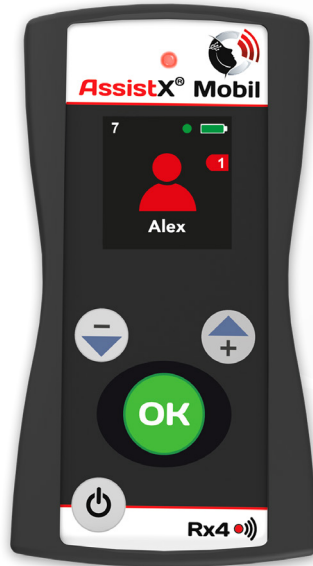


US/CA/AU

# INSTRUCTIONS FOR USE

# AssistX Mobil



**C.S.S.**  
MICRO SYSTEMS

## **\*PRELIMINARY VERSION\***

**Please always use the latest version of the Instructions for Use!**



**[www.csslabs.de/downloads](http://www.csslabs.de/downloads)**

**Instructions for use also available in other languages.**

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Instructions for Use V2.3 US/CA/AU  
from Firmware V2.00  
from Device V1.13  
Art #20540, #20534, #20535,  
#20523, #20389

CSS Microsystems GmbH  
In den Hofäckern 16  
74189 Weinsberg  
Germany  
[www.csslabs.de](http://www.csslabs.de)

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## 1. Introduction

Thank you for choosing a high quality CSS product. Please read these instructions for use carefully and take care of these instructions when using the device. Please keep the instructions for use at hand when you use the device.

## 2. Intended use

**AssistX Mobil** is a secure call system that allows people with disabilities or illnesses, e. g. being unable to make themselves known by speaking or otherwise due to paralysis, being able to call nursing and assistant caregivers or relatives. AssistX Mobil can be used regardless of the underlying disease or disability. There are basically two types of application.

**AssistX Mobil** can be supplemented with a wide variety of control elements for individual adjustment to the respective structural or functional disorders and restrictions of the activity. These include, for example, a wide variety of adaptation aids such as **buttons, proximity sensors, sip and puff sensors, acoustic sensors**. For this purpose, the transmitter has a patented **AssistX port** to which all common adaptations and controls are connected and automatically recognized. The system consists of at least one transmitter and one receiver. Several transmitters and receivers can be combined, for example, to reach nursing staff and relatives on different floors or to be able to call from different places such as beds and wheelchairs. If the restrictions are too severe, depending on the sensor used, the call can be triggered not only actively

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through directed movements, but also passively through the remaining physical activities. For example, a strong cough can be detected via the **AssistX AS one** acoustic sensor. With the individually selectable adaptation aid 'Sensor', **AssistX Mobil** forms a system for triggering care calls. Various sensors and accessories for call triggering are offered in order to be able to map the different context-dependent and everyday-relevant factors lying in the person or in the environment. The aim of supplying **AssistX Mobil** as a supplement to adaptation aids is to make it easier to lead a more independent life by being able to call for nursing help at any time in situations where care is required. In addition, nursing staff are relieved because, for example, routine inspection rounds can be omitted. However, **AssistX Mobil** does not serve as a substitute for a home emergency call system.

- b) Device alarms from aids such as **pulse oximeters** and **ventilators** can also be forwarded via special interface cables. In this system, the interface cables replace the handicap-friendly adaptations (sensors) as input elements. With the device-specific interface cables, **AssistX Mobil** forms a system for forwarding device alarms from aids and thus facilitates patient care, since e. g. routine patrols can be omitted. However, **AssistX Mobil** is not used to monitor medical values or to make a diagnosis, but only as a supplementary call activation to the basic functions of aids such as a **pulse oximeter**, **medication pump**, **nutrition pump** or **ventilator**, which is always necessary when context factors - such as the spatial situation in the home or sensory disorders of the caregiver - make it difficult for caregivers to perceive device alarms.

### 3. Explanation of symbols



Safety instructions!




Important instructions!

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### 3. Explanation of symbols

 Safety instructions!

 Important instructions!

## 4. Safety instructions



### Handling

Please handle the device carefully. The device contains sensitive electronic components. It is not allowed to do any modification.

The device is not life-sustaining or life-supporting. The device consists of several components. Small items may be detached from the device, which may result in suffocation or other danger to children. Small children or people with intellectual disabilities should not reach or use the device without supervision.

Do not use the device in damp, wet, very cold or very hot environments (see temperature information in technical data).

Never replace the built-in batteries by yourself! The battery can be damaged, which can lead to overheating and can lead to injuries. The integrated rechargeable lithium polymer battery may only be replaced by authorized personal.



### Mounting

The device must be mounted in a way that it cannot fall down. Only recommended mounting components from the manufacturer are to be used. The user bears the sole risk of mounting. The manufacturer is not liable for personal injury or property damage caused by the device or its components falling down.



### Repair

Under no circumstances you should open the device and repair it by yourself. Disassembling the device can permanently damage the device and cause injury. Contact your reseller or the manufacturer if the device is damaged or does not work properly. If the device or its accessories are mechanically damaged, they may no longer be used.

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## **Interaction with medical devices**

The device and its components can emit electromagnetic radiation and have integrated magnets. The device must therefore not be placed on a person or brought closer than 15 cm to people using other active medical devices. The device must also not be placed directly on active medical devices. Please pay special attention to people with implanted pacemakers. If necessary, please contact the device manufacturer of the other active medical device.

## **5. Cleaning and disinfection**

Before cleaning the device, switch it off and disconnect all cables. The device should be cleaned daily with a disinfectant and cleanser intended for use in hospitals. Cleaning should only be done with a wipe. Wipe all surfaces and let them dry or follow the wiping instructions.

Do not use sprays that may allow moisture to enter the device. Under no circumstances may any component of the device be subjected to steam or wet sterilization.

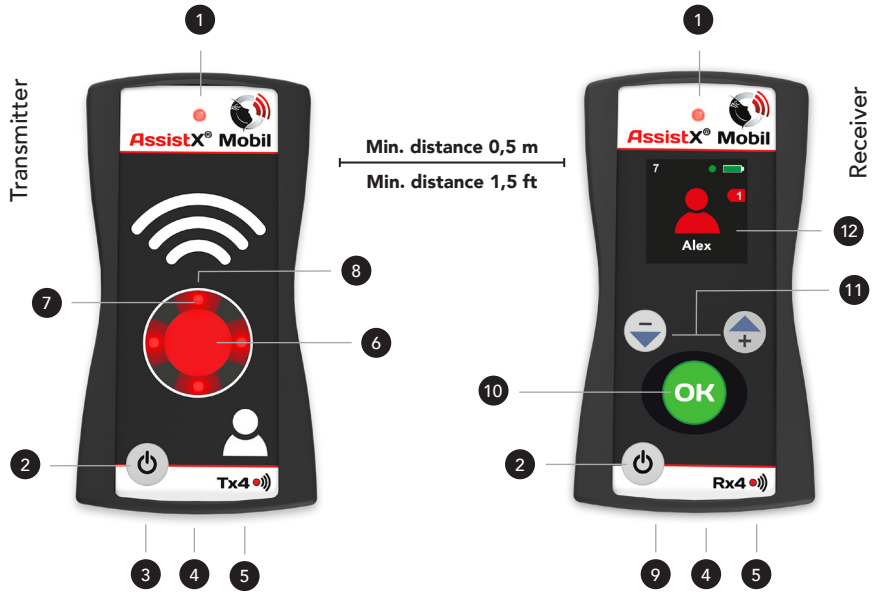


## 6. Scope of delivery

- **AssistX Mobil** TX (transmitter)
- **AssistX Mobil** RX (receiver)
- **AssistX Mobil** S-Charger for transmitter
- **AssistX Mobil** Dock for receiver
- Power supply for Dock
- USB cable
- Instructions for Use
- QuickStart Guide

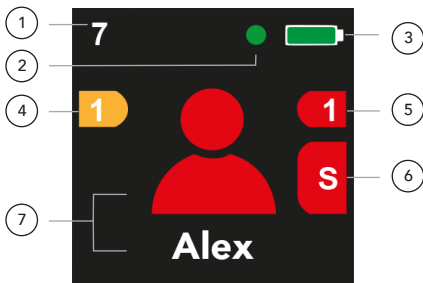


## 7. Device Buttons, Ports, Display



- ① LED
- ② ON/OFF Button
- ③ AssistX Port Sensor-/Switchport
- ④ USB socket (power/configuration)
- ⑤ Reset (restart)
- ⑥ Call Button

- ⑦ Confirmation Light
- ⑧ Infrared receiver
- ⑨ Output socket (Jack Plug)
- ⑩ Confirm / OK Button
- ⑪ Menu / up-down Buttons
- ⑫ **AssistX Mobil RX Display**



- ① Connected transmitters
- ② Charger connected
- ③ Battery status
- ④ Out of range warning
- ⑤ Call Queue
- ⑥ Alarm type
- ⑦ Caller Name / Time & Date

- ① **LED Battery** — empty — charging — full

LED flashes **green**, when 100% charged and connected to the power supply. When **switched off while power supply connected**: By briefly pressing the **ON/OFF button**, the **LED** lights up for 5 sec and shows the current charge status.

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- ⑥ **Alarm Display** S Sensor/Switch/External Device disconnected from transmitter  
B Battery alarm at the transmitter

- ③ **AssistX Port** for many common sensors/switches (jack plug 3.5 mm pink)

### **Connect sensor/switch**

Quickly insert the sensor/switch into the AssistX Port. If the plug is inserted too slowly, the sensor/switch may not be identified or may be identified incorrectly. The LED on the transmitter flashes red, do not press the switch or sensor for about 2 sec until you hear a beep and the LED stops flashing.

### **Unplug sensor/switch**

For safety reasons a ⑥ call is triggered whenever the sensor is plugged off. To avoid triggering a call, switch off the transmitter before disconnecting the sensor.

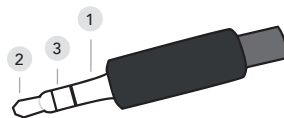


If the sensor/switch is unplugged (safety-critical!) during a call has not yet been completed (if it is not confirmed at the transmitter of the caller), the LEDs on the transmitter light up orange and a warning sounds. If the call is completed by pressing the button on the transmitter, the warning disappears.

- ⑨ **Output socket** (Alarm signal adjustable via **Relay Mode**)

With the **Mono Jack Plug** you can tap 1 & 2, with a **Stereo Jack Plug** 1,2 & 3:

- ① Common contact
- ② Normally open contact (NO)
- ③ Normally closed contact (NC)



## 8. Use of the device

Before using for the first time, please charge the device according to these instructions for use!

### Call triggering:

The caller triggers the call signal on the transmitter via the **6** Call Button or connected sensor/switch or by an infrared signal. Unplugging the sensor also triggers a call.

### Staff Call:

The button **6** can be used to trigger a staff call by care staff or relatives in order to be able to call other care staff in an emergency. This call has the highest priority. A blue flashing symbol with a yellow exclamation mark appears on all receivers, indicating the calling transmitter. To avoid false alarms, the button **6** must be pressed for at least 3 seconds.

### Confirmation and acknowledge:

When the call signal has reached the receiver (the transmitter lights up **red** to confirm that the call is received), the **1** LED on the receiver lights up **green**; the caregiver has to acknowledge the call for the first time now. The transmitter's **7** Confirmation Light and **1** LED then changes from **red** to **green**, indicating that the call has been answered by the caregiver.

In order to end the call in the Call Queue on the receiver, the caregiver must confirm the execution of the call to the caller and via the **6** Call Button on the transmitter within an adjustable time.



**Activate Call**  
With the transmitter



**Call acceptance**  
At the receiver



**Complete call process**  
At the transmitter at the caller

## Call Queue:

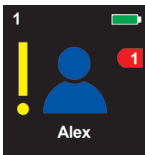
If there is more than 1 alarm/call, the call will be put in the Call Queue so that each caller can be served one after the other. The ⑦ display of the transmitter name tells you the currently used user name.

## Priorities:

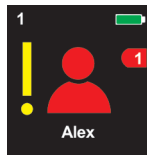
Calls that are triggered via the the (optional) Multiport transmitter AssistX ITX have different priorities. This ensures that urgent calls to the AssistX Mobil are prioritized. If a normal call is active and a call with a higher priority is triggered, the prioritized call appears immediately on the receiver and the normal call is put on hold.

A Staff Call (also via the simple AssistX Mobil transmitter) has always the highest Priority.

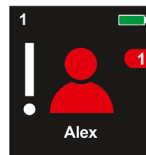
### Pirorität 1



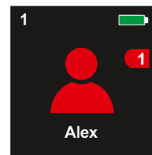
### Pirorität 2



### Pirorität 3



### Pirorität 4






## Call repeat:

If a call is confirmed at the receiver, but not also confirmed at the transmitter within an adjustable time, the transmitter repeats the call and the alarm starts again at the receiver.

## Out of Range Monitoring:

Is one or are more than one transmitters out of range for longer than 2 min, an alarm, which is indicated by the ④ out of range warning (including the number of transmitters out of range) and the ⑦ name of the transmitter: **Caller 1**

An additional alarm sound will remind every 20 seconds of the lost subscribers. If the transmitter is back in range, the warning will be deleted automatically. The warning can be deleted by pressing [OK] but will be activated again automatically after 1 min.

-  If a **connected transmitter is switched off**, the range warning is also triggered. Please therefore always **leave all connected transmitters switched on!**
  
-  Note: If the range is not sufficient, you can use the the AssistX Mobil Repeater (Art #20531) to extend the range.
  
-  For security reasons (DIN VDE 0834) a call cannot be deleted. The call must always be confirmed first at the receiver, then at the transmitter. If a transmitter or receiver fails while a call is in progress, the other side waits until there is radio contact again and the call sequence can continue. A call cannot be lost. A current call can only be canceled by switching the device off and on.

## Charging:

Two different chargers are available for easy handling in everyday use: Dock (usually for the receiver) and S-Charger (usually for the transmitter), both are included in the set.

**To charge**, plug the S-Charger into the socket and then plug the transmitter firmly into the S-Charger. For the Dock, please plug the power adapter into the socket and connect the micro USB connector to the Dock. Then please plug the receiver firmly into the Dock, the **green** LED on the dock will light **brighter**. Please fully charge the devices (LED on the transmitter and receiver flashes **green**). If necessary, the devices can remain permanently connected to the chargers, there will be no battery damage.



## Battery condition:

The charging condition of the battery will be showed by the color of the LED (**Green-Yellow-Red**). In the lower red range there will be an acoustic warning every two minutes. Beginning with the first signal, the battery lifetime will be approximately 1 hour.

If the condition of the battery is critical, the device will switch off and there will be 3 acoustic signals. The device cannot switched on again and needs to be charged. Before switching off there will be the following actions:

- **Transmitter**  
The transmitter will activate a call/alarm and waits until the call is confirmed. After that it will switch off.
- **Receiver**  
Before switching off, all active calls have to be served and have to be confirmed.

## 9. Settings

### Menu

If the Receiver is in the Setup Menu mode and is receiving a call, the Setup menu will be exit automatically. Changes will not be saved in this situation. As long as there are active calls, it is not possible to enter the Setup Menu.

- **Enter/exit Menu**  
Press [OK] Button 5 Sec. Exit the setup menu with „Menu > Exit“ or the [ON/OFF] Button.
- **Navigate Menu**  
To navigate through the setup menu use the [+] and [-] buttons.

### Info menu

Here you can see the main information of the device like firmware version and frequency.

---

## Subscribers (teach in new transmitters to the receiver)

Up to 32 transmitters can be connected to any number of receivers.

- **Adding subscribers (fast)**

Press the [+] Button at the receiver until the LED will light up **purple**. Hold the key [+] for 1 sec until the display shows the message „Press Call Button“. Switch to the transmitter you want to teach in and press the **red call button**. The receiver will confirm the new transmitter with „Subscriber added“ or „Subscriber already exists“.

- **Adding subscribers (Setup Menu)**

Go to „Menu > Subscribers > Add“.

- **Delete of subscribers**


Go to „Menu > Subscribers > Delete“. You can now select subscriber to be deleted from the subscribers list and delete them with the [OK] key. If you delete a subscriber having a standard name like „Caller 4“, the remaining list will be shrunk. means: „Caller 3“ will be followed by „Caller 5“. A new transmitter will have the name „Caller 4“. To delete all transmitters go to „Menu > Subscribers > Delete all“.



Note: For safety reasons we recommend in larger facilities to use two receivers used so that one is always charged and one is used. This guarantees the battery life for one shift.

## Set the Alarm signals of the receiver

The receiver is able to emit four different alarm signals: **Sound / Flash / Vibration / Relay (switch, toggle)**

The  switch output can activate e.g. external call signals.

- **Aktivite/deactivate Alarm signals**

Go to „Menu > Settings > Alarm Signals“. Here the signals can be set separately.



Do not deactivate all alarm signals! Always set the volume loud enough so that the call can be safely heard.



- **Set the switch mode**

Trough „Menu > Settings > Relay Mode“ the switch mode can be set up.

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Relay Mode      ● 1x 1 sec       continuous      ● ● ● Interval

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## Call repeat

Here the time can be set when a call should be triggered again if the call has not been finally confirmed at the caller. This function cannot be deactivated (safety function!). We strongly recommend settings to 1 min.

## Date & Time

Notice: the actual week day will be showed and automatically adjusted and can't set manually.

- **Call up time menu**

Go to „Menu > Settings > Clock > Clock Set“.

- **Set Clock**

The navigation is controlled via **[+]** and **[-]**.

- **Daylight saving time**

Here the automatic changeover to daylight saving time can be switched on and off.

- **Save and exit**

Press the **[OK]** key 1 sec for „Next“.

Use **[OK]** to go back to menu.

## Saving power (Power save mode)

If the Power save mode is switched on the display will switch off after 20 sec after the last key press. By pressing the **[OK]** button the display will switch on again.

If there is an ⑥ alarm or ⑤ an out of range warning the display will switch on and will stay on as long as there is an alarm or warning.

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- **Activate/deactivate power save mode**  
Go to „Menu > Settings > Power Save“.

## Infrared receiver of the transmitter

(From Firmware V1.34 & Device Version V1.08)

An infrared receiver is built into the transmitter. With a AAC or environment control device, a call can be triggered via a built-in transmitter. This function can be used in addition to a sensor/switch. The IR receiver is activated by default. It can be switched off (e.g. if there are several transmitters in the room) by first pressing the ON button (3), then the red button (6). After a short time, the LED around the red button lights up **red**, then the IR receiver is deactivated. When the process is repeated, the LED turns **green** and the IR function is activated again.

To teach the IR code into your AAC or environment control device, you need the IR one handset (Art #20164), the code for your device may also be available for download ([csslabs.de/download](http://csslabs.de/download)).

With the Configurator software, the IR channels can be switched (4 different channels available) if several devices in a room want to use the IR function.


## Configurator Software

The AssistX Mobile Configurator software is available at [csslabs.de/download](http://csslabs.de/download) (for Windows). You can use it to:

- Update the firmware of the transmitters, receivers and repeaters
- Assign names (eg the caller) to the transmitters in the receivers
- Clone the receiver so that the configuration (transmitter names) is copied to several receivers
- Save the receiver configuration
- Switch the IR channel at the transmitter or switch the IR function on/off
- Setting date and time

Instruction by specialist personnel is required to use the Configurator.


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 Please note: If you update a device, all other components of the system (transmitters, receivers and repeaters) also need to be updated. Otherwise, safety-critical system failures can occur!

## 10. Maintenance / Review

The device must be checked for safety and functionality at regular intervals of **3 months**. The check must be done by trained specialist personnel only. The following should be checked:

- Battery (replace every 3 years at the latest)
- Speaker function
- Range
- Connectors for damage and soiling
- Damage to the housing
- Update Firmware

 Please note: If you update a device, all other components of the system (transmitters, receivers and repeaters) also need to be updated. Otherwise, safety-critical system failures can occur!

## 11. Support

If you need any support or for technical questions about the product, please contact the reseller where you purchased this product. If necessary, e. g. the reseller is not available or cannot help, send us an email to [support@csslabs.de](mailto:support@csslabs.de). Please be sure to include a description of the problem and the serial number of the device.

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## 12. Technical specifications

Dimensions: 65 x 119 x 26,5 mm (transmitter/receiver)

Weight: 110 g (transmitter), 130 g (receiver)

IP Rating: IP 54

Power supply: 5 V (USB)

Frequency: 922 MHz

Battery lifetime (depending on use): 24 - 72 h (transmitter), 10 - 24 h (receiver)

Range: 30 - 350 m, typical indoor: 80 m (100 - 1150 ft, typ. 250 ft.)

### Temperature ranges

Use: 0 °C to 45 °C

Transportation and storage: -10 °C to 50 °C

## 13. Conformity/Standards

**AssistX Mobil** based on the requirements of DIN VDE 0834.

## 14. Environmental protection and disposal

All electrical and electronic devices must not be disposed with general household waste, but must be disposed at designated disposal points. This product is subject to the European Directive 2002/96/EC and must therefore be properly disposed at the WEEE collection points. Please dispose used batteries and rechargeable batteries in a recycling bin for used batteries or via special resellers.

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