## Installation manual 1.0

# Orbit





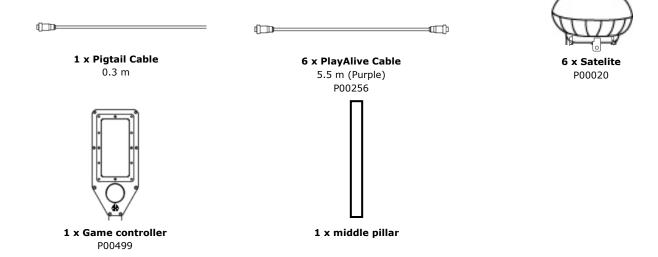
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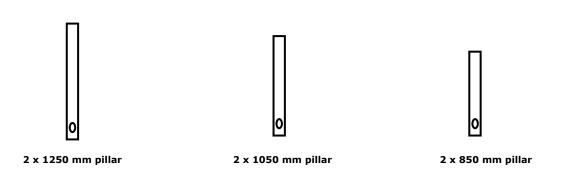
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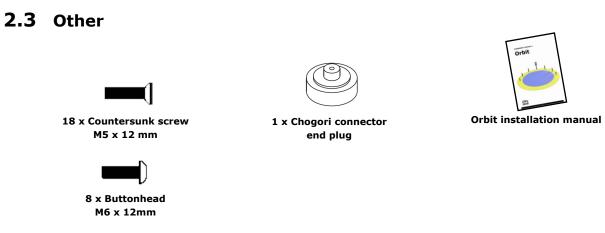
#### **Component overview**

#### 2.1 Electronics



#### 2.2 Steel components

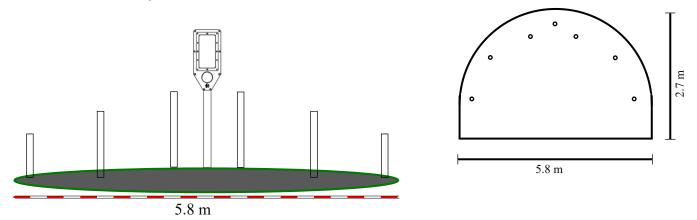




## (3)

#### 3.1 Overview of construction site

The area for the placement of the Orbit should have a diameter of minimum 5.8 meters. The Orbit must have a power cable of 230V drawn to the middle pillar. Later in the installation process an electrician must be responsible for the connection, see section 4.1.



#### 3.2 Prepare for installation

Dig 7 holes for the Orbits pillars. The holes should be round with a diameter of 500 mm and a depth of 0.5 meter. The middle hole for the middle pillar should be aligned with the 230 V power cable, as this is where the Orbit gets it's power, as seen on the illustration. Also dig ways for the cables to be pulled between the pillars as shown on the illustration in 3.3.

The middle pillar should be placed 0.35 meters further back from the Orbits remaining pillars. The center distance between the pillars should be as shown on the illustration.

The hole for the middle pillar should be centered between the outer pillars holes.

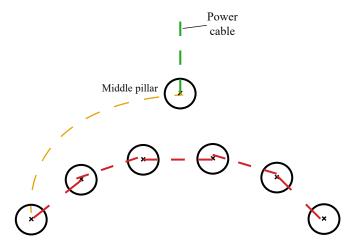
Please prepare for the following installation by

Please prepare for the following installation by reading point 7 "Appendix".

#### Power cable 2.65 m 2.65 m Middle pillar 0.65 m Ø500 mm Ø500 mm × Ø500 mm Ø500 mm 1.40 m 1.25 m 0.55 m 0.55 m 5.0 m

#### 3.3 Pulling of cables

Pull a purple PlayAlive cable up through the middle pillar and along the dugged out way to the far left pillar. Pull another Purple PlayAlive cable up through the far left pillar, along the dugged out way to the second most left pillar and up through the pillar. Continue this until all the pillars are connected to eachother in a line as show on the illustration.



#### 3.4 Casting the Orbit

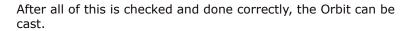
middle pillar, so it is

dle pillar's tao.

reachable from the mid-

Once the cables have been pulled, the Orbit is ready to be placed in the dug out holes and thereafter cast. Please note, that the pillars should be cast around 0.4 meters below the surface. The distance from the ground to the lowest satellites should be 0.45 meters, and the distance from the ground to the tallest satellites should be 0.85 meters.

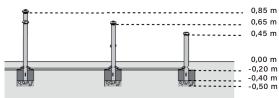
**Before casting** make sure to pull the power cable through the middle pillar, so it is reachable from the middle pillar's top, and make sure all the other purple PlayAlive cables can be reached from the pillars tops. Lastly make sure the pillars is completely leveled.



**Important:** Make sure **Important:** Make sure the power cable of 230 the purple PlayAlive V is pulled through the cables are pulled through the pillars and are reach-

able from the top.

**Important:** Prior to casting, assess wheather the height alligns with the specifications suitable for the children in this particular area.



#### Installation of electronic components

#### 4.1 Connecting the power cable

Once the Orbit has been cast and secured, the electronics can be installed. Firstly have an electrician connect the power cable to the pigtail cable. Make sure the cable is long enough to reach the top of the middle pilar and is operable afterwards.

**Important:** This must be performed by an electrician.

#### 4.2 Installation of satellites

The electronic components can now be connected.

1. Start by identifying the satellites ID. All satellites have an individual ID labelled on the back. Make sure the satellites are placed in the correct order as illustrated.

**Important:** Please make sure there is **NO** power running through the cables when they ID: 3 ID: 4 are being connected. ID: 2 ID: 5 ID: 6 ID: 1

- 2. Connect the satellites to the cables pulled through to each pillar. The cables can't be connected wrong to the satellite, as the cable only fits the satellites in one way. Satellites 1 through 5 will be connected to two cables whereas satellite 6 will only be connected to one cable. The other cable outlet on satellite 6 should be blocked with the Chogori Connector end plug.
- 3. The satelittes must be fixed to the pillars with 3 Countersunk M5  $\times$  12 mm screws. The screws can be screwed into the pillars with just the use of ones fingers. Do not use force as it might cause cold welding. The 3 brackets for the screws on each satellite can be adjusted if needed. For questions please feel free to contact PlayAlive.

Note: The holes on the pillars are asymmetrical to ensure the correct orientation of the satellites. The correct orientation puts the PlayAlive logo in the danish reading direction, which is from left to right.

It is advised to **NOT** screw the screws in completely until installation step 5 has been completed and everything is working correctly.

**Important:** Please start by screwing with your fingers to avoid a possible cold welding. Make sure all three holes are aligned when starting to screw.

**Important:** When installing the satellites, make sure they are turned the correct way. The logo should be right side up.

#### **4.3** Installation of game controller

Now the game controller can be installed.

- 1. Connect the game controller to the purple PlayAlive cable from the furthest left satellite. It is very important the game controller is connected to the satellites **before** it is connected to the power cable as the system otherwise will take longer time to start up.
- 2. When the satellites have been connected to the game controller, the power cable can be connected. This will be the last cable connected.
- 3. Place the game controller in the middle pillar. Make sure the display on the game controller is facing forward (same direction as the PlayAlive logo on the satellites). Secure the game controller with 8 Buttonhead M6 x 12 mm screws. The screws can be screwed into the pillar with just the use of ones fingers. Don't screw the screws in too tight as it might cause cold welding.

**Important:** Please start by screwing with your fingers to avoid a possible cold welding. Make sure all three holes are aligned when starting to screw.





#### Start up

#### 5.1 Turn the system on

Turn on the power and the system will start up. Be aware that this can take some time as the start-up time depend on pending updates and internet connection. It will typically be between 5 and 10 minutes. Once started the game controller will light up and the system is ready.

If the system doesn't turn on after some time, please check that the power cable is properly inserted and the game controller is recieving power.

#### 5.2 Start a game and test the setup

Go to the display and tap the satellite until you reach the game combo. Hold in on the satellite to choose the gamemode combo. Tap on the satellites lighting up and make sure they turn upon the contact. Please study the games in section 6.1 and test them out on the Wave. For questions please feel free to contact PlayAlive.

If the satellites aren't working as stated, please see installationsteps 3.3 and 4.1-4.4 again.

Complete the installation by fastening the screws securing the satellites and the game controller.

**Important:** Please finish this installation by ensuring the screws holding the game controller and the satellites are properly fastened



#### **Games included in Orbit**

#### **6.1** Orbit games

Games will rotate so the Orbit is always new and exciting. An example of a rotation of 4 games can be seen below.

Agent	In the game "Bloks," players are challenged to match blocks of the same color with each other. To match the blocks, they need to touch each other in groups of at least three blocks. Once the blocks are matched, they will disappear from the board and earn points at the bottom of the screen.
Bloks	In the game "Agent," the objective is to locate sensors with matching colors or patterns. With each round, it becomes increasingly challenging as the sensors acquire more colors, and a series of copycats sneak in. The key is to be quick, as points are earned based on the amount of time remaining after completing a mission.
Memory	The game "Memory" involves remembering as many colors in a sequence as possible. The game begins with a sequence of three colors, displayed by the corresponding sensors lighting up and making a sound in the correct order. It is now up to the player to replicate this sequence by pressing the sensors in the displayed order. With each round the player successfully completes, an additional color is added to the sequence.
Versus	In the "Versus" game, players compete against each other in four different rounds of challenges. The main objective is to capture their color on the sensors, but as the game progresses, it becomes more difficult and intense.

Each month the games will rotate. Either there will be a new game launched or there will be an improved or changed version of a game that's been out of rotation. We contantly develope new games to continue the fun and learning.



#### 7.1 General introduction to PlayAlive's technology platform

The PlayAlive system is an interactive system, where the tecnical elements communicate with each other and make it possible to engage people in all ages in activities.

The visible part of the installation are the satellites and the game controller. The satellites are intelligent units containing light, sound, communication and a touch sensor. They act as the user interface for the system. The cables connected to the satellites supply the satellites with power and enables communication to the game controller.

The PlayAlive technology elements are highly advanced electronics. Despite the fact they are very robust after installation, they can easily be damaged before or during installation if not handled correctly.

You should also be careful when pulling cables during the installation. Please be aware that the PlayAlive cables are not designed to be pulled in the connector. Therefor when pulling the cables, please pull on the cable and not on the connector.

Please be aware that when connecting and disconnecting PlayAlive components to each other, they must **NOT** be supplied with power, as this can cause components to break.

### NOTE: ALL PARTS ARE DESIGNED TO FIT TOGETHER WITHOUT THE NEED OF USING FORCE.

You can risk cold welding by using force when fitting parts together.

**Important:** Be careful when handling the parts and working with electricity.