PistonXP Release notes

Piston Kft.

RN

Version: 2.1-rc.11

Release date: 2025-06-05

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UPDATING PISTONXP

⚠️ | **Before installing the update, make a backup copy of the `PistonXP` installation directory!**

⚠️ | **For OEM versions:**
Do not use the `Online Update` **button in** `PistonXP` 〉 `Setup` 〉 `Maintenance` **! This would download and update to the latest official version, with Piston logo.**

There are several ways to update PistonXP:

- Run `Setup ▸ pxp_update.exe` from the installer DVD and click the Install button.

, or

- Autorun the installer DVD (runs `Autorun.exe`)
- Select `Software` 〉 `Install PistonXP and drivers` (runs `Setup ▸ pxp_fullsetup.exe`)
- On the `Select Components` screen, choose `Update the software only` and click the `Install` button

, or you can simply just reinstall it to the same directory.

After the installer has finished the update, run `PistonXP.exe` and depending on the version you are updating from, do the following extra steps:

Updating from versions before 2.10.0.0698

- **Audiometer**: Connect your audiometer, then set `PistonXP` 〉 `Setup` 〉 `Audiometer` 〉 `Standard` 〉 `Read from device` and `PistonXP` 〉 `Setup` 〉 `Audiometer` 〉 `Headset` 〉 `Read from device`.

Updating from versions before 1.84.0.0519

- **CPET**: Perform a sensor characteristics measurement: `PistonXP` 〉 `Setup` 〉 `CPET` 〉 `Measurement of gas sensor characteristics` 〉 `Start calibration`.

Updating from versions before 1.82.0.0458

- Create admin password.
- Create user and setup auto login if needed.

CHANGELOG

All notable changes to this project will be documented in this file. The format is based on Keep a changelog

[2.10.0.0709] - 2025-06-05

Fixed

- CPET window: FVC data source indication - Ticket 205
- Prediction method indication for stored parameters - Ticket 242
- Double confirmation of "store data" at exit - Ticket 226
- Base spirometry: An extra Pred column is visible - Ticket 211
- Remove empty "results" tab for others test types than FVC - Ticket 212
- Exact prediction algorithm type not stored when Custom is selected - Ticket 220
- Trend Analysis bug fixes - Ticket 222
- Missing parameters on CPET report - Ticket 192
- Parameter display options are language dependent in INI file - Ticket 217
- List only used prediction algorithms on report - Ticket 219
- Mutex issue - Ticket 310
- Table headers on printed reports of CPET diagnoses - Ticket 312
- Displaying import/export menu item - Ticket 314
- Stability fixes on ILLA interface for Eolys - Ticket 315
- Stability and accuracy fixes on SPIRO interface for Eolys - Tickets 317, 322
- Stability fixes for plethysmograph tests - Ticket 321
- Stability fixes for CPET - Ticket 324
- Stability fixes for SpO2 and trend analysis - Ticket 325
- Character set compatibility issue - Ticket 326
- Minor refinements and fixes on provocation test - Ticket 328
- Unresponsive OK button of Settings window on PCs without COM ports - Ticket 331
- Usability improvements of Comment editor - Ticket 338
- Fixes on importing far eastern characters via GDT - Ticket 340
- Bug fix for Bluetooth heart rate monitors - Ticket 346
- Stability fixes for PinkFlow zeroing - Ticket 351
- Stability fixes for CPET - Ticket 348
- Date filter fix on patient form's detailed search - Ticket 359
- CSV format fix on SPIRO interface for Eolys - Ticket 360, 364
- Stability fixes, refinements and customization options for flow calibration - Ticket 363
- Unification of device serial number on test reports - Ticket 370
- Minor stability fixes - Ticket 372
- FEV1/IVC and FEV1/VC calculation fix - Ticket 379
- Motorized pump plug-in issue fix - Ticket 375

- Predicted value mark-up, calculation and re-calculation fixes - Ticket 380
- Minor bug fixes on FOT communication services
- Fix for copy-paste feature on parameter visibility matrix - Ticket 385
- Fix for hangs while generating reports with unset default printer - Ticket 388
- Fix for MVV parameter calculation - Ticket 398
- Fix for patient filtering in PostgreSQL databases - Ticket 399
- Fix for maximal respiratory pressure gauge - Ticket 400
- PostgreSQL backup fix - Ticket 412

Changed

- Low screen resolution warning - Ticket 255
- Grading display moved to parameters table - Ticket 228
- Only notify to calibrate if any of the devices is set to do so - Ticket 208
- Data import/export for MediSAP, Eolys - Ticket 318
- GUI and translation refinements for CPET - Ticket 324
- Customized OEM installers and DB preset for Eolys - Ticket 333
- Minor code optimizations - Ticket 373
- GDT export is changed to multi-body (multi-sentence) to improve compatibility - Ticket 343
- Refining calculation of end-tidal gas concentrations - Ticket 396
- GDT parameter ordering - Ticket 407

Added

- Set parameter visibility at once - Ticket 256
- Added warnings to Measurement Details Form - Ticket 233
- Configuration file formatted automatically - Ticket 223
- Guidelines on Wasserman panels - Ticket 259
- Audio Threshold table "Police Nationale", eolys - Ticket 246
- Explanatory table for FVC grading system - Ticket 229
- Predefined composite prediction algorithms - Ticket 227
- NHANES III Predicted values - Ticket 174
- PADOA HIS interface for Eolys - Ticket 199
- Basic spirometry: auto stop when no flow detected - Ticket 210
- More details are added for calibration step descriptions - Ticket 209
- Additional transcutaneous pCO_2/pO_2 monitor support - Ticket 313
- Limited PostgreSQL 16 support - Ticket 317
- Error messages during HIS (GDT) issues are detailed - Ticket 327
- Option for customization of CPET warm-up parameters by protocol - Ticket 334
- New features in Comment editor, new measurement count badges on Main menu - Ticket 352
- Vyaire/Padoa command line interface for Eolys - Ticket 347, 409
- Usability and ergonomics enhancements - Ticket 356
- INI file backup - Ticket 309
- AMEDTEC ECGpro integration - Ticket 329
- Support for truncated patient ID while loading back earlier CPET via GDT - Ticket 358

- New spirometry features (recording SpO2 and HR, animation, zero countdown, Z-Score on report) - Ticket 361
- GDT compatibility support for Innomed CardioPC/E 3.2 - Ticket 362
- Support for misformatted CSV input on SPIRO interface for Eolys - Ticket 367
- FOT mode switch warning added - Ticket 371
- INI file validator - Ticket 330
- Adapted connectivity for Bluetooth LE devices - Ticket 355
- Customizable semi-automatic PRE/POST function selection for Spirometry - Ticket 376
- Distinguish inactive doctors (closed praxis), change patient-doctor association - Ticket 377
- Customizable PEmax/PImax on report, new and enhanced HL7 export features for SOTE - Ticket 381
- Out-of-canvas drawing highlighted for Spirometry - Ticket 382
- Patient merge feature - Ticket 383
- GUI improvements for Jinbo Medical - Ticket 389
- Enriched CPET data export for data evaluation - Ticket 393
- FOT device support update and intrabreath mode - Ticket 394, 405
- Pulse interface on spirometry for Eolys - Ticket 395
- Manual upload of predicted spirometry parameters on CPET for SSEM - Ticket 397
- Protocol customization via GUI on CPET for TSO Medical - Ticket 403
- Customizable noise filtering on PinkFlow - Ticket 411
- Added support for GSS CO2 and Hummingbird O2 sensors - Ticket 408

[2.00.0.0680] - 2024-01-02

Fixed

- Calibration time lag calculation bug - Ticket 60
- DataID, MasterID anomaly in CHDATA table - Ticket 93
- PWG software couldn't connect - Ticket 125
- Plethy - Diff measurement screen switch bug - Ticket 15
- DLCO test sometime switch to IntraBreath mode - Ticket 76
- PistonXP freezes with patients height = 60cm - Ticket 94
- Threadmill protocol steps table bug - Ticket 176
- Measurement order mixed up - Ticket 183
- Comment window disappears - Ticket 126
- Gaw, sGaw parameter units - Ticket 150
- PXP update database path from ini - Ticket 27
- CPET report 670 message - Ticket 118
- Audiometer USB removal - Ticket 190
- Minor bugfixes

Changed

- Side menu redesign - Ticket 184
- Minimal screen resolution is now 1600x900
- Mouth pressure measurement enhancement - Ticket 12
- Lower PinkFlow low flow threshold ($+1\%$ accuracy) - Ticket 181

- Restrictions on CPET TCP interface - Ticket 142
- Graph zoom with CTRL + mouse wheel
- Graph autozoom with double click
- FOT CV instead of coherence - Ticket 244
- Lactate diagram standardization - Ticket 275

Added

- ATS/ERS 2019 Compliance - Ticket 77
- GLI 2020 and 2021 predictions update - Ticket 186
- New ETSPLs for Piston PDD-401 circumaural audiometric headphones
- Audiometer ETSPL and PELTOR correcton table read from device - Ticket 180
- Serial number and software version on report - Ticket 8
- DB update tool - Ticket 70
- Writing comments for patients - Ticket 121
- Tlco Hb, Dlco Hb and Kco Hb parameters - Ticket 187
- Tlco Hb, Dlco Hb and Kco Hb predictions
- FRC parameter in TGV measurement - Ticket 137
- Diffusion capacity test VA parameter - Ticket 150
- LLN and Z-Score diagram on report - Ticket 14
- SpO2 test: show previous data - Ticket 107
- Printing comments for calibration report - Ticket 127
- Russian language support - Ticket 128
- VE/VCO2 slope on the result tab on Slopes section - Ticket 116
- Increase decrease load from keyboard - Ticket 117
- Automatic flow calibration (PCS-1500/M) - Ticket 182
- Adaptive, scriptable CPET protocol framework - Ticket 197
- Continuous save during CPET examination - Ticket 225
- FOT adjustable measurement duration - Ticket 244
- FOT calibration tube impedance calculation - Ticket 244
- FOT fres, Ax4, Ax5 predictions - Ticket 299
- CPET dead space calculation (VD/VT-Jones and VD/VT ABG) - Ticket 274
- Digital signature

Removed

- Legacy FTDI device compatibility removed
- Legacy MCHPUSB device compatibility removed
- DBSetup removed (compatibility issues)
- User manuals removed from the installer (still available on the installation CD)

[1.84.0.0594] - 2020-10-01

Released **only for CPET** system! Known bugs with Plethysmograph and FOT. This release is only compatible with **BTL CardioPoint version 2.33**.

Fixed

- Rhinomanometer graph and PRE/POST – Ticket 114
- PO2 and PCO2 parameter calculation – Ticket 115
- HRR doesnt correspond with HR predicted - HR max – Ticket 108
- OUES calculation - wrong value – Ticket 110

[1.84.0.0579] - 2020-05-04

Released **only for CPET** system! Known bugs with Plethysmograph.

Fixed

- Comments disappearing totally – Ticket 51
- Error opening record by GDT – Ticket 61
- CardioPoint incomplete measurement report error – Ticket 4
- Warm-up error message pops up strangely – Ticket 52
- Weird record – Ticket53
- Detecting device disconnection – Ticket 59
- Comments printing – Ticket 3
- CPET settings store - Ticket 16
- Average values displayed incorrectly – Ticket 40
- Piston report does not merge to CardioPoint report automatically - Ticket41
- RCP treshold doesnt place to intersection of two lines - - Ticket 42
- CPET: find in DB – Ticket 48
- English for Translation repeatition – Ticket 54
- PXP merge doesn't work when updating 498 version – Ticket 56
- Incorrect icon of Piston appears – Ticket 57
- CPET report contains BMR value, makes no sense – Ticket 58
- Calibration time lag calculation – Ticket 60
- Store port setting – Ticket 62
- CPET - Tab Table is not refreshed after the test is done – Ticket 66
- Table items saved in template change the position – Ticket 71
- Results table (finished test) in Table card must be refreshed to see the values – Ticket 72
- VO2max, VCO2max options not stored – Ticket 73
- New patient not selected (PSQL) – Ticket 74
- Starting second instance will crash – Ticket 46

Added

- Added some contents to the User's Manual – according to TÜV requests – Ticket 49