RECO Manager
User Guide

Bluetooth Beacon Management Gateway

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Package Contents

The following items should be found in your package.

- RECO Manager
- DC Power Adapter for RECO Manager
- 'How to register' Guide

Note:

Make sure that the package contains the above items. If any of the listed items is damaged or missing, please contact support@perples.com
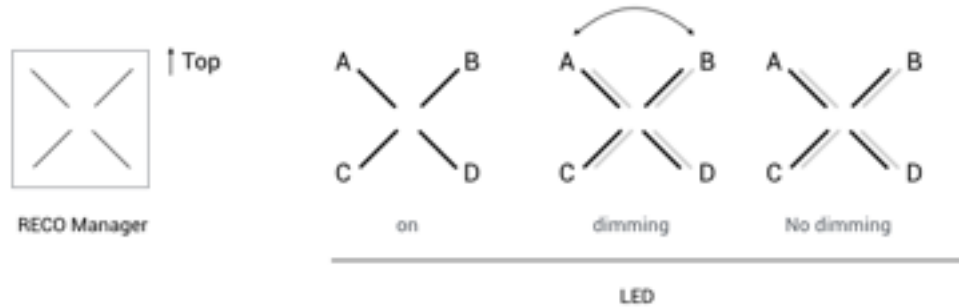
Main Features

- Complies with IEEE 802.11b/g/n
- One 10/100M RJ45 WAN port
- Provides WPA/WPA2, WPA-PSK/WPA2-PSK authentication
- Two Bluetooth 4.0 module
- Support firmware upgrate and Web management
- Register all RECO Bluetooth beacons around
- Change the characteristics of registered RECO Bluetooth beacons
- Complies with IEEE 802.3af PoE(Power over Ethernet)

The Front LED description

The RECO Manager's status LED are located on the front cover

Notation

AP(Access Point) ON

Normal State	Network Problem	Common Problem

AP(Access Point) OFF

Normal State	Network Problem	Common Problem

The Rear Panel

The following parts are located on the real panel

Power:

> The power socket is where you will connect the power adapter. Please use the power adapter provided with this RECO Manager.

RESET:

> Press the Reset button and then wiat for the RECO Manager to reboot. RECO Beacons which you already registered will remain after rebooting.

WAN:

> This WAN port is where you will connect the DSL/cable Modem, or Ethernet. If your Ethernet network support PoE, you don't need to connect the power adpater.

Connecting the RECO Manager

1. Locate an optimum location for the RECO Manager. The best place is usually at the center of your RECO beacons network.

2. Adjust the direction of the RECO Manager. Normally, upright is a good direction

3. Connect DSL/Cable Modem to the WAN port on the RECO Manager

4. Connect the power adapter to the power socket on the RECO Manager. The RECO Manager will start to work automatically as AP(Access Point)

* If you want to connect the RECO Manager through other Wi-Fi AP(Access Point), just connect the power adapter to the power socket on the RECO Manager.

Internet Setup

The default IP address is 192.168.1.1. With a Web-based utility, it is easy to configure the RECO Manager. The Web-based utility can be used on any OS with a Web browser. To access the configuartion utility, open a web-browser and type the default IP address, 192.168.1.1 in the address filed of the browser

The RECO Manager supports three connection types: Automatic Configuration - DHCP(the default connection type), Static IP, and Wi-Fi

Automatic configuration - DHCP

By default, the RECO Manager's configuration type is set to automatic configuration - DHCP, and it should be kept only if your ISP supports DHCP or you are connecting through a dynamic IP address.

Static IP

If you are required to use a permanent IP address to connect to the Internet, then select Static IP.

IP Address. This is the RECO Manager's IP address, when seen from the WAN, or the Internet. Your ISP will provide you with the IP Address you need to specify here.

Subnet Mask. This is the RECO Manager's Subnet Mask, as seen by external users on the Internet (including your ISP). Your ISP will provide you with the Subnet Mask.

Default Gateway. Your ISP will provide you with the Default Gateway Address, which is the ISP server's IP address.

Primary DNS (Required) and **Secondary DNS (Optional)**. Your ISP will provide you with at least one DNS (Domain Name System) Server IP Address.

When you have finished making changes to the screen, click the **Save Settings** button to save the changes, or click the **Cancel Changes** button to undo your changes.

Wi-Fi

If you want to connect internet through other wireless AP(Access Point), then select Wi-Fi.

Network name. This is the name of network you want to connect.

Authentification. Select the security type of the network you selected. RECO Manager supports WPA/WPA2, WPA-PSK/WPA2-PSK authentication.

Password. This is the password of network you want to connect

Mounting RECO Manager

To mount the RECO Manager on a wall or a ceiling, peform the following procedures.

1. Detach the mounting place form the RECO Manager by sliding forward.

2. Install mouting plate to the place you want to mount the RECO Manager.

3. Attach the mouting place with the RECO manager by sliding opposite direction of detachment.

Placement Consideration

The following recommendations can help your RECO Manager achieve the best management range and network coverage.

- Place your RECO Manager in an open area where there are few obstructions, such as large pieces of furniture or walls. Try to place it away from metallic surfaces.

- Try to place your RECO Manager far from any microwave oven, 2.4 gigahertz (GHz) cordless products, and other sources of interference.

Power on

RECO Manger supports two power-on options: Power Adapter, PoE(Power over Ethernet)
When power-on process succeeds, the LED on the WAN port turns on.

Power Adapter
        Connect the power adapter to the power socket on the RECO Manager.

PoE
        Check if your Ethernet network support 802.3af PoE. Connect the PoE-enabled
        Ethernet cable to the WAN port on the RECO Manager.

* PoE injector is a device which makes normal 8-pin Ethernet cable to PoE Ethernet cable. This
device is not included in the RECO Manager package.

Register RECO Beacons

RECO Manager scans all RECO Beacons around and register them via Web-based configuration utility. To access the configuartion utility, open a web-browser and type the default IP address, 192.168.1.1 in the address filed of the browser

1.   Select 'Register' tab on the right menus

2.   RECO Manager will scan all RECO Beacons by clicking 'Scan' button

3.   Check RECO Beacons you want to register from the scanned beacon list

4.   In a few minutes, RECO Manager will register selected RECO beacons

Manage and configure registered RECO Beacons

Once a RECO beacon is registered to the RECO Manager, all characterstics such as UUID, Major, minor, transmit power (tx-power), transmit interval can be changed by Web-based configuartion utility of the RECO Manager.

configure the characteristics of RECO Beacon

1. Select 'Manage' tab on the right menus

2. Select a RECO Beacon of which you want to change chracteristics

3. Change the chracteristics of the RECO Beacon

4. In a few seconds, RECO Manager will connect and change the characteristics of the RECO Beacon.

How to register RECO Manager to RECO Member Center

RECO Manager supports remote RECO Beacon management when it is registered to RECO Member Center. The followings is the procedures to register RECO Manager to RECO Member Center.

1. Join RECO Member Center (https://member.reco2.me) After you signed up, we will send you a confirmation email to the address you filled in the signing process. Please confirm your email then you can access RECO Member Center.

2. Each RECO Manager has unique serial number and confirmation code in the bottom of the device. It's printed in the label with certification numbers. Check the serial number and confirmation code of your RECO Manager

3. Click 'Register RECO Manager' button

4. Enter 'serail number' and 'confirmation code' of your RECO Manager. All the RECO Beacons registered to your RECO Manager will be automatically registered to the RECO Member Center.

How to manage RECO Beacons remotely

RECO Member Center(https://member.reco2.me) provides the same web-based configuration utility as the RECO Manager has. Change chracteristics of RECO Beacons in RECO Member Center the same way you do with RECO Manager. Whenever and wherever you are, you can manage your beacons remotely through any web browsers of any devices.

FCC Information to User

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 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 con-nected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information : 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

IMPORTANT NOTE:

FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.