

ON/OFF

it is used to connect the app to the KX3

R-RST/S-RST/R-Serial/S-Serial

Sent/Received RST - Sent/Received Serial

CALL/NAME/QTH/LOCATOR

Information to be logged in the QSO. If QRZ.com XML integration is active, after entering the call, the app does an online lookup and fills all the available fields

LONG PRESS of CALL

Opens QRZ.com page for that call

LONG PRESS of NAME

Clears the CALL/NAME/QTH/LOCATOR fields

LONG PRESS of QTH

Shows the position of the OM on the map based on longitude/latitude from QRZ.com

LONG PRESS of LOCATOR

Calculates distance and bearing based on the WWLOCATOR grid coordinate

RX Area

Everything that is decode is shown here. Also everything that is sent is shown here.

SINGLE PRESS

Clears the area. Everything is recorded in the "full QSO" file.

Checks for Callsign. Select one and it'll be copied to the Call field.

LONG PRESS

"Full QSO file" options: display, send or delete.

TX Area

Type here the text that has to be sent.

In SEND mode you have to press the SEND button to send the message.

In XMIT mode, everything is typed is automatically sent as you type.

LONG PRESS

Deletes all the text in the area

LOG

it is used to log QSOs

SINGLE PRESS

Records the QSO with

LONG PRESS

Switches between SEND and XMIT mode

SEND/XMIT

Sends text in the TX area

SINGLE PRESS

SEND MODE: Sends text

XMIT MODE: Stops the sending of the actual message

LONG PRESS

Switches between SEND and XMIT mode

CW WPM Slider and Button

Sets the CW WPM speed. Use the slider or the button

BUTTON SINGLE PRESS

increases WPM value by one

BUTTON LONG PRESS

decreases WPM value by one

BAND +/BAND -

switches to the previous or following band

SETTINGS

opens the settings page

MODE Spinner

set the modality

TOOLS Spinner

select one of the tools

MACROs Spinner

select and recall a macro

FREQ +/FREQ -

SINGLE PRESS

Increases or decrease the frequency by steps

LONG PRESS

Sets the step size

MACROs

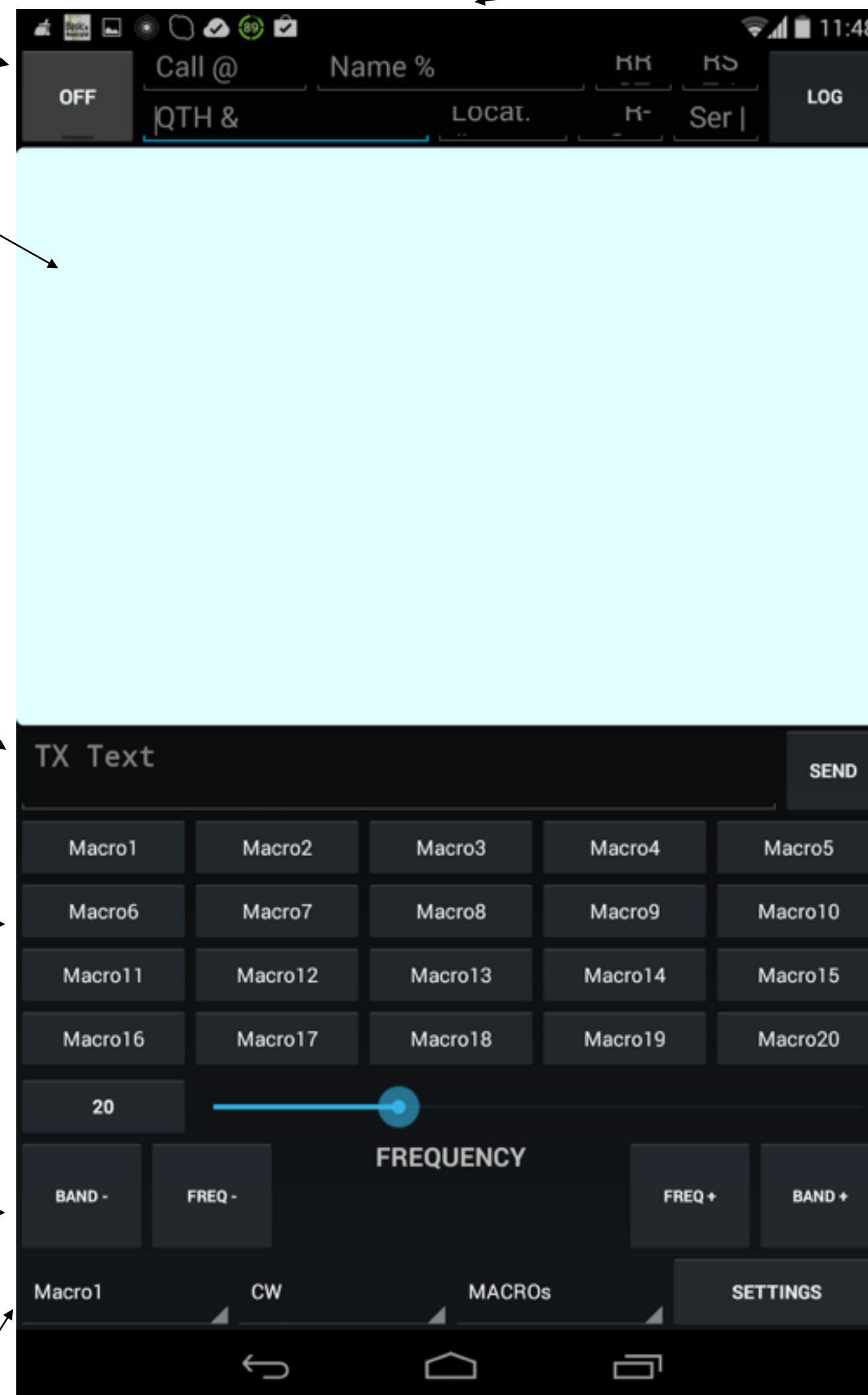
Sends/Records text macros

SINGLE PRESS

copies the macro content to the TX area

LONG PRESS

Set the label, command and color of the macro button



SWR Meter / TUNE Helper

used to analyse antenna performance and to help you tune your antenna

SWR Meter

analyze the SWR over a specific frequency range

RUN BUTTON SINGLE PRESS

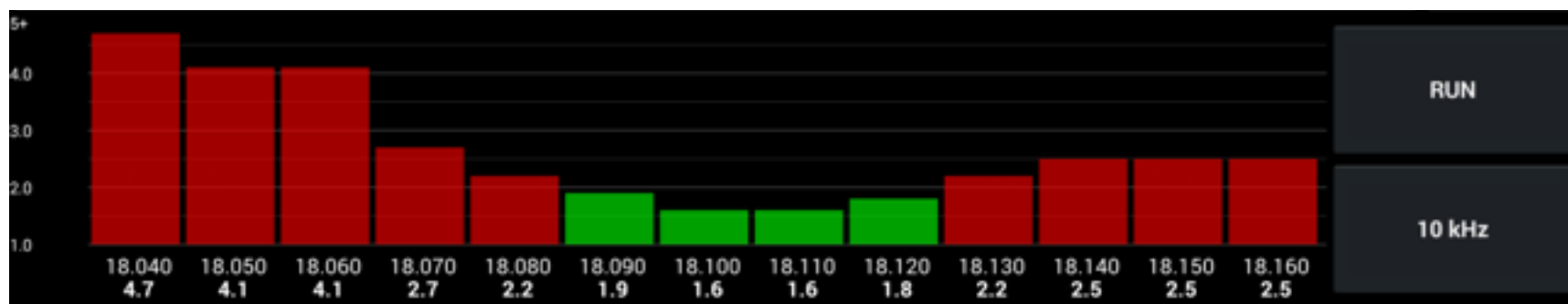
Starts the sweeping

STEP BUTTON SINGLE PRESS

Sets the step size

STEP BUTTON LONG PRESS

Sets the number of steps



AUDIO SPECTRUM/WATERFALL

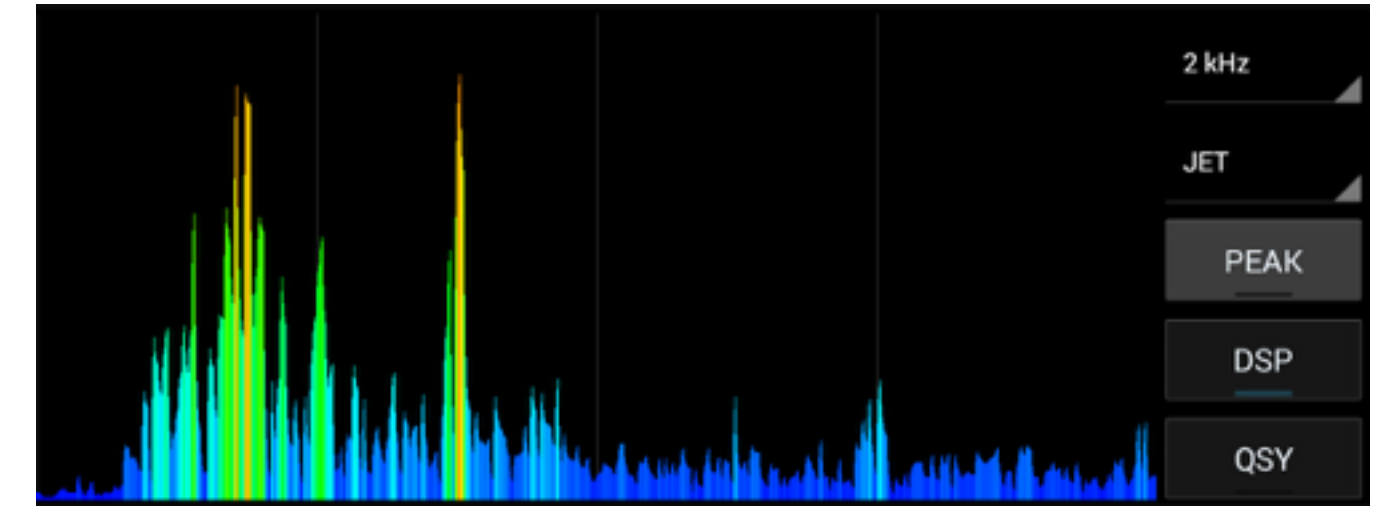
by using an audio cable between the Phone/RX IQ port of the KX3 and the Audio In of your Android device

SPECTRUM

shows the audio spectrum

BANDWIDTH Spinner

Let you choose the bandwidth of the spectrum, from 2kHz to 24kHz
For a bandwidth greater than 4kHz you should use the RX I/Q port of the KX3



COLORMAP Spinner

Let you choose the color map to be used for the spectrum view

PEAK Hold

By enabling this function a line showing the maximum level reached by the signal, for each single point of the frequency range shown. To clear it, disable and re-enable the function

DSP

It shows the actual audio filter center (red line) and bandwidth (white area for the spectrum, black area for the waterfall). This is fundamental to choose the best bandwidth and to see which signal you are listening to (or decoding in case of CW/PSK/RTTY)

Touch QSY

Once enabled, if you touch the spectrum/waterfall you'll see a white vertical line. Move it with your finger to the signal you want to listen/decode, release the finger and the KX3 will exactly move the center frequency to where the white line was.

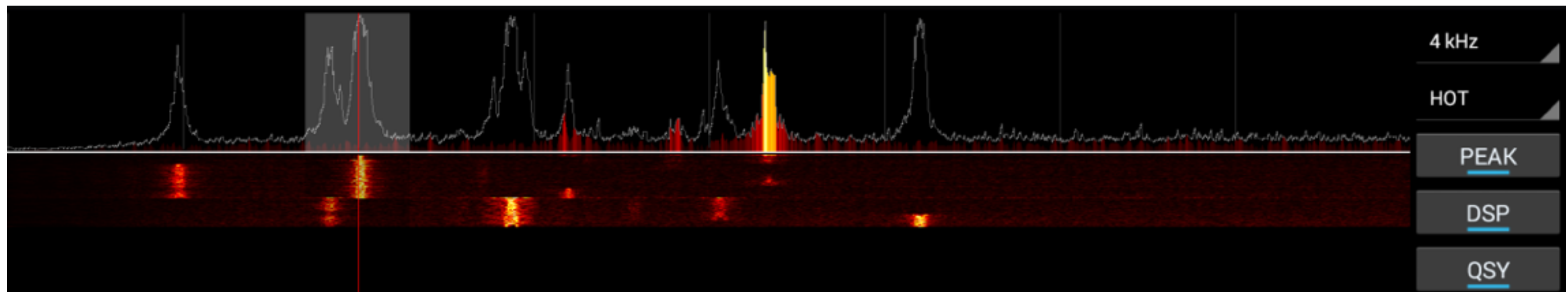
This function is particularly useful for PSK31 and RTTY.

WATERFALL

same as for the spectrum view, but PEAK Hold function is disabled

SPECTRUM/WATERFALL

shows audio spectrum and waterfall in the same view



DX Cluster

it shows a real time list of spots coming from the <http://dxcluster.co.uk> website

BAND FILTER

With ALL no band filter is applied. Otherwise you can select any of the bands available, from 160M to 2M

FILTER Button

Enables filtering of spots shown

FILTER String

You can enter a string that has to be in the spot description that is used to filter the list view.

You can for example search only for QRP stations by entering "QRP", or only portable stations by entering "/P", or only a specific country, or callsign or part of it.

ALARM Button

Enables alerting based on the string entered in the ALARM String editable text. When a spot is found satisfying the ALARM String, a popup alert shows up and a beep sound is played.

ALARM String

Same as for FILTER String.

All text strings are automatically transformed to UPPERCASE so that the string filtering/alerting is not case sensitive.

You can enter MULTIPLE strings for filter and alarm by separating them with a comma (,).

By default the list is updated every 15 seconds but you can customize as you want.



PRESETS

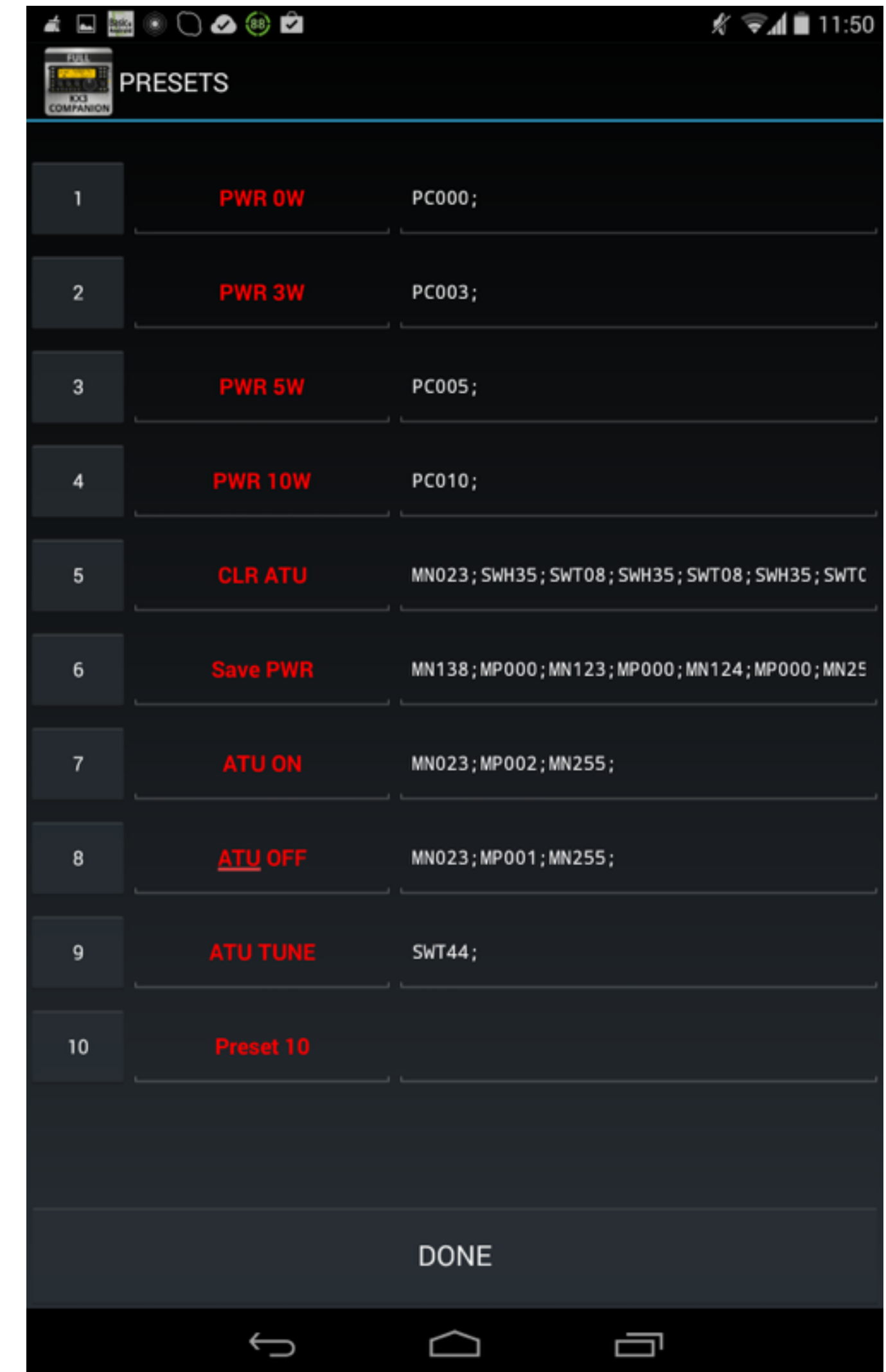
It does let you set a up to 10 commands using the KX3 Programming Language.

More information about the programming language can be found here:

<http://www.elecraft.com/manual/K3&KX3%20Pgmrs%20Ref,%20E11.pdf>

You can also find a quick guide here:

<http://alphapapacharlie.com/elecraft-kx3-basic-programming/>



MACRO STATIC and DYNAMIC SYMBOLS

Here are the “commands” I’m working on.

First the static information:

- **<OMCALL>** - OM call
- **<OMNAME>** - OM name
- **<OMQTH>** - OM QTH
- **<OMLOC>** - OM locator
- **<MYCALL>** - our call
- **<MYNAME>** - our name
- **<MYQTH>** - our QTH
- **<MYLOC>** - our locator (in the future this may be automatic and based on GPS)
- **<MYRIG>** - our rig info
- **<MYANT>** - our antenna info
- **<MYWTR>** - our weather/temperature info
- **<MYSW>** - KX3 Companion (!)
- **<MYCUS1>** - first customizable field
- **<MYCUS2>** - second customizable field
- **<RRST>** - received RST
- **<SRST>** - sent RST
- **<RSER>** - received serial
- **<SSER>** - sent serial
- **_ (underscore)** - carriage return line feed used for multi-line messages

And here are dynamic information:

- **<FREQ>** - actual frequency
- **<BAND>** - actual band
- **<MODE>** - actual mode
- **<DATE>** - actual UTC date
- **<TIME>** - actual UTC time
- **<GREET>** - sends GM/GA/GE/GN based on the time of the day

MACRO PROGRAMMING LANGUAGE

Here's the list of the actually available commands:

- **<QSO>** – Logs the QSO as by long clicking the LOG button
- **<WPM:xx>** – Changes the WPM value
- **<MODE:xy>** – Changes the mode where x can be 1 (LSB), 2 (USB), 3 (CW), 4 (FM), 5 (AM), 6 (DATA), 7 (CW- REV), or 9 (DATA-REV) and y can be 0 (DATA A), 1 (AFSK A), 2 (FSK D), OR 3 (PSK D)
- **<FREQ:xxxxxxxxxxx>** – Changes the frequency of VFO A
- **<FREQB:xxxxxxxxxxx>** – Same as FREQ but for VFO B
- **<UP:x>** – Moves up the VFO A based on x that can be 0=1 Hz; 1=10 Hz; 2=20 Hz; 3=50 Hz; 4=1 kHz; 5=2 kHz; 6=3 kHz; 7=5 kHz; 8=100 Hz; 9=200 Hz
- **<DN:x>** – Moves down the VFO A based on x that can be 0=1 Hz; 1=10 Hz; 2=20 Hz; 3=50 Hz; 4=1 kHz; 5=2 kHz; 6=3 kHz; 7=5 kHz; 8=100 Hz; 9=200 Hz
- **<UPB:x>** – Same as UP but for VFO B
- **<DNB:x>** – Same as DN but for VFO B
- **<VFOAB>** – Switches VFO A with B
- **<PWR:xxx>** – Changes the power out value
- **<SEND>** – Immediately sends what's before the command so that you don't need to press the SEND button
- **<CLEAR>** – Clears the RX display and saves content to the full log file
- **<CMD1>** – First custom command
- **<CMD2>** – Second custom command

Every command has to be placed between “<” and “>” so that the KX3 Companion recognizes it as a command and not as regular text.

If you want to use multiple commands one after the other, please separate them by at least a space “ ”.

So for example, a good “73” macro can be:

73 <OMCALL> DE <MYCALL> SK<QSO> <SEND>

This sends the 73 message and automatically substitutes the <OMCALL> with the callsign in the “Call” field, the <MYCALL> with your callsign as set in the “personal information” area of the settings. It'll also automatically LOG the QSO (and eventually automatically send an eQSL).

The <SEND> command let the macro start immediately by simply pressing the macro button without the need for pressing the “Send” button. Note that the <SEND> command should be the last thing in the macro.