

UPAD

Fixturlaser UPAD^{XA}



We have done it again!

Fixturlaser is the first laser alignment specialist to introduce a tool for shaft alignment that is ultra portable – the Fixturlaser UPAD^{XA}.

The tool is attached to your arm allowing you to work in complete freedom and mobility during the entire measurement and alignment process; it is your work freedom-in-a-box.

EXPRESS ALIGNMENT by Fixturlaser





The alignment system, Fixturlaser UPAD^{XA}, has all the capabilities of our state-of-the-art laser shaft alignment system, Fixturlaser XA: the user friendly and animated graphical interface, wireless data transfer, and automatic registration of the measurement points, etc. This is all packaged in an angled display box equipped with a Velcro[®] fastening that enables attaching it to your arm - your work freedom-in-a-box!

Fixturlaser UPAD^{XA}

freedom-in-a-box

FIXTURLASER UPAD^{XA} FEATURES

EXPRESS EVALUATION WITH ANIMATED AND COLOR DISPLAY SCREEN

3D Macromedia[®] Flash[™] is used to simplify the measurement, evaluation, and the alignment process, figures and arrows will show you how to proceed with the process. Color coded values will help you interpret and evaluate the results.

EXPRESS DATA TRANSFER

With the elimination of wires connecting the transmitters and detectors to the display unit, you have complete mobility to move around in your work place. The wireless transmitters have built-in Bluetooth units allowing for express data transfer.

EXPRESS MODE

Incorporating inclinometers in both measurement units, have allowed us to introduce a new function to our users – the Express Mode. When rotating the shaft and the measurement units are kept still in the measurement position, the system will automatically register its value.

EXPRESS DOCUMENTATION

The unit is equipped with a USB slave port. When connected to a PC, it will appear as a mass storage device in your PC; files are therefore easily transferred to your hard drive or other storage media of your choice.



The Fixturlaser UPAD^{XA} has a transreflective, back-lit full VGA color touch screen. High resolution 3-D Macromedia® Flash™ animations guide you safely throughout the measurement and alignment process. During the actual adjustment, arrows will you show in which direction the machine needs to be adjusted.

On-screen guidance **step-by-step**

1. USER-SPECIFIED TOLERANCE TABLE values



We advise that you align in accordance with the machine manufacturer's tolerances. If these are not available, there is a standard tolerance table in the system. If required, you can also enter your own tolerance values.

2. GREEN LIGHT MEANS GO



The green light indicates that the laser beam has hit the detector and that you can start your measurements. Clear step-by-step prompts show what to do in order to complete the measurement process.

3. POP-UP WINDOWS FOR DATA ENTRY



Only the information you need is shown on the screen. For example, when you need to enter a distance, a pop-up keyboard appears.

4. EXPRESS MODE™



In the Express Mode method, the alignment condition can be calculated by recording three points while rotating the shafts at least 60 degrees.

5. REGISTRATION OF MEASUREMENT POINTS



After recording the first point, the other points are taken automatically when shafts are rotated to a new green position and are kept in its position for more than two seconds.

6. COLOR CODED RESULTS



The results from the entire measurement are shown directly on the display. The color codes indicate if there is a need for alignment. Green indicates within tolerance, orange near tolerance and red out of tolerance.

7. 3-D ANIMATIONS PROMPT YOU THROUGH THE ALIGNMENT



The display shows how you should adjust the machine to arrive within the selected tolerances. Adjust until the icons show green, which means the alignment has arrived within the tolerances. The arrows at the feet of the machine guide you continuously by showing the direction of machine adjustment.

8. EXTRA DISTINCT WITH ENLARGED RESULT FIGURES



The result figures can be shown in an extra large and distinct format for better visibility during the alignment process. This applies to both coupling errors and foot values.

9. MEMORY MANAGER



The full alignment result – both the horizontal and vertical values of the angular error and the parallel error as well as the foot values – is shown in the same screen. When you are finished, you can name your alignment and save it in the memory manager.

Technical specifications

FIXTURLASER UPAD^{XA}

Weight (incl. all standard parts):	7,9 kg (17,42 lbs)
Storage Temperature:	-20 to 70°C (-4 to 158°F)

CASE

Material:	High Impact ABS Plastic
Sealing:	Dust, water (5m/16 feet), and air tight with air pressure compensation valve
Drop Test:	3 m (10 feet) onto concrete floor
Dimensions:	460 mm x 365 mm x 185 mm (18,1 in x 14,4 in x 7,3 in)

DISPLAY UNIT

Housing Material:	Anodized aluminium and high impact ABS plastic over molded with TPE rubber
Operating Temp:	0 to 50°C (32 to 122°F)
Storage Temp:	-20 to 70°C (-4 to 158°F)
Long term storage temp:	Room temp. 18 to 28°C (64 to 82°F)
Relative humidity:	10 – 90%
Weight:	336 g (0,74 lb) with batteries
Dimensions:	128 mm x 90 mm x 85 mm (5,0 in x 3,5 in x 3,3 in)
Environmental Protection:	IP 54
Processor:	Intel X-Scale, 520 MHz
RAM:	128 Mb
Flash Storage Memory:	512 Mb (app. 10 000 measurements)
Display:	Transflective color TFT-LCD backlit with touchscreen
Display Size:	3,5" diagonal (70 x 55 mm)
Display Resolution:	Full VGA 640 x 480 pixels
Color Depth:	262 000 colors
Interface:	Touchscreen with enhanced transmission
Pheripials	1USB slave port, 12Mbps
Wireless communication	Class I Bluetooth
Power Supply:	High performance rechargeable Li-Ion battery and external power supply
Operating Time:	10 - 15 hours typical use
Battery charging temperature	5 to 35°C (41 to 95°F)
LED Indicators:	Unit status and battery status indicators

MEASURING UNITS

Housing Material:	Anodized aluminum and high impact ABS plastic over molded with TPE rubber
Operating Temp:	0 to 50°C (32 to 122°F)
Relative Humidity:	10 – 90%
Weight:	186 g (6,6 oz)
Dimensions:	79 mm x 77 mm x 33 mm (3,1 in x 3,0 in x 1,3 in)
Environmental Protection:	IP 65
Laser:	650 nm class II diode laser
Laser Line Fan Angle:	6°
Laser Power:	< 1 mW
Measurement Distance:	Up to 10 m (33 feet)
Detector:	CCD
Detector Length:	30 mm (1,2 in)
Detector Resolution:	1 µm (0,04 mils)
Measurement Accuracy:	0,3% ± 7 µm (0,3% ± 0,27 mils)
Ambient Light Protection:	Optical filtering and sunlight signal suppression
Inclinometer Resolution:	0,1°
Inclinometer Accuracy:	±0,5°
LED Indicators:	Laser transmission and status indicators
Laser Safety:	See yellow label below

V-BRACKETS

Fixture:	V-fixture for chain, width 20 mm (0,79 in)
Material:	Anodized aluminum
Shaft Diameter:	Ø 20-450 mm (3/4 in -18 in)
Rods:	4 pcs 85 mm (3,4 in) and 4 pcs 160 mm (6,3 in) extendable to 245 mm (9,6 in)

WIRELESS PACKAGE

Housing Material:	PC/ABS plastic
Operating Temp:	0 to 50°C (32 to 122°F)
Weight:	60 g (2,1 oz) without batteries
Dimensions:	97 mm x 47 mm x 36 mm (3,8 in x 1,85 in x 1,4 in)
Wireless Communication:	Class II Bluetooth transmitter
Power Supply:	3 AA (LR6) batteries
Operating Time:	10 hours continuously
LED Indicators:	Transmitter and battery status indicators



The Fixturlaser UPAD^{XA} system offers a wide range of optional accessories and expansion kits in order to measure with high accuracy under difficult or special conditions.

optional accessories



Fixture for Non-Rotating Shafts^{XA}



Extension Fixture^{XA}



Magnetic Base^{XA}



Magnetic Brackets^{XA}



Thin Chain Fixture^{XA}

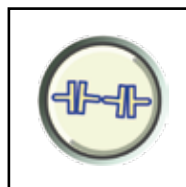
optional software



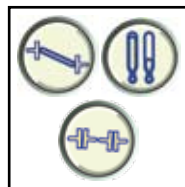
Fixturlaser OL2R^{XA}



Fixturlaser Offset^{XA}



Fixturlaser Machine Train^{XA}



Fixturlaser XA Software Package



More information is available in the Fixturlaser XA brochure.

ELOS FIXTURLASER AB

P.O. Box 7 | SE - 431 21 Mölndal, SWEDEN | Phone: +46 31 706 28 00 | Fax: +46 31 706 28 50 | E-mail: info@fixturlaser.se | www.fixturlaser.com

ELOS
FIXTURLASER