



# **iWRAP 5.0.2**

## RELEASE NOTE

Tuesday, 21 April 2015

Version 1.2

## VERSION HISTORY

Version	Comment
1.0	First version
1.1	Added one addressed HID issue to chapter 1.2.3
1.2	Document updated to reflect latest iWRAP5.0.2 release Updated contact details

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# 1 Changes from iWRAP 5.0.1

## 1.1 Build numbers

- iWRAP 5.0.2 build 764 for WT11i, WT12, WT32 and WT41 (Generic build)
- iWRAP 5.0.2 build 763 for WT11i, WT12, WT32 and WT41 (iAP build for MFI licensees)
- iWRAP 5.0.2 build 765 for WT32 (Audio Source build)
- iWRAP 5.0.2 build 766 for WT32 (CVC build for CVC licensees)
- iWRAP 5.0.2 build 767 for WT32 (aptX build)
- iWRAP 5.0.2 build 768 for WT32 (aptX Source build)

## 1.2 New features

- SSP user confirmation auto-accept can be enabled by setting SET CONTROL CONFIG block #3 bit #1: SET CONTROL CONFIG 2 0 0 0.
- New SET PROFILE HID configuration bits #4 and #5, which allow for reception of raw HID output reports and larger HID data channel MTU configuration.
- SET CONTROL AUDIO allows routing input and output to different audio interfaces
- New optional parameter for SET BT SNIFF allows automatic sniff / active mode management

## 1.3 Issues addressed

### 1.3.1 General issues

- The radio power table for WT41-A and WT41-E has been adjusted to reduce the difference between power output levels. Since the change does not affect the maximum power output, only the steps between the minimum and maximum power level, it does not affect any radio certifications.
- We have found and implemented a workaround for CSR's S/PDIF issue with getting wrong sampling rates. S/PDIF can be used for A2DP audio, but not for SCO audio. See IWRAP-577 in the list of known issues
- Added missing leading zeroes to SSP CONFIRM events – now iWRAP will always print 6 digits, for example “012345” instead of “12345”. The leading zeroes are still missing from SSP PASSKEY notification events (known issue IWRAP-579)
- Command @{link\_id} now works for link\_ids above 9
- Fixed a bug which caused link\_ids above a disconnected link\_id to stop working with the @ command; for example, if iWRAP had connections 0, 1 and 2, and connection #1 was disconnected, @2 would no longer work
- Fixed parts of INFO CONFIG output missing when using very low baud rates
- Fixed a bug that limited the maximum number of ACL connections (unique Bluetooth devices) to 6 instead of 7 on BlueCore4-based modules (WT11i, WT12, WT41). On WT32, 6 is still the limit

- Fixed PLAY command and SET CONTROL RINGTONE stopping working after a VOLUME command was issued
- Fixed SET BT PAGEMODE alternate pagemode setting threshold to count active ACLs (unique devices connected to), not active logical links
- Added missing leading zeroes to SSP CONFIRM events
- Fixed a connection issue when making an L2CAP call and an RFCOMM call to a service UUID simultaneously, and the L2CAP connection failed, which caused iWRAP to lose track of the RFCOMM connection state, which in turn caused further SDP connections to fail

### 1.3.2 A2DP profile issues

- Fixed a memory leak in the stream endpoint discovery subroutines, which caused iWRAP to crash after 15 outgoing A2DP calls
- Fixed a bug in SET CONTROL CODEC that would leave aptX enabled for incoming connections even when it was disabled with SET CONTROL CODEC

### 1.3.3 HID profile issues

- Added missing Bluetooth HID Handshake response to SET\_REPORT packets sent by the HID Host
- Fixed an issue with losing characters in ASCII keyboard mode when the same letter was sent over and over again, but with different Shift key states, e.g. "AaAaAa"
- HID GET now prints the last byte of an odd-numbered HID descriptor correctly; previously it always printed the last byte as zero, even though it was stored and sent over the air correctly
- Fixed HID failure in data mode when SET CONTROL ESCAPE was disabled
- Reordered HID SDP entry elements so that Windows XP will accept it

### 1.3.4 iAP profile issues

- Fixed a rare data duplication bug
- Fixed iAP not working with SET CONTROL CONFIG 0040 0000 (print "OK" after each command)
- Fixed a bug with iWRAP hanging in MUX mode when an iAP link was abnormally disconnected in the middle of receiving a MUX frame from the UART that was intended for the iAP link

## 1.4 Newly discovered known issues

- IWRAP-159: OBEX PUT command with invalid parameters will put the OBEX handler in an invalid state, and the connection needs to be restarted in order to recover
- IWRAP-533: SYNTAX ERROR is incorrectly printed after receiving an OBEX FORBIDDEN response
- IWRAP-535: The analogue input pin on the WT11i is driven low on boot, causing the command AIO to report 0
- IWRAP-550: If pairing is initiated to / from two devices at the exact same time, it is possible to pair and be connected to two devices even if SET BT PAGEMODE 4 is used. The workaround is to set the maximum number of ACLs (0x000d PSKEY\_MAX\_ACLS) to 1.
- IWRAP-574: WT32 will not wake up from deep sleep as quickly as the other modules: instead of requiring one extra character from the UART to wake up, it will actually require 2-3 "AT\r\n" sequences before it wakes up

- IWRAP-577: S/PDIF cannot be used for voice data, because it does not work with sampling rates under 32kHz
- IWRAP-578: When iWRAP receives a constant stream of data from a Windows 7 or XP PC with any generic Bluetooth radio, the connection suddenly terminates with NO CARRIER ERROR 40c RFC\_PEER\_VIOLATED\_FLOW\_CONTROL. This is a CSR firmware issue, and the only known workaround is to limit the data rate
- IWRAP-579: SSP PASSKEY notification event is missing leading zeroes in the generated passkey, for example “006789” is printed as “6789”
- IWRAP-596: iWRAP data transfer may hang in MUX mode, if buffers are filled. **Fixed in iWRAP 5.5 and iWRAP 6.0.**
- IWRAP-614: NO\_AUTO\_DATAMODE feature set with SET CONTROL CONFIG (optional block 1, bit 5) does not work for IAP connections. **Fixed in iWRAP 5.5 and iWRAP 6.0.**
- IWRAP-619: When WT32 is in HCI mode and IAP profile is configured it was discovered, HCI\_Read\_Remote\_Version\_Information command may corrupt pairing/connection process.
- IWRAP-620: Binding twice command to PIO usually fails.
- IWRAP-628: When using aptX codec for A2DP streaming some glitches may appear.
- IWRAP-641: iWRAP does not parse correctly AT message +COPS, if the cellular network's name has a dot in it.
- IWRAP-644: CD line remains high when a link is closed while an attempt to open another link is ongoing.
- IWRAP-646: When KEEPALIVE flag is used, AAX stream indicator GPIO works reliably only first time after audio streaming begins. **Fixed in iWRAP 5.5 and iWRAP 6.0.**
- IWRAP-663: 128-bit UUID requests do not work if UUID format does not contain minus signs. Only acceptable format is xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx. **Fixed in iWRAP 5.5 and iWRAP 6.0.**
- IWRAP-691: Automatic SNIFF mode never resumes after A2DP streaming stops. **Fixed in iWRAP 5.5 and iWRAP 6.0.**
- IWRAP-706: PLAY command cuts of SCO audio stream indefinitely until SCO link is closed/reopened.
- IWRAP-765: It was reported, after long running (several hours) connect/disconnect tests module might hang up.

## 2 Updates in iWRAP5.0.2

### 2.1 Build numbers

- iWRAP 5.0.2 build 992 for WT11i, WT12, WT32 and WT41 (Generic build)
- iWRAP 5.0.2 build 993 for WT11i, WT12, WT32 and WT41 (iAP build for MFI licensees)
- iWRAP 5.0.2 build 994 for WT32 (Audio Source build)
- iWRAP 5.0.2 build 996 for WT32 (CVC build for CVC licensees)
- iWRAP 5.0.2 build 997 for WT32 (aptX build)
- iWRAP 5.0.2 build 998 for WT32 (aptX Source build)

### 2.2 Issues addressed

#### 2.2.1 General Issues

- Fixed no sound issue when SPDIF or I2S is used as an audio input.

#### 2.2.2 A2DP profile issues

- Fixed problem with A2DP streaming using aptX codec from some new mobile phones

### 3 Contact information

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