

**Project Name : KidFit**

**Product model nos. : KF001**



**Checked by**

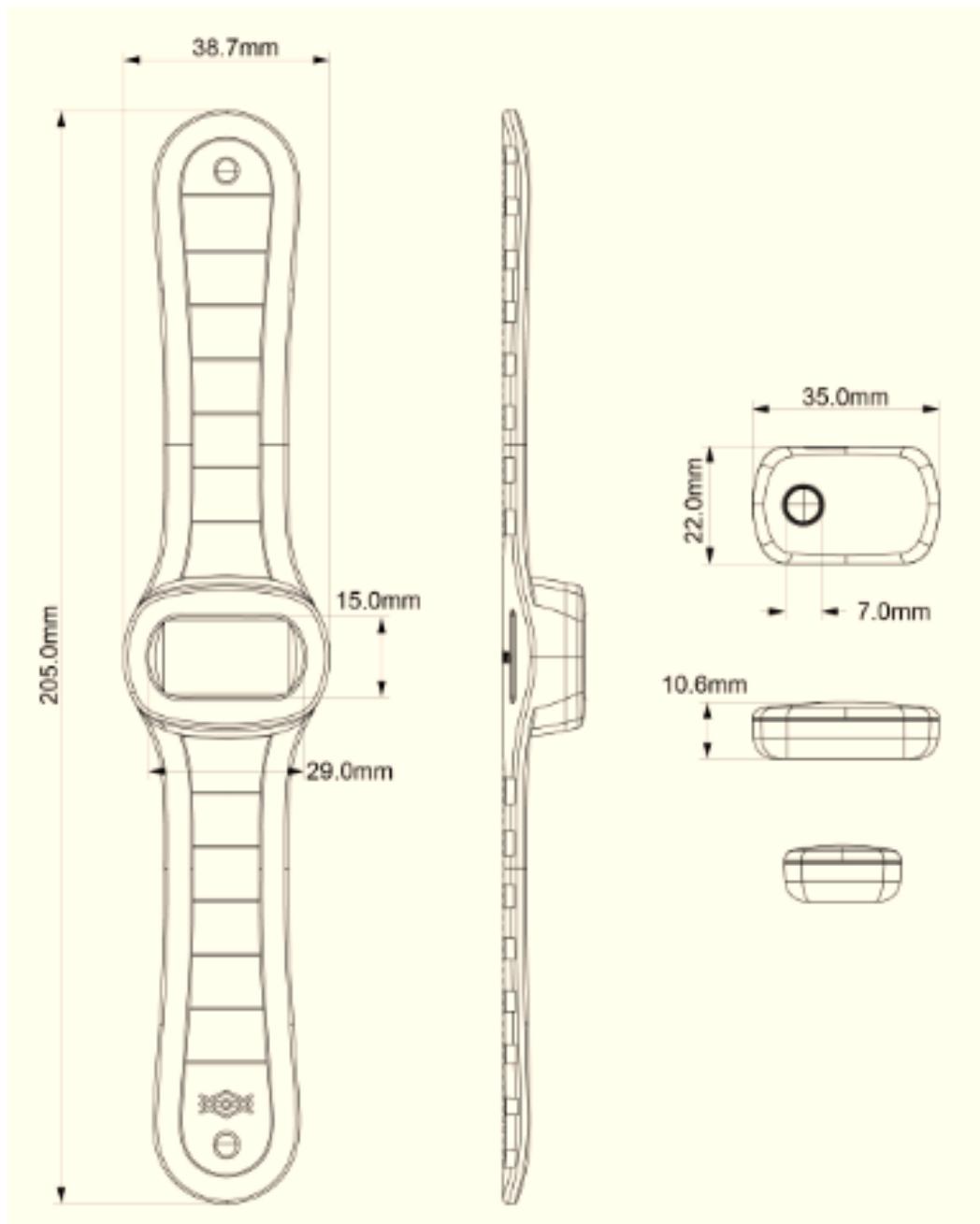
**Anthony Chan**  
**R.E.A.C. Electronics Co. Ltd.**

**Approved by**

**X-Doria International Ltd.**

## OUTLOOK AND DIMENSION

### A.) US Market



## **MAIN FEATURE**

- Daily Steps. (Tracker data)
- Daily Travel time. (Tracker data)
- Daily Distance (Calculate by APP)
- Daily Calories burnt. (Tracker data)
- Daily Sleep data. (Tracker data)
- 14 days data record for main unit (Steps, travel time, calories burnt)
- 14 records of sleep data. (Start date/time, wake up date/time, Awake event times)
- Battery level indication requested by APP
- Built in Real Time Clock
- Clear tracker memories by APPs.
- Bluetooth 4.0 (BLE)

## **BUTTON FUNCTION**

- 1 key
  - In activity mode, press once key to turn on/off Bluetooth connection
  - In activity mode, press and hold key 3 seconds to enter/ exit the sleep tracker mode.

## **LED DISPLAY INDICATOR**

- 4 LED indications
  - a.) **Red LED for battery charging**
    - Charging --- red LED flashes every 2 seconds.
    - Full charge --- red LED on
    - Low batt --- Red LED flashing every 5s
  - b.) **Amber LED**
    - Sleep tracker mode LED indicator
  - c.) **Blue LED**
    - Bluetooth operation LED indicator
  - d.) **Green LED**
    - Activity tracker mode LED indicator

## **USB BATTERY CHARGING**

Input voltage : 5V@500mA input by USB mini port

Charging time : ~ 1.5 hour

## **RESET**

- Press **RESET** key to clear all data, setting, and restore to default setting,

## **TRACKER DATA RANGE (DAILY)**

Step : 0 – 350,000 steps  
Travel Time : 0 – 1440 minutes  
Calories : 0 – 65536 kcal

## **PERSONAL PARAMETER RANGE (USE TO CALCULATE RESTING AND ACTIVITY CALORIES)**

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Gender : Male/Female  
Age : 5-99  
Weight : 20 – 136kg  
Height : 100 cm – 200cm  
Stride length : 30 cm – 150cm

#### **DEFAULT SETTING**

Time and Date : 00:00 (24-hr format), 2014/1/1

Gender : Male  
Age : 10  
Weight : 30kg  
Height : 150cm  
Stride length : 50cm

Resting Calories burnt per min : 0.95 kcal/min (for Male with age =10, weight = 30kg, height = 150cm)

## **OPERATION**

### **A.) Activate the pedometer**

After pressing the **RESET** button or for the **FIRST TIME** use, the tracker must be paired and activate the kidfit tracker. The tracker will not be functioned until activation, the blue LED is only flashing every 2 seconds when press the key.

To activate the tracker, follow below procedure:

- 1.) Press button once, blue LED will be flashing every 2 seconds representing in Bluetooth searching and connecting mode.
- 2.) Connect the tracker using the smartphones which support Bluetooth 4.0. (Make sure Bluetooth is on)
- 3.) Once Bluetooth connection is established, APPs send the **“Time/ Date Data”** to the tracker.
- 4.) Once, the tracker got the **“Time/ Date Data”** and it was activated. Press button on the tracker to disconnect the bluetooth mode, and Green LED flashes 5 times (0.5s ON and 0.5s OFF), representing the device is working in activity mode.

Note : If no connection after 3 minutes, Bluetooth will return to OFF. And Bluetooth connection will do on request.

### **B.) Activity mode**

- When enter to activity mode, the Green LED will flash flashes 5 times (0.5s ON and 0.5s OFF), representing the device is working in activity mode.
- No more flashes until entering activity mode next time.

### **C.) Sleep tracker mode**

- In activity mode, press and hold key over 2 seconds to enter the sleep tracker mode.
- Amber LED will flashes 5 times (0.5s ON and 0.5s OFF), representing the device is working in sleep tracker mode. No more flashes during sleep tracker mode.
- When wake up, press and hold the key over 2 seconds to stop the sleep tracker.
- Green LED will flash flashes 5 times (0.5s ON and 0.5s OFF), representing the device is working in activity mode.
- If sleep duration reaches 24 hours, device will auto exit sleep tracker mode, and return to activity tracker mode.

Note : During sleep tracking mode, pedometer function will be disabled.

Note : The Sleep tracker process will be end after 13 hours, and then go back activity tracker mode.

### **D.) Bluetooth Connection**

- In activity tracker mode, press the key to turn on the Bluetooth of the device in searching mode for 3 minutes, blue LED is flashing every 2 seconds
- If no success connection for 3 minutes, Bluetooth connection is turned off and return to activity tracker mode, Green LED will flash flashes 5 times (0.5s ON and 0.5s OFF), representing the device is working in activity mode.
- If success connection, keep connection until disconnection. (press key to disconnect or disconnect by APPs)
- In Bluetooth connected status, blue LED will flash every 5 seconds.
- During Bluetooth connection, activity tracking is still working.

### **E.) Data Synchronization**

- After connection, APPs send the commands to tracker to get the tracker data memories. (Data communication protocol, please refer the KIDFIT DATA FORMAT.)

### **F.) Memory**

- The past 14 days activity tracker records + Current day activity record will be stored for **DAILY STEP, ACTIVITY**

## TIME and CALORIES BURNT.

- The 14 sleep tracker records will be stored for **SLEEP START DATE/ TIME, WAKE UP DATE/ TIME, TIME FOR AWAKE EVENT.**

## G.) Battery level detection and indication

- There are total 5 battery level indication of the activity tracker. It includes 100%, 75%, 50%, 25%, and 10%.
- When the battery level was dropped to 10%, red LED will be flashing every 5 seconds which represents low battery indication.
- When USB is plugged in for battery charging, the red LED will be flashing every 2 seconds. After fully charge, the red LED will be on.

## CALORIES BURNT CALCULATION

- DAILY CALORIES displays the calories burnt from 00:00 to current
- DAILY CALORIES BURNT = RESTING CALORIES (kcal) + ACTIVITY CALORIES (kcal)

### The Mufflin Equation for RMR (in kcal/day):

For men:  $(10 \times \text{weight}) + (6.25 \times \text{height}) - (5 \times \text{age}) + 5$

For women:  $(10 \times \text{weight}) + (6.25 \times \text{height}) - (5 \times \text{age}) - 161$

**Note:** Weight is in kg, height is in cm, age is in year.

RESTING CALORIES (Corrected\_RMR) consumed per minute =  $1.15 \times \text{RMR}$  (for Mufflin equation) / 24 / 60  
ACTIVITY CALORIES consumed =  $[(\text{Weight (kg)} - 15) * 0.000693 + 0.005895] * \text{Steps walked}$

- DAILY CALORIES displays the calories burnt from 00:00 to current
- Once it change the personal parameter, the RESTING CALORIES will be changed as well, APPs need to send the updated personal parameter to tracker in order to calculate the calories inside the tracker accurately.

## FCC Statement

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.

## FCC Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment.

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.

### **Caution!**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **Canada Statement**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.