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SDR Cube v1.06
RELEASE NOTES
July 13, 2011

1) NEW FEATURE: Bandscope Sensitivity Adjustment

Sometimes the band is so quiet that little-to-no spectrum indication can be seen on the bandscope, yet you can still hear the signals. In these conditions, we now have the ability to increase the “bandscope sensitivity” in order to better see those very low signals and thus enable the user to tune to them. The control for this adjustment was added to the User Menu and is called BANDSCOPE ...

Bandscope = 4: Least sensitive setting, view strong spectrum levels and prevent display from clipping
Bandscope = 3: Normal (DEFAULT)
Bandscope = 2: More sensitive
Bandscope = 1: Even more sensitive
Bandscope = 0: Most sensitive, for viewing the lowest possible spectrum levels

(Note that this control does not affect RF gain – the audio signal will be just as strong (or weak) in the headphones when you change the BANDSCOPE setting; but with it you will be able to adjust the height of the signals seen in the spectrum display, thus allowing you to better see weak signals and then tune to them more easily during times of weak band reception.)

2) NEW FEATURE: Addition of TX Lock/Unlock Control

The Cube currently allows the user to transmitting within the normal ham band limits. However some users have expressed the desire to transmit outside the ham bands , either for experimental purposes or because their country’s upper/lower band edges are different than the Cube’s settings. So we have added a user-adjustable control to allow this ... Located in the User Menu, the new control is called TX Lock, and it can be selected to permit transmitting only inside the ham bands (TX Lock “ON”) or everywhere (TX Lock ‘OFF’).

3) IMPROVEMENT: Listing of TX->RX delay value

The Terminal command: Print User Parameters (‘i’) now includes the listing of the TX-to-Rx Delay. As with the other user-settable parameters, this one is useful when re-entering configuration settings in new software releases.

4) IMPROVEMENT: CW Tone Quality

CW pitch generation scheme was changed to produce a cleaner CW tone. This improvement results in a more pure sine wave being used in Tune and CW modes, thus producing even less sideband energy during transmission.

5) BUG FIX: PSK TX audio level

An inadvertent connection between the Codec Mag setting and the PSK Tx audio path was corrected.

6) BUG FIX: PSK TX opposite sideband suppression

The receive FIR needed to be set to unity gain, thus allowing better sideband suppression to be achieved.