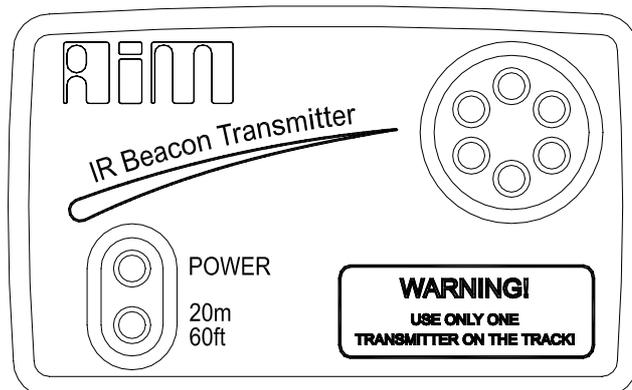**Figure 1: Infrared lap transmitter** (front view)

Introduction

The Infrared transmitter, or Beacon as it is often called, is set near the edge of the track to trigger a lap time to the onboard system of a passing vehicle.
All beacons have a common frequency so one only transmitter per track is required.
The beacon transmitter may be powered by the internal battery pack, composed of 8 AA batteries, or by a 12 V external power source.

Installation notes

- The infrared transmitter has to be placed near the edge of the track;
- The infrared rays emission source has to face the track;
- Please, ensure to firmly fix the beacon so to avoid movements and possible false laps;
- Once the transmitter has been installed, remember to switch it on.

The beacon transmitter has two operating modes: **LOW** power and **HIGH** power.
The low power mode has to be used when the track is less than 10 m (30 ft) wide, while the high power mode has to be used when the track is up to 20 m (60 ft) wide.
To activate this function, please open the beacon transmitter and place the clip (located directly below the battery attack to the beacon transmitter board) either over one of the two connectors (for **LOW** power mode) or over both connectors (for **HIGH** power mode).
When the beacon transmitter operates in HIGH power mode, both front power led lights up.

Figure 2: Infrared lap transmitter HIGH/LOW power switch

Dimensions
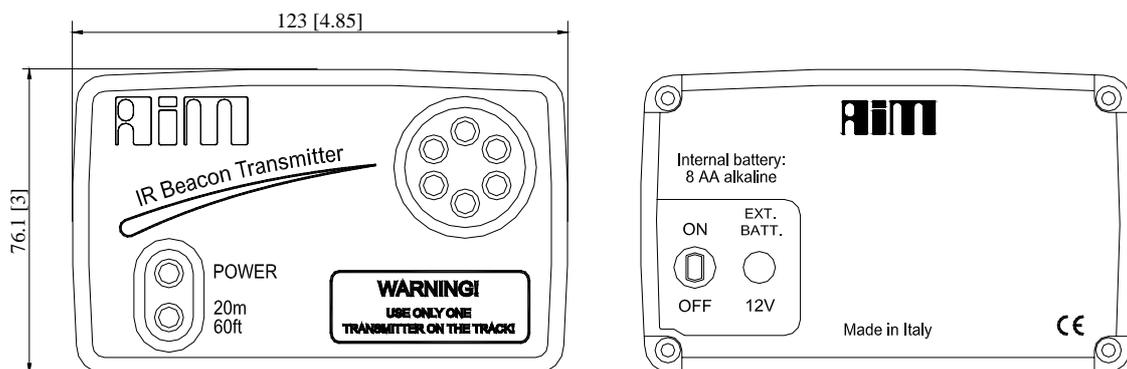
Dimensions in millimetres [inches]

Notes

When the transmitter operates in HIGH power mode, it is strongly recommended to use a 12 Volts external battery.

Technical characteristics

Characteristics	Value
Internal batteries	8 AA, 1.5 V
External battery	12 V, 1.0 A
Low power mode range	10 m (30 ft)
High power mode range	20 m (60 ft)
Dimensions	123x76x47