ELECRAFT KX3 ©

□Button Conventions

Each button has a **TAP** function and a press and **HOLD** second function.

☐Knob Conventions

AF/RF-SQL MON, Primary function is AF gain, **TAP** for RF gain or SQL in FM. Hold 1/2 sec for MON function.

⊔ <u>Oper</u>	<u>ating Bands .5–3</u>	<u>54 rcv</u>
Band	Freq Range MHz	Mode
160 m	0.5 - 2.0	ALL
80 m	3.5 - 4.0	ALL
60 m	5.3 - 5.4	ALL
40 m	7.0 - 7.3	ALL
30 m	10.0-10.15	ALL
20 m	14.0-14.35	ALL
17m	18.068168	ALL
15 m	21.0 -21.45	ALL
12 m	24.8999	ALL
10 m	28.0-29.7	ALL
6 m	50 -54	ALL
(with KX	144 installed)	
2 m	144 -148	ALL

■Mode Change

- Tapping **MODE** selects LSB, USB, CW, DATA, AM or FM.
- ALT modes, CW REV, DATA REV, AM-S or FM+/- are selected by holding **ALT** . USB and LSB are alternates of each other.
- •In SSB the + icon indicates ESSB mode.

□Indicator LEDs

- TX = transmitting when lit
- OFS = Off set on
- VFO B = VFO B is active
- $\triangle f = Rx$ and Tx not the same

□Supply Voltage & Current

Power connector: 2.1 mm x 5mm Internal battery: 12.0 vdc (8 alk) External. Operating bat:9–15 vdc Rx: (mono) 150mA normal

Tx: (mono) 2.5A max

☐More display icons

- •I/II = pass band tuning function, see page 12.
- A This symbol is shown on all menus that must be first unlocked before changing value. UNLOCK by pressing **KHZ** for 3 secs. Lock symbol will turn off, adjust item.

□No Transmit CW Practice

• If PTT-CW is selected by holding **VOX** it will only generate sidetone unless you tap XMIT

□Monitor level

- Press MON to set transmit monitor level in voice, cw sidetone
- □Compression level
- •Tap **CMP** adjust knob above □CW, PSK, RTTY Decode
- Select MODE. Set VFO B to not show specials. Press and hold Text.

□GPIO / Keyline Port 2

- •ACC2 2.5 mm stereo jack, tip is keyline, ring is 3v logic signal. □Quadrature RX I/Q output
- •RX I/O, 2.5 mm stereo jack Provides quadrature outputs for SDR software

□Computer Control port 1

•ACC1 3.5 mm stereo jack connects to computer via KXUSB or KXSER cable for firmware updates, control and configuration using KX3 utility or KX3 Memory pgm. Tip = RX, Ring = TX

☐Mic Connector 3.5 mm

Four conductor mic plug

Sleeve - ground

Ring 2 – Logic

Ring 1 - PTT/UP/DWN

Tip – mic audio, see page 5

□Channel Hopping (SCAN)

 Most useful on channelized bands. Store frequencies in sequential channels. Add a text label, the first character must be *. **RCL** one of these memories. Live scan can be started by using **SCAN** Radio hops these * channels. To disable tap **RATE** or change bands.

□Passband Tuning

•In voice mode **PBT I/II** function I is low cut, function II is high cut. In CW or DATA I is width and II is shift. Hold **PBT I/II NORM** to reset.

XIT - RIT

• Tap XIT or RIT OFS LED turns on, use **OFS/VFO B** to adjust the offset. To exit hold **CLR**

□Power ON/OFF BAND- & ATU/TUNE 2 sec.

TX PWR Level

0.0 to 10W on 80m thru 15m 0.0 to 8w on 12 m thru 6m. Press and hold **KEYER/MIC PWR** then adjust power level with **KEYER/MIC** knob.

■ Band Change

Tap **BAND**- **BAND** + To change Bands may be locked out of list.

□ Access and change Menus

Press and hold **MENU** until a menu entry appears in VFO B area. Item value appears in VFO A. To change value rotate VFO A. To change menu item rotate VFO B. Hold **MENU** to exit. While in menu, hold **MENU** for 3 seconds to display more info about current menu entry. Tap any button to exit.

□Other Display Icons

•AGC S F = AGC Slow. Fast ALC= auto level control on, pg 25

AM-S = AM mode, ___

ANT 1 2 = antenna 1(HF), 2 (2M)

ATT = Attenuator on, pg13

ATU = tuner enabled, pg 14 **CMP**= Compressor, page 8

CWT= Automatic CW tune, 13

NB = noise blanker, pg 13

 $\blacktriangleleft \triangleright$ = manual notch, pg 13

NR = Noise reduction on. Pg 13

NTCH = man or auto notch on, 16 **PRE** = Preamp on, 13,

QSK = Full break-in CW on, pg16

RL = manual notch on, pg 13

RX = Auto Rec attenuation on, 13

RIT= rec incremental tuning, 11

SPLT = Split mode on, pg19

SUB = dual watch enabled, pg 20 **TX** = points to active TX VFO see split

VOX = vox enabled, pg 15, 16

□Storing memory channels

Select freq to store, hold **STORE** rotate VFO A to mem #, Hold **STORE** again to store, or tap any

other switch to cancel. □ Recall Memories

•Hold **RCL** then select mem 00-99 using VFO A.

□Direct Frequency Entry

• Tap **FREQ ENT**, enter up to 3 MHz digits, then decimal point, (ATU) then up to 3 khz digits then ← (MSG) switch

□Add label to Memory

•Hold **RCL** then select memory # with VFO A, turn VFO B to select text position at flashing cursor, use VFO A to change label character, after editing hold **STORE** to store and finish.

■ Menu summary-1 (locked items - 🖁)

2 TONE - OFF- enables 2 tone generator & ACC2 IO -OFF-determines function of GPIO sig AF LIM - 30- LIMITERWHEN AGC IS OFF

AFX MD-DELAY- STEREO EFFECTS AGC MD-ON - AGC MODE ON/OFF

AGC SPD - SLO - FAST/SLOW AGC THR - 005 - SEE DETAILS PAGE 36

ALARM - OFF- AUTO POWER ON AM MODE-ON-AM MODE ON/OFF

10 ATU MD-TUNER MODE BYPASS OR AUTO AUTO INF- BAND DATA TO ACC1 JACK &

12 AUTO OFF - INFINITE - SETS OFF TIME 13 BAT CHG - SET TO NOR IF CHGR INSTALED 14 BAT MIN - 10 - SETS WARNING THRESHOLD

15 BKLIGHT- ON - BACKLIGHT ON/OFF 16 BND MAP- IN - SETS BANDS DISPLAYED 17 COR LVL- .1- PROTECTS RCV FRONT END @

18 CW IAMB -A- IAMBIC MODE A OR B CW KEY1- TIP-SELECTS KEYER TYPE, SIDE

20 CW KEY2 - L=DOT-SELECTS PADDLE TYPE CW WGHT-1.25- ADJUSTS TIMING RATIO 22 DUAL RX-OFF- SEE MANUAL PG 20

23 FM DEV - 3.5 - FM VOICE DEV IN KC 24 FM MODE - ON - ON/OFF 25 FW REVS – SOFTWARE REVISION #S

LCD TEST- ROTATE VFO A TO TEST ALL MIC BIAS - ON- BIAS FOR MIC ELEMENT

28 MIC BTN - FOR PTT UP/DWN OR OFF 29 MSG RPT- MSG REPEAT INTERVAL 30 PREAMP - 20DB- 10, 20 OR 30 DB

31 REF CAL – REFER TO MANUAL PAGE 31

♣□Menu summary-2

32 RPT OFS - TX OFFSET PER BAND & MEM RS232 -4800- FIRMWARE TRANSFER 38400

34 RX EQ-EQ FOR CW AND VOICE MODES

35 RX IQ - OFF -SET TO ON FOR SDR 36 RX ISO - OFF - VFO ISOLATION AMP &

37 RXSBNUL-OPPOSITE SB NULL PG 32 38 RX SHFT- NOR- SHIFT IF UP TO 8KC &

RX XFIL - NOT INSTAL- SET TO NOR IF INST 40 SER NUM- N/A -YOUR S/N SET AT FACTORY

41 SMTR MD-NOR-SMETER - OR TO ABS & 42 SW TEST- OFF- SET ON TO READ ADC &

43 SW TONE- ON- PRESS GENERATES TONES TECH MD-OFF- SET TO ON TO READ PARAM TIME -N/A- REAL TIME CLOCK VIEW/SET

TUN PWR- NOR- FOLLOWS TUNE PWR, ADJ 47 TX BIAS- PG.32 MANUAL, TRANSMIT BIAS &

TXCRNUL- CARRIER NULL PG. 34 & 48

TX EQ-+DB-TRANSMIT EQALIZER AS RXEQ TX ESSB- OFF3.0-EXTENDS TX BNDWDTH

TX GAIN- TRANSMIT GAIN SEE PG. 33 TX GATE - OFF-TX NOISE GATE BACKGRND

TXSBNUL- nnn- FACTORY SIDEBAND NULL & VFO CRS-PERMODE-COURSE TUNING RATE

VFO CTS-256-VFO COUNTS PER TURN

VFO NR- ON-ON/OFF- VFO TUNING NOISE & VFO OFS-ON - XIT/RIT OFFSET - VARIES

58 VOXGN- 030- VOX SENSITIVY

VOX INH- ANTIVOX

45

WATTMTR -1.00- FOR FINE CALIBRATING INTERNAL WATTMETER &

61-66 ARE FOR TRANSVERTER BAND SETUP -SEE MANUAL FOR DETAILS &