



Piste Box (EP-G01) User Manual

The EnPointe Wireless Fencing System

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The Piste Box

This Piste Box is designed to be used with the EnPointe Wireless Fencing System (EP-R01, EP-P01). The EnPointe Wireless Fencing System is not included in this set. This Piste Box, in conjunction with an EnPointe Wireless System and Scoring Machine, cancels hits to a metallic piste. For more information about the system, its features and setup, please see our website enpointefencing.com or contact us at support@enpointefencing.com. You can revisit the EnPointe Wireless System User Manual at enpointefencing.com/downloads, or view our instructional video on setting up the Piste Box at enpointefencing.com/videos.

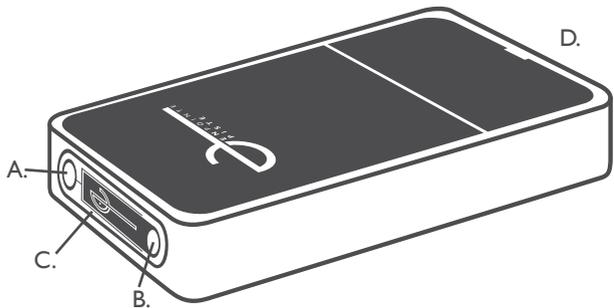
Included in this purchase:

- 1x Piste Box
- 1x Piste Manual
- 1x Protective Case

Additional items required for the operation of the Piste Box:

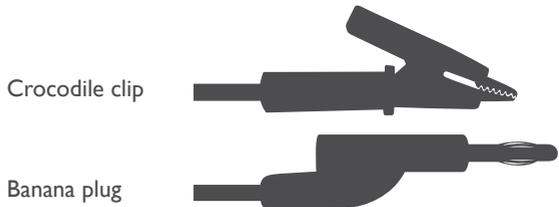
- Conductive Tape (recommended 25mm width, ~50m length)
- 2x connector wires (where each wire has one end with a banana plug, and one end with a crocodile clip)
- Insulation Tape: Gaffer tape, duct tape or cloth tape should all work well for this purpose.
- 2x AAA batteries

Piste Box



- A. Socket A, for connecting to the conductive tape
- B. Socket B, for connecting to the piste
- C. EnPointe Logo/Battery Indicator Light
- D. Battery Compartment

Connector Wires



Updating Your Wireless System:

In order to use the Piste Box with an existing wireless system, you will need to update your Relay Box. You can do this by downloading the most recent update from enpointefencing.com/downloads. Please refer to the instructions given at enpointefencing.com/downloads, or on page 5 of your original Wireless Fencing User Manual for more details.

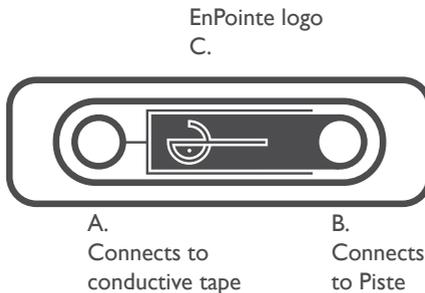
Please Note: If you purchased your EnPointe Wireless Fencing System after 20/12/2018, you will not need to install an update, as your system should come preloaded with the latest Piste Box firmware.

Batteries and Power:

Checking the battery level:

To check the battery level of the Piste Box, firstly look at the top of the box. Then use two fingers to touch the outer pins [A] and [B], at the same time. The battery indicator light will shine through the EnPointe logo [C], between the pins.

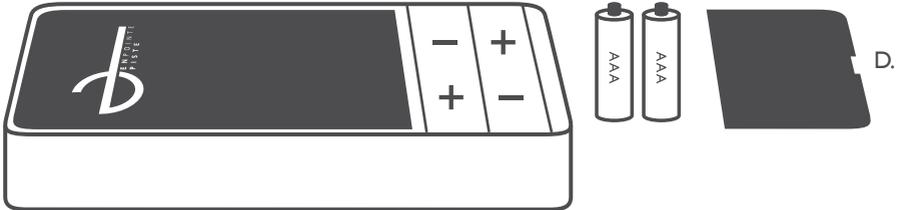
Green indicates that the battery is full (approximately 100 hours of use from one set of batteries), orange indicates the battery is half-full, and red indicates that the box is on low battery (approximately 20% battery remaining), and that the batteries may need to be changed soon.



Replacing the batteries:

The Piste Box uses two (2) standard AAA batteries, and lasts for approximately 100 hours of continuous fencing, or around three months of regular club use.

The Piste Box batteries can be replaced by pulling the lift tab shown in [D].



Turning on the Piste Box:

Once a Piste Box is paired to a Relay Box, it will switch on with the rest of the system, and begin cancelling the piste immediately. There is no need to separately turn on the Piste Box each time you use it.

Switching off the Piste Box:

When you turn off your Relay Box, the Piste Box will switch off at the same time. If you remove the batteries from your Relay Box for any reason, you will need to touch on the Piste Box again.

Cancelling Hits to a Metallic Piste Using the Piste Box

To start you will need a 'conductive tape' (described above), and an 'insulation tape' (a non-conductive tape that can be used to secure and protect the conductive tape). The following Piste Box setup will cancel hits to either a grounded, or a non-grounded metallic piste.

Preparing the piste:

1. Roll out the conductive tape at a distance of approximately 5cm away from the side of the piste.
2. When placing the tape in a border around the piste, fold at the corners so that the tape remains unbroken. Stick down the conductive tape with a bit of insulation tape every few metres, to ensure it doesn't move.

Please note: It is important that the conductive tape forms a continuous circuit around the piste, and is not broken at any point. It is also important that the conductive tape **does not make contact with the piste at any point.**

3. If the conductive tape requires connection to another piece or part of conductive tape in order for it to remain in a continuous loop, pull the adhesive layer apart, and slot the new piece of tape between the existing conductive tape's adhesive layer and its backing. What's important is that both pieces of conductive tape are directly contacting, and that they are not separated by an insulating layer.
4. Cover over the rest of the conductive tape with insulation tape, leaving around 20cm underneath the scoreboard free of the insulation tape for now.

Touching on the Piste Box:

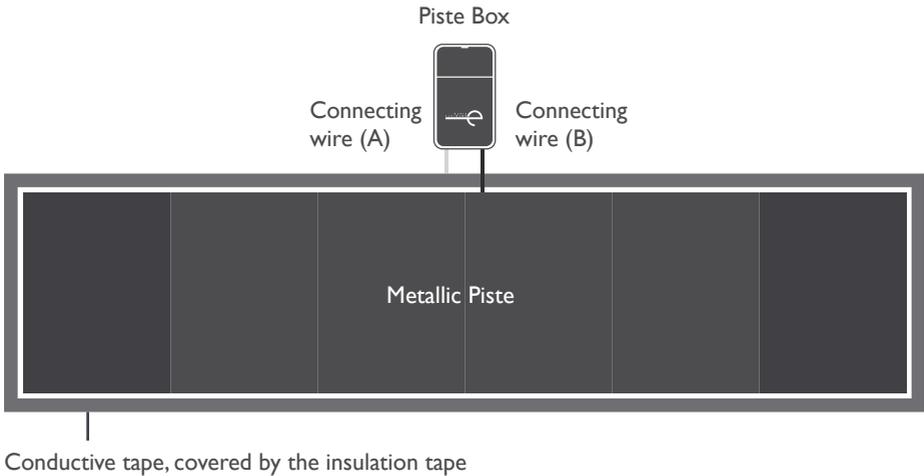
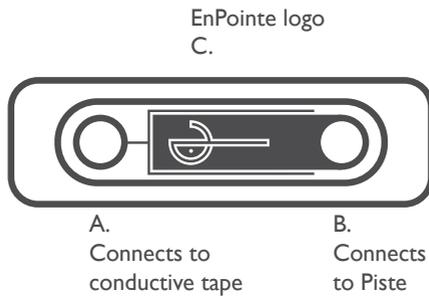
Please note: With this software version, the Piste Box is paired at first 'touch-on', and remains paired to that Relay Box. You should only need to touch on the Piste Box once, unless the batteries are removed from the Relay Box.

1. When you turn on the Relay Box, it will prompt you to touch on as normal (all orange lights are lit). Touch on the Piste Box first. This can be done by holding the Piste Box and using three fingers to touch pins [A], [B], and the EnPointe logo [C]. Hover the Piste Box over the centre of the Relay Box. The three green lights on the Relay Box will flash once to indicate the Piste Box has touched on. Then touch on the Pocket Boxes as normal.

If a Piste Box has been paired to a Relay Box, the second fencer will not be able to touch on unless the Piste Box is powered and in range. The Piste Box will remain paired to this Relay Box, even if the system is turned off and on again. If you wish to completely de-pair the Relay Box from the Piste Box, just remove and replace all the batteries from the Relay Box. You can re-pair your Piste Box by repeating the procedure outlined above.

Connecting the wires to the Piste Box:

1. Plug one of the connector wires into pin [A] (as shown in the diagram below). Attach the crocodile clip on the other end of the wire to the conductive tape. Attach where the conductive tape is left uncovered (this is why 20cm was left bare).
2. Plug the other wire into the [B] pin. Attach the crocodile clip on the other end of the wire to the piste. It can attach to either the piste's existing grounding wire, or to the piste itself.
3. Tape over the last 20cm of conductive tape with the insulation tape, making sure that the crocodile clip does not detach.



Tips and Troubleshooting

Error

Hits are not being cancelled properly.

Solution

1. Firstly check that the Piste Box has sufficient charge, and has not disconnected from the Relay Box.
2. Then check the connections between piste>wire>box, and tape>wire>box. To help diagnose the issue, you can have the fencers test the wire/piste grounding screw or wire directly, to see if it's a broken connection, or an issue with the Piste Box itself.
3. Check that the loop of conductive tape has not become torn or disconnected in any way.
4. Check that the piste is not touching the conductive tape at any point.

When attempting to touch on, both of the orange error lights on the left and right of the Relay Box are alternately flashing.

This error indicates that the Relay Box cannot establish a wireless connection to the Piste Box. This could be because:

1. The Piste Box is out of charge, or the batteries have become dislodged from their compartment.
2. The Piste Box's antenna is blocked from communicating with the Relay Box, possibly due to a metal object placed on top of the Piste Box.

The Connectivity Error lights  on the Relay Box flash three times in quick succession, every second.

This indicates that the conductive tape is shorted out to the metallic piste. Please make sure that the insulation tape is covering the entire length of conductive tape, and that no metal objects (like weapons, reel boxes or spare wires/conductive tape) are bridging the conductive tape and piste.

The connectivity error lights  are constantly flashing.

This indicates that there is a wireless connectivity issue between the Piste Box and the Relay Box, or the Pocket Boxes and the Relay Box. The Relay Box will attempt to reconnect, and the off-target lights will display if the box is disconnected for a long enough period of time that a hit could have occurred. Firstly check that the wireless antennas on the Relay and Piste Boxes are unobstructed. See that:

1. No large metal objects are placed next to either box, and that the boxes are not closely surrounded by metal on all sides.
2. Check that they are not located in a place where signals are absorbed, or dissipate into the environment - like a wide open field.

If you still encounter wireless connectivity problems, try locating the Piste Box at the middle of the piste, rather than at the end. Or try moving the Pocket Boxes into a front pocket of the fencer. If problems persist, please contact our support team at support@enpointefencing.com for more specific help with this issue.

If you encounter a dead spot on the piste.

This is likely an indication that parts of the piste are not totally connected to each other. Dead spots on the wired system are often caused by the same issue. The connection between these parts of the piste may depend on where there is weight on the piste, so it is a good idea to test a 'dead spot' while standing on different sides of the affected area.

Tip: A small amount of the conductive tape can connect the affected area to the rest of the piste, as a short-term solution to dead spots.

If you prefer the Piste Box is not located directly next to the piste.

To avoid a tripping hazard or for convenience, you can extend the connection of the tape loop, by attaching a length of conductive tape to the loop (as described above), and running the tape away from the fencing area to a place where the Piste Box can be safely placed. The same can be done with the connection to the piste, but remember that the loop of conductive tape must be insulated, and the piste must not short out to the loop of tape. The Piste Box can be moved 1-2m away from the piste and Relay Box without issue. It is recommended to move the Piste Box further away if it is in danger of being stepped on (by referees, fencers, etc). Not only is that a tripping hazard, but can damage the connection between the Piste Box and the piste/loop.

Tip for referees when testing weapons.

For best results when testing weapons as a referee, please make sure you are located on the same surface as the fencer whose weapon you are testing, i.e. only test the weapon if both the referee and fencer are located either wholly on, or wholly off, the piste.

If you have any difficulties setting up or using the Piste Box, please contact us at support@endpointfencing.com, and our support team would be more than happy to assist you!

Frequently Asked Questions (FAQs)

Does my metallic piste need to be grounded, in order for the Piste Box to work?

No. Both grounded and non-grounded pistes will be cancelled with a Piste Box attached.

Where can I get more conductive tape?

You can purchase conductive tape separately from our online shop. Similar items can be purchased online, or from hardware and electronics stores.

Can I use similar items/wires in place of the conductive tape for the same effect?

Most kinds of tape with a similar size, shape and conductivity to the tape we provide, will be suitable for this purpose. We can guarantee that the tape we provide will work with the Piste Box. Other kinds of conductive tape may not have the same level of compatibility. If you have a specific tape in mind, you can contact our support team at support@enpointefencing.com, and we will advise you on the suitability of the proposed substitute product.

Generally, most wires do not have the surface area required for the optimal functioning of our system, but some clubs have tested with them and found them to work.

Important Information:

Technical Specifications:

Power Supply	Two (2) x AAA batteries
Battery Life	Approximately 100 hours
Size and Weight (inc. batteries)	Size: 10cm x 6cm x 1.5cm / Weight: 111g
Size and Weight (inc. carry case)	Size: 12cm x 8.5cm x 4cm / Weight: 156g
Radio Transmission Frequency	2.4 GHz ISM band
Encryption Protocol	AES-128 authenticated encryption
Operating Temperature Range	0-50 degrees Celsius

Warranty:

The warranty is valid for twelve months from the date of purchase. It includes free repair for any defects in materials or assembly. It does not include international shipping costs. If the consumer encounters a major fault or defective system, they must stop using the system, and contact the manufacturer immediately. This ensures they are eligible for a warranty claim.

You can contact support@enpointefencing.com to make a claim, or contact us through our business address: EnPointe Fencing, 5a Hartnett Close, Mulgrave 3170, Victoria, Australia.

Our goods come with guarantees that cannot be excluded under Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

The intended use for this product is for fencing, under safe conditions and in accordance with health and safety guidelines. We cannot take responsibility for damage that results from improper use of the system, or use of the system in a manner outside of its intended purpose.

Disposal of Product:

The electronics contained in this system must not be disposed of with normal household waste. Instead, it is your responsibility to dispose of your system by arranging to return it to a designated collection point for the recycling of waste electrical and electronic equipment. By separating and recycling your system at the time of disposal you will help to conserve natural resources and ensure that the system is recycled in a manner that protects human health and the environment.

For more information about how to designate your EnPointe Fencing System or Piste Box for recycling, please contact our customer services team on +613 9015 4441, or support@enpointefencing.com for further information.

When Using Batteries

- Always insert the batteries correctly, and following the manufacturer's instructions.
- Do not mix new and old batteries (replace all batteries at the same time).
- Do not mix standard, rechargeable and alkaline batteries together.
- Only use the kind of batteries recommended in this manual (AAA).
- Do not attempt to charge non-rechargeable batteries.
- Do not leave dead or depleted batteries inside the product.
- Do not dispose of batteries in a fire, batteries may leak or explode.
- Always remove the batteries from the device before extended periods of storage.
- Do not short-circuit the supply terminals.
- Batteries may leak or explode if misused.

Disclaimer and Safety Message

All our wireless fencing products have been designed for fencing under normal conditions, and to the FIE rules and scoring specifications. If fencers use the system under non-standard or unsafe fencing conditions (for example, not wearing shoes, or not wearing a glove on the weapon hand) we cannot guarantee the reliability of the system.

We encourage all fencers to keep their protective gear and equipment up to date with regulatory safety standards, and to only fence in conditions and environments that adhere to health and safety guidelines.

For more information about our products, updates or innovations, please visit our website at enpointefencing.com or email us at support@enpointefencing.com. Allez!



CE Compliance Notice:

The EnPointe Piste Box (EP-G01) meets the minimum requirements for safety and electromagnetic compatibility of electronic devices, and conforms with the relevant European Union directives and recommendations:

Directive 2011/65/EU

Directive 2014/53/EU

Directive 2014/30/EU

Council Recommendation 1999/519/EC of 12th July 1999

More information about our compliance, including the relevant harmonised standards, can be found in our declaration of conformity, available at enpointefencing.com/downloads.

FCC Compliance Notice:

Contains FCC ID: SQGBL652

This device complies with part 15 of the FCC Rules. Operation is subject to the following two 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the Relay Box.
- Increase the separation between the equipment and system.
- Move or shorten the length of the connector cables.
- Consult the dealer or an experienced technician for help.

Note: The system is intended to be used with an FCC compliant scoring machine. If the scoring machine is not compliant, the system as a whole may not be. Connector cables of up to 1.8m in length were tested with this system and found to comply.

Pacemaker Notice: This product contains strong magnets and utilises wireless technology. Consult with a medical professional before using.

Contains small parts. Keep out of reach of children.

All companies and products referenced herein are trademarks or registered trademarks of their respective holders.

**The 'EnPointe' logo is a registered trademark.
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