

Sports & Wellbeing Analytics Limited

# PROTECH™ HEAD IMPACT

Receiver User Instructions



The PROTECHT system is a multi-component system that is simple to set up and use to monitor and measure contact loads in training sessions or competitive matches in contact sports.

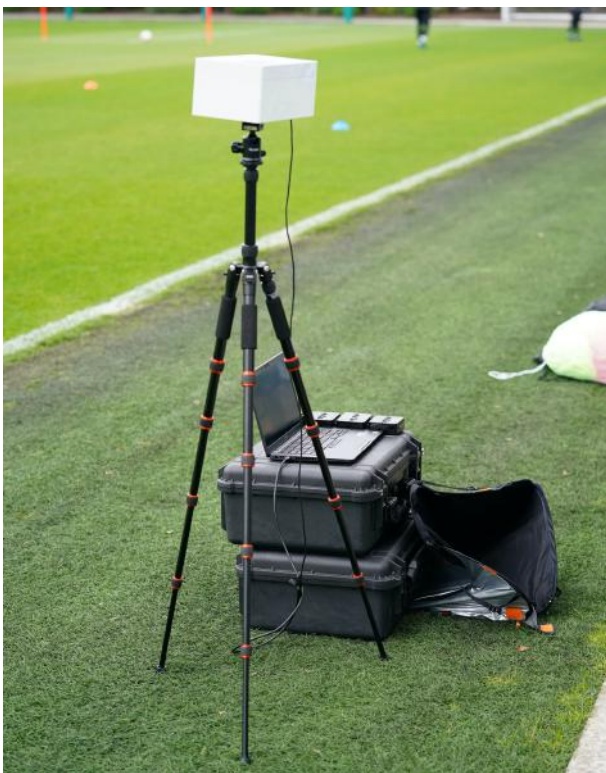
There are four physical components for the system:

Mouthguards  
Charging Case  
Receiver  
Edge Device (Laptop)

This guide deals with the receiver and its physical connection with other components of the PROTECHT system. Please refer to the detailed user instructions for the other components for how to use and operate these components.

## 1. THE RECEIVER

The receiver for the PROTECHT system is housed in a weatherproof box that is attached to a tripod for use at the side of a pitch, boxing ring or other floor space. It has a range of up to 120m and houses 2 radio receivers designed and tuned to pick up the real time impacts recorded by the mouthguards worn by the athletes.



## 2. SETTING UP THE RECEIVER

The receiver will need to be attached to its tripod before it can be connected to the Laptop.

This is best done on the sideline and can be done quickly using the screw fixing clamp underneath the receiver.



Position the receiver on its tripod around from the centre line of the pitch with the direction label facing the field of play about 1-2m back from the side line or athlete participation area.



### 3. SETTING UP THE EDGE DEVICE

Place the Edge Device Laptop no more than 1m from the Receiver and on a stand to keep the device off of the ground or floor and turn it on and let the system boot up. This should only take a minute or two.

In some settings – such as covered stadia or arenas – external power supplies are available. If these are accessible and within a safe distance of the location of the Edge Device Laptop it is advisable to plug it into the power source using the power cable and adapter provided. If an external power source is not available or cannot be reached safely with the cable and adapter provided please ensure that the Edge Device Laptop is fully charged before use.

Plug the receiver cable into one of the USB ports on the side of the laptop.



**Note :** It is important that this cable is not tight to allow for the equipment to be moved if required and to maintain a solid connection.

If using the device outside and bad weather is expected, it is critical to use the rain cover provided. Full instructions for this are provided with the tent.

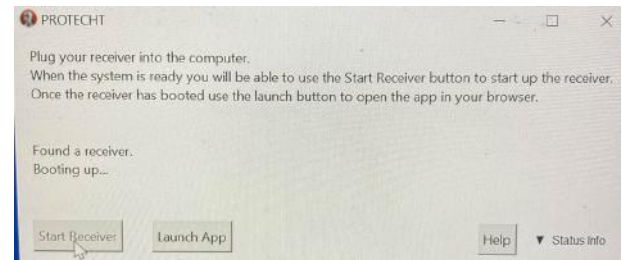
#### Step 4: CONNECT THE PROTECHT APPLICATION ON THE EDGE DEVICE TO THE RECEIVER

Once the physical connections have been completed, at the bottom of the screen click

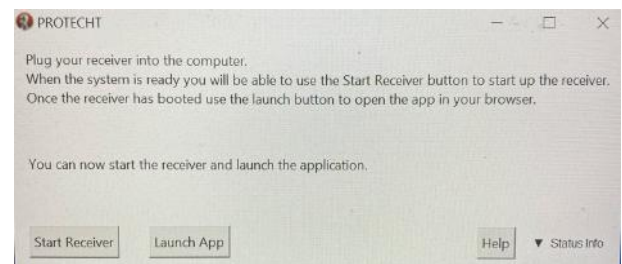
on the head button to launch the PROTECHT application.



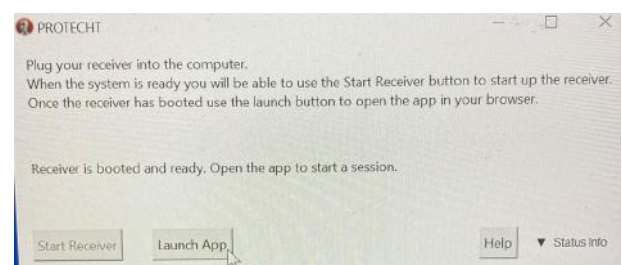
When the receiver screen appears, move the cursor to the Start Receiver button and click once. The system will now look for any connected receivers and start them up.



Once completed, you will get a message that a receiver has been found.



#### Step 5: LAUNCH THE PROTECHT SESSION



Once the receiver connection has been established, move the cursor to the Launch App button and click once. This will now launch the PROTECHT application.



## PRECAUTIONS

### RECEIVER

The PROTECHT receiver contains electronic equipment. Whilst the box itself is waterproofed and can be used in wet conditions, it should not be opened as this may damage the seals and allow water to stop the electronics from working.

The PROTECHT receiver should only be connected to the Edge Device via the USB cable provided. It is recommended that some slack be present in the cable when connected to the Edge Device so as not to damage the connections, risk it being disconnected during use or otherwise damage the Edge Device.

### EDGE DEVICE LAPTOP

The PROTECHT edge device is a high specification commercially available laptop computer that is loaded with the PROTECHT application and provided expressly to run this and only this application during games and training sessions. No other software should be loaded onto the device as this will affect its operation.

The PROTECHT edge device needs to be protected from rain, snow or other water spillages which will cause permanent damage to the device. Should the edge device be used when there is any risk of water getting onto the device, the weatherproof tent provided with the system should be used.

### ELECTRICAL SAFETY INFORMATION

Operating Conditions: Receiver

External Operating Temperature: -40 to +85C  
Input Power: 300mA 3.6V max drawn through USB from connected Laptop Computer



This system complies with Part 15 of the FCC rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received including interference that may cause undesired operation.

No changes shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the equipment.





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