



# Embed Wireless U.S.A. Equipment Installation Guide

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**One Leader. One System.**

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## **Overview**

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This document outlines the process of installation and setup for the Embed Wireless hardware. Topics to be covered include Coordinator and Device installation, wiring details, and wireless settings. This guide assumes that the installer has basic electronic skills.

### **Do not use in life critical or applications requiring high reliability**



The Embed Wireless system is not intended for use in systems that may affect human life or that require a very high degree of reliability such as medical equipment, nuclear facilities, aerospace equipment or transportation equipment. Embed does not assume any liability for accidents resulting in injury or death, or for any damages to property that may occur as a result of using the product in such facilities, equipment, or control systems.

### **Protecting against electrostatic discharge**



Electrostatic discharge can damage electronic components including the Embed Wireless System. Please observe electrostatic discharge precautions for handling or installing this equipment.

### **Power Supply Details Range**

The Embed Wireless should be operated with a power supply with a voltage between 9 – 15 V, which can supply at least 300 mA.

### **Other information and warnings:**

- Embed Wireless is intended for operation between 55 °C and -20 °C.
- Embed Wireless is not intended for use at home.



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**Product Directory**

**Embed Wireless Device/Client:**

The wireless client allows for a cable-free connection between Controller and Embed Wireless Coordinator/Server's.



**Embed Wireless Coordinator/Server:**

The wireless coordinator/Server enables for communications with Embed Wireless devices/clients and the Game Server.





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## **Embed Wireless Client/Device Game Installation**

- Step 1:** Connect the RS485 patch cable to the wireless client J1.
- Step 2:** Connect 12 V (minimum of 300 m.A.) to J1 on the Embed Wireless Client/Device.
- Step 3:** Connect and orient the antenna straight up or down.

**Note 1:** Embed Wireless should not be installed in, nearby or on metal enclosures (such as a full metal cabinet), otherwise performance may be severely degraded.

**Note 2:** Embed Wireless should be installed so that it is more than 20cm from any possible human bodies.

**Note 3:** Embed Wireless should be installed away from sources of electrical noise (such as motors, air conditioner units etc).

## **Embed Wireless Server/Coordinator Game Installation**

**Step 1:** Connect the RS485 patch cable to the wireless client J1.

**Step 2:** Connect and orient the antenna straight up or down.

**Note 1:** Embed Wireless should not be installed in, nearby or on metal enclosures (such as a full metal cabinet), otherwise performance may be severely degraded.

**Note 2:** Embed Wireless should be installed so that it is more than 20cm from any possible human bodies.

**Note 3:** Embed Wireless should be installed away from sources of electrical noise (such as motors, air conditioner units etc).



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## **FCC Compliance Statement**

The following product has been tested and certified as compliant with the regulations and guidelines set forth in Part 15 of FCC Rules:

**Manufacturer: Embed International Pty Ltd**

**Model: RAD-002**

### **Part 15 of FCC Rules**

This equipment complies with the limits for a Class B digital device as specified in Part 15 of FCC Rules which provide reasonable protection against harmful interference in a residential area.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

(1) This device may not cause harmful interference, and (2) this device must accept and interference received including interference that may cause undesired operation.

This equipment complies with the limits for a Class B digital device as specified in Part 15 of FCC Rules which provide reasonable protection against harmful interference in residential area.

This equipment generates and uses 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.

In the unlikely event that there is 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 with the dealer or ask an experienced radio/TV technician for help.

Any changes or modifications to this equipment not expressly approved by Embed could void the user's authority to operate this equipment.



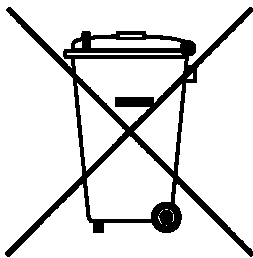


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## Waste Electrical and Electronic Equipment (WEEE) Statement

Embed complies with Directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on waste electrical and electronic equipment (WEEE).

This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed. In order to avoid dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are dispensing in a sound way.



For proper disposal instructions go to,  
<http://www.embedcard.com/recycle>

For more information about the disposal of Waste Electrical and Electronic Equipment (WEEE), please go to,  
[http://ec.europa.eu/environment/waste/weee/index\\_en.htm](http://ec.europa.eu/environment/waste/weee/index_en.htm)

**Please retain this for future reference.**



# DECLARATION OF CONFORMITY

With regard to the R&TTE Directive 1999/5/EC

We,

**Embed International Pty Ltd**

2 Neil St  
Osborne Park, WA  
Australia 6017

Declare under our sole responsibility that the product,

**Product:**     **EI-WIR-180**  
                  *Embed Network Adapter 2.4GHz IEEE 802.15.4*  
                  **RAD-002**  
                  *Embed Network Adapter 2.4GHz IEEE 802.15.4*

Fulfills the essential requirements of the directive 1999/5/EC as attested by the conformity with the following harmonized standards:

<b>Health &amp; Safety</b>	ETSI EN 60950-1
<b>EMC</b>	ETSI EN 301 489-1 ETSI EN 301 489-3
<b>Radio</b>	ETSI EN 300 440-2 ETSI EN 300 420-1

The conformity assessment procedure referred to in Article 10.4 and Annex III of Directive 1999/5/EC has been followed. In addition, complies with Low Voltage Directive 2006/95/EC.

This product carries the CE Mark:



Date & Place of Issue:     31<sup>st</sup> March 2011, Perth, Australia

**Signature:**

**Mark Easte**  
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