to (12VDC).It has a polarity protection circuit.

## Internal battery power supply

You can use any battery pack around 12V like our 18650 lithium battery pack. **Must use special charger for lithium battery, must **not** connect regular DC external power supply when lithium battery pack installed.**

## Headphones

Stereo headset will be connected to the headphone port(PHONE), impedance 8-32 ohm.

## Antenna

Any resonant antenna can be connected directly to the antenna(ANT) with a BNC connector, for non-resonant antenna you will need to insert an antenna tuner.

## Key/Paddle

The EK-1B has an automatic function that determines what type of key is being used and is initiated on power up. Will show up "Paddle" or "Hand KEY" on screen. Connect ring to paddle dash or straight key's ground. Connect to sleeve paddle's ground. Tie ring and sleeve together for straight key. **Must plug the straight key first before power up to activate.**



- Connect to Paddle dot or straight key's contactor
- Connect to paddle dash or straight key's ground
- Connect to paddle's ground or straight key's ground

# Operating



## Power switch and Gain

This switch is at left side, counter clockwise tuning to the end to shut off the power, clockwise turning to power it on, GAIN up to the end.



## Tune/Step

Change frequency in VFO mode, change memory location in Memory mode.

## V/M/SAV

Click this button to alternate between Memory mode(MEM)and VFO mode, the LCD screen will show the "M-\*" or "V-\*" (\* The figures for 0-9). In Memory Mode the **Tuning** knob is used to change memory locations. In VFO Mode the **Tuning** knob is used to change the frequency.

Press the **V/M/SAV** button for 2 seconds (the LCD screen will display SAV), the current frequency and current mode will be stored in the Memory Location selected.

## RIT/MOD button

Click this button to enter or exit RIT function. "R-" will be displayed to the middle of the frequency display. When in the **RIT** mode, turning the tuning knob clockwise will raise the frequency (as indicated by the up arrow). turning the tuning knob counter-clockwise will lower the frequency (as indicated by the down arrow). Press and hold the **RIT/MOD** for 2 seconds. This will allow you to change the Keyer speed. Current keyer speed will show on LCD, turning the **TUNE/STEP** to adjust. Press and hold the **RIT/MOD** for 2 seconds for each change.

### **Change the Frequency Tuning Steps**

Pressing the tuning knob lightly will change the tuning step between 10Hz, 100Hz and 1KHz. When changing the step, the related step position displaying on screen blink twice.

If you Pressing the tuning knob for 2 seconds, the tuning step will be 100KHz. (in the RIT mode, will be 10Hz and 100Hz).

If STEP changed in MEM mode, then it will automatically change to VFO mode

### **Transmitting**

When transmitting on the frequency of: 714-14.35MHz, 18.068-18.168MHz or 21.0-21.45MHz, the **EK-1B** will display TX at middle of LCD. Will show "NO" when out of the Ham bands.

Youkits

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