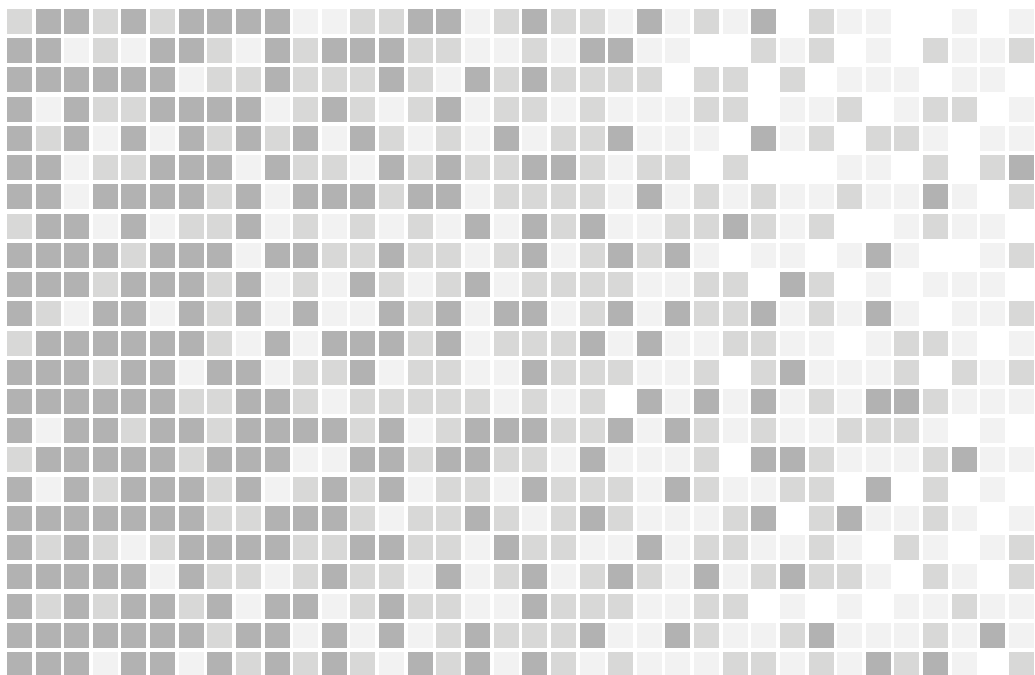




# EnPointe Wireless Fencing Set EP-P01, EP-R01 User Manual





# The EnPointe Wireless Fencing System

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## The EnPointe Wireless Fencing System

This set includes two Pocket Boxes that plug into body wires, and a Relay Box that plugs into an existing scoring machine. A scoring machine is not included with this set.

This system behaves as a wired (reels) system would, without a grounded metallic piste.

A piste attachment can be added to this set for hit cancellation on metallic pistes.

For more information about the system, the piste attachment, features or setup, please see our website [www.enpointefencing.com](http://www.enpointefencing.com) or contact us at: [support@enpointefencing.com](mailto:support@enpointefencing.com).

Included in this set:

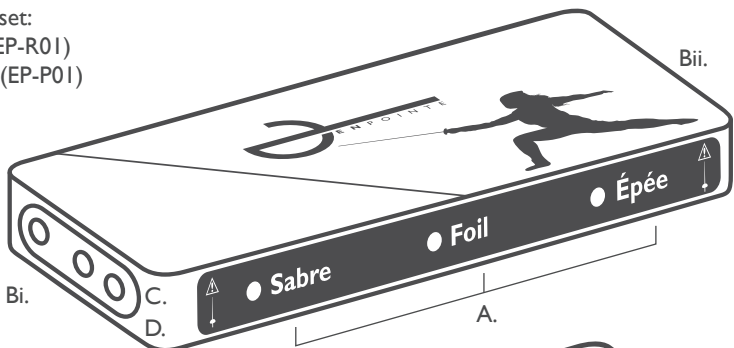
1 x Relay Box (EP-R01)

2 x Pocket Box (EP-P01)

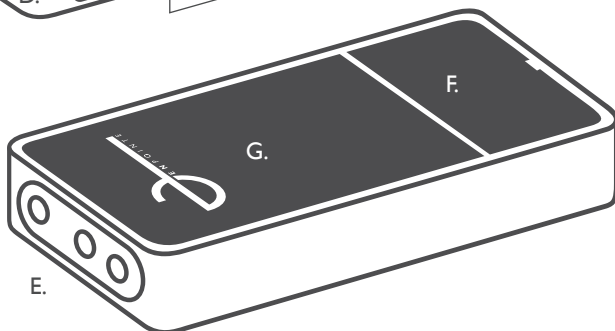
1 x Carry Case

1 x Manual

**Relay Box**



**Pocket Box**



A. Weapon select menu

B. Socket for connector cables

C. Connectivity error light

D. Equipment error light

E. Socket for body wire

F. Battery compartment

G. EnPointe logo,  
faces outward from body

## The Pocket Box:

To begin using your system, place two AAA batteries in the battery compartment of each pocket box, shown in [F], in the direction indicated.

In order to begin fencing with the pocket boxes, simply plug your three-pronged bodywire into the plug at the top of the box, shown in the picture above [E].

There is no need to switch the pocket box 'on', it will automatically turn on when you begin fencing. It will turn itself off once you have finished, and the relay box has been switched off.

It is important that you place the pocket box into the pocket so that the silhouette of the fencer faces you (fencer-to-fencer), and the 'EnPointe' logo faces outward. This ensures that the box has continuous contact with the body, and that the wireless antenna is unobstructed.

**Reminder:** The boxes are designed to sit in the pocket of standard fencing breeches. They can be used in normal sweatpants, so long as the box remains snug in the pocket. Extremely loose clothing, in which the boxes would rattle around, may reduce the reliability of the pocket boxes.

## The Relay Box:

To set up the Relay Box for wireless fencing, place four AAA batteries in the Relay Box battery compartment shown in [H]. Place them in the compartment in the orientation indicated on the device.

Attach the connector cords from the scoring machine to the relay box, as shown in [B]. Attach the other ends of the cords where reels or cables would otherwise plug into the scoring machine. If you did not purchase connector cords, standard Épée wires can be used instead.

It is important that the cord for the left-hand side of the piste (as indicated on the scoring machine), is connected to the left of the relay box [Bi], and that the cord for the right side of the piste is connected to the right of the relay box [Bii] when the box is facing you.

## Touching On:

Firstly, place your scoring machine in the mode of weapon you will be fencing in.

Now choose the weapon you wish to fence with by pressing the 'Sabre', 'Épée' or 'Foil' buttons, as shown in [A]. This will switch on your relay box.

If your weapon is plugged in and your body wire is plugged into the pocket box and attached to the lamé, you can register to the piste by touching the top of the relay box with your weapon. This process should take less than a second.

All four error lights [C and D, on both sides of the box] will be lit while no-one is 'touched on'. Once a fencer has touched on, the lights on that fencer's side of the piste will turn off.

The first fencer to touch on is allocated to the right hand side of the piste.

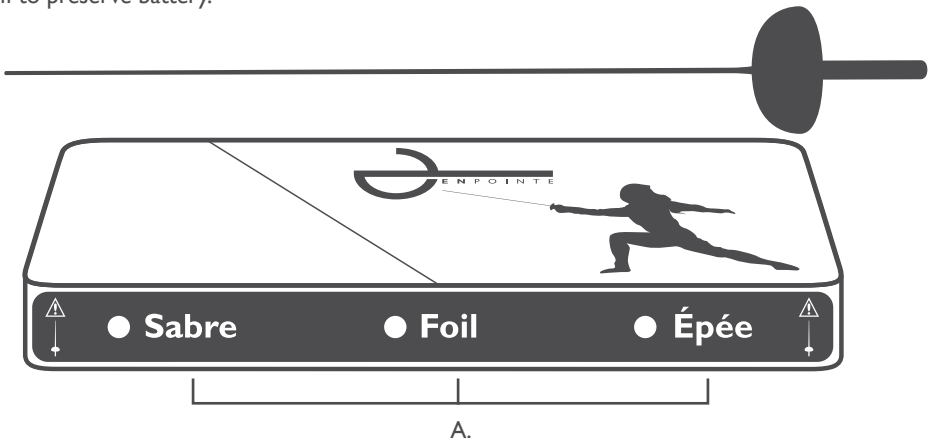
You can switch weapons or wires with no need to re-register.

Now you are ready to fence! There is no calibration routine or syncing required.

## Switching off:

To switch off your system, simply press the same button on the relay box of the weapon you selected, so that the green light turns off, as shown in [A]. This also switches off any touched-on pocket boxes.

If no-one is touched on with their weapon connected for more than one minute, or if no hit of any kind has been made for more than 15 minutes, the system will automatically switch itself off to preserve battery.



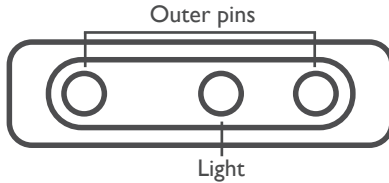
# Batteries and Power:

The Pocket Boxes use two standard AAA batteries, and last for 90 hours of continuous fencing, or approximately three months worth of regular club use.

The pocket box batteries can be replaced by pulling on the lift-tab shown in [F].

The battery level can be viewed by touching the two outer pins on the pocket box. The middle pin will glow green (high battery), or fade to yellow (medium battery) or red (low battery, around 20% charge).

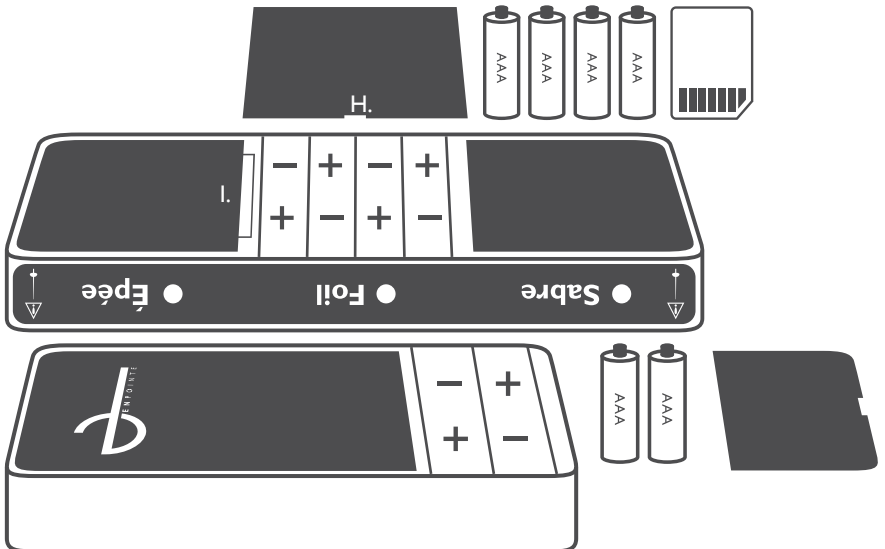
While fencing, pocket box low battery is indicated by flashing the warning light [C] once every second, on that fencer's side of the piste.



The Relay Box uses four standard AAA batteries, and has a battery life of 120 hours of continuous fencing, or four months of club use.

The relay box batteries can be replaced by opening the compartment shown in [H].

Low battery is indicated by all four yellow error lights flashing five times when you turn on your relay box. This will occur when approximately 20% of the battery charge is left.



## Timing and Updates

Please note that the information listed in this manual is for the initial release software, and additional updates may change the behaviour of the system. Please refer to the version release notes available at [www.endpointefencing.com/downloads](http://www.endpointefencing.com/downloads) for more information.

Any new EnPointe system will come pre-installed with the latest update.

In the event of rule changes, or if we have made any changes to our system that we think will improve the wireless experience, we will provide free updates to download from our website.

These files can be loaded onto a MultiMediaCard (MMC) (like those used in digital cameras), and then plugged into the relay box.

Simply download the file from our website at [www.endpointefencing.com/downloads](http://www.endpointefencing.com/downloads) and drag and drop the file from your 'downloads' folder onto the MMC. Many laptops and computers have MMC slots, or MMC to USB adaptors can be purchased from most stationery and electronics stores.


Once the file is loaded onto the card, open the battery case on the relay box, shown in [H], and insert the MMC underneath the batteries, into the slot shown in [I]. Push the card in until it clicks, then replace the batteries. To remove the card again, push it in, and it will spring out.


Once all the error lights and weapon select menu lights have flashed on and off, the system has been updated. You can then take the MMC out or leave it in the relay box for the next update.

If an update has failed, all the error lights will flash five times once the batteries have been reinserted.



## Troubleshooting and Warning Lights

**General Connection Errors** are shown by the  warning lights. They indicate that the relay box is not communicating with a pocket box on that side of the piste.

**Personal equipment errors** are shown by the  equipment light, and indicate there is an issue with an individual fencer's equipment, including lamé, weapon, body wire or pocket box.

### Troubleshooting Guide

#### Error

#### Solution


The yellow error lights on the relay box (both general and equipment lights) for both sides of the pistes are lit.

These lights are lit when the system detects that no pocket boxes have been touched on. Once you are plugged in and touch the box with your weapon, the lights should turn off.

I cannot touch on.

Check that:

1. Your pocket box has sufficient battery. You can do this by touching the outer pins and looking through the middle pin for the battery indicator light.
2. Your weapon and lamé are plugged in.
3. Your pocket box is sitting snug in the back pocket and making continuous contact with the body.


The equipment error light () for my side of the piste is lit.

This light indicates there is a problem with the fencer's equipment.

Check:

1. Is your lamé connected in foil and sabre?
2. Has your button grounded out to your guard in *Épée*?

If you have completed this checklist and your equipment light has not turned off, you may have a body wire or weapon that is faulty.


The equipment error light () for my side of the piste is flashing.

This indicates there is a problem with that fencer's pocket box.



Check:

1. Do you have the pocket box oriented in your pocket correctly? (Fencer silhouette facing you, EnPointe logo facing outward.)
2. Is the pocket box able to properly sense the fencer? For best performance, the pocket box must be close to the body and snug in the pocket. Very loose clothing may cause the box to hang off the body or rattle around.
3. Has it been more than 5 seconds since any of the above has occurred? The light will flash for 5 seconds after it records any of the above scenarios.

You can still fence with this light flashing, but in extreme circumstances, system performance may be impacted.

The connectivity error light () is flashing continuously on one side of the piste.

This indicates that the fencer touched-on to that side of the piste has low battery in their pocket box. You can still fence with this error.

The relay box error lights () and equipment error lights () flash five times when I first turn on the system.


This indicates that the batteries in the relay box are very low (20% battery life) and will need to be replaced soon. You are still able to fence with the system while this error is present.

The off-target light(s) on the scoring machine are flashing.

As in the wired system, you may be fencing with a body wire that needs replacing.

Hits are not being registered correctly.

Check that the connector cords, or épée wires, are not broken at any point and are properly connecting the relay box to the scoring machine.

The connectivity error lights () on the relay box flash, then extinguish. The off target lights on the scoring machine flash when this happens.

This indicates that a wireless connection cannot be sustained between 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. First check that the wireless antenna on the relay box is unobstructed.

See that:

1. No large metal objects are placed on top of the relay box, blocking the antenna.
2. The relay box is not placed in a location where it is closely surrounded by metal on all sides.

If this does not solve the issue, check that the wireless signals are not failing to reach the relay box. This may occur if you are fencing in a place where signals are absorbed, or dissipate into the environment.

This may be:

1. An environment where signals are absorbed, like in a sound-proofed room with foam on the walls.
2. A wide open space where the signal dissipates outwards without reflecting off any objects, like a wide open field.

If you encounter wireless connectivity problems in these environments, try moving the location and orientation of the relay box. Try moving the pocket box into a side or front pocket of the fencer, or if using a belt clip, try moving it to the front of the fencer's uniform. This should eliminate any connectivity issues.

The off-target lights on the scoring machine are continuously flashing and will not allow us to fence. All the error lights on the relay box are lit.

This indicates that the system is unable to establish a connection between the relay box and pocket boxes. Firstly;

1. Does your pocket box have enough battery? Check by touching the outer pins of your box, and looking through the centre pin for the battery indicator light.
2. Have the batteries in the pocket box come loose? Check that the batteries are placed securely in their compartment.

If you have sufficient battery, and have tried to improve the wireless connectivity using the steps above, you should not have this issue. If you are still experiencing this, it is possible that your wireless box is encountering unprecedented amounts of interference.

No amount of interference from wireless systems (including Wi-Fi and Bluetooth devices) should cause this. It is possible you are fencing in close proximity to non-compliant wireless emitters. Please contact us at [support@endpointfencing.com](mailto:support@endpointfencing.com) for more specific help with this issue.

### **Sabre Fencers Please Note:**

We recommend using working body wires when fencing sabre. If you are fencing with a damaged body wire, and your blade becomes disconnected (your scoring machine will show a white light, as with the wired system) at the exact moment you hit, your touch may not register (as of 2018/10/23). Please check the EnPointe website for the latest updates and improvements regarding this issue.

## Frequently Asked Questions (FAQs):

**Q** - Will the wireless system behave any differently from a wired system?

**A** - We have made every effort to ensure that the EnPointe system behaves in the same manner as the currently-used wired systems. In normal use, the EnPointe system follows the same timing and light decisions of standard reels in all three weapons. It adheres to all FIE guidelines on wireless scoring as outlined in their wireless 2016 test protocol.

**Q** - Will the system encounter interference?

**A** - No, the system's performance should not be reduced by interference from other wireless fencing systems, or from other forms of wireless technology like Wi-Fi or Bluetooth.

**Q** - How durable is the pocket box? Will it break if I fall on it?

**A** - The pocket boxes are made from aluminium and flexible fibreglass. It would be highly unlikely that one could be broken in the process of normal fencing, even if you were to drop it, fall directly onto it, or step on it accidentally. That being said, we recommend that fencers treat the pocket boxes with care, the same as you would with any other expensive technology.

## Important Information:

Technical Specifications:

Power Supply

Relay box: four (4) x AAA batteries  
Pocket boxes: two(2) x AAA batteries  
per box

Battery Life (of one set of batteries)

Relay box: approximately 120 hours  
Pocket Box: approximately 90 hours

Size and Weight (inc. batteries)

Relay box size: 13.5cm x 6cm x 1.6cm  
Weight: 165g  
Pocket Box size: 10cm x 6cm x 1.5cm  
Weight: 111g

Size and Weight of entire set (including carry case)

Size: 20.7cm x 17.5cm x 5.0 cm  
Weight: 575g

Radio Transmission frequency

2.4GHz 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](mailto: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.

## Disclaimer and Safety Message

This wireless fencing system has 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.

We hope you enjoy your EnPointe Wireless Fencing set.

For more information about our products, updates or innovations, please visit our website at [www.enpointefencing.com](http://www.enpointefencing.com) or email us at [support@enpointefencing.com](mailto:support@enpointefencing.com). *Allez!*



**CE Compliance Notice:**

The EnPointe Wireless fencing set (EP-P01, EP-R01) 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 [www.enpointefencing.com/downloads](http://www.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.**

**Patent Pending. ID: 2017902406**

**Made in Australia.**

