

Dartsee Assembly Manual - 2024



So you've got Dartsee in the mail...

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Foreword

Hello and welcome to Dartsee! Within the pages of this assembly manual, you are about to embark on an exciting journey that blends technology, camaraderie, and the timeless tradition of dart games. This assembly manual represents more than just a set of instructions; it symbolizes the beginning of a chapter filled with laughter, friendly competition, and shared memories. Within your hands lies the power to create an environment that transcends the ordinary. Dartsee will become the centerpiece of joyous gatherings, drawing friends, family, and loved ones together. It will spark excitement, ignite friendly rivalries, and foster a sense of belonging that only shared experiences can bring.

In the midst of our rapidly evolving world, where technology often isolates us, Dartsee is a testament to the remarkable synergy between innovation and human connection. By embracing this system, you are not only enhancing your own venue but also spreading the joy of social interaction to all who will have the pleasure of trying out your new Dartsee system(s).

This manual will cover everything you need to get your Dartsee up and running. The last steps which consist of setting up the software for your specific venue and calibrating the system will be taken with live assistance from one of our colleagues at a pre-registered time slot on your WhatsApp channel.

On behalf of the entire Dartsee team, we would like to thank you for choosing our automatic darts scoring system that will drive your venue to the next level!

Tools needed for assembly

In this section we will cover the tools needed for opening up your Dartsee's packaging and securing the unit on a wall.

You will need the following tools:

- cordless drill (for drilling and screws)
- bit set
 - PZ2 bit
- drill bit set
 - appropriately sized drill bits for the wall you'll be working with (6-10 mm)
- tape measure
- dowels and screws
 - appropriate to the wall you'll be working with and the hole size you're drilling
- pencil
- scissors
- nice to have, but not strictly necessary:
 - retractable knife
 - hammer
 - combination pliers
 - pinchers
 - safety gloves

Unboxing

Let's start out by unboxing the units themselves. **If you have received more than one unit, please start by opening up box #01 marked with “+extras”. That box contains the packing list, calibration equipment and spare parts.**

Opening up the boxes

As of July 2023 Dartsee started phasing in cardboard boxes as a new method of packaging. These boxes are much easier to handle and also more environmentally friendly than the previous wooden ones.

There will be 2 (or more) black plastic straps going around the box, to secure the package during transport. You can simply cut these with scissors.



Next, you'll have to cut the tape around the lid of the box, including the factory sealing label.



Make sure to only cut the opening sides of the box. These are marked with red lines on the following picture:



After this you can simply open the lid and you'll be greeted by the contents of the package in a similar fashion:



We use paper filler to make sure that everything arrives undamaged. You are free to throw it away. After the filler is gone, you can pack everything out, check the contents list and the contents of the box. The contents list enumerates the equipment contained in **all of the boxes together**.

Contents list and package contents

Contents list

Each of our Dartsee unit shipments have a contents list attached. You can find this in box #01, which also has “+extras” printed on its label. The contents list covers everything that is contained in **all of the boxes together**.

Your contents list will look similar to this, depending on the number of units you ordered:

After unpacking everything, let's examine the contents of the boxes to get familiar with the system.

Package contents (2 boxes):

- 2x Dartsee electronic dart game system
 - (the front camera is: built-in)
- 2x Winmau Blade 6 dartboard
- 2x Winmau surround (black)
- 2x Gigabyte Brix computer
 - (with power adapter and cable)
- 2x LED power supply
- 1x Dartsee calibration board



Contents

First, let's start with the box that has the "+extras" label. This box contains your calibration equipment and spare parts, apart from the other parts contained in all the other boxes too. With the help of the next image you'll be able to identify each of the components. The image below is just a guideline on what you should look for, the actual packaging of some components might differ slightly.

The rest of the boxes will also contain a Computer, a throw line sticker and an LED power supply, but nothing else of the above.



Wall mounting guide

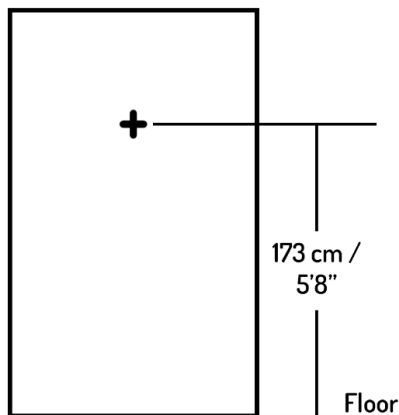
To secure a Dartsee ring to a wall, you'll have to take a measurement first. Here's an image to help you out with the process:

Dartsee Ring wall mounting guide



You can find the alignment tool in box #1, taped to the lid, along with the spirit level. After fixing the ring to the wall, you can use the spirit level to level your dartboard.

- 1** Measure up and mark a distance of 173 cm or 5'8" from the floor on the wall.

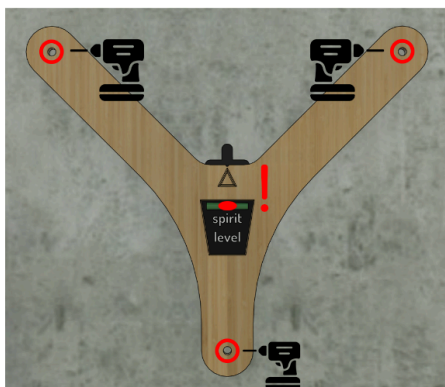


- Put the alignment tool with the spirit level under the previously marked point. Adjust the tool so the small hole at the top of the triangle is right at your measured height.

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- 3** Make a mark on the wall through the holes at the end of the alignment tool's arms. Make sure the tool is level while doing so! Drill the holes for the dowels/screws.*



*Always use the appropriate type of dowels and screws regarding the wall you're working with!

- Hang up the Dartsee Ring on the screws in the wall. There are keyhole hangers on the back of the ring, behind the dartboard.

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Throw line (oche) measurement

The next step is measuring the throw line distance. We recommend using the Winmau Setup Pro to make this task as simple as possible. You can find this accessory in the “+extras” box. Please follow the instructions on the back of its packaging to ensure you find the perfect distance from the dartboard. Once you have that measurement you can mark it with the throw line sticker. Take into account that the line you have measured is where the players’ shoes’ toe caps should be, so place your marking accordingly.

Now you’ve measured out everything that’s needed, let’s get on with the assembly!

Assembly

In this section you are going to affix your Dartsee unit to the wall. Easy, right?

Notice - **very important!**

The first step in putting up your unit on the wall is to remove the three screws from the back of the Dartsee ring. These are screwed into the back of the dartboard from the backside of the unit so the board is secure during shipping. You'll need a PZ2 bit for this step. The image below shows where exactly you'll be able to find this screw (after removal, the screw and washer can be discarded):

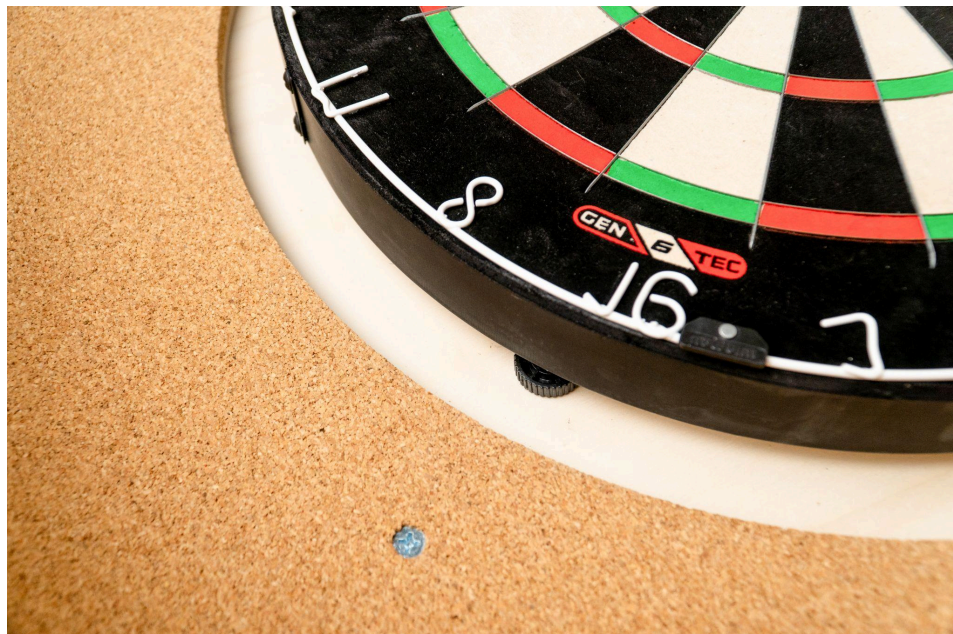


Removing the dartboard

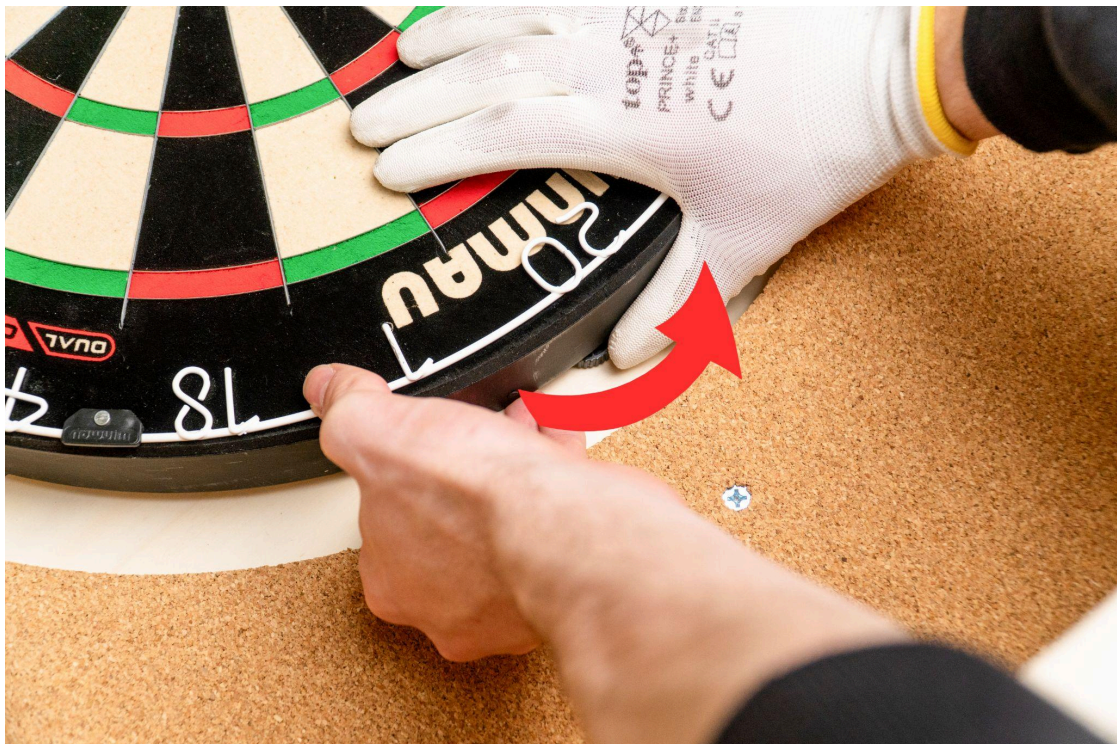
To be able to affix the Dartsee ring to the wall, the next step is to remove the dartboard. With the screw from the back gone, this will be an easy process. Firstly, pull off the foam surround from around the dartboard.



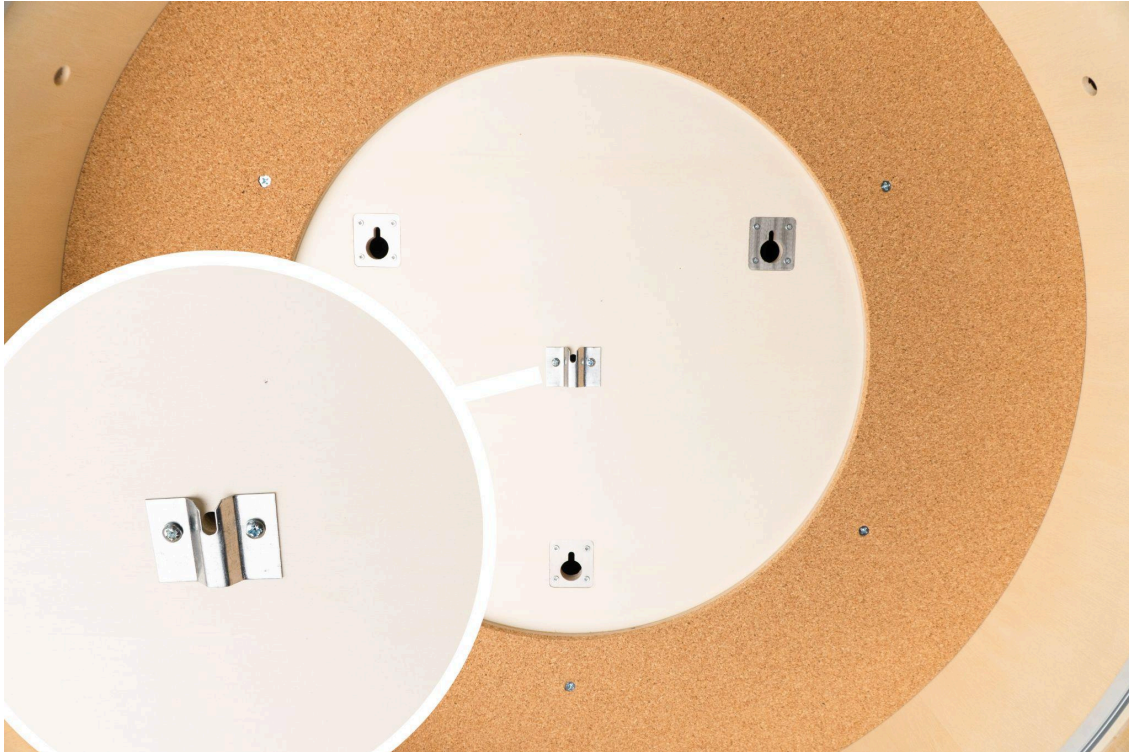
The second step is to screw in the adjustment screws on the back of the dartboard so it is able to move freely. There are 3 adjustment screws in total, at the 20, 15 and 16 segments by default. You can identify them with the help of the following image:



These can be accessed from the front and have to be turned counter-clockwise (if you stand in front of the dartboard) until they lock out. By gently pulling up the dartboard with your other hand you can reduce the tension between the unit and the adjustment screws to make this task easier. Wearing safety gloves can be helpful as well.



After screwing in all of the adjustment screws the board should rotate freely. To fully remove it from the ring you'll have to lift it up towards the front camera, because the screw in the back of the board is seated in an assembly like this:



Drilling the holes

The next step is to drill holes in the wall at the points you've previously measured. Please make sure you use appropriate type and size dowels and screws, depending on the construction of the wall. **Do not choose screws that don't fit through the holes on the Dartsee ring.** After you drilled the holes and inserted the dowels (if they are a tight fit you may want to use a hammer to fully seat them) the next step is to fix the Dartsee to the wall. **It is strongly recommended that at least 2 people do this step together.**

Attaching the unit to the wall

This step is the easiest to do when 2 people lift up the unit to the wall. Now one person can hold the unit in place and make small position adjustments while the other inserts the screws through the ring into the dowels. Once the screws have been properly tightened the unit is attached and doesn't need to be held anymore.

Nice job, your Dartsee is up on the wall!

Now you can put the dartboard and the surround back into place. Please make sure to rotate all three of the adjustment screws equally while putting back the dartboard to make it as parallel with the unit as possible.

In case of any repair in the future, reaching the cameras or the LED strip is only possible after the front cover of the unit is removed. It can be done by twisting it as shown on the following picture:



Cabling

After the Dartsee is up on the wall, the next step is to do the electronics and cabling. You can remove the stretch film from the cable bundle that comes out at the top of the ring. There will be 6 cables in total. 5 USB connectors, these are coming from the cameras and going to the PC - and 1 barrel connector, this is the power cable of the LED ring.



Now is the time to unpack the computer, its power adapter and power cable (if your country uses EU, GB, US or AU power plug you should have received this as well). You can unpack the LED power supply too, its box houses a power adapter and a power cable. **Important: The computer shouldn't be installed in a fully enclosed space, it needs some openings for air change.** Make sure the USB cables will be able to reach it (approximately 2.5 meters usable length) and also that the computer power adapter will be able to reach a power socket. It also has a VESA mount included, so it can be affixed to the mount of the TV that will sit above the Dartsee unit (this guide does not cover assembling the TV and its mount).

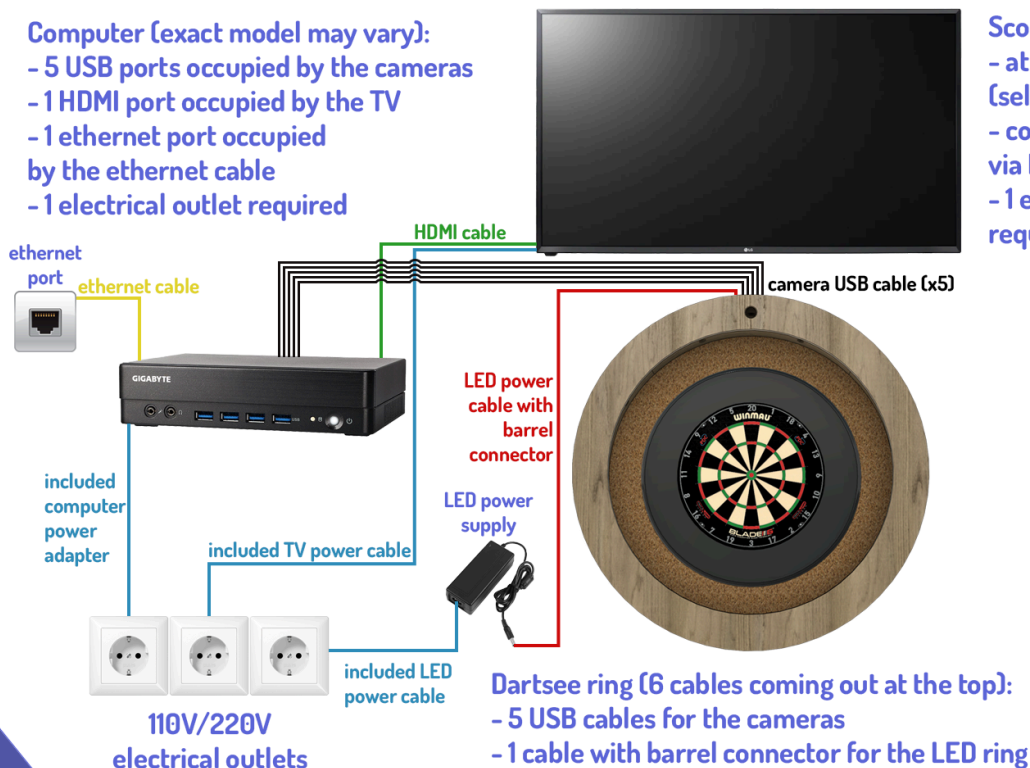
The 5 USB cables have to be plugged into 5 USB ports on the computer. The order and the specific ports **do not** matter. Next, the computer power adapter has to be connected to the computer. After this is done, the LED power adapter can be connected to the barrel connector mentioned previously. Again, make sure you place the LED power supply in a way that its cable reaches a power socket.

The rest of the electronics, namely an ethernet connection and a HDMI connection to a TV is not covered in this guide due to the variabilities in networks, TV mounts and models, but a full wiring diagram is included below to help with the required connections. The previously mentioned connections are also present in the image:

Dartsee wiring instructions

Computer (exact model may vary):

- 5 USB ports occupied by the cameras
- 1 HDMI port occupied by the TV
- 1 ethernet port occupied by the ethernet cable
- 1 electrical outlet required



Scoreboard:

- at least FHD resolution TV (self sourced), 43" recommended
- connected to the PC via HDMI
- 1 electrical outlet required



Game controller:

- android tablet (self sourced)
- connected to the PC via Wi-Fi (to the same network)
- 1 electrical outlet required



tablet power adapter - sold separately!



110V/220V electrical outlet

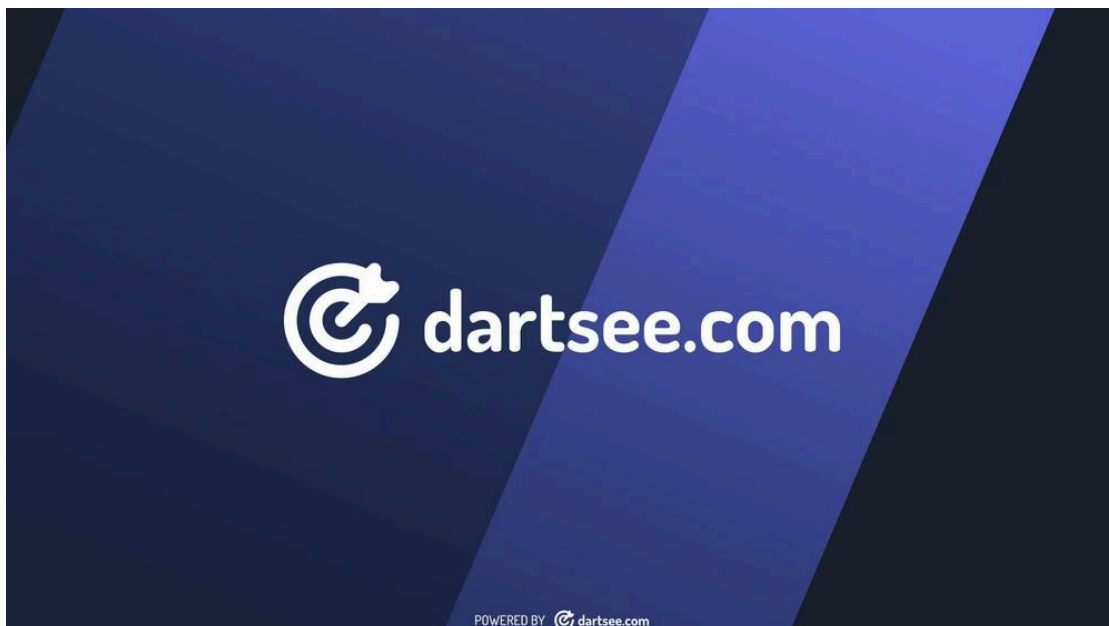
*country specific power cables are included in the package

Electronics testing

It is strongly recommended to follow these steps after the network is ready and the TV is in place with the HDMI cable connected to it.

Now that everything is for the electronics testing, please connect the ethernet cable and HDMI cable to the computer. Next, turn on the TV. It is very important to **turn on the TV first** because otherwise it might not detect the signal coming from the computer. If this happens the computer has to be rebooted by pulling the power plug and plugging it in again. After the TV is turned on and set to the proper input channel (please refer to the TV's manual about this) the computer and LED ring can be plugged into a power socket. When the computer is plugged in, it will automatically boot. The booting sequence may take a minute and should also be present on the TV screen. The LED ring should light up right after it's plugged in.

If the assembly was successful and the system is getting internet, after booting has finished and the computer is fully operational, the Dartsee splash screen should present itself on the TV screen:



Congratulations, you've finished the assembly and testing of your Dartsee ring!

Getting the tablets ready

The setup of the tablets will be done live on your WhatsApp channel, but there are some tips to make it easier for you. If you have bought a brand new tablet please don't do anything to it apart from turning it on and charging it. The tablets have to be in a factory reset state for the setup to work properly, **please don't carry out the initial setup steps of the tablet** (choosing a language etc).

If the tablet has been used before, please perform a factory reset on it. You can refer to the tablet's manual on how to do this.

Finish (software setup, calibration)

After the tablets have been prepared, everything is ready to get your Dartsee systems up and running. Now is the time to reach out to us about your WhatsApp channel (if it has not been created yet) and schedule a time slot to finish up the installation with us.