Release Notes – VA5 Pro

Version 2.78

July 26, 2021

- 16 bit wav encoding (see manual MENU / SETTINGS / Global Settings / Wav Encoding)
- Limits multipliers (enables to increase or decrease limits) and Acc fmin in FASIT (see manual FASIT / FASIT Settings)
- Adash limits enabled for velocity measurement with fmin lower than 10 Hz (see manual Analyzer / Meas Menu / Limits / Adash Limits)
- Adash limits enabled for acceleration measurement with fmin higher than 500 Hz (see manual Analyzer / Meas Menu / Limits / Adash Limits)
- IR Camera warming up (see manual IR Camera / Warming Up)

Version 2.77

July 1, 2021

- IR Image Correction (see manual IR Camera / IR Image Correction)

Version 2.76

May 19, 2021

- Limit values for static measurements (see manual Analyzer / Meas Menu / Limits)
- New measurement type - complex Smax (see manual Analyzer / Complex Smax)
- Minimum and Maximum values during averaging (see manual Analyzer / Edit Measurement / Avg)
- ADS: changing channel without losing readings (see manual ADS / ADS Settings / Measurement Definition)
- New feature - Stethoscope easily accessible from Menu / Stethoscope

Version 2.75

February 2, 2021

- Runup minimum and maximum speed (see manual Global properties / Trigger Settings)
- Negative Averaging (see manual Global properties / Trigger Settings / Negative Averaging)
- Negative Averaging in Bump Test (see manual Bump Test / Settings / Negative Averaging)
- Balancer: circumferential distance of balancing mass (see manual Balancer / Single plane balancing / RUN2 - the RESULT Screen)
- Route status symbols like VA3 (✓, !, .) (see manual Route / Route Status)
- Marking of non-exported routes (see manual The Route / Route measurement)

- Battery percent in About dialog (see manual Global properties / The About...)
- Export bump test to analyzer (see manual Bump Test / Analyse)

Version 2.74

November 23, 2020

- Limits in the route (see manual The Route / Limits)
- Balancer: Unbalance value displayed (see manual The Balancer / Single Plane Balancing)
- Balancer: The "Remove trial" item in basic settings menu (see manual The Balancer / Basic Settings)
- ADS: Vibration scale in animation (see manual ADS / ADS Settings / Vibration Scale)
- ADS: Zoom and move using touch screen (see manual ADS / Buttons for Machine View / Zoom/Move/Rotation

Version 2.72

May 25, 2020

- Adjustable order in amp+phase measurement (see manual The Analyzer mode / amp+phase measurement)
- Adjustable order in phase shift measurement (see manual The Analyzer mode / Phase shift measurement)
- Adjustable resolution in orders measurement (see manual The Analyzer mode / orders measurement)

Version 2.71

April 28, 2020

- Physical unit and frequency range in bump test (see manual Bump Test / Settings)
- Graph unit for spectra (see manual The Analyzer Mode / The Analyzer buffons description / Graph Properties / Graph Unit)
- Screenshots in lossless png format instead of jpg (see manual Global Properties / Screenshot)
- Bearing fault frequencies: BSF2 instead of BSF (see manual The Analyzer Mode / The Analyzer buttons description / Graph Properties / Bearing Faults)

Version 2.70

December 16, 2019

- Adjustable FASIT limits (see manual FASIT / Setup)
- Sensor's name (see manual Sensors Properties / AC Sensors)
- Spectrum value type (RMS, 0-P, P-P) defined globally (see manual Global Properties / Spectrum Settings)

Version 2.69

June 3, 2019

- Export of all unexported projects at once (see manual Global Properties / Export All)
- Time signal with DC offset (gap) (see manual The Analyzer mode/Time signal measurement/Time signal with DC offset (gap)
- Using external USB drive for exports (see manual General information/Connection to the computer/VAx_DISC)

Version 2.67

August 7, 2018

- New highest resolution (speed / 1024) is available for balancing and 1x ampl + phase measurement (see manual The Analyzer mode/New Meas creation/New Advanced/Resolution for details)
- New function "Auto-forward" jump to next point in route (instead of "start next" function), (see manual Global properties/Global Settings/Route Auto Forward for details)
- New "Waiting for retrig" window with more user information (see manual Global properties/Trigger Settings/RunUp Mode)
- New "Waiting for trigger" window with more user information (see manual Global properties/Trigger Settings/Trigger Source)
- Lower "Band fmin" than 10Hz is available for FASIT (see manual The FASIT/Set-up/Band fmin)
- New Zoom and Cursor controll by mouse in A4410 Virtual Unit (see manual A4400 VA4 Pro vs. A4404 SAB/A4404 SAB/Graph control by mouse)

Version 2.66

March 27, 2018

- More than 255 averages enabled
- ACMT detect type RMS or PEAK (see manual The Analyzer mode/ACMT measurement)

Version 2.64

January 24, 2018

- Possibility to play different channels in left and right headphone (see manual The Stethoscope / Playback Settings)
- Full spectrum (see manual The Analyzer mode / Full spectrum)
- Order full spectrum (see manual The Analyzer mode / Order full Spectrum)

Version 2.59

July 6, 2017

- Export of records from data cell to Recorder (see manual The Analyzer Mode/Next Meas functions/Export to Records)
- Export of records from data cell to VA4_DISC (see manual The Analyzer Mode/Next Meas functions/Export to VA4_DISC)
- "Remove trial mass" question after trial run (see manual The Balancer/Single plane balancing/RUN 2 - the TRIAL MASS screen)

- Different number of blades fot each plane (see manual The Balancer/Balancer Settings/Basic Settings)
- Balancing mass splitting (see manual The Balancer/Single plane balancing/RUN 2 - the RESULT screen)
- Change of blades (see manual The Balancer/Single plane balancing/RUN 2 - the RESULT screen)
- Various correction mass radius for each plane (see manual The Balancer/Balancer Settings/Rotor Settings)
- Temporary records deleting (see manual The Recorder/Temporary records)

Version 2.58

May 16, 2017

- Time synchro averaging for spectra (see manual The Analyzer Mode/New Meas creation/New Advanced/Averaging)
- Ampl Tacho (see manual Global Properties/Trigger Settings/Use Ampl Tacho)
- You can turn on/off orders in filtered orbit (see manual Analyzer/Filtered Orbit Measurement)

Version 2.57

March 23, 2017

- Order spectrum (Analyzer/Order spectrum)
- FFT output normalization - power spectrum, power spectral density, ... (Analyzer/Graph Properties/FFT Output)
- PAS (=Phase Assigned Spectrum) as FRF result (Analyzer/New Mead Creation/New Advanced)
- "Manual Entry" parameter in DC measurement (Analyzer/DC measurement)
- A4410 installer

Version 2.56

January 6, 2017

- Filtered orbit measurement (Analyzer/Filtered Orbit Measurement)
- Ultrasound measurement (Analyzer/Ultrasound)
- Circular view for time waveform (Analyzer/Graph Properties/View (time waveform)

Version 2.55

December 6, 2016

- Export to wav Settings (Recorder/Editing of Record)
- Min speed (Sensors properies/Tacho)

Version 2.54

November 4, 2016

- Minor fixes

Version 2.53

October 26, 2016

- Ultrasound Module
- Route sensors checking (menu Global/Global Settings/Check Route Sensors)
- Cursor on spectrograph
- Tacho marks in orbit graph

Version 2.52

September 22, 2016

- New notes format
- Settling Prolongation (Sensors/Settling Prolongation)
- Balancer: negative value of trial mass enabled (removing mass)
- Bumptest: integration in spectrum
- Route creation in instrument

Version 2.51

June 20, 2016

- Averaging types for static values (linear, maximum, minimum, median)
- Reference spectrum drawed bellow signal

Version 2.50

June 3, 2016

- Faster saving data in route

Version 2.49

April 26, 2016

- New appearance of FASIT
- FASIT as meas type

Version 2.48

April 5, 2016

- Variable Speed Detection
- True and Scaled detect types

Version 2.47

February 11, 2016

- Appearance dialog (Global/Appearance)

Version 2.46

September 29, 2015

- New skin

Version 2.45

August 25, 2015

- Manualy entered speed valid for whole route

Version 2.44

August 20, 2015

- Minor fixes

Version 2.43

August 14, 2015

- Initialization delay shortened

Version 2.42

May 26, 2015

- Minor fixes

Version 2.39

May 16, 2015

- New module: ADS

Version 2.41

May 14, 2015

- Global/Global Settings/Record Analysis Start
- Imperial unit in basic meas

Version 2.40

May 11, 2015

- Minor fixes

Version 2.38

March 11, 2015

- Minor fixes

Version 2.37

January 21, 2015

- Minor fixes

Version 2.36

January 13, 2015

- New data type: record
- Export of all meases in a set to csv

Version 2.35

December 12, 2014

- Number of used ac channels in point list
- Channel number in meas list

Version 2.34

October 21, 2014

- Export of runup trends

Version 2.33

September 19, 2014

- Up to 8388608 samples is time waveform
- Up to 3276800 lines in spektrum

Version 2.32

September 18, 2014

- New coherence vizualization in fresp graph
- New runup mode - time or revolution
- Export to uff - all meases in history

Version 2.29

July 11, 2014

- Virtual unit: up to 4 SABs possible to connect to one PC

Version 2.27

April 24, 2014

- Selectable runup trend time axe - real time, relative (Global/Runup/Trend Time Axe)
- Parameter "Trend Length" from "Global/Global Settings" removed to "Global/Runup"
- Integration enabled in octave spectrum
- Selectable y-axe in octave spectrum (linear, logaritmic, decibel)
- Total mass in balancer (Balancer/Total Mass)
- Parameter fmin is possible to set to any value greater than one even if integration used
- Ord cursor in spec graph (frequency / speed frequency)
- Voltage units allowed for g-demod
- New image in balancer: overhung rotor for 2 planes
- Serial number in virtual unit's licence file name
- Export of trend data into csv file
- Headers in csv files

Version 2.25

March 3, 2014

- New detect type of wideband: AVG
- Help in instrument (Global/Help)

Version 2.24

January 29, 2014

- Runup trend divided into parts with selectable length (Global/Runup)

Version 2.22

October 11, 2013

- "Enter Speed" item for set: you can enter the speed before measurement
- Tacho sensor: pulses per rotation as floating point number
- "Stop if ICP Error" in global settings
- "Route START Button" in global settings: "start next" enables immediate start of measuring on next point

- "Graph Lines" in spectrum graph properties (Graph Properties): drawing spectrum methods (continuous / discrete)
- Fresp: amplitudes view ("Graph Properties/Fresp View")
- Clock on screen
- New date format - mm/dd/yyyy + time displayed with a.m./p.m.
- Project list: time of last modification displayed on status bar
- Runup trend: x-axe notes in format hh:mm:ss
- Amplitudes ratio in phase shift
- Polar graph in phase shift
- Screenshots (Global/Screenshot)

Version 2.21

September 9, 2013

- Trends during measurement
- New data type: phase shift
- New type of trigger: manual sequential (same as manual but waits between averages)
- Phase in spectrum
- Dynamic factor in Balancer
- Recorder cursor in absolute time
- Envelope changed to Demod

Version 2.20

June 7, 2013

- Button "Save" for settings dialogs
- Integration in orbit
- Envelope measurements: ENV fmin minimal value decreased to 5Hz (instead of 100Hz)

Version 2.19

May 27, 2013

- New module: Bump Test
- Spectrum: time signal view, editing of parameters of spec windows ("Graph Properties/Spec View")
- RMS and 0P values in time signal graph
- Total value in spec graph
- Stethoscope: setupable playback speed
- Speed period view in time signal, orbit, ACMT and cepstrum (Graph Properties/Speed Period...)
- Bearing faults view in time signal, ACMT and cepstrum (Graph Properties/FTF Period...)
- Synch Table in spectrum (Graph Properties/Synch Table)

Version 2.18

March 25, 2013

- Zoom spectrum

Version 2.17

January 15, 2013

- Periodic cursor in ACMT
- Setupable edge for external trigger ("Global/Trigger Settings/External Trig Edge")
- Clear Last Data in set (point)

Version 2.16

December 3, 2012

- Longer time waveform (up to 1M samples)
- Free memory indicator during record acquisition

Version 2.15

November 23, 2012

- New data type: cepstrum
- New detect types of wideband: Crest and Kurtosis
- Sound playback during the record analysis
- Data export to uff ("Meas/Save to uff")
- Data export to wav ("Meas/Save to wav")
- Data export to csv ("Meas/Save to csv")
- Saving instrument settings as profile ("Global/Profiles")
- Tacho sensor settings replaced from "Global/Trigger Settings" to "Sensors/Tacho"
- Route: "Measurement is not completed" notification
- Bearing and ISO 10816 settings for each channel ("Sensors/AC1 - AC4")
- Menu "Sensors/All Bearings": same bearing for all channels
- Menu "Sensors/All ISO": same ISO for all channels
- Export analyzer project to runup ("Project/Export to runup")
- Export runup project to analyzer ("Project/Export to analyzer")
- Button "Find": finds item in list
- User defineable graphs colors ("Global/Global Settings/Background Color - Create")
- Balancer: remove balancing masses ("Balancer/Basic Settings/Balancing Masses")

Version 2.14

June 18, 2012

- Evaluation of ISO 10816 divided to A, B, C, D
- Continuous record preview
- Remote desktop control
- New data type: octave analysis
- New data type: sound level
- New data type: equivalent sound level

- New module: octave analysis
- Trigger settings: new item Pulses per rotation

Version 2.13

March 26, 2012

- Enter value of cursor position by number possible ("Graph Properties/Cursor Position")
- Orda and aps view in RMS, 0P, PP ("Graph Properties/Detect Type")
- ICP channels powered permanently, shorter measurement initialization
- Balancer: balancing vector in balancing protocol
- Peak hold averaging
- Record preview during analysis
- FASIT: ISO 10816
- Graph wideband: ISO 10816 settings and limits displayed if used
- Envelope measurements: ENV fmax minimal value decreased to 200Hz (instead of 1600Hz)
- Statistics of static trends ("Graph Properties/Statistics Table")

Version 2.12

February 6, 2012

- Speed control replaced by Trigger control
- Balancer: new settings dialogs
- Balancer: recomended trial calculation
- FASIT: new settings dialog
- Lubri: new settings dialog
- FASIT: harmonics displayed as triangles bellow axe

Version 2.11

January 5, 2012

- Virtual unit
- Version 2.09
- November 28, 2011
- Centerline values A,B,X,Y displayed together
- DC gap channel in ac channel settings + orbit with gaps ("Sensors/DC gap channel")

Version 2.08

November 9, 2011

- Spec cascade: first in front or last in front view ("Graph Properties/Order Z")
- New mode: Lubri
- Selectable record analysis speed: fast or real time ("Global Settings/Record analysis speed")

Version 2.07

September 30, 2011

- New mode: FASIT
- Balancer: advisor removed
- Balancer: keep trial in two planes possible

Version 2.06

August 10, 2011

- Time cursor in orbit
- VA4_DISC check during startup
- Export of records to WAV ("Project/Export to WAV")
- Selectable range of phase -180°,180° or 0°,360° ("Global Settings/Phase range")
- Bearing database + bearing faults view in spec ("Global/Bearing Settings") + ("Graph Properties/Bearing Faults")

Version 2.05

June 28, 2011

- New mode: stethoscope

Version 2.03

May 16, 2011

- Temporary change settings of sensors in records ("Sensors")

Version 2.02

April 22, 2011

- Graphs with axes and grids
- Graphs alignment ("Global Settings/Align Graphs")
- New cursor types: harmonic, periodic, delta, sideband ("Graph Properties/Cursor")
- Orda trends
- Export of records ("Project/Export")
- Text notices ("Project/Notices")
- ISO 10816 alarms ("Global/ISO Machine Settings")
- Spec peak list ("Graph Properties/Peak List")
- Spec view in RMS, 0P, PP ("Graph Properties/Detect Type")
- Fresp: time signal view, editing of parameters of spec windows ("Graph Properties/Fresp View")
- Cursor movement linear or maxs ("Global Settings/Cursor Type")
- Background colors of graphs ("Global Settings/Background Color")

Version 2.01

February 23, 2011

- First release