

LAN 1 DHCP
LAN 2 10.0.0.1

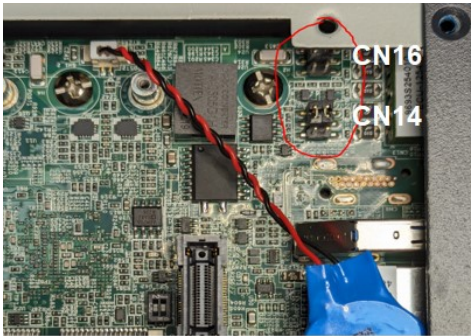
COM1 - /dev/ttyAP0
COM2 - /dev/ttyAP1

ESU-150 kommer som standard uten uten passord på root bruker. Bruk **passwd** for å sette passord.

Serieporter

Tilkobling:

COM		
PIN	RS-232	RS-485
1	TX	D-
2	RX	D+



Serieporter satt til RS-232 (CN16 øverst og CN14 nederst)

Serieporter RS-232/485 jumpers

CN14	COM1 RS-232		COM1 RS-485	
CN16	COM2 RS-232		COM2 RS-485	

Debug port (USB micro)

RS-232 115200- 8N1

Teste Serieporter med «advcomtest»

Sende data på COM1

```
advcomtest -s /dev/ttyAP0 9600 'test'
```

Lese data på COM2

```
advcomtest -r /dev/ttyAP1 9600
```

Merk: advcomtest, har problemer med tilkobling til annen hardware. Bruk minicom til annet testing.

Teste Serieporter med Minicom

RS-485 opp mot ADAM-4017 (ASCII) Start Minicom med «minicom -s», Ctr + a -> o for å åpne meny

```
Welcome to minicom 2.7.1

OPTllqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
Compx A - Serial Device      : /dev/ttyAP0
Portx B - Lockfile Location   : /var/lock
       x C - Callin Program   : 
Presx D - Callout Program     : 
       x E - Bps/Par/Bits     : 9600 8N1
       x F - Hardware Flow Control : Yes
       x G - Software Flow Control : No
       x
       x Change which setting? █
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
       x Screen and keyboard    x
       x Save setup as 9600      x
       x Save setup as...        x
       x Exit                    x
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
```

```
root@ecu150-a539e8: ~  
  
Welcome to minicom 2.7.1  
  
OPTIONS: I16n  
Compiled on Dec 23 2019, 02:06:26.  
Port /dev/ttyAP0, 14:35:20  
  
Press CTRL-A Z for help on special keys  
  
$01M  
014017P
```

Python eksempelkode

Using the pymodbus library to read coil 0-1, then setting coil 1 to True, and then do another reading

```
#Using the pymodbus library to read coil 0-1, then setting coil 1 to True, and then do another reading

from pymodbus.client import ModbusSerialClient
from pymodbus.transaction import ModbusRtuFramer

# Create a Modbus RTU client
client = ModbusSerialClient(method='rtu',
    port='/dev/ttyAP0',
    baudrate=9600,
    stopbits=1,
    bytesize=8,
    parity='N',
    framer=ModbusRtuFramer)

# Connect to the Modbus RTU slave
client.connect()

# Define the slave address
slave_address = 1

# read current coil states
r = client.read_coils(0,4,1)
print(r.bits)

# write to coil 1 the value 1
client.write_coil(1,True,1)

# reread the coil states
r = client.read_coils(0,4,1)
print(r.bits)
```