

Winkey2 Errata Sheet - last update: February 4, 2008

Version 20 is equal in revision status to Winkey1 v10

Version 21 Description of Changes:

- 1) The PTT_ENABLE bit in the PINCFG register was ignored in version 20, PTT always cycled with keying. In version 21 the bug was corrected and PTT will assert automatically with keying only when PTT_ENABLE is asserted. If PTT_ENABLE is cleared the buffered PTT command can be used to cycle the PTT outputs.
- 2) The Buffered PTT serial command (0x18) has been re-instated. When PTT_ENABLE is clear, this command is used to control the two PTT outputs. Either PTT output can be controlled, the selection is based on which KEY bit in the PINCFG register is set. Here are some examples:
To set PTT output 0, first set the KEYPORT0 bit in PINCFG. Then issue at Buffered PTT enable command with a parameter of zero: <0x18><0x01> to clear PTT output issue : <0x18><0x00>. To set and clear PTT output 1, repeat the above sequence with the KEYPORT1 bit set. Both examples assume that PTT_ENABLE is cleared.
- 3) A buffered port control command has been added. The command is overloaded on the HSCW speed control command (0x1D). To select Key port 0, issue the serial command: <0x1D><0x00> or to select port 1 issue <0x1D><0x01>. By combining the buffered PTT and PORT commands the PTT lines can be synchronously controlled in the midst of keying.
- 4) Standalone versions of the above two serial commands have been added:
The port command is an **R** followed by either a 0 or 1 to select the desired port
The PTT command is a **U** followed by either a 0 or 1 to either turn PTT off or on.
Message example: **/R0TEST1 /R1TEST2 /U1TEST3 /R0/U1TEST4 /R1/U0 TEST5**

Here is a breakdown of what the above message does:

Select key port 0 send TEST1
Select key port 1 and send TEST2
Turn on PTT1 and send TEST3
Select key port 0, turn on PTT0 and send TEST4
Select key port 1, turn off PTT1 and send TEST5

- 5) A problem with saving parameters in standalone using the **P** command is fixed.

Version 22 Description of Changes:

- 1) In pre-V22 the POT RANGE parameter was not validated, if an illegal value was entered erratic behavior could result. In V22 an illegal value is ignored
- 2) The Speed Pot value is now averaged to reduce random speed pot changes due to noise.
- 3) Changes in Speed Pot are ignored during transmit. Again this reduces random speed pot changes due to induced RF. This was never proven to be a problem in V21 but it was easy to implement. The speed pot will be monitored in between active dits and dahs so that a user can still change speed while transmitting but not as responsively as in previous versions.
- 4) PTT release is measured one dit time after the last element sent. In addition a tail setting of 1 means no additional delay time is inserted beyond the dit time. In other words delay equals setting minus 1. This greatly improves the QSK performance. Hang time operation has not been changed.
- 5) Direct paddle input now operates for all modes. In v21 and earlier only Imabic A and B would work for direct paddle input.
- 6) V22 now operates properly for cases where it is connected to a host application and the host PC goes into standby which places the USB ports into standby sleep mode. In V22 WKUSB will go into sleep mode and will wake up when the PC does and remain connected to the host application. In V21 if the host went to sleep WKUSB would disconnect and go into standalone mode. So when the PC woke up WKUSB would not be connected.

- 7) Mutli-press pushbutton sequences are supported for standalone operation. This allows messages 5 and 6 to be accessed directly and also maps the serial number decrement command to a push button press sequence. This is described in the new revision of the WK2 datasheet.