# Instruction Manual

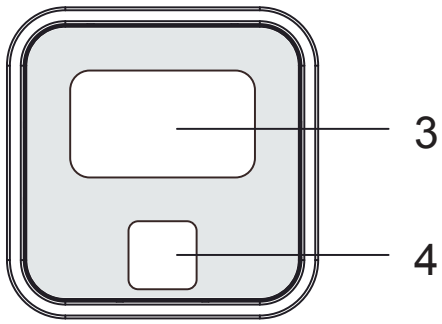
# Ambient Monitor

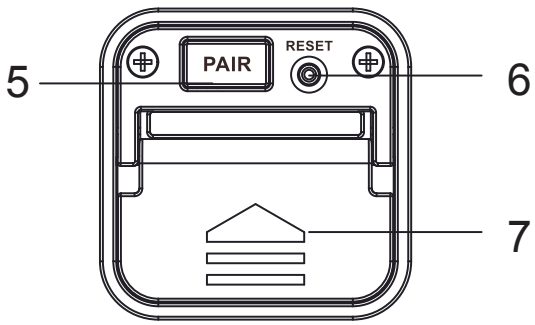
Available on the App Store

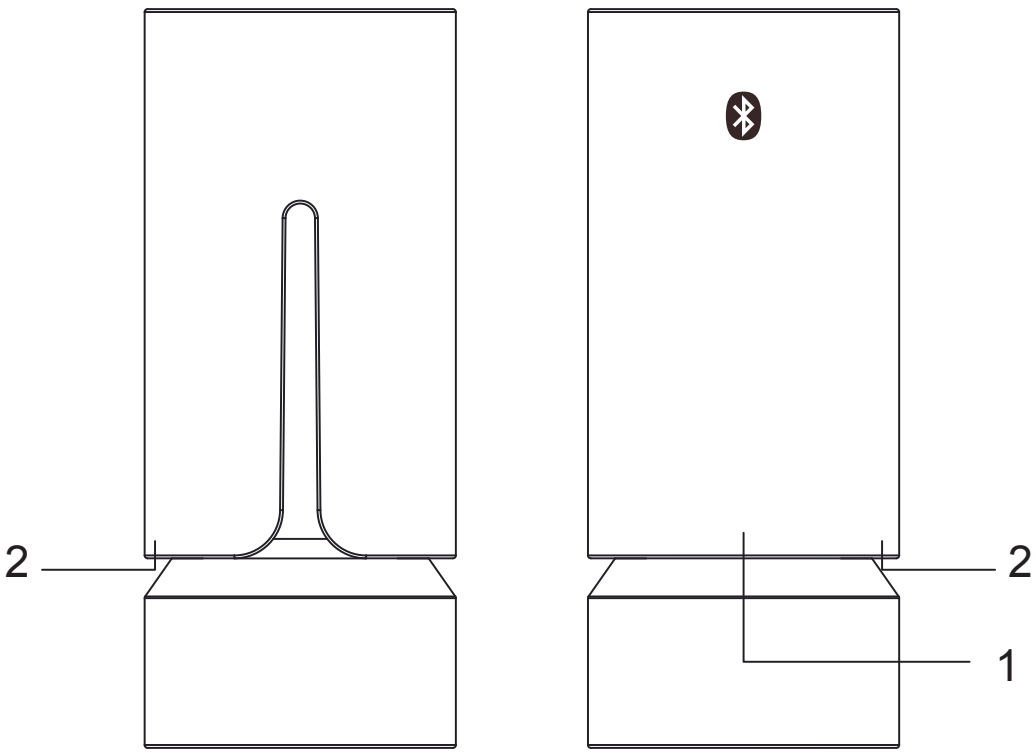
# Main Unit

## Location of Control

1. LED Indicator
2. Ventilation Window
3. LCD Display
4. Ambient Light Sensor
5. Pair Button
6. Reset Button
7. Battery Door
8. Handing slot



# Features

Thanks you for purchasing the BTL - Wire. This product is designed as a BTL- Wire by working with Ipad, Iphone , IPod or other IOS devices.

- Supports iOS 7 or above
- Supports Bluetooth 4.0 or above
- Measures and logs ambient temperature, relative humidity and light intensity
- Variable sampling and logging rate
- Low battery indication
- LED indicator

Specifications:

| Description | Unit | Min | Typ | Max | Remark |
|---|---|---|---|---|---|
| Temperature Measuring Range | °C | -50 | | +70 | |
| | °F | -58 | | +158 | Not available for Japan |
| Temperature Accuracy | °C | | | 1 | 0.0 – 40.0°C |
| | | | | 2 | Otherwise |
| | °F | | | 1.8 | 32.0 – 104°F |
| | | | | 3.6 | Otherwise |
| Relative Humidity Measuring Range | % | 5 | | 99 | @ 0.0 – 60.0°C |
| Relative Humidity Accuracy | % | | | | TBD |
| Light Intensity Measuring Range | lx | 0 | | 65.5k | Using white LED |
| Light Intensity Accuracy | % | | 20 | | |
| Logging Duration | days | | 90 | | Logging @ 1 hour |
| | hours | | 36 | | Logging @ 1 minute |
| | hours | | 9 | | Logging @ 15 seconds |
| Radio Communication Range | m | 10 | 30 | | Vary with different smart devices |
| Operating Temperature Range | °C | -10 | | 50 | Non-condensing |
| | °F | 14 | | 122 | |
| Time Accuracy | second /month | | | 60 | |
| Operating Voltage | V | 2.2 | | 3.4 | |
| Battery Life | Month | | 12 | | @ 1 minute sampling |

Note: all specifications are subjected to change at final stage

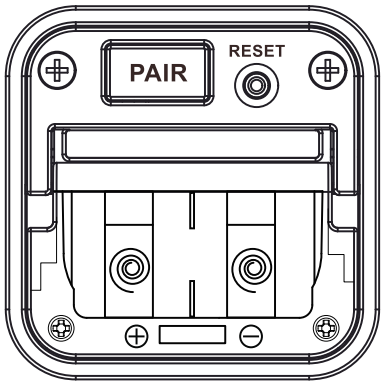
# Before you start using it

Please make sure to read the instruction manual carefully.

- Following and respecting to your manual will prevent damage to your instrument and loss of you statutory rights arising from defects due to incorrect use.
- We shall not be liable for any damage occurring as a result of non-following of these instructions. Likewise, we take no responsibility for any incorrect readings and for any consequences which may result from them.
- Please take particular note of the safety advice!
- Please keep this instruction manual for future.

# Getting started

1. Installing battery into the sensor
1.1. Open the battery door on the Ambient Sensor
1.2. Insert two (2) AAA batteries according to the polarities ○+ and ○– as indicated
1.3. Close the battery door.
1.4. The Ambient Sensor should start showing the temperature, humidity and light intensity measurements on the LCD display.




2. Install the Ambient App on your device
2.1. Access App Store and search for “Ambient”
2.2. Install the App on to your device

# Pairing the Ambient

3. Pairing the Ambient Sensor with the App

3.1. Make sure the Bluetooth is turned ON before running the Ambient app.

3.2. Tap the Ambient to start the app. It will start with an empty screen for the first time.

3.3. Press the “+” icon to start pairing with new devices.

3.4. Press and hold the “PAIR” button on the sensor for more the 5 sensor. The LED indicates a blue glow and the LCD display shows the Sensor ID as a 3-digit hexadecimal value (0~9, A, b, C, d, E, F).

The Ambient App should able to find the sensor with the same Sensor ID as indicated above.

If the Sensor ID is not displayed, please move the smart device closer to the Sensor and try again.

Tap it and start pairing the Sensor to the App.

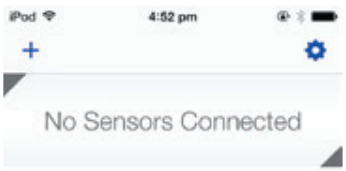
You can pair one Sensor to many smart devices, and you can pair many Sensors to the same smart device. If the Sensor was paired with another smart device before, the App will prompt for Erasing (Erase) or Keeping (Keep) previous stored data inside the device

# Pairing the Ambient

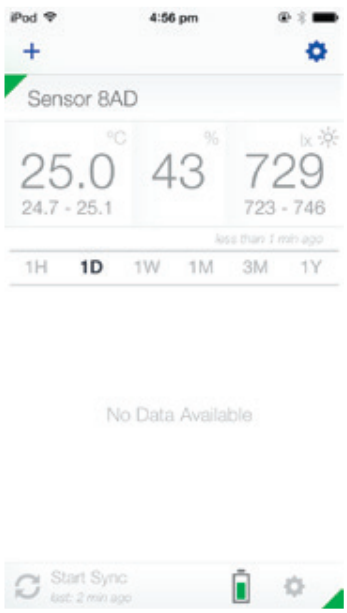
3.5. The screen shows instant measured data after successful pairing.

3.6. Repeat the above steps on the same smart device to pair another Ambient Sensor, or pair the same Ambient Sensor to another smart device.

3.7. When the Ambient App is paired with multiple Sensors, tap on the Sensor's readings to expand to view all information of that sensor.





# Instant Sensor readings and battery level

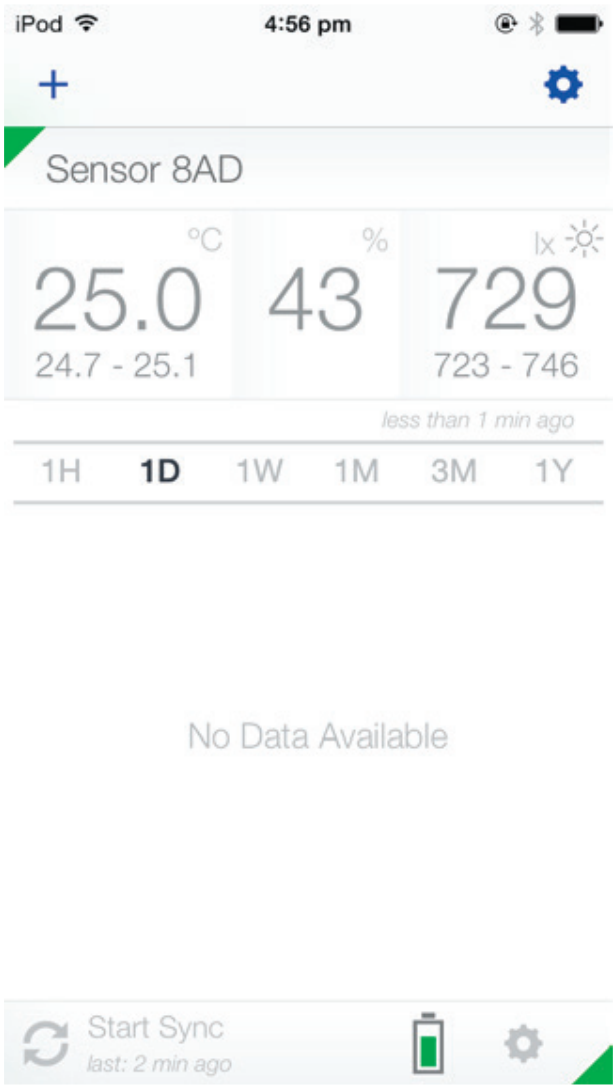
Tap the experiment name location. User can edit the name of the experiment.

4. Reading the Instant Sensor readings and battery level

4.1. The Ambient Sensor will broadcast its instant measurements to all nearby and paired smart devices.

4.2. The Ambient App shows the instant readings and the 24-hour measured range, as well as the freshness of the measured data.

4.3. The battery icon shows the battery level of the Ambient Sensor.



# Ambient Sensor Logged Data

5. Getting the Ambient Sensor Logged Data

5.1. Move the smart device close to the Ambient Sensor. To confirm they are in communication range, check the freshness and make sure it shows “less than 1 min ago”.

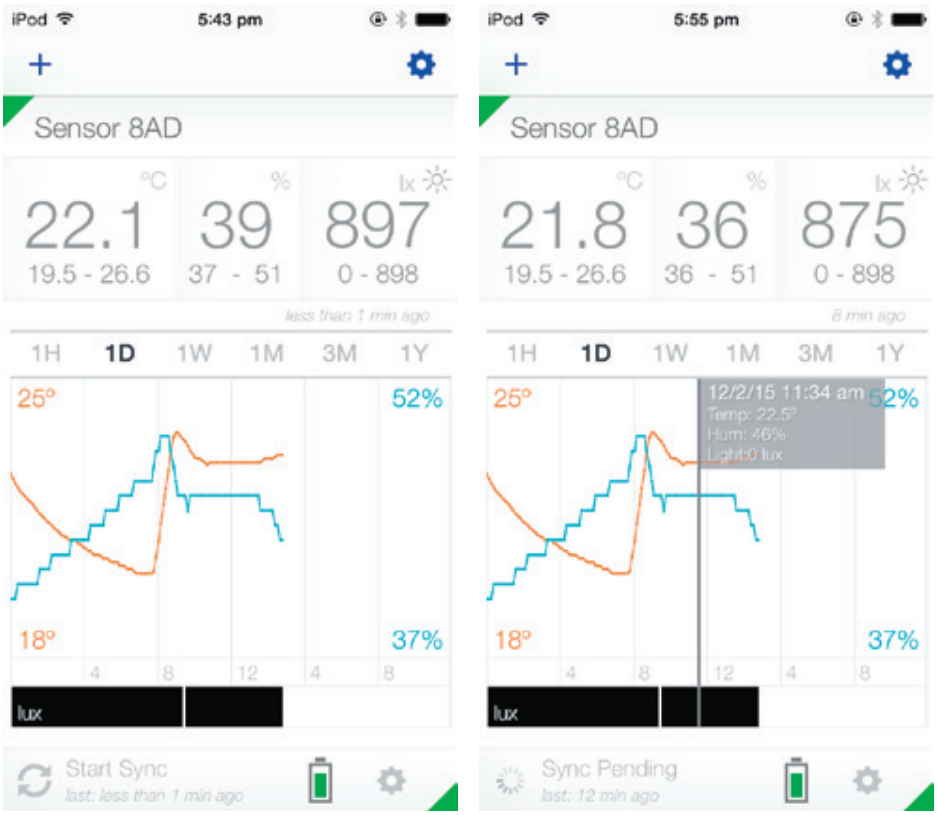
5.2. Tap the “Start Sync” icon to start collecting logged data. I may take up to a few minutes due to various reasons including number of records to be synchronized, interferences or sensor settings.

5.3. The logged measurements according to the sensor settings since the first pairing of the Ambient Sensor or the most recent erase will be displayed as a curve on the screen.

5.4. Tap and hold on the graph to show the readings on that measured time

5.5. Tap the scale bar to choose the scale of the graph (1 Hour, 1 Day, 1 Week, 1 Month, 3 Months or 1 Year).

5.6. Swipe on the graph to show historical readings.



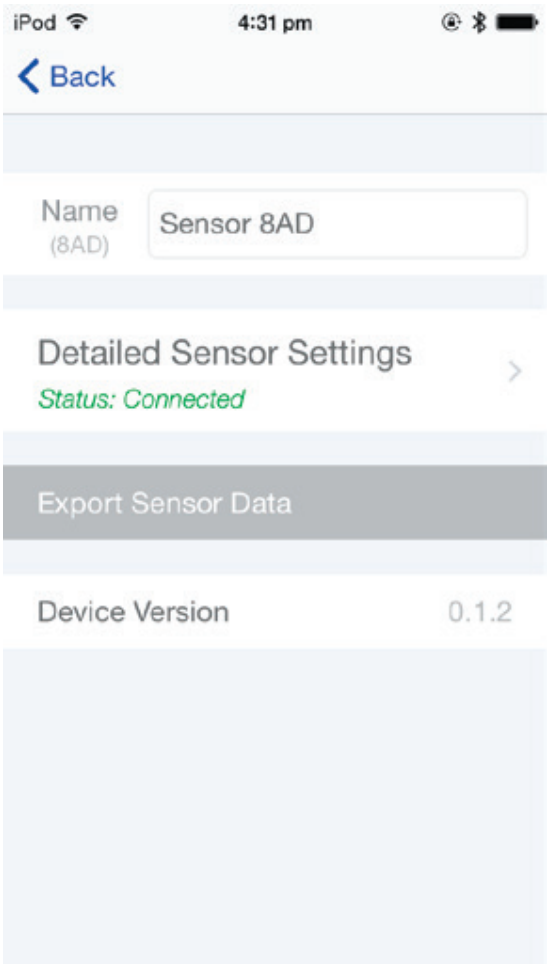
# Adjusting the Ambient Sensor settings

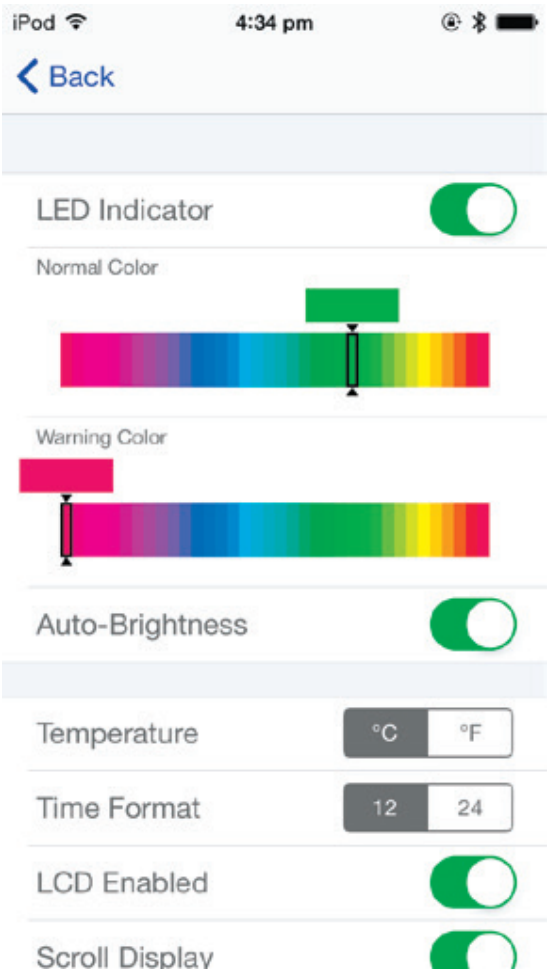
6. Adjusting the Ambient Sensor settings

6.1. Tap the setting icon of the Ambient Sensor to view and adjust the settings of the sensor.

6.2. Tap the “Name” to change from a Sensor ID to any name.

6.3. Tap the “Detailed Sensor Settings” to adjust the settings of the sensor. User can set LED indicator color, sensor measure rate and sensor logging rate on this page. Also, user can delete sensor data here.

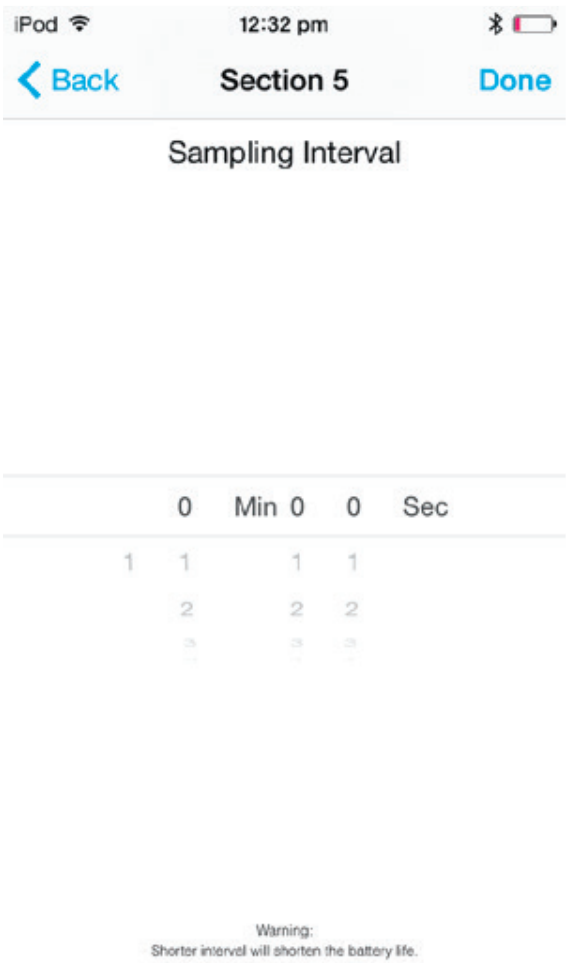


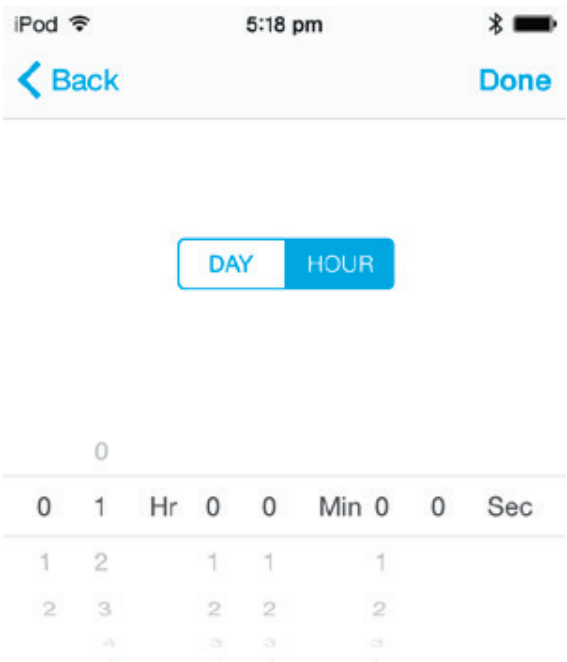



# Exporting Logged Data

7. Exporting Logged Data

7.1. On the Sensor Setting above, tap the “Export Sensor Data” to share the sensor in a CSV format. User can access the data with any spreadsheet applications.



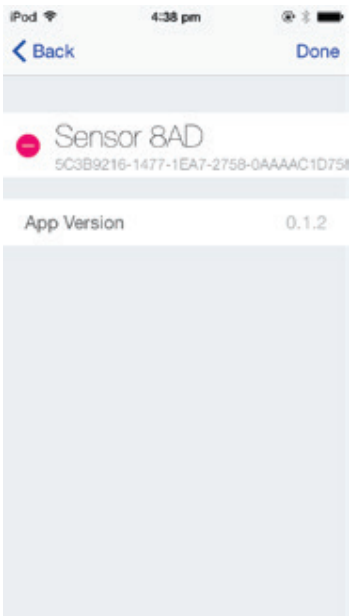



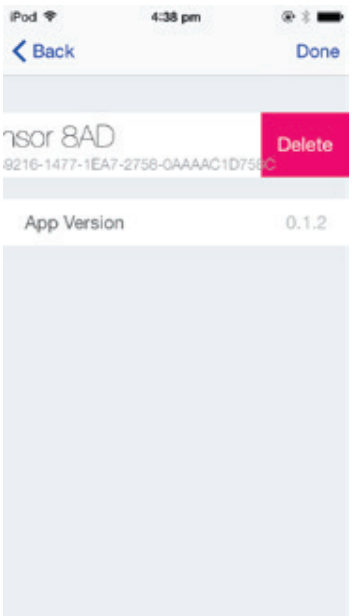
# Removing an Ambient Sensor

8. Removing an Ambient Sensor

8.1. Tap the Ambient App Setting at the top right corner.

8.2. Press “Edit” to, choose Ambient Sensor to be removed, and press “Delete” to remove it from the App.

# Care Of Your RTL Wire

- The unit shall not be exposed to dripping or splashing.
- Do not expose the unit and batteries to humid, rain, sand or execessive heat caused by heating equipment.
- No objects filled with liquids, such as vases, shall be placed on the unit.
- No naked flame sources, such as lighted candles, should be placed on the unit.
- Do not cover the unit. Adequate space with a small gap between the buzzer holes and surrounding surfaces.
- To clean the set, use a soft dry cloth. Do not use any cleaning agents containing alcohol, ammonia, benzene or abrasives as these may harm the housing.

**Disposal of Your Old Product**
Your product is designed and manufactured with high quality materials and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

**Disposal of Flat Batteries / Accumulators**
You, as the end user, are legally obliged **(Battery Ordinance)** to return all flat batteries and rechargeable batteries.
**Disposal in the household waste is prohibited.**
"European Directive 2006/66/EC" Batteries, including rechargeable batteries, which contain hazardous substances are marked by symbols which indicate the prohibition of disposal in the household waste.

The designations for the heavy metals concerned are as follows:
**Cd** = cadmium, **Hg** = mercury, **Pd** = lead. You can return flat batteries / rechargeable batteries free of charge to the collection points in your community or anywhere where batteries / rechargeable batteries are sold.

**You thus fulfil your statutory obligations and help protect the environment.**

**Caution**
Replace only with the same or equivalent type of battery, please refer to the engraved battery marks inside the battery compartment for the correct battery polarity (+) and (-). Danger of explosion is possible if battery is incorrectly replaced.

This product complies with the requirement of the 1999/5/EC directive.

Use this unit and mobile phone only in environments with ambient temperatures between 0°C and 70°C.

The maximum operating temperature of the unit is 70°C

**FCC Statement**

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.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 the 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.

**Japan Radio Law Statement**

This product contains the certified module by Japan Radio Law.
The certification number is  xxx-xxxxxx
xxx