

E710



EXPANDABLE



QUICK START



40° MIN.
ROTATION



BARCODE
ENTERING

 **Bluetooth**[®]



4-Page Overview

For complete details and Technical Data about the system, please see our 12-page brochure.



SHAFT ALIGNMENT

Professional measurement and alignment system for rotating machines

EASY-LASER[®]



SIMPLE AND EFFECTIVE

FOR ALL NEEDS

ONE SYSTEM, MANY POSSIBILITIES

Easy-Laser® E710 offers what is probably the most competent and cost-effective measuring system for rotating machines on the market! Using a single instrument, you now have the potential to troubleshoot and prevent wear and breakdowns in your machines. It is the perfect measurement system for all important stages of machine set-up.

Easy-Laser® E710 allows:

- SHAFT ALIGNMENT
- SHEAVE/PULLEY ALIGNMENT
- VIBRATION MEASUREMENT
- TWIST MEASUREMENT OF BASES
- STRAIGHTNESS MEASUREMENT
- BEARING PLAY CHECKS

EASY TO USE

Measurement and alignment should be easy! That is the fundamental philosophy behind our measurement systems. When we talk about simplicity we mean several things, for example, simple to place or mount the measurement equipment on the measurement object, easy to perform the measurement and easy to interpret the measurement result. Simple to use = quick and easy!

MEASUREMENT PROGRAMS

HORIZONTAL MACHINES



Horizontally coupled machines often consist of a pump and motor, but there can also be other types of machine such as a gearboxes and compressors. The measuring units are mounted on each side of the coupling with cable or wireless communication to the display unit. Then follow the step-by-step instructions on screen (see next page).

VERTICAL/FLANGE-MOUNTED MACHINES



Alignment of vertical and flange-mounted machines. Shows centre offset, angular error and shim value at each bolt.

CARDAN/OFFSET-MOUNTED MACHINES



Alignment of cardan/offset mounted machines. (Accessory Cardan bracket is required.)

SHEAVE/PULLEY ALIGNMENT



Using the system you can align sheaves and pulleys with digital precision. (Requires the BTA Digital accessory.)

VIBRATION MEASUREMENT



You can measure vibration levels (inch/s) and bearing condition (g-value). (Requires the Vibrometerprobe accessory.)

FLATNESS MEASUREMENT OF BASES



With the Values program you can, in principle, measure any type of geometry, for example flatness and twist of the base.

CHECKING BEARING PLAY



The Values program can be used e.g. when one wants to measure as with dial gauges and to check bearing play. With the standard equipment and completely normal set up on the machine!



Easy-Laser® is used to align generators and gearboxes in wind turbines of a number of sizes and makes. Special brackets are available (accessories) for alignment with locked rotors, which increases the safety for the operator.

Engines, gearboxes and propeller shafts on ships are aligned using Easy-Laser® system. Thanks to flexible brackets you can install the equipment in the most appropriate place; shaft, coupling or flywheel.

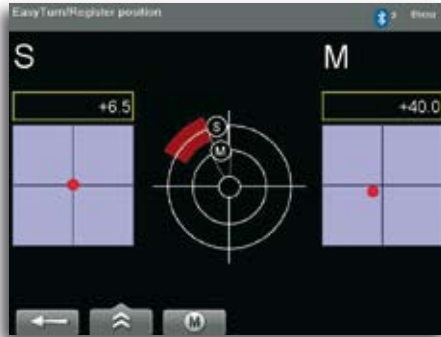
Easy-Laser® is used to align pumps and motors for all types of industries and installations. Correctly set-up and aligned machines are a requirement for achieving optimum service life and minimal energy consumption.

E710

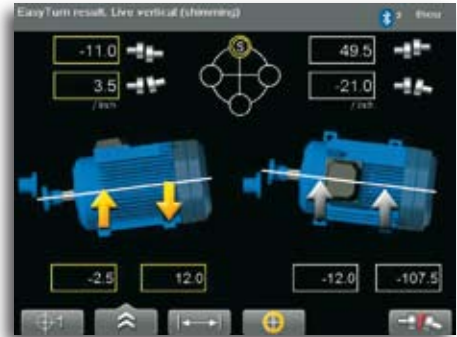
MEASUREMENT PROCEDURE



1. Enter the distances between measuring units and the machine feet. The barcode reader makes this a quick procedure! (This example describes the Horizontal program.)



2. Take the measurement values in three positions with as little as 20° between. It is clearly visible on the display when the laser beam hits the detector.



3. The live values are used to adjust the machine. For clarity the adjustment is displayed both graphically and numerically. The shim and adjustment values are colour coded: red=outside tolerance, green=inside tolerance.

SMART FUNCTIONS

SOFT FOOT CHECK



The program shows which foot (feet) should be corrected for soft foot.

TOLERANCE CHECK



Measurement results can be checked against pre-defined tolerance tables or values you determine yourself.

LIVE-ANY-ANGLE 360°



This function allows adjustment of the machines live with the measuring units positioned anywhere around the shaft.

REFERENCE FOOT LOCKING



Allows you to lock any pair of feet on the machine. Gives great freedom when aligning base-bound or bolt-bound machines.

FLEXIBLE FEET CONFIGURATIONS



The software can handle machine design of all types: two pairs of feet, three pairs of feet, pair of feet before the coupling etc.

THERMAL GROWTH COMPENSATION



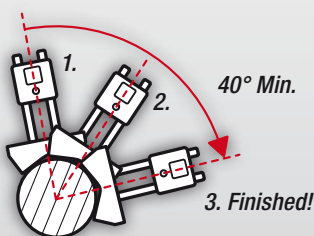
Calculates the correct shims and adjustment values even when the machines expand considerably from a cold to a hot state (operating temperature).

EASYTURN™ FUNCTION



With the EasyTurn™ function you can start measurement anywhere on the turn.

Turn the shafts with the measuring units to three positions in any direction with as little as 20° between to register the measurement value. Measurement is complete!



NEW FEATURE!

BARCODE READER



The barcode reader (accessory) is used to enter the machine data before measurement. At the first measurement of the machine apply the adhesive bar code label. Next time the machine is checked the dimensions are read in directly. Also any compensation values. This makes it easier for new operators who don't need to search through long lists of machine templates with descriptions that are difficult to understand. Quite simply, easier to do correctly!



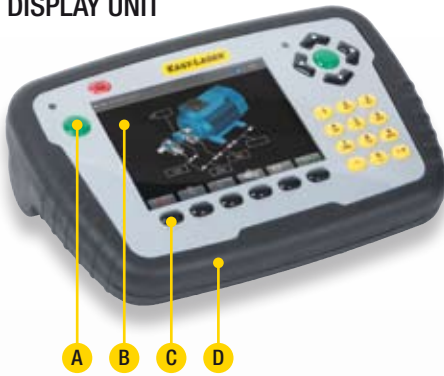
DOCUMENTATION



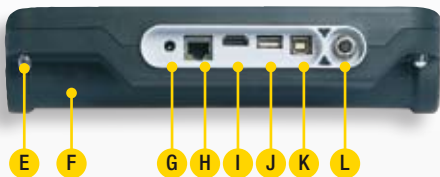
When measurement is complete it is possible to generate a PDF report directly in the measurement system's display unit. You can, of course, save all measurements in the display unit's internal memory. You can also easily save desired measurements on your USB memory, or connect directly to your PC.



DISPLAY UNIT

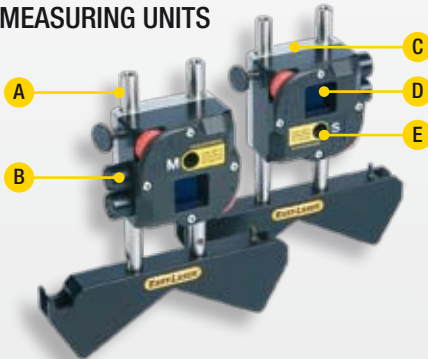


- A. Two Enter buttons, for left and right-handed users
- B. Large, easy to read 5.7" colour display
- C. Proper buttons for clear feedback
- D. Robust, rubber coated design



- E. Mounting for shoulder strap
- F. Battery compartment
- G. Connection for charger
- H. Network connection
- I. Expansion port
- J. USB A
- K. USB B
- L. Easy-Laser® measurement equipment

MEASURING UNITS



- A. Rods made of stainless steel. Extendable.
- B. Well protected connectors
- C. Stable aluminium design
- D. PSD (2 axis)
- E. Laser aperture

WIRELESS UNITS

Easily inserted into the connector on the measuring unit (2 pcs.).



A COMPLETE SYSTEM CONTAINS

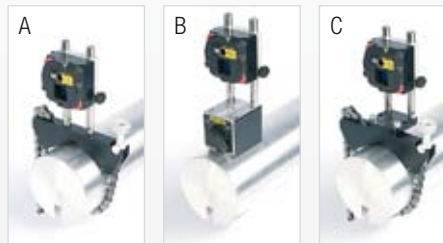
- 1 Measuring unit M
- 1 Measuring unit S
- 1 Display unit
- 2 Bluetooth® units
- 2 Cables 78.7" [2 m]
- 2 Shaft brackets with chains
- 2 Extension chains
- 2 Magnet bases
- 2 Offset brackets
- 4 Rods 4.72" [120 mm]
- 4 Rods 2.36" [60 mm]
- 1 Manual
- 1 Quick reference manual
- 1 Measuring tape 9.8' [3 m]
- 1 USB memory
- 1 USB cable
- 1 Charger (100–240 V AC)
- 1 Tool box
- 1 Shoulder strap for display unit
- 1 Optical cleaning cloth
- 1 CD with documentation
- 1 Carrying case (Drop tested 10 feet/3 m). Dust and water proof.

Bluetooth® units included!



System Easy-Laser® E710 Shaft, Part No. 12-0440

STANDARD BRACKETS



- A. Shaft bracket with chain
- B. Magnet base
- C. Offset bracket

ACCESSORY BRACKETS



- D. Magnetic bracket, Part No. 12-0413
- E. Thin shaft bracket, Part No. 12-0412
- F. Sliding bracket, Part No. 12-0039

BARCODE READER

Accessory. With 25 pcs. barcode stickers, Part No. 12-0619



ENDURIO™ POWER MANAGEMENT



Easy-Laser® E710 is equipped with our Endurio™ Power management system. This ensures that you never have to stop in the middle of a measurement because the battery has run out. If the internal battery's charge level starts to drop, simply insert the batteries into the integrated battery compartment and continue measuring.

UPGRADE AND EXPAND



If you wish to expand functionality in the future, the software in the display unit can be upgraded via the internet or by connecting a USB memory containing the new software. Also, by using clever accessories, you can adapt the systems for your own needs, now and in the future as your measurement requirements change. It is cost-effective.

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05-0483 Rev1



ISO9001
CERTIFIED

