XPEDO
THRUST E Pedals

XRF12

Owner's Manual

This product is ANT+ certified and complies with the bicycle power ANT+ Device Profile. For a complete listing ofANT+ Certified Products and their specific interoperability, please visit www.thisisant.com

TABLE OF CONTENTS

PACKAGE CONTENTS **4**
THRUST E ANATOMY **5**
INSTALLATION OVERVIEW **6**
PRE INSTALLATION **7**
Battery Information 7
PAIRING **8**
Pairing Quick Guide 9
INSTALLING THE PEDALS **9**
INSTALLING THE CLEATS **10**
CALIBRATION **10**
Cadence Calibration 10
Static Calibration 12
Static Calibration Quick Guide 12
RIDE **13**
MAINTENANCE AND CARE **13**
TROUBLESHOOTING **13**
SPECIFICATIONS **14**

ATTENTION!

- Before beginning a power-based training program, be sure to consult your physician.
- If you use a pacemaker or implanted electronic device, please consult your physician before using.
- When using the THRUST E pedals for the first time, please be sureto practice engaging and disengaging in a safe and secure environment.
- Please read "Battery Information" carefully before using THRUST E rechargeable batteries.
- Carefully read the manual and follow instructions to prevent accidents and possible injury.

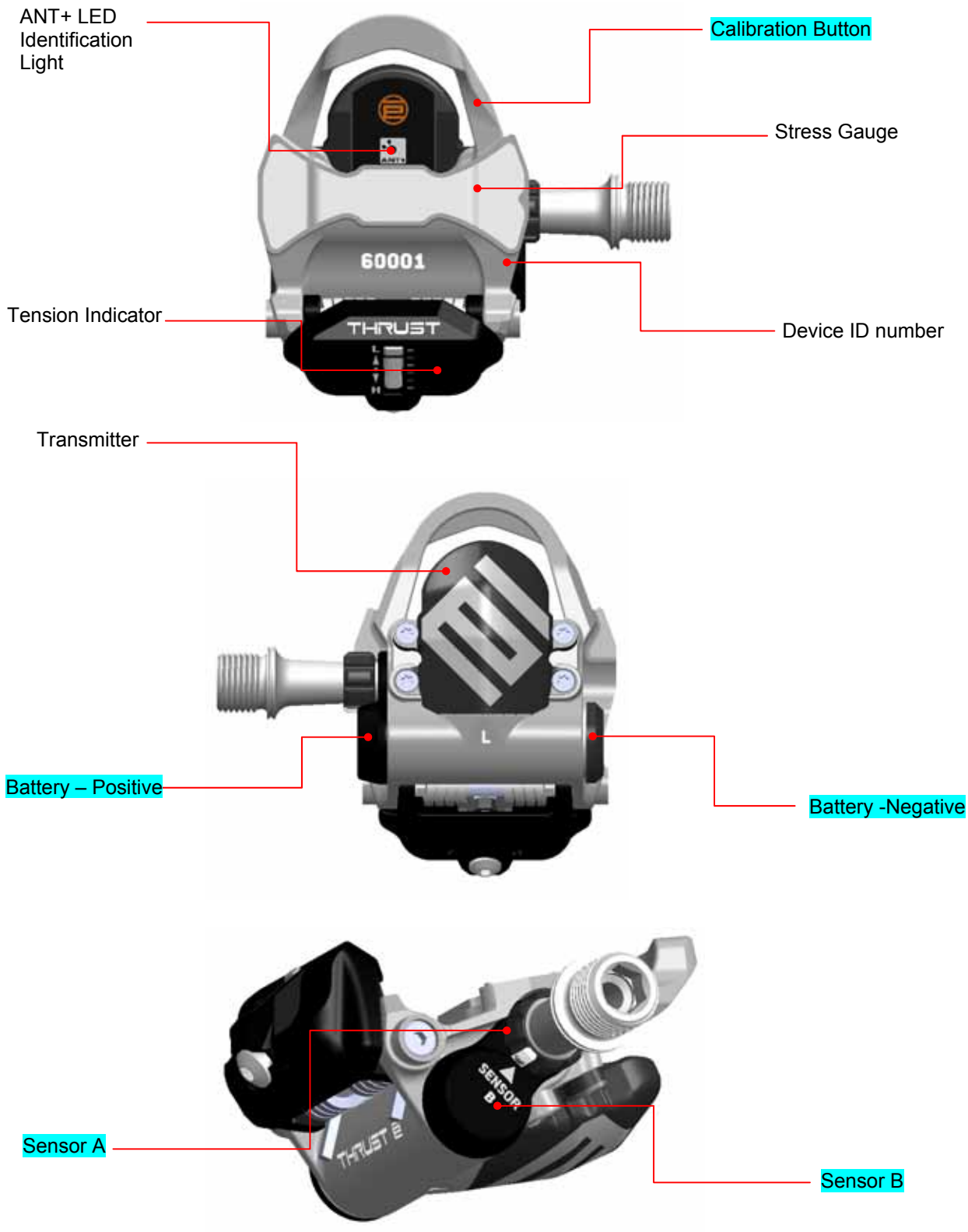
Warranty Info

XPEDO THRUST E is warrantied to be free from defects in materials or workmanship for one year from the date of purchase. Within this period, XPEDO will, at its discretion, repair or replace any components that fail in normal use. Repairs or replacement will be made at no charge to the customer for parts or labor. Customer shall be responsible for any necessary shipping costs to warranty center. This warranty does not apply to: (i) cosmetic damage, such asscratches and nicks; (ii) damage caused by improper installation by an unauthorized dealer; (iii) damagecaused by a crash, accident, abuse, misuse, fire, or other external causes; (iv) damage caused by service performed by anyone who is not an authorized XPEDO dealer; or (v) damage to a product that has been modified or altered without the written permission of XPEDO. Additionally, XPEDO reserves the right to refusewarranty claims against products or services that it deems fraudulent.

PACKAGE CONTENTS

THRUST E Pedals • Right pedal (1) • Left pedal (1)	
3.6v/600mA Rechargeable Batteries (3)	
Battery Charger with USB Connector (1)	
Cleats • **THRUST 7 6° 9 (red)(2)** • **THRUST 7 Fixed (black)(2)**	
Cleat Hardware • 11mm cleat bolts (6) • 13mm cleat bolts (6) • Cleat washer (12)	

THRUST E ANATOMY

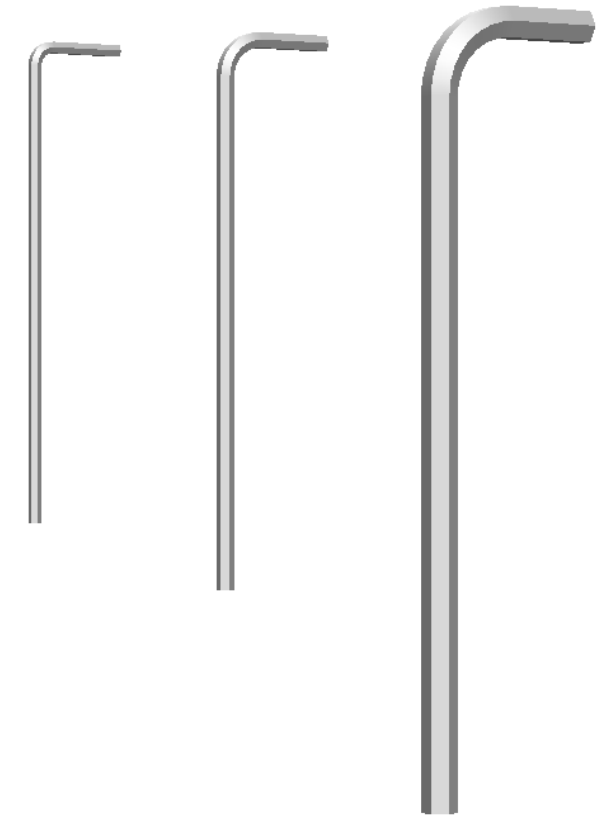


INSTALLATION OVERVIEW

1. Pre Installation (charging batteries)
2. Pair THRUST E with a ANT^{+} compatible console
3. Install THRUST E pedals on your bike
4. Install cleats to the shoes
5. Ride

Tools Needed:

1. 8mm allen wrench for pedal installation and battery cap placement
2. 4mm allen wrench for cleat installation
3. 3mm allen wrench for tension adjustment
4. Grease



3mm 4mm 8mm

Grease

PRE INSTALLATION

Battery Information

The THRUST E comes with three rechargeable 3.6V batteries (one spare). These batteries must be fully charged prior to installation. A USB battery charger is included and it will take approximately 6 hours to fully charge the two batteries for the first time. After initial full charge, it will only take around 2 hours for a full charge cycle. Under normal riding conditions, a full charge will operate for approximately 150 hours.

Red LED indicates it is charging.

Green LED indicates the charge is complete.

Notes:

- A single battery can be recharged up to 500 times.
- If the THRUST E had not been used for more than 3 month, please do charge the batteries again before riding

Caution	Use only the battery specified for this device. Failure to do so may result in malfunction and damage to the pedals and even fire.
Caution	Risk of explosion if battery is replaced by an incorrect type.
Caution	Dispose of used batteries according to local recycling policy.

Battery Warning

Failure to comply with these guidelines, the lithium-ion battery life may be shortened or cause damage to the charger, fire, chemical burn, electrolyte leakage and / or risk of injury may occur.

- Do not place the charger close to a heat source such as a vehicle parked under direct sunlight. To prevent damage to the device, the device need be removed from the car to avoid direct sunlight.
- Do not use a sharp object to remove the battery.
- Do not incinerate either batteries or devices.
- Do not place the battery in an area where child could reach..
- Do not disassemble, puncture or damage the battery.

- Use the THRUST E battery for replacement only, if the THRUST E battery is being used in other ways may risk of fire or explosion.

PAIRING

We recommend pairing the THRUST E prior to mounting them on the bicycle. Before pairing the THRUST E to a console, make sure you are at least 10 meters (30 feet) from any other ANT+™ device. This will avoid any accidental pairing to another ANT+ device.

Steps:

1) Remove the battery cap on the right pedal with 8mm allen wrench.	
2) Insert battery into the THRUST E right pedal with the + side first.	
3) Tighten the battery cap with 8mm allen wrench (Torque: 2-3Nm).	
4) Align sensor A and sensor B and the LED light on the "E" logo is lit. This will indicate the battery installation was successful.	 
5) Turn on ANT+ compatible console and refer to the console's manual to add a Power device.	
6) Verify the pairing is complete by making sure the device ID number on the console matches with the number on the THRUST E right pedal.	

7) Repeat the step 1 to 3 to insert battery into THRUST E left pedal.	

Pairing Quick Guide

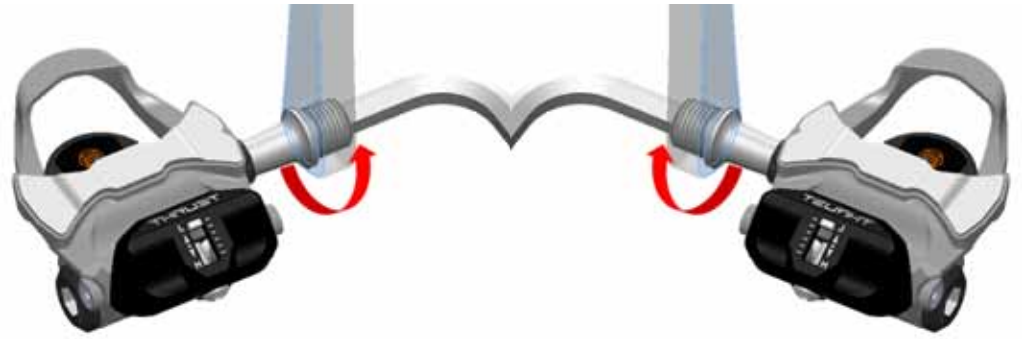
GARMIN EDGE 800
Quick Tap On/Off → tap the Dumbbell icon → Search “Power Meter Detected” will flash up on your screen when the units are paired.
GARMIN EDGE 500
Menu → Settings → Bike Settings → Bike 1 → ANT+Power → Search “Power Meter Detected” will flash up on your screen when the units are paired.
GARMIN EDGE 510, 810
Connections → tap the Dumbbell icon → Search
GARMIN 1000
Home Screen → Sensors → Add Sensor → Power
WAHOO FITNESSv4.2.4(305)
Sensors → Add New Sensor → Select sensor with ID# on the right pedal.

For the latest Pairing Calibration Quick Guide please visit www.xpedo.com/support.

INSTALLING THE PEDALS

1) Apply a thin layer of grease on the spindle threads. Install the right pedal to the right crank and left pedal to the left crank. The right pedal will have a “R” on the underside of the pedal body and the left pedal will have a “L” on the underside of the pedal body. If the crank arms are recessed, make sure to use 1mm pedal washers.

2) Tighten the pedals using a 8mm wrench (Recommended torque 35Nm or 25 ft-lbs).



Note: The left pedal spindle is a reverse thread (counter clockwise to tighten)

INSTALLING THE CLEATS

1) Apply a thin layer of grease on the bolt threads.

2) Place cleat on shoe with the washers and bolts.

3) Position the cleat in desired location and tighten the bolts using a 4mm allen wrench (Recommended torque 5Nm or 45 in-lbs).

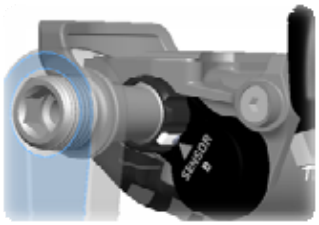
Note: Red cleat is 6° float and black cleat is fixed (no float)

CALIBRATION

Cadence Calibration

Steps:

1) Position the right crank arm at 12 o'clock position. We recommend using a trainer.	

2) On the right pedal, rotate the ring with Sensor A so it aligns with Sensor B (Figure #) The ANT+LED will light up when the A-B sensors are aligned	
3) Position the left crank arm to 12 o'clock position and repeat step 2.	

Static Calibration

Steps:

1) Clip the shoes into the pedals without your feet in the shoes
2) Rotate the pedals with the shoes 2 times to activate the pedal (Do not move the crank arm)
3) Place the right crank arm at 3 o'clock position
4) Perform the calibration by going to the "Calibrate" function on your console. The calibration function will vary by manufacturer. Please refer to the console's instruction manual.
5) Once the calibration is complete, console will display a message "Calibration Complete".

Note: Make sure nothing is touching the pedals and shoes at this position during calibration.

Repeat Static Calibration every time when new cleats are installed and/or the tension is adjusted.

Static Calibration Quick Guide

GARMIN EDGE 800
Menu → Bike Settings → Bike Profiles (select profile) → ANT+ Power Calibrate
GARMIN EDGE 500
Menu → Settings → Bike Settings → Bike 1 → ANT+ Power → Calibrate
GARMIN EDGE 510, 810
Home Screen → Bike Profiles (select profile) → Calibrate
GARMIN 1000

Home Screen → Select Status Bar → Calibrate
WAHOO FITNESS v4.2.4(305)
Sensors → Bike Power → Calibrate → Message: Calibration Successful, Offset = 65535

For the latest Static Calibration Quick Guide please visit www.xpedo.com/support.

RIDE

Clip into pedals and start pedaling. Console will display the power (watts), cadence and left-right % balance. Different consoles will display the data differently on the screen. Please refer to the console user manual to properly display this data.

MAINTENANCE AND CARE

- Wipe down the contact plate on the pedal. Do no use harsh chemicals or pressure washer to clean pedals
- Periodically check the battery compartment for any moisture or corrosion
- Power pedals will turn off after 4 minutes of no activity

TROUBLESHOOTING

THRUST E does not pair with the console
- Make sure the battery is fully charged
- Make sure only the right pedal has a battery for initial pairing

Console shows “Multiple sensors found”
- Make sure the left pedal does not have a battery until the right pedal is paired first
- Make sure you are least 3 feet away from another ANT+ device

Only one side is displaying power reading
- Make sure both batteries are fully charged
- Repeat pairing step

There is no power reading
- Repeat pairing step
- Perform static calibration

Console keeps pairing with left pedal

- Make sure batteries are fully charged on both left and right pedal
- Repeat pairing step (right pedal first)

The LED light on the Battery Charger is not lit

- Check that battery is placed correctly with + side towards the Xpedo logo
- Make sure the USB wire connection is secure in the charger

SPECIFICATIONS

- Data Transmitting: Power / Cadence / Balance / Battery Level
- Pedal Body: 6061 anodized aluminum
- Pedal Spindle: CroMo
- Bearing: 3 sealed bearings
- Q-Factor: 53+/-0.5mm
- Release Torque:Between 10~18 Nm
- Cleats: THRUST 7 Cleat System (6° float or fixed)
- Weight: 385g/pr (with battery)
- Water Resistance: IPX7 (Note: Do not submerge or pressure wash the components)
- Operation Temperature Range: From -10° to 50°
- Charging Temperature Range: From 0° to 40°
- Radio Frequency/Protocol: 2.4GHz ANT+ wireless communication protocol
- Accuracy：±2% (Indoor testing)
- Hibernate Mode: 4 minutes of pedal inactivity
- Battery Specification: 3.7V/570mA rechargeable battery
- Battery Charger Specification: Input ⎓ 5V/1A ; Output ⎓ 4.2V/500mA

Federal Communications Commission (FCC) Statement

15.21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)
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 receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

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 of the device.

FCC RF Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.