

# Discover SMARTfloor

Playful learning through movement

The flexible solution for  
a completely new movement experience -  
individual, mobile, and versatile.



## SMARTfloor

Powered by PHYWE Systeme GmbH & Co. KG

[www.smartfloor.io](http://www.smartfloor.io)



# What is SMARTfloor?

SMARTfloor is an interactive sensor floor that enables a more dynamic approach to computer science education. The system captures students' movements, allowing them to control various applications through activities like jumping, hopping, or tapping. SMARTfloor facilitates a physical experience of one's programming, significantly enhancing the learning effect!

Captured body movements are transformed into analyzable information using latest technologies and artificial intelligence. Depending on the application, data output can occur on different devices – from screens to projectors, TVs, tablets, and smartphones. In this way, SMARTfloor creates diverse and innovative applications in the fields of education, sports, health, and events.



## Experiencing computer science education physically

In the educational sector, SMARTfloor creates a completely new movement experience that excites, motivates, and inspires. SMARTfloor enriches the learning process through movement, turning learning into an active and playful experience. In this way, SMARTfloor sets new standards for modern learning.

EDUCATION  
EDUCATION  
EDUCATION

# As much SMARTfloor as you want!

The different SMARTfloor versions offer a wide range of applications for every need: whether you have limited space or need quick assembly and disassembly, each version maximizes the potential of the individual situation.

## SMARTfloor education solutions:



### SMARTfloor Puzzle

1.3 × 1.3 or 2.5 × 2.5 meters of space required

Individual, mobile, and versatile: SMARTfloor Puzzle is the variable solution for small and large spaces.

- Available in 4- or 16-piece sets
- Variable surface layout
- Flexible choice of display devices
- Maximum design flexibility

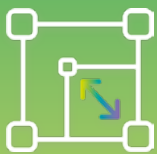
### SMARTfloor Mobile

2.0 × 2.2 meters of space required

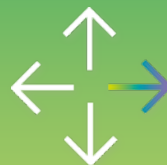
Mobile, easy to unfold, and ready to use: SMARTfloor Mobile is the perfect solution for quick deployment.

- Rollable complete system
- Quick to set up
- Large, integrated screen
- Minimal cabling effort





Available in two sizes  
to suit any amount of space:  
as a set of 4 or 16



Individual surface design  
possible thanks to variable  
arrangement



## Technical data

- 4/16 ultra-flat sensor fields (W/L/H 51 × 51 × 1.4 cm)
- 8/16 ultra-slim edge strips for a perfect edge finish
- SMARTfloor PlayBox for connecting the sensor floor and HDMI-capable display device (TV not included)
- 3/1 non-slip and washable keyboard mats
- Robust transport case and easy-rolling transport trolley

# SMARTfloor Puzzle



## Available in 4- or 16-piece sets

Whether it's a small corner or an entire room, SMARTfloor Puzzle offers maximum design flexibility and adaptability to any local conditions.

With the variable arrangement of the sensor fields and interchangeable keyboard mats, SMARTfloor Puzzle is the most versatile SMARTfloor variant.

It consists of sensor fields and edge strips. The square sensor fields can be flexibly connected at their interlocks, while the edge strips complete the overall picture. For an optimal gaming experience, SMARTfloor Puzzle offers different keyboard mats in various designs.

You also have great flexibility in choosing the display device for games and apps: TV, projector or screen – any HDMI-compatible device can be used.



Simple connection  
to existing TV, projector,  
or screen



Intuitive plug system  
for maximum design  
flexibility





# SMARTfloor Mobile

Due to its holistic design and intuitive folding system, SMARTfloor Mobile is the most convenient SMARTfloor variant. It can be taken to any location and put into operation in the shortest time, making it the perfect solution for immediate use.

It consists of a sensor floor and a chassis. The sensor floor can be easily lifted out of the holder by two people and placed freely on the floor. Sixteen high-precision sensor fields ensure an optimal gaming experience, protected for maximum durability by a scratch-resistant and shatterproof acrylic glass panel. A universal keyboard layout, consisting of numbers, colors, arrows, and additional keys, provides maximum flexibility in input options.

The chassis of SMARTfloor Mobile includes a holder for the sensor floor and all other components, such as the TV and the SMARTfloor PlayBox. Four easy-rolling wheels allow SMARTfloor Mobile to be quickly and easily moved from room to room.



**Easy moving**  
on smooth-rolling wheels



**Quick assembly and disassembly** through practical folding function



## Technical data

- High-precision sensor floor consisting of 16 sensor fields (W/L/H 195 × 220 × 182 cm)
- Integrated 65" 4K UHD TV as screen
- SMARTfloor PlayBox for connecting the sensor floor
- Integrated, universal keyboard layout
- Easy-rolling, lockable chassis with tilt protection



**Ready to use immediately**  
thanks to the integrated TV



**Easy to use** thanks to  
the well-thought-out  
complete system

## Ready to use in just a few steps:

1.

Move SMARTfloor Mobile  
to the play area and lock  
the wheels

2.

Unlock the tilt protection,  
unfold the sensor floor,  
and lay it out freely

3.

Connect the PlayBox and TV  
and turn them on

4.

Select a game  
and start playing!



# SMARTfloor

## Hub

SMARTfloor Hub is a web platform for creating and managing games and apps for SMARTfloor. It offers a steadily growing number of pre-made content. Custom games and apps can be quickly and easily uploaded and transferred to the SMARTfloor device.

With the group feature, SMARTfloor Hub supports the independent creation and storage of content for a specific user group (e.g. a class). The content is then directly synchronized with your SMARTfloor device and can be tried out or played immediately.

**Create and play your content with just a few clicks:**

1. Intuitive programming with Scratch's visual programming language
2. Automatic transfer to your own SMARTfloor device via WLAN
3. Select and play the content via the sensor floor

[hub.smartfloor.io](https://hub.smartfloor.io)



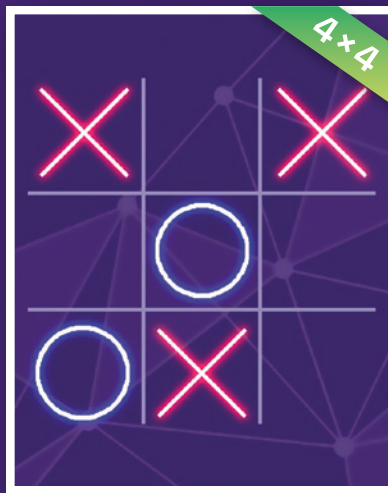
SCRATCH



## Simon Says

Memory game

Simon presents sequences of numbers to be entered via the SMARTfloor device – the faster you react, the more points you can earn!



## Tic Tac Toe

Movement game  
Multiplayer game

Circle or cross – who completes a row first?  
A classic game now playable on SMARTfloor!

# Apps & games

SMARTfloor comes with a selection of pre-installed apps that are ready to play, but also serve as illustrative examples for programming your own custom applications.

There is something for everyone!



## Mole Mauler

Movement game  
Multiplayer game

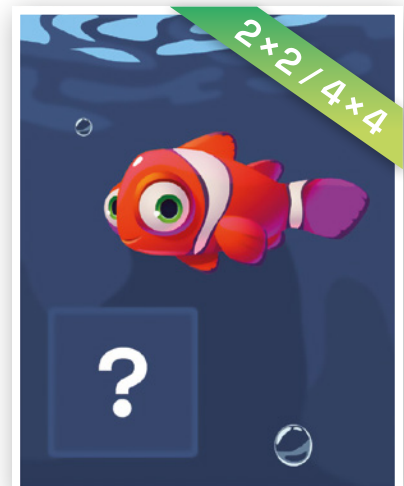
Moles are wreaking havoc on the vegetables! The SMARTfloor gardener resorts to steamroller tactics.



## Galaxy Odyssey

Movement game

The classic retro game “Space Invaders,” reimagined for SMARTfloor. A spaceship fights its way through aliens and asteroid belts with lasers.



## Angler's Craze

Memory game

Your short-term memory is challenged here! Using SMARTfloor, figure out where fish and other sea creatures are hiding in the thickets of the reef.



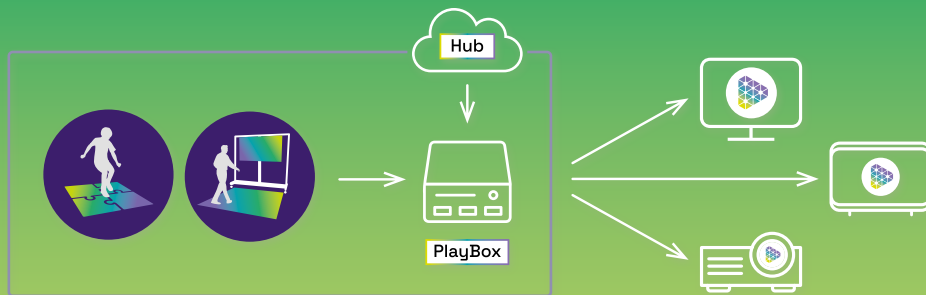
# SMARTfloor

## PlayBox



SMARTfloor PlayBox is the connecting device for all SMARTfloor versions. It ensures the image transmission to any HDMI-compatible display device and reliable power supply for the sensor floor. An intuitive 5" colour touch screen allows you to configure the sensor zones, adjust their sensitivity and change the keypad layouts.

Upon logging into SMARTfloor Hub, the PlayBox automatically downloads all self-created apps and game content as well as software updates. During gameplay, the PlayBox uses AI to analyze the input from the sensor fields and wirelessly transmits it to the running game. The result is incomparable fun!



Input:  
SMARTfloor Puzzle / Mobile

Processing:  
SMARTfloor PlayBox

Output:  
Screen / TV / projector

## Technical data

- Robust and impact-resistant housing (W/L/H 19 × 24 × 11 cm)
- Powerful microcontroller with dual-band WLAN
- 5" color display with touch function
- External antenna for optimal connection of the sensor floor

# Scope of delivery

All SMARTfloor versions at a glance:

	SMARTfloor Puzzle, 16-piece set	SMARTfloor Puzzle, 4-piece set	SMARTfloor Mobile
Sensor fields	16 (4×4)	4 (2×2)	16 (4×4)
Edge strips	16	8	-
Total dimensions (W/L/H)	243 × 243 × 1.4 cm (4×4 arrangement)	122 × 122 × 1.4 cm (2×2 arrangement)	195 × 220 × 182 cm (unfolded)
Keyboard layouts	1	3	1
SMARTfloor PlayBox	1	1	1
Pre-installed games	5 (4×4 arrangement)	5 (2×2 arrangement)	5 (4×4 arrangement)
Transport case	1	1	-
Transport trolley	1	-	-
Display device	-	-	65" 4K UHD TV
Additional accessories	User manual External antenna HDMI cable Power cable	User manual External antenna HDMI cable Power cable	User manual External antenna HDMI cable Power cable TV remote control
Article number	12820-99	12821-99	12810-99



# Experience SMARTfloor in action:



[www.smartfloor.io](http://www.smartfloor.io)

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