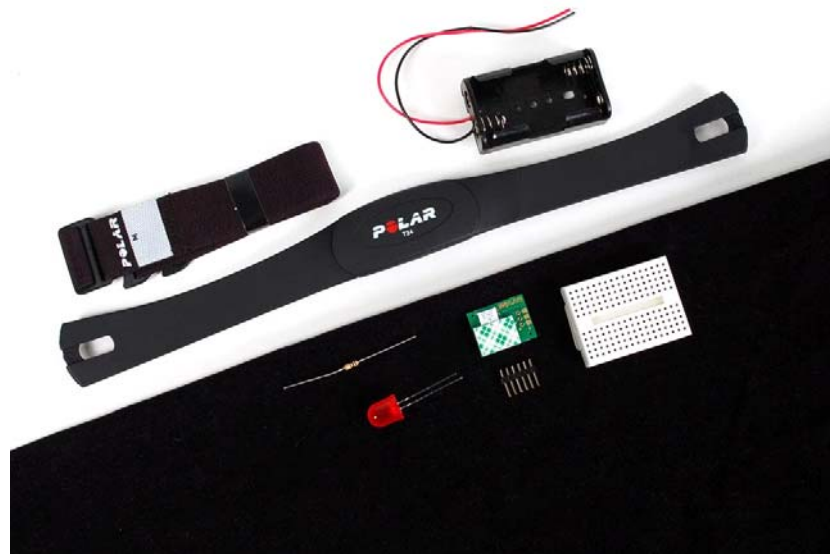




# Heart Rate Educational Starter Pack with Polar Wireless Sensors

PRODUCT ID: 1077



## . Description

Read wireless heart-rate data into your electronics projects in under 10 minutes with this educational experimentation kit for Polar wireless heart rate bands. This pack is designed for students, hobbyists, engineers and artists who want to add biometric interactivity to electronics. This is the easiest way possible to do it! No gel, no probes, no calibration and no clips. Simply strap the band on and detect heartbeats from 4 feet away.

**Please note:** this pack is designed for students, hobbyists, engineers and artists. It is not a developer pack and is not for use in product development! Polar specifically wants product developers to contact them to license the technology for OEM use so they can make sure the application is appropriate. Please do not purchase this with the assumption that it will guarantee your product's approval.

Pack includes:

- Polar T34 Heart Rate Transmitter
- Polar Heart Rate Receiver
- 2xAA battery holder
- Tiny breadboard
- 10mm red LED
- 1K ohm resistor
- header pins
- **You will also need a microcontroller (Arduino or similar) to read the logic level from the receiver and blink the LED!**

The Polar T34 Non-Coded Heart Rate Transmitter monitors and then wirelessly transmits your heart rate data from the chest strap to a Polar WearLink+ compatible receiver. This allows the wearer to monitor their heart rate. This transmitter can also be paired with your local gym's exercise equipment if it is Polar WearLink compatible.

**Key Features:**

- Heart rate sensor wirelessly transmits heart rate data without the need for conductive gel
- Water-resistant up to 30 meters for use in extreme environments
- Battery to last up to 2,500 hours of continuous usage
- Adjustable elastic strap for comfortable yet secure sensing
- Removable and machine washable textile strap keeps your sensor bacteria-free

**Details:**

- Water resistant up to 30 meters
- ECG accuracy
- Up to 2,500 hours of usage
- Non-user replaceable battery
- Adjustable medium size elastic chest strap included (25-54 inches)
- Machine washable and anti-bacterial

The Polar Heart Rate Receiver is designed to receive heart beat signals from compatible Polar heart rate sensors such as the T34. Together, the sensor and receiver provides a low-cost and convenient heart rate monitoring system that can be connected to most any microcontroller.

The Heart Rate Receiver is a stand-alone module, with on-board connections for power (3.3 V to 5 V), ground, and signal. It wirelessly interfaces to a compatible Polar coded or uncoded sensor transmitter. The output pin simply pulses high when a heartbeat is detected.

This module:

- Receives heart beat signals from a compatible sensor transmitter
- Indicates a received heartbeat signal using a LOW/HIGH output signal
- Wirelessly interfaces to transmitter with a range of up to four feet

# Technical Details

Parallax has a heart rate sensing tutorial with sample code on their learning site.

<http://learn.parallax.com/KickStart>

For product support, replacement parts and warranty for Parallax products click here.

<https://www.parallax.com/support>

