

WhaleTeq DFS400 Changelog

Test Environment:

- Linux Kernel Version (Ubuntu): 5.15.0-125-generic
- Raspberry Pi Version: Raspberry Pi 4 Model B (4GB RAM)
- Raspberry Pi Linux Kernel Version: 5.10.103-v7l+ (32-bit), 5.10.103-v7l+ (64-bit)
- macOS Version: macOS Sonoma 14.4.1

IMPORTANT:

1. the calling convention is _cdecl
2. only compatible with FW version 0.44.X(DFS400) / 0.42(DFS360) and later

Version 1.0.8.6 - 2026-05-20

1. FIX: adject ECG output frequency
2. FIX: performance waveform frequency with decimal places
3. CHG: output signal max and min

Note:

1. FW V0.46 fix long time play data issue

Version 1.0.8.3 - 2026-01-05

1. CHG: DFS400 check shock times
2. FIX: ECG signal for high frequency

Version 1.0.8.2 - 2025-12-30

1. FIX: ECG abject output range not in 0~5 mV

Version 1.0.8.1 - 2025-12-26

1. FIX: can not set performace waveform frequency
2. FIX: didn't set adject ECG mode

Version 1.0.8.0 - 2025-11-25

1. NEW: ECG page support gain
2. NEW: performance page support adjust ECG parameters
3. CHG: sine/triangle/rectangle amplitude minimum change to 0.25 mV

Version 1.0.7.2 - 2025-10-20

1. NEW: show "Received Shock"

Version 1.0.6.3 - 2025-06-13

1. NEW: auto sequence support horizontal scroll bar

Version 1.0.6.1 - 2025-5-02

1. FIX: pass criteria sync didn't work for range text
2. FiX: ECG page will automatically stop
3. FIX: auto sequence edit itme will not show current ECG signal

Version 1.0.6.0 - 2025-04-11

1. FIX: shock result ECG always save VT
2. FIX: recall and R&R will list unknown type result
3. FIX: connected issue
4. FIX: more accurate identification for shock type
5. NEW: R&R export result features to .csv
6. NEW: auto sequence support play next ECG trigger by time
7. NEW: auto sequence support setting different pass criteria for each item
8. NEW: help and feedback in setting menu

Version 1.0.5.2 - 2024-05-24

1. FIX: DFS360 license issue

Version 1.0.5.1 - 2024-04-26

1. FIX: DFS360 check pulse over range

Version 1.0.5.0 - 2024-04-12

1. NEW: DFS360 support play data
2. CHG: DFS360 SDK merge into DFS400

Version 1.0.4.5 - 2024-02-16

1. FIX: DFS400 play data start/stop quickly will let play data freeze

Version 1.0.4.4 - 2023-12-28

1. FIX: Only DFS400 support play data

Version 1.0.4.3 - 2023-12-07

1. NEW: support play data

Version 1.0.3.15 - 2023-10-31

1. FIX: auto sequence buttons enable behavior

Version 1.0.3.13 - 2023-10-27

1. CHG: NSR frequency increment to 0.1

Version 1.0.3.12 - 2023-10-26

1. FIX: NSR when BPM higher than 300 show wrong waveform at AP for DFS360

Version 1.0.3.11 - 2023-10-26

1. FIX: auto sequence click next button sometime ECG will not show at AP for DFS360

Version 1.0.3.10 - 2023-10-24

1. FIX: auto sequence click next button sometime ECG will not show at AP
2. FIX: NSR when BPM higher than 300 show wrong waveform at AP

Version 1.0.3.9 - 2023-10-06

1. CHG: shock record time synchronize with FW
2. FIX: CPR cycle duration text

Version 1.0.3.8 - 2023-09-27

1. CHG: DFS360 also support larger range for NSR BPM

Note:

1. only compatible with FW version 0.42 (DFS360) and later

Version 1.0.3.6 - 2023-08-24

1. FIX: ECG page didn't show test result

Version 1.0.3.5 - 2023-08-22

1. FIX: auto sequence will stop

Version 1.0.3.4 - 2023-08-16

1. FIX: auto seq switch to next item will show previous result for a short while
2. FIX: waiting mode receive shock need to recount
3. FIX: disconnect need to enable all control

Version 1.0.3.3 - 2023-08-11

1. FIX: auto sequence will stop when turn on loop

Version 1.0.3.2 - 2023.08-10

1. FIX: performace waveform didn't output

Version 1.0.3.1 - 2023-08-09

1. NEW: auto sequence will not stop ECG when in waiting mode
2. NEW: ECG page receive shock need to wait at least 15 seconds
3. NEW: set CPR cycle duration

Version 1.0.3.0 - 2023-06-02

1. CHG: get pulse buffer size by command

Note:

1. only compatible with FW version 0.42.X(DFS400) and later

Version 1.0.2.8 - 2023-05-26

1. CHG: get/clear energy computed flag by command

Version 1.0.2.7 - 2023-04-10

1. FIX: Main form graph zoom in range limit

Version 1.0.2.6 - 2023-03-31

1. CHG: ECG update graph 10 times per second to 20 times per second

Version 1.0.2.5 - 2023-03-30

1. CHG: can't set parameters when ECG is playing
2. FIX: load waveform list clear when remove all waveform in device

Version 1.0.2.4 - 2023-03-28

1. FIX: switch load radio button fast will sleep 1 second

Version 1.0.2.3 - 2023-03-28

1. FIX: load radio button tab order

Version 1.0.2.2 - 2023-03-22

1. FIX: ECG page didn't clean previous result

Version 1.0.2.1 - 2023-03-17

1. NEW: auto sequence default list
2. FIX: 0.xx Joule only show .xx Joule
3. NEW: load waveform editor form add whaleTeq format button

Version 1.0.1.20 - 2023-03-02

1. FIX: recall wrong time/slope/tilt displayed

Version 1.0.1.19 - 2023-02-23

1. FIX: barcode reader license check for different languages

Version 1.0.1.18 - 2023-02-21

1. CHG: load waveform pattern name use load file name
2. NEW: load waveform help message box
3. FIX: barcode reader license behavior
4. FIX: disconnect device can still play ECG waveform

Version 1.0.1.17 - 2023-02-20

1. FIX: check barcode reader license

Version 1.0.1.16 - 2023-02-14

1. FIX: check usage when edit user-defined waveform list

Version 1.0.1.15 - 2023-02-13

1. FIX: user-defined disable after stopping ECG

Version 1.0.1.14 - 2023-02-13

1. NEW: can play single ECG
2. CHG: move user-defined ECG to main form

Note:

1. only compatible with FW version 0.40.1(DFS400)/0.40(DFS360) and later

Version 1.0.1.13 - 2023-02-01

1. FIX: unknow waveform type will crash
2. FIX: MTE waveform over 175 ohm flip wrong direction

Version 1.0.1.12 - 2023-01-31

1. CHG: pulse analysis for RBW
2. FIX: high cpu usage when edit auto list
3. CHG: RBW waveform needs to be flipped

Version 1.0.1.11 - 2023-01-18

1. FIX: keep zooming in analysis graph will crash
2. CHG: DFS360 pass criteria only can change 50 Ω

Version 1.0.1.10 - 2023-01-11

1. FIX: FW update sometime will fail

Version 1.0.1.9 - 2022-12-29

1. FIX: FW update connect device fail
2. FIX: output ECG graph will not play smoothly

Version 1.0.1.8 - 2022-12-27

1. FIX: check box load fixed modify position when form size changed
2. FIX: shock waveform help image need to reset when recall form closed

Version 1.0.1.7 - 2022-12-26

1. FIX: analysis ROI bar sometime can't move separately
2. FIX: not stop when auto list last one is not support ECG
3. FIX: switching 100 and 400 connect issue

Version 1.0.1.6 - 2022-12-22

1. FIX: AP can play ECG when nothing connect

Version 1.0.1.5 - 2022-12-19

1. NEW: fixed load or set separately
2. FIX: manual key-in check spacial characters
3. FIX: analysis not align graphs when click in ROI mode

4. NEW: recall double click will show raw data location in explorer

Version 1.0.1.4 - 2022-12-15

1. NEW: R & R Analysis select 1 data in waveform and joule

Version 1.0.1.3 - 2022-12-15

1. FIX: loop didn't work
2. FIX: live update for DFS360

Version 1.0.1.2 - 2022-12-14

1. FIX: user define <> save to file error

Version 1.0.1.0 - 2022-12-09

1. NEW: can connect DFS360/DFS400
2. NEW: support live update
3. CHG: energy ratio change to charge ratio
4. FIX: NSR frequency and amplitude do not change
5. FIX: R&R analysis can set vol/amp by mainform graph setup
6. CHG: support .csv and .json file for recall and R&R analysis features

Version 1.0.0.8 - 2022-11-07

1. FIX: remove get NSR/waveform parameter API
2. FIX: separate set waveform parameters to amplitude/frequency

Version 1.0.0.7 - 2022-11-04

1. CHG: remove user define ECG license

Version 1.0.0.6 - 2022-11-03

1. FIX: auto list has user define open AP without connection will crash

Version 1.0.0.5 - 2022-11-02

1. FIX: output ECG amplitude and frequency didn't change

2. NEW: recall show pass/fail and its range

Version 1.0.0.4 - 2022-11-02

1. CHG: move file naming and language into Options...
2. CHG: set/get NSR/waveform parameter by command
3. NEW: passing range add sync checkbox

Version 1.0.0.3 - 2022-10-31

1. NEW: pass criteria
2. NEW: recall feature
3. NEW: analysis add ECG played column

Version 1.0.0.2 - 2022-10-25

1. CHG: update UI
2. NEW: support demo mode

Version 1.0.0.1 - 2022-10-21

1. initial version