Release notes for WinA4P program:

Version 1.0

(1) First release.

Version 1.1 modified from version 1.0 14/1/2005

(1) Release note viewing added to help menu.

(2) I.F. offset for VHF bands corrected from -45MHz to +45MHz.
    Previously radios programmed for VHF would indicate a synthesiser
    lock error.

(3) Lead in delay in all default files changed from 0 to 40ms.
    Previously the internal modem would fail to operate correctly if
    radio programmed using defaults file.

Version 1.2 modified from version 1.1 7/2/2005

(1) Bug fixed preventing comms port selection menu from being shown.

Version 1.3 modified from version 1.2 3/8/2005

(1) Option added to allow selection of channel to use in RX test.

(2) Bargraph and up/down test controls now protected from
    overrange values returned from radios with corrupt eeprom,
    previously caused program to crash.

(3) Hot keys added to test routines.

(4) Bug fixed that caused program crash if large numbers entered
    for lockout time.

(5) MPT1411 reversed bands deleted (disabled).

Version 1.4 modified from version 1.3 18/1/2006

(1) UHF 406-512MHz band extended to 350-512MHz.

Version 1.5 modified from version 1.4 28/4/2006

(1) 0.5 to 10W Power range added to support 10W power amplifier
    option.

Version 1.6 modified from version 1.5 4/5/2006

(1) 350-512MHz band changed to 404-485MHz, 350-410MHz band added.
    Previous band definition could result in out of range pll
    code calculation warning. N.B. radios programmed with
    frequencies below 404MHz using earlier software versions will

cause WinA4P to report an error when reading the radios. These radios must be re-programmed with the newer version to correct the band information.

Version 1.7 modified from version 1.6 18/1/2007

(1) Support for RS485 version of ZRT radio added.

Version 1.8 modified from version 1.7 19/1/2007

(1) Bug fixed in setting of serial port 7/8 bit format. This setting was incorrectly read from the radio signal setting instead of the serial port setting causing alteration of the radio signal 7/8 bit selection to set the serial port format as well. Altering the serial port setting had no effect.

Version 1.9 modified from version 1.8 1/3/2007

(1) Interface type (RS232/485) and half/full duplex selection added for issue B RS485 ZRT.

(2) RTS/CTS handshake option is now suppressed only if RS485 selected.

(3) ZRT and ZRT485 now have modbus and rftech routing protocol options enabled.

(4) ETSI 868 MHz band title changed to PAN EURO 868 MHz, frequency range changed from 11 incremental channels starting at 869.4 MHz to discrete channels from 863.0 to 870.0 Mhz.

Version 2.0 modified from version 1.9 12/10/2007

(1) RSSI monitor and CW generator tests added to Tools menu.

(2) Range of comms port selection increased from 4 to 16.

(3) Bug fixed that caused "run time error 5" when out of range power or start frequency values entered in main configuration menu.

(4) Selection of 7 bit format for radio modulation now inhibited if any packet protocol options selected.

(5) User is now requested to stop a test if it is still running when closing the calibrate menu.

Version 2.1 modified from version 2.0 9/6/2008

(1) 800MHz bands now use frequency resolutions of 12.5 or 10.0kHz instead of 6.25 or 5.00kHz.

(3) Pan Euro 868 band bottom limit extended from 863 to 862 MHz.

Version 2.2 modified from version 2.1 14/10/2008

(1) VHF 138MHz-155MHz band extended down to 130MHz.

Version 2.3 modified from version 2.2 16/1/2009

(1) CRX series receiver support added.

(2) VHF 175-225MHz band extended to 275MHz.

Version 2.4 modified from version 2.3 14/7/2009

(1) Extended timeout implemented for routing table memory update command. Previously reported "device not responding" before radio replied.

Version 2.5 modified from version 2.4 24/8/2009

(1) SK store and forward, radio wake up, and multi-protocol options implemented.

(2) Sync/Async mode selection now forced to Synchronous at time of programming radio if radio baud rate over 1200 baud. Previously it was possible to corrupt the transmit data if the option was set to Asynchronous at 1200 baud or less, before selecting a higher baud rate.

Version 2.6 modified from version 2.5 6/10/2009

(1) Menu title for "about" button corrected from "A4Pwin" to "WinA4P".

(2) Branding support added.

(3) Manual no longer embedded in installation package.

Version 2.7 modified from version 2.6 2/7/2010

(1) Bug fixed that prevented routing table enabled checkbox from being set when reading from a radio or file.

Version 2.8 modified from version 2.7 30/11/2010

(1) Major re-write to support 64 bit and .NET framework operation.
(2) Verify product and firmware menu option implemented. This option was previously present but not operational.
(3) Firmware download menu option implemented. This option was previously present but not operational.
(4) Ability to read firmware checksum and firmware variant identifier added. These facilities are only supported on products with firmware version 5.8 onwards.
(5) Test routines now allow use of Esc and F1 hot keys to stop/start test.
(6) Bug fixed in tests preventing display of Next, Store and Fast hot keys.
(7) Min and Max power save addresses may now be set to zero as required if power save is not in use.

(8) Selection of 8 radio data bits per character now forced if message packeting
    is selected with protocol set to none, previously was only forced if
    protocol selected (see also version 2.0 mods).
(9) Minimum power setting for 5W radios increased from 0.05 to 0.1W in line with
    current legislation.
(10)Maximum destination address for RFT routing table entries changed from 247
    to 255 (247 is the Modbus limit).
(11)Destination title in routing table changed from "modbus" to "destination" in
    RFT routing mode.
(12)Maximum power warnings for bands are now suppressed unless a power level
    that exceeds the maximum is entered.
(13)Bug fixed that caused comms port settings greater than 4 to be forced to 1
    at start up.
(14)350-410 MHz UHF band extended down to 310MHz.

Version 2.9 modified from version 2.8 10/06/2011

(1) Support for broadcast repeater mode added.
(2) Bug fixed that prevented some protocols from being displayed on main page.
(3) Bug fix that prevented ZRT RS485 title from being displayed on main page.

Version 3.0 modified from version 2.9 31/05/2012

(1) Bugs fixed that were caused by V2.8 mods affecting RSSI monitor operation.
(2) RSSI monitor now shows average based on logarithmic values, i.e. a 50% duty
    cycle signal will be displayed as having an average 6dB down on the peak.
(3) Comms routines now set RTS and clear DTR to put devices that use this
    option into program mode ("Power off if DTR inactive" option must be checked).
(4) Bugs fixed that were caused by V2.8 mods preventing RSSI calibration test
    channel selection.

Version 3.1 modified from version 3.0 06/09/2012

(1) Slider controls on RSSI monitor form changed to trackbars to allow compatibility
    with newer windows controls.
(2) Pan Euro band changed from 862-870MHz to 11 fixed channels from 869.4 to 869.65MHz.
    These are the channels on which 500mW operation is allowed. Other channels must
    now be programmed using the 820-950MHz band option.
(3) RSSI calibration, RSSI test, and RSSI monitor routines now show RSSI in dBm
    instead of dBuV.
(4) Labelling fixed to clarify operation of audio mute option.

Version 3.2 modified from version 3.1 29/06/2014

(1) Store and forward form no longer uses design time defined control arrays as these
    are no longer supported by VB.net.
(2) Bug fix. If device type was changed after editing data, the query appears about
    discarding the changes, if the answer to the query was yes the device still did
    not change.
(3) All modally opened forms are now disposed afterwards to garbage their resources.
    Previously the commsport selection form would display an ever increasing comms
    port list on successive openings.

(4) Support for ZRM series radio added.
(5) USB comms added (required for ZRM), this required major re-organisation of all comms routines.
(6) VHF 66-88MHz band added.

Version 3.3 modified from version 3.2 02/04/2015

(1) Support for AT program mode added.
(2) Support for ZRMD added.

Version 3.4 modified from version 3.3 25/04/2016

(1) Support for ZRMS, ZRMT added, ZRM removed.
(2) Selection of timed program mode added.
(3) Console now beeps if the "Next" button is pressed during a multi-step calibration test if there are no more steps to be carried out.

Version 3.5 modified from version 3.4 31/08/2017

(1) Option added for muting received audio when transmitter off for ART400 and XRT400 when running full/semi duplex mode.

Version 3.6 modified from version 3.5 22/03/2018

(1) Device type referencing modified to allow easier enabling/disabling of model types.
(2) Main window picture text box adjusted to avoid clipping of device type text.

Version 3.7 modified from version 3.6 29/05/2018

(1) 47-68MHz band added.

Version 3.8 modified from version 3.7 09/01/2019

(1) Bug fixed that caused unhandled exception during program save if network I.D. greater than 32767 entered.

Version 3.9 modified from version 3.8 25/04/2019

(1) Support for timed program mode added for ZRT450 and ZRT485.