SMART PRODUCTS FOR SMART PEOPLE

X BALANCER + ™

X BALANCER + ™

Front view containing vibration inputs for left and right plane and the tachometer sensor

Back view containing USB Type - C for fast charging and communication with the application in the PC

- **Durability & Protection**
  - Rugged IP65-rated housing: fully protected against dust and water ingress.
  - Built to withstand harsh industrial environments and impacts.

X BALANCER + ™

Introducing the innovative features of the X BALANCER + ™

- **Easy to Use:** The X BALANCER + ™ is designed to be user-friendly, with all necessary knowledge available in the application, presumably making it easy for operators to perform balancing tasks.
- **Speed range:** An extended range of rotor speeds, spanning from a remarkable low of 30 RPM up to an astonishing 180,000 RPM.
- **Wireless:** Bluetooth communication establishes a seamless connection between the device and the X BALANCER + ™ application, enhancing the convenience of its use on Android tablets or Windows-based PCs/tablets. This wireless technology eliminates the hassle of wires, allowing users to effortlessly engage with the application. It empowers users to access services, data, and functionalities wirelessly, resulting in a smoother and more user-friendly experience on their chosen device.
- **Applicability:** It can be used for a variety of rotating machines, encompassing pumps, fans, mills, mowers, stirrers, and blowers.
- **ISO Standards:** The balancing process can be conducted in accordance with ISO Standards, ensuring that the balancing is performed to internationally recognized standards.
- **Multiplane:** The device is capable of performing balancing in either one or two planes, which allows for comprehensive balancing adjustments.
- **Weight Distributions:** Weight distributions can be fixed to specific positions, likely enabling precise adjustments during the balancing process.
- **Standard Rotors:** The software includes standard rotors, simplifying the implementation process by providing predefined options.
- **Add vector:** The process of adding vectors enables the combination of unbalanced weights to visually represent a single weight at a specific angle.
- **Material reduction:** Allow the user to reduce mass by drilling a hole on the plane instead of adding weight.
- **Balancing Reporting:** Balancing results can be easily reported, allowing users to document the outcomes of their balancing efforts.

X BALANCER + ™

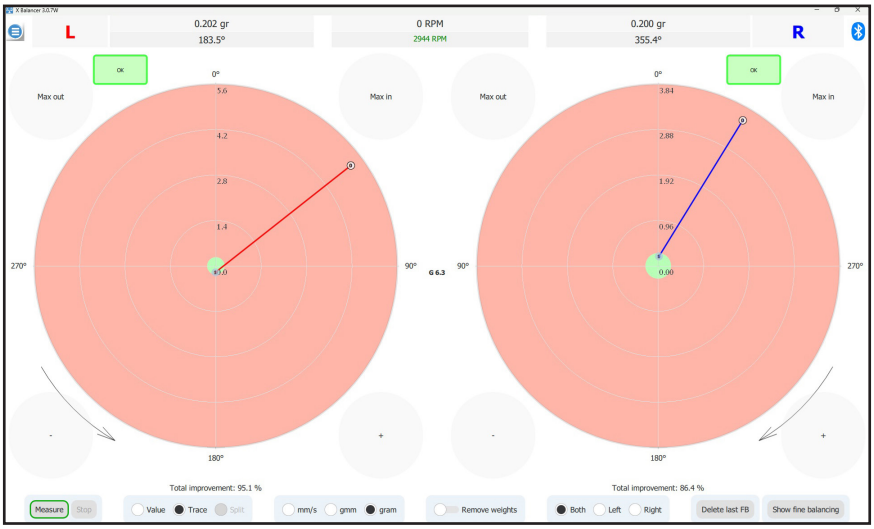
X Balancer +™ with Extended Analysis

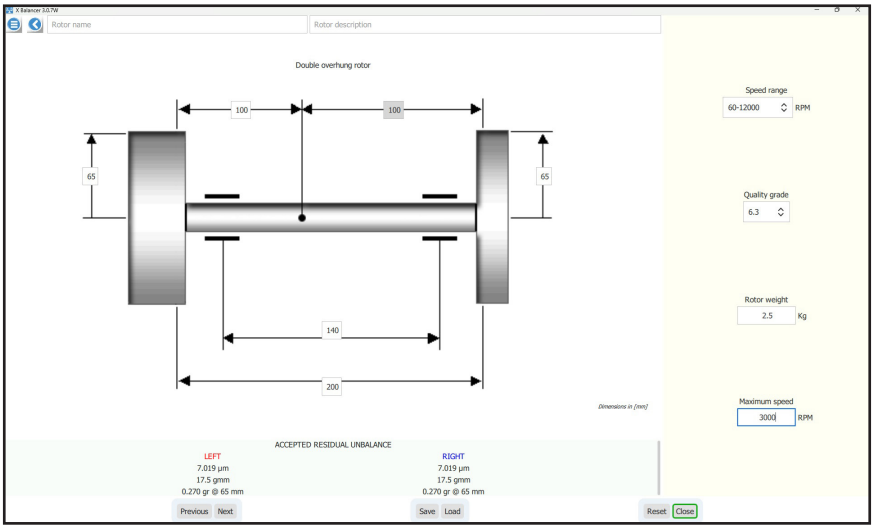
The all-in-one solution for precision balancing and advanced vibration diagnostics.

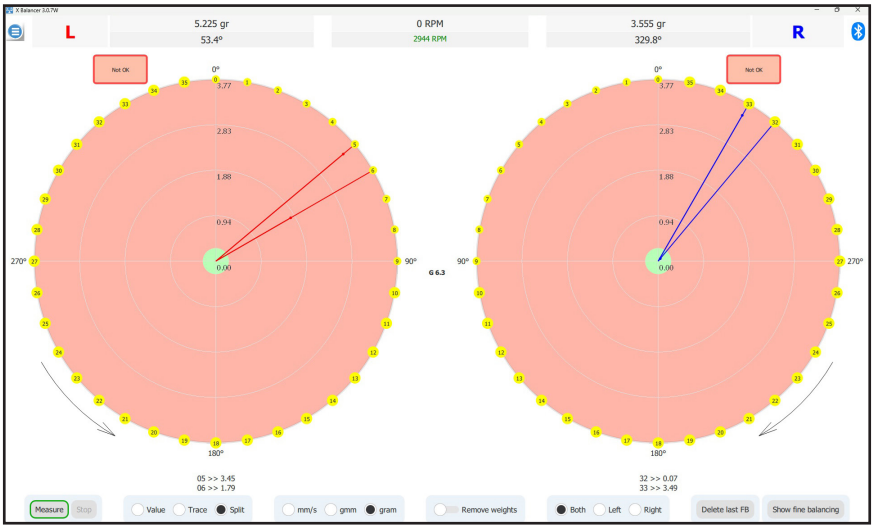
- **Spectrum Measurement**
  - Analyze system vibrations across a wide frequency range (2 Hz – 12,800 Hz).
  - Resolution options down to 0.5 Hz for highly detailed diagnostics.
  - Supports pre- and post-balancing measurements to verify improvements.
  - Results viewable in multiple units (g, mm/s, µm) and detection types.
  - Compatible with accelerometers, velocity sensors, and proximity probes.
- **Coast-Down Analysis**
  - Detect mechanical resonances and critical speeds during machine shutdown.
  - Captures vibration levels and phase angles as functions of rotational speed, with results available in multiple units (g, mm/s, µm) and across various detection types.
  - Intuitive diagrams pinpoint resonance zones and help prevent future issues.
- **Total Value Measurement**
  - Monitor vibration intensity across the same frequency ranges as Spectrum.
  - Works with multiple transducer types, units, and detection methods.
  - Automatic integration in balancing workflows for seamless diagnostics.
- **Bearing Condition Monitoring**
  - Uses accelerometers to assess bearing health over various frequency ranges.
  - Results displayed in the gBC unit with RMS, Peak, and PP detection options.
  - Early detection of defects protects critical machine components.
- **Integrated Automation**
  - Automatic Total Value and Bearing Condition measurements during balancing.
  - Results clearly presented in the Initial Run menu and Balancing Report.
  - Helps detect mechanical issues before balancing, ensuring accurate results.
- **Upgrade Options**
  - Contact your authorized distributor to purchase a license ticket and upgrade your X BALANCER + ™.

X BALANCER + ™

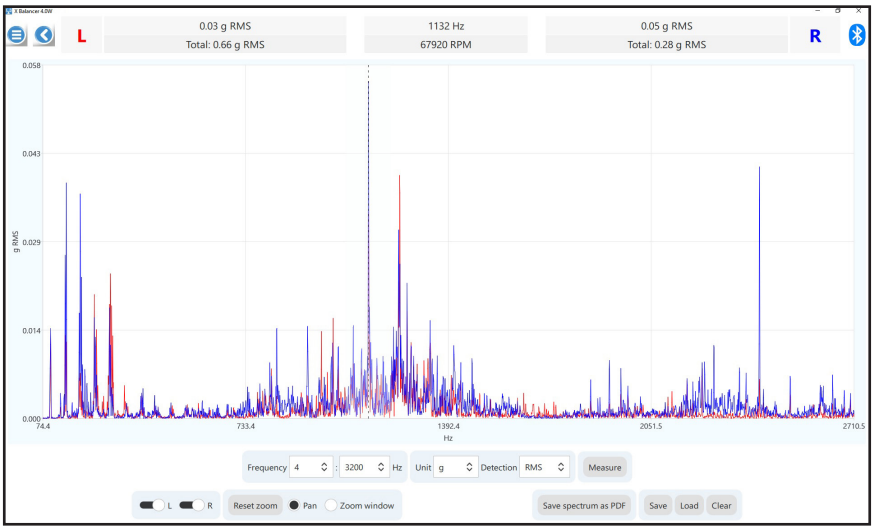
A summary of some selected menus from the application

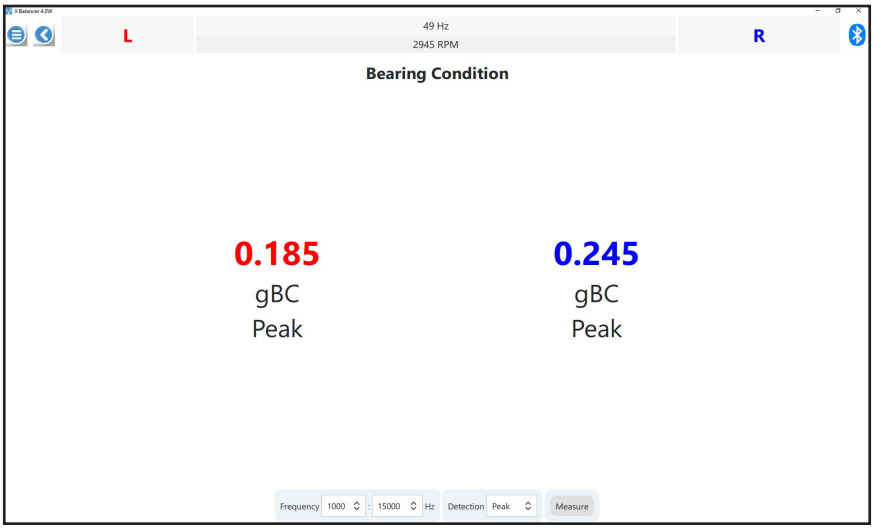


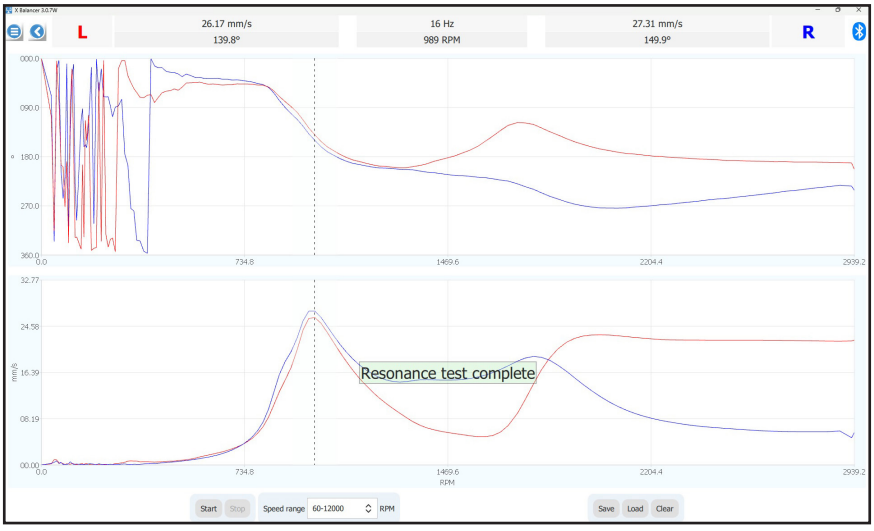




X BALANCER + ™


L
0.03 g RMS
Total: 0.66 g RMS
1132 Hz
67920 RPM
0.05 g RMS
Total: 0.28 g RMS
R
g RMS
Hz
Frequency
Unit
Detection
RMS
Measure
Reset zoom
Pan
Zoom window
Save spectrum as PDF
Save
Load
Clear


L
49 Hz
2945 RPM
R
Bearing Condition
0.185
gBC
Peak
0.245
gBC
Peak
Frequency
Detection
Peak
Measure


L
26.17 mm/s
139.8°
16 Hz
989 RPM
27.31 mm/s
149.9°
R
Resonance test complete
RPM
Start
Stop
Speed range
60-12000
RPM
Save
Load
Clear

X BALANCER + ™

Electrical properties

Digital	ADC	24 bit	
	Dynamic range	120 dB	
Rotor speeds	Low range	30 - 1200 RPM	
	Medium range	60 - 12000 RPM	
	High range	6000 - 18000 RPM	
Signals in	AC inputs	All standard ICP accelerometers (4mA/24V), velocimeters or proximity sensors	
	External reference	0.5 to 24 V	
Measurements	Amplitude range	0 to 80 g, peak	Depending on transducer
	Accuracy	0.01 g ± 1 % for non integrated 0.1 mm/s ± 2 % for single integrated 1 µm ± 3 % for double integrated	
	FFT lines	Up to 12800	
	Resolution	0.5 Hz or 1 Hz	Depending on frequency range
	Spectrum range	From 2 Hz up to 12800 Hz	
	Total Value range	From 2 Hz up to 12800 Hz	
	Bearing condition range	From 500 Hz up to 15000 Hz	
Power	Battery	3.7 V, 6.8 Ah Li-ion	Fuel gauge smart battery pack
	Operating time	12 hours typical use	
	Charging	2 hours up to 80% with fast charger	4 hours fully charged
	Charger	Fast charger QC 3.0 compatible	
Temp.	Operating Storage	-20 °C to +70 °C (-4 °F to 158 °F) -30 °C to +80 °C (-22 °F to 176 °F)	
Size	Dimensions L x W x H Weight	215 x 150 x 46 mm 700 gr	

Version 1.4_EN