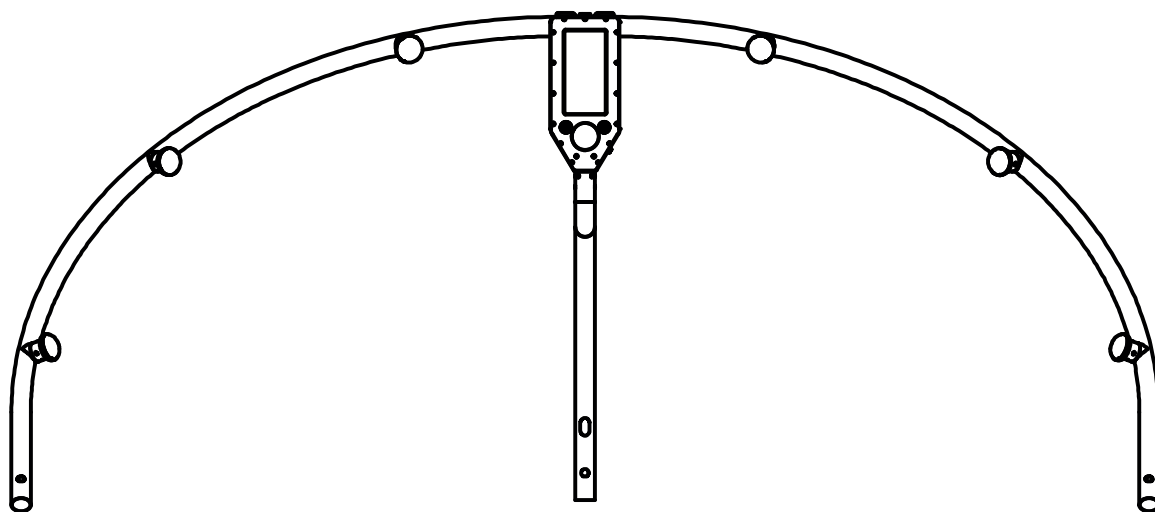


Installation manual

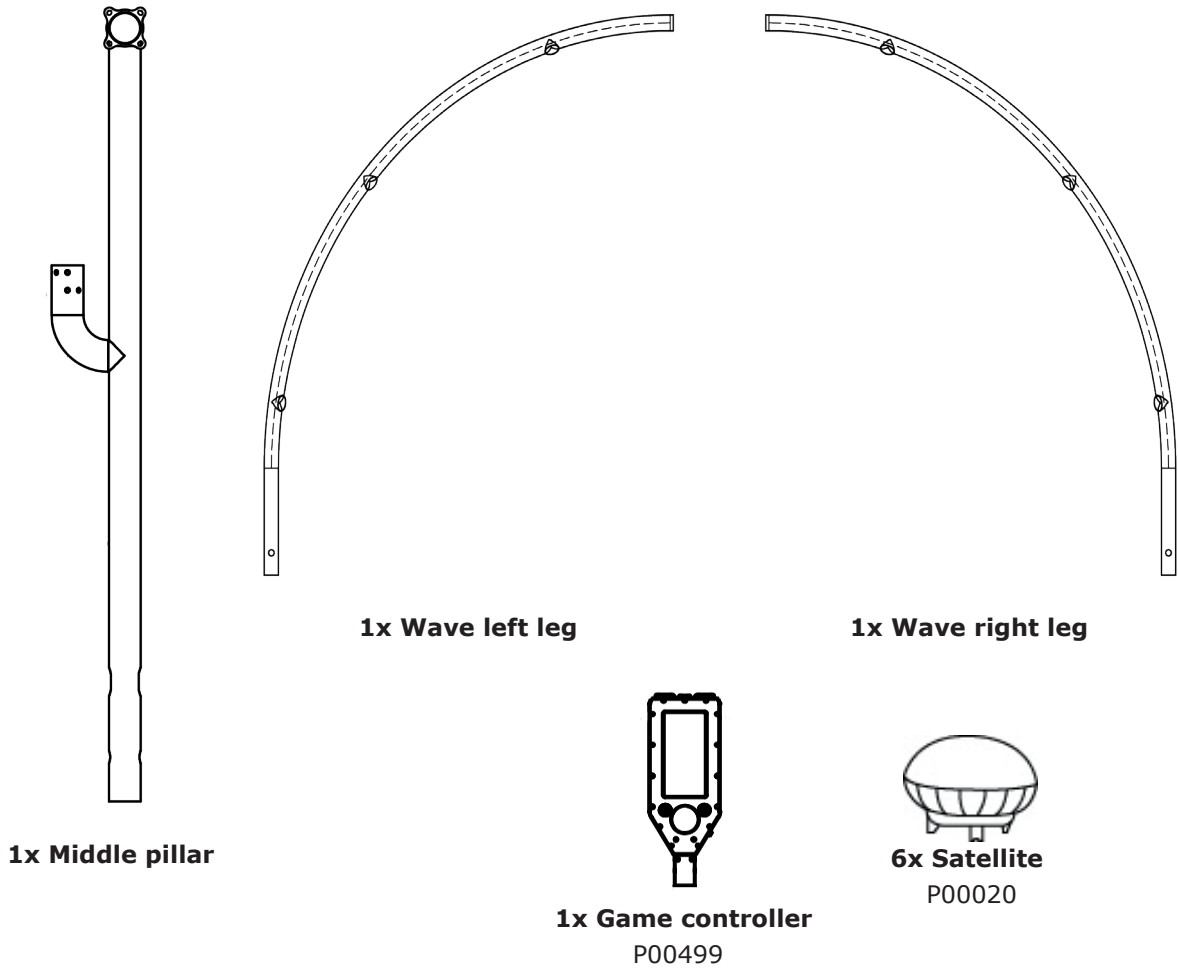
Wave



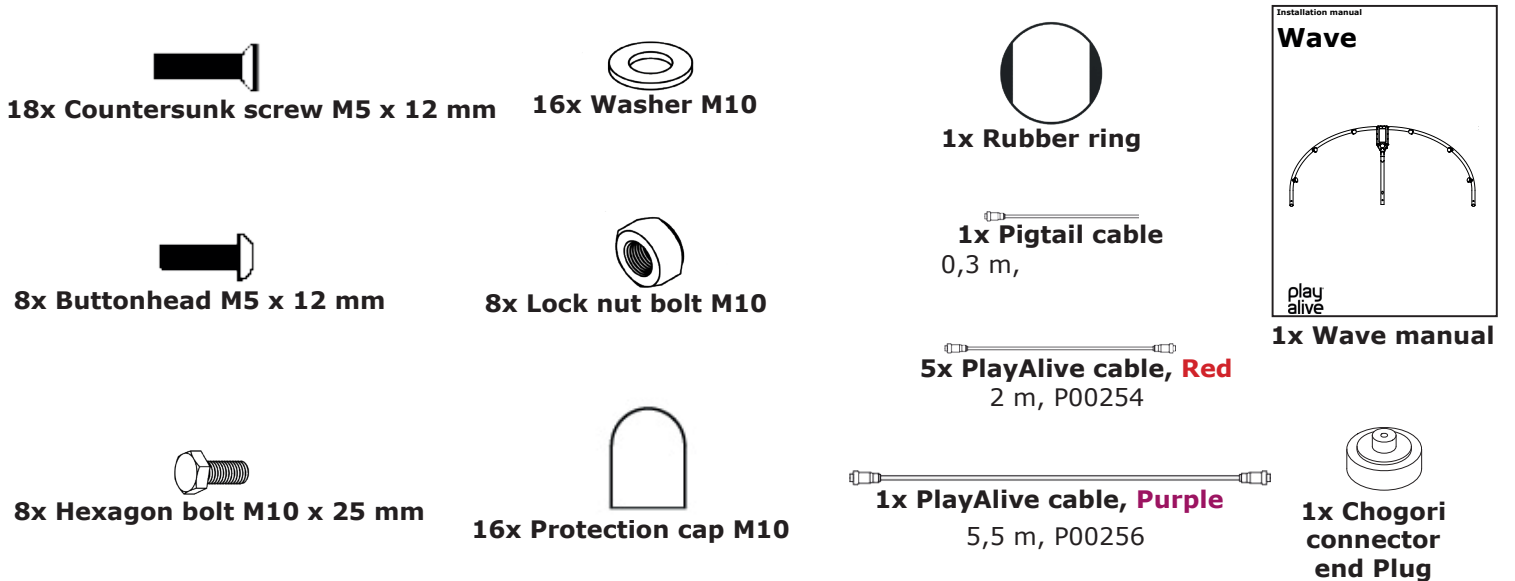
play[®]
alive

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2.1 Steel components & pre-installed electronics



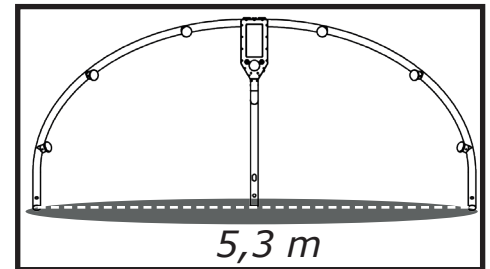
2.2 Other components



3.1 Overview of construction site

The site for the placement of wave should have a minimum diameter of 5,3 m.

Note that the Wave should have a power supply of 230 V drawn to the middle pillar. This needs to be done by an electrician.



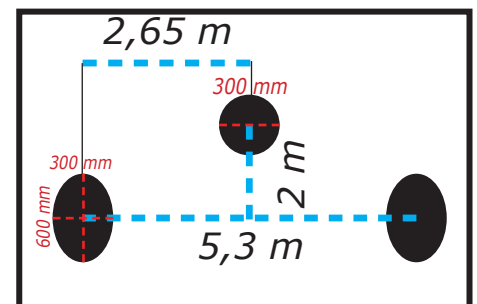
3.2 Prepare for installation

Dig a hole for the middle pillar. It should be 0,5 m deep and have a diameter of 300 mm. Please make sure to align this with the 230 V power cable.

Important: when digging the hole keep in mind the power cable (230 V) should be pulled through the middle pillar.

Once this is done, dig two holes for the legs of the Wave. The holes should be an ellipse, 300 mm wide and 600 mm long. The holes should be dug with a tilt of approximately 45°.

The two holes should have a distance of 5,3 m between them, measured from the center of the holes. Make sure that the holes are dug 2 m in front of the hole for the middle pillar. As well as the hole for the middle pillar will be aligned with the middle between the two holes for the legs. See illustration "overview of holes placement".



Overview of holes placement.

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

3.3 Initial pulling of cables

The purple PlayAlive cable should be pulled now, **before** any assembly is begun.

Push it through the middle pillar arm and upwards, so that the cable will go through the middle pillar and to its top. Then push it down through the left leg of the wave, and leave the connector of the cable outside the hole. See illustration "overview of initial pulling of devicenet cable". Please see installation point 3.4 for orientation of wave left leg and middle pillar.

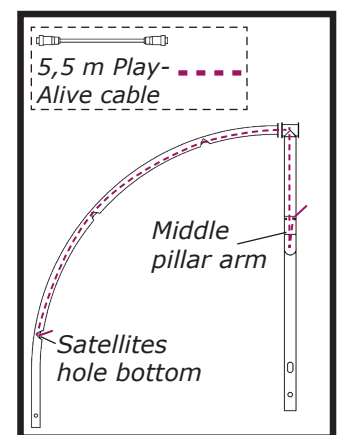
Please make sure to leave the connectors of the cable outside the holes and that they stay there during the next steps of the installation process.

Also note that this step is only performed once, on the left side of the wave.

Notice: When pulling this cable it can be helpful to use a pulling string.

Important: Make sure that the connectors of the cables are left outside the pillars throughout the entire assembly process, so that they won't be lost inside the pillars.

Important: If this step is not completed know step 4.2 and 4.3 will be very difficult to complete.



Overview of initial pulling of devicenet cable.

Notice: This installation step is only performed once, on the left side of the Wave.

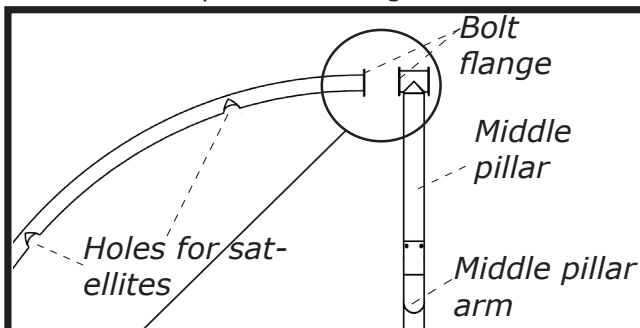
3.4 Assembling Wave

Assemble the Wave by bolting the wave legs to the middle pillar. Please make sure that the Wave's legs are turned the correct way before bolting. The legs should be turned so that the bolt flange is at the top. Note that the Wave's legs have 3 holes for satellites along their curve, please make sure that these are facing the same way as the middle pillar arm, see illustration "overview of assembly".

Once the Wave's legs are turned the correct way, the Wave can be assembled by bolting the bolt flange at the top of the left leg to the bolt flange at the left side at the top of the middle pillar. Start by pushing a washer onto the bolt, then push the bolt through the wave leg flange and then the middle pillar flange. Then push another washer onto the bolt and lock it all in place with the lock nut bolt. Finish by mounting the protection caps onto the lock nut bolts' and bolts' heads. Repeat this process on all four corners of the flange. see illustration "bolting process".

Do the same with the wave's right leg, though do remember to mirror it so that the bolt's head will be at the wave leg bolt flange and the lock nut bolt at the middle pillar bolt flange.

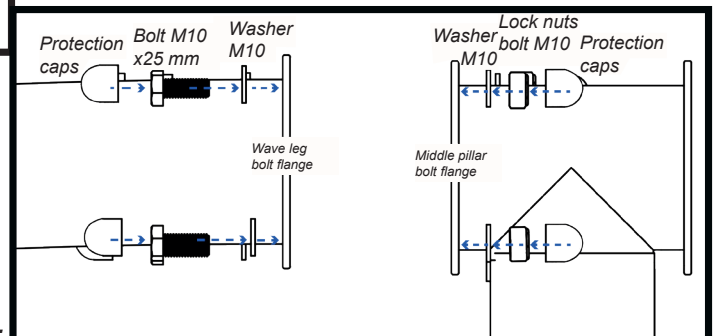
Notice: This installation step is symmetric. Therefore, the procedure is the same for both sides of the wave. Though do remember to mirror the process, so that the bolt's head will be by the wave leg flange, and the lock nut bolts by the middle pillar flange.



Overview of assembly.



Bolting process.



Notice: For this step (3.4) it could be an advantage to be 2 people, or more. As some of it will be difficult to complete on your own.

3.5 Casting the Wave

Once the Wave has been assembled it is ready to be placed in the dug holes and cast. Please note that the wave legs and middle pillar, should be cast 0,4 m below the surface.

Before casting make sure to pull the power cable through the middle pillar so that it is reachable from the middle pillar arm. Please ensure that the purple PlayAlive cable is still in place, and that one end can be reached through the bottom hole for satellites, and the other through the middle pillar arm.

Also please be sure that the middle pillar is completely leveled.

Once this is done and the middle pillar is leveled and the cables are in place, the middle pillar and the wave legs should be cast.

Notice: For this step (3.5) it could be an advantage to be 2 people, or more. As some of it will be difficult to complete on your own.

Important: Please make sure that the power cable of 230 V is pulled through the middle pillar so that it is reachable from the middle pillar arm before casting.

Important: Please make sure that the purple PlayAlive cable is still in place and will be both reachable and operable after casting.

Important: Please make sure that the middle pillar is completely leveled, before casting.

4.1 Connecting power cable

Once the Wave has been cast and secured the electronics can be installed.

Start by having an electrician connect the power cable to the pigtail cable.

Here it is important to keep in mind that the cable should be able to reach the top of the middle pillar arm, and be operable afterwards.

Important: This job must be performed by an electrician.

4.2 Pulling devicenet cables

The devicenet cables will be pulled through the holes for the satellites. When pulling the cables it is easiest to start at the top and guide the cables downwards.

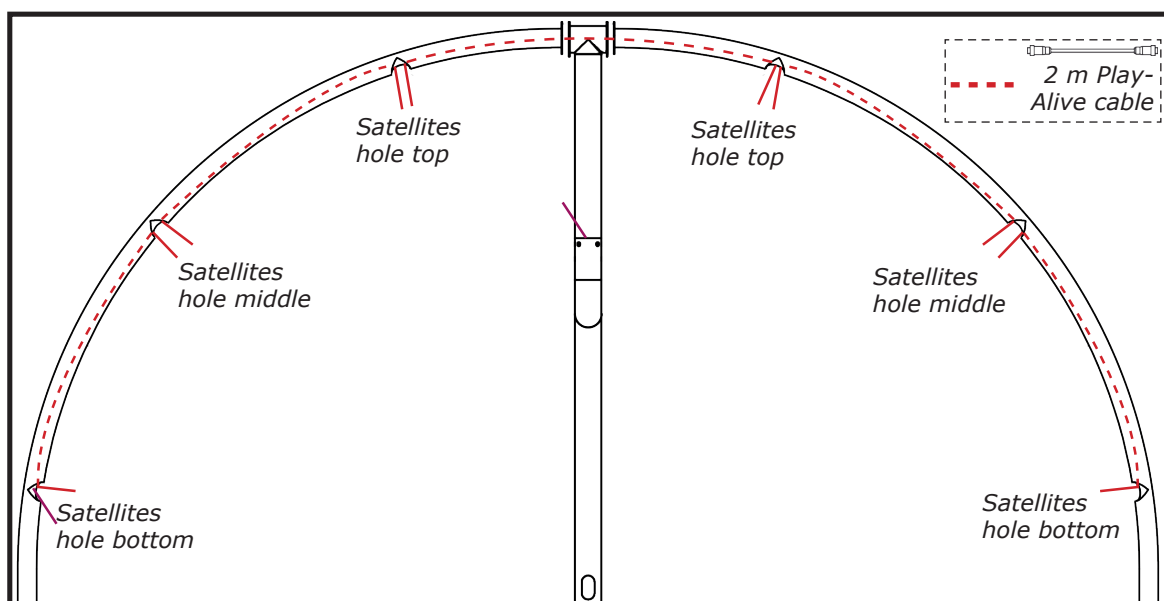
1. Start by pushing a red PlayAlive cable through the satellite hole top, in the left leg. Push it in an upwards motion so that it will go across the middle pillar and to the satellite hole top in the right leg.

2. Then push another red PlayAlive cable through the satellite hole top in the left leg, the same as in point 1. Push the cable trough in a downwards direction, so that it can be pulled through the satellite hole middle in the left leg.

3. Take another red PlayAlive cable and push it through the satellite hole middle, in the left leg, in a downwards direction so that it can be pulled out the satellite hole bottom, in the left leg.

See illustration "pulling of devicenet cables" for more guidance. Once you have completed this repeat point 2 and 3 on the wave's right leg.

Notice: To ensure easy access and connection to the game controller and satellites please make sure that you keep a hold of one end of the cables by the starting point, to keep it in place here. Do the same at the finish point. This will also prevent the cables from falling down through the legs of the Wave.



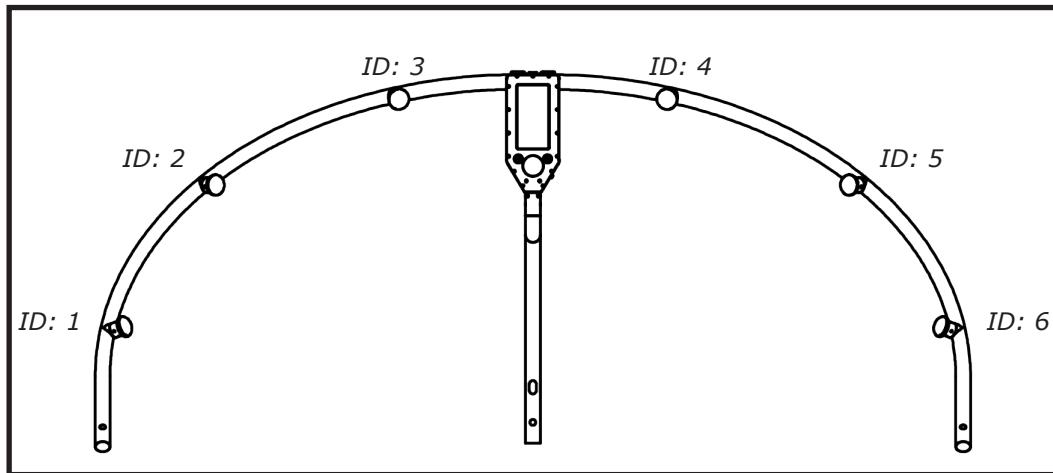
Pulling of devicenet cables.

Notice: Point 2 and 3 of this installation point are symmetric. Therefore, the procedure is the same on both sides. The order the devicenet cables are pulled in does not matter, however, the described order is recommended.

4.3 Installation of satellites

Once the devicenet cables have been pulled the electronic components can be connected.

1. Start by identifying the satellites ID. All satellites have an individual ID labelled at its rear. Please make sure that each satellite is placed correctly as illustrated in "placement of satellites".



Placement of satellites.

2. Connecting the satellites. Connect the satellites to the pulled cables.

Note that the cables cannot be installed wrong as they only fit to the connector one way.

Satellites ID 1,2,3,4, and 5 will each be connected to the two cables at their position. Where satellite 6 will only be connected to the one cable at its position. The chogori connector end plug should be installed to this satellite as well.

3. Fixing the satellites. The satellites must be fixed to the Wave legs with 3 Countersunk M5 x 12 mm screws. The components are designed so that the screws can be screwed in with one's fingers. Please do that to prevent a possible cold welding. If this is not possible try to adjust the satellite, so that the holes align better.

The holes in the wave legs are asymmetric to ensure the correct orientation, as this is important for some of the games. The correct orientation of the satellites, are so PlayAlive's logo is turned in the danish reading direction, left to right.

It is advised to hold of on fixing the screws **completely** until installation step 5 has been completed, so that you are sure everything is working correctly.

Notice: It is advised to wait until point 5 is complete before fixing the screws completely.

Important: The wave legs have air holes placed by the satellites. Please make sure that they are clear!
They enable potential moisture to leave the steel components.

Important: Please make sure that there is **NO** power running through the cables when they are being connected to the satellites. This is important as having power run through the cables while cables are being connected and disconnected from the satellites could potentially break the satellites.

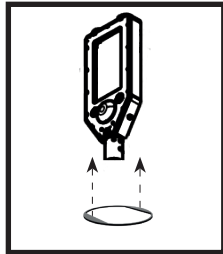
Important: Please start by screwing the screws in using your fingers, to avoid a possible cold welding. If this is not possible try to adjust the satellite to align with the holes better. Then try again, using your fingers.

Important: When installing the satellites please make sure that the satellites are turned the correct way. This is very important as some of the games cannot be played if the satellites are turned the wrong way.

4.4 Installation of game controller

Now the Game Controller can be installed.

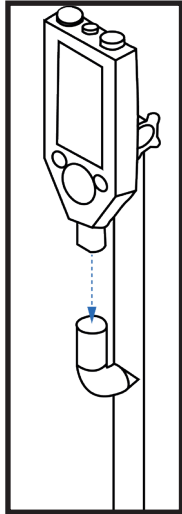
1. Start by pulling the rubber ring onto the bottom of the game controller. It is important the the rubber ring is turned so that the sides with the greater width is at the back and front of the game controller. Please note that the display pannel is on the front of the game controller. See illustration "attachment of rubber ring".



Attachment of rubber ring.

2. Connect the game controller to the devicenet cable from the satellite. This will be the cable with the purple stripe. Note that it is very important that the PlayAlive cable is connected to the game controller **before** it is connected to the power cable, as failing to do so will break the electronic parts.

3. When the satellites have been connected, the power cable can be connected to the game controller as well. This will be the second, and last, cable. Please make sure to follow this order when connecting the cables.



Placement of game controller.

4. Now place the game controller in the middle pillar arm. Make sure that the display on the game controller is facing forward, as shown in illustration "placement of game controller". Fix it with 8 Buttonhead M5 x 12 mm screws. These components are designed so that the screws can be screwed in using your fingers. Please do this to avoid possible cold welding. If this is not possible please try to adjust the game controller so the holes are better aligned.

It is advised to hold of on fixing the screws completely until installation step 5 has been completed, so that you are sure everything is working correctly.

Notice: For this installation step (4.4) it could be an advantage to be 2 people, or more. As some of it will be defficult to complete on your own.

Important: Please make sure to connect the cables in the order described in this installation point. This is very important as some of the PlayAlive components could break if the cables are installed in the wrong order.

Important: Please start by screwing the screws in using your fingers, to avoid possible cold welding. If this is not possible try to adjust the game controller to align the the holes better. Then try again, using your fingers.

Notice: It is advised to wait until point 5 is complete before fixing the screws completely.

5.1 Turn the system on and wait

Please turn on the power. The system will then start up. Note that this can take some time as the start-up time depend on updates and internet connection. Though it will typically be between **5 and 10 minutes**. Once started the game controller will light up and the system is ready for you to select a game.

If this is not the case please check that the power cable is properly in, and that it does in fact supply the game controller with power.

5.2 Start a game and test the setup

Go to the display and select a game. For this test please select Combo. When touching the satellite that lit up please make sure that the satellite despawns (goes back to not having a color). During the onboarding only one satellite will light up at a time. However, once the onboarding is done (after making a combo of two), please make sure that; all satellites spawns (gets a color), the game controller counts points for each selected satellite, that when selecting a satellite a sound is played, and that the satellites despawns and respawns.

If this is not the case please see section 3.3 and all of section 4 again.

If desired an elaboration of the game, and the others included, can be seen in installation point 6 "Games included in Wave".

If you have been able to conduct the steps as described in section 5.1 and 5.2 the PlayAlive product has been successfully installed.

Please complete the installation by fastning the screws holding the satellites and game controller in place.

Important: Please finish this installation by ensuring that the screws holding the game controller and satellites in place are properly fastened.

Thank you for your effort installing another PlayAlive product.

6.1 Games

An explanation of the games are included below.

Agents	Here you have to find the matching satellites, within the given time frame. By finding the correct number of matches before the time runs out the next level is unlocked. The faster you find the matching the satellites the more difficult the next level will become.
Combo	Collect as many gems (e.g. diamonds and rubies) as you can within the game's time frame. The different gems (colors) have the same point value however the more of the same gem (e.g. diamonds) you collect in one go (color combinations), the more points you will get.
Versus	This game allows up to 4 players to compete against each other in a series of games. One game consists of 5 smaller games selected at random, however, the first smaller game (out of the 5 in one game) will always be the same. These smaller games can differ between upbeat, quick reaction games and slower games that require more strategy then speed.

Additional games can be uploaded, contact PlayAlive for more information.

7.1 General introduction to PlayAlives technology platform

The PlayAlive system is an interactive system. The technological elements communicate with each other and thereby, make it possible to realize activities for all ages.

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

IMPORTANT: BE CAREFUL WHEN HANDLING THE PARTS.

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

You should also take care when pulling cables. Please be aware that the PlayAlive cables are not designed to be pulled in the connectors. When pulling the cables please make sure that you pull the cable and not the connector.

Please be aware that when connecting and disconnecting PlayAlive components to each other, they must not be supplied with power. This could cause some of the 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.