



-power in control



APPLICATION NOTES



DELOMATIC 4, DM-4 GAS/HYDRO

PCM TCP/IP port (WebArm)

- TCP/IP setup



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1. About this document

General purpose

This document continues the application notes for DEIF's Delomatic 4, DM-4, used in GAS or HYDRO applications.



For functional descriptions, the procedure for parameter setup, complete standard parameter lists, etc., please see the Installation Instructions.

The general purpose of the application notes is to offer the designer information about TCP/IP setup.



Please make sure to read this handbook before working with the DM-4 controller and the gen-set to be controlled. Failure to do this could result in damage to the equipment or human injury.

Intended users

The document is mainly intended for the person responsible for designing DM-4 systems. In most cases, this would be a panel builder designer. Naturally, other users might also find useful information in this document.

Contents/overall structure

The document is divided into chapters, and in order to make the structure of the document simple and easy to use, each chapter will begin from the top of a new page.

2. Warnings and legal information

Legal information and responsibility

DEIF takes no responsibility for installation or operation of the generator set. If there is any doubt about how to install or operate the generator set controlled by the unit, the company responsible for the installation or the operation of the set must be contacted.

The DM-4 is not to be opened by unauthorised personnel. If opened anyway, the warranty will be lost.

Electrostatic discharge awareness

Sufficient care must be taken to protect the terminals against static discharges during the installation. Once the unit is installed and connected, these precautions are no longer necessary.

Safety issues

Installing the unit implies work with dangerous currents and voltages. Therefore, the installation should only be carried out by authorised personnel who understand the risks involved in working with live electrical equipment.



Be aware of the hazardous live currents and voltages. Do not touch any AC measurement inputs as this could lead to injury or death.

Definitions

Throughout this document, a number of notes and warnings will be presented. To ensure that these are noticed, they will be highlighted in order to separate them from the general text.

Notes



The notes provide general information which will be helpful for the reader to bear in mind.

Warnings



The warnings indicate a potentially dangerous situation which could result in death, personal injury or damaged equipment, if certain guidelines are not followed.

3. Abstract

The DM-4 offers TCP/IP communication, which may need to be changed (address etc.). This document is the instruction manual that tells how to carry out changes and which changes are available.

Furthermore, it describes how to check the PCM module (WebArm module).

4. Configuration of the PCM card

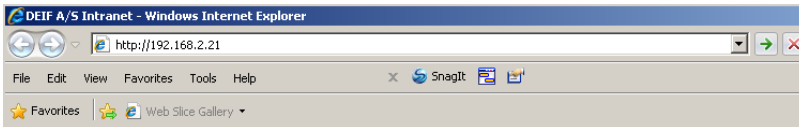
Check software via IP connection

Use a TCP/IP cable to connect your PC to the DM-4 Ethernet port.

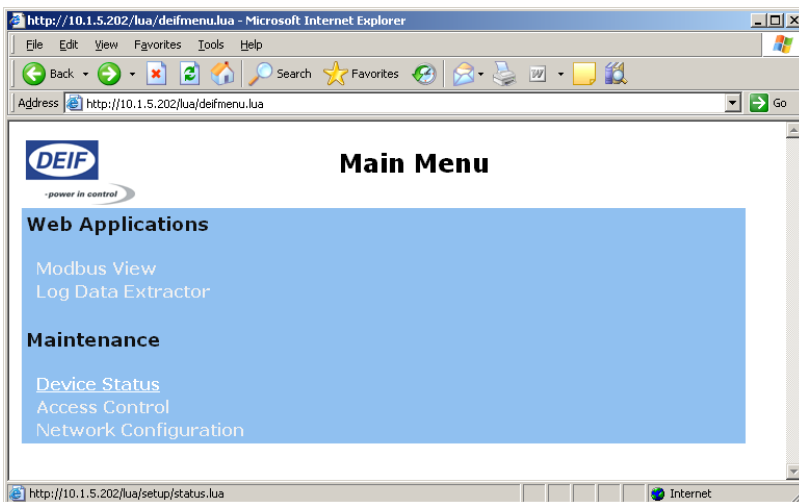


From factory, the IP-address is 192.168.2.21.

Open your internet browser. Key-in the IP address in the address field:



Click "enter". You now get the information screen from the PCM card:

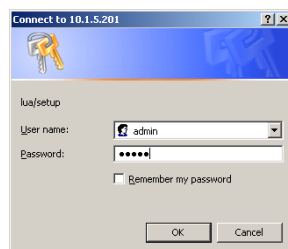


Select "Device Status"

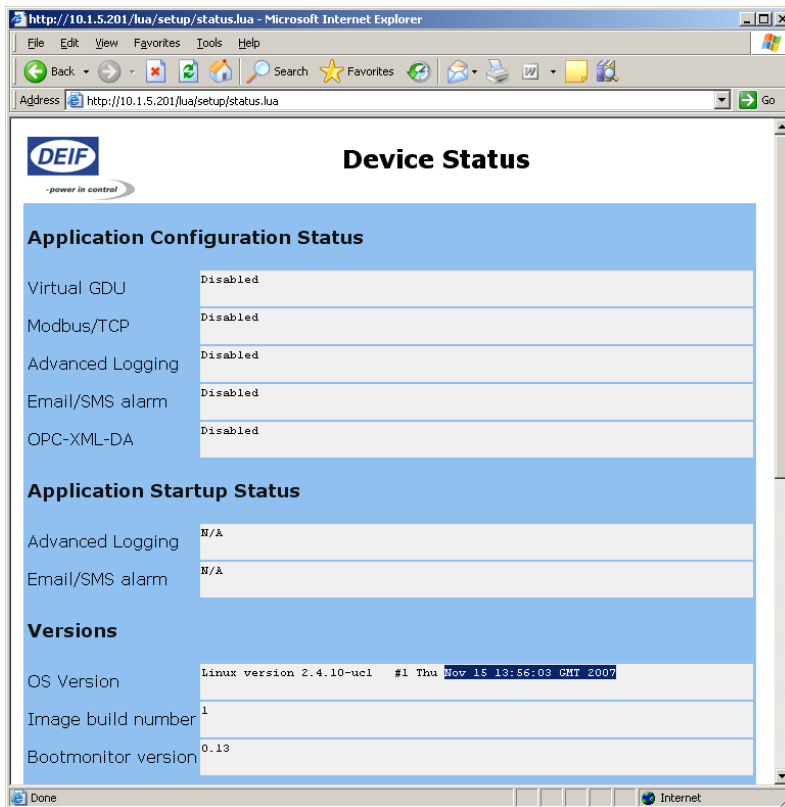
You may be prompted for a name and password:

User name: admin

Password: admin



The following screen appears:

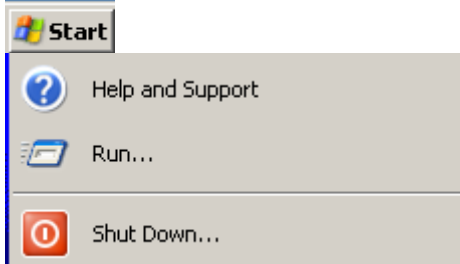


The OS version will, if correct, display the date (here: Nov 15 13:56:03 GMT 2007).

Alternative to using a web browser:

Check software with telnet

Under Windows start prompt:



Select "Run".

Write "cmd" and press enter.

The command prompt will appear.

Now start **telnet**

Command: **telnet ip-address**
(example: telnet 192.168.2.21)

```

c:\ Command Prompt
C:\Documents and Settings\rmi>telnet 10.1.5.202_

```

login: **root**
password: **admin**

```

c:\ Telnet 10.1.5.202
default login: root
Password:

BusyBox v0.60.2 (2007.11.15-13:33+0000) Built-in shell (msh)
Enter 'help' for a list of built-in commands.

# exit

```

if "2007.11.15" is displayed, then it is the correct WebArm software.
"exit" to disconnect from PCM-card.

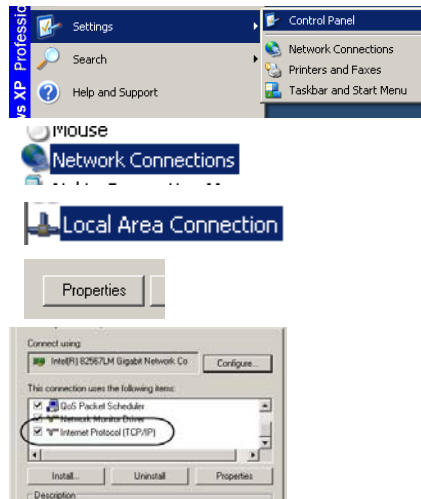
The software has now been checked.

Change of PC IP configuration

If it is not possible to establish connection, the PC IP setting may have to be changed:

Select in windows START:

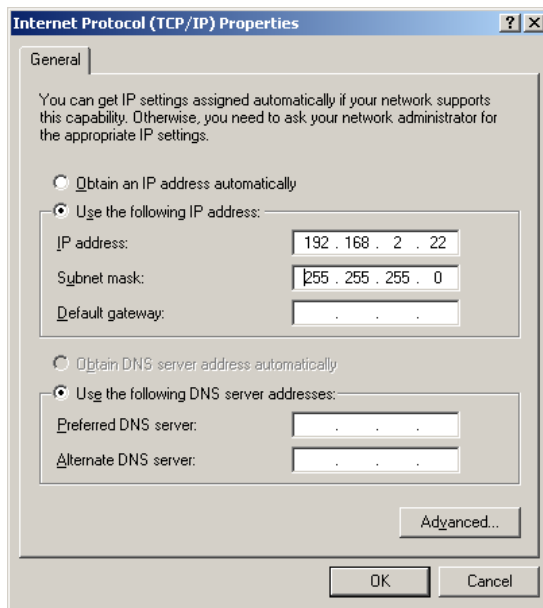
- Settings
- Control panel
- Network connections
- Local area connection
- Properties
- Internet protocol (TCP/IP)



- Properties

Now put in the following information:

IP-address: 192.198.2.22 (default for DM-4 is 192.198.2.21 and that cannot be used here)
Subnet mask: 255.255.255.0



Remember that you have to change back to original settings after finishing this check.

After this, you can check the connection using "ping":

In Windows:

- Start
- Run
- Cmd

In the prompt write: ping 192.168.2.21 (example, use the relevant DM-4 IP address). If successful, the prompt looks like this:

```

C:\Documents and Settings\rmi>ping 10.1.5.201

Pinging 10.1.5.201 with 32 bytes of data:

Reply from 10.1.5.201: bytes=32 time=29ms TTL=255
Reply from 10.1.5.201: bytes=32 time<1ms TTL=255
Reply from 10.1.5.201: bytes=32 time<1ms TTL=255
Reply from 10.1.5.201: bytes=32 time<1ms TTL=255

Ping statistics for 10.1.5.201:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 29ms, Average = 7ms

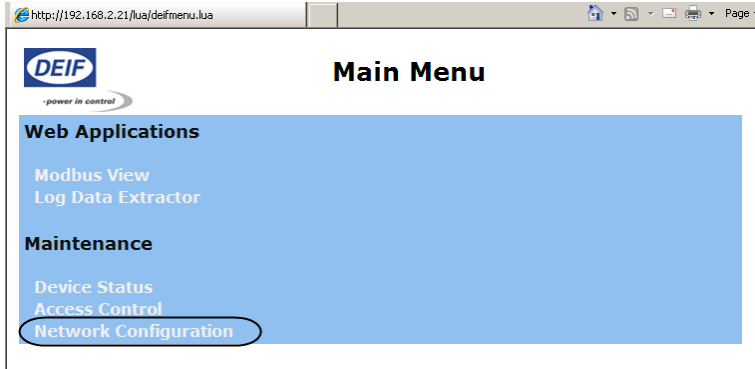
C:\Documents and Settings\rmi>

```

Now the DEIF HMI BROWSER can be used, and the user interface can be started.

DM-4 IP address

To change the IP address, select “Network Configuration”.



You can now change the IP address for the DM-4. Note that the system has to be restarted before the change takes effect.

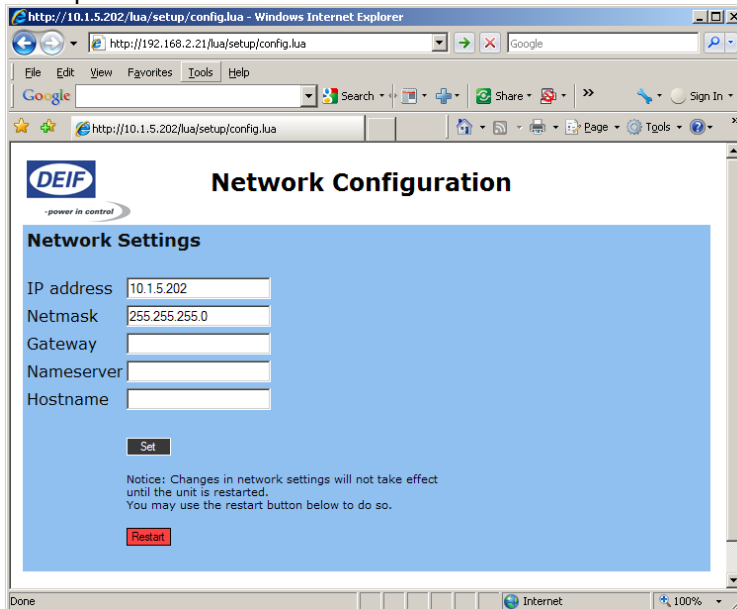
The default IP address is 192.168.2.21

The default netmask is 255.255.255.0



When the IP address is changed, only the new address can be used to access the DM-4 via TCP/IP. Make sure that you use a valid address if changing it.

Example:



DEIF A/S reserves the right to change any of the above.