

SILVERNET

Easy as 1-2-3 Quick Install Guide

Step 1 - Hardware

- a) Open the box – Note* A PCP link has two radios. An BASE 500 has one radio.
- b) Read the Self Install Sheet
- c) Open inner box



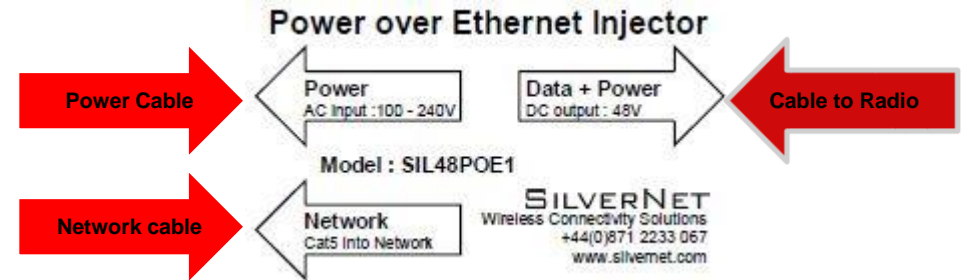
- d) Make sure you have 1 x Radio, 1 x cable gland, 1 x Mounting bracket set, 1 x PoE and 1 x Power Cable per inner box.
- e) assemble the bracket – see image below
- f) Fit to pole or wall – Note* We use the same brackets for all Radios



- g) Run outdoor shielded grade network cable and pass through the radio cable gland prior to plugging into the radio.



- h) Plug in the PoE injector – see below image



- i) See Ethernet Light come on



- j) Repeat this for the other radio, also see **Step 2 i)**

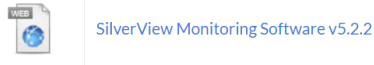
Note: With a multipoint system, configure each radio as you install it.

If using external antennas **ALWAYS** cover antenna joints with amalgamation tape.

Step 2 - Software

a) Download and install SilverView from our website

<http://silvernet.com/support/downloads-centre/>

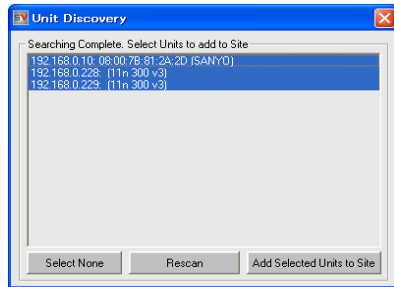


b) Click on the SilverView Icon on your desktop. –

Note: The default password is “password”. SilverView will only run when connected to a network

c) Start the unit discovery tool in SilverView, top left button with magnifying glass.

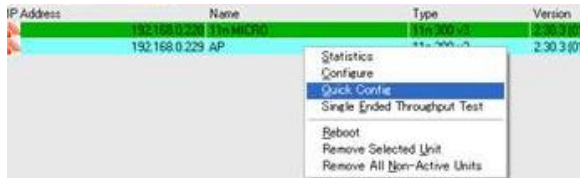
SilverView should discover the radios.



d) Select the radio/radios and add to Site

Note: You can also discover some IP cameras or codecs.

e) In SilverView, right click on a radio and choose “Quick Config”. Default User name & Password is “admin” & “password” (all lower case).



Note: A Double left click or Right click then click configure will go to the radio web configuration page (you will need to be on the same IP address range)

f) Quick Configure your point to point link

Local radio example

Remote radio example

Make sure one end is a Station WDS and the other an Access Point WDS

Change the SSID and Passphrase in both radios and make sure they match

Change the IP address of each radio (not matching) and set the Link Distance

Note: If you configure your local radio (where you are plugged in) before your remote radio then you will have to plug into the remote radio to configure it.

g) Quick Configure your point to multipoint links

Note: If you have a multipoint system, you will need to set one radio as Access Point WDS and two or more as Station WDS. The SSID and Passphrase will need to match in all the multipoint radios but all IP addresses MUST be different.

> IP Address	Mode	SSID	Channel
192.168.0.220	AP WDS	silvernetwireles1	5620
192.168.0.227	Sta WDS	silvernetwireles1	5620
192.168.0.235	Sta WDS	silvernetwireles1	5620

h) Once your IP addresses have been changed you will need to re-discover in SilverView. **See step 2, c)**

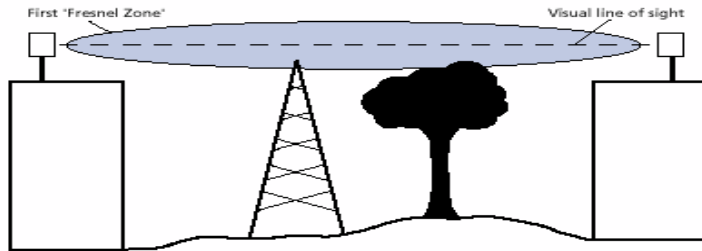
i) The radio lights will come on when there is a wireless connection



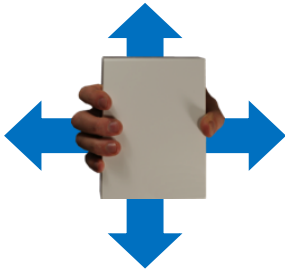
Note: Use SilverView to see link quality, channel, bandwidth, etc.

Step 3 – Common problems

a) **Line Of Sight** - The radios work best when they have line-of-sight. If the radios do not have line-of-sight then you will get a very poor signal or no signal at all.



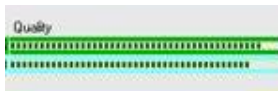
b) **Alignment** – if the radios are not aligned correctly the signal quality of the radios will suffer and you may not receive the throughput you require.



Slowly move the radios one at a time, side to side, then up and down until you get the best signal.

Available Alignment Tools:

- i. You can use the Fitted radio LEDs – **See Step 2, i)**
- ii. The link RSSI level or quality gauge in SilverView

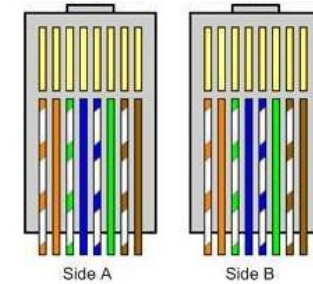


- iii. The link Align tool in the Station WDS status web page – enabling this will also turn on the alignment beeper

c) **Power/No Network Connection** – if the radios are not powering on then you will need to test the Outdoor Shielded cat5 cable and re-terminate if required. Make sure the downlink cable is made as a straight through cable. Please also check that the PSU is plugged in turned on and that the green LED is on.

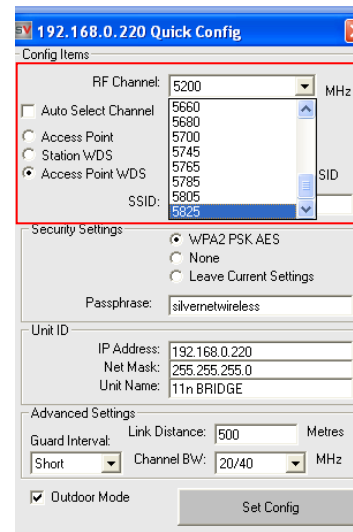
Pin ID	Side A	Side B
1	Orange-white	Orange-white
2	Orange	Orange
3	Green-white	Green-white
4	Blue	Blue
5	Blue-white	Blue-white
6	Green	Green
7	Brown-white	Brown-white
8	Brown	Brown

1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8



Note: we recommend the use of surge protection and always the use of shielded outdoor data cable for all outdoor equipment.

d) **Interference** – Our radios use auto-channel select and should avoid interferences as best as possible. Rebooting the radios will allow a re-scan. If you are experiencing interference problems when using the radios then please try each channel until you find one that gives you a better link.



e) **IP Addresses** – Default IP addresses are 192.168.0.228 and 229. Change the IP address of each radio to suit your needs.

Note: If you reset the Pro Range via the Web page menu or via the external reset button, the IP address will reset back to Default IP address: 192.168.1.1

f) **Login Password** – The default is set to “admin” and “password”. We recommend changing this. Use something that you won’t forget, like a job number or project number. Use this on all radios in the system.

Radio Password

Changes the administrator password for accessing the device

Password	<input type="password"/>	
Confirmation	<input type="password"/>	

g) **Distance** – On shorter links leaving the distance setting on auto is fine as the radios will auto adjust. Link distances over 2km need the distance setting adjusted. Usually overestimating the distance is better than underestimating for better signal stability. On longer distances, turn off auto adjust in the advanced wireless settings. Do this for point-to-point and multipoint systems.

Device Configuration

General Setup	Advanced Settings
Distance Optimisation (Auto-ACK Timeout)	<input checked="" type="checkbox"/> For Point to Multi-Point customers, please disable this Auto-ACK Timeout and select the furthest distance of the client to this device, otherwise it may cause instability
Distance (meters)	<input type="text" value="2000"/> <input checked="" type="checkbox"/> Min: 300, Max: 24000
Chainmask Selection	<input type="text" value="2x2"/>

h) **SSID** – The SSID should be the same in both radios. If you are using multiple links, please make sure that **each link has its own unique SSID**. You can check this with our SilverView monitoring software.

i) **Security Key** – The security passphrase should be the same in all radios on the same link. **See Step 2, f)**

j) **Config files/firmware** – Default config files and latest firmware can be downloaded from our website. Upload the 228 config into one radio and the 229 config into the other radio.

Note: The Station WDS config can be loaded to multiple remote radios but the IP address of the radio will need changing prior to loading onto the next radio.

Firmware and Software

File Type	Title	Date	Description
	Gen 3 - PICO/MICRO2/LITE/MAX Default Configuration Files	31-01-2017	Gen 3 - Multiple Default Configuration Files For PRO95 radios. By downloading the software you are agreeing to our terms of use and have read the disclaimer

k) **Manual** – Read the manual for detailed explanations of the SilverNet equipment. This can be downloaded from our website.

<http://www.silvernet.com/support/downloads-centre/>

l) **Youtube** – Training videos are available to watch on YouTube.

<https://www.youtube.com/user/SilverNetLTD>

