

qb701 - Laser Shaft Alignment System

Misalignment can have devastating effect on machinery, resulting in unplanned downtime, need for bearings replacement, shortened machine life span etc. While this issue is easy to mitigate with an advanced laser alignment system, the latter can be costly. We are proud to introduce qb701 - an entry level laser shaft alignment system that offers all of the essential functionality for the price of a dial indicator kit!



Main Features

- easy and precise shaft alignment
- wireless transducers with rechargeable batteries
- large 30mm CCD detectors
- distance between transducers on S and M machines - up to 10 m
- extra light wireless transducers weigh just 115 g
- electronic inclinometers allow for convenient measurement in any shaft position
- a rich set of options including horizontal and vertical machine alignment, direct PDF reports etc.
- high capacity flash drive for measurements and reports storage, USB interface with PC
- ConSpect freeware for measurements archiving and reports generating

Technical Specifications

	Control Display
CPU	Ultra low power ARM Processor running at 533 MHz
Memory	128 MB RAM, 128 MB Internal Flash, 4GB Ultra High Speed Memory
Display	Sunlight-readable backlit TFT colour graphic display with AR coating
Resolution	QVGA, 320 x 240 Pixel; Dimensions: 3.5 inch diagonal
Keyboard elements	Navigation cursor cross with up, clear and menu keys; Alphanumeric keyboard with dimensions, measure and results hard keys
LED indicators	On-screen Icon indicator for laser status and alignment condition 2 LED (Red+Green) for wireless communication and battery status
Power supply	Operating time: up to 10 hrs (LiPo rechargeable battery)
External interface	1 x USB host for external memory (up to 32GB) 1 x USB slave for PC communication / Power bank quick charge RS232 (serial) for S & M transducers
Integrated wireless communication	up to 100m
Charging adapter	AC charging adapter /Direct USB charging
Environmental protection	IP 65 (dustproof and water spray resistant), shockproof
Accuracy of system	< 1% ± 0,01 mm

Temperature range	0 - 40 °C (32 - 104 °F)
Operating humidity	< 90 %
Carrying case dimensions	390 × 310 × 192 mm (15.4 × 12.2 × 7.6 in)
Total weight (incl. Case)	3.5 kg (7.7 lbs)
Warranty	1 years standard warranty + 2 additional year upon registration

CE conformity	EC guidelines for electric devices (2004/108 EWG) are fulfilled
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Measuring units

Housing material	ABS plastic
Type of laser	Diode laser
Laser wavelength	650 - 675 nm
Laser safety class	2
Maximum laser power	1 mW
Distance between measuring units	Up to 10 m (33ft)

Type of detectors	Single axis CCD, 30 mm (1.2 in)
Cable	Integrated wireless communication Class 1 (up to 100m)
Dimensions	87 × 79 × 39 mm (3.4 × 3.1 × 1.5 in)
Weight	115 gram (4.1 oz)
PC download	Plug in to PC by USB socket
Memory	4GB, thousands of alignments
Softfoot check	Yes
Alignment tolerance check	Yes
User editable tolerances	Yes
Shaft diameter range	20 - 1000 mm
Battery	up to 12 hours continuous use (rechargeable LiPo battery)
Sensors	Single axis CCD, 30 mm (1.2 in); electronic inclinometer ±0,1°

Communication	Integrated wireless communication, up to 100m
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Miscellaneous

System Measuring distance	up to 10 m (33 ft.)
Measuring errors, displayed resolution	<1% ±10 µm; 1µm / 10 µm (0.04/0.4 mils)
Shaft diameters	20 to 250 mm (0.8 to 10 in.) diameter with supplied chains
Mounting system	2 × V-brackets; 2 × chains; 2 × threaded rods per V-bracket

Complete system contents:

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| 1. Display unit (batteries included) | 7. USB cable |
| 2. 2 mechanical shaft fixtures | 8. Quick Start Guide |
| 3. 2 locking chains with tightening pin | 9. Calibration certificate valid for 2 years |
| 4. Chain included for shaft diameters 20 - 150 mm (1.2 - 5.9 in) | 10. CD with instructions for use and instructional video |
| 5. Optional chain for shaft diameters 150 - 500 mm (5.9 - 20 in) | 11. Carrying case |
| 6. Measuring tape | |

*Specification subject to change without notice.

Representative: