



Fox Delta

Amateur Radio Projects & Kits

FD- SIGEN-0517 VFO

User & Configuration Guide: SIGEN-0517 1MHZ to 160MHZ VFO

FD-SIGEN-0517 VFO SETUP / USE:

Manual Dial Tuning:



Use the rotary encoder to change frequency
Press B1 Twice (short) to use memory channel
Use the rotary encoder to select the memory number (1 to 10)

Save Frequency to Memory:

Dial Tune required Frequency to be entered into MEM by turning encoder
Press B2 once
Message "Save Mem#1" Displays.
Turn encoder and change memory number where this freq is to be stored.
Press B1 (Long)
LED blinks and memory #1 (- 10) is stored

Recall memory:

At switch ON, LCD displays "Dial Tune"
To recall a memory, press B1 once and "Mem # 1" comes up.
Turn encoder to select stored Memory.

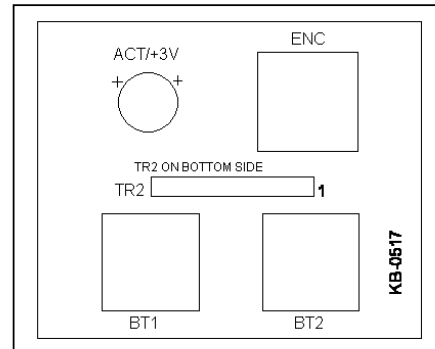
LCD BACKLIGHT:

BL is automatically powered OFF after 10 sec of inactivity, push any button or rotate the encoder to power ON again.

Reset To Default:

To restore the factory default parameters push BTN1 and BTN2 at the same time and power on the board.

Factory default	SIGEN-0517 VFO
Step Size	1 Hz
Freq Min	100 KHz
Freq Max	200 MHz
VFO Offset	0
Xtal Frequency (si5351)	25.000000 MHz
CLK_1 frequency	0
CLK_2 frequency	0



SETUP:

When “Dial Tune” displayed on LCD, press B2 (Long) to enter into **SETUP**
LED Flashes once.

Now, you are in configuration mode to set Si5351 parameters:

“SetUP STEP”



Turn encoder and select one of the “Step” that you wish to use.
Once above selected, **press B2 (Long) to go to next setup item**, or, if this was the only item that you wanted to edit, press B1 (Long) to save and exit.
LED blinks and a “Saved” message comes up.

“Setup Fmin”



By turning encoder, set lowest frequency that you wish to use
Press B2 (long) to go to next item

“Setup Fmax”



Enter upper most freq that you want to use. (VFO May go to approx 200MHZ)
Press B2 (Long) to go to next item

“Setup Offset”



Enter the freq you want main osc to be offset for your IF. Values are Pluse or Minues.
Press B2 (Long) to go to next item or B1 (Long) to save and exit.

“Setup Fxtal”



This is crystal freq used on Si5351 Module. Its 25MHZ. A small correction can be made in FW/SW to get very close to 25000000. If you can not get what exact freq that you want, change 25MHZ Xtal on Si5351 Module.
Press B2 (Long) to go to next item or Press B1 (Long) to save and exit

“Setup CLK_1”



Si5351 module has second signal available at CLK1. May be used for Second IF in a receiver or Transmitter.

Set required freq here.

Press B2 (Long) to go to next item or B1 (Long) to save and exit

“Setup S-Meter”



Select ON or OFF. This activate PIC PIN2 for analog DC signal for measurement of S-Meter or ALC signal level and display it in Bar Graph form on LCD. (DC 0 to 5V)

Press B1 (Long) to save and exit. LED Flashes and “Saved” Message on LCD.

Configuration of SIGEN-0517 is complete.

Measure signals at CLK0 / J1 and CLK1 / J2 using a freq counter.

73s / [Tony / I2TZK](#), [Frank / K7SFN](#), [Dinesh / VU2FD](#)
16th July 2017

For more details, please visit Project Page: <http://www.foxdelta.com>