

AnalysIR Release Notes

Release 13th July 2016 **1.16.100.8106**
 1.16.100.8107
 1.16.100.8108
 1.16.100.8109

- 377. Update:** Can now enter multiple KEYs. Allows for certain configurations where hardware can be redefined on each restart/resume.
- 378. Update:** Many new Protocols added – see user guide for complete list.
- 379. Update:** All links to AnalysIR website updated to https from http.
- 380. Update:** Toggle state now displayed in details tab for RC5.
- 381. Update:** Improved import of files in Saleae format.
- 382. Update:** Improved display of Import window on very small displays.
- 383. Update:** Support added for DirecTV protocol and many more.
- 384. Update:** Improved decoding for RCMM protocol.
- 385. Update:** Improved error messages when sending IR signals from AnalysIR.
- 386. Update:** Reduced potential for false positives when decoding
- 387. Update:** Time now displayed as 24 hour in History (newly decoded signals).
- 388. Fix:** Error handling in History when empty.
- 389. Update:** Menu option added to load sample signals.
- 390. Update:** Number of sample IR signals included with AnalysIR increased.
- 391. Update:** Include carrier frequency when signals sent from LearnIR application to AnalysIR.
- 392. Update:** website link added to about tab.
- 393. Fix:** Improved error handling when setting all rows in History to RAW.
- 394. Update:** More tooltips added and improved.
- 395. Fix:** Processing of main menu system & behaviour improved.
- 396. Update:** New TestIR application integrated with AnalysIR (An automated utility to test IR Receivers across various protocols, carrier frequencies, duty cycles & ranges. Requires custom hardware & separate purchase). TestIR is a commercial tool for manufacturers.

- 349. Update:** Tooltips added to about/registration window, to assist with registration process.
- 350. Update:** Tooltips added to about/registration window, to assist with registration process.
- 351. Update:** Improved input text validation during registration.
- 352. Update:** More detailed error message on registration screen.
- 353. Fix:** fix to 'ignore' settings in checksum calculator.
- 354. Update:** Improved error handling and error message in checksum calculator.
- 355. Update:** Added the #pulses for each signal in the Details tab.
- 356. Update:** Improved algorithm for 'cleaning' RCMM signals.
- 357. Update:** Option added to automatically save exported signals to file in Export Window.
- 358. Update:** Added new feature to import UEI formatted signals.
- 359. Update:** Increased maximum size of text box in import window from 64,000 to 2MBytes for users who want to import very large signal sets in one operation.
- 360. Update:** Improved decoding algorithm for XMP.
- 361. Update:** Improved decoding algorithm for RCMM.
- 362. Fix:** Fixed obscure error in IR syntax generic processing engine.
- 363. Update:** Enhanced support for LearnIR to allow non-standard carrier frequencies and support for derivative 3rd party LearnIR devices.
- 364. Update:** Added support for sending IR signals using Photon over Serial/USB or WiFi.
- 365. Update:** Added support to send IR Signals with A.IR shields over Serial/USB or WiFi.
- 366. Fix:** Fixed error when trying to send IR with USB IR Toy.
- 367. Update:** Improved handling for network connected devices.
- 368. Update:** Improved calculation of carrier frequencies.
- 369. Update:** Added support for ESP8266/NodeMCU source device over Serial/USB and WiFi.
- 370. Update:** DISNEY protocol must always be selected manually to reduce false positives due to the nature of this protocol.
- 371. Update:** added support for Photon over serial/USB and WiFi.
- 372. Update:** Improved error handling when sending IR signals on supported devices.
- 373. Update:** Added feature to set all rows in history to RAW.
- 374. Update:** Details tab now updated when scrolling with up/down arrow keys in History.
- 375. Update:** Several new IR protocols added.
- 376. Update:** Support confirmed for the RedBear DUO as it is functionally equivalent to the Photon.

- 311. Update:** New release numbering scheme for official V1 release.
- 312. Update:** iTach connection now closed cleanly when net connection is being closed.
- 313. Update:** Number of supported IR protocols increased to 75+
- 314. Update:** Configured network delay now included in Network error message
- 315. Update:** Added Contact Us option via website to Help menu
- 316. Update:** Added IRForum option via website to Help menu
- 317. Update:** Added Shop option via website to Help menu
- 318. Update:** Added AnalysIR.com option via website to Help menu
- 319. Update:** Improved display of 'update check' pop-up when application starts.
- 320. Update:** Enhanced functionality of 'update checks' via website.
- 321. Update:** Improved integrity checking for stored settings between sessions.
- 322. Update:** Added new CRC8/CRC16 to checksum calculator.
- 323. Update:** Minor enhancements to Laser-Tag decoder
- 324. Update:** Enhanced handling of network connections for Photon, iTach & RPi
- 325. Update:** Support for carrier frequency reporting/recording via WiFi (Photon only or custom 3rd party devices also)
- 326. Update:** Improved import of older session files(rare issue)
- 327. Update:** Photon WiFi option added to Source menu & now supported in '.ini' configuration file
- 328. Update:** Added new context menu feature to allow moving rows in History up & down. (Also available via Power Tools Menu / History option)
- 329. Update:** Improved error handling for iTach WiFi
- 330. Update:** Improved Handling of Networked connected device, in particular Photon WiFi
- 331. Update:** Carrier frequency reporting & recording now supported for Photon WiFi
- 332. Update:** Photon WiFi option now visible on Source menu.
- 333. Update:** Photon A.IR Shield options now visible on Source menu. (*WiFi & Serial*)
- 334. Update:** Now showing a warning Icon on 'Check for Update' pop-up, if a dev version is available or user is not on the latest release.
- 335. Update:** Added more compact encoding format for network devices to allow some users connect using other devices with limited resources (e.g. ESPxxxx).
- 336. Update:** Ensure COM ports are closed, before making Network Connection.
- 337. Update:** Status colour is now light green when network connection is open and a darker green when a COM port is open.
- 338. Update:** Improved error handling of network connections.
- 339. Update:** Improved calculation of carrier frequencies for network connections.
- 340. Update:** Increased maximum number of Custom protocols from 50 to 100.
- 341. Update:** Reset Source to default on system suspend or load/comms error
- 342. Update:** Introduced Auto generated button IDs via History context menu
- 343. Update:** Introduced support for AIR Shield Nano, AIR Shield Photon & AIR Shield rx models
- 344. Update:** Improved method for establishing network connections.
- 345. Update:** Added lots of tooltips to menu items on main window
- 346. Update:** LearnIR IR sending process amended to reflect firmware update.
- 347. Fix:** Corrected some Typos

- 217. Update:** Added XMP support to Detail view
- 218. Update:** Improved accuracy for cleaning XMP on export
- 219. Update:** Improved conversion from RAW to LIR format signals
- 220. Update:** Improved decoding for XMP
- 221. Fix:** issue where some COM ports may not be available
- 222. Update:** Improved performance of History display
- 223. Update:** Removed trailing SPACE for LIRC RAW Export
- 224. Fix:** Improved behaviour of 'auto-clean' when different protocols present in History
- 225. Update:** RCMM protocol now supported
- 226. Update:** Additional error handling when making network connection to RPi
- 227. Update:** Can now vary the timeout for network connections
- 228. Update:** Fubarino mini added as option to Source menu
- 229. Update:** PSOC4 added as option to Source menu
- 230. Update:** Photon added as option to Source menu
- 231. Update:** Major improvements to resizing of main window
- 232. Update:** Improved display at different screen scaling levels
- 233. Update:** Added button to initial popup/registration window to allow easy copy of registration information
- 234. Update:** Improved 'Auto-clean' algorithm for all signals.
- 235. Update:** Added button in export window to allow exporting all signals in History.
- 236. Update:** Carrier frequency is now stored (if available) for every signal recorded or imported.
- 237. Update:** Stored carrier frequency is now used when sending IR signals (Send Direct only, for individual signals)
- 238. Update:** Export form now allows overriding of stored carrier frequency per channel
- 239. Update:** Carrier frequency can be changed manually (individually or all) using History context.
- 240. Update:** Included several new items in properties window
- 241. Update:** Added optional check for updates at start-up or via help menu
- 242. Update:** Wait cursor now displayed in certain cases.
- 243. Update:** Option added to 'ini' file to change default BAUD rate in some special cases.
- 244. Update:** Improved auto-sizing in all on-screen tables
- 245. Update:** Added support for new A.IR shield and new option in Source menu.
- 246. Update:** Can now send IR using A.IR shield.
- 247. Update:** Improved network handling for future Photon support. (Photon can also be used over serial)
- 248. Update:** Each network device can now be configured with its own set of parameters.
- 249. Update:** LIRC RAW now supported for import & bulk import.
- 250. Update:** Network connection now closed when source device changes.
- 251. Update:** now display number of pulses and total signal duration in Send IR Window
- 252. Update:** Added more icons to some menus
- 253. Update:** AnalysIR now remembers last used path for saving/loading Session files and also images.

- 254. Update:** New Reverse Engineering tool for AC signals.
- 255. Update:** Initial popup window stays visible until AnalysIR is fully loaded
- 256. Update:** Added support for Lasko IR Protocol
- 257. Update:** Now caching a slow system query at start-up. Loading should be a bit faster on some slower systems.
- 258. Update:** All signals now display minimal info in details view, including carrier frequency, if available.
- 259. Update:** Carrier frequency now included with export notes/comments
- 260. Update:** Increased the use of help style tooltips throughout
- 261. Update:** Clicking in either channel table now shows position in trace.
- 262. Update:** Added new facility to change the overlay colour for both channels
- 263. Update:** Start position is no longer updated when clicking the channel table. It is now updated with via double-click.
- 264. Update:** Default carrier frequency for new signal is 0 Hz or blank (''), unless the actual frequency is reported.
- 265. Update:** It is now possible to sync a range of settings between both channels via context menu, so that changing a value on one channel also changes it in the other channel.
- 266. Fix:** History fields updated properly, if signal not decoded after changing settings.
- 267. Update:** Invalid filename chars filtered out when saving session file.
- 268. Update:** carrier frequency supported in batch export.
- 269. Update:** Older session files without carrier frequency, can be imported.
- 270. Update:** Format of saved session file, updated to cater for carrier frequency.
- 271. Update:** Context menus also integrated into main menu system
- 272. Update:** Carrier frequency added to selected history row, when manually requested from USB IR Toy.
- 273. Update:** MSB/LSB/LSB8 menus no longer dimmed when checked
- 274. Update:** LSB8 now handles any length HEX value – avoiding excessive error messages
- 275. Update:** check for updates message box updated with yes/no/cancel options
- 276. Update:** Menus now expand automatically on mouse hover
- 277. Update:** Channel can now be changed by clicking the channel tab, via menu, clicking the timeline, clicking the channel panel or clicking the channel text indicator in the status bar.
- 278. Update:** help tooltips can be enabled/disabled via help menu
- 279. Update:** clicking www.analysir.com in status bar or the logo brings you to the website.
- 280. Update:** Users can delete history row via context menu
- 281. Update:** Users can copy history row to clipboard via context menu
- 282. Update:** Added over 10 new Infrared protocols (see docs for details)
- 283. Update:** Removed check for long spaces and warning popups when batch exporting for IRremote. This was possible because IRremote was updated to accepted longer marks/spaces, based on our suggestions.
- 284. Update:** Added support for recording signals from iTach Flex WiFi (Global Caché). Should also work for other iTach Flex devices in the same range.
- 285. Update:** New network settings for iTach Flex added to ini file.
- 286. Update:** Added support for bulk importing iLearn files, including key name/ID/Button name (Global Caché).
- 287. Update:** Added a new feature to auto populate the button field, if the same signal already appears in history.
- 288. Update:** Added feature to optionally include verbose signal description when exporting.

- 289. Update:** Added feature to optionally include key/button ID when exporting.
- 290. Update:** Added feature to optionally allow saving exported signals to file.
- 291. Update:** Added support for exporting in A.IR send format.
- 292. Update:** Removed Windows update when copying new files during after release update.
- 293. Update:** Increase the width of the drop=down in the 'Rules Tab'.
- 294. Update:** When loading a Saved Session, users can now choose to overwrite history, append or append into channel 1 or 2.
- 295. Update:** Improved relative positioning of all context menus on pop-up.
- 296. Update:** Milestag1 protocol added
- 297. Update:** Milestag1 support added to Details tab.
- 298. Update:** Can now export to A.IR send format.
- 299. Update:** LIRC RAW added to file import filter.
- 300. Update:** Session Histories cannot be loaded via import utility.
- 301. Update:** Improved handling of network data, particularly for very long signals.
- 302. Update:** iTach network properties now displayed in properties window.
- 303. Update:** Zip files in installation package renamed.
- 304. Update:** added feature to set the carrier frequency in all History rows to be the same as the currently selected row.
- 305. Update:** Relocated Pulse Analytics option from File menu to Power Tools Menu
- 306. Fix:** fixed potential issue when trying to import LearnIR formatted file.
- 307. Fix:** fixed format error when exporting in IRLib format.
- 308. Fix:** Removed annoying popup that could occur during upgrade when copying certain updated files.
- 309. Fix:** Numerous other minor fixes.
- 310. Update:** Numerous other minor updates.

- 171. Update:** Added new feature to clear all RAW signals in Displayed History (File Menu).
- 172. Update:** Additional properties now displayed in Properties Window (File Menu)
- 173. Update:** Support added for bulk import of IR signals via Import Window (File Menu).
- 174. Update:** Signals can now be imported directly from file system via Import Window (File Menu).
- 175. Update:** Key name can now be entered when importing Signals via Import Window (File Menu).
- 176. Update:** PSOC4 now supported as source (Source Menu).
- 177. Update:** Batch Export now supported for PSOC4 (File Menu).
- 178. Update:** Feature added to allow disabling the serial port, to facilitate reuse in another application, without closing AnalysIR. (File Menu).
- 179. Update:** Feature added to allow restarting AnalysIR. (File Menu).
- 180. Update:** Feature added to allow truncating displayed signals (Channel 1|2 Menu).
- 181. Update:** Protocols supported increased to over 60. Refer to user guide or properties for complete list. (Protocols Menu).
- 182. Update:** Usage of term 'carrier frequency' throughout (instead of previously 'modulation frequency' term)
- 183. Update:** Checksum Calculator added to assist in verifying checksums for AC signals (Power Tools Menu)
- 184. Update:** Feature added to clean all recognised signal in History via one single operation. This automatically corrects the signal timings, similar to the same feature when exporting. (Power Tools Menu)
- 185. Update:** Added support for horizontal resizing of main window, thus allowing increased view area for signals and history. Tested up to 1800 pixels. (Should work beyond that).
- 186. Update:** Added support for vertical resizing of main window, thus allowing increased view area for Channel 1 & 2 data along with History. Tested up to 1200 pixels (Should work beyond that).
- 187. Update:** When resizing the main window, scrollbars will now appear only when the window size is less than the default.
- 188. Update:** Window size will be remembered from previous AnalysIR session.
- 189. Update:** Visual indicator added to task bar to signal when data is being received over serial.
- 190. Update:** Context menu added to bottom right of main screen to allow resetting or disabling of Serial Port.
- 191. Update:** The total number of signals are now displayed above the Session History Panel.
- 192. Update:** Improved handling & stability for USB IR Toy serial interface.
- 193. Update:** Added support for new IR Protocol - CANON33CAM
- 194. Update:** Added support for new IR Protocol - DAIKIN280AC
- 195. Update:** Added support for new IR Protocol - ELECTROLUX96AC
- 196. Update:** Added support for new IR Protocol - GREE067AC
- 197. Update:** Added support for new IR Protocol - FUJITSU88DUALAC
- 198. Update:** Added support for new IR Protocol - GWTS
- 199. Update:** Added support for new IR Protocol - IROBOTROOMBA
- 200. Update:** Added support for new IR Protocol - KONICAMINOLTA32CAM

- 201. Update:** Added support for new IR Protocol - MITSUBISHI288AC
- 202. Update:** Added support for new IR Protocol - MOTOROLA
- 203. Update:** Added support for new IR Protocol - NIKON4CAM
- 204. Update:** Added support for new IR Protocol - PENTAX6CAM
- 205. Update:** Added support for new IR Protocol - SAMSUNG112_168AC
- 206. Update:** Added support for new IR Protocol - SCIENTIFICATLANTAROGERS
- 207. Update:** Added support for new IR Protocol - TCL112AC
- 208. Update:** Added support for new IR Protocol - TOSHIBA144AC
- 209. Update:** Added support for new IR Protocol - XMP
- 210. Update:** Introduced the retention of selected settings between AnalysIR sessions. These settings are saved when closing AnalysIR and restored automatically when starting AnalysIR.
- 211. Update:** Improved display of trailing space on signal trace for channel 1 & 2
- 212. Update:** Numerous updates to getting Started Guide, reflecting changes in this release.
- 213. Update:** Included support for XMP in Details tab view, which also flags checksum errors in XMP signals.
- 214. Fix:** Resolved an issue where COM ports with numbers less than 10 might not be visible on some systems.
- 215. Fix:** Removed trailing any trailing space for LIRC RAW Export, to avoid reported issues.
- 216. Fix:** Numerous fixes, reliability & cosmetic enhancements throughout.

- 125. Update:** Created a single source sketch/firmware version which covers all supported platforms. (except for RPi which uses a different approach)
- 126. Update:** Added support for exporting single signal in LIRC '.conf' raw format.
- 127. Update:** Added support for exporting in '.bin' format for USB IR Toy.
- 128. Update:** Added a new feature to allow selection of '.bin' files via a file dialogue pop-up, when importing USB IR Toy files.
- 129. Update:** Added support for batch exporting in LIRC '.conf' raw format.
- 130. Update:** Added support for DISNEY GwTS protocol (also 2400 BAUD serial).
- 131. Fix:** removed redundant code which caused problems on one Windows 8, installation.
- 132. Update:** Added support for Tiva C TM4C123G LaunchPad for both decoding & carrier frequency measurement. Energia IDE required.
- 133. Update:** Added support for MSP430 MSP-EXP430F5529LP LaunchPad for decoding only @ 16MHz. (device not capable of measuring carrier frequency). Energia IDE required.
- 134. Update:** Added decoding support for LearnIR, the new smart IR learner from AnalysIR.
- 135. Update:** Added support for importing LearnIR format.
- 136. Update:** Added support for exporting in LearnIR format.
- 137. Update:** Added IR sending support for LearnIR, the new smart IR learner form AnalysIR
- 138. Update:** Improved SRAM usage on Arduino firmware, thus allowing longer signal length for Air Conditioners.
- 139. Update:** Improved timings on Arduino firmware to allow capture of some difficult Air Conditioner signals.
- 140. Update:** Improved importing for IRLib format, to allow for latest version.
- 141. Update:** updated the header timings for XSAT protocol definition.
- 142. Update:** No longer adding 1000 uSec space to end of signal when importing.
- 143. Update:** Improved robustness of Key processing
- 144. Update:** Sending IR via the USB IR Toy has proven to be problematic since introduced into AnalysIR.
To overcome these issues we have implemented a new approach to sending IR via the IR Toy. Now we make use of the 'irtoy.exe' utility from the manufacturer (DP), thus eliminating complications when using AnalysIR. This has proven to be much more reliable than before.
Unfortunately, we are not in a position to provide firmware support for this device. Please contact the device manufacturer directly for support.
- 145. Update:** Improved ruggedness of USB IR Toy interface, to avoid potential glitches.
- 146. Update:** Added a new option to display decoded values as MSB (default) or LSB.
- 147. Update:** Added a new option to display decoded values as LSB8, least significant bit on 8-bit byte boundary. This is particularly useful in decoding complex protocols such as long AC signals.
- 148. Update:** Added file save dialogs when saving Session, Trace or Screenshot files.
- 149. Update:** During export the 'Auto clean' feature is now defaulted to 'off', to avoid inadvertent adjustments to the exported signal.

- 150. FIX:** resolved a com port error popup at start-up which impacted a small number of users.
- 151. FIX:** Corrected a typo In the AnalysIR.ini file. [DAIKIN64] is corrected to [DAIKIN64AC].
- 152. FIX:** fixed an issue with Arduino UNO and a serial bug on the board or serial driver. The AnalysIR Arduino firmware has been updated with a workaround for this problem. When using Arduino UNO, users must now define 'ArduinoUNO' as true in the firmware, instead of Arduino328. This Arduino bug does not exist on any other model of Arduino we have tested. This fix has been superseded by fixing the baud rate at 115,200 for all platforms.
- 153. FIX:** resolved an issue where the colour coded Header, Trailer, Ones and Zero bits displayed in the timeline for each channel, were not automatically displayed or displayed incorrectly.
- 154. Update:** Added a new feature to the AnalysIR.ini file (Com_Port_ignore). This allows users to stop AnalysIR presenting one or more Com ports as options in the Com port drop down list, because a small number of systems mis-behaved when these ports were accessed.
- 155. Update:** Added a new feature to allow setting of the runtime priority for AnalysIR in windows. This may be of assistance on some slower/older PCs having issues with time sensitive devices such as the USB IR Toy. In general, we do not advise altering the priority unless absolutely necessary.
- 156. Update:** Updated processing of RC5 signals for better reliability, in particular with noisy signals.
- 157. Update:** Added support for DAIKIN Air Conditioner 160 bit protocol.
- 158. Update:** Added support for CHIGO Air Conditioner 96 bit protocol.
- 159. Update:** Added support for Panasonic Air Conditioner 216 bit protocol.
- 160. Update:** Added support for Electrolux Air Conditioner 96 bit protocol.
- 161. Update:** Added support for Vestel Air Conditioner 56 & 112 bit protocol.
- 162. Update:** Added option to protocols menu to select only AC signals for decoding. This can be combined with toggle option to enable all non-AC signals.
- 163. Update:** In the History Grid, TAB moves to the next row and SHIFT+TAB moves to the previous row, in addition to the similar existing Up/Down Arrow & Mouse options.
- 164. Update:** Added a new feature to the Protocols menu to disable automatic decoding of IR signals.
- 165. FIX:** resolved problem clicking on column headers in Properties window.
- 166. FIX:** resolved issue when exporting in IRLib format and also auto cleaning signal for IRLib.
- 167. FIX:** resolved issue where some AC signals were being incorrectly decoded as SANYO protocol.
- 168. FIX:** resolved issue when loading a session history file caused an exception in rare situations.
- 169. FIX:** Extra semi-colon removed from Arduino sketch. No impact, as just cosmetic.
- 170. Update:** Introduced a new feature to display fields within the protocol for RC5 and NEC protocols. More protocols may be added in future updates.

- 82.Update:** INI file cleaned up along with some redundant settings.
- 83.Update:** New IR source option provided on Main menu
- 84.Update:** USB IR Toy added as IR source
- 85.Update:** Added support for reading carrier frequency from USB IR Toy
- 86.Update:** Added support to import in USB IR Toy '.bin' file format
- 87.Update:** Added support to import in Command Fusion format (Beta)
- 88.Update:** Added support to export in Command Fusion format (Beta)
- 89.Fix:** Corrected issue which occurred on some systems when exporting into 3rd party format, from Export Window.
- 90.Fix:** Corrected situation where RC5 alternative IR Protocol was not always detected.
- 91.Update:** RPI added as a source directly via network (Ethernet or Wi-Fi).
- 92.Update:** Properties window – Automatically resized for smaller displays (e.g. 600 pixels height of Netbook or VGA)
- 93.Update:** Import window - Automatically resized for smaller displays (e.g. 600 pixels height of Netbook or VGA)
- 94.Update:** Some pop-up windows on Serial Port issues are removed.
- 95.Update:** During registration the window is now also shown in taskbar.
- 96.Update:** Baud rate display updated when switching between different sources.
- 97.Update:** Changes in handling of COM port recognition. Please report any new issues.
- 98.Update:** Network address & port for RPi –added to config/ini file.
- 99.Update:** 'Beta' support for MSP430 F5529 LaunchPad introduced for Energia in this release. Contact us directly, if you want to try it out. Carrier frequency measurement does not work yet, due to timer issues with Launchpad.
- 100. Update:** Changes to sources are now saved in config/ini file and remembered for next session. The format for the ini file has been updated accordingly.
- 101. Update:** Updated decoding algorithm for JVC & SHARP protocols to avoid 'false positives' on some occasions.
- 102. Update:** The decoded IR protocol is now updated in the history panel when a manual decode is attempted, with new settings.
- 103. Update:** Introduced new 'Power Tools' menu option.
- 104. Update:** Added History Decode to new 'Power Tools' menu.
- 105. Update:** Additional sample history file added to install package, which contains the full set of IR codes for a SKY+ remote control.
- 106. Update:** Improved validation of all Sony protocol variants – reduced potential for false positives.
- 107. Update:** Added redirection to AnalysIR website when accessing features not available in 'Demo-mode', to allow upgrade option. Does not impact registered users.
- 108. Update:** Current IR Source now displayed in status bar
- 109. Update:** Improved handling of decoded values longer than 64 bits
- 110. Update:** Correct channel must be selected in history when manually analysing a signal.
- 111. Update:** When copying a signal to the other channel, a new row is added to the history for the new signal.
- 112. Update:** Unknown protocols now included in code generation of RAW signals, during Batch Export.

- 113. Update:** Minor updates to Getting started guide for USB IR Toy & MSP 430 LaunchPad.
- 114. Update:** When installing a new version of AnalysIR, the config/ini file is always overwritten and a backup is made of the old file (both in APPDATA directory). This avoids a situation where some newer features can be disabled if an old config/ini file is used.
- 115. Update:** Validation of acceptable values for carrier frequency added.
- 116. Update:** Added menu item to enable/disable auto decoding of new IR signals.
- 117. Fix/Update:** fixed crash when importing some invalid formats and also enhanced validation some more.
- 118. Update:** New 'beta' facility to add custom protocols to AnalysIR. Contact us if you want to try it out for unsupported protocols including Air conditioners.
- 119. Update:** The format that has been auto-detected on 'import auto detect' is now displayed.
- 120. Update:** When loading a session history from file, the first history row is automatically displayed, analysed and decoded.
- 121. Update:** Added support sending all common carrier frequencies (IR Toy only - 30, 33, 36, 38, 40, 56, 455 kHz).
- 122. Update:** Added full support for automatic generation of 'C' code for RAW signals using Batch Export for the IRLib library.
- 123. Update:** Increased the max # of mark/spaces recorded in our Arduino code from 460 to 700 (Leonardo 906, Mega1280/2560 1024+).
- 124. Update:** Added full support for automatic generation of 'C' code for RAW signals using Batch Export for the IRLib library.

- 60. **Update:** Adjusted signature processing to allow for virtual machine 'VirtualBox' on Apple OSX.
- 61. **Fix:** Corrected situation where RC5 alternative was not always detected accurately.
- 62. **Fix:** Issues avoided when switching between LAN & WLAN. Please report any further issues.
- 63. **Update:** Removed any 'Space' at start of signal when batch-exporting in IRremote RAW format.
- 64. **Update:** Batch export now includes Arduino code generation for RAW format signals for IRremote. Note: not all protocols available with AnalysIR will be supported by the standard IRremote/IRLib libraries.
- 65. **Update:** Adjusted the default 'Delta' setting for the RC6 protocol to improve chances of decoding weak signals and to allow for timing issues with some transmitters.
- 66. **Update:** Introduced generic decoding scheme for IR protocols, excluding bi-phase encoded signals (signals like RC5, RC6 are bi-phase).
- 67. **Update:** Added support for Import in Saleae Logic CSV format.
- 68. **Update:** Added DENON protocol using new decoding scheme.
- 69. **Update:** Added DAEWOO protocol using new decoding scheme.
- 70. **Update:** Added SAMSUNG (Alternative Name TOSHIBA) protocol using new decoding scheme.
- 71. **Update:** New signature generation algorithm introduced, to avoid issues a small number of users were experiencing. Unfortunately, all users will require a new key for this and subsequent releases.
- 72. **Update:** Added a 1 second delay after opening the serial port on Arduino to avoid potential clashes with the boot loader on some Arduino models. *(Note: this was implemented in an earlier release, but not included with the release notes)*
- 73. **UPDATE:** Overwrite decoded values on subsequent decoding from History, using 'Analyse' button or menu option.
- 74. **UPDATE:** Improved NEC decoding algorithm to avoid some cases where a valid SANYO signals were interpreted as an NEC signal.
- 75. **UPDATE:** Improved RC5 decoding algorithm.
- 76. **UPDATE:** Changed default timings for PANASONIC protocol.
- 77. **UPDATE:** Added support for import from Saleae Logic CSV format.
- 78. **UPDATE:** Double clicking either of the Tolerance labels now resets the tolerance setting to the default of 100%, for that channel.
- 79. **UPDATE:** Made spelling of 'Analyse' menu option for Channel 1 consistent.
- 80. **UPDATE:** UNO removed as a define option in Arduino code, because it is identical to the standard or default 'Arduino328' definition. *(Note: this was implemented in an earlier release, but not included with the release notes)*
- 81. **Guide:** Several corrections and minor additions to Getting Started Guide, including the above fixes and updates.

- 23. **Update:** Changed the behaviour of the menu items (Overlay, Invert, Lock, Mute and Discrete) to be the same as the equivalent checkboxes in both channel panels. Also renamed the 'Mute Beep' option to just 'Beep'. The logic is now that if an item is selected (checked) it is enabled and if not selected (checked) it is disabled. Hopefully, this will be more intuitive for all users.
- 24. **Fix:** Changed 'Infra-red' to Infrared in 'About tab' on main window.
- 25. **Update:** Added option of 'Discrete' to menu for both channels.
- 26. **Update:** The combo-box for both protocol selection in the 'Rules' tab and 'COM port' on the main window have been changed to disable user editing of values. Only values set by AnalysIR can be selected now. Allowing user editing did not make sense here.
- 27. **Fix:** 'ALT+P' now works for 'Protocol' menu selection.
- 28. **Update:** Major redesign of taking measurements on channel trace (see Guide). All 4 Arrow keys can now be used in addition to mouse.
- 29. **Update:** Removed double-click action from scale numeric field on both channels, because it was too easy to accidentally fire this event when clicking. Double-clicking the 'Scale' label now resets the scale value to the default as does the existing menu option.
- 30. **Fix:** The vertical scroll-bar on the signal trace which was reported on one system has now been removed and reported as fixed. Please report if it re-occurs, as we could not reproduce/test on any of our systems.
- 31. **Update:** Introduced a new checkbox to the left of the measure field. When checked, measuring is enabled for that channel and vice-versa.
- 32. **Update:** Added an option to enable/disable measure on channel menus.
- 33. **Update:** Introduced a new checkbox to the left of the cursor field. When checked, the cursor feature is enabled for that channel and vice-versa.
- 34. **Update:** Added an option to enable/disable cursor on channel menus.
- 35. **Update:** Added an auto-complete feature into the History grid for the 'Key' column, with a pre-populated list of common keys. Users can also enter new values, and it should result in consistent spelling for many 'Key' labels. These new values are not retained for new sessions.
- 36. **Update:** The Arduino & RPi Zip files are now copied to the APPDATA directory as is the updated guide. Previously, they were not overwritten for an updated installation and just appeared in the install directory.
- 37. **Update:** Reduced the number of messages being written to on-screen log when scaling/zooming for less 'noise'.
- 38. **Update:** Use of 'Sensitivity' has been replaced by 'Tolerance' throughout to better reflect the functionality.
- 39. **Fix:** When channel data is empty, clicking the 'Copy to channelx' button but no longer clears the other channel.
- 40. **Update:** Tab ordering for controls on all windows implemented.
- 41. **Update:** Added a batch export feature to copy all the signals in the Session History to the clipboard in IRemote send format (i.e. commented 'c' code).
- 42. **Update:** Use of CTRL+B, ALT+B has been changed in Menu system.
- 43. **Update:** The behaviour of the lock feature has been changed. Now if you receive a signal on a locked channel, a beep is made (provided of course beep is enabled). The popup messages have been removed.

- 44. Update:** Updated the closing sequence of the Main window to allow users to cancel the close using the ESC key. Changed button options from Yes/No to OK/Cancel
- 45. Fix:** Typos corrected in 'config (INI)' file. (Fix included only for new installs or if you backup and delete your 'config' file (APPDATA directory), before a new install. Recommendation: Ignore this)
- 46. Update:** Added more 'Alt+key' shortcut keys to menu navigation.
- 47. Update:** No longer save empty file when History is empty.
- 48. Update:** Cursor value no longer shows negative values when mouse is dragged to the left of the time-scale on either channel.
- 49. Update:** Changed text on Import buttons in Import Window for better clarity.
- 50. Update:** Added a new 'Serial Port Reset' option to the file menu.
- 51. Fix:** Fixed an issue (exception) when user clicked cancel in file open dialog.
- 52. Fix:** Removed unnecessary 'Label2' from Import window.
- 53. Fix:** Fixed an issue reported, when importing malformed data in Pronto Format.
- 54. Fix:** Application terminated abruptly when dragging the mouse to the left of the signal trace on either channel.
- 55. Fix:** Import screen data table columns hidden on some systems. Fix implemented, but unable to verify as problem system not available for testing. Please report if problem persists.
- 56. Fix:** IR protocols names were being added incorrectly to the Rules tab instead of the Properties window.
- 57. Guide:** Several corrections and minor additions to Getting Started Guide, including the above fixes and updates.
- 58. Update:** Measure positions now retained when zooming
- 59. Update:** Naming of saved images is now more consistent.

1. **Update:** Increased size of Properties display within window. Allow multiple select of all Rows & Columns for easy copy.
2. **Update:** Pressing 'ESC' key exits the active Window. The Main window will prompt for confirmation before exiting.
3. **Update:** Adjusted Protocols menu. Removed LEGOTOWER as it is not implemented yet. Set default state of HELISH3CH to not checked. As this is very specialised there is no need to search for this protocol every time.
4. **Update:** Moved the 'Protocols' selection menu from the 'File' menu to the main level.
5. **Update:** Added 'Clear All' option in File Menu to clear Channel Traces & Data, History and on-screen log in one simple step.
6. **Update:** Added 'Clear Both' option in File Menu to clear both Channel Traces & Data log in one simple step.
7. **Update:** We have re-arranged the layout of the Import window to provide a pseudo left to right transition and provided more space for the text box.
8. **Update:** When saving session history, you are now prompted to enter a string which describes the session. When you re-load this session later the session description is displayed in the title of the History panel.
9. **Update:** Added a visualisation on the signal trace to show the duration measured by clicking on the trace – for each channel. Last Measure also added to pop-up tooltip display.
10. **Update:** Stopped recording every change to COM port in the AnalysIR configuration file, to avoid clutter as it can grow quite quickly.
11. **Update:** Changed 'Mute' and 'Mute Toggle' to 'Mute Beep' both in channel panels and menus for more clarity.
12. **Fix:** Toggle Flag issue resolved along with bit count in History.
13. **Fix:** Exception on Menu item to reset scale for channels 1 & 2
14. **Fix:** Labels on Properties dialog window corrected
15. **Fix:** Spelling corrected on Y-Axis of Chart Analytics Form.
16. **Fix:** Resolved issue when clicking channel 2 clear button with lock setting on channel 1 set. Now operates as intended.
17. **Fix:** Resolved issue where recorded signal was displayed in wrong channel.
18. **Fix:** Bit pattern map didn't redraw automatically when Channel 2 'Analyse' button was clicked. Similarly for related menu item.
19. **Fix:** Corrected the behaviour of the check mark for Channel 1 Menu item 'Mute toggle'. 'Mute' & 'Mute Toggle' renamed to 'Mute Beep' throughout.
20. **Fix:** Corrected situation where X-axis title was hidden in Pulse Analytics Window.
21. **Fix:** Resolved issue with exception on restart from standby or hibernation, see Guide for more details.
22. **Guide:** Several corrections and minor additions to Getting Started Guide, including the above fixes and updates.