

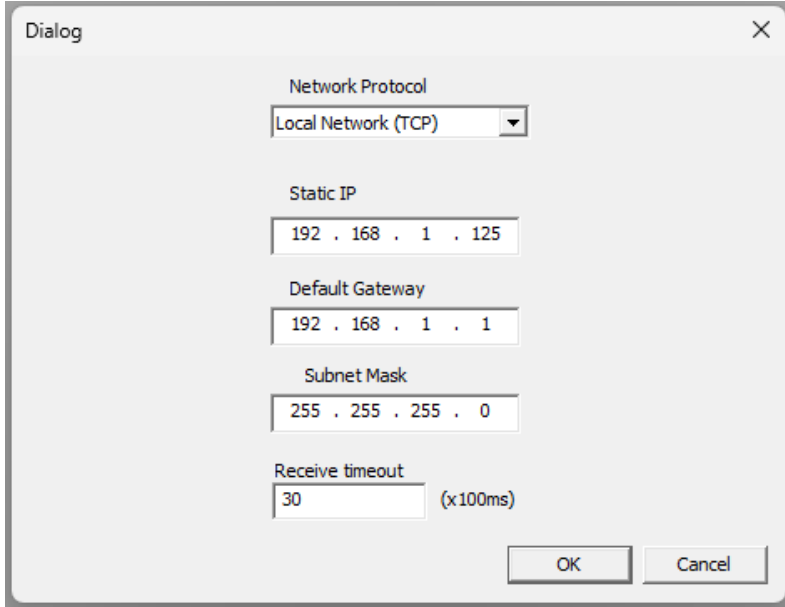
Mega_Link 2
Product Familiarisation
Thames Water

Part 5 – Ethernet Comms

26th March 2026

Comms configuration

Basestation



Dialog

Network Protocol
Local Network (TCP)

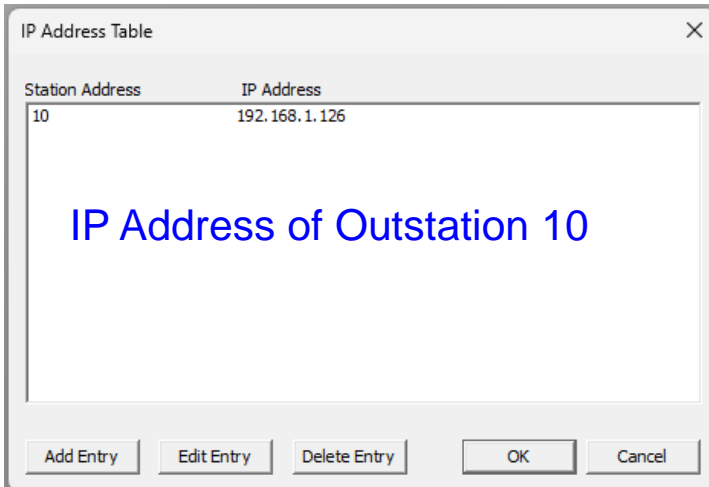
Static IP
192 . 168 . 1 . 125

Default Gateway
192 . 168 . 1 . 1

Subnet Mask
255 . 255 . 255 . 0

Receive timeout
30 (x100ms)

OK Cancel



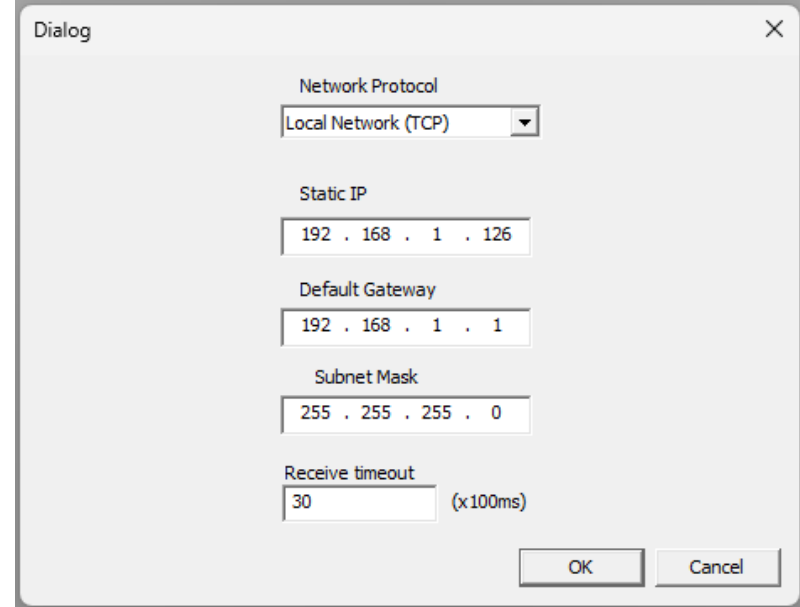
IP Address Table

Station Address	IP Address
10	192.168.1.126

IP Address of Outstation 10

Add Entry Edit Entry Delete Entry OK Cancel

Outstation 10



Dialog

Network Protocol
Local Network (TCP)

Static IP
192 . 168 . 1 . 126

Default Gateway
192 . 168 . 1 . 1

Subnet Mask
255 . 255 . 255 . 0

Receive timeout
30 (x100ms)

OK Cancel

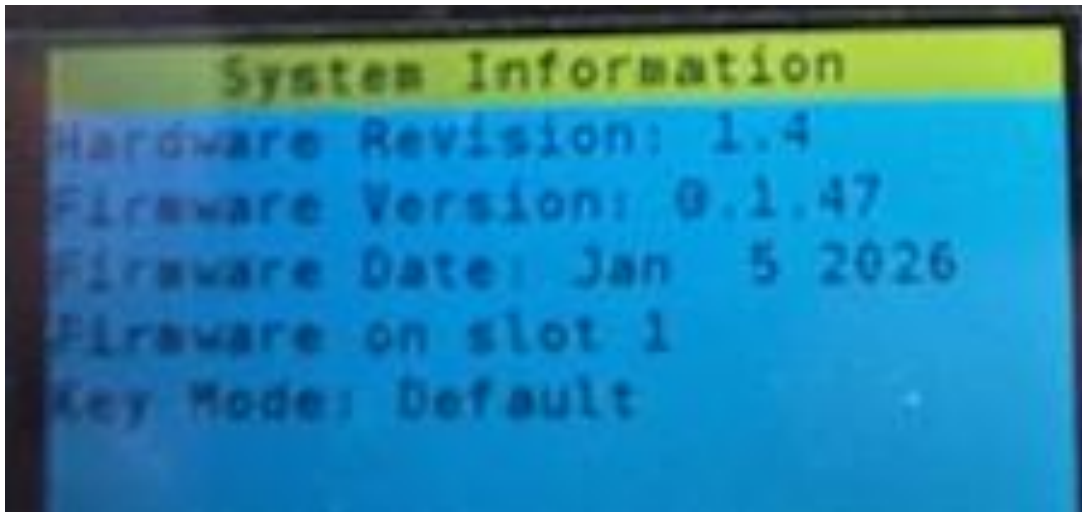
Outstation does not need to be programmed with IP address of basestation – it gets this in the TCP/IP message

Comms configuration

- Ethernet outstations must be set at addresses 10, 20, 30 etc.
 - And must be entered in basestation IP Address Table
- Giving automatic allowance for 9 in between addresses, e.g. 11, 12, 13....19 for I/O expansion modules at Outstation 10
- I/O expansion module addresses, e.g. 11, 12, 13...19 do not need to be entered in the IP Address Table

Firmware Version

System Configuration -> System Information



Firmware Version: 0.1.47

Comms Configuration

System Configuration -> Comms Configuration

```
Comms Configuration
Configured as Basestation
Station Address: 0
System Address: 0
Auth Protocol: 1
COM Ports used:
5 (TCP)
```

Basestation
Address 0
COM Port 5 (TCP) Ethernet

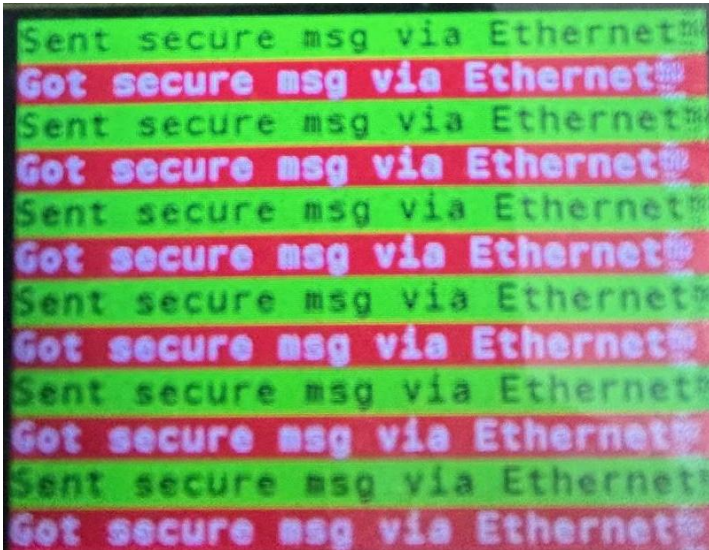
```
Comms Configuration
Configured as Outstation
Station Address: 10
System Address: 0
Auth Protocol: 1
Low Power mode: No
COM Ports used:
5 (TCP)
```

Outstation
Address 10
COM Port 5 (TCP) Ethernet

Eavesdrop Comms

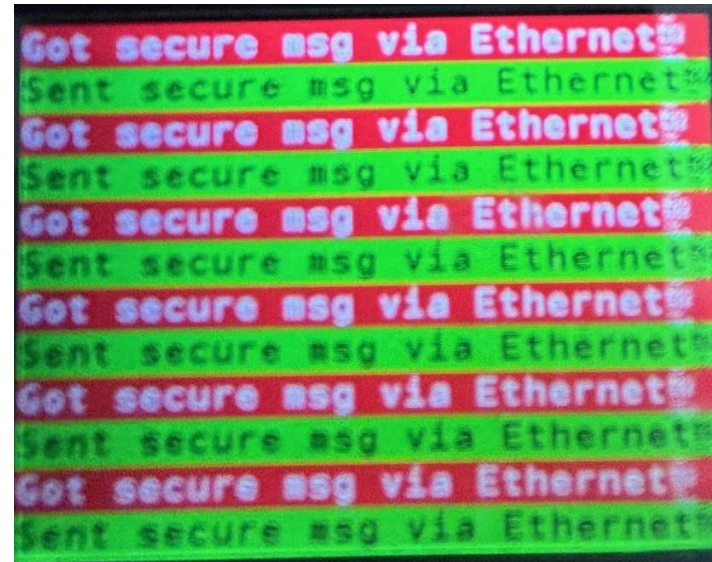
Comms Traffic -> Ethernet Traffic

Basestation



Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet

Outstation 10



Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet
Got secure msg via Ethernet
Sent secure msg via Ethernet

Basestation Tx is Green



Outstation Rx is Red



Basestation Rx is Red

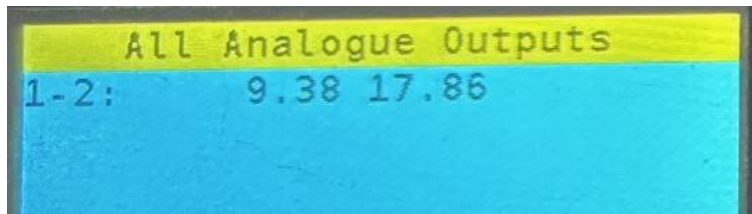


Outstation Tx is Green

Analogue I/O

System Status -> All Analogue Outputs System Status -> All Analogue Inputs

Basestation



Outstation 10

