ID: K66VX-5R 2.1033 (b)(3)

> VX-5 Operating Manual

CONTROL & CONNECTORS

TOP PANEL

Antenna Jack

This SMA jack accepts the supplied rubber flex antenna, or another antenna designed to provide 50 Ω impedance on the operating bands.

VOL knob

This control adjust the volume of the receiver,

DIAL knob

Use this knob to turn the frequencies, or select the memories and other settings such as tuning steps.

TX/BUSY lamp

This dual color LED glows Green when a signal is received. The LED glows Red when you are transmitting.

FRONT PANEL

LCD display

The display consists of segmented digits for frequency readout and various icons representing enabled transceiver features, as well as for viewing set mode programming and alphanumeric names.

PWR switch

This is the main "ON/OFF" switch for the transceiver.

LAMP switch

Press this switch to illuminate the display and keypad when operating in the dark. Pressing only this switch activates the lamp for 5 seconds. Press **F/W** key first if you want the lamp to stay on (until you press this sequence again).

Keyboard

These keys select operating features of the transceiver during reception, and generate DTMF tone pairs during transmission.

SIDE PANEL (LEFT SIDE)

• PTT switch

Press this switch to transmit, and release it to receive.

MON switch

In the US version, Press this switch opens the squelch momentarily without disturbing the squelch settings. In the European version, this switch activates the 1750 Hz burst tone.

SIDE PANEL (RIGHT SIDE)

MIC/EAR jack

This 3-contact mini phone jack provides audio output for an optional earphone or speaker/microphone.

EXT DC jack

This coaxial jack accepts an external source of 10 to 16 volts DC (center contact positive) to operate the transceiver, and to charge a FNB-58LI Lithium-Ion Battery Pack if attached.

KEYPAD ASSIGNMENT

PWR key

Press and hold this key for 1 second, to toggles the transceiver's power on and off.

LAMP key

- Press this key momentarily, to illuminates the LCD and keypad for 5 seconds.
- Press this key after FW key is pressed, to illuminates the LCD and keypad until you press LAMP key again.
- Press and hold this key for one second, to activates the spectrum analyzer feature.

BAND [SET (AR)] key

- Press this key momentarily, to changes the operating band through the following sequence:
 - 430MHz Band → AM Band → HF Band → FM Band → TV Band → 50MHz Band → 144MHz → 430MHz Band
- Press this key after FW key is pressed, to enter the Set mode.
- Press and hold this key for one second, to activates the ARTS feature.

1 [TN (FRQ)] key

- Press this key momentarily, frequency entry digit "1".
- Press this key after FW key is pressed, to activates the CTCSS and DCS operation.
- Press and hold this key for one second, to appears the Sub-band frequency at the bottom of the main frequency on the display.

2 [CD (TAG)] key

- Press this key momentarily, frequency entry digit "2".
- Press this key after FW key is pressed, to selects the CTCSS tone frequency and DCS code.
- Press and hold this key for one second, to selects the memory channel display type (frequency display √ Alpha Numeric display).

3 [DT (VLT)] key

Press this key momentarily, frequency entry digit "3".

- Press this key after FW key is pressed, to activates the DTMF Autodialer.
- Press and hold this key for one second, to appears the battery pack type and battery voltage on the display.

MR [SKP (SC)] key

- Press this key momentarily, to recall the memory mode.
- Press this key after FW key is pressed, to toggles scan skip of current memory.
- Press and hold this key for one second, to activates the Memory channel scanning.

HM/RV [EMG] key

- Press this key momentarily, to reveres the transmit and receive frequencies when a repeater split programmed.
- Press this key after FW key is pressed, to recalls a favorite frequency.
- Press and hold this key for one second, to activates the Emergency feature.

4 [MG (DSP)] kev

- Press this key momentarily, frequency entry digit "4".
- Press this key after FW key is pressed, to recalls the Memory Group.
- Press and hold this key for one second, to select the frequency display (Large Font √ Small Font).

5 [AP (ICO)] key

- Press this key momentarily, frequency entry digit "5".
- Press this key after FW key is pressed, to sets the Automatic Power Off feature.
- Press and hold this key for one second, to changes the some labels to Icon display.

6 [RP (ONT)] key

- · Press this key momentarily, frequency entry digit "6".
- Press this key after **FW** key is pressed, to selects the repeater shift direction (either "+", "-", or simplex).
- Press and hold this key *for one second*, to appears the operating time and total Tx time after the transceiver's power on.

0 [SQ (WX)] key

- Press this key momentarily, frequency entry digit "0".
- Press this key after FW key is pressed, to adjusts the squelch threshold level.
- Press and hold this key for one second, to recalls the Weather channel frequency.

TX PO [LMOD (LK)] key

Press this key momentarily, to selects the transmitter power output level: Low,

Medium 1, Medium 2, or High.

- Press this key after FW key is pressed, to selects the Key Lockout feature.
- Press and hold this key for one second, to activate the Key Lockout feature.

7 [ST (TMP)] key

- Press this key momentarily, frequency entry digit "7".
- Press this key after FW key is pressed, to selects the synthesizer step size during VFO operation.
- Press and hold this key *for one second*, to appears the current temperature of the transceiver's inside.

8 [(BRO)] key

- · Press this key momentarily, frequency entry digit "8".
- Press and hold this key for one second, to appears the current barometrical pressure.

9 [BP (ALT)] key

- Press this key momentarily, frequency entry digit "9".
- Press this key after FW key is pressed, to selects the keypad beeper on/off.
- Press and hold this key for one second, to appears the current altitude (calculate from barometrical pressure).

VFO [DW (SC)] key

- Press this key momentarily, to recall the VFO mode.
- Press this key after FW key is pressed, to activate Dual Watch feature.
- Press and hold this key for one second, to activate VFO scanning.

OPERATION

Turning the Power On/Off

Press and hold the PWR switch for one second to turn the transceiver on.

To turn the transceiver off, press and hold the PWR switch again for one second.

Adjusting the Volume Level

Rotate the VOL control to adjust the receiver volume.

Note: If you press the **MON** switch, just below the **PTT** switch on the left side of the radio, the squelch is overridden, and you can then use the background noise to set the volume level, even if there aren't any incoming signals.

Squelch Adjustment

The VX-5 initially is set to the "Auto-Squelch" mode, which automatically optimizes the

squelch setting to silence background noise under typical operating conditions. We recommend that you initially use the Auto Squelch setting, and only change it if your operating environment causes the squelch to open unnecessarily.

To change the Squelch Setting:

- 1. Press the $F/W \rightarrow BAND$ [SET (AR)] key to activate the Set mode.
- 2. Turn the DIAL knob to select "1 SQUELCH".
- 3. Press the BAND [SET (AR)] key momentarily, then turn the DIAL knob to select the squelch threshold, on a scale of 0 to 15. Advance the DIAL knob to the point where the background noise is just silenced.
- 4. Press PTT switch momentarily, to save your new setting and return to normal operation.

Band Change

Press the **BAND** [SET (AR)] key *momentarily*, to changes the operating band through the following sequence:

```
430MHz Band → AM Band → HF Band → FM Band → TV Band → 50MHz Band → 144MHz → 430MHz Band .......
```

Tuning

The VX-5 initially operates in the "VFO" mode, a channelized system which allows free tuning throughout the entire selected Operating Band.

Four tuning methods are available on the VX-5.

- Turn the DIAL knob tune in the pre-programmed step established for the current Operating Band.
- Press F/W key, followed by turn the DIAL knob, to step up or down the band in 1-MHz steps.
- Press the keypad in six digits: the three MHz digits, and three kHz digits.

Ex 1: To operate on 146.940MHz

$$\text{Press } [1] \rightarrow [4] \rightarrow [6] \rightarrow [9] \rightarrow [4] \rightarrow [0]$$

Ex 2: To operate on 810kHz

$$\text{Press } [0] \rightarrow [0] \rightarrow [0] \rightarrow [8] \rightarrow [1] \rightarrow [0]$$

Note: Pressing **VFO** [**DW** (**SC**)] key during frequency entry truncates remaining decimal places to zero, and can be used as a shortcut for keypad entry. For example, to enter $1.16.000 \mathrm{MHz}$, simply press $[1] \rightarrow [4] \rightarrow [6] \rightarrow \text{VFO} [DW (SC)]$

Press and hold the VFO [DW (SC)] key for one second to start upward scanning
of the band.

Transmission

To transmit, simply close the PTT (Push To Talk) switch, and speak into the front panel grille in a normal voice level (be careful not to cover up the microphone with your hand – it's at the upper right Connor of the grille). Release the PTT switch to receive.

Power Output Setting

Four power output levels are available on the **VX-5**: 0.3 watts (Low), 1.0 watts (Medium 1), 2.5 watts (Medium 2), and 5.0 watts (High). To change the power output level, press the **TX PO** [LMOD (LK)] key to select one of four power setting.

MEMORY MODE

The VX-5 provides a wide variety of memory system resources. These include:

- o 220 "Standard" memory channels, numbered "1" through "220".
- Three Call channels, storage and quick recall of one prime frequency on each amateur band.
- o Ten set of band-edge memories also known as "Programming Memory Scan" channels, labeled "L1/U1" through "L10/U10".
- Five Memory Group, labeled "MG1" through "MG5". Each Memory Group can be assigned 24 channel from the "standard" memory channel.

Memory Storage

Simplex Memory

- Select the desired frequency.
- 2. Press and hold the FW key for one second.
- 3. Within five seconds of releasing the FW key, turn the DIAL knob to select the desired memory channel.
- 4. Press the **FW** key momentarily to store the displayed data into the selected memory channel.

Semi-Duplex Memory

- 1. Select the desired receive frequency.
- 2. Press and hold the FW key for one second.
- 3. Within five seconds of releasing the FW key, turn the DIAL knob to select the desired memory channel.
- 4. Press the **FW** key momentarily to store the displayed data into the selected memory channel.
- 5. Select the desired transmit frequency.
- 6. Again press and hold the **FW** key for one second (Do not change the memory channel).
- 7. Hold the PTT switch while pressing the FW key momentarily, to store the independent Tx/Rx frequency into the memory channel.

Memory Group Operation

Memory Group Assignment

- Press Recall the memory channel to be Grouped.
- 2. Press and hold the **FW** key for one second, then press the numbered key ([1] \sim [5]) you want Memory Group.
- 3. Now memory channel date is copied into the Memory Group.

Memory Group Recall

- 1. Press the $F/W \rightarrow 4$ [MG (DSP)] key to recall the Memory Group.
- 2. Rotate the DIAL knob to select the desired Memory Group (MG1 \sim MG5).
- 3. Press the BAND [SET (AR)] key momentarily to enter the Memory Group.
- 4. In the Memory Group, you selects the memory channel in the current memory group only (up to 24 channels) by turning the **DIAL** knob.
- 5. To exit the Memory Group, **BAND** [SET (AR)] key momentarily, to return to the memory mode

RESET

Microprocessor Resetting

- 1. Turn the radio off.
- Press and hold the 4 [SV (DBL)], MR [SKP (SC)], and VFO [DW (SC)] key while turning the radio on.
- Press the FW key momentarily to initialize the radio.

Set Mode Resetting

- 1. Turn the radio off.
- 2. Press and hold the **MR** [SKP (SC)] and VFO [DW (SC)] key while turning the radio on.
- 3. Press the FW key momentarily to initialize the Set mode.

CLONING

- Turn both radio off.
- 2. Connect the optional CT-27 cloning cable between the MIC/EAR jacks of the two radio.
- Press and hold the FW key while turning the radio on. Do this for both radio. "CLONE" appears on both radios.
- 4. On the destination radio, press the MON key ("WAIT" appears).
- 5. Press the **PTT** switch on the *source* radio, "SEND" blinks and "WAIT" blinks on the other radio as data is transferred.
- 6. If there is a problem during the cloning process, "ERROR" is displayed. Check your

- cable connections and battery voltage, and try again.
- 7. If successful, "CLONE" reappears on both display. Turn both radio off and disconnect the CT-27. You can then turn the radios back on, and begin normal operation.

SET MODE

The **VX-5** Set mode is east to activated and set. Use the following procedure:

- 1. Press the **FW** → **BAND** [**SET** (**AR**)] key to activate the Set mode.
- 2. Turn the DIAL knob to select the Set Item to be adjusted.
- 3. Press the BAND [SET (AR)] key momentarily, then turn the DIAL knob to adjust or select the parameter to be changed on the Set Item selected in above step.
- 4. After completing your selection and adjustment, press and hold the **BAND** [SET (AR)] key for one second to save the your new setting and revert to the Set mode display, or press the **PTT** switch momentarily to exit the Set mode and retune to normal operation.

Set mode Details

Set Item 1 (SQUELCH)

Function: Squelch threshold level for AM and FM Narrow.

Available Values: 0 ~ 15

Default: 01

Set Item 2 (WFM SQL)

Function: Squelch threshold level for FM Wide.

Available Values: $0 \sim 15$

Default: 01

Set Item 3 (NAME SET)

Function: Store Alpha-Numeric "Tags" for the Memory channel.

Name Storing:

- Recall the memory channel to be named.
- Recall the Set Item 3, then press the BAND [SET (AR)] key momentarily.
- Turn the **DIAL** knob to select the desired first letter, number, or symbol, then press the **BAND** [SET (AR)] key momentarily to save the first letter/number/symbol.
- Repeat the previous step as necessary to complete, pressing the BAND [SET (AR)] key after each entry.
- o Press and hold the **BAND** [SET (AR)] key for one second to save the your new setting and revert to the Set mode display.

Set Item 4 (ICON)

Function: Enable/disable the ICON display.

Icon Assignment:

- After selecting the Set Item 4, press the BAND [SET (AR)] key momentarily.
- o Turn the DIAL knob to select the Band or Mode you want to change to Icon.
- Press the BAND [SET (AR)] key momentarily, then turn the DIAL knob to select desired Icon.
- Press and hold the BAND [SET (AR)] key for one second to save the your new setting and revert to the Set mode display.

Set Item 5 (VFO)

Function: Select the VFO Band edge for the DIAL knob.

Available Values: ALL/BAND

Default: ALL

ALL: When the VFO frequency reach the high band edge of the current band, the VFO frequency jump to the next low band edge or vice versa.

BAND: When the VFO frequency reach the high band edge of the current band, the VFO frequency jump to low band edge of the current low band edge or vice versa.

Set Item 6 (ARS)

Function: Enable/disable the Automatic Repeater Shift.

Available Values: ON/OFF

Default: ON

Set Item 7 (RPT SHIFT)

Function: Setting the Repeater Shift Direction

Available Values: -RPT/+RPT/SIMP

Default: -RPT

Set Item 8 (SHIFT)

Function: Set the magnitude of the Repeater Shift.

Available Values: $0.00 \sim 99.95~\mathrm{MHz}$

Default: Depends on the transceiver version.

Set Item 9 (VFO SPLIT)

Function: Enable/disable the VFO Split Operation

Available Values: ON/OFF

Default: OFF

When this feature "ON", you can operate between the VFO-A and VFO-B frequencies

(Current VFO is Rx, other VFO is Tx).

Set Item 10 (VFO LINK)

Function: Enable/disable the VFO Link feature.

Available Values: ON/OFF

Default: OFF

When this feature "ON", the VFO-A and VFO-B are "slaved" so that they change

frequency together.

Set Item 11 (VFO STEP)

Function: Setting the synthesizer steps.

Available Values: 5/9/10/12.5/15/20/25/50/100 kHz Default: Depends on the transceiver version.

Set Item 12 (RESUME)

Function: Select the scan resume mode. Available Values: 5SEC/BUSY/HOLD

Default: 5SEC

5SEC: The scanner will hold for 5 second, then resume whether or not the other station

is still transmission.

BUSY: The scanner will hold until the signal disappears, then will resume when the

carrier drops.

HOLD: The scanner will stop when a signal is received, and will not restart.

Set Item 13 (SCAN LAMP)

Function: Enable/disable the Scan lamp while paused.

Available Values: ON/OFF

Default: ON

Set Item 14 (RX SAVE)

Function: Select the Rx battery saver interval (sleep ratio).

 $\label{eq:available Values: 200mS(1:1)/300mS(1:1.5)/500mS(1:2.5)/1s(1:5)/2s(1:10) } \\$

Default: 200mS(1:1)

Set Item 15 (TX SAVE)

Function: Enable/disable Tx saver.

Available Values: ON/OFF

Default: OFF

Set Item 16 (APO)

Function: Set the APO time.

Available Values: OFF/30min/1hour/3hour/5hour/8hour

Default: OFF

Set Item 17 (BUSY LED)

Function: Enable/disable the BUSY LED while the squelch open.

Available Values: ON/OFF

Default: ON

Set Item 18 (ARTS BEEP)

Function: Select the Beep option for the ARTS operation.

Available Values: RANGE/ALL/OFF

Default: RANGE

RANGE: Beeps sound only when the radio first detects that you are within range.

ALL: Beeps sound every time a polling transmission is received from the other station

(every 15 or 25 seconds when in range).

OFF: No alert beeps sound.

Set Item 19 (ARTS ITVL)

Function: Select the Polling Interval for the ARTS operation.

Available Values: 25SEC/15SEC

Default: 25SEC

Set Item 20 (KEY BEEP)

Function: Enable/disable the Keypad beeper.

Available Values: ON/OFF

Default: ON

Set Item 21 (EDGE BEEP)

Function: Enable/disable the Band-edge beeper while scanning.

Available Values: ON/OFF

Default: ON

When this feature "ON", beeps sounds when scanner reach the Band edge (in the VFO

Scan) or Memory channel "1" (in the Memory Channel Scan).

Set Item 22 (BELL)

Function: Select the CTCSS Bell ringer repetitions.

Available Values: OFF/1/3/5/8/RPT

Default: OFF

Set Item 23 (MON/T-CAL)

Function: Select the MON key (just below the PTT switch) function.

Available Values: MON (Monitor)/T-CAL (1750 Hz Tone Burst)

Default: Depends on the transceiver version.

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Set Item 24 (HOME/REV)

Function: Select the \mathbf{MH} [RV (EMG)] key function.

Available Values: HOME (Home Channel Recall)/REV (Repeater Reverse)

Default: REV

Set Item 25 (LAMP MODE)

Function: Select the LCD/Keypad Lamp mode.

Available Values: KEY/5SEC/TOGGLE

Default: KEY

KEY: Illuminates the LCD/Keypad for 5 seconds when any key pressed. <u>5SEC</u>: Press **LAMP** key to illuminates the LCD/Keypad for 5 second.

TOGGLE: LAMP key toggles LCD/Keypad lamp on/off.

Set Item 26 (TOT)

Function: Set the TOT time.

Available Values: OFF/1min/2.5min/5min/10min

Default: OFF

The time-out timer shuts off the transmitter after continuous transmission of the

setting time.

Set Item 27 (BCLO)

Function: Enable/disable the Busy Channel Lock Out feature.

Available Values: ON/OFF

Default: OFF

Set Item 28 (CLOCK SFT)

Function: Shifting of CPU clock frequency.

Available Values: ON/OFF

Default: OFF

Set Item 29 (SQL TYPE)

Function: Select the Tone Squelch mode.

Available Values: OFF/TONE/TONE SQL/DSC

Default: OFF

Set Item 30 (TONE SET)

Function: Setting the CTCSS Tone Frequency Available Values: 39 standard CTCSS tone

Default: 88.5 Hz

Set Item 31 (DSC SET)

Function: Setting the DCS code.

Available Values: 104 standard DCS code.

Default: 023

Set item 32 (DTMF SET)

Function: Programming the DTMF Autodialer.

DTMF Autodialer Programming:

- o After selecting the Set Item 32, press the BAND [SET (AR)] key momentarily.
- Rotate the DIAL knob to select the autodial memory number you want to store.
- Press the **BAND** [SET (AR)] key momentarily, then key in the phone number you want to store.
- o If you make a mistake, press the **MON** key *twice* to clear the current digit and re-enter the correct number.
- After entering the final digit, press and hold the BAND [SET (AR)] key for one second to revert to the Set mode display.

Set Item 33 (CW ID)

Function: Program and activate the CW IDer

CW IDer Programming:

- After selecting the Set Item 33, press the BAND [SET (AR)] key momentarily.
- Turn the **DIAL** knob one click to change the display from OFF to ON (CW IDer ON).
- Press the BAND [SET (AR)] key momentarily, then turn the DIAL knob to select the first letter/number of your callsign, and press the BAND [SET (AR)] key momentarily to save the first letter/number.
- Repeat the previous step as necessary to complete your callsign, pressing the BAND [SET (AR)] key after each entry.
- o Press and hold the **BAND** [SET (AR)] key for one second to save the your callsign and revert to the Set mode display.

Set Item 34 (SPEC-ANAL)

Function: Select the Spectrum Analyzer Sweep mode.

Available Values: SINGLE/CONTINUE

Default: SINGLE

SINGLE: The transceiver sweeps the current band once.

CONTINUE: The transceiver sweeps the current band repeatedly until the Spectrum

Analyzer is turned off

Set Item 35 (SMRT SRCH)

Function: Select the Smart Search Sweep mode.

Available Values: SINGLE/CONTINUE

Default: SINGLE

SINGLE: The transceiver sweeps the current band once in each direction starting on the current frequency. All channels where activity is present (up to 15 in each direction) are loaded into the Smart Search memories. Whether or not all 31 memories are filled, the search stops after one sweep in each direction.

<u>CONTINUE</u>: The transceiver makes a sweep in each direction as with the "SINGLE" mode, but if all 31 channels are not filled after the first sweep, the radio continues sweeping until there are *all* filled.

Set Item 36 (RX MODE)

Function: Select the Operating mode.

Available Values: AUTO/N-FM/W-FM/AM

Default: AUTO

Set Item 37 (LOCK MODE)

Function: Select the Control Locking lockout combination.

Available Values: KEY/DIAL/KEY+DIAL/PTT/KEY+PTT/DIAL+PTT/ALL

Default: KEY

Set Item 38 (HALF DEV)

Function: Reducing the MIC Gain.

Available Values: ON/OFF

Default: OFF

Set Item 39 (LANGUAGE)

Function: Select the language for the display. Available Values: ENGLISH/JAPANESE

Default: ENGLISH

Set Item 40 (ON TIMER)

Function: Set the ON Timer time. Available Values: OFF ~ 24:00

Default: OFF

The ON Timer turns on the radio passes the setting time.

Set Item 41 (CONTRAST)

Function: Setting the Display contrast level.

Available Values: 1 ~ 10

Default: 5

Set Item 42 (MTR SYMBOL)

Function: Select the S/PO meter Symbol. Available Values: >>, \blacksquare , \bullet , =, \blacktriangleright , -, CHR

Default: >>

Set Item 43 (BARO OFST)

Function: Correcting the atmospheric pressure.

Available Values: 600 ~ 1300 hpa

Set Item 44 (DISP MODE)

Function: Select the display while the transceiver's power off

Available Values: NONE/TEMP/BRM/ALT/T+B/T+A

Default: NONE

NONE:

TEMP: Appears the current temperature while the transceiver's power off.

BRM: Appears the current barometrical pressure while the transceiver's power off.

<u>ALT</u>: Appears the current altitude while the transceiver's power off (calculate from the barometrical pressure).

 $\underline{T+B}$: Appears the current temperature and current barometrical pressure while the transceiver's power off.

<u>T+A</u>: Appears the current temperature and current altitude while the transceiver's power off.

SPECIFICATIONS

General

Frequency Ranges:

Rx: 0.5-1.8 MHz (BC Band)

1.8-16 MHz (SW Band)

 $47-59~\mathrm{MHz}$ (50 MHz HAM)

59-108 MHz (FM)

108-137 MHz (Air Band)

137-174 (144 MHz HAM)

174-222 MHz (VHF-TV)

222-420 MHz (ACT1: Action Band 1)

420-470 MHz (430 MHz HAM)

470-729 MHz (UHF-TV)

800-999 MHz (ACT2: Action Band 2, Cellular Blocked)

Tx: 50-54 MHz

 $144-146~\mathrm{MHz}$ or $144-148~\mathrm{MHz}$

430-440 MHz or 130-450 MHz

Channel Steps: 5/9/10/12.5/15/20/25/50/100 kHzFrequency Stability: $\pm 0.5 \text{ ppm } (-10^{\circ}\text{C to } +60^{\circ}\text{C})$ Repeater Shift (default): $\pm 600 \text{ kHz}$ (144 MHz)

 $\pm 1.6/5.0/7.6 \text{ MHz} (430 \text{ MHz})$

Emission Type: F2, F3 Antenna Impedance: 50Ω

Supply Voltage: Nominal: 7.2 V DC, Negative Ground

Operating: 10-16 V DC, Negative Ground (EXT DC jack)

Current Consumption: 150 mA (Receive)

55 mA (Standby, Saver Off) 16 mA (Standby, Saver On) 400 μA (Auto Power Off) 1.6 A (5 W Tx, 50 MHz) 1.7 A (5 W Tx, 144 MHz) 1.9 A (4.5 W Tx, 430 MHz)

Operating Temperature: -20°C to +60°C

Case Size: 58 (W) x 88 (H) x 27 (D) mm (w/o knob & antenna)

Weight: ??? g

Transmitter

RF Power Output: 5 W (@ 13.8 V EXT DC IN)

5W (@ 7.2 V, 50 MHz/144 MHz)

4.5W (@ 7.2 V 430 MHz)

Modulation Type: Variable Reactance

Maximum Deviation: ±5 kHz

Spurious Emission: At least 60 dB below

Microphone Impedance: $2 k\Omega$

Receiver

Circuit Type: Double-Conversion Superheterodyne Intermediate Frequencies: 1st: 47.25 MHz (N-FM)

> 45.8 MHz (W-FM) 2nd: 450 kHz (N-FM)

10.7 MHz (W-FM)

Sensitivity: 0.5 $\mu\mathrm{V}$ for 10 dB S/N (0.5-15 MHz, AM)

0.9 µV for 12 dB SINAD (76-, W-FM)

 $0.16~\mu\mathrm{V}$ for 12 dB SINAD (50-54 MHz/144-148 MHz/430-450 MHz, N-FM)

Selectivity (-6dB/-60dB): 15 kHz/35 kHz (N-FM)

AF Output: 400 mW $\ensuremath{\widehat{w}}$ 80 for 10 % THD (@ 7.2 V DC)

Specifications are subject to change without notice, and are guaranteed within amateur

bands only.

ACCESSORIES & OPTIONS

Accessories

FNB-58LI Battery Pack

NC-72B/C/U AC Power Supply

Belt Clip Hand Strap Antenna

Operating Manual

Warranty Card

Options

FNB-58Ll Battery Pack
NC-72B/C/U AC Power Supply

CD-15 Rapid Charger

FBA-23 Battery Case for 2 x LR-6 type Cell

SU-1 Barometer Sensor Unit
MH-34B4B Speaker/Microphone
MH-37A4B Earpiece/Microphone

VC-25 VOX Headset

E-DC-5B Cigarette Lighter DC Power Cable

E-DC-6 External Power Cable

CSC-73 Soft Case

CN-3 BNC to SMA Adapter
CT-44 Microphone Adapter

CAUTION!

Changes or modifications to this device not expressly approved by Yaesu Musen could void the user's authorization to operate this device.

- Changes or modifications to this device not expressly approved by Yaesu Musen could void the user's authorization to operate this device.
- 2. This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions; (1) this device may not cause harmful interference, and (2) this device must accept any interference including interference that may cause undesired operation.
- 3. The scanning receiver in this equipment is incapable of tuning, or readily being altered, by the User to operate within the frequency bands allocated to the Domestic public Cellular Telecommunications Service in the Part 22.

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesirable operation of this device.