

# *Mega\_Link 2*

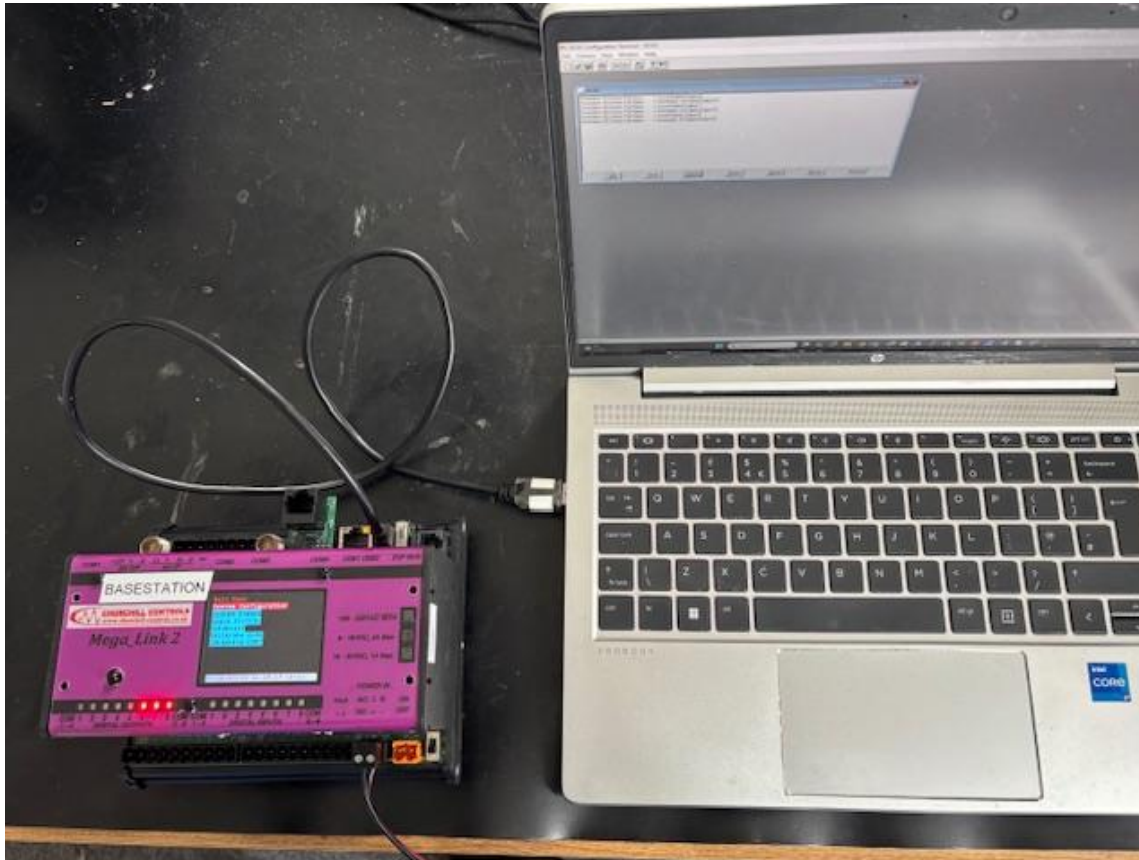
## Product Familiarisation Thames Water

### Part 6 - Configuration and Diagnostics

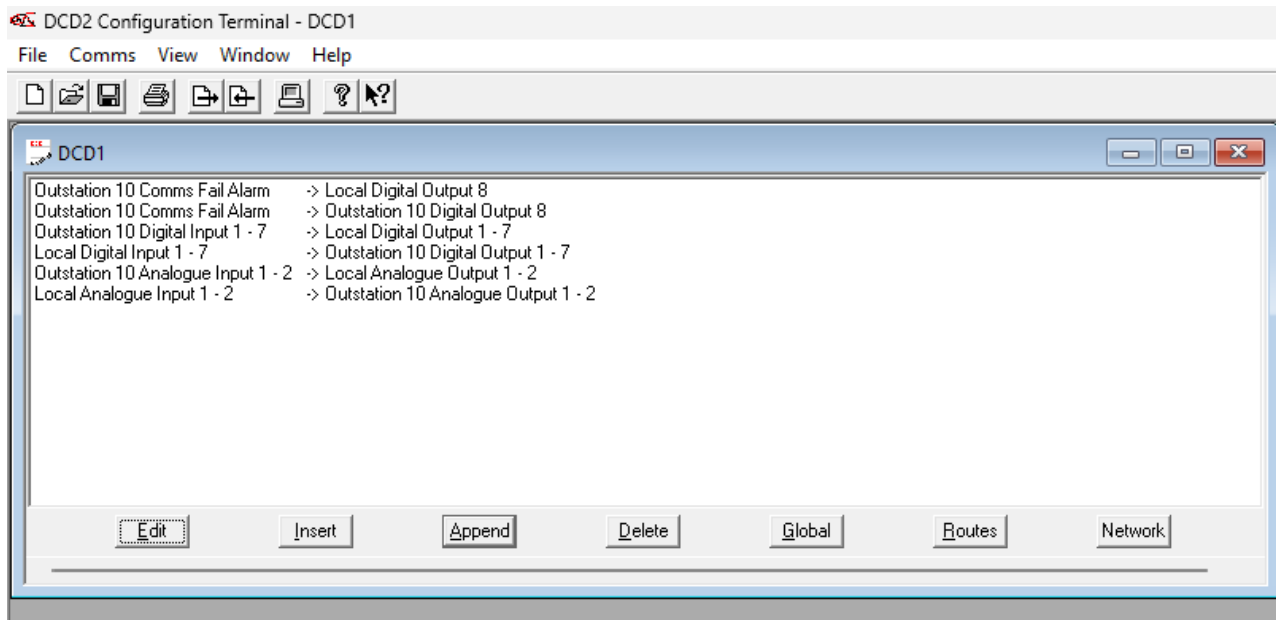
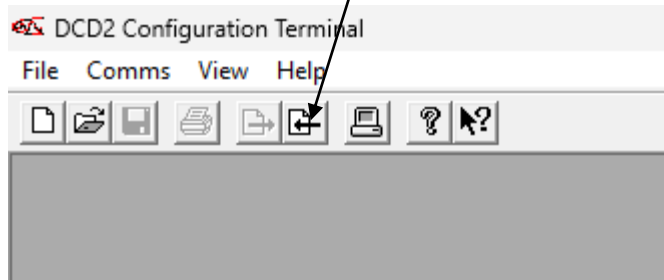
26<sup>th</sup> March 2026

# DCD 2 Tool

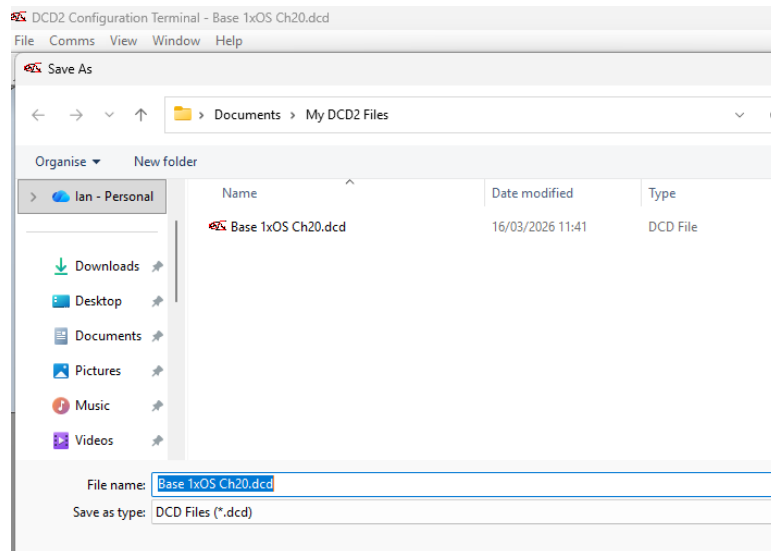
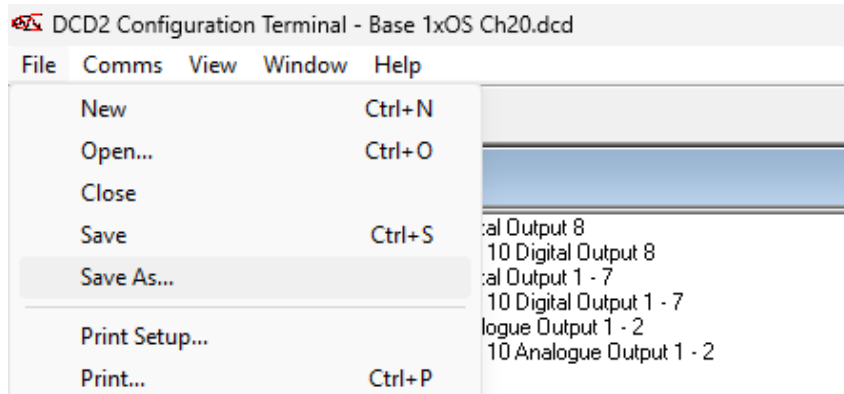
- Data Configuration & Diagnostics (DCD 2)
  - USB-A to USB-mini cable



## Config Upload

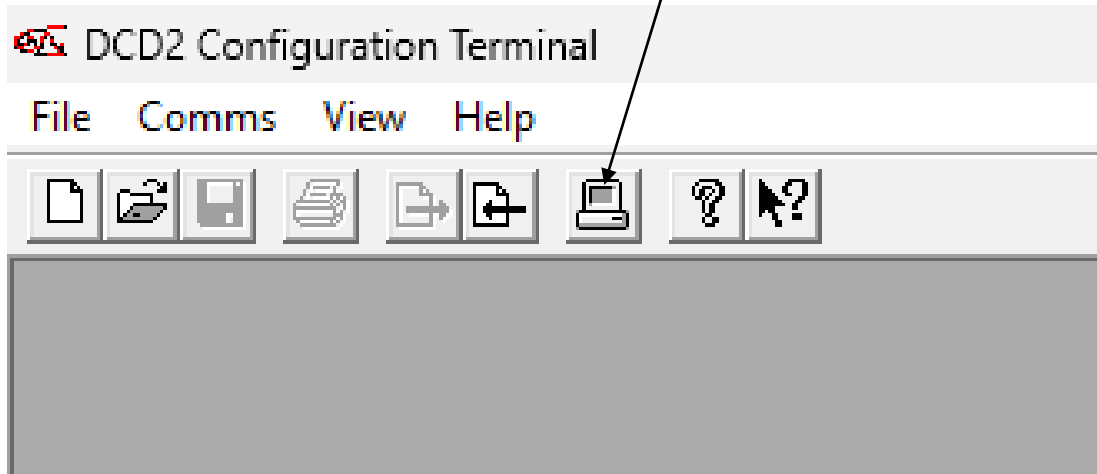


# Save As...



# Diagnostics Terminal

Diagnostics Terminal



# Diagnostics Window

COM4 - Tera Term VT

File Edit Setup Control Window Help

EXIT

Hit Return key to get "EXIT" response

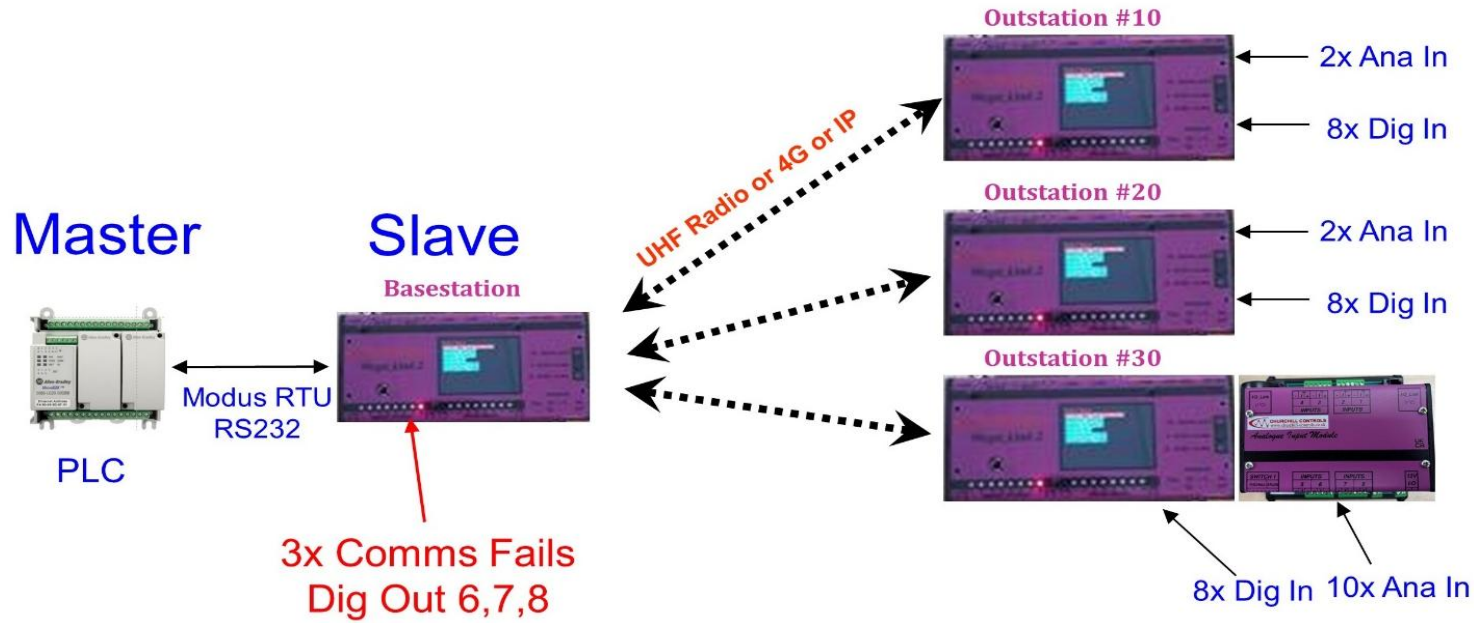
Type "?" and Return to see command menu

## AVAILABLE COMMANDS

```
B : Display Field_Bus Comms
D : Display Mega_Link2 Comms
I : Display Internal Data Transfers
ID: Display Input Digitals
IR: Display Input Registers
OD: Display Output Digitals
OR: Display Output Registers
S : Display Station Status
PB: Basestation Path Test
PO: Outstation Path Test
PS: Stop Path Test
RS: Scan Radio Channels
RU: Transmit Unmodulated Carrier
RM: Transmit Modulated Carrier
RC: Change Radio Channel
Any other key:  Exit
```

EXIT

# Example for Diagnostics



**Analogue Input Expansion  
Module becomes Outstation #31**

# D Command

```
Outstation: 10
09:02:57 TX: 01 1A 00 00 0A 0C 00 20 00 00 00 00 00 00 00 00 00 00 AF FF 00 00 00 00 0A 04 C1 C9 C2 09 01 3C
Time-out set to 4700ms.
Primary comms rcvd pkt
09:02:59 RX: 01 16 00 0A 00 0D 7F FF 00 00 11 00 11 00 0E 00 10 00 01 07 B3 FF 54 07 F2 0D 01 00 C1 DE
    2800ms left. Good reply.

1 sec to next poll.

Outstation: 20
09:03:07 TX: 01 1A 00 00 14 0C 00 80 00 00 00 00 00 00 00 00 00 00 AF FF 00 00 00 00 0A 04 CB C9 C2 09 B1 37
Time-out set to 4700ms.
Primary comms rcvd pkt
09:03:09 RX: 01 16 00 14 00 0D 7F FF 00 00 02 00 02 00 02 00 02 00 12 07 AF FF 55 07 F5 0D 01 00 3F F1
    2800ms left. Good reply.

1 sec to next poll.

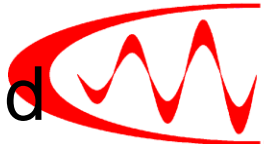
Outstation: 30
09:03:17 TX: 01 1A 00 00 1E 0C 00 80 00 00 00 00 00 00 00 00 00 00 B1 FF 00 00 00 00 0A 04 D5 C9 C2 09 10 96
Time-out set to 4700ms.
Primary comms rcvd pkt
09:03:19 RX: 01 16 00 1E 00 0D 7F FF 00 00 01 00 01 00 01 00 02 00 0A 07 B1 FF FA 06 EC 0C 01 00 29 C4
    2900ms left. Good reply.

1 sec to next poll.

Outstation: 31
09:03:27 TX: 01 04 00 00 1F 03 DF C9 C2 09 CE E5

RequestingOutstation: 31 (expansion module) Time-out set to 4700ms.
Primary comms rcvd pkt
09:03:29 RX: 01 16 00 1F 00 02 00 00 00 00 38 07 20 0A 3C 07 41 0A 35 07 3E 0E 35 07 3F 0E 02 00 46 41
    3100ms left. (expansion module) Good reply.

End of fast scan. Scanning every 10 secs
Scanned 4 Outstations with 0 failures
```



# Input Registers IR Command

INPUT REGISTERS

If analogues not 0..20mA, scale as necessary

Reg No.	Block No.	0	1	2	3	4	5	6	7
0:	0:	10	10	10	10	12.05V	-80dBm	0.36mA	0.35mA
8:	1:	-	-	-	-	-	-	-	-
16:	2:	-	-	-	-	-	-	-	-
24:	3:	-	-	-	-	-	-	-	-
32:	4:	-	-	-	-	-	-	-	-
40:	5:	-	-	-	-	-	-	-	-
48:	6:	-	-	-	-	-	-	-	-
56:	7:	-	-	-	-	-	-	-	-
64:	8:	-	-	-	-	-	-	-	-
72:	9:	-	-	-	-	-	-	-	-
80:	10:	17	17	14	16	12.16V	-75dBm	9.38mA	17.85mA
88:	11:	-	-	-	-	-	-	-	-
96:	12:	-	-	-	-	-	-	-	-
104:	13:	-	-	-	-	-	-	-	-
112:	14:	-	-	-	-	-	-	-	-
120:	15:	-	-	-	-	-	-	-	-
128:	16:	-	-	-	-	-	-	-	-
136:	17:	-	-	-	-	-	-	-	-
144:	18:	-	-	-	-	-	-	-	-
152:	19:	-	-	-	-	-	-	-	-
160:	20:	2	2	2	2	12.29V	-82dBm	9.39mA	17.88mA
168:	21:	-	-	-	-	-	-	-	-
176:	22:	-	-	-	-	-	-	-	-
184:	23:	-	-	-	-	-	-	-	-
192:	24:	-	-	-	-	-	-	-	-
200:	25:	-	-	-	-	-	-	-	-
208:	26:	-	-	-	-	-	-	-	-
216:	27:	-	-	-	-	-	-	-	-
224:	28:	-	-	-	-	-	-	-	-
232:	29:	-	-	-	-	-	-	-	-
240:	30:	1	1	1	2	12.22V	-78dBm	8.94mA	16.55mA
248:	31:	9.23mA	12.96mA	9.25mA	13.12mA	9.22mA	18.23mA	9.22mA	18.24mA E
256:	32:	-	-	-	-	-	-	-	-
264:	33:	-	-	-	-	-	-	-	-
272:	34:	-	-	-	-	-	-	-	-
280:	35:	-	-	-	-	-	-	-	-

# Input Digitals ID Command



```

                                INPUT DIGITALS

Alarm Flags:
C: Mega_Link2 Comms Fail
B: Battery Low
H: Hardware Fail
M: Field Bus Fail
F: Complete Comms Fail
A: Batt not charging
P: Primary Comms Fail
S: Secondary Comms Fail

Reg  Block
No.  No.  0          15 16          31 0          15 16          31
0:    0:  _____ S00000000 00000000000000000000  -----  -----
64:   2:  -----
128:  4:  -----
192:  6:  -----
256:  8:  -----
320: 10:  _____ S11111111 00000000000000000000  -----  -----
384: 12:  -----
448: 14:  -----
512: 16:  -----
576: 18:  -----
640: 20:  _____ S11111111 00000000000000000000  -----  -----
704: 22:  -----
768: 24:  -----
832: 26:  -----
896: 28:  -----
960: 30:  _____ S11111111 00000000000000000000 00000000000000000000 00000000000000000000
1024: 32:  -----
1088: 34:  -----
1152: 36:  -----
1216: 38:  -----
1280: 40:  -----
1344: 42:  -----
1408: 44:  -----
1472: 46:  -----
1536: 48:  -----
1600: 50:  -----
1664: 52:  -----
1728: 54:  -----
1792: 56:  -----
1856: 58:  -----
1920: 60:  -----
1984: 62:  -----
    
```

# System Status S Command

```
VT COM4 - Tera Term VT
File Edit Setup Control Window Help
Software: 0.1.45. Supply: 12.13V
Counts 1: 3      2: 3      3: 3      4: 4
Digital inputs 1..8:
    00000000
Digital outputs 1..8:
    11110001
Analogue inputs 1..2:
    8.78mA    16.30mA
Analogue outputs 1..2:
    9.25mA    20.47mA
Alarms:
Field_Bus Comms: OK    Battery: OK    Mega_Link2 Comms: OK
Mains: OK    Hardware I/O: OK
```