

HAMBUILDER

RADIOWORK

USER MANUAL

HBR1HF Mono Band

20m SSB/CW Transceiver



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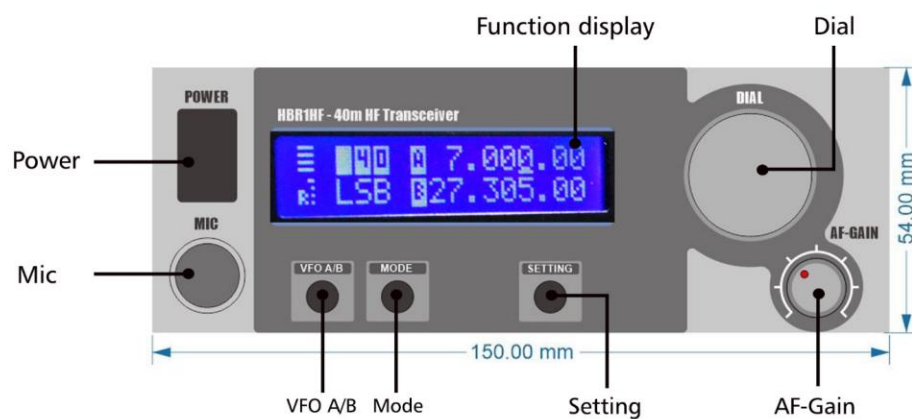
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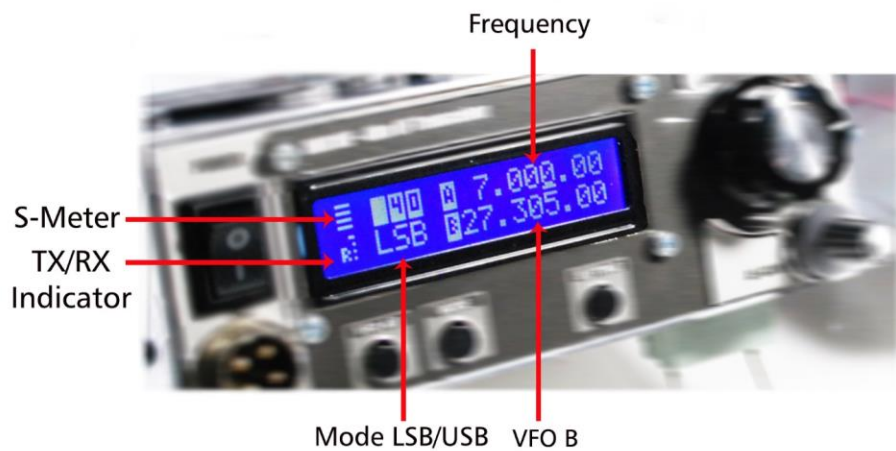


1 PANEL DESCRIPTION

■ Front panel



■ Function display



FRONT PANEL DESCRIPTION

- **Power**
To turn ON or OFF
- **Microphone connector**
Connect the supplied microphone here.
- **DIAL**
 - Sets the operating frequency
 - memory channel
 - Sets the item in the set mode
- **VFO A/B**
VFO (A,B), show current/active VFO, each VFO frequency saved in EEPROM after a few second.
- **MODE**
Mode button use to select modulation mode
Mode, display modulation/operation mode.
 - o LSB = - 1500Hz
 - o USB = 1500
- **SETTING**
SET, used to setting up :
 - o IF value , push rotary (DIAL)
 - o CW
 - o CALLIBRATE
 - o BFO USB/LSB
- **FREQUENCY**
Frequency, its show Frequency Operation (FO)
 - o Its cover 40 m : 6.900.000 - 7.249.999
- **RX/TX Indicator**
RX/TX indicator, its Show transceiver state when TX on RX
- **AF - Gain**
Audio Frequency Gain, Simply the volume control
- **PSU requirement**
Voltage 13.8V
Current 15A

■ Unit Description

HBR1HF Mono Band 20m HF Transceiver.

This is a completely assembled and tested homebrew mono band transceiver with specifications:

- *. Heterodyne using 11.059200 MHz Xtal filter based on Hambuilder BritX exciter
- *. ADE-1 mixer
- *. 40m Band coverage
- *. SSB & CW modes
- *. 2x IRF 530 Final RF amplifier
- *. 25 watts RF power output (max power in CW Mode)
- *. CW mode using 700Hz tone modulation generated by microcontroller
- *. 16x2 char LCD
- *. Si5351 VFO and BFO synthesizer based on RTCMono controller
- *. Enclosure dimension between 150x170x60mm or 150x150x56mm is dependent on stock

Band Coverage :

- *. 20m (14.000.000 - 14.500.000), 9-15 MHz BPF, 15 MHz LPF
- *. Bands range are programmable, as long as not cross the BPF/LPF range

The packet consist of :

- *. HBR1HF Transceiver set
- *. Condenser Microphone
- *. DC Cord
- *. Supply VCC: 12-13.8V, 6A (TX), 0.3 (RX)

NOTE :

- ** Shipped assembled, pre-programmed, fully tested, and in working condition.
- ** Purchasing this Product means being prepared to comply with the applicable requirements & policies.
- ** This is a home-brew Product and is designated for personal use only.
- ** Adequate knowledge in radio electronics is required in using this Product.
- ** Hambuilder is not liable for any damage or error caused by user's failed experiments and/or learning process.
- ** For those of you who have difficulty in assembly and want to discuss about products that suitable to your electronic project, please contact our team via message inbox or via email to : support@hambuilder.com

■ Power Supply (PSU)

- PSU requirement
Voltage 13.8V
Current 15A

2 RARE PANEL DESCRIPTION



NOTE :

- * **PLEASE DO NOT** to change settings unless you understand
- * Normal operation is just vfo-mode and dial
- * Setting and calibration values are under the enclosure

