221e Wireless Power Charger - Tx

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User Manual

v.1.0

DISCLAIMER

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1. INTRODUCTION

This document aims at providing the necessary information to use the WPC_TX_v1 inductive charging transmitter module.

2. CONTENT OF THE KIT

The system includes an electronic board (PCB) and a coil with a magnetic support, as shown here after:





Figure 1 - Transmitter system, PCB (left) and coil (right)

3. SPECIFICATIONS

	Value
PCB Dimension	50 mm x 50 mm x 14 mm
Coil Dimension	50 mm x 50 mm x 7 mm
Typical Input Voltage	12 DC
Minimum Input Voltage	11 V DC
Maximum Input Voltage	13 V DC
WPC Compatibility	Qi compatible. Verified with the following receivers: – Samsung Galaxy S3 – Nokia Lumia 920 – Micro–USB receiver <i>Mudder Qi N310</i> (Samsung Galaxy Advance, Galaxy Next, Galaxy Ace 2, Nexus S)
Minimum distance transmitter – receiver	3 mm
Typical distance transmitter – receiver	5 mm
Max distance transmitter – receiver	7 mm

4. **DESCRIPTION**

In order to use the system, follow the procedure to associate the transmitter with the receiver:

1. Connect a 12 V DC power source to the bipolar connector on the PCB identified by the "12V" mark; positive pole onto the + marked connector and negative pole onto the - marked connector as shown in Figure 2:

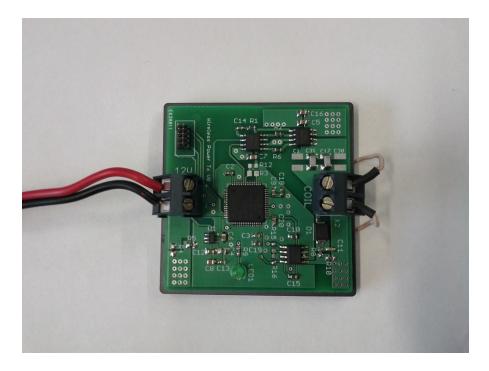


Figure 2 - Connection of power source to the system.

2. Ensure a minimum thickness of 2-3 mm between the coil and the device, as shown in Figure 3.

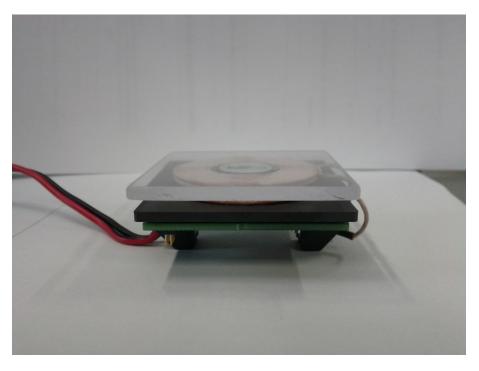


Figure 3 - Thickness between coil and the support surface for the receiver.

- 3. Place the device (i.e. mobile phone) with the receiver, as aligned as possible with the transmitter's coil.
- 4. During the association phase, the green led on the PCB will flash rapidly for a few seconds. Once paired, the led will continue to flash with a lower frequency (0.5 second / 1 second).
- 5. The device is now charging.

NOTE:

In case the association procedure takes too long, try moving slightly the receiver in order to improve the alignment. Furthermore, verify the following:

- Distance between transmitter WPC_TX_V1 and the device.
- Transmitter system switched on (green led flashing).

NOTE:

The WPC_TX_V1 system is protected from overcurrent.