



Pisces Digital ICS Repeater QUICK INSTALLATION GUIDE

CE0700



For your safety, please beware of power lines at all times during the installation. Please make sure to take appropriate safety measures for protection. Contact with high-voltage power lines can cause death and/or serious injury. Please handle the equipment with care. Mechanical shock due to dropping or mishandling can permanently damage sensitive RF components.

The PS Digital ICS Repeater is designed to improve cell phone signal coverage and enhance reception in indoor areas where mobile signal is limited or compromised due to construction structures or natural obstacles. The PS has been optimized to provide mobile signal coverage and improve data transmission in homes, offices, conference rooms, shops and other small indoor areas.

1. Standard Package Contents



Main Repeater Unit
with Built-in Antennas



Power Supply Adaptor



USB Cable for
OMT Access



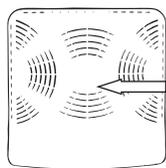
Quick Installation Guide

2. Parts Identification



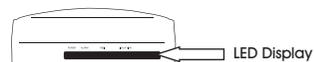
Front

Built-in
Service Antenna

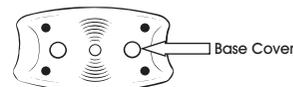


Back

Built-in
Donor Antenna



Top

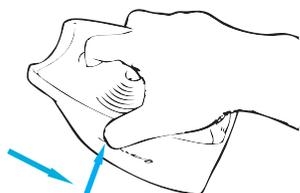


Bottom

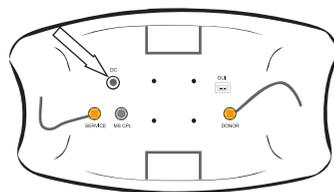
LED Display

Base Cover

3. Connecting Power to PS Digital ICS Repeater



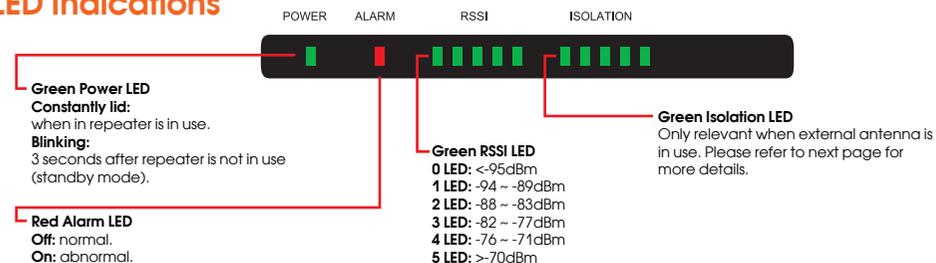
Graph 1



Graph 2

- (1) Turn the main repeater unit upside down so base cover is accessible.
- (2) Insert index finger into one of the round openings on one side, pull first towards the center of the repeater, then lift up away from the repeater (see graph 1).
- (3) Locate the DC power opening (labeled DC) and insert the 90° power cord plug into the opening. Make sure the power supply adapter cable sits over the rounded groove on the side of the repeater.
- (4) Put the base cover back in place. Be sure to have all four hinges on the inside edge of the base. Then secure the base cover by pushing down until all four hinges snap in place.
- (5) Place the PS Digital ICS Repeater next to a window (the side with Coiler logo should be facing the desired coverage area). Then plug in the power cable to a power outlet (refer to Graph 3).

4. LED Indications

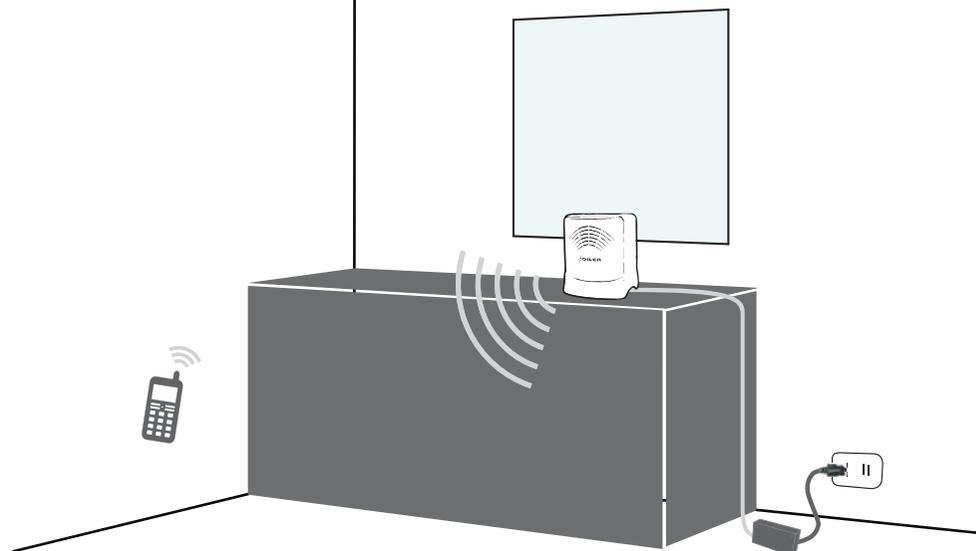


5. Begin Using the PS Digital ICS Repeater

Once powered on, simply check the RSSI level on LED display. For best performance, Coiler recommend RSSI of -80dBm or better (3 LEDs). Isolation LED is not relevant when no external antenna is in use. If multiple windows are available, then best placement location would be where RSSI signal is strongest (more RSSI LED the better). The PS Digital ICS Repeater is now ready to be used.

Note: Please do not block the signal by placing any object in front of the PS Digital ICS repeater.

Graph 3



*Pisces has ability to adjust the service frequencies. Download the full Pisces manual from Customer Portal on www.coiler.com.tw for full OMT operation instructions and details.

6. Optional Package Contents



3m Coaxial Cable with 90° Connector



7dBi Antenna with 2 Mounting Options



L-shape Wall Mount Bracket



Wrench Tool

7. Using Optional Antenna

The PS Digital ICS Repeater is easy to install in most circumstances (as illustrate in **Scenario 1**). However, there are few circumstances where external antenna would be required. The following scenarios are examples of how the optional package contents can be used.

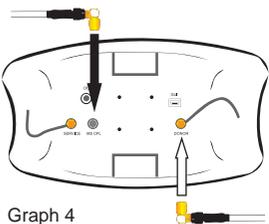
Scenario 2: no signal at the window - optional antenna can be used as external donor (receiving) antenna and installed at a location with better signal (for example: top/side of a building).

Scenario 3: there are no windows near the intended service area/room - optional antenna can be used as external donor (receiving) antenna and installed at the closest window.

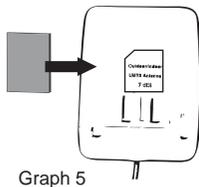
Scenario 4: additional area/room requires enhance signal from the repeater - optional antenna can be used as additional service antenna and installed at second service area/room. If more than two areas/rooms require service, additional cabling & splitter can be used to cover multiple areas/rooms. Please consult with a Coiler representative for more accessory options.

To install optional antenna, please follow steps below.

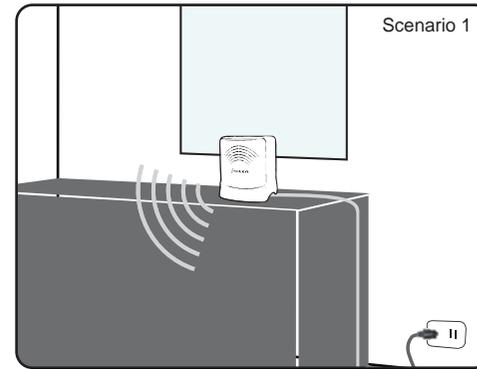
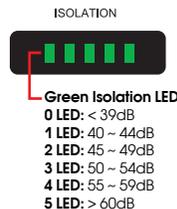
- (1) Remove base cover (see Section 3 steps 1 & 2 for instructions).
- (2a) Use wrench tool to disconnect built in donor antenna (for scenario 2 & 3).
- (2b) Use wrench tool to remove the cover on MS CPL (for scenario 4).
- (3a) Connect 90° connector to Donor port (graph 4, hollow arrow), then tighten connection.
- (3b) Connect 90° connector to MS CPL port (graph 4, solid arrow), then tighten connection.
- (4) Snap base cover back in place (see Section 3 step 4 for instruction).
- (5) Determine the location of the external antenna then secure the cable along the wall.
- (6) Connect external antenna to the other end of the cable, tighten connection.
- (7a) Mounting with double sided foam pad - the front side of the antenna should be facing either the source of the signal (used as donor) or the service area (used as service). When used as a service, the foam pad would always be applied on the back side of the antenna (see graph 5). As a donor, the foam pad can be applied to the front of the antenna and mount on window glass indoors, or apply the foam pad to the back of the antenna and mount on window glass outdoors.
- (7b) Mount the antenna with mounting kit. Please use appropriate tools to secure the screws.
- (8) Power on the repeater and check the Isolation LED and make sure there are 5 green LEDs (the higher the isolation value, the better it is for the performance of the repeater). If there are less than 5 green LED's, please try to relocate or reposition the antenna or the main repeater unit.



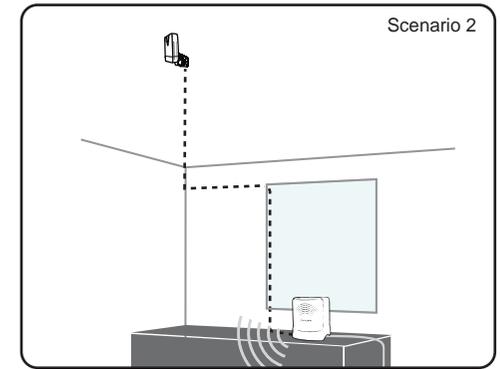
Graph 4



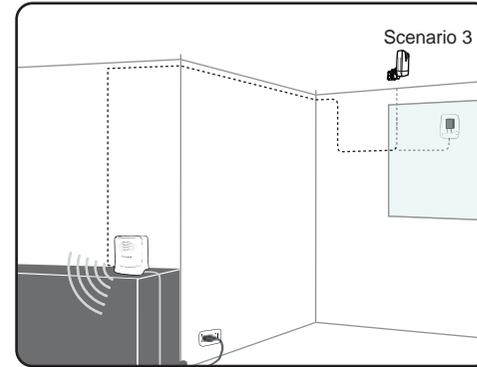
Graph 5



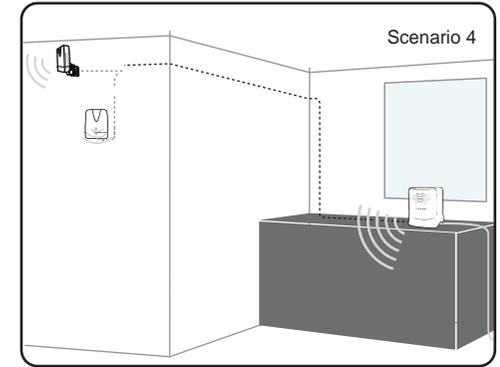
Scenario 1



Scenario 2



Scenario 3



Scenario 4

8. Frequent Ask Questions (FAQ)

Question	Answer & solution
Why does isolation LED keep changing?	When no external antenna is connected, the ICS (Isolation Cancellation System) function of the repeater is always working to reduce antenna signal feedbacks.
Why is there still low or no signal after the installation of the equipment?	(1) Ensure that the signal level (RSSI) is sufficient - the recommended RSSI should show minimum 3 green RSSI LED. Use external donor antenna if neccessary. (2) Ensure that all connections are tightly fastened. (3) Ensure that the output power of the adaptor is DC 6V and the green power LED is illuminated. (4) Reconnect the power cable.
Why is the repeater's signal not stable?	(1) Ensure that the input signal is stable. (2) Ensure that there are no object(s) in front of the PS repeater. (3) Ensure that the RF cable is not damaged. (4) If external donor antenna is in use, ensure that there are 5 green isolation LEDs on constantly. If isolation LED is less than 5, please increase the distance between the donor antenna and the repeater unit. (5) Reconnect the power cable.
Why is the alarm LED RED?	This can only happen when input RSSI is too strong (when signal is greater than -32dBm). If this is the case, the use of repeater is not needed. Please do not use the repeater if signal quality is already sufficient.

**If abnormal status persists after all the corrective actions are taken, please contact your sales agent for further instructions.