



WirePlus[®]

**Installation
and
User Guide**

SRC-DOCWPMAN-01-2007 (XTN Ver 1.0)

Table of Contents

- 1 Introducing WirePlus 1**
 - The WirePlus XTN2
- 2 Quick Start.....3**
- 3 Package Verification.....4**
- 4 Installing XTN Outlets.....4**
 - Your WirePlus XTN.....5
 - Installing Your Outlet.....6
- 5 Specifications..... 12**
 - XTN Specifications 12
- 6 Approvals 14**
 - The FCC wants you to know: 14
 - Caution: Exposure to Radio Frequency Radiation 15
- 7 Technical Support 16**
- 8 Troubleshooting Aid 17**

1 Introducing WirePlus

Thank you for purchasing a SercoNet WirePlus solution.

WirePlus takes you beyond the world of cords and cables, providing you with a non-invasive, wireless, broadband home network. The WirePlus system consists of two outlets. The WirePlus INT serves as the basis of your home wireless network, while WirePlus XTNs extend that network to every corner of your home.

WirePlus outlets are IEEE 802.11g compliant wireless network solutions, combining standards based wireless technology with existing telephone wires already in the home. By combining these features, Wi-Fi signals can be extended easily, providing you with an easy to install, affordable, high-speed, home network.

WirePlus outlets leave your existing phone system intact, allowing the full range of telephony features, such as call forwarding and caller ID, and telephony hardware such as fax and answering machines. Additionally, the WirePlus system coexists seamlessly with cable and DSL services, such as ADSL2++.

In the event of a power outage, WirePlus outlets allow direct access to the Public Switched Telephone Network (PSTN) via a standard RJ-11 phone connector, supporting lifeline services, and allowing you to place emergency calls.

The WirePlus XTN

By plugging WirePlus XTN outlets into telephone jacks throughout your home you can benefit from full wireless coverage at the highest possible Wi-Fi speeds. Normally, as distance from the transmitting antenna of the wireless access point (WAP) increases, walls and interference cause signal levels to decrease, or result in dead spots. It brings 0 or 1 bars of signal strength to 4 or 5 bars.

The XTN outlet overcomes these issues and provides robust performance wherever needed by boosting signal strength. By bringing the antenna closer to the workstation, the XTN ensures that your broadband services operate near the maximum 802.11b/g throughput all the time.

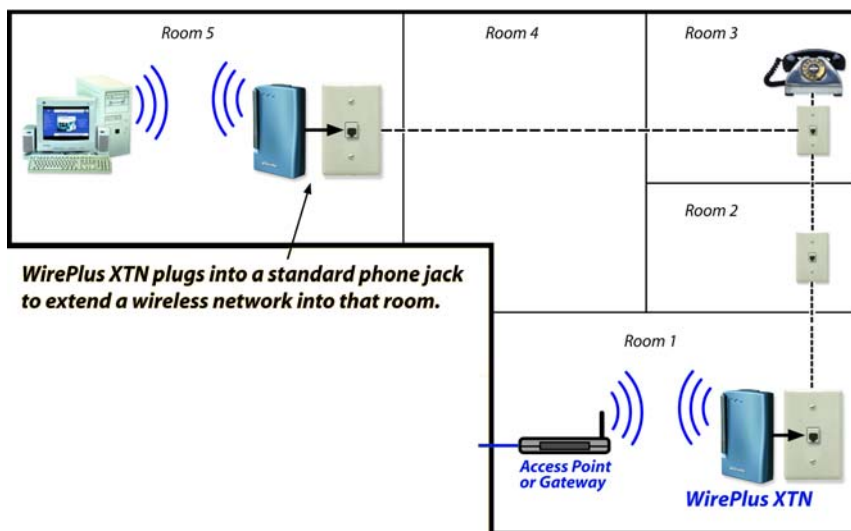


Figure 1: Typical XTN Application

2 Quick Start

If you are experienced with hardware and networking, you can use the Quick Start section to set up your WirePlus solution. If you are not experienced with hardware and networking, skip the Quick Start and go to *Chapter 3*.

To install your WirePlus outlets:

1. Set the channel selector on the back of the outlet using a small screwdriver (not provided). The channel is obtained from the WAP or via client software in the remote computer.(see *Figure 3*).
2. Slightly loosen the screws on your telephone jack, slide the plastic base into place, and retighten the screws (see figure 4).

Note:

You do not need to completely remove the screws.

3. Connect the outlet to the telephone jack (see *Figure 5*).
4. Snap the outlet into the plastic base (see *Figure 6*).
5. Switch the antenna on (see *Figure 7*).
6. Attach the power supply (see *Figure 8*).

Note:

If you are installing an XTN, your installation is complete.

3 Package Verification

Unpack your WirePlus outlet and ensure all the components are present. Your package should include one of the following combinations of components:

Table 1: Package Contents

XTN Package
2 XTN Outlets
2 Plastic Base Units
2 AC/DC Power Adapters
Installation manual

Installing XTN Outlets

If you are installing a WirePlus XTN outlet, select an installation location in the area you need to boost your network's signal strength (See figure 1).

The channel you select when installing an XTN outlet will be the channel for your wireless network. The rotary dial (see Figure 3) on all outlets in your network must be set to the same channel as your network. If you are unsure of what channel to select, see the channel set in the software of the WAP or if provided from the client software with the client computer (associated with your network SSID).

The first unit must be installed in close proximity to the WAP. Ideally it should be within 1-2 meters. There should not be any walls, metal cabinets, mirrors or other wireless (RF) limiting structure between the first XTN and WAP.

There may be multiple dead or low speed spots in the building. Multiple remote XTN's can be used. Ideally an XTN should be located at the nearest telephone jack to the location were the dead spot is. XTN's should be located no closer than 10 meters (30 feet) to each other if there are no walls or obstacles between units. Always start with XTN units set to the lowest power setting.

When adjusting the antenna setting adjust 1 unit at a time to obtain optimal function.

If you must change channels make sure you power down (unplug) the unit before attempting linkage to the WAP.

Note:

If you are adding an XTN to an existing network you must set the XTN to the *same channel* as your network.

Your WirePlus XTN

Figure 2 shows the interface, connectors, and LEDs of your XTN.

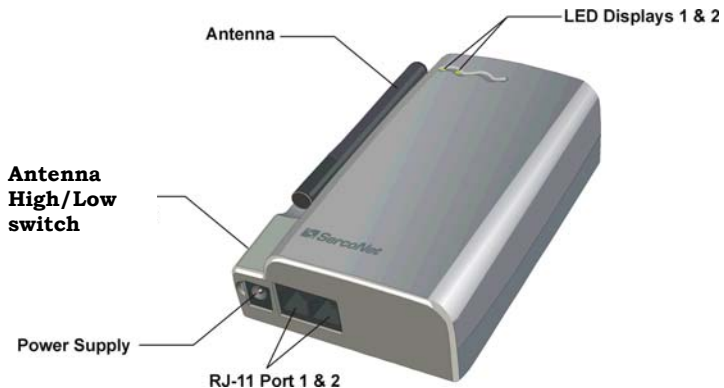


Figure 2: XTN Interface, Connectors, and LEDs

Note:

LEDs are numbered from left to right.

Table 2 lists the XTN LEDs and their functions.

Table 2: XTN LEDs

LED	Activity
LED 1: Power	Lights green when the power supply is connected
LED 2: Wireless	Flashes green when there is wireless (RF) traffic. Light will flash as bright as power light with high traffic is present.

Installing Your Outlet

To install your WirePlus XTN:

1. Set the rotary dial on the back of your outlet to the channel of your network.

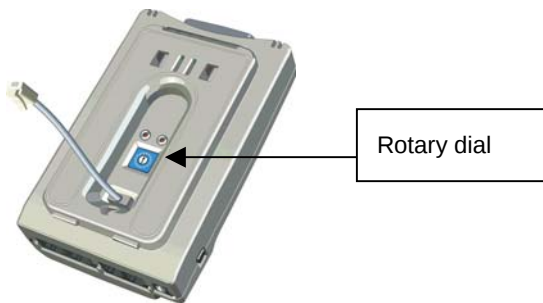


Figure 3: Rotary Dial

Channel selector

WiFi channel	XTN rotary
Channel 1-9	Channel 1-9
Channel 10	Channel A
Channel 11	Channel B
Channel 12	Channel C
Channel 13	Channel D
Channel 14	Channel E
Not used	Channel F
Not used	Channel 0

1. Disconnect the phone cord from the jack, if you have DSL also disconnect the ADSL filter from the jack.
2. Slightly loosen the screws on your telephone jack's wall plate and slide the lip of the plastic base behind the telephone jack's wall plate, and pull the plastic base down over the wall plate.

Note:

You do not need to completely remove the screws.

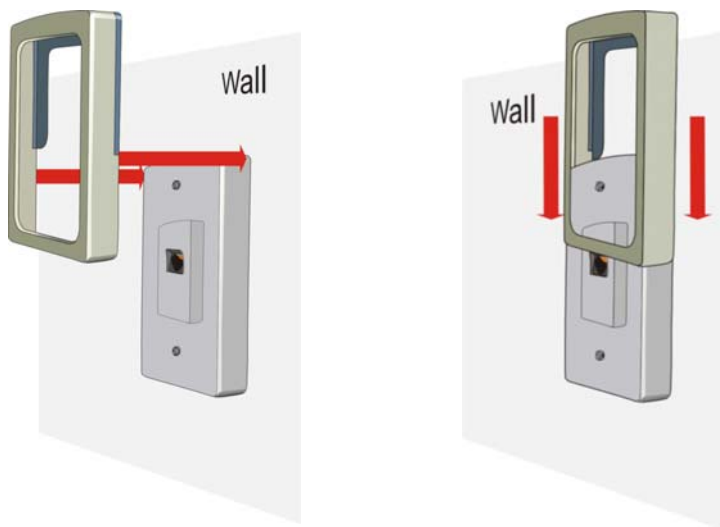


Figure 4: Mounting The Base

3. Tighten the screws on the telephone jack's wall plate.

4. Plug the outlet into the telephone jack using the RJ-11 adapter on the back of the outlet.



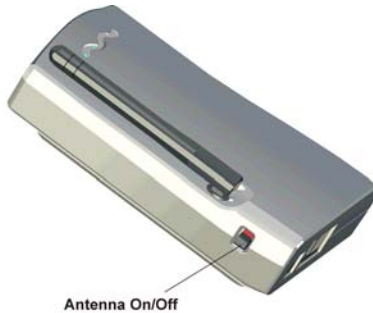
Figure 5: Connecting With RJ-11

5. Insert the tabs on the bottom of the outlet into the slots on the bottom of the base (1); then press the outlet flat against the base until it snaps into place (2).



Figure 6: Mounting The Outlet

6. Antenna High/Low Switch – selects power transmission and receives sensitivity levels. Default settings are Low for reduced radiation. Set to High for a better coverage area.
Note: If the antenna switch is in High position the distance between the XTN's must be at least 10 meters (30 feet).



Antenna High/Low

Figure 7: Antenna High/Low Switch

Note:

The antenna is in the **Low** position when the switch is pushed towards the rear panel of the outlet.

7. Connect the AC/DC power adapter to your WirePlus outlet and then plug it into a power outlet.
8. Reconnect the ADSL filter if used into port 1 of the XTN unit; then the phone line into the filter. If no DSL plug the phone line into port 1 directly. Port 2 would be used for a second line of a 2 line phone set.

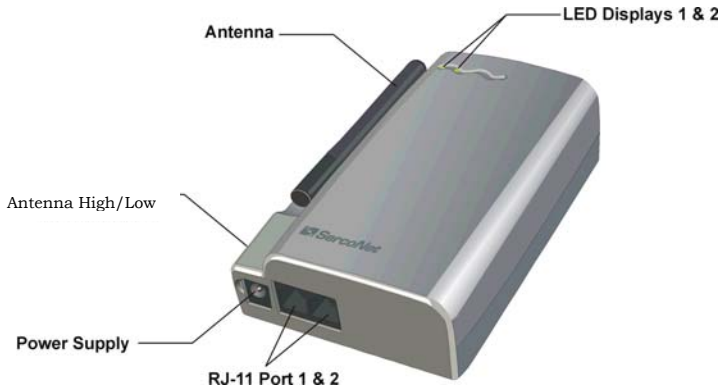


Figure 8: Power Supply

5 Specifications

Technical specifications for SercoNet's WirePlus XTN outlets follow:

XTN Specifications

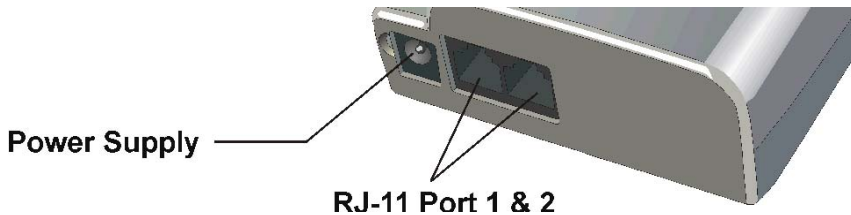


Figure 9: Power Supply and phone jack layout

Table 3: XTN Specifications

INT IEEE-802.11g	
Standards	IEEE-802.11g, IEEE-802.11b
Channels	11 Channels (US and Canada) 13 Channels (Europe) 14 Channels (Japan)
Telephony Interface	
Connections	2 x RJ-11
Telephony Functionality	● Regular Telephone Sets ● Dial-Up Modems ● Fax Machines ● Speakerphones ● Answering Machines ● Caller ID ● xDSL
Regulatory	
Regulatory	
Parameters	
Integrated Outlet	4.8 x 1.5 x 3.0 inches 123 x 37 x 78 mm
Outlet Base	4.8 x 0.7 x 3.0 inches 123 x 17.5 x 78 mm
Operating Temperature	32°F to 104°F 0°C to 40°C
Operating Humidity	0-85% RH non-condensing
Storage Temperature	-4°F to 158°F -20°C to 70°C
Power	Input: 5VDC Consumption: 2.5 Watts

6 Approvals

The FCC wants you to know:

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 more of the following measures:

- a. Reorient or relocate the receiving antenna.
- b. Increase the separation between the equipment and receiver.
- c. Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- d. Consult the dealer or an experienced radio/TV technician.

Caution: Exposure to Radio Frequency Radiation

The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such manner that the potential for human contact normal operation is minimized. When connecting an external antenna to the device, the antenna shall be placed in such a manner to minimize the potential for human contact during normal operation. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Note: This equipment complies with 47CFT Part 68 of the Rules.

This equipment complies with TUV60950-1

Note: The manufacturer is not responsible for any Radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the User's authority to operate the equipment.

Note: This product may be covered by one or more of the following U.S. Patents: 5,841,360; 6,690,677; 6,970,538; 6,549,616; 6,757,368; 7,123,701; 6,842,459; 6,961,303; 6,927,340; 7,109,418; 7,016,368; 7,035,280; 7,006,523 ; 7,095,756 ;6,956,826

Other U.S. and International Patents Pending.

7 Technical Support

If you need further assistance with the installation or operation of your WirePlus outlet, please contact SercoNet Technical Support at one of the following telephone or fax numbers, Email address, or website:

North America

Toll Free: 800-508-7646

Office: 727-490-4248

Fax: 727-490-2300

Mobile: TBD

International

Tel: +972-9-7411833

Fax: +972-9-7481333

Email: support@serconet.net

Website: www.serconet.net

8 Troubleshooting Aid

Item	Trouble	Fix
1	No LED's lighted on unit	Verify that the power outlet is working. Should not be controlled by a light switch.
2	Power LED OK No flashing LED	Verify that you have the correct channel on all units. Verify that the RJ-11 cable is correctly seated in the jack.
3	Power LED OK. No flashing LED	Verify that the wall jack is wired correctly. Use phone to verify dial tone.
4	LED is flashing, limited bars on computer	Adjust power setting to high level at one or all XTN units
5	LED's seem to working but no traffic	Verify WAP is working. Can the computer access WEB with correct SSID in same room as the WAP? If not bad WAP.
6	LED's are flashing, computer sees other SSID's on same channel.	Reset network for another channel. Channels 1,6,11 are the only three non-overlapping channels
7	LED on right flashing, but no traffic	Units are too close together

