

Pool Safety Diagnostic

DSP 10 – S2

USER MANUAL

KIT DSP 10-D

KIT DSP 10-B

KIT DSP 10-BT

KIT DSP 10-E

KIT DSP 10-F

Version from 2015

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Guarantee, Responsibility

Our products are guaranteed to be free from manufacturing defects

The warranty on all our products (excluding consumables such as batteries, etc.) is valid for one year from date of purchase.

This warranty is limited to the replacement of defective parts acknowledged by the company Firstinnov' and which have been returned in their original packaging, postage prepaid to the company Firstinnov'.

This warranty does not cover damage caused by connection errors, modifications, power surges, mechanical alterations, misuse, lack of care, etc.

The manufacturer and its suppliers accept no liability to you or any other person for any damages, lost profits or any other claim resulting from the use of this product.

Rights under common law are not affected.

Important!

1. The content of this manual is subject to change without notice.
2. Due to restrictions imposed by printing, the displays shown in this manual may differ from the actual product.
3. The contents of this manual may not be reproduced without the manufacturer's consent

Safety Notice

Please read this user manual carefully before using your DSP10-S2.

Improper use as listed in the user manual absolves Firstinnov' from all responsibility.

The DSP10-S2 is an additional alarm system. This system is an aid to supervision and is not a replacement for the vigilance of a responsible adult.

The DSP10-S2 is intended for use around a private family pool only, or for collective use to increase the protection of those who cannot swim.

When the siren has been triggered never get too close to the DSP10-S2 central unit. Indeed, prolonged exposure to excessive noise can cause a decrease in hearing.

Radio emission devices using the 434MHz band (e.g. wireless headphones) will not disrupt transmission and will not trigger the alarm, but they can reduce the range of the system.

Firstinnov' assumes no liability for injury or damage resulting from the use of the DSP10-S2.

The system is designed to operate between 0 and 60 ° C.

Never use the system when the central unit beeps until the problem has been resolved.

Do not use the DSP10-S2 in seawater or in a high salt concentration pools.

Description of proper functioning

The DSP10-S2 is easy to install and test. The child wears the sensor wristband. If the child falls into the water, the wristband detects the fall. It then sends a coded message by radio waves. The message is received by the central unit and triggers an audible alarm.

The remote control is then used to turn off the alarm.

The DSP 10 – S2 System

The DSP10-S2 kit contains a central alarm unit, a sensor wristband and a user manual.
To order additional items, please use the following references:

Designation: Reference:

Blue wristband sensor DSP10-1W

Pink wristband sensor DSP10-2W

Central unit DSP10-S2

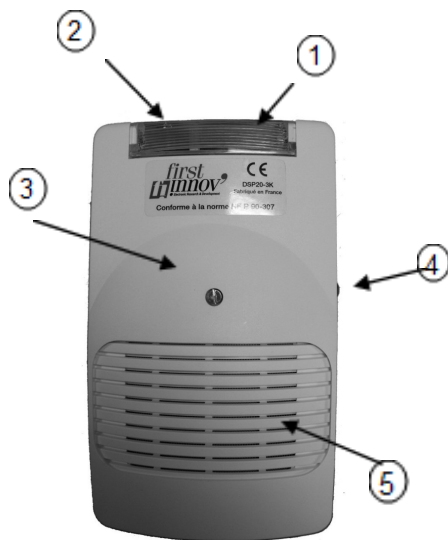
Remote Control DSP20-1R

Spare battery central unit DSP10-S5

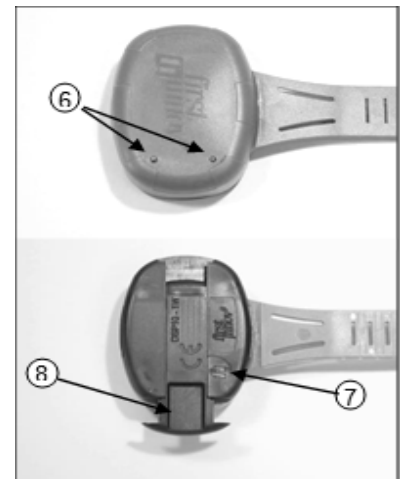
Spare battery bracelet DSP10-S4

Spare battery remote DSP20-S4

Central Unit



Sensor Wristband



Remote Control (Optional)



1. Status light of the central unit
2. FI Logo recognition sticker
3. Central unit retaining screw
4. Siren stop button and "range test"
5. Built-in siren
6. Water sensor electrodes
7. FI Logo recognition markings
8. Wristband safety locking tab
9. Remote control stop button for siren and "range test"
10. Remote control FI recognition logo sticker
11. Remote control retaining screw
12. Remote control recognition button

The central alarm unit:

The central unit is equipped with a built-in siren (5) that sounds when the wristband sensor comes into contact with water. You can stop it by pressing the button located on the unit (4) or by pressing the remote control button (9). If you press one of the two buttons while the siren is not triggered, this will initiate the "range test" mode (see paragraph *System Diagnostic and Testing*). A red light (1) indicates the status of the central unit (unit ready, "range test" mode, low battery warning and water alert). The FI logo sticker (2) indicates the recognition zone (see paragraph *Additional Components*). The three mounting points allow secure mounting of the central unit to ensure proper positioning.

Wristband Sensor:

The bracelet is fitted to the wrist of the person to be supervised. The two electrodes (6) detect contact with water. The FI markings (7) indicate the recognition zone (see paragraph *Additional Components*). Each wristband is equipped with a mechanical safety device for locking and unlocking. To unlock the wristband, pinch the sensor and push the locking tab. These actions must be done simultaneously in order to release the locking tab.

Remote Control (optional):

You can stop the siren by pressing one of the four buttons. If you press the button (9) while the siren is not triggered, this will initiate the "range test" mode (see paragraph *System Diagnostic and Testing*). The FI logo sticker (10) indicates the recognition area (see paragraph *Additional Components*).

Installation

Proper installation is crucial to proper operation, so please follow the installation instructions closely.

Switching on the central unit

The central unit is independent and runs off a battery located inside the casing. On delivery of the DSP10-S2, the battery of the unit is not connected. To do this, open the unit using a screwdriver and connect the battery. The unit initializes with a beep and the red indicator light will flash every 3 seconds. This operation should be carried out indoors or under cover before installing the system.

Remember to fill out the service label on the inside of the central unit to note the date of first use.

Installing the central unit

Install the central unit protected from weather and sun to avoid premature aging of the casing.

For optimal performance, no obstacle should be placed between the central unit and the edges of the pool (walls, trees, etc.).

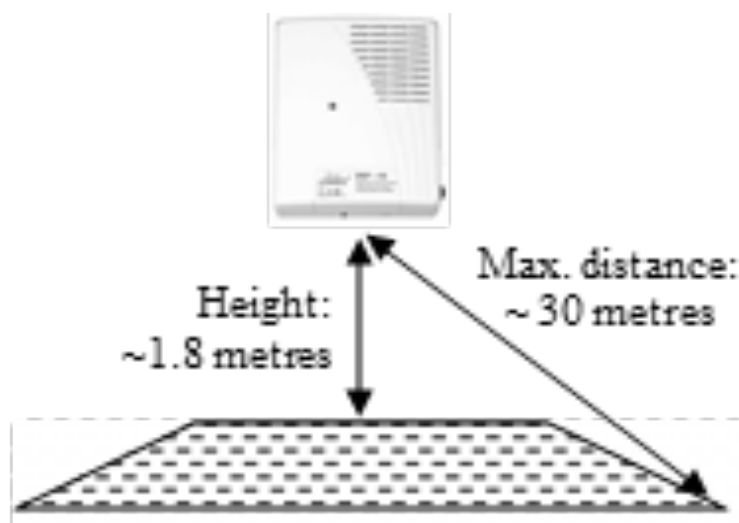
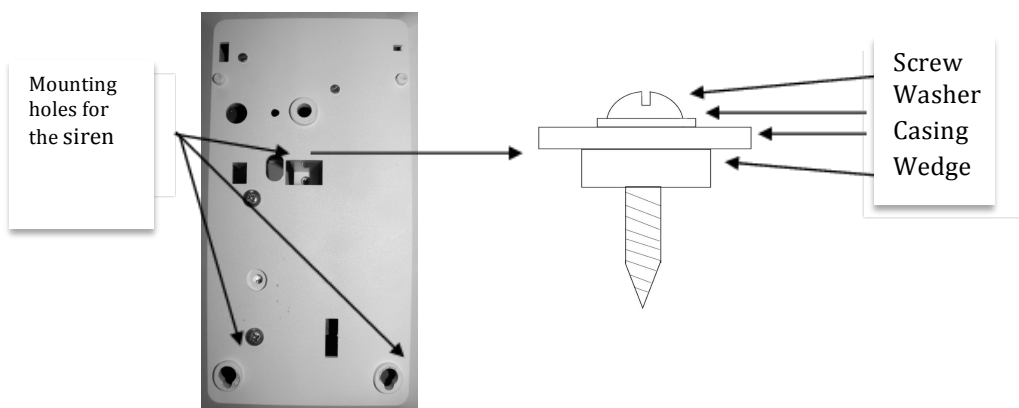
Incorrect installation can decrease system performance, which is a danger to the safety of your child.

Carefully follow the instructions below:

1. Locate a desirable position to secure the central unit in accordance with the recommendations outlined above. Temporarily attach the unit to the support (wall, panel, etc.) at a height of about 1.8 meters and symmetrically to the corners of the pool (see figure). The distance between the unit and the edges of the pool must be less than 30 meters. The system scope will depend on the environment around the pool.
2. Press the button (9) on the remote control to initiate "range test" mode, the central unit will beep and the red light will flash every second. The unit will remain in this mode for 30 seconds.
3. Immerse the wristband sensor less 10cm in the pool, the central unit will beep twice and the indicator will continue to flash. The unit has detected the wristband sensor's contact with water at the test location. Remove the sensor from the water, the unit will beep three times and the light will go out. The unit exits the "range test" mode and returns to normal operation.

4. If the central unit triggers the alarm instead of a beep, press the remote control to stop the alarm then press again to switch to "test range" mode and repeat step 3.
5. Repeat steps 3 and 4 in different corners of the pool.
6. If the central unit does not beep in every test location in the pool, move the unit and repeat the procedure from step 1.
7. When you have found the location that allows the central unit to cover the entire pool, open the cover and secure it with three screws.
8. Make marking before drilling the holes to secure the central unit.
Never drill the mounting holes directly through the case.
Do not touch the circuit board or its antenna during fixation.

Your DSP10-S2 is now ready for use.



Use

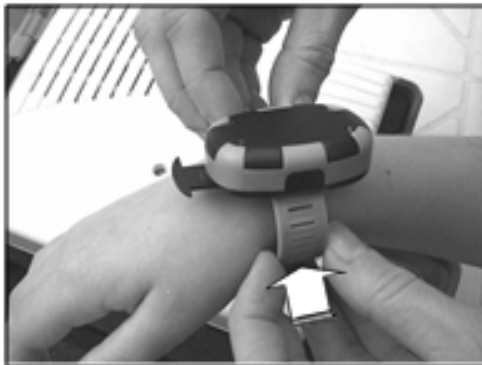
Once the system is installed and tested, simply fit the wristband to the arm the child concerned. Never cover the sensor with a garment. Remember that the DSP10-S2 system is an aid to supervision and is not a replacement for the vigilance of a responsible adult.

Fitting the wristband

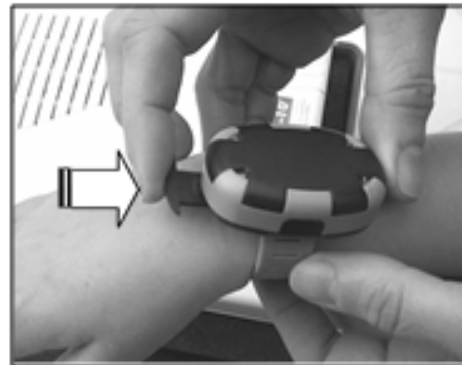
1. First test the wristband to make sure that it is working (see section *System Diagnostic and Testing*)
2. Unlock the wristband. Pinch the side of the strap and pull the sensor locking tab. These actions must be done simultaneously in order to release the clasp.

Follow the steps below to fit the wristband sensor to the arm of the child:

Fitting the bracelet



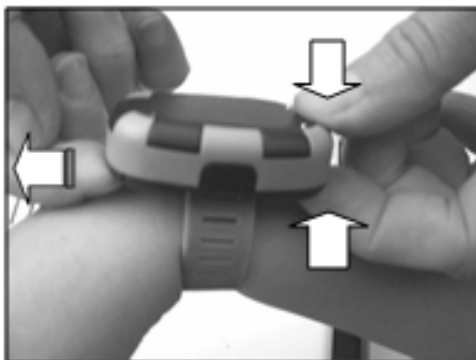
Locking the security clasp



Removing the wristband

To remove the wristband pinch the side of the strap and pull the sensor locking tab. These actions must be done simultaneously in order to release the clasp.

Removing the bracelet



System Diagnostic and Testing

The DSP10—S2 is equipped with a number of diagnostic functions allowing you to test the properties of the system and to warn you in case of malfunction. Don't forget to test the system (including all wristbands) before use and maintain it properly.

General Test Procedure

This procedure applies to a system that has already been installed.

1. Press the button (9) on the remote control to initiate "range test" mode. The central unit will beep once and the red light will flash every second. The unit will remain in this mode for 30 seconds.
2. Immerse the wristband sensor less 10cm in the pool, the central unit will beep twice and the indicator will continue to flash. The unit has detected the wristband sensor's contact with water at the test location. Remove the sensor from the water, the unit will beep three times and the light will go out. The unit exits the "range test" mode and returns to normal operation.
3. The "range test" is valid, and it is possible to renew the procedure at another location of the pool as many times as necessary.
4. If the unit does not beep check the batteries of the different elements of the system or refer to the paragraph *Additional Components*.

Low battery diagnosis

The batteries in the DSP10-S2 system generally last about 2 years. At all times, the different components of the system report the state of their battery to the central unit. Note that if an element has been stored for a long period in an area where communication with the central unit cannot be established, it is possible that the battery has become discharged without signalling its state to the central unit.

A low battery is signalled by a beep from the central unit which is repeated every 30 seconds

1. If the red light is off, the battery of the central unit is low. If the red light flashes, it means that another component is concerned (remote or wristband).
2. Ensure proper operation of the component. If it does not work see paragraph *troubleshooting*. Position the FI logo stickers of the element and the central unit face to face (a few millimetres apart). Within 20 seconds, while the red light flashes, follow the procedure described below according to the type of accessory:
 - Remote Control: Press the button 12 (*see figure on page 4*).
 - Wristband: soak the wristband in a glass of water and then remove it.If the indicator on the central unit slows and does not beep, you have identified the accessory with low batteries. Otherwise, the unit emits a beep; try a different accessory.
3. When you replace the batteries of the faulty component, the low battery warning will automatically disappear. If the unit continues to beep, it means that another component has a low battery. Repeat the procedure in this case.

Additional Components

The wristband sensor and the remote control provided on delivery are operational, i.e. it is not necessary to carry out the recognition procedure. However, if in doubt or other wristbands complement the basic equipment, recognition is possible at any time using the procedure below.

To initiate system recognition of the accessories, follow this procedure and repeat for each accessory:

1. Maintain the accessory against the FI logo sticker (*see figure below*); the LED will blink rapidly.
2. Within 20 seconds, while the red light flashes, follow the procedure described below according to the type of accessory:
 - Remote Control: Press the button 12 (*see figure on page 4*).
 - Wristband: soak the wristband in a glass of water and then remove it.

If the operation was successful, the control unit emits a confirmation beep. The accessory is ready for use. If the procedure fails see paragraph *Troubleshooting*.

Example: wristband recognition



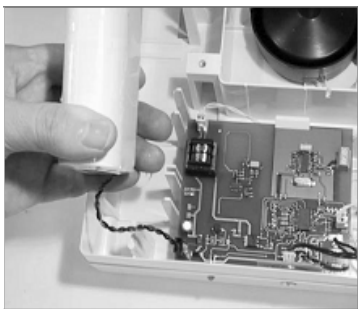
Maintenance

It is advisable to test the operation of the DSP10-S2 before each use.

Do not wash the central unit with large amounts of water. Use a damp sponge to clean the casing.

A service label is located inside the central unit and allows you to track battery changes. It is important to keep the wristbands clean. Clean the electrodes with a toothbrush using water and soap (caution! Do not use the washing machine, do not use abrasive products, ... etc.).

Changing the central unit battery



The battery of the central will generally last about 2 years. In case of an indication "low battery" it must be replaced (réf. DSP10-S5). Open the central unit by unscrewing the retaining screw on the front cover. Remove the connector and the power supply. Remember to fill out the service label on the inside of the unit to record the battery replacement dates.

Changing the wristband sensor batteries

The wristband sensor's battery will generally last about 2 years. If indication "low battery wristband" it must be replaced (type 3V CR2032) as follows:



1. Insert a flat screwdriver into the opening slot in the lower part of the wristband. Then insert alternately the screwdriver on each side of the case between the upper and lower parts to gradually open.



2. Remove the coin-cell battery (type 3V CR2032) from its holder and replace with a new one of the same type (the + terminal of the battery is visible).

3. Close the casing and test the bracelet (see paragraph *Installation*)

Changing the remote control batteries

The two remote control batteries will generally last about 3 years. If indication "low battery remote control" they must be replaced (3V CR2032) as follows:

1. Open the remote control with a Phillips screwdriver
2. Remove the two coin-cell batteries (type 3V CR2032) from their holders and replace them with two new ones of the same type (the + terminal of the battery is visible).



3. Close the casing and test the remote (see paragraph *Installation*)

Warning: when changing the batteries, do not touch the PCB. Any deterioration of the PCB is not guaranteed by Firstinnov'.

Instructions concerning batteries

Batteries should not be disposed of with household waste. To properly dispose of them according to the local standard, please place them in the public collection bin or return them to your retailer or manufacturer.

Trouble Shooting

1. The light on the central unit is not blinking:

Make sure the battery of the central unit is properly connected.
If so, replace the battery of the unit.

2. The central unit is beeping:

- Beep every 30 seconds:

The light is not flashing: replace the battery of the unit.

The light flashes: the battery of one of the elements (wristband, remote control) is discharged. In turn, approach each element to the recognition zone (see paragraph *low battery indication*)

3. The central unit emits an alarm

1. Ensure that the wristbands are not in the water.
2. Press the button on the remote, or on the central unit.
3. Disconnect and reconnect the battery in the central unit.

4. The wristband sensor isn't working

Clean the electrodes with a toothbrush using water and soap (careful! Do not use the washing machine, do not use abrasive products, ... etc.).

Repeat the wristband recognition procedure (see paragraph *Additional Components*).

If the problem persists, replace the battery in the wristband sensor.

5. The remote control isn't working

Test the remote control near the central unit. Repeat the recognition procedure on the remote control (see paragraph *Additional Components*).

If the problem persists, replace the battery in the remote control.

If the system still does not operate normally contact your DSP10-S2 dealer.



WARNING To reduce the risk of injury does not let children use or play with the device.



WARNING Firstinnov' only applies its guarantee of quality, operation and safety for its products if they are made up of original Firstinnov' components. The use of components that are not originally Hayward voids any warranty.

Declaration of Conformity



This declaration is the responsibility of the manufacturer within the European Community:

Firstinnov 5, Rue du chant des oiseaux 78360
Montesson France

(Name / Address)

This certifies that the following designated products:

DSP20-3K, DSP10-S2, DSP10-1W, DSP10-2W and DSP20-1R

(Product identification)

Comply with the essential protection requirements of R&TTE Directive 1999/5/EC on the approximation of the laws of the Member States relating to Radio Spectrum Matters, EMC and Electrical Safety.

This declaration applies to all specimens manufactured in accordance with the technical documentation described in the annex II of the Directive. This documentation is kept at the disposal of the relevant national authorities of any Member State for inspection purposes.

Assessment of compliance of the product with the requirements relating to the essential requirements according to Article 3 of R&TTE was based on Annex III of the Directive 1999/5/EC and the following standards:

Radio Spectrum: EN 300 220-1&3 EN 300 330 –1&2

Identification of regulations / standards

EMC:EN 301 489 part 1&3

Identification of regulations / standards

Safety:EN60950

Identification of regulations / standards

Disposal of batteries and electronic equipment

CAUTION



This device is marked with the recycling symbol relating to electronic waste. This means that this product should be taken over by a recycling system in accordance with European Directive 2002/96 / EC to be either recycled or dismantled in order to reduce any impact on the environment. For more information, contact your local or regional government.

Electronic products that have not been properly disposed of are potentially dangerous for the environment and human health due to the presence of hazardous substances.

What to do if an accident occurs

Do not panic. Remove the child from the water as quickly as possible. Call for help immediately and follow the advice given to you.

Dial 18 for the fire fighters and 15 for an ambulance

Replace wet clothes with warm blankets.

The danger of drowning is often due to the time of discovery, sometimes longer than you think, and the frequent initial panic that prevents an immediate rescue attempt.

Drowning prevention:

Closely supervise children. In the case of a family reunion, designate ONE responsible adult (incorrectly we tend to believe that more people supervising means more control over the situation).

Never leave a child alone near a pool or any body of water; they can drown in just 10 cm of water.

Reinforce supervision of children with disabilities or a discomfort in swimming.

Remove attractive floating objects from the pool that can entice children to lean and fall into the water.

Place pole and buoys poolside to be used in case of an accident. The mobile phone must be on hand to immediately contact medical help.

Whenever possible, teach the child to adapt in the water for his/her own safety, as well as knowing the dangers (depth of the deep end in the pool, muddy bottom and slippery banks of the pond, danger of wells and water holes which one can not evaluate the depth).



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(1) Facturation selon les conditions tarifaires de l'OBL de l'appelant – tarifs applicables en France métropolitaine depuis tout poste fixe (hors publiphones)