



designed for scientists

IKA HUB

ENGLISH

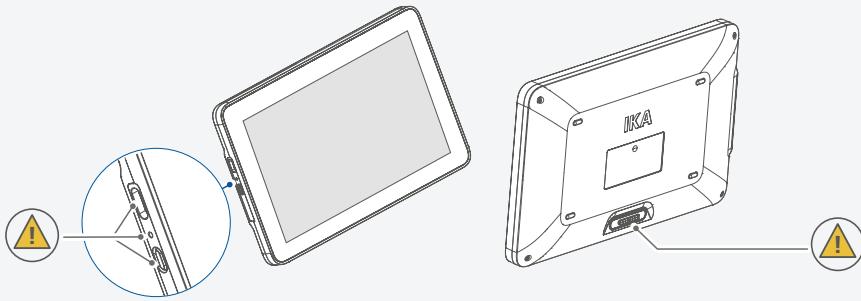


Fig. 1

- CE
 EU Declaration of conformity 6
- FC
 Note for USA (FCC) 6
- IC
 Note for Canada (IC) 6
- i
 Explication of warning symbols 7
- !
 Safety instructions..... 8
- fl
 Intended use..... 10
- box
 Unpacking 11
- Device setup 12
- key
 Installation..... 12
- Charging the battery pack..... 18
- Operator panel and display 20
- hand
 Operation 24
- list
 Menu navigation and structure 38
- Interfaces and outputs 43
- Maintenance and cleaning 45
- Troubleshooting..... 46
- Accessories 46
- Warranty 46
- doc
 Technical data..... 47



EU Declaration of conformity

We declare under our sole responsibility that this product corresponds to the directives 2014/35/EU, 2014/30/EU and 2011/65/EU and conforms with the following standards or normative documents: EN 61010-1, EN 60204-1, EN 60529, EN 61326-1 and EN ISO 12100.

Wireless module:

Directive: 2014/53/EU Standards: EN 300328, EN 301489-17, EN 301489-1, EN 60950-1.

A copy of the complete declaration of conformity or further declarations of conformity can be requested at sales@ika.com.



Note for USA (FCC)

This device complies with Part 15 of the FCC rules. Any changes or modifications not expressly approved by the Manufacturer could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept all interference received, including interference that may cause undesired operation.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Note for Canada (IC)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This device complies with Health Canada's Safety Code 6 / IC RSS-210. The installer of this device should ensure that RF radiation is not emitted in excess of the Health Canada's requirement.

Explication of warning symbols



/// Warning symbols



Danger!

Indicates an (extremely) hazardous situation, which, if not avoided, will result in death, serious injury.



Warning!

Indicates a hazardous situation, which, if not avoided, can result in death, serious injury.



Caution!

Indicates a potentially hazardous situation, which, if not avoided, can result in injury.



Notice!

Indicates practices which, if not avoided, can result in equipment damage.

/// General Symbols



Position number



Correct/Result!

Shows the correct execution or the result of an action step.



Wrong!

Shows the incorrect execution of an action step.



Note!

Displays action steps that require particular attention to detail.



Beep

Shows action steps where audible beeps can be heard.



Safety instructions

/// General information

- › **Read the operating instructions completely before starting up and follow the safety instructions.**
- › Keep the operating instructions in a place where it can be accessed by everyone.
- › Ensure that only trained staff work with the device.
- › Follow the safety instructions, guidelines, occupational health and safety and accident prevention regulations.
- › The device must only be used in a technically perfect condition.
- › Pay attention to the marked sites in Fig. 1.
- › Refer to the operating instructions for the connected devices.

/// Device setup

Notice!

- › Make sure the **IKA HUB** and the **HUB.DS** are stably mounted or placed on an even, stable, clean, no-slip and dry surface.

/// Working with the device

Danger!

- › Do not use the device in explosive atmospheres, it is not EX-protected.
- › Controlling of devices via the **IKA HUB** is only allowed if device is in your field of view. This allows you to quickly access your devices in the event of a connection failure. Monitoring devices is possible outside field of view. However, this applies only to experiments that can be carried out in unsupervised operation.

Caution!

- › When using the device, keep a minimum distance of 15 cm from active implants, as these may be interfered with by the **IKA HUB**.
If you have any questions, please contact your doctor to assess the potential interaction with your implant.

Notice!

- › If the **IKA HUB**'s battery becomes completely discharged during operation, the devices controlled by the **IKA HUB** will either continue to run or shut down automatically, depending on the set safety parameters.
This functionality depends on the settings specified in the "Safe conditions" menu.
If the continue operation feature is enabled when the battery is completely discharged, the drive unit can only be turned off using the "On/Off" button, the power switch, or the rotary/push button.
- › The setting specified in the "Safe conditions" must always be appropriate for the active process in case of communication failure.
- › Don't use the **IKA HUB** in environments with many 2.4 GHz devices or place it directly next to WiFi routers, microwave ovens, or other high-power RF sources.

/// Using and storage condition

Notice!

- › The device must only be stored and operated indoors at temperatures between 5 °C and 40 °C. Otherwise, its performance and battery life may be reduced.
- › Do not place the device in hot areas such as close to heating devices. Doing so may damage the device, or cause the built-in battery pack to explode.
- › Do not use the device in areas prone to dripping or splashing water. In case the device gets wet, unplug all cables, power off the device before cleaning. Allow it to dry thoroughly before powering it on again. Do not attempt to dry the device with an external heat source, such as a microwave oven or hair dryer.
- › Do not store or use your device in areas with high concentrations of dust or airborne materials. Dust or foreign materials can cause your device to malfunction and may result in fire.

/// Accessories

- › Protect the device and accessories from bumping and impacting.
- › Check the device and accessories beforehand for damage each time when you use them. Do not use damaged components.

/// Charging the battery pack

Warning!

- › The built-in battery pack in the device must only be charged with the original power supply unit and the original USB (C-C) cable. Incompatible charger may damage the battery pack and the device or even create a risk of fire.
- › Do not charge the battery pack that has leaked or that is discolored, deformed or damaged in any other way.

Notice!

- › The built-in battery pack in the device supplied is partially charged. To ensure full capacity of the battery pack, fully charge the battery pack before using the device for the first time.
- › The housing of **IKA HUB** may warm up during charging. Do not cover the device.
- › The capacity of the built-in battery decreases over time. Failure may occur if the device is not used for a long period of time. Fully recharge the device before using it again.
- › To ensure a long life of the built-in battery, if the device is not used for a long time, we recommend charging it to about 50% every 6 months.
- › Disconnect the device from power sources when not in use for long time.

/// Maintenance

- › The device must only be opened by trained specialists, even during repair.
- › This device contains a permanently installed battery that must not be removed or replaced by the user. Attempts to open the device or replace the battery yourself may result in electrical hazards, fire, or irreparable damage. Please contact our service department exclusively for battery replacement via sales@ika.com.

/// Disposal instructions

- › The device, accessories, packaging and batteries must be disposed of in accordance with local and national regulations.
- ›  When the device reaches its end of life, take it to a collection point designated by local authorities. The battery pack must be collected separately from electronic waste.



Intended use

/// Use

The **IKA HUB** is designed exclusively for controlling compatible IKA devices (max. 5 devices) wirelessly.

The **HUB.DS (HUB Docking Station)** is intended for charging the **IKA HUB** and providing additional connection options (USB, Ethernet). It also allows wall or rod mounting.

/// Application Area

- › For indoor use only, in environments such as laboratories for research, education, industrial or commercial purposes.
- › Before using the wireless connection, ensure that the radio frequencies are approved for use in your region. If not, control must be performed via USB cable.

/// Prohibited Use

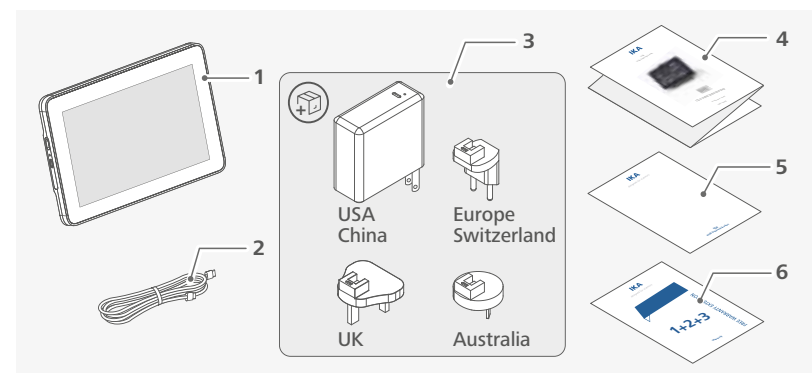
User safety cannot be guaranteed:

- › If accessories not supplied or recommended by the manufacturer are used.
- › If the device is operated improperly or contrary to the manufacturer's specifications.
- › If the device or its electronic components are modified by third parties.

Notice: The **IKA HUB** is not suitable for use in explosive atmospheres or outdoor environments.

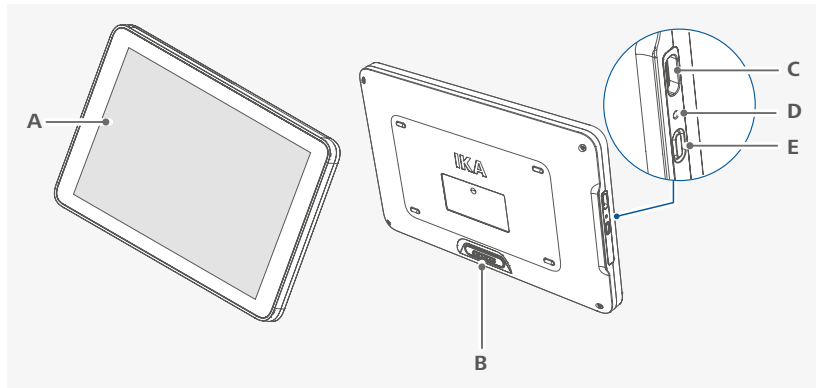
Unpacking

- › Please unpack the device carefully.
- › Any damage should be notified immediately to the shipping agent (post office, railway network or logistics company).



1	IKA HUB	4	Quick guide (DE/EN)
2	USB cable	5	User guide
3	Power supply set	6	Warranty card

Device setup

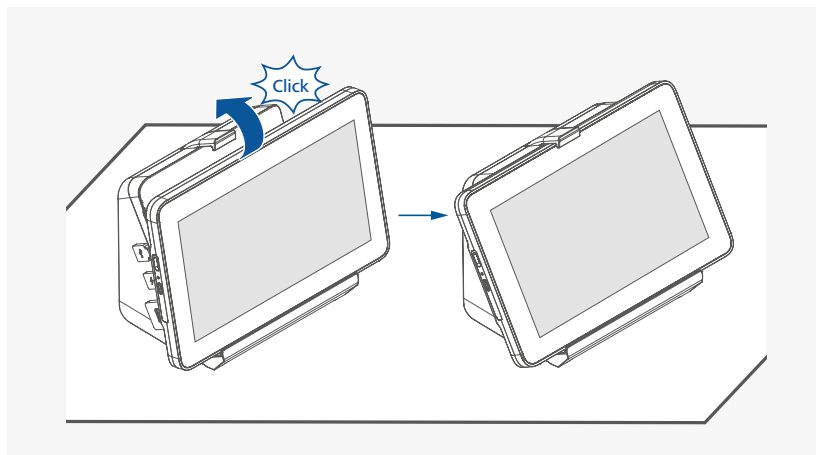


A	Display	D	Restart button
B	Magnetic connector (Power contacts)	E	Standby button
C	USB-C port		



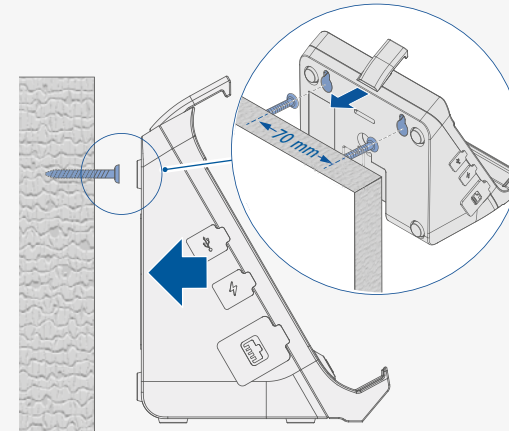
Installation

/// Flat surface



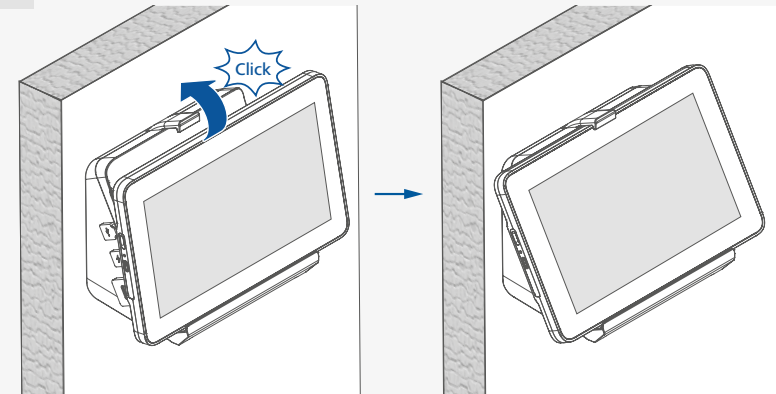
/// Wall mounting

1

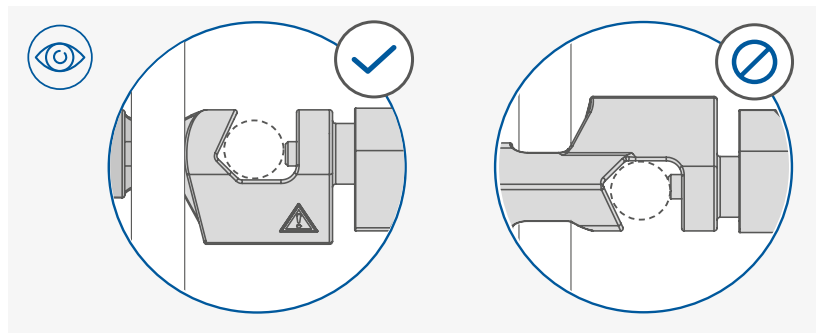
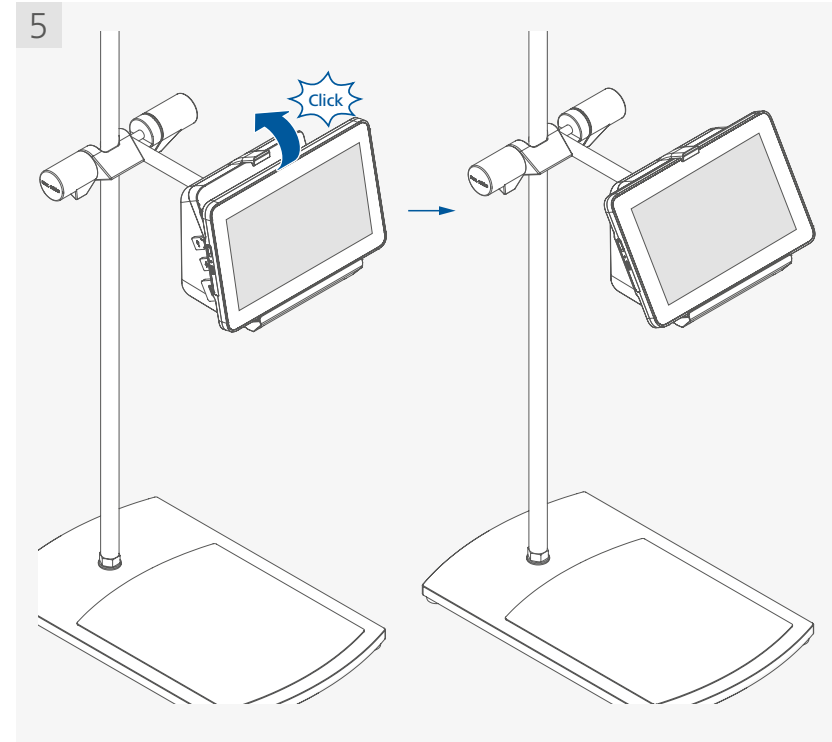
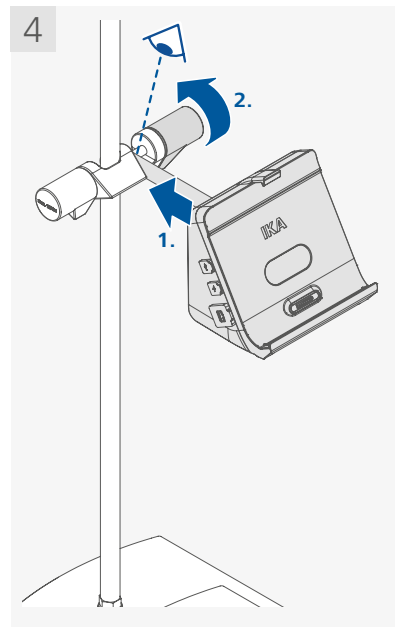
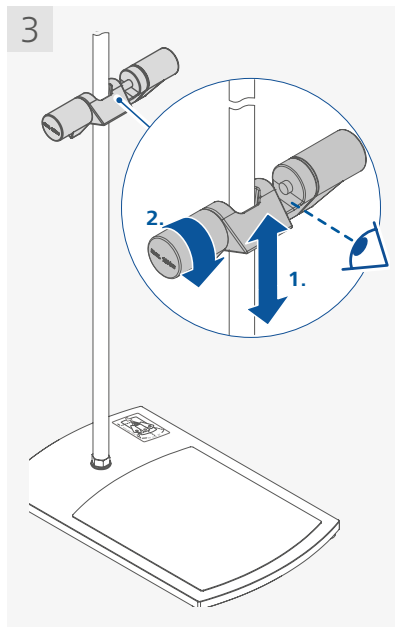
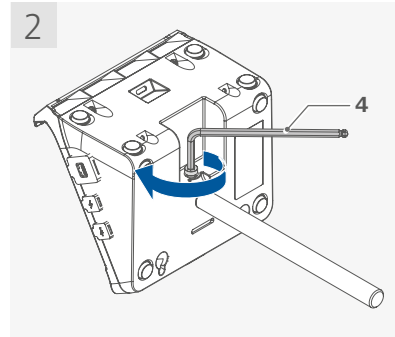
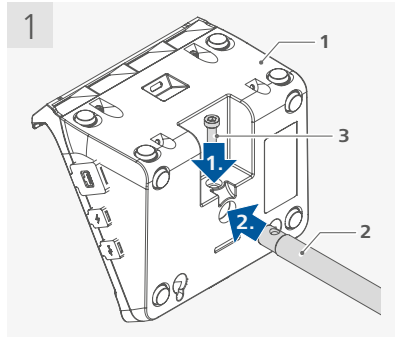


i The screw spacing is 70 mm.

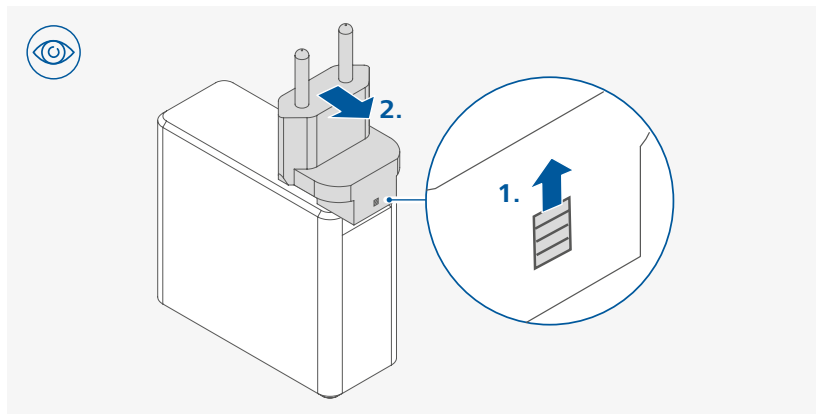
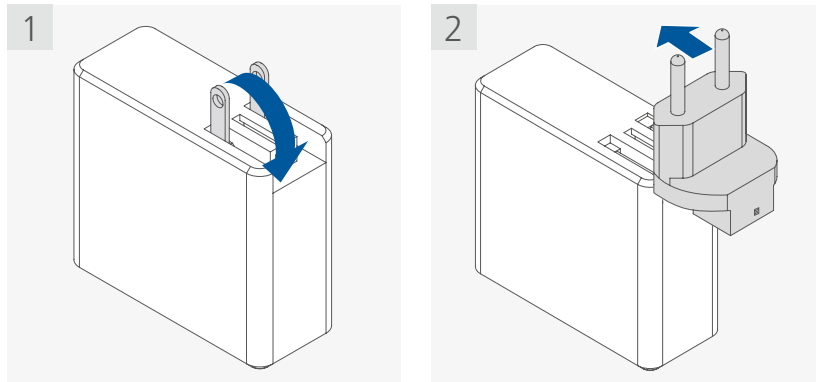
2



/// Stand mounting

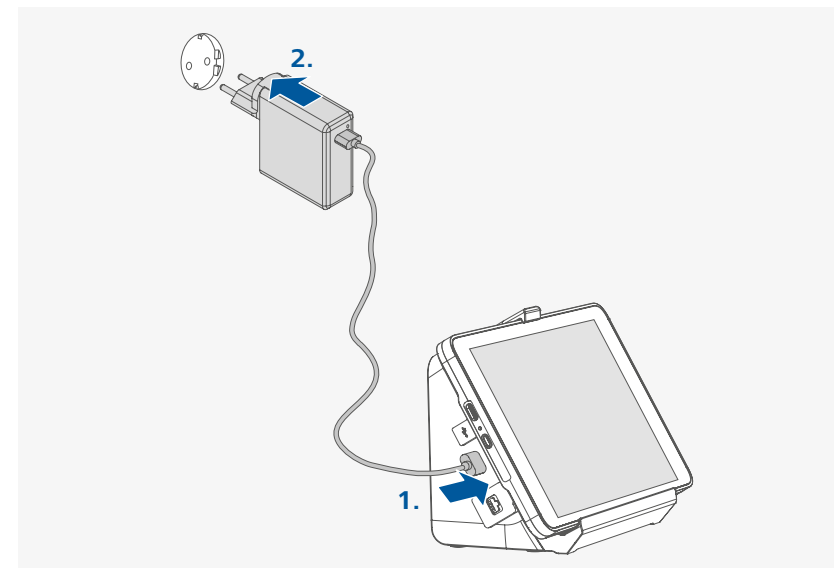
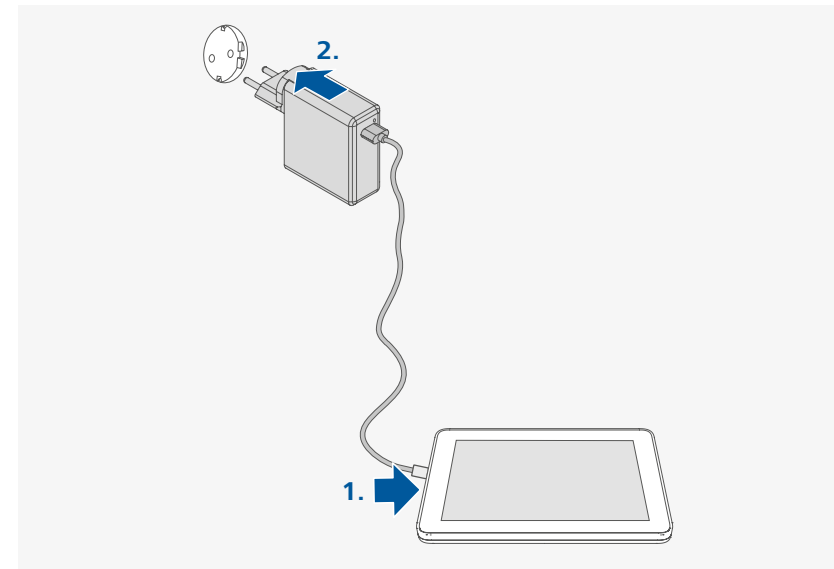


/// Attaching the country adapter



i For removing the exchangeable adapter, push the latch upward firstly.

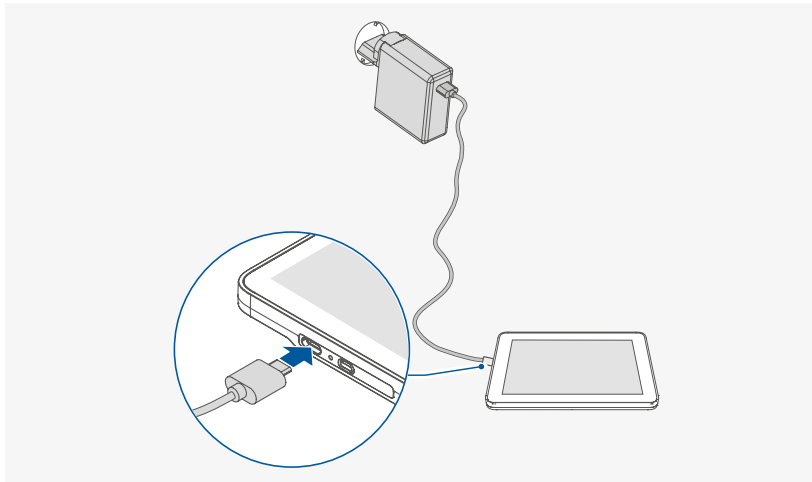
/// Connect the **IKA HUB** or **HUB.DS** to the power



Charging the battery pack

Charging options for the **IKA HUB**:

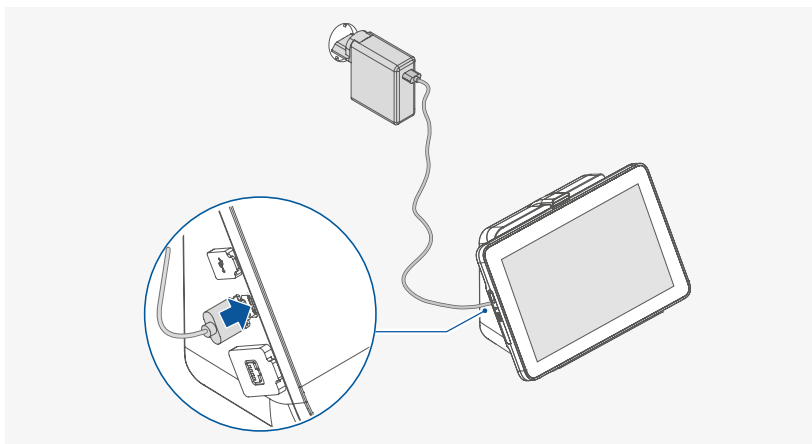
- › with power supply



⚠ Notice!

- › Use only IKA original power supply for charging the **IKA HUB**.
- › The battery pack can only be charged when the **IKA HUB** is switched on.
- › It is not possible to charge the battery pack by connecting the USB cable to a computer.

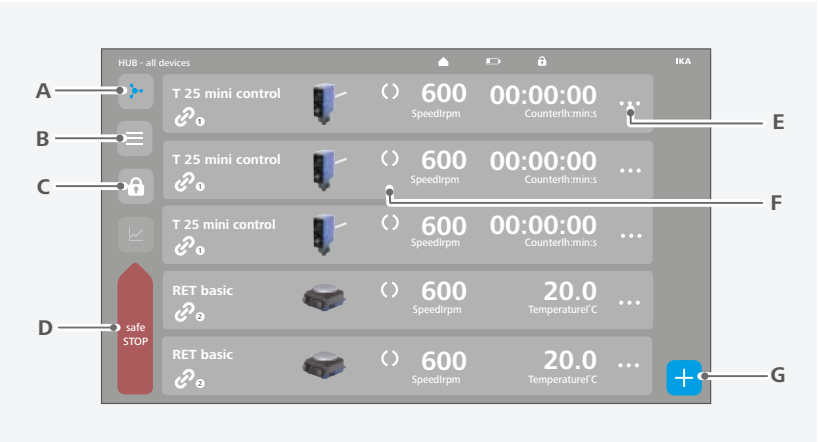
- › at **HUB.DS**



i Only USB-C port (power) on the **HUB.DS** can be connected for charging the battery pack in the **IKA HUB**.

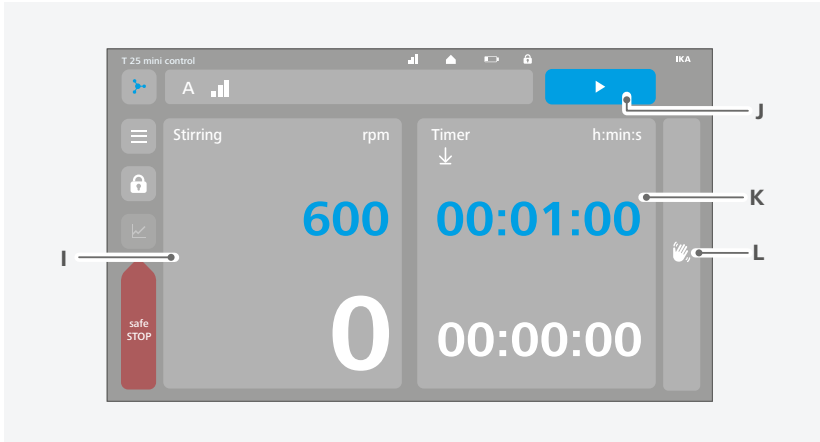
Operator panel and display

/// Explanation of the control elements on **IKA HUB** main screen



Item	Designation	Function
A	IKA HUB button	Access connected devices overview screen of the IKA HUB.
B	Menu button	Access IKA HUB/device menu.
C	Lock button	Locks/unlocks control elements (press and hold button for 2 seconds).
D	Safe STOP button	Set device to a safe state by dragging this button to upper position in case of emergency.
E	Device setting button	Access the individual connected device setting screen.
F	Device tile	Access the connected device working screen.
G	Search button	Search compatible devices for connection with the IKA HUB.

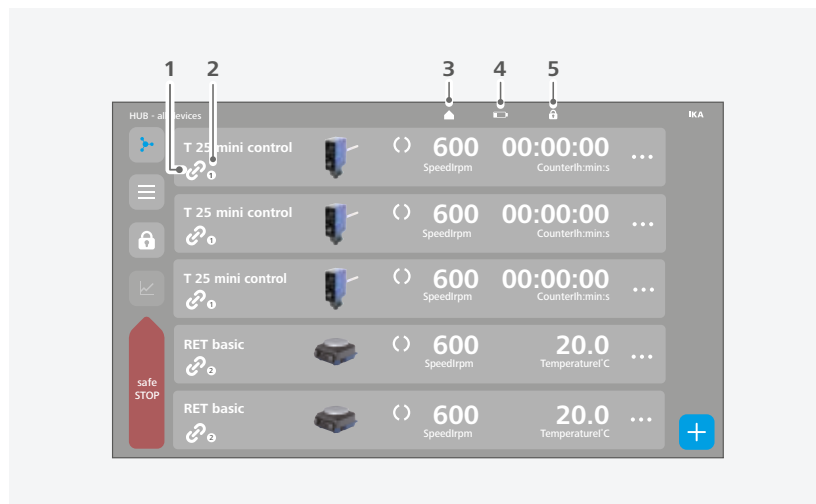
/// Explanation of additional controls on the main screen



Item	Designation	Function
I	Speed tile	Access the speed setting.
J	Start/Stop button	Start/stop the function of the connected device.
K	Timer/counter tile	Access the timer/counter setting
L	Identify button	Identify current operating device.

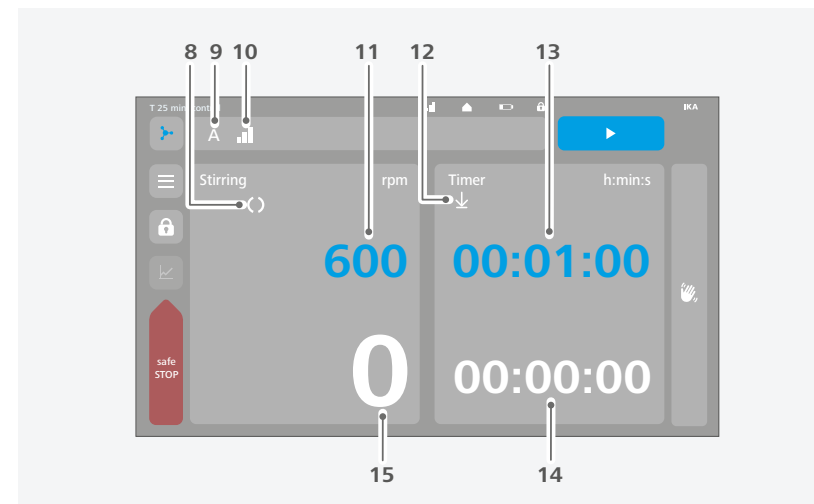
i The control elements displayed change depending on the connected device.

/// Explanation of symbols on the IKA HUB main screen



Item	Designation	Function
1	Link symbol	Indicates the same type devices are linked together for synchronized operation.
2	Linked device type	Indicates the linked device type.
3	Home symbol	Indicate the IKA HUB is placed on the HUB.DS .
4	Battery status symbol	Indicate the IKA HUB battery status.
5	Lock symbol	Indicate the setting of the IKA HUB is locked.

/// Explanation of additional symbols on the main screen



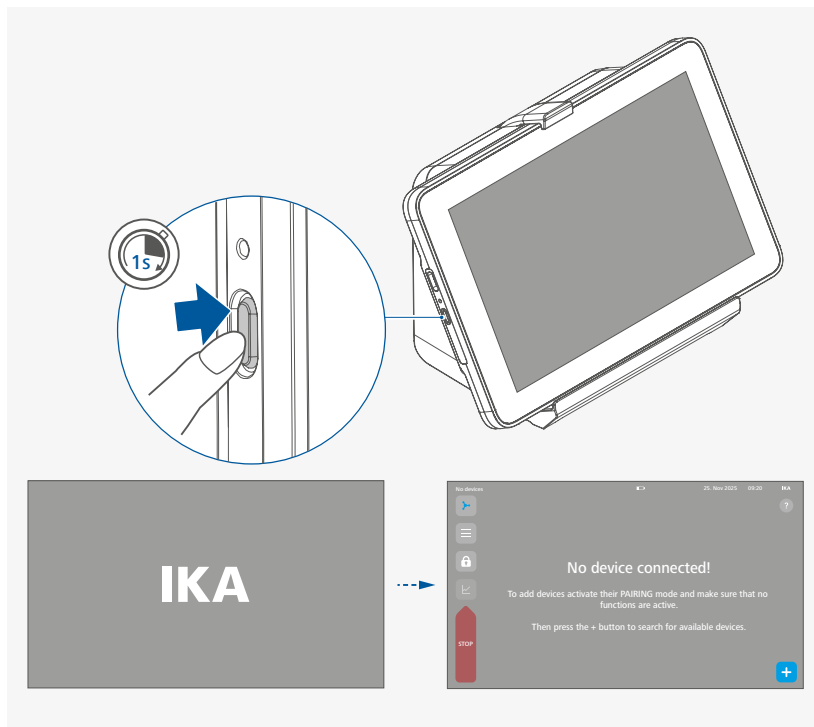
Item	Designation	Function
8	Working symbol	The symbol is static if function is not active. The symbol is animated if function is active.
9	Operating mode symbol	Indicates the connected device is in operating mode (A, B, C or D).
10	Wireless signal strength symbol	Indicates the connected device wireless signal strength.
11	Set speed value	Indicates the set speed value of the connected device.
12	Timer/Counter symbol	↑ : Indicates the "Counter" is activated. ↓ : Indicates the "Timer" is activated.
13	Set timer value	Indicates the set timer value of the connected device.
14	Actual timer value	Indicates the actual timer value of the connected device.
15	Actual speed value	Indicates the actual speed value of the connected device.

i The symbols displayed change depending on the connected device and device menu setting.



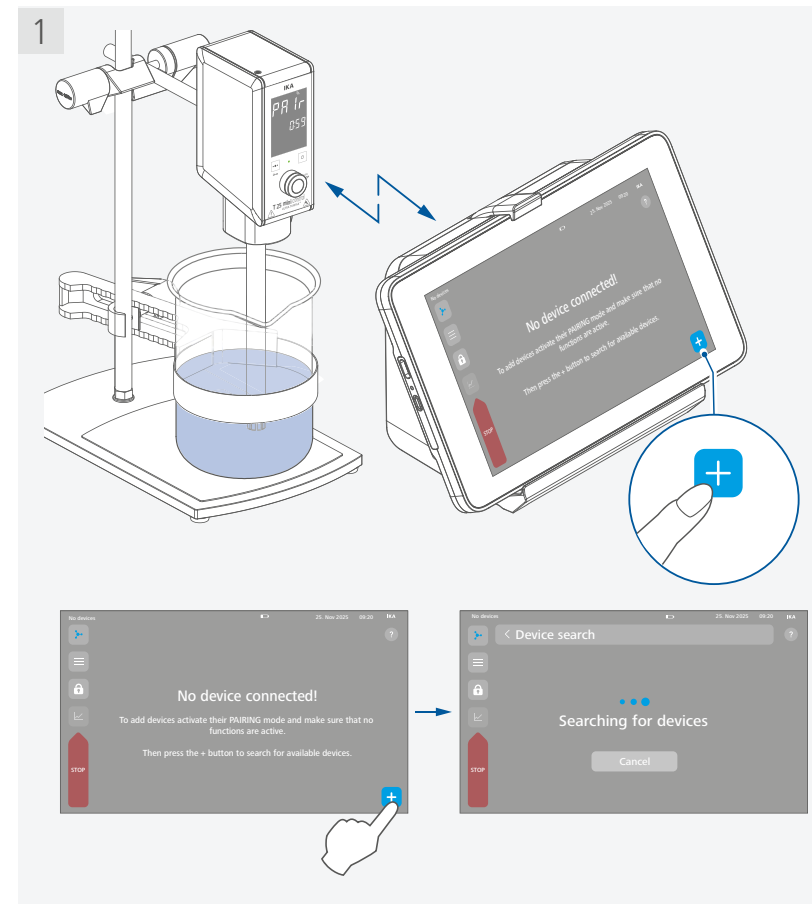
Operation

/// Switch on the **IKA HUB**

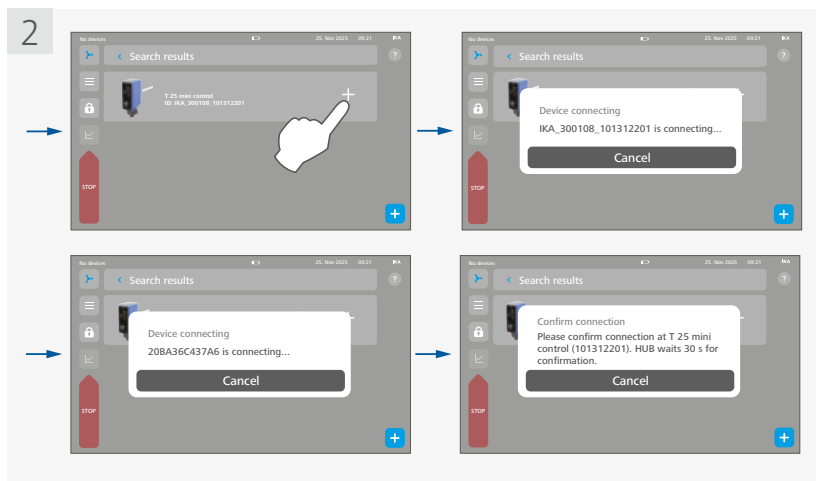


- i** › Press and hold the standby button for 1 second to switch on the **IKA HUB**.
- › The start-up process takes approximately 40 seconds. Then the **IKA HUB** is ready for operation.

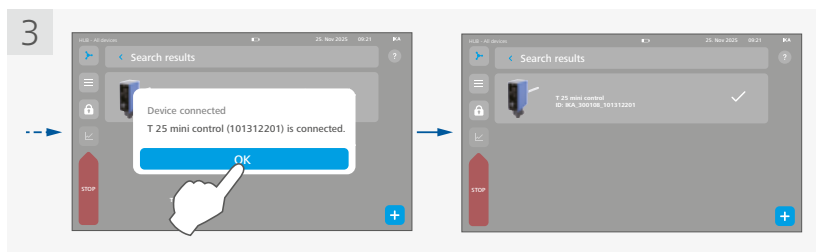
/// Search and connect compatible devices, e.g. **T 25 mini control**



- i** › When connecting a device, ensure it is in pairing mode. Refer to the operating instructions of the device.
- › You can connect up to 5 compatible devices to the **IKA HUB**.

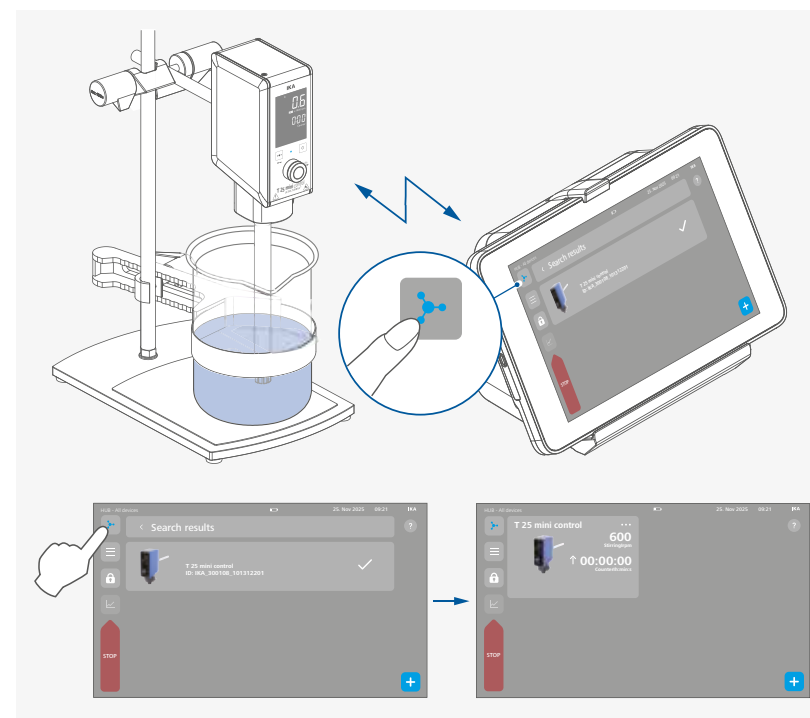


i › Confirm the connection by pressing the rotary knob on the **T 25 mini control** when prompted. The **IKa HUB** will wait 30 seconds for confirmation.

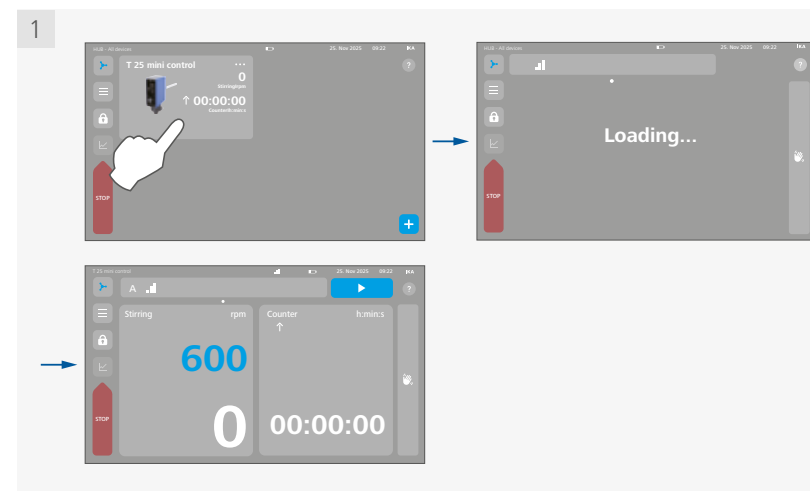


i › A tick (✓) indicates that the device is connected successfully.

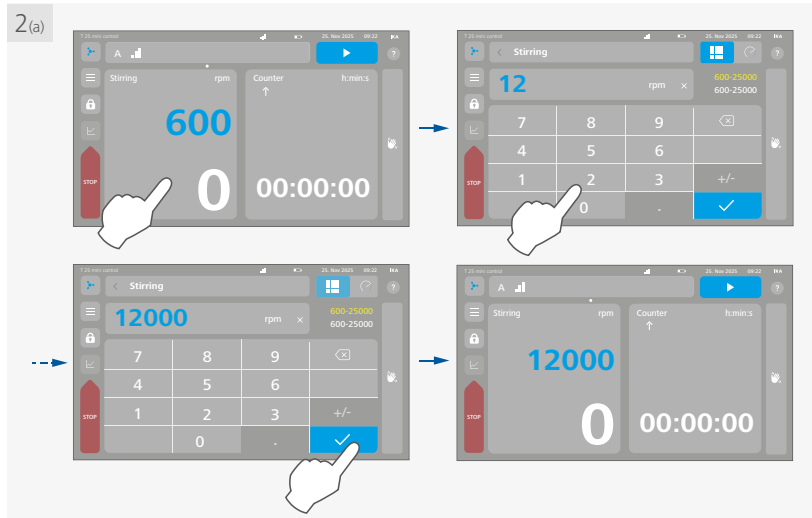
/// Overview the connected device



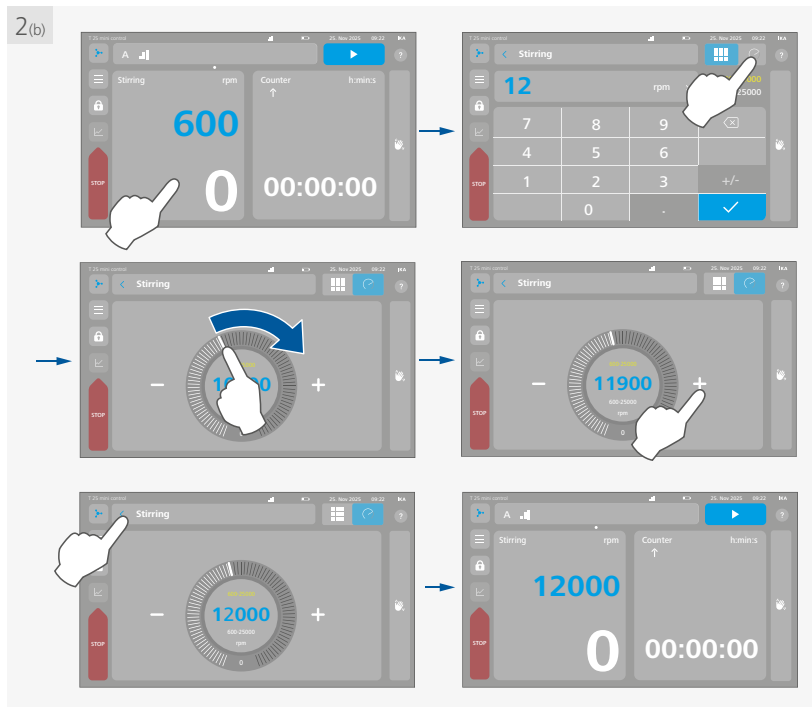
/// Set values to connected device



› Set the speed with the numeric keypad

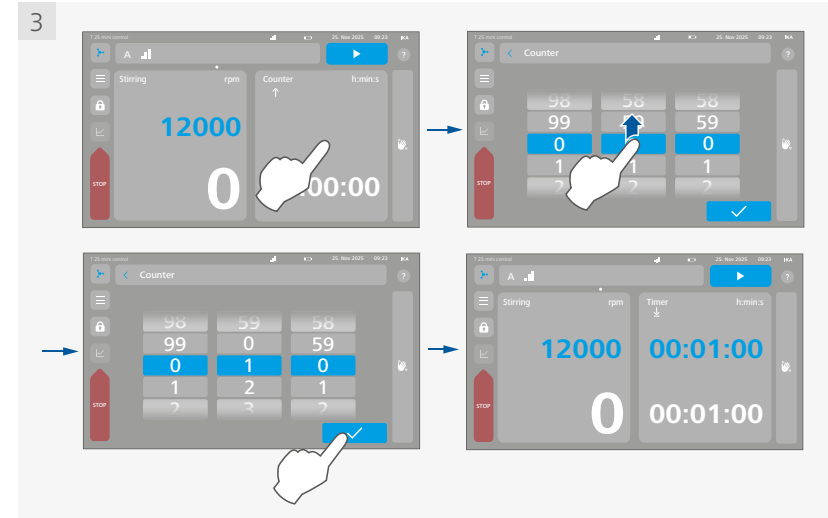


› Set the speed with the touch-wheel



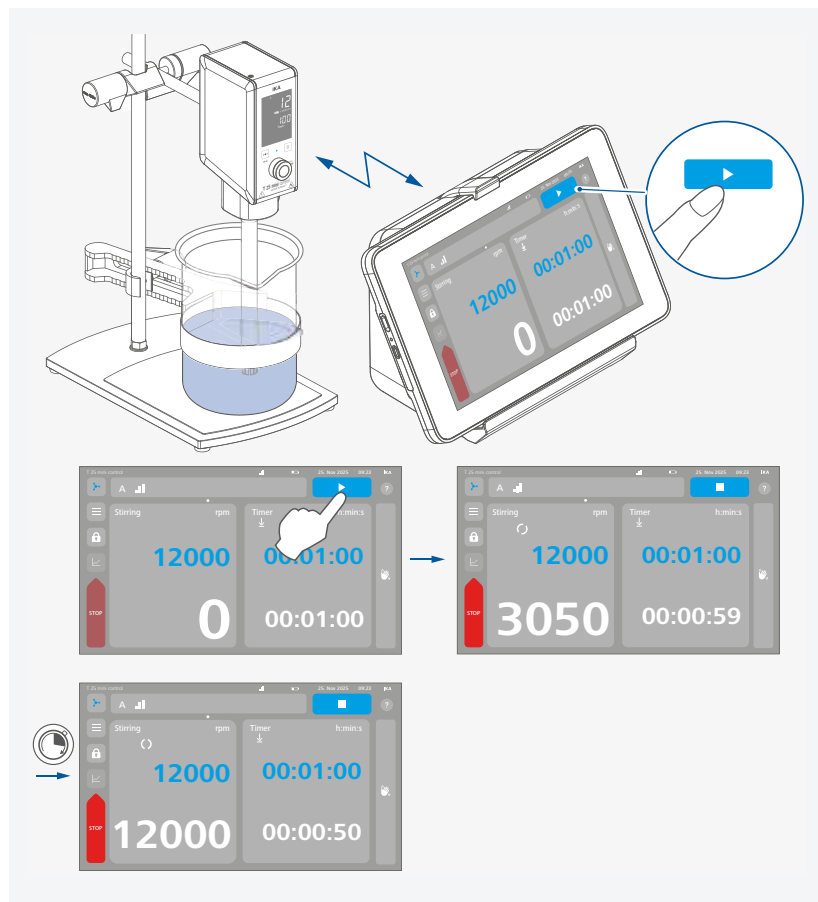
i › The speed can be precisely adjusted using the + and - buttons on either side of the touch-wheel.

› Set the timer/counter



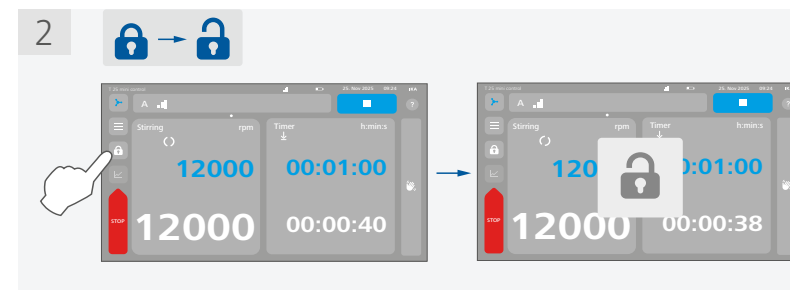
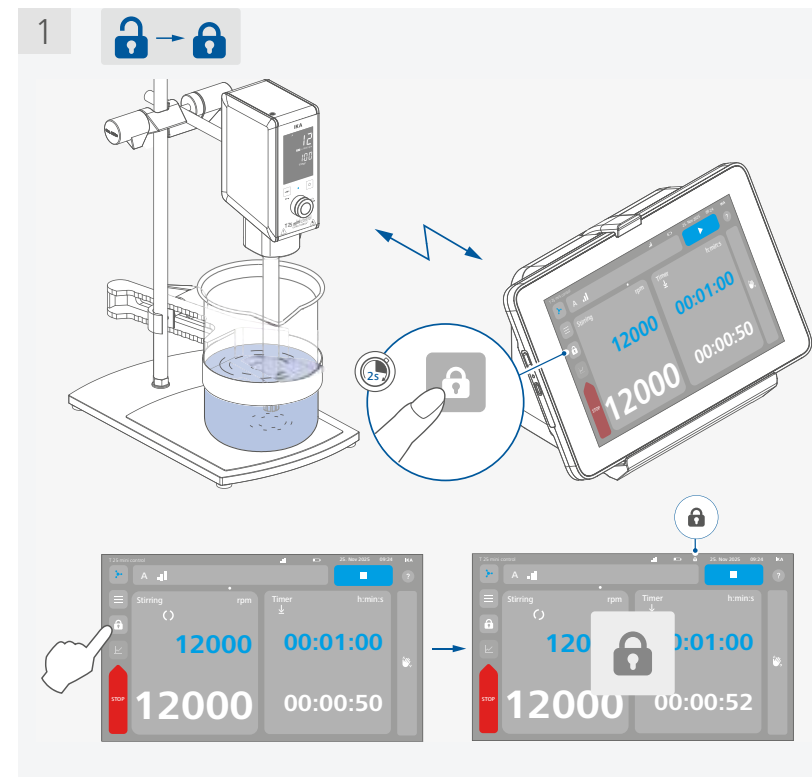
i › If the value of the timer/counter setting is set to 00:00:00 [hours:minutes:seconds], the counter function is activated and the corresponding counter symbol (↑) appears.
› If the value of the timer/counter setting is set to a value larger than 00:00:00, the timer function is activated and the corresponding timer symbol (↓) appears.
Once the set timer value has elapsed, the connected device function stops automatically and the last set timer value is displayed.

/// Start/stop the connected device function



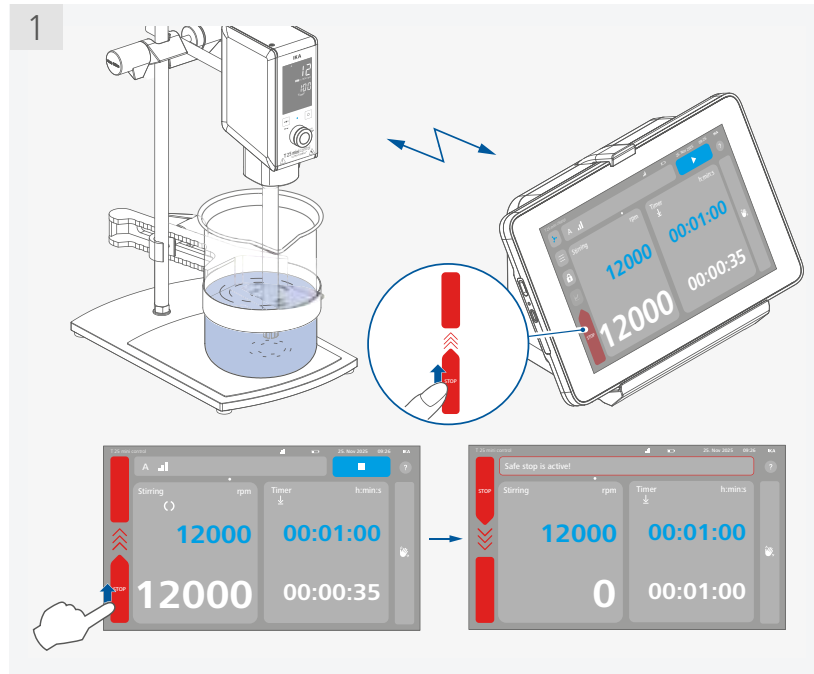
- i**
- › The speed and timer/counter value can also be adjusted during the running of the connected device.
 - › When the connected device is started, the start button (▶) changes into stop button (■). The connected device can be stopped by touching the stop button (■) on the device's main screen.

/// Lock/unlock the settings

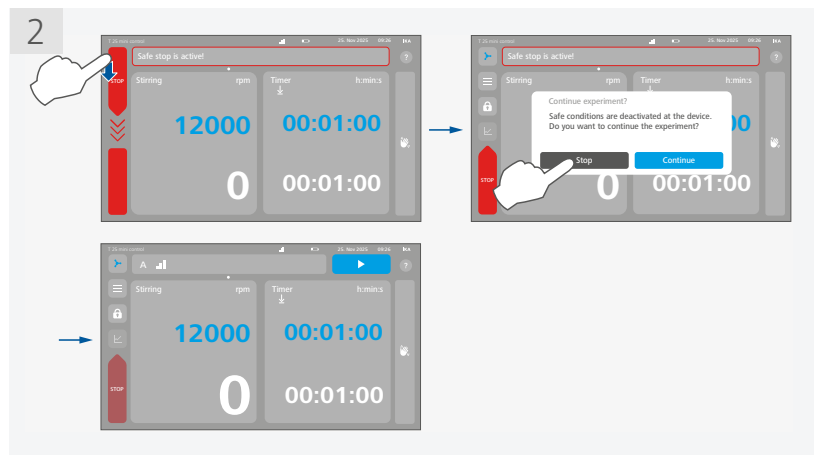


- i**
- › Keep touching lock button about 2 seconds, the device settings will be locked and the lock symbol (🔒) will appear on the screen.
 - › When the settings are locked, the lock symbol (🔒) appears when you touch any button or press/turn the control knob.
 - › Keep touching lock button about 2 seconds again, the device settings are unlocked and unlock symbol (🔓) appears on the screen.

/// Safe stop the connected device

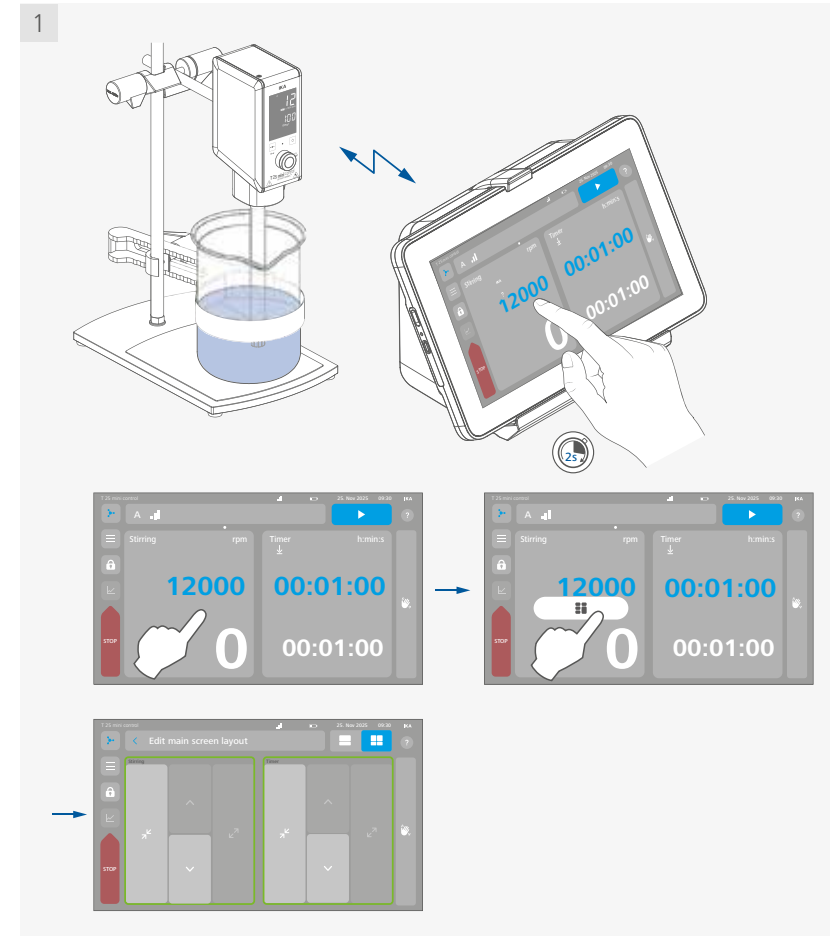


- i** › In an emergency, pull the safe STOP button to the upper position. Depending on the "Safety condition" menu configuration, the connected device will then switch to safe mode (stop or safe speed).

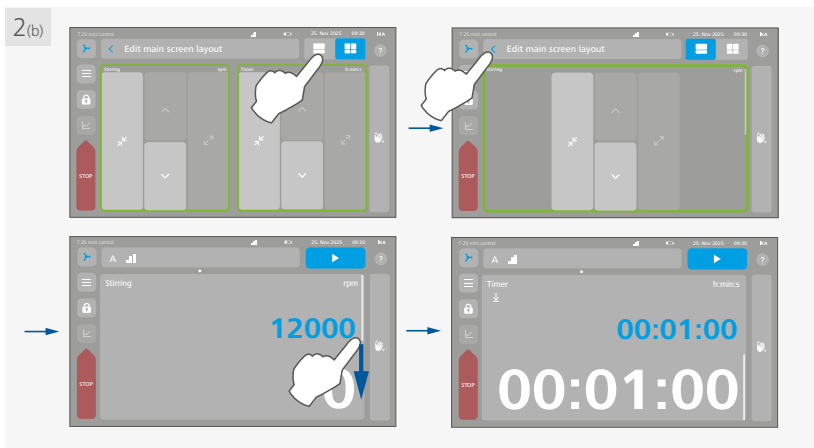
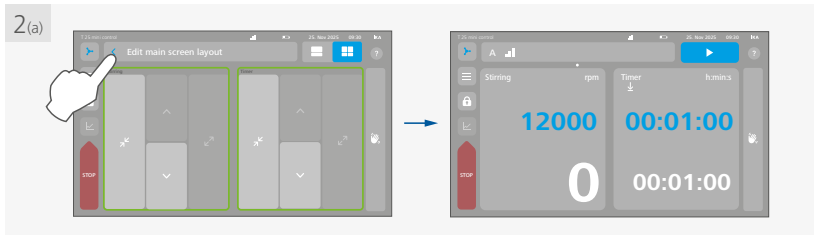


- i** › The experiment can be stopped by touching the stop button () or continued by touching continue button () after the safe stop.

/// Screen layout editing for connected device main screen

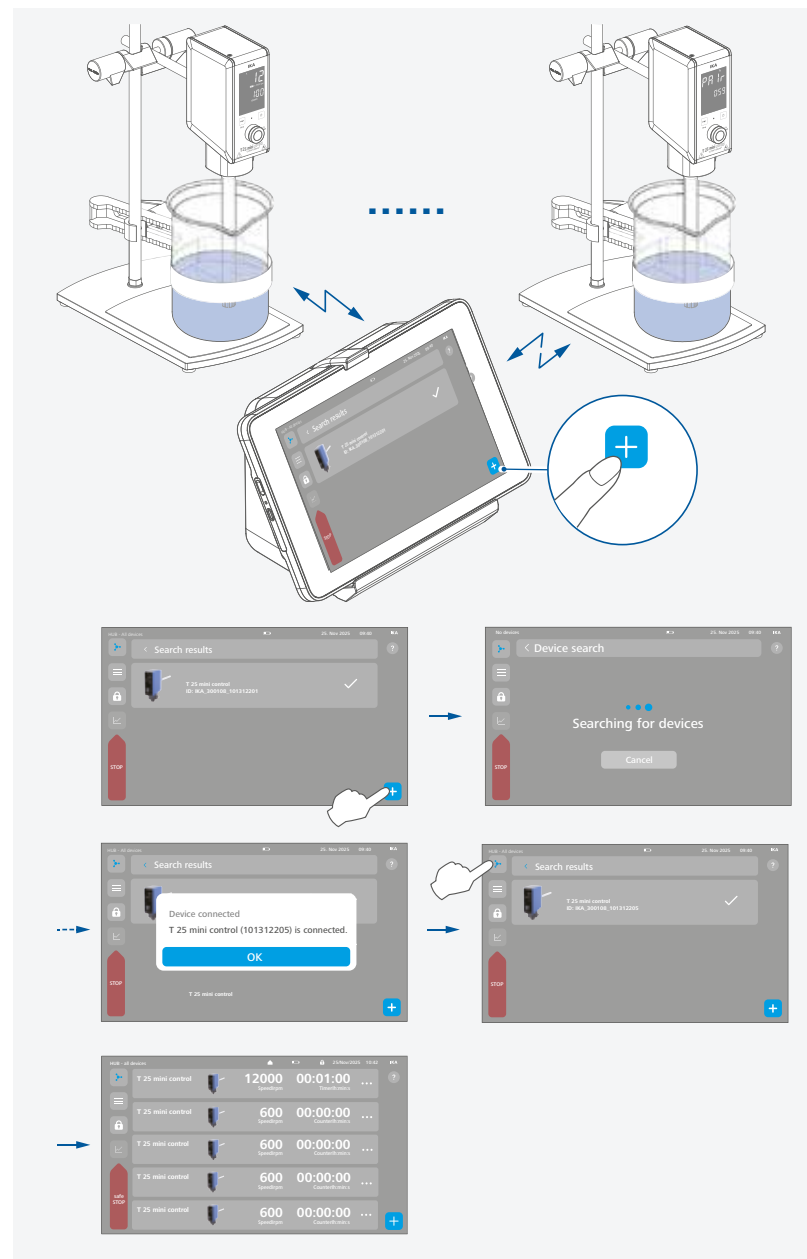


- i** › Keep touching speed tile or timer/counter tile, screen layout editing icons appear on the screen.
› Touching the screen layout editing button () to edit the screen layout.



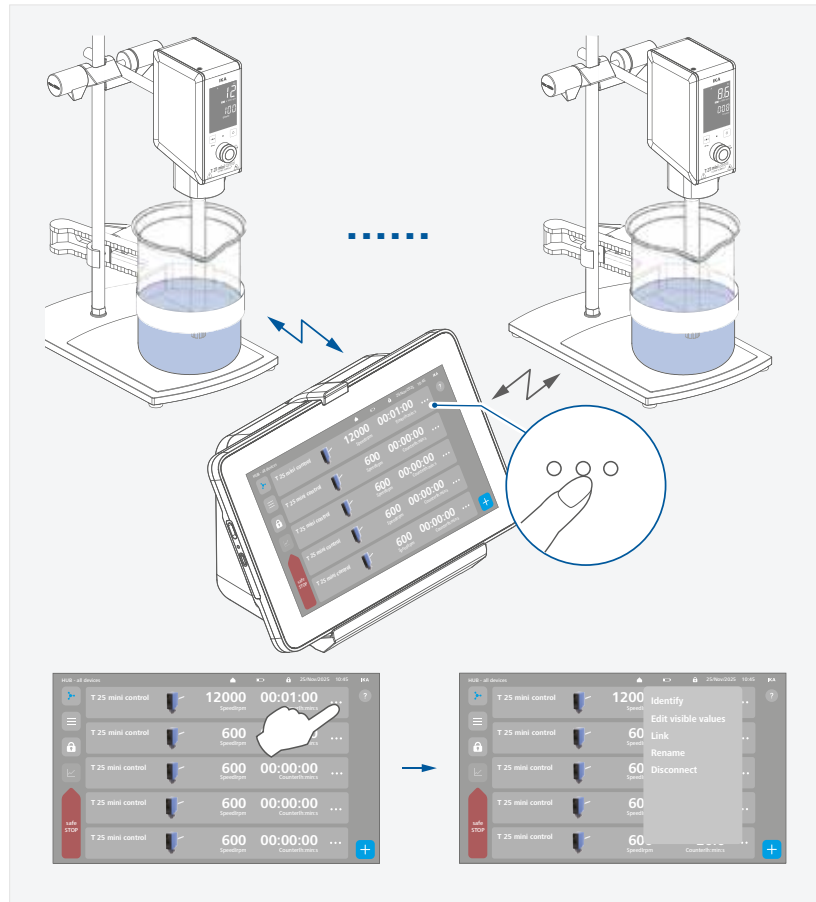
- i**
- › Touch button (■) to show the tiles in one column.
 - › Touch button (■) to show the tiles in two columns.
 - › Touch button (↔) or (↕) to adjust the size of the selected tile.
 - › Touch button (↗) or (↘) to adjust the position of the selected tile.
 - › The order of the values depends on the connected device and the setting in the "Visible values" menu option.

/// Search and connect more devices



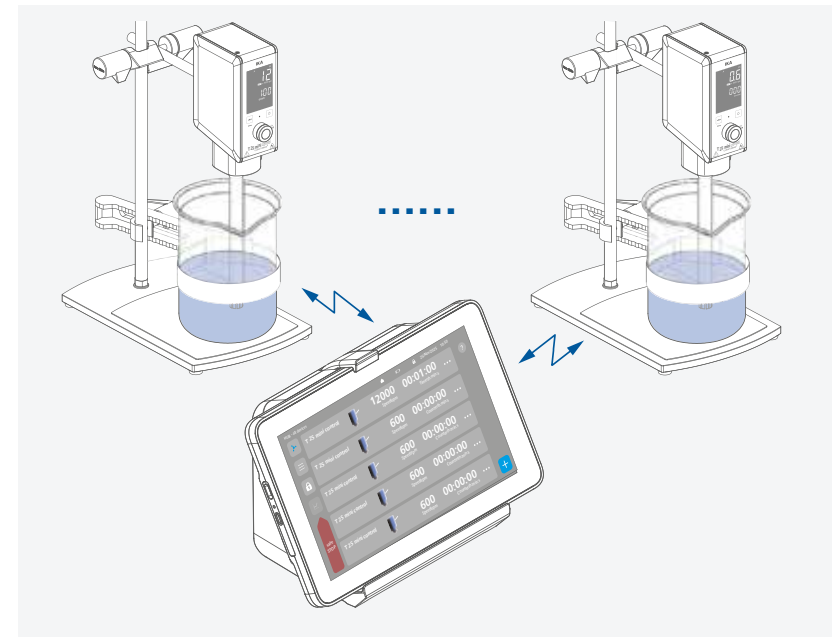
- i**
- › More device can be connected to the **IKA HUB** by touching the search button (+) on either "Search result" screen or connected devices overview screen.
 - › You can search and connect up to 5 compatible devices to the **IKA HUB**.

/// General settings for individual connected device



- i**
- › **Identify:**
Identify connected device. The device will give visual/acoustic feedback.
 - › **Edit visible values:**
Define which values are shown of each device in the **IKA HUB** screen. You can choose maximum 3 values.
 - › **Link:**
Link devices of the same type to operate them synchronously.
 - › **Rename:**
Give each device an individual name.
 - › **Disconnect:**
Disconnects the device from the **IKA HUB**.

/// Monitor and control multiple devices



- i** The **IKA HUB** can monitor and control up to 5 devices at the same time:
- › Lock/unlock the settings to all connected devices by pressing the lock/unlock button on the overview screen of the **IKA HUB**.
Note: When the settings are locked, the devices function can only be stopped or switched off by pressing the control knob or standby button/power switch on the connected devices in emergency. The devices can also be stopped by dragging the safe stop button to upper position in emergency.
 - › Safely stopping or allow any device to continue running at a set safe speed by pushing the safe STOP button to upper position, depending on the settings of the individual device. See the menu setting in "Safe conditions".

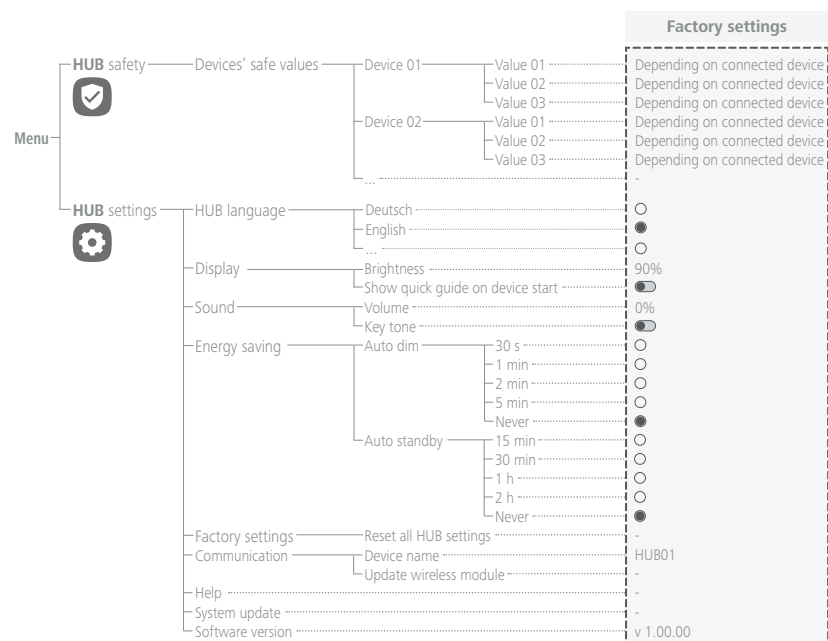


Menu navigation and structure

/// IKA HUB menu navigation

- › Enter the **IKA HUB** menu: Touch the menu button (☰).
- › Edit the menu options:
 - Touch and select/confirm the menu options.
 - Activate or deactivate the sub-menu options.
- The icon (⬤) indicates the deactivated menu options.
- The icon (◐) indicates the activated menu options.
- Select the menu options by touching icon (○).
- The icon (●) indicates the selected menu options.
- Edit the value with the keypad or touch-wheel.
- › Navigate one step back: Touch back button (<).
- › Return to the **IKA HUB** main screen: Touch the **IKA HUB** button (⌂).

/// IKA HUB menu structure



/// IKA HUB menu details



HUB safety

Devices' safe values:

In this menu option, you can overview all safe values of the connected devices.



HUB Settings

Languages:

In this menu option, you can select the desired language for the device.

Display:

- › **Brightness:** In this menu option, you set the brightness for the screen.
- › **Show quick guide on device start:** In this menu option, you can activate/deactivate the quick guide during the device starting.

Sounds:

In this menu option, you can activate/deactivate the key tone and set the key tone volume.

Energy saving:

In this menu option, you can select a time for auto dimming and auto standby for energy saving.

Factory settings:

In this menu option, you can restore all the **IKA HUB** settings to factory settings.

Communication:

- › **Device name:** In this menu option, you can input a new name for the **IKA HUB**.
- › **Update wireless module:** In this menu option, you can perform a firmware upgrade to the wireless module in your device.

Help:

- › In this menu option, you can find all available help topics.

System update:

- › In this menu option, you can perform a software upgrade for your device.

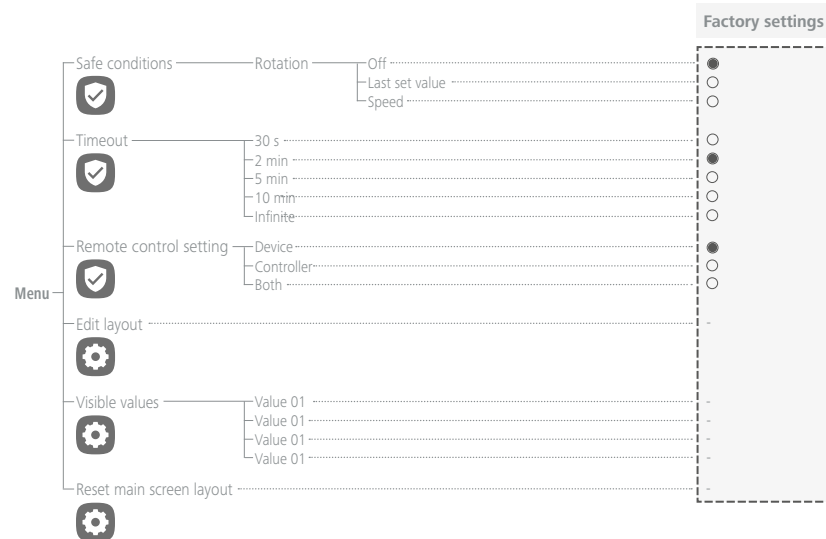
Software version:

- › In this menu option, you can view the software version of the device.

/// Device menu navigation

- › Touch the connected device to enter the individual device main screen.
- › Enter the device menu: Touch the menu button (☰).
- › Edit the menu options:
 - Touch and select/confirm the menu options.
 - Activate or deactivate the sub-menu options.
 - The icon (⬤) indicates the deactivated menu options.
 - The icon (◐) indicates the activated menu options.
 - Select the menu options by touching icon (○).
 - The icon (●) indicates the selected menu options.
 - Edit the value with the keyboard or touch-wheel.
- › Navigate one step back: Touch back button (◀).
- › Return to the **IKA HUB** main screen: Touch the **IKA HUB** button (▶).

/// Device menu structure



i The device menu structure depends on the connected device.

/// Device menu details

Safe conditions

Rotation:

- › **Off:** In this menu option, you can deactivate the safe value function for the time out event. The device will stop running if the device and the **IKA HUB** communication failure time exceed the timeout setting.
- › **Last set value:** In this menu option, you can activate the last set value as the safe speed for the time out event. The device will continue to run with last set speed if the device and the **IKA HUB** communication failure time exceed the timeout setting.
- › **Safe speed:** In this menu option, you can activate and set a value as the safe speed for the time out event. The device will continue to run with the set speed if the device and the **IKA HUB** communication failure time exceed the timeout setting.

Timeout

In this menu, you can select 30 seconds, 2 minutes, 5 minutes or 10 minutes as the time limit. This time limit applies if there is a communication failure between the device and controller. The device will continue to run at the set speed until the set time has exceeded. If the communication failure time exceed the set time, the device will stop running or continue to run depending on the setting in above "Safe conditions".

Remote control setting

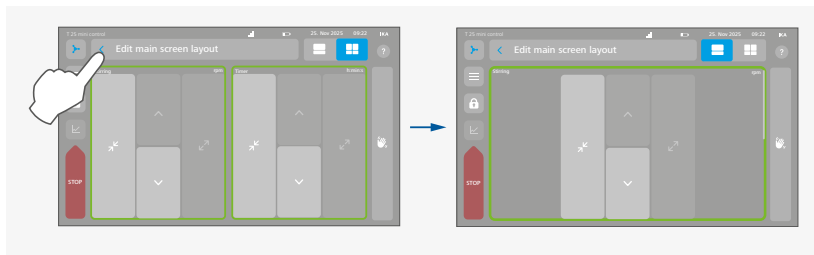
In this menu, you can select "Device", "Controller" or "Both" as the leading device for remote control.

- › **Device:** When you select "Device" as the leading device, the settings can only be changed via the connected device.
- › **Controller:** When you select "Controller" as the leading device, the settings can only be changed via the controller (**IKA HUB**).
- › **Both:** When you select "Both" as the leading device, the settings can be changed via either connected device or the **IKA HUB**.



Edit layout

In this menu option, you can edit the layout on the working screen.



Touch button (■) to show tiles in one column.

Touch button (■) to show tiles in two columns.

Touch button (↶) or (↷) to adjust the size of the selected tile.

Touch button (∧) or (∨) to adjust the position of the selected tile.



The layout of the values depend on the connected device and the setting in menu option "Visible value".



Visible values

In this menu option, you can select and define necessary parameters to be shown on the working screen.



Reset main screen layout

In this menu option, you can restore the main screen layout to factory setting.

Interfaces and outputs



Notice!

See also the operating instructions of the drive unit!

/// USB interface

The Universal Serial Bus (USB) is a serial bus for connecting the device to the PC. Equipped with USB devices can be connected to a PC during operation (hot plugging). Connected devices and their properties are automatically recognized.

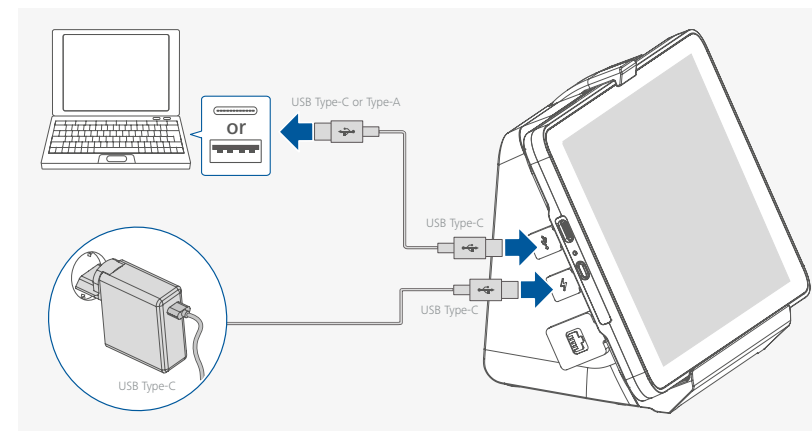
/// USB device drivers

Connect the IKA device through the USB data cable to the PC. The data communication is via a virtual COM port.

From Windows 10 and onwards the standard Windows USB driver is automatically loaded and a COM port number is assigned (find details in Windows Device Manager: "USB Serial Port (COMxx)"). If you have problems with USB communication, first ask your IT system administrator whether access to the USB interface is restricted for data security reasons.

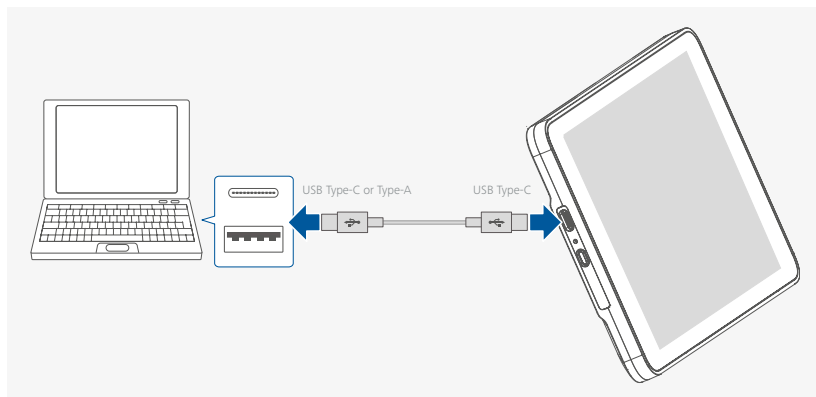
/// Connections between device and external devices

➤ Connect the **IKA HUB** to a PC via **HUB.DS**:

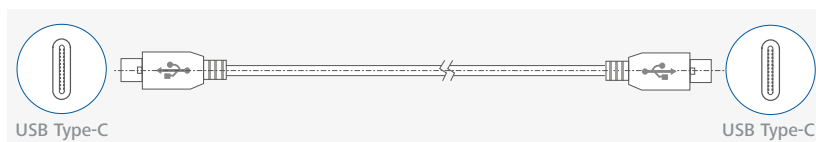


The **HUB.DS** must be powered when connecting the **IKA HUB** to a PC via the **HUB.DS**.

- › Connect the **IKA HUB** to a PC directly



USB cable (C - C):
This cable is required to connect USB port to a PC.



USB cable (A - C):
This cable is required to connect USB port to a PC.
Note: The USB cable (A - C) is not included in delivery scope.



- › Wireless connection:
For details on setting up a wireless connection, please refer to the relevant operating instructions.

/// Device software update

Keep your device up-to-date with the IKA Firmware update tool.
The firmware update can be done with a computer connected through USB-Interface.
For this, you need register on our website MyIKA first.
After registering your device IKA will inform you about available updates for your devices.
Please download the software "FWUToolSetup.zip" from our IKA service website www.ika.com.

Maintenance and cleaning

The device is maintenance-free.

/// Cleaning

For cleaning disconnect the mains plug!
Use only cleaning agents which have been approved by IKA to clean the device: water containing surfactant / isopropyl alcohol.

- › Wear protective gloves during cleaning the devices.
- › Electrical devices may not be placed in the cleansing agent for the purpose of cleaning.
- › Do not allow moisture to get into the device when cleaning.
- › Before using another than the recommended method for cleaning or decontamination, the user must ascertain with IKA that this method does not destroy the device.

/// Spare parts order

When ordering spare parts, please give:

- › Machine type
- › Serial number, see type plate
- › Item and designation of the spare part, see www.ika.com.

/// Repair

Please send in device for repair only after it has been cleaned and is free from any materials which may constitute a health hazard.

For repair, please request the "Decontamination Certificate" form IKA or use the download printout of it from IKA website: www.ika.com.

If you require servicing, return the device in its original packaging. Storage packaging is not sufficient. Please also use suitable transport packaging.

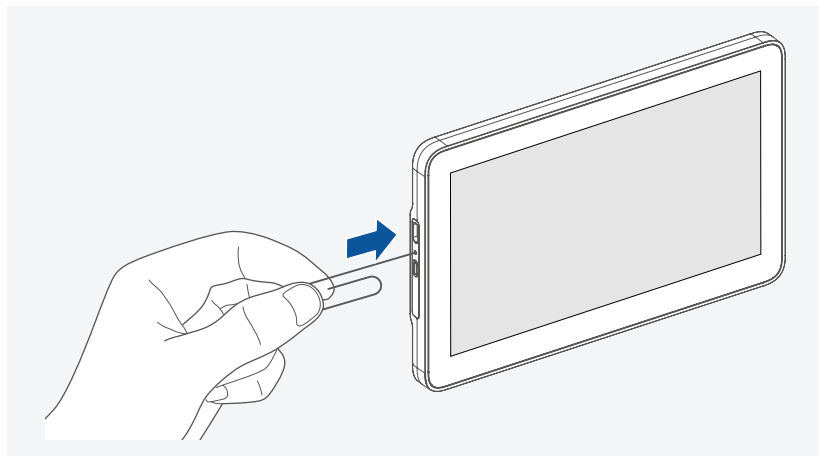
Troubleshooting

No connection to device:

- › Make sure your device is switched on and ready to connect.
- › Make sure you are close to your device to establish wireless connection.
- › Put the **IKA HUB** on the **HUB.DS** to connect.

Restart the **IKA HUB**:

In some cases the **IKA HUB** needs to be restarted. To restart the **IKA HUB** by using a paperclip and push carefully the restart button.



Accessories

HUB.DS Dock station
Plug-in power supply set

See more accessories on www.ika.com.

Warranty

In accordance with IKA Terms and Condition of sale, the warranty period is 24 months. For claims under the warranty please contact your local dealer. You may also send the machine direct to our factory, enclosing the delivery invoice and giving reasons for the claim. You will be liable for freight costs.

The warranty does not cover worn out parts, nor does it apply to faults resulting from improper use, insufficient care or maintenance not carried out in accordance with the instructions in this operating manual.

Technical data

General data		
Nominal voltage	VDC	5
Max. power input	W	2.5
Power input standby	W	< 0.1 W
Interface		USB-C (data)
Permissible ambient temperature	°C	+ 5 ... + 40
Permissible relative humidity	%	80
IP code according to EN 60529		IP 41
Dimensions (W × D × H)	mm	192 x 123 x 19
Weight	kg	0.5
Operation at a terrestrial altitude	m	max. 2000 m above sea level
Max. communication distance (dependent on the building)	m	5
Battery pack		Built-in rechargeable lithium-polymer battery
Battery pack capacity	mAh	10000
Runtime battery-operated	h	10
Battery charging time	h	5
Supported Languages		German, English, Chinese ...
Display		
Size		7"
Resolution		1024 x 600 px
Battery pack		
Voltage	VDC	3.7
Charging capacity	mAh	10000
Battery type		Lithium-polymer
Power supply		
Input	VAC	100 ... 240 VAC
	A	0.8 A
	Hz	50/60 Hz
Output		5 VDC – 3.0 A
		9 VDC – 3.0 A
		12 VDC – 2.5 A
		15 VDC – 2.0 A
		20 VDC – 1.5 A
Protection class		II (double insulated)

Subject to technical changes!





designed for scientists

IKA-Werke GmbH & Co. KG

Janke & Kunkel-Straße 10, 79219 Staufen, Germany
Phone: +49 7633 831-0, Fax: +49 7633 831-98
eMail: sales@ika.de

USA

IKA Works, Inc.
Phone: +1 910 452-7059
sales@ika.net

KOREA

IKA Korea Ltd.
Phone: +82 2 2136 6800
sales-lab@ika.kr

BRASIL

IKA Brasil
Phone: +55 19 3772-9600
sales@ika.net.br

MALAYSIA

IKA Works (Asia) Sdn Bhd
Phone: +60 3 6099-5666
sales.lab@ika.my

CHINA

IKA Works Guangzhou
Phone: +86 20 8222 6771
info@ika.cn

POLAND

IKA Poland Sp. z o.o.
Phone: +48 22 201 99 79
sales.poland@ika.com

JAPAN

IKA Japan K.K.
Phone: +81 6 6730 6781
info_japan@ika.ne.jp

INDIA

IKA India Private Limited
Phone: +91 80 26253 900
info@ika.in

UNITED KINGDOM

IKA England LTD.
Phone: +44 1865 986 162
sales.england@ika.com

VIETNAM

IKA Vietnam Company Limited
Phone: +84 28 38202142
sales.lab-vietnam@ika.com

THAILAND

IKA Works (Thailand) Co. Ltd.
Phone: +66 2059 4690
sales.lab-thailand@ika.com

TURKEY

IKA Turkey A.S
Phone: +90 216 394 43 43
sales.turkey@ika.com

KENYA

IKA Works Kenya Ltd.
Phone: +254 112 323 745
sales.kenya@ika.com

UGANDA

IKA Works Kampala Limited
Phone: +254 112 323 745
sales.uganda@ika.com

SPAIN

IKA Works Spain, S. L.
Barcelona
sales.spain@ika.com

Discover and order the fascinating products of IKA online:
www.ika.com



www.ika.com



IKAworlwide // #lookattheblue

Technical specifications may be changed without prior notice.