



**LevelOne**

**User Manual  
POT-xxxx Series**

**PoE Repeater over 2-wire M/S**

## 1. Introductions

The POT system, one master & one slave units, provide a long-reach Ethernet extension with remote Power-over-Ethernet (PoE) capability over a 2-wire line. Connection with a Class 0 PD device, the distance of two-wire 24AWG cables can be up to 300 meters when using a 48Watt high power PoE Switch, FSW-0513/0543. Users may select a fixed data rate for different copper line ranging. The maximum data rate can be up to 60 Mbps full duplex for 2-wire line.

The POT master unit is powered by the local PoE Ethernet network, and transmits both the data and power to the remote slave unit over 2-wire cable. The remote unit regenerates the power and provides the PoE capability to power up the remote PD device up to 15 watts when connecting to 48Watt High Power Switch, FSW-0513. The POT M/S supports the indoor & outdoor models with wall-mount feature.

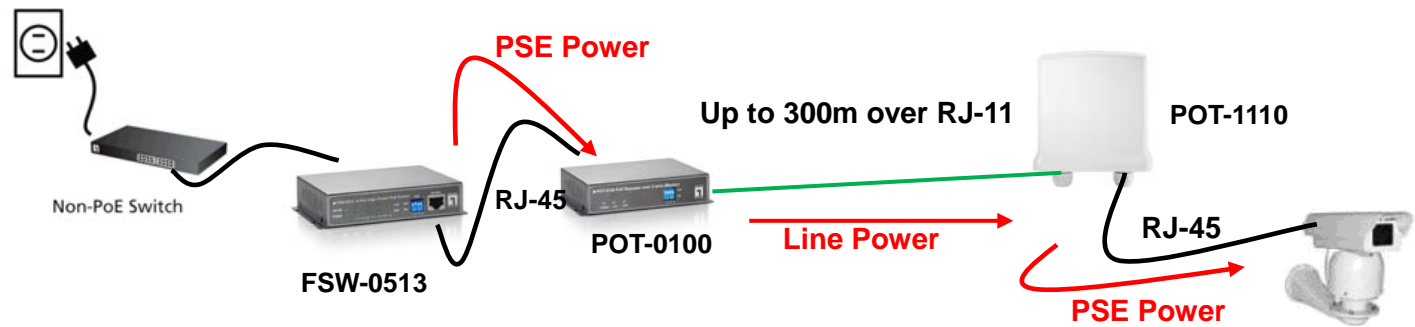
Equipped with dip switches, the 2-wire line speed can be configured to meet different line gauges and distances. A POT pair offers a cost effective solution for remote power applications such as LAN-to-LAN connectivity, Video Streaming, FTTB, and MDU/MTU over single twisted line.

### **IP-66**

POT-1110 is IP66 is IP66-compliant meaning it is weatherproof from snow, rain, typhoon, desert heat, etc. this PoE Repeater is up to the challenge for deployment in any harsh weather condition.

## 2. Application Notes

### 1) Ethernet & Power Extension over RJ-11 Cable



## 3. Features

- Two-wire cables are used to connect 100Mbps Fast Ethernet PoE devices
- Max. distance up to 300m for 24AWG cable
- Max. data rate up to 60 Mbps full duplex
- Remote PoE capability for PD devices of WiFi AP, IP camera, IP telephones
- Up to 15 watts for remote PoE, depending on PSE Power
- Easy installation by indoor & outdoor different models
- IEEE 802.3af PSE Compliant for Class 0-3
- Dip Switches for RJ-11 rate settings
- Auto MDIX for 10/100 BaseT Ethernet LAN Ports
- Low-Latency for Video/Voice/Data applications

## 4. Packing Contents

Inside the package you should find:

- (1) One POT-xxxx unit (Master or Slave)
- (2) One User Manual

Please check if the packing is damaged or any component is missing. If so, please contact your distributor.

## 5. LED Indicators

On the front panel of POT-xxxx, there are 4 LED indicators as the following

**POWER:** “Green On” indicates power is on and normal.

**LAN:** “Green On” indicates Ethernet LAN port is in connection.  
“Flashing” indicates Ethernet LAN data activities.

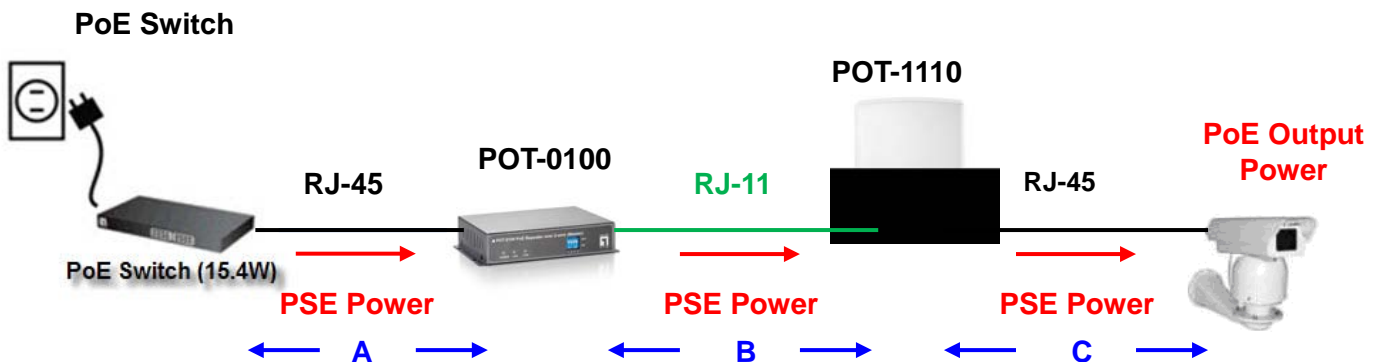
**LINE:** “Green On” indicates 2-wire line is in connection.  
 “Flashing” indicates 2-wire line is in line handshaking.

**ACTIVE:** “Green On” indicates as POT-0110 Slave unit.

## 6. Dip Switches Settings(default DIP setting All is OFF)

Pin 1	Pin 2	Pin 3	Pin 4	Line Rate (Mbps)
NA	OFF	OFF	OFF	10/10
NA	ON	OFF	OFF	20/20
NA	OFF	ON	OFF	30/30
NA	ON	ON	OFF	40/40
NA	OFF	OFF	ON	50/50
NA	ON	OFF	ON	60/60
NA	OFF	ON	ON	60/60
NA	ON	ON	ON	60/60

## 7. Data Rates & Distances



### Performance for AWG 24 Line with 15.4W PSE (Distance A=1m)

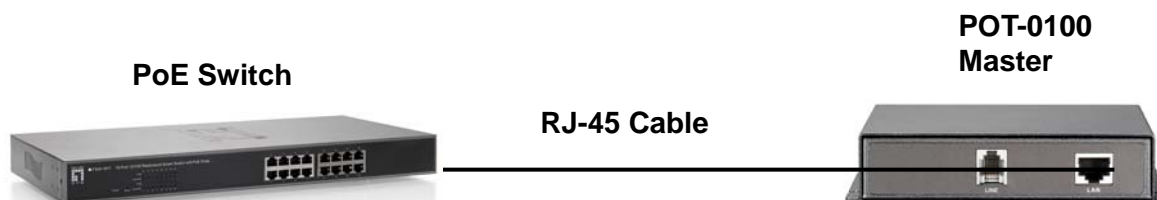
Line Rate (Mbps)	Distance B (Meter)	Distance C (Meter)	Max. PoE Output Power (Watts)
60/60	100	100	7
60/60	200	100	NA

## Performance for AWG 24 Line with 40W Power Injector (Distance A=1m)

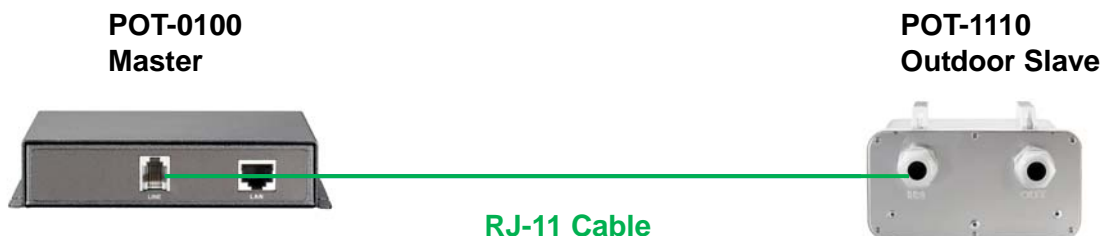
Line Rate (Mbps)	Distance B (Meter)	Distance C (Meter)	Max. PoE Output Power (Watts)
60/60	100	100	20
60/60	200	100	13
50/50	300	100	7
40/40	400	100	NA
20/20	500	1	NA

## Quick Guide

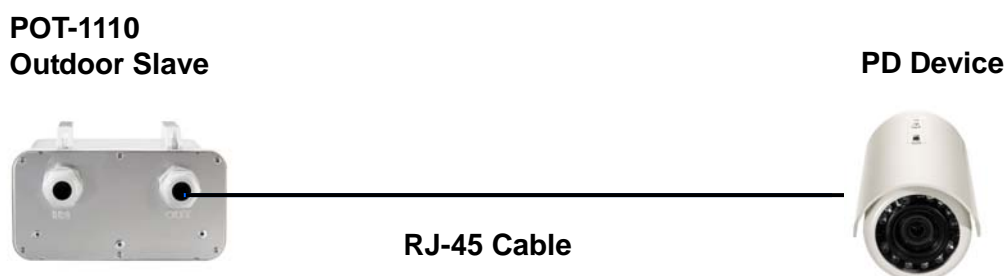
1. Connect one of the Ethernet Switch port with PoE power supply to the **LAN** port of **POT-0100 (Master)** as the following connection.



2. Connect the **LINE** port of **POT-0100 (Master)** to **POT-1110 (Outdoor Slave)** LINE port (Use RJ45 Connect PIN4 & PIN5) as the following connection.



3. Connect the **LAN** port of **POT-1110 (Outdoor Slave)** to power up the **PD** device as the following connection.



4. Power on PSE Source. POT system will start handshaking .When LINE LED is always on, The POT system is connection ready.