

Version 1.001
Initial Production Release.

Version 1.002
Modified FM Mode transmit level control.

Version 1.003
SWR Meter Wasn't Updating on perfect match
MONITOR wasn't working in REMOTE mode (no audio at all)
MONITOR was weak in Upper Side Band
FM Transmit Audio weak from Ethernet
Increased Default value for Sidetone Volume
Changed Default Step Size to 10Hz

Version 1.004
Audio could be heard with HP connected, pressing RIT
Improved Transmit audio over Ethernet
Improved VOX TRIP versus Speaker Peaking

Version 1.005
Auto Flow Control could fail on serial port
Keyer Mode A and B sometimes reversed
Add Identifier for remote/radio mode to Start String
Provide forward and reflected power on S-Unit query during transmit
Added way to disable Ethernet in remote mode for serial users.
Added Remote Encoder Rotation Notification to POD PASSTHRU mode.
Amp Key getting driven high at wrong time
CWType Character Count on serial query incorrect on buffer wraps and overflows

Version 1.006
Couldn't hear CW Sidetone on GUI when using CWType
If Keyer Mode was ON (A or B), didn't accept PTT-KEY from GUI
Slow POD turn causes adjustment in opposite direction
In Split mode, could get wrong forward and reflected power measurement on 6Meter
Modified FM Transmit Level

Version 1.007
Resolved first transmit issue when changing from FSK to Sideband modes
Modified FM Deviation
Modified AM Carrier Level

Version 1.008
PassCode takes too many turns to adjust reasonably
Added SWR Bargraph
SWR Meter flickers between 1.0/1.1 and 1.x, now more stable
UDP Port Number only adjustable by even numbers
Manual Notch Width adjustment error
In REV allow VFO adjustments by main encoder even if main encoder LOCKed
Permit 6kHz mechanical filter in AM Receive Mode
Using POD Fn Key for REV, couldn't adjust Frequency
On Memory Store, display current Frequency in Memory On Top Row
Limit AM Receive DSP BW to 9000
Continuous Sweep could set AGC rate to OFF

Version 1.009
**NOTE: Due to non-volatile memory layout changes,

going from 1.008 to 1.009 will force a master reset.
Resolved signal strength report if queried too fast serially
Initial 6Mtr Output higher than desired when selecting < 100W.
Sporadic remote pod digit entry
Attenuator settings not remembered after power reset
Remember Antenna selection per band
Remember PreAmp selection per band
Added SPL, A=B, and RIT ON/OFF to the Pod Functions

Version 1.010

CW Keyer Settings Incorrect (menu versus radio display)
6M Auto Tune Message not displayed
When Split, VFO B not red. Affected many display items also.

Version 1.011

With AN/NR/NB all engaged, system was sluggish. Improved this.
Also helps out RIP and TRIP performance, losing less packets.
Some changes not always remembered when changing bands or band stacks
With Headphones Connected, sometimes could still get audio into speakers
Problem with Recall Sub. Showed itself in several areas as display issues
**NOTE: Due to non-volatile memory layout changes,
going from 1.010 to 1.011 will force a master reset.

Version 1.012

Add Internal Temperature Control of approximately 70deg C
Implemented optimized internal device setup
Prevent DSP BW changes when in Transmit
Added way to Clear CWType ahead buffer
(new feature in upcoming One Plug GUI 1.0.3)

Version 1.013

Removed test letter from version (f)
Fixed ATTN Selection, broken in 1.012

Version 1.014

Voice Modes, Key Down, without mic audio the SWR says 9.9:1, even with perfect match
FMCTCSS Tones not connecting to a repeater
Increase Over Temp Shutoff Temperature
Increase SW ALC trip point for CW
After Over Temp occurs, Power Level gets stuck at 20w
Key Loop On, then Key Loop Off, won't transmit until you reset rig or you jumper Txout to TXen
Add RIPCompressionVersion Byte to Get Ethernet Setup Query
Improved RIP/TRIP performance. Optimized algorithms in interrupt routine.
Improved Reliability of control of Remote TUNE function

Version 1.015

TX Power Meter left the S up, instead of P (visual)
Set RF Gain to 100% when doing a sweep. Permits full signal gain so low signals are seen, and not overwritten with low RF Gain setting.
Multiple buffer throughput enhancements to handle RIP/TRIP data faster/more reliable.
(biggest gain in RIP/TRIP performance will be with 1.015 connected with 1.0.3 One Plug)

Version 1.016

Power Meter not shown with normal CW speeds
Add Transmit over serial ability in radio mode for loggers "*Tx"
Add Split over serial ability in radio mode for loggers "*Nx"

Version 1.017

Key Speed above 40wpm didn't show ALC action on LED
Mode not remembered if changed then immediately switch bands
Added Compression 16 to 8 bit for RIP and TRIP (In One Plug Version 1.0.4)
Don't allow TUNE when transmitting
Don't allow transmit when TUNEing
Increased Monitor Level
Recalling Memories could force split
Amp Key released still in Transmit, correct after menu
Added Main Mode to radio's remote display
Added way to turn Display On and Off via Remote (eth and serial)
Added MARS capabilities (will require an additional PC program to enable)

Version 1.018

CW Waveform Incorrectly Transmit Gain Controlled
Recall Memory Cancel Not per Manual
6Meter Voice Mode Transmit Error after Forced Master Reset
TRIP Error Handler Adjustment (Will Utilize GUI 1.0.5)

Version 1.019

Added AF and RF gain displayed simultaneously
Remove RF Gain adjustment text from display if = 100% and modifying AF
Auto IF Changes due to DSP BW changes caused a spike in audio and Smeter
Allow Radio to handle TRIP and RIP commands independently
Set Band Stacking lower limit to 105khz below Ham lower limit for band stacking purposes
Modified RIP handling to improve receive audio transmit on the Internet
Modified TRIP handling to improve transmit audio quality
Mute Audio At Rig Remotely
In Remote Mode, allow current settings to be stored automatically if RIP and TRIP are both off
In Remote Mode, if the Radio Display is turned OFF, allow any key pressed to re-enable display
In Remote Mode, if the Audio at Rig is muted, allow any key pressed to un-mute the audio
Added MARS Query capability to update program (when using a special query ruf file)
Improved program verification in the Update program
Allow Radio to remember current settings when RIP and TRIP are off (15 seconds after user interaction)

Version 1.020

Tuner erroneously went to bypass if sweep goes out of band
RIT/XIT value could get corrupted via Serial or Ethernet changes
AF value offset on screen moved left
Ignore CWType characters if not in CW mode
Reduce background noise on Remote compressed Transmits (TRIP)
Certain MARS frequencies added
Incorporate the new update.exe version 4.06 as used in boot loader 1.003

Version 1.021

MON can get into state where it can't be turned off
SP button should not turn off CW if it is on, when coming from a different menu item
Make the Multi Knob items traverse items based on transmit mode
Make it more obvious on the display as to which of the AF / RF items is being adjusted
Added a query during master reset whether to clear the Frequency Memories or not
("CLEAR MEMORIES? RIT=YES,XIT=NO", affects the V>M settings only. Bypassed if memory map changes)
(Current Status Memory and Band Stack Registers are reset regardless of selection)
Improve NR
Improve AN
Passband was 85Hz off on FSK modes

Version 1.022

Allow Memory Selection by the Multi Encoder to wrap from 99 to 0 and 0 to 99

Add Split state to band stack registers and frequency memories

Do not force split if Recall Sub is ON

Improved audio performance when utilizing multiple DSP features together.

RX-EQU with AN with NR and with NB all turned on.

Corrected error where %'s could be shown off by one in the Menu

Increase Internal CW Keyer Weight factor range from 0..24% to 0..50%.

The higher settings allow you to adjust to get stronger CW than 1.021 can achieve.

0% gives a little less than 1:1 dit to space ratio.

10% is approximately 1:1 dit to space ratio, standard CW. Also the default.

50% gives almost 2:1 dit to space ratio.

Compatible with One Plug 1.0.6. But One Plug 1.0.6 value is 1/2 actual value in radio.

Updated One Plug to be released at a later date.

Band Stack memory storage should only contain transmit frequencies within the ham bands

If you traverse out of band, and then switch to another band, the band stack registers will not be overwritten. e.g. if you are on an AM broadcast band, they won't be stored into the band stack registers.

MARS band stack storage is limited to MARS transmit frequencies.

Frequency Memories can store any frequency values.

Improve debouncing of Remote Pod function key presses

Maintain the Sweep Grid during Continuous Sweep (Continually holding down SWP Key)

Resolved erroneous signal strength indications at the first few cells of a sweep

Version 1.023

Intermittent POD FN Key Press Failures

Enabled Frequency changes when using POD for REV

XIT Transmit Frequency adjustment was off

Sweep Cursor was two pixels off center

Lengthen Lead In Buffer for TRIP to help Remote Transmit quality

Added support for SteppIR Main Frequency Query

Set SteppIR to ORION Mode

Set OMNI-VII menu item "SERIAL IF" to "SteppIR/CT"

Added support for CT Logger Main Mode Query

Set OMNI-VII menu item "SERIAL IF" to "SteppIR/CT"

Version 1.024

10mtr and 17mtr couldn't be selected immediately after master reset.

Any other key press would then enable these buttons to work properly.

Increase rate at which Signal Strength and Transmit Power is measured in remote modes. They are added to the RIP audio packets for real time usage.

Switching from Transmitter Disabled to Transmitter Enabled could increase power level where the next transmit would result in an over current shutdown.

Improve AM Modulation Index

Improve FM Modulation Index

Improve interaction when AN/NCH and NR and NB and RX EQU are simultaneously turned on and operating

Improve Auto Notch effectiveness

Improve Remote Transmit TRIP audio quality

Improve Remote Receive RIP audio quality

Note, improvements work better with 1.0.7 One Plug GUI

But still compatible with 1.0.6 GUI

Show Grid only after sweep, not during

Added an "M" indicator to the version for MARS enabled rigs.

Seen in version string displayed when A=B is depressed and

in the version string returned serially and via the Ethernet for Version Queries.

Version 1.025

Receive modes have digital artifacts depending upon RF Gain, AGC, and signal conditions
Lower the 60m transmit limit for UK to 5.2535 (5.2585-5k tolerance)

Version 1.026

Frequency set at 52535 shows up in the 80m band stack registers.
Improved flow of SteppIR Mode ?A Query.
Slowed Down Multi Knob rotation for memory selections.
Slowed Down Remote Pod Encoder RIT adjustment.
Removed SWEEP Tone from headphone.
Handle fragmentation bits in UDP Packet Headers.
Adjust remote transmit time out to 5 seconds.
Improve Preamp recall per band.
Improve Antenna Selection recall per band.
Remember AF/RF selection upon power cycle.
Improve NR effectiveness.
Improve AN effectiveness.
Improve AN/NR/NB/NCH/RX EQU interaction/loading.
Add TRIP GAIN Adjustment for remote transmits.
Requires One Plug version 1.0.8 to utilize.

Version 1.027

Changes that affect both Remote Mode and Radio Modes:
Improve transmit audio performance in FM mode.

Changes that affect Remote Mode only:

Increased Ethernet Handling priority in Remote Mode.
Modified the Remote Mode displayed FAIL counter to include
1 = Number of Receive Overruns detected by the Network IC (NIC).
Shows up as the lower three digits of the FAIL counter.
2 = Number of Network Chip Status Failures reported by the NIC.
Shows up as the top four digits of the FAIL counter.
For either of the two failures, the firmware performs a fast hardware reset of the network chip which takes less than 10 ms before it is back to streaming audio again.
Solutions could include getting a better router, cleaning up network cables, providing proper RFI and EMI protection on all cabling, etc.
If Either of these conditions persist, then they will result in very poor remote receive and transmit audio performance of the OMNI-VII. The firmware performs a hardware reset of the Network IC. This process takes 10ms before audio is back up and streaming.
Solutions could include getting a better router, cleaning up network cables, providing proper RFI and EMI protection, etc.
Menu entrance / exit clears the Network Receive Overrun counter.
Menu entrance / exit clears the Network Chip Status Failure counter.
Removed the SMeter and Transmit power / SWR from the front panel display.
Improves network packet reception and handling.
Removed the update of the various counters in remote mode while transmit is active.
Modified the TRIP data input buffer error handling algorithm.
Increased the "no communications timeout" for turning RIP Off automatically to 2 minutes.
RIP is turned off if the heartbeat command from the PC is not sent to the rig on a regular basis.
On networks with 95% of the 10Mb bandwidth loaded the OMNI-VII will sporadically missed the RIP OFF command.

Version 1.028

Decouple the Remote Encoder from the Main Encoder LOCK feature
Improve RIT/XIT usage on the Remote Encoder
Improve AM transmit audio
Increase deviation in FM transmit audio

Version 1.029

Improve the lower range of the SPOT Level feature
Resolved Bandwidth crash due to a serial CAT command in remote/Ethernet mode
Reject invalid frequency commands rather than limit them on the CAT interface

Version 1.033

Improved FSK Transmit Power Level for 100 watts
Corrected headphone AF level with headphones connected at power up

Version 1.035

Improved Auto Tuner Power Settling for reliability
Increased DSP output level in Sideband for hardware reliability

Version 1.036

- Improved Ethernet Audio reliability
- Improved handling of broken Ethernet packets, net effect was to improve Ethernet packet handling for control and audio streaming.
- Removed support for uncompressed audio via the Ethernet.
(note, when using third party programs, ensure you enable compression for RIP and TRIP, otherwise the radio will not start "RIPing" audio)
- Added a bit to the ?T query to identify that the version does NOT support uncompressed audio. Refer to the programmers reference guide for more details.
- Increased priority of Ethernet audio packet handling. Preserving DSP functioning within allotted time. (e.g. AN, NR, etc. all still worked at least as well as version 1.035.)
- Improved handling of QRN/impulse type noise so it wouldn't prematurely load up AGC.
- Added Bandwidth to the rig memory recall/restore. This was added so that customers could store settings for digital modes using sideband as the mode but wanting a narrower bw filter. ***Caveat, when going from 1.035 to 1.036, when one does a recall, the BW will get recalled as 12kc, simply adjust the bw to the desired value, and then re-save the VFO to Memory. From then on the bandwidth for that specific memory will get recalled properly. This should be done for all memories the user has already stored.
- Added Memory Recall (*Rnn, nn=0..99) to the CAT interface
- Added Memory Write (*Snn, nn=0..99) to the CAT interface
Note, for the above two commands, there is not a single query, once a memory recall is performed, then each parameter can be queried via the CAT interface individually.
- Improved logic on programming the DDS to help prevent the radio from being off frequency. Basically made the timing of the code a bit more robust, should help those who have seen the rig transmit off frequency, a very very rare occurrence.