



ossio[®]
REAL WIRELESS POWER

COTA[®] WPT SYSTEM USER MANUAL

VERSION 1.2 • DC-1145 • JUNE 2019

TABLE OF CONTENTS

Cota Wireless Power Transfer System User Manual 3

1 Product Description 3

2 Set-up 3

3 Operating the Cota WPT Source and Cota WPT Client 3

 3.1 Perform Power Network Check 3

 3.2 Enable Cota WPT Source Operation 4

4 Light Ring Status 4

5 Specifications 5

 5.1 Cota WPT Source 5

 5.2 Cota WPT Client 5

6 Support 5

7 FCC Information 6

8 RF Exposure Notice 6

COTA WIRELESS POWER TRANSFER SYSTEM USER MANUAL

1 PRODUCT DESCRIPTION

The Cota® Wireless Power Transfer System (Cota WPT system) transmits power by using radio waves in the 2.4GHz Industrial, Scientific, and Medical (ISM) band defined by the FCC. It constantly communicates with the Cota Wireless Power Transfer Client (Cota WPT client) to identify paths along which power can be delivered and sends power along these paths. Power may be delivered up to a maximum distance of 1 meter from the front of the Cota Wireless Power Transfer Source (Cota WPT source).

The Cota WPT client is designed to receive RF power from a Cota WPT source and may be used to provide stable power to a variety of devices through its 5V USB port. The Cota WPT client may be placed on a table-top or mounted on a wall or other stable surface.

2 SET-UP

If the Cota WPT source is to be installed on a wall or in a ceiling, then installation should be performed by qualified contractors and electricians. Such installations must ensure adequate ventilation around the rear panel of the Cota WPT source. For tabletop use, place the Cota WPT source in the provided table stand. Ensure that the Cota WPT source is secured and cannot fall. Avoid tripping hazards by ensuring proper placement of the AC power cable.

The Cota WPT client shall be placed within 1 meter of the front of the Cota WPT source and at no more than a 60° offset from the front of the Cota WPT source. The Cota WPT client shall be installed in accordance with the installation guidelines described in *DC-1155_Ossia_Cota_WPT_Client_Installation_Guidelines.pdf*.

3 OPERATING THE COTA WPT SOURCE AND COTA WPT CLIENT

Plug the Cota WPT source into an AC wall outlet and apply power. The light ring on the Cota WPT source should illuminate, changing colors slowly and continuously while the Cota WPT source is initializing. For light ring colors and their meanings, see Section 4, Light Ring Status.

3.1 PERFORM POWER NETWORK CHECK

- Connect to the Wi-Fi™.
- Log in to the Cota Web Admin interface on a computer by using the Google Chrome web browser.
- SSID and login information are on a label on the back of your Cota WPT source; connect directly to the Cota Web Admin.

3.2 ENABLE COTA WPT SOURCE OPERATION

1. Go to **System >> Health Monitoring**, click the **System Status** tab, and verify that all the components under the **Components Status** are green.
2. The Cota WPT clients are factory registered with your Cota WPT source and will appear on the Cota Web Admin page.
3. Click **Start Charging** for the desired Cota WPT client.
4. When shutting down the Cota WPT source, use the **Shut Down** command in the Cota Web Admin first, and then wait for 30 seconds before disconnecting the Cota WPT source from AC power.

4 LIGHT RING STATUS

State	Light Ring Color Pattern	Description
Idle/Debug	Slowly flashing orange	The system is in idle or debug state.
Calibration	Purple segments progressing	The system is performing system calibration and initialization. The system enters this state automatically upon coming up.
Wait for Clients	Light red background color with one bright light segment moving slowly in circle	This state indicates the system has been initialized and calibrated, but it does not detect any Cota WPT client/device the vicinity.
Ready	Green background color with one pink light segment moving in circle	The system detected at least one Cota WPT client and is ready to deliver power to that Cota WPT client, however, the Cota WPT clients/devices might have not been authorized or enabled to charge.
Powering	Multiple light patterns moving quickly in circle	The system is delivering power to Cota WPT client (s) or charging the Cota WPT client (s).
Identifying	Solid green color ring flashing every second	Users can use the web interface to locate the Cota WPT source. Once users click on Identify Transmitter button, light ring will flash for at least 15 seconds (configurable duration).
Error/Over Temp	Solid red color ring flashing every second	The system has encountered an error condition that it cannot continue without intervention. All critical errors will force the system to enter this state. Users will need to check the system log and system temperature to get more detail on the error.

5 SPECIFICATIONS

5.1 COTA WPT SOURCE

Item	Description
Modulation	Power: Continuous Wave (CW) Signal Data: IEEE 802.15.4
Frequency	2.4 to 2.5GHz
Power Field	60° from the front of the Cota WPT source, horizontally and vertically to a maximum distance of 1 meter
Operating Temperature	10 C to 40 C
Environment	Indoor use only
Mounting	Wall, ceiling, or table-top mounting
Power	120 VAC

5.2 COTA WPT CLIENT

Item	Description
Modulation	Power: CW Signal Data: IEEE 802.15.4
Frequency	2.4 to 2.5GHz
Power Field	60° from the front of the Cota WPT source, horizontally and vertically to a maximum distance of 1 meter
Operating temperature	10 C to 40 C
Environment	Indoor use only
Mounting	Wall, ceiling, or table-top mounting
Power	5 VDC USB power

6 SUPPORT

Technical support for Ossia products can be initiated through the following methods:

Website contact form: <https://www.ossia.com/contact/>

Telephone: +1 (425) 406-6477

7 FCC INFORMATION

Cota WPT Source: FCC ID: 2AS57OSSACOTATX201

Cota WPT Client: FCC ID: 2AS57OSSACOTARX201

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules and consumer ISM equipment pursuant to part 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the user manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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.

NOTE Changes or modifications to the Cota WPT client or Cota WPT Source not expressly approved by Ossia could void the user's authority to operate the equipment.

8 RF EXPOSURE NOTICE

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the Cota WPT source shall not be less than 20 cm during normal operation.



1100 112th AVE NE #301

Bellevue, WA 98004

425.406.6477

www.ossia.com

The Ossia, Cota, & Design logos and Cota are registered trademarks of Ossia Inc.

Copyright ©2019 Ossia Inc. All Rights Reserved.