

PHYWE Systeme GmbH & Co KG
Robert-Bosch-Width 10
D-37079 Göttingen

Telephone +49 (0) 551 604-0
Fax +49 (0) 551 604-107
e-mail info@phywe.de

Operating instructions



The appliance complies with the relevant EC directives.



Fig. 1: 12821-99 SMARTfloor Puzzle

TABLE OF CONTENTS





1	SAFETY INSTRUCTIONS
2	PURPOSE AND PROPERTIES
3	FUNCTION AND OPERATING ELEMENTS
4	HANDLING
5	OPERATING INSTRUCTIONS
6	TECHNICAL DATA
7	SCOPE OF DELIVERY
8	CONFORMITY
9	DISPOSAL
10	LICENCE INFORMATION

1 SAFETY NOTES



Caution!

- Before using the appliance, read the operating at instructions carefully and completely. This will protect you and prevent damage to your appliance.
- Do not operate the appliance if damage is visible
- Only use the device for its intended purpose.
- Do not open the electrical connection box (SMARTfloor PlayBox) or the sensor fields.
- Protect the connection box (SMARTfloor PlayBox) and the sensor fields from dust, moisture and vapours. Only clean the device when it is disconnected from the mains.
- Ensure that there is sufficient distance between the sensor fields and other objects such as televisions, doors or walls.
- Avoid exposed connecting cables to the sensor fields, the TV/monitor and the mains connection of the SMART-floor PlayBox. These can lead to falls.
- The transport case with the contents of all sensor fields and the SMARTfloor PlayBox is very heavy. Therefore, move the transport case with more than one person only on the castors.
- The magnetic connections of the sensor fields have high connection forces. Take care of your fingers.

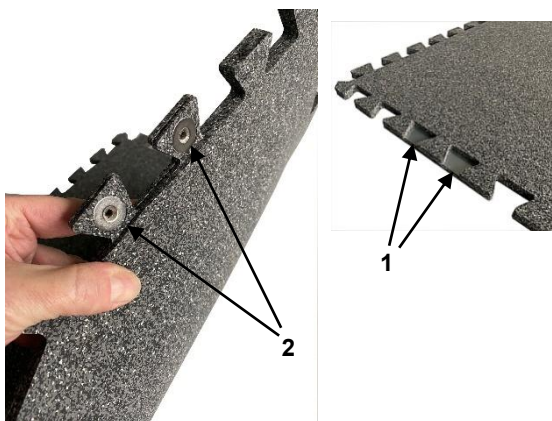
Definition of used symbols	
	Caution! Risk of danger. Observe operating instructions
	Complies with relevant European directives
	Old appliances must be disposed of separately from household waste
	Class II appliance with functional earthing

2 PURPOSE AND PROPERTIES

SMARTfloor Puzzle is an interactive sensor floor in combination with digital data acquisition and evaluation. The system records movements and body reactions and transforms them into analysable information using the latest technologies. Depending on the application, the data is output to various end devices, from televisions/monitors to tablets and smartphones.

3 FUNCTION AND OPERATING ELEMENTS

3.1 Sensor fields

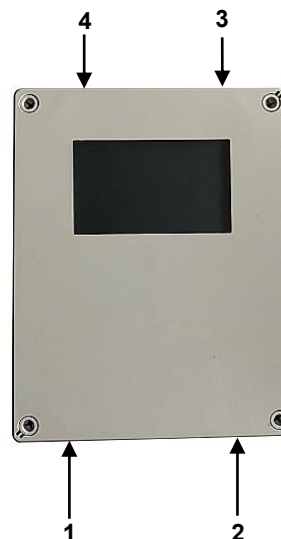


1. Contact surfaces for power supply
2. Solenoid connections for power supply

3.2 SMARTfloor PlayBox



1. SMARTfloor PlayBox
2. Adapter cable for connection to the sensor fields
3. Touch pen for easier display operation
4. Receiving antenna
5. Power supply cable



1. Mains switch, fuse and mains connection. Fuse 1.6A slow-blow
2. Connection of the sensor mats via the supplied adapter cable
3. HDMI for connecting a TV/monitor using the HDMI cable supplied.
4. Antenna connection.

3.3 Transport case



1. Seven latches on the case lid
2. Three folding handles



Always use the supplied transport trolley to transport the case.

4 HANDLING

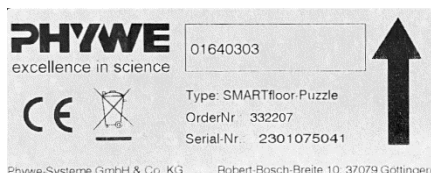
4.1 Laying the sensor mats

Lay the individual sensor fields one after the other on a firm, level floor.

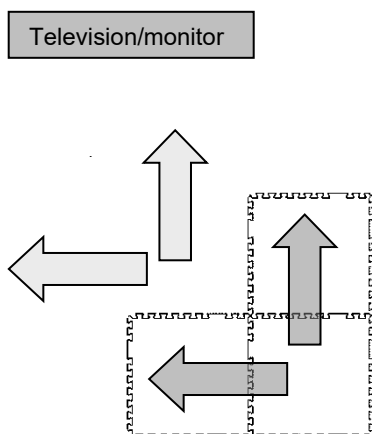


Attention: The system may only be installed and operated indoors.

An arrow on the rating plate can be seen in the top right-hand corner of each sensor field. This shows the installation direction or the direction in which the TV or monitor is located.

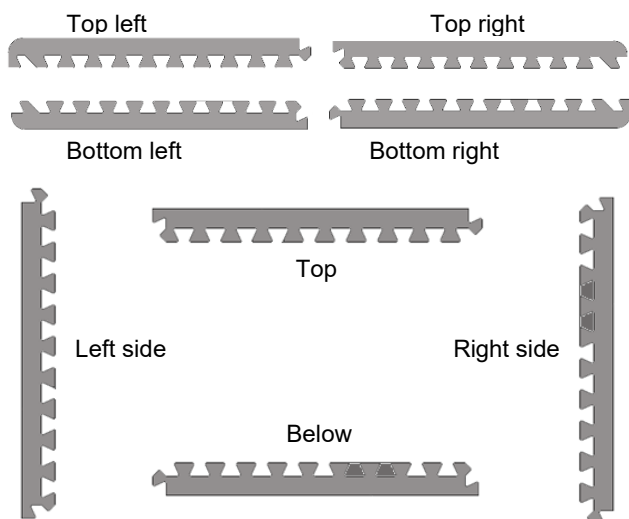


Start by laying the first sensor fields at the rear right. Make sure that you leave enough space to the TV/monitor. Now lay the sensor fields one after the other either towards the TV/monitor or to the left. Then lay the next row to the left or above.



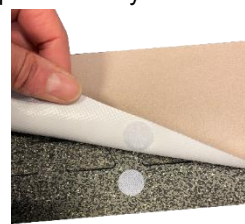
4.2 Laying the edge elements

Once the sensor fields have been laid, the edge elements can be installed. Make sure that edge elements with rounded edges are laid on the upper or lower long side. The edge element for the power supply must be on the right-hand side.



4.3 Laying the keyboard map

Roll out the keyboard map on the sensor fields including the edge elements. Align the map so that there is a margin of approx. 1 cm to the edge of the border element. If the map slips too much on the sensor fields, use the Velcro pads included in the scope of delivery.



Never bend the map sharply. Store the map in a sufficiently large packaging roll when it is not laid in the field.

4.4 Installing the SMARTfloor Play Box

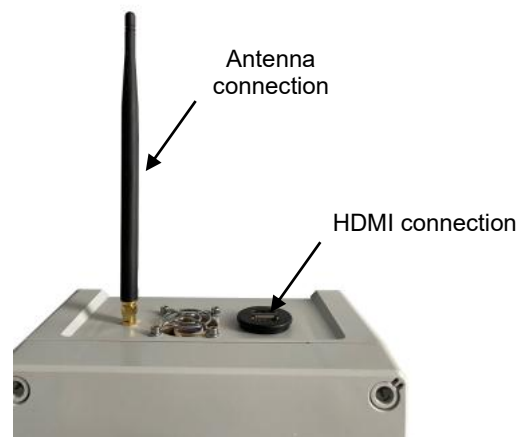


The SMARTfloor PlayBox may only be opened for installation on a wall by authorised specialist personnel. The screw holes next to the housing cover screws must be used for this purpose. The mains plug **MUST** be disconnected before opening the housing, otherwise there is a danger to life!

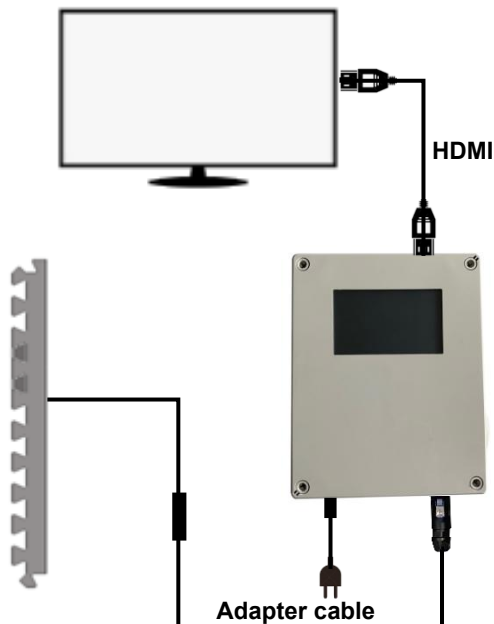
Screw the supplied antenna onto the corresponding threaded socket on the top of the Play Box.

The display on the Playbox can show all applications and games without an additional TV/monitor.

However, if you require a larger display, we recommend connecting an external TV or monitor. To do this, plug the HDMI connection cable into the top of the SMARTfloor PlayBox and connect the HDMI cable to the TV or monitor.



Connect the SMARTfloor PlayBox to the edge element for the power supply using the adapter cable as shown. Make sure that the adapter cable audibly clicks into place when it is plugged into the PlayBox.



Display with connected external monitor

4.5 Setting up the pitch for the first time

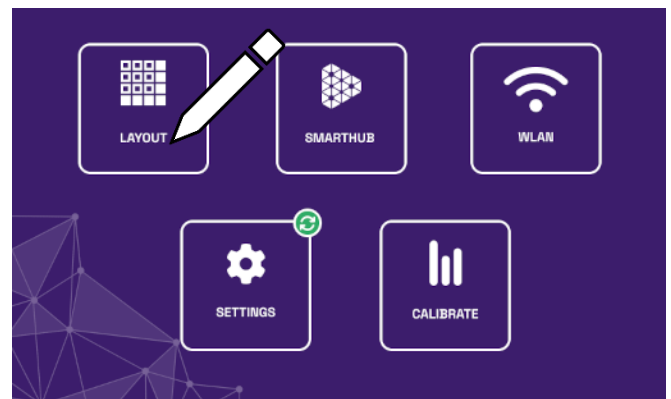
Switch on the SMARTfloor PlayBox. If no TV or monitor is connected, the main overview appears and you can switch to the game selection by swiping from right to left. This is indicated by a hand symbol. We recommend using the supplied stylus to swipe and operate the display.



In the game selection, you can return to the main menu by swiping from left to right.

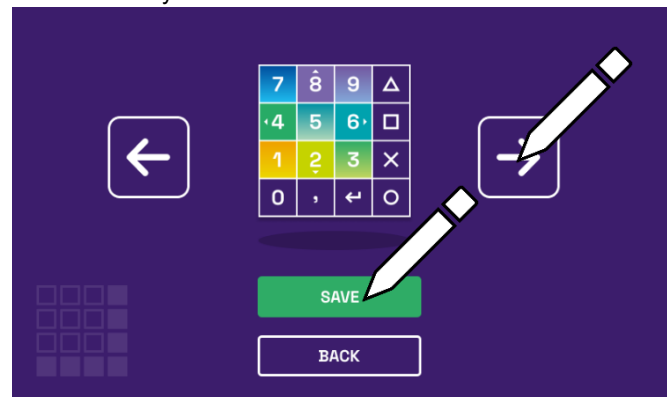


In the main overview, you can access all relevant sub-areas by clicking on them.



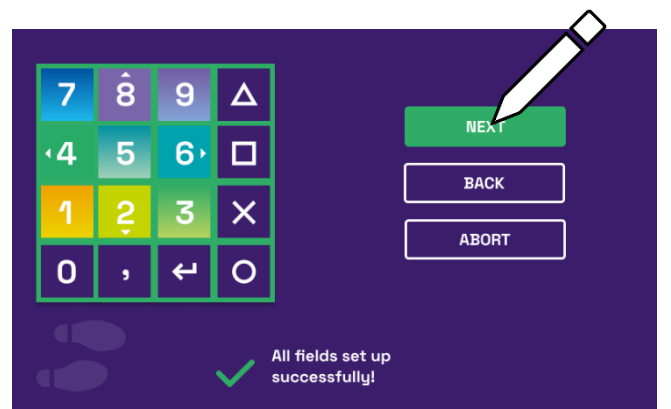
Select the "LAYOUT" area.

Please select the layout you require here, depending on which film you have placed on the sensor mats. Use the arrows to make your selection.



Then confirm with "SAVE".

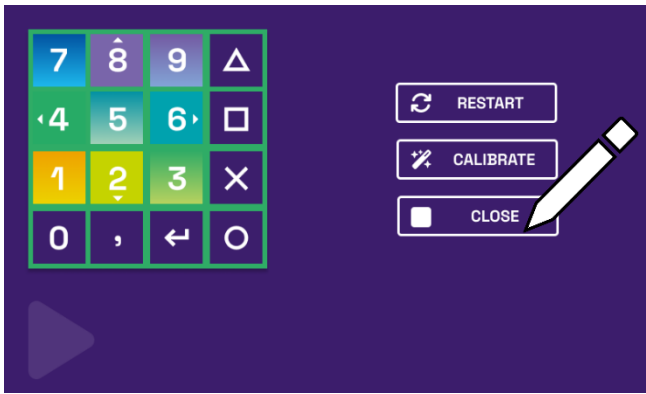
A setup manager will then start and guide you through setting up the sensor fields. Follow the instructions on the screen.



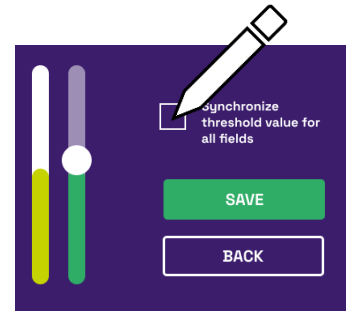
You can now switch to the game selection (swipe in the main overview or directly on a connected TV or monitor).

Navigation now takes place via the corresponding fields on the sensor base.

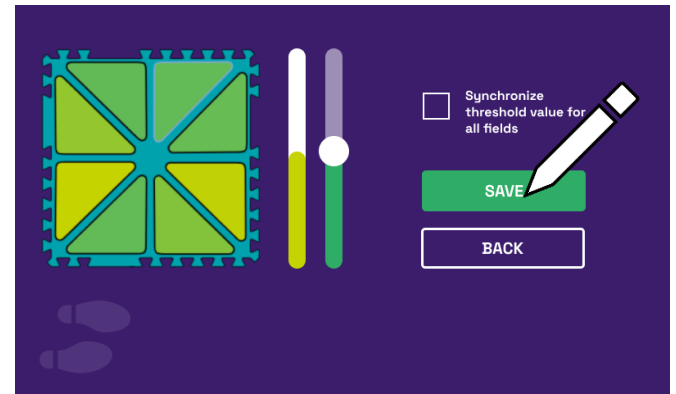
While the game is running on the monitor/TV, the game can be stopped or restarted on the PlayBox screen at any time. Calibration can also be carried out. See 4.6



Remove the tick for synchronisation to carry out a detailed calibration of individual sensor areas within the input field.



To check whether the setup is correct, you have the option of testing the sensor fields in the layout under "Settings/Device/Test".



4.6 Calibrating the sensor fields

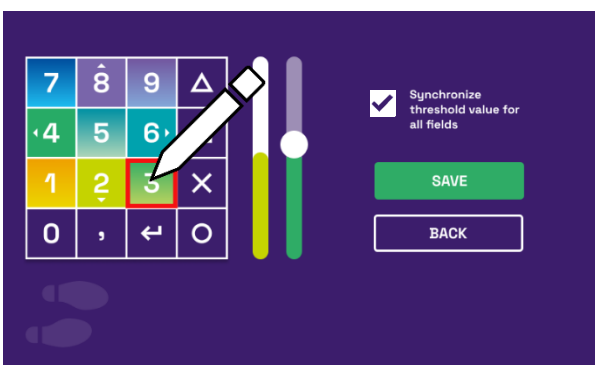


Click on the individual sensor areas and set the threshold value using the slider. Then accept the calibration with "SAVE".

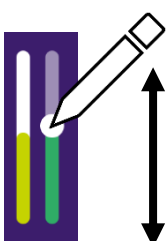
4.7 Using the SMARTHub to load your own games and applications.

The SMARTHub allows you to create and test your own games, e.g. with Scratch, and then store them in the hub. To do this, you need to register on the hub.smartfloor.io page.

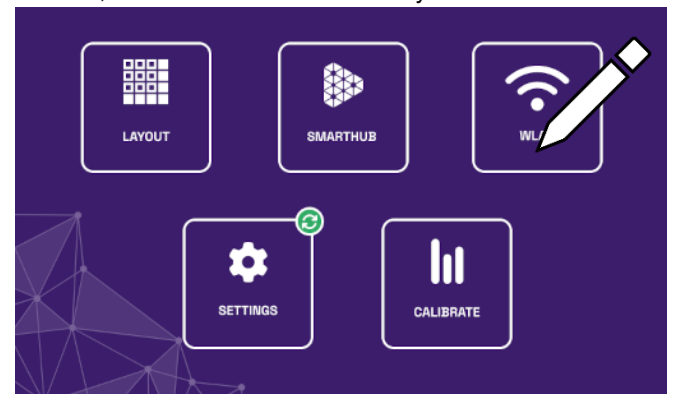
If you want to play the games you have created on your sensor field, connect the SMARTfloor PlayBox to the WLAN.



Select a field. Next to the field is a level indicator and a slider.

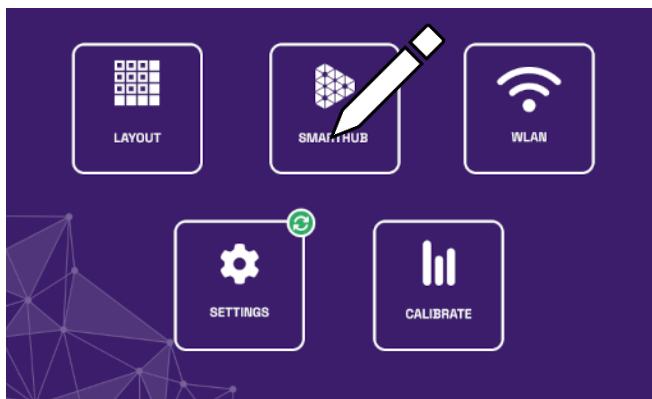


Move the slider to the position where the switching threshold is to be reached. This means that if the level is exceeded (light green level display), the sensor hero is recognised as "pressed".

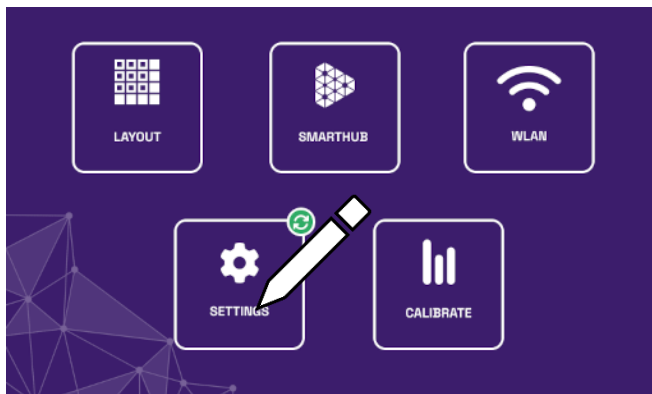


Then select your network (SSID) and enter your password for the network. Then click on "CONNECT".

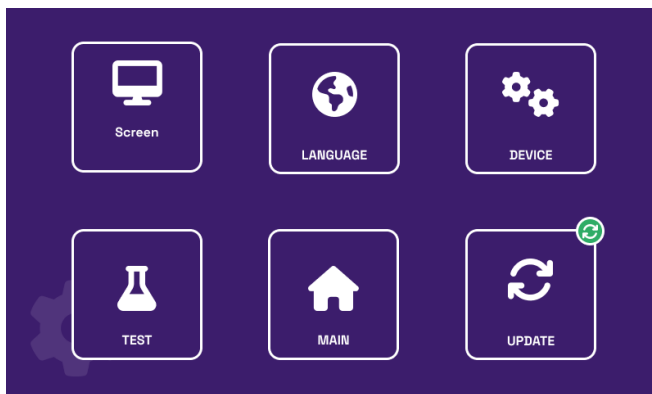
Now click on "SMARTHUB" and enter the access data that you specified when you registered in SMARTHub.



4.8 Miscellaneous settings



You can make device-specific settings under 'SETTINGS'.



Setting the resolution of a connected TV or monitor



Setting the used language



Testing the connected sensor field
See also chapter 4.5



Perform a firmware update. If the green symbol appears, a new firmware update is available.



Resetting the SMARTfloor PlayBox to the factory settings and licence information with links to the licence texts.

5 OPERATING INSTRUCTIONS

This quality appliance fulfils the technical requirements summarised in the current directives of the European Community. The product characteristics entitle it to CE- labelling.

This device may only be operated under expert supervision in a controlled electromagnetic environment in research, teaching and training centres (schools, universities, institutes and laboratories).

Electrostatic charges or similar electromagnetic phenomena (HF, burst, indirect lightning discharges, etc.) can influence the device so that it no longer operates within the specified data. The following measures will reduce or eliminate the disturbing influence: Avoid carpeted floors; ensure potential equalisation; install on a conductive, earthed surface, use shielding, shielded cables.

6 TECHNICAL DATA

(typical for 25 °C)

Operating temperature range 5...40°C

Sensor fields:

Supply voltage:	12V
Max. Current consumption per field:	25mA
Dimensions (WxHxD)	610x610x12 mm
Mass per sensor field	4.6 kg

Play Box:

Supply voltage:	see type plate
Power consumption:	43 VA
Mains fuse:	see rating plate

Radio

Frequency:	868.3 MHz
Max. Transmission power	+ 10dBm
Communication range	0... 15m
Housing dimensions (WxHxD)	191x240x107 mm
Mass	1.4 kg

Transport case:

Max. Load capacity	300kg
Housing dimensions (WxHxD)	910x860x610 mm
Mass (empty)	12kg

7 SCOPE OF DELIVERY

The scope of delivery 12820-99 includes:

- 16 sensor fields
- 16 Edge elements
- Keyboard map
- SMARTfloor PlayBox
- Adapter cable
- Touch pen
- Receiving antenna
- IEC connection cable 1.5m
- Spare fuse 1.6A slow-blow
- HDMI connection cable 2m
- Transport case
- Transport trolley
- Operating instructions

The scope of delivery 12821-03 includes:

- 12 sensor fields
- 8 Edge elements
- Keyboard map
- Operating instructions

8 CONFORMITY



Hereby, PHYWE Systeme GmbH & Co KG declares that the radio equipment type 12820-99 is in compliance with Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available at the following internet address:

www.phywe.com/en/ec-declaration

9 DISPOSAL

The packaging consists mainly of environmentally friendly materials that should be disposed of at local recycling centres.



This product does not belong in the normal waste disposal (household waste).

If this appliance is to be disposed of, please send it to the address below for professional disposal .

PHYWE Systeme GmbH & Co. KG

Customer Service Department

Robert-Bosch-Breite 10

D-37079

Göttingen

Phone+49 (0) 551 604-0

Fax+49 (0) 551

604-107

10 OPEN SOURCE LICENCE INFORMATION

The product contains software components that are licensed by the rights holders as free software or open source software. The corresponding licences or links to the licence texts can be accessed via the Playbox graphical user interface. (see chapter 4.8)