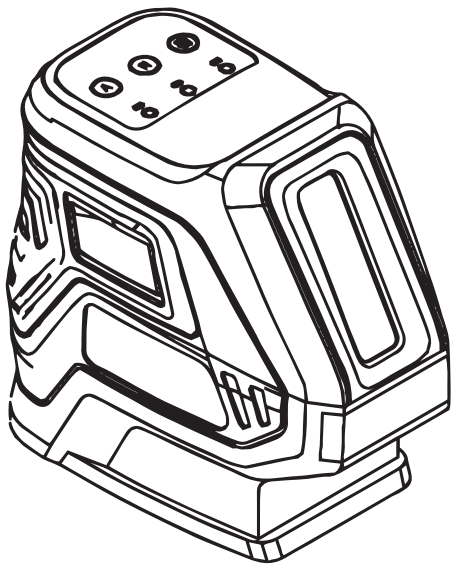


# USER MANUAL

011.20R SATURN 2.0 RED  
011.20G SATURN 2.0 GREEN



EN ENGLISH

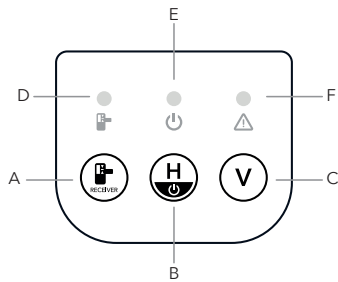
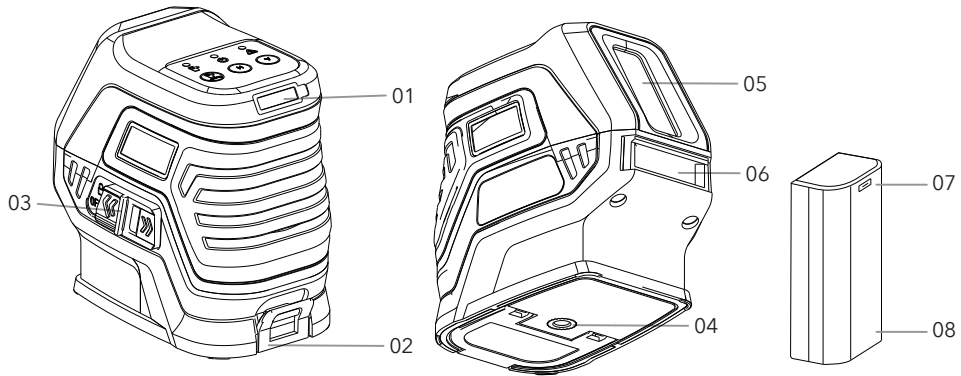
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## OVERVIEW



### ■ KEYPAD

- A Receiver mode button
- B Horizontal laser line / Power button
- C Vertical laser line
- D Receiver mode LED indicator
- E Power LED indicator
- F Slope warning LED indicator



## ▮ CASE

- 01 USB-C socket (for power)
- 02 Battery compartment
- 03 ON/OFF - Pendulum lock switch
- 04 1/4" Tripod connection
- 05 Vertical laser exit
- 06 Horizontal laser exit
- 07 USB-C connector (for charging)
- 08 LI-ION battery

## QUICK START GUIDE

KEYPAD	NAME	FUNCTION	
A	Receiver mode button	Press	(De-)activate receiver mode (pulse)
B	Horizontal laser line/ Power-button	Press	(De-)activate horizontal laser lines
		Hold	Turn on/off device in Locked (manual slope) mode
C	Vertical laser line	Press	(De-)activate vertical laser lines
D	Receiver mode LED	Off	Receiver mode is off, detection with receiver is not possible
		Red	Receiver mode is on, laser line pulses and detection with receiver is possible
E	Power LED	Flashin	Battery low (around 30mins remaining)
		Green	Device is switched on
F	Slope warning LED	Orange flashing fast	Device is out of self-levelling range
		Orange flashing slow	Slope active (pendulum is locked, laser not levelled)



## SAFETY

Please read the complete safety instructions in the booklet delivered with this device.

Use extreme caution when the laser beam is turned on.

Do not aim the laser beam at any gas that may explode.

LASER RADIATION – Class 2 Laser product. – Do not stare into beam.

## BATTERY

Type of battery: 7.4V Li-ion battery (2200 mAh)

Type of charger for battery: 5V-1A

### NOTE

The battery should only be charged with the included cable.

Charging only happens when the cable is plugged in and connected with the USB-C connector (for charging) [07] which is situated on the battery [08].

Connecting the cable to the USB-C socket (for power) [01] does NOT charge the battery!

The product can also be powered directly from main power when the battery is unable to power the device (i.e. battery is missing/not charged).

Using the USB-C port (for power) [01] on the device and the included power supply cable, the product will work normally.

When the [E] Power LED starts flashing, the battery is running low. This warning tells the user that the device will work for  $\pm 30$  minutes before powering off.

## FIRST TIME USAGE

Remove all protection foils.

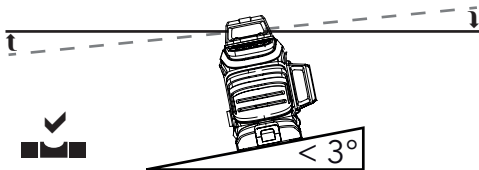
## USE

### ■ AUTO-LEVELLING

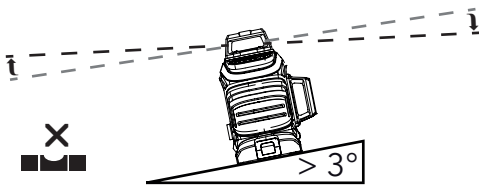


Slide the ON/OFF / Pendulum Lock switch [03] to the ON side. The switch will hide 'ON' and 'OFF' becomes visible. The power LED indicator [E] will be turned on. The pendulum levelling mechanism is released, and the instrument will align on its own.





The Horizontal laser line will light up. Make sure that the instrument is placed on a flat surface with a maximum slope of 3,5°.



If the slope exceeds 3,5°, the lasers will start blinking. The slope warning LED indicator [F] start blinking too.

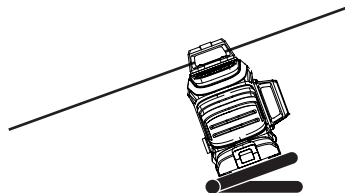
## ■ SLOPE MODE



To work in manual slope mode, the pendulum needs to be blocked. Make sure the ON/OFF / Pendulum Lock switch [03] is in the OFF position (OFF is covered, ON is visible).

- Switch on the device by holding the Horizontal laser line / Power button [B] for approx. 3 sec. until the laser switches ON.

## — MANUAL SLOPE



- Now you can manually tilt the laser using a tripod with a tilting head to get the exact desired slope.

### NOTE

In slope mode, the laser lines no longer levelled automatically. A slow flashing warning indicator [F] will remind you the pendulum is blocked and the laser is not able to level.

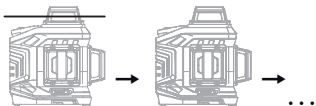
We advise to use a slope adapter (optional) or tripod with tilting head (optional) to set slopes.

### ■ SWITCHING ON/OFF LASER LINES

When switching on the device, the horizontal laser diode will be activated.

#### — HORIZONTAL LASER LINES

After the device is ON, the Horizontal laser line can be switched ON/OFF by pressing the Horizontal laser line / Power-button [B].



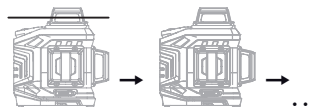
- Press the Horizontal laser line-button [B] a first time to switch off the horizontal laser line.
- Press the Horizontal laser line-button [B] a second time to switch on the horizontal laser line.
- ... (these two previous steps will repeat)

### NOTE

We advise to set the horizontal line on your working height, using a tripod.

#### — VERTICAL LASER LINES

After the device is ON, the Vertical laser line can be switched ON/OFF by pressing the Vertical laser line button [C]. The vertical laser line always forms a perfect 90° angle with the horizontal laser line.



- Press the Vertical laser line-button [C] a first time to switch on the vertical laser line.
- Press the Vertical laser line-button [C] a second time to switch off the vertical laser line.
- ... (these two previous steps will repeat)



## ■ RECEIVER MODE





When working in a bright environment (e.g. outdoors) or over longer distances, laser lines become less visible to the human eye. To find the laser lines in those situations, this laser can be used with a laser receiver.

- To activate the Receiver mode, press the receiver mode button **[A]**. The receiver mode LED indicator **[D]** will light up and you will notice the activated laser lines decrease slightly in brightness. In receiver mode, the laser line will start blinking very fast (pulse at 10KHz) to allow the laser receiver, which operates by pulsed light, to detect the laser line.
- To deactivate the receiver mode, press the Receiver mode button **[A]** again. The receiver mode LED indicator **[D]** turns off and the brightness of the active laser lines will increase again.

### NOTE

All Futech lasers will use 10KHz as frequency in receiver mode. Only receivers that can detect laser lines at 10KHz are compatible.

## TECHNICAL SPECIFICATIONS

MODEL	011.20R SATURN 2.0 RED	011.20G SATURN 2.0 GREEN
Visibility		
Accuracy	± 2 mm / 10 m	
Range with receiver	50 m	
Range without receiver	15 m	
Levelling range	± 3.5°	
Levelling	Pendulum levelling	
Slope function	Manual (via pendulum lock)	
Tripod thread	1/4"	
Pendulum lock	Present	
Transport safety mode	Present	
Amount of laser diodes	2	
Laser frequency (receiver mode)	10kHz	
Laser wavelength	635nm	520 nm
Laser classification	Class 2 < 1mW	Class 2 < 1mW
Power supply	Li-Ion battery 7.4V, 2200mAh	
Battery life (all lines on)	± 25 - 30h.	± 8 - 9.5h
Protection	IP54	
Dimensions (l x w x h)	105 x 60 x 95 mm	
Weight	0,42 kg	
Operation temperature	-5°C ~ +40°C	







## DECLARATION OF CONFORMITY

Futech (Belgium) declares under its own responsibility that this device:

- 011.20R, SATURN RED
- 011.20G, SATURN GREEN

is in conformity with the standards

EN 61326-1:2013

following the provisions of Directive(s)

EMC 2014/30/EU.

Lier, Belgium,  
March 30, 2023  
Patrick Waüters

Potential misprints are reserved. Images used are not strict. All features, functionality and other product specifications are subject to change without notice or obligation.







# USER MANUAL

other languages:



**DA** DANSK



**DE** DEUTSCH



**ES** ESPAÑOL



**ET** EESTI KEEL



**FI** SUOMEN KIELI



**FR** FRANÇAIS



**IS** ÍSLENSKA



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