WKtest Utility Help File

Wktest first time startup

Connect the WK PC board to an RS232 (com1, com2...etc) and then pull down Comm item from the menu bar. Select the com port winkey is connected to. Next we need to open the communications interface to WinKey, do this by clicking in the OpenWK pushbutton. The app will look for WinKey and then will calibrate the interface, init Winkey, and open Winkey for operation. The result of the operation will be shown in a message just under the OpenWK pushbutton group.

Open error messages

WK Fail:no echo
Comm was opened successfully but winkey did not respond

WK Fail:echo mismatch
Comm was opened sucessfully but winkey responded an invalid echo

WK Fail:no open response
Comm was opened sucessfully and winkey echoed but winkey did not respond to open

WK Fail:comm open
Comm open failed, could be an invalid com port setting

WK Fail:get comm state
Comm configuration failed

WK Fail:set comm state
Comm configuration failed

WK Already Open
Attempt was made to reopen winkey

WK Fail:unknown error
Unrecognized error response

Wktest Dialog Box Controls

Winkey Test Bed Users Guide

Configuration
The application needs to be configured for the serial port that WinKey will be connected to. Click on Comm on the menubar and select the desired comport. If you are using a USB to serial adapter you will need to install the adapter first, you can leave the port settings at their defaults, Wktest will set up the port properly during its init. If control over USB blocksize is provided, use the smallest transfer size available, this is usually 64 bytes. You will need to check which comport the USB serial adapter occupies as this will be entered in winkey's Comm selection. (it's usually com5 or com6)

Wktest Startup
When the Wktest app starts up, WinKey is effectively closed down. The first thing to do is click on the Open

button, this will intiate a connection to Winkey over the selected comport. Status of the connection is displayed just under the CloseWK and KeyerTest pushbuttons. There are two types of errors that can happen, communications and winkey connection errors. If you get a comunications error it is usually due to a misconfigured comport or the comport selected is already in used by another application. Winkey connection errors are rare, you would see them if you are bringing a WinKey board up for the first time. If you are using a serial cable make sure it is a one to one cable and not a null or crossover cable. In other words, pin 2 on one end needs to connect to pin 2 on the other end pin 3 to 3 ect. See the Winkey manual for more information on cable requirements.
Once WinKey starts up successfully it's software version will be displayed in the status version and it will be ready to accpet commands.
Start by moving the cursor to the keyboard entry window, click there and type characters into the window. You will see the busy status flag appear on the status window, after the character has been sent busy will disappear. If this works next try pressing the paddles (if connected to WK) and you will see both the busy and breakin status flags appear and then go away. (alternatively you can use the DIT and DAH bushbuttons) If you get this far, you are all set to go.

Wktest Menubar
Comm: Specify the com port winkey is conected to
Debug: Various test selections, it's best to leave these alone
Msg1: Enter or play Message one
Msg2: Enter or play Message two
Msg3: Enter or play Message three
Msg4: Enter or play Message four
Help: Help and About selections

Wktest Control Descriptions

Keyer Mode
Iambic A : when both paddles are pressed a sequence of dot-dash-dot-dash..... is sent
Iambic B: just like Iambic A except that when both paddles are released an extra opposite dot or dah is sent
Ultimatic: the last paddle pressed will be the paddle in force
Bug Keyer: This is used to simulate the old vibroplex mode or used for straight keying.

Wktest Customize
Various keying setups are located here. Enter a new value and press update to set the value in WinKey
Weight: Value range 10 to 90, 50 is no weighting adjustment
LeadIn: Sets lead in delay to allow time for antenna relay changeover. 0 to 250 in 10 mSec steps
Tail: Sets tail delay to keep antenna relay set between letters. 0 to 250 in 10 mSec steps
Farns: Set Farnsworth activation point in WPM
Ratio: Modify dit to dah ratio. Range is 33 to 66. 50 selects 3:1
KComp: Key Compensation, 0 to 250 in 1 millisecond steps.
1stExt: First extension setting 0 to 250 in 1 millisecond steps.
Ksamp: Set Paddle switchpoint range from 10 to 90, 50 is normal.

Wktest Status
Text strings show operational status of winkey as reported by the status byte:
Xoff: Winkey's input serial buffer is full
BrkIn: Paddles were pressed, serial input is cancelled
Busy: Winkey has received input and is actively sending morse
Tune: Winkey output is keyed
Wait: Winkey is paused for a buffered timed delay

OpenWK
This pushbutton opens the interface to winkey, nothing works until you open winkey

CloseWK
This pushbutton closes the interface down

RandChar
This pushbutton starts a random character test where strings of random characters are sent to Winkey over the serial port.

KeyerTest
This pushbutton starts a random paddle test, nonsense is sent

Pin 5 Config
These radio buttons specify the function of the WK I.C. pin 5. Pin 5 can be PTT, sidetone, or alternate key output

Wktest DIT
This pushbutton when pressed will assert and hold the DIT paddle. It will stay asserted until DIT is pressed a second time.

Wktest DAH
This pushbutton when pressed will assert and hold the DAH paddle. It will stay asserted until DAH is pressed a second time.

Wktest WPM
This collection of controls are associated with speed control of Winkey.

WPM Edit Boxes
The upper edit box is used to specify the lower end of the speed range while the ower edit box specifies the upper end of the range. To use these controls, enter a value and then click on the slider button.

PotLock
This set locks winkey's speed to the speed pot. The slider has no effect except to follow the speed pot setting

WPM Slider
The slider is used to set the speed when PotLock is off

RunWild
This is an extreme speed change test that continually changes speed. It is only used to stress test the winkey interface

Outgoing Window
This window displays characters as they are echoed back from winkey

Keyboard Entry Window
Click in this window and start typing to send characters to winkey

ClearBuf
This pushbutton will clear any serial cahracters in queue.

Pause
This pushbutton will pause serial output until it is pressed a second time.

Tune
This pushbutton will assert the key output and hold it until Tune is pressed a second time. Tune has a built in watchdog that will automatically turn tune off after 100 seconds

Reset Defaults
This pushbutton will reset all of winkey's setting to power on defaults

Exit
This will exit the wktest application.

Message Editor Dialog Box
Simply enter a message in the edit box and press **Save** to store the message.
Restore will cancel anything entered in the edit box and restore the original message.

Insert Buffered Command
This group of controls allow you to insert a buffered command into a message. There are seven different command options

SetPtt

This push button inserts a PTT assertion into the message at the cursor position. Ptt will stay assrted until ClrPtt is pressed

ClrPtt
This push button inserts a PTT deassertion into the message at the cursor position.

Merge Pushbutton
The two characters following a buffered merge will be combined into a single prosign character ex. AR

SetWpm
Enter a WPM value in the edit box to the left of this control and press this pushbutton to insert a buffered speed change at the cursor position.

SetKey
Enter a value in seconds in the edit box to the left of this control and press this pushbutton to insert a timed keydown delay at the cursor position.

SetWait
Enter a value in seconds in the edit box to the left of this control and press this pushbutton to insert a timed delay at the cursor position.