Laser transmitters
XT20 XT22

Flatness and level equals reliability

Setting up your machinery correct is a vital part of early defect elimination. With the XT laser transmitters you satisfy the requirements for flatness and level mentioned in standards (e.g. ISO and ANSI/ASA). This means reduced maintenance expenses and increased asset capacity in the long run.

When checking flatness, be it on a machine foundation or a flange, you assure they meet the specified requirements for installation or operating conditions.

Precise and easy to use

XT20 and XT22 are the most user-friendly laser transmitters ever designed. Wireless connection simplifies operation and reduces set up time. The electronic levels stabilize faster, resulting in a better user experience and quicker measurement jobs. Electronic zeroing eliminates the cumbersome work caused by manual set up and associated errors that can follow.

As a user you will also appreciate the newly developed fine-adjustment function which makes it significantly easier to point the laser beam onto the detector at long distances.

The two transmitters are at their core the same, but some things differ, addressing different user needs.

Connected reliability

The XT transmitters have wireless connection to our XT Alignment App. This means that during measurement you get warning messages about events that can affect the result negatively, for example if the transmitter position has changed, or temperature changes inside the unit. Digital read-out (in the app or in the built-in display) means accuracy will not be affected by user interpretation or possible bad ambient lighting. We can also let the app guide you step-by-step when calibrating the levels before measuring. That's user friendly!

The laser transmitter serial number and time since latest calibration will be saved with the measurement report. This traceability means added reliability for your measurement jobs.

Versatility in every sense

Both transmitters can be used with the Straightness, Basic Flatness, and Values programs.[A] Fact is, with the Values program you can tackle almost any type of geometrical measurements! A long lasting rechargeable battery provides an operating time of up to 30 hours. The transmitters have lots of mounting possibilities, various attachments for brackets, and repositionable attachment magnets. There's a solution for every measurement situation.

Compatibility

You need measuring unit XT70-M as detector, which is standard with system XT770. It can also be purchased separately. If you would like to use XT20/XT22 with one of your existing Easy-Laser D- or E-series systems your will need to download the free XT Alignment App to be able to calibrate the digital levels.[B]

XT20

XT20 are for those who take flatness and straightness measurements for machine installations, and for those who check surface flatness on manufactured parts. XT20 is water and dust protected (IP55). This is the choice for maintenance and installation technicians. Excellent also for checking flange flatness.

XT22

XT22 in addition also lets you point the laser beam perpendicular to the laser plane. A built-in vertical precision level also lets you level it when mounted on its side so the laser plane sweeps vertically. XT22 provides more options for geometrical measurements, and even higher accuracy and precision thanks to fiber laser technology, among other things. With this transmitter you can literally measure anything!

[A]At introduction of XT20 and XT22 available GEO programs are limited, more will be added succesively. Keep track on our web site!
[B]The design of the XT transmitters differ in many ways from previous models like for example D22. They can therefore not be exchanged straight off. Ask your local distributor before purchase.
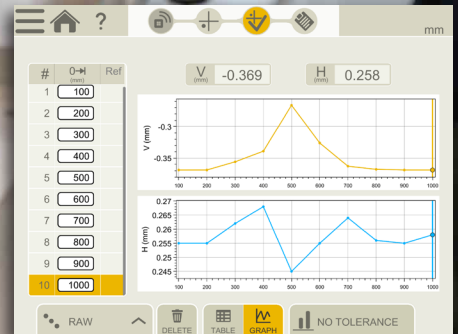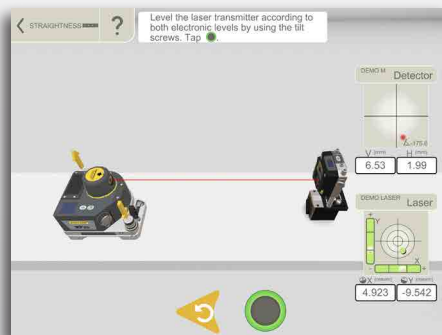
The Straightness program.
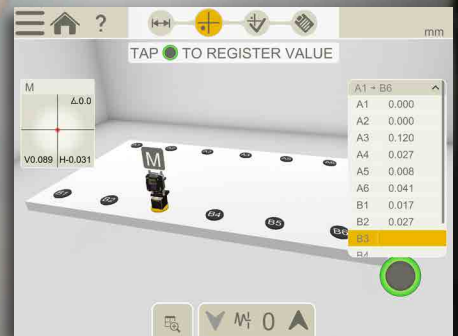
The program for basic flatness.

Connected!

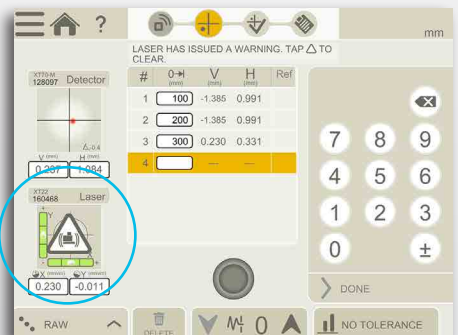The transmitters are wirelessly connected to the Easy-Laser XT Alignment app. This means many new possibilities and benefits.

Step-by-step guidance

Calibrating the laser plane level is made effectively and rationally thanks to the step-by-step guidance in the measurement program. You are up and measuring quicker, and with a more reliable result.
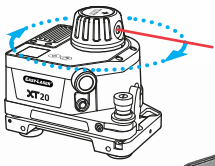
Measurement environment control

The built-in sensors warn for things that can affect the measurement reliability, e.g. shock and temperature changes inside the unit. Thanks to wireless connection you immediately see on the display that something has occured, and can act accordingly.

Flatness made easy

XT20

A. Super stable rotatable head, still easy to turn. No need for locking/unlocking screw. One aperture.

B. Marking for every 45°.
For quick rough alignment.

C. Fine turning of laser beam head.

D. Charger connection. [1]

E. Tilt adjustment (x2).
Tilt table with large adjustment angle, ±1.3° (±23 mm/m [±23 mils/inch]).

F. Solid aluminium core ensures rigid design.

G. Release lever.
Also for dampening the strong magnet force when placing the transmitter on the surface.

H. Fastening of separate magnet bases (x2).

I. Rubberized grip surface.

J. M6 thread (x4) for safety strap screw and other accessories/adaptations.

K. Countersunk profile for fingers, for better grip when lifting the transmitter.

L. Super magnets (x3)

M. Square design makes it easy to position in a corner of an object, it also clearly indicates tilting angles and simplifies calibration.

N. Clear TFT colour display On/Off, Change display view.

(Inside)
Wireless connection, up to 40 m [132']. [2]
Chargeable Li-Ion battery with long operating time, up to 30 h.
Electronic precision levels (Horizontal x2) with super quick stabilization.
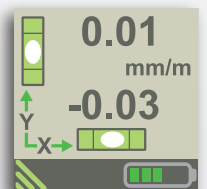
0.01 mm/m
-0.03

XT20 Laser transmitter - selected specifications	
Measurement distance	20 m [66']
Laser beam straightness	± 0.01 mm [± 0.4 mils]
Laser plane flatness	± 0.01 mm/m [± 0.01 mils/inch]
Laser head fine turning	1:132 gear ratio
Squareness between laser beams	N/A
Environmental protection	IP55. Designed for outdoor use (pollution degree 4).

[1] Can also power the transmitter during measurement. Please note that this will heat the transmitter up, which might affect stability.
[2] Depending on environment and display unit used.

# Geometric excellence

XT22

A. *Super stable rotatable head, still easy to turn. No need for locking/unlocking screw. Two apertures.*

B. *Flippable angular prism.*
Provides a laser beam perpendicular to the flatness plane.

C. *Super fine turning of laser beam head. Simplifies beam positioning to detector on very long distances like the 40 m [132'] maximum.*

(Inside)
Electronic precision levels:
(Horizontal x2, Vertical x1).
Super quick stabilization.

Fiber-coupled laser diode technology, for extremely straight laser beam.
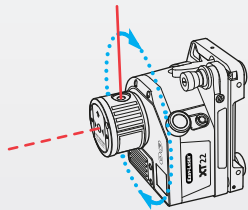
XT22 has a vertical precision level, making it possible to place and level it also on its side.
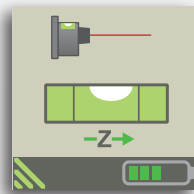
As a user you will appreciate the newly developed fine-adjustment function which makes it significantly easier to point the laser beam onto the detector at long distances.

Fiber-coupled laser diode

The fiber-coupled laser creates an extremely smooth laser beam profile, free from reflections and irregularities. This means that the laser beam will have very good optical properties in terms of straightness.
The light from a laser diode is coupled into a single mode optical fiber that filters away all disturbances in the beam. The output beam from the fiber is extremely circular and perfect Gaussian beam profile (cross section), making it ideal for propagation over a large distance with minimum increase of the beam width and maintaining a very high straightness accuracy.

XT22 Laser transmitter - selected specifications	
Measurement distance	40 m [132']
Laser beam straightness	± 0.003 mm [± 0.12 mils]
Laser plane flatness	± 0.01 mm/m [± 0.01 mils/inch]
Laser head fine turning	1:1320 gear ratio
Squareness between laser beams	± 0.01 mm/m [± 0.01 mils/inch]
Environmental protection	N/A. Designed for industrial use (pollution degree 3).

[1]Can also power the transmitter during measurement. Please note that this will heat the transmitter up, which might affect stability.
[2] Depending on environment and display unit used.

Versatile mounting

Multiple possibilities
The XT laser transmitters are designed for precision and ease-of-use. The Multi-bracket provides a lot of extra, versatile mounting possibilities.

A: The three super magnets can be mounted at many different positions, making it possible to also place the transmitter on a small surface, when needed. Here are three examples.

B/C: Use the Multi-bracket as adapter for mounting on tripod, vertically or horizontally.*

D: Use it to mount the transmitter vertically on a magnet base.*

E: Use rods on regular magnet bases to position the transmitter at required height. For example when you need to place the transmitter on a lower position than the surface to be measured.

F: Mount one or two magnet bases directly on the tilt table.

G: Washers to place on magnets when used on fine, non-magnetic surfaces.

G

A
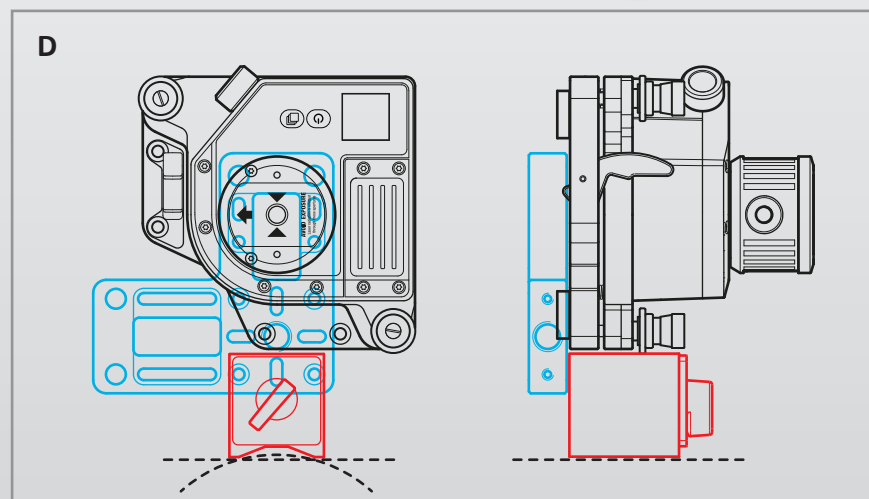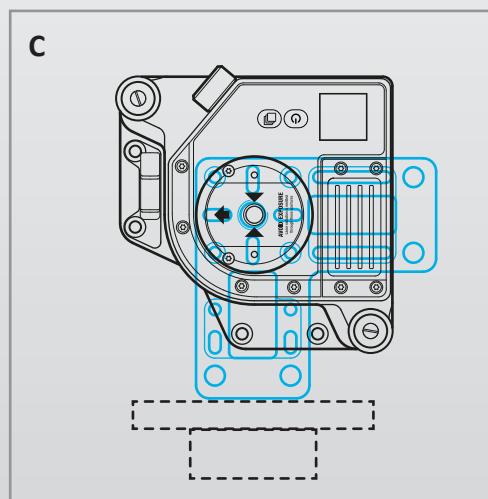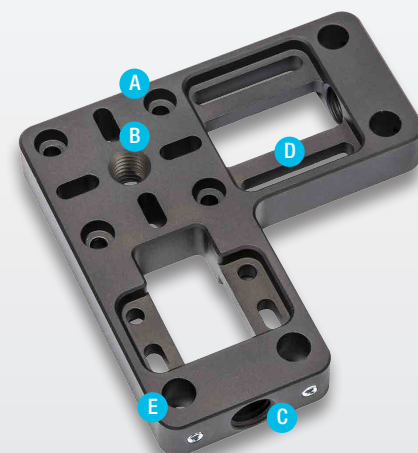132x132 mm [5.2x5.2"]   82x82 mm [3.2x3.2"]   53x53 mm [2.1x2.1"]

B
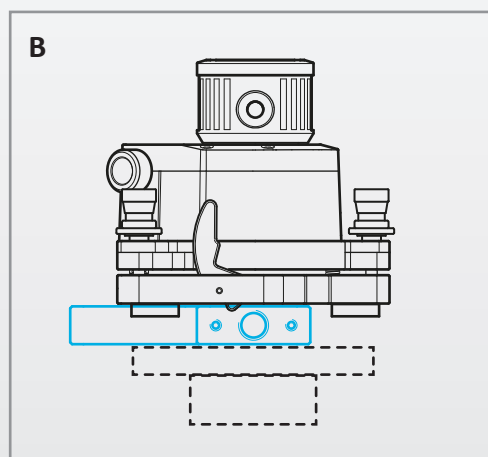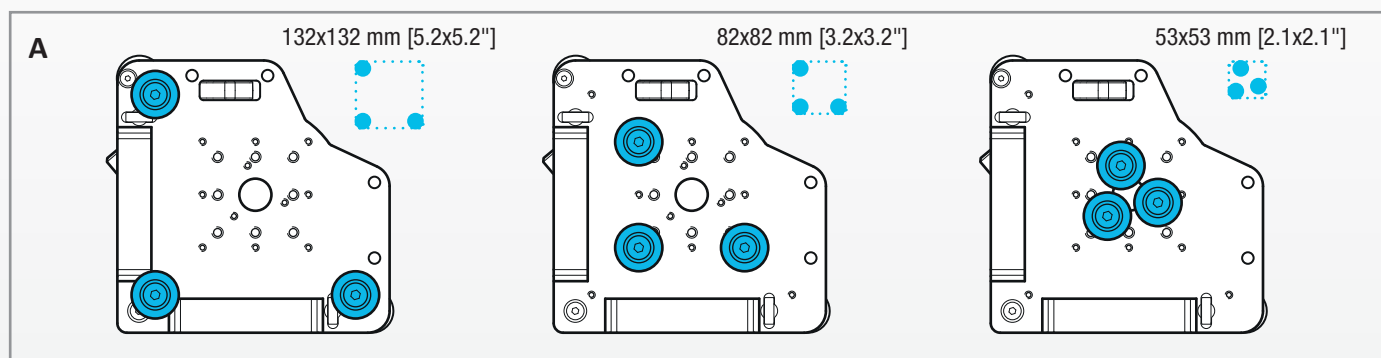
A. Holes for mounting of Multi-bracket (x6) [B/C/D/E]

B. Tripod mount threads 5/8-11 UNC. For horizontal mounting. [B]

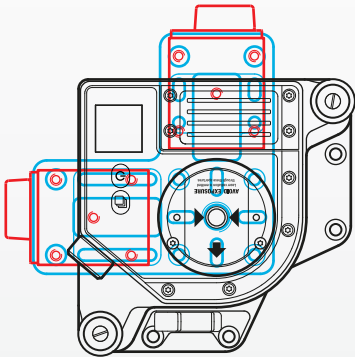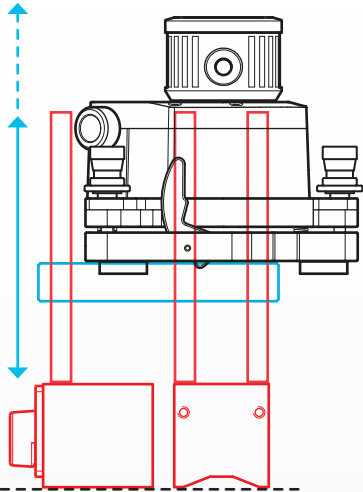*C.* Tripod mount threads 5/8-11 UNC (x2). For vertical mounting. [C]

D. Slit for arbitrary positioning of mounting screws M6 (x4)

E. Holes for mounting on rods (x4). With locking screws. [E] *

C

D

* Magnet bases and tripod not included.

E 120x120 mm [4.7x4.7"]

F 115x115 mm [4.5x4.5"]   60x70 mm [2.4x2.8"]

2   1

Accessories

Safety strap
Part No: 03-1406
Bahco 3875-LY2, for 3 kg [6.6 lbs] weight. Screw 01-1402 for fastening the strap is included with transmitter.
Please note that safety regulations differ between countries.

Magnet base
Part No: 12-0013
Magnet base with On/Off function and many optional rod mounting possibilities. Holding power 800N.
Three sides are magnetic.

Rods
Stainless steel. Extendable.
Part No: 12-0987
4 pcs. 120 mm [4.72"]
Part No: 12-0060
4 pcs. 240 mm [9.44"]
(Other lengths also available.)

Sliding table for tripod
Part No: 12-0202
Sliding table to mount on a tripod. Mounted using 5/8-11 UNC thread. Allows for 150 mm [5.9"] slide of the unit.

Tripod
Part No: 12-0269
Min./Max. height 500–2730 mm [19.7–107.5"]

Machine pin
Part No: 01-1333
For mounting the transmitter in a spindle, for example. Clamping pin diameter 20 mm [0.79"], clamping length 60 mm [2.36"]. 5/8-11 UNC.
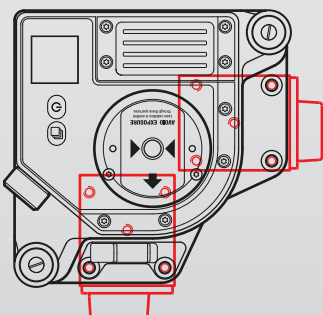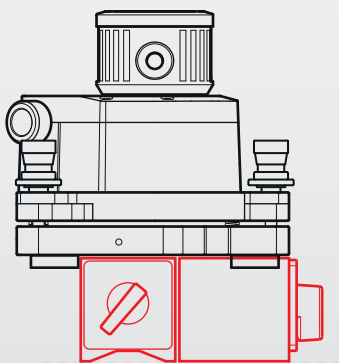
XT20 and XT22 Laser transmitters	
Type of laser	XT20: Diode laser
	XT22: Fiber-coupled diode laser
Laser wavelength	630–680 nm
Laser Safety Class	Class 2
Output power	< 1 mW
Beam diameter	XT20: 6 mm [0.24"] at aperture, 10 mm [0.39"] at 20 m [66']
	XT22: 6 mm [0.24"] at aperture, 13 mm [0.51"] at 40 m [132']
Working range	XT20: 20 m radius [66']
	XT22: 40 m radius [132']
Communication	BT Wireless technology
Warning indications	Tempearature drift and shake/vibration
Connections	Charger
Type of battery	Heavy duty Li-Ion chargeable
Operating time	Up to 30 hours continuous use
Warmup time	15 min
Operating temperature	-10–50 °C [14–122 °F]
Charging temperature (battery)	0–50 °C [32–122 °F]
Storage temperature	-20–50 °C [-4–122 °F]
Relative humidity	10–95% non-condensing
Number of precision levels	XT20: 2 pcs Horizontal
	XT22: 2 pcs Horizontal, 1 pc Vertical
Precision level range	± 10 mm/m [± 10 mils/inch]
Precision level accuracy	± 0.02 mm/m ±1% [± 0.02 mils/inch ±1%]
Precision level sensitivity	0.001 mm/m [0.001 mils/inch]
Laser beam straightness	XT20: ± 0.01 mm [± 0.4 mils]
	XT22: ± 0.003 mm [± 0.12 mils]
Laser plane flatness	± 0.01 mm/m [± 0.01 mils/inch]
Squareness between laser beams	XT20: N/A
	XT22: ± 0.01 mm/m [± 0.01 mils/inch]
Laser head fine turning	XT20: 1:132 gear ratio
	XT22: 1:1320 gear ratio
Environmental protection	XT20: IP55, designed for outdoor use (pollution deg. 4)
	XT22: N/A, designed for industrial use (pollution deg. 3)
TFT display	240x240 pixels, RGB colour
Housing material	Anodized aluminium + PC/ABS + TPU
Dimensions	XT20: WxHxD: 147x126x152 mm [5.79x4.97x5.98"]
	XT22: WxHxD: 147x136x152 mm [5.79x5.35x5.98"]
Weight	XT20: 2065 g [72.86 oz]
	XT22: 2264 g [79.86 oz]

Easy-Laser® XT20 Laser transmitter (kit), Part No. 12-1293	
1	XT20 Laser transmitter
1	Multi bracket
1	Charger (100–240 V AC) with cable
1	DC to USB adapter, for charging
1	Set of tools and fastening items
1	Cleaning cloth for optics
1	Quick manual
1	Carrying case, WxHxD: 460x350x175 mm [18.1x13.8x46.9"]
	Weight (kit): 5.6 kg [12.3 lbs]

Easy-Laser® XT22 Laser transmitter (kit), Part No. 12-1294	
1	XT22 Laser transmitter
1	Multi bracket
1	Charger (100–240 V AC) with cable
1	DC to USB adapter, for charging
1	Set of tools and fastening items
1	Cleaning cloth for optics
1	Quick manual
1	Carrying case, WxHxD: 460x350x175 mm [18.1x13.8x46.9"]
	Weight (kit): 5.8 kg [12.8 lbs]

LASER 2 | CE | ISO 9001 CERTIFIED | 3 YEAR WARRANTY | GLOBAL SUPPORT