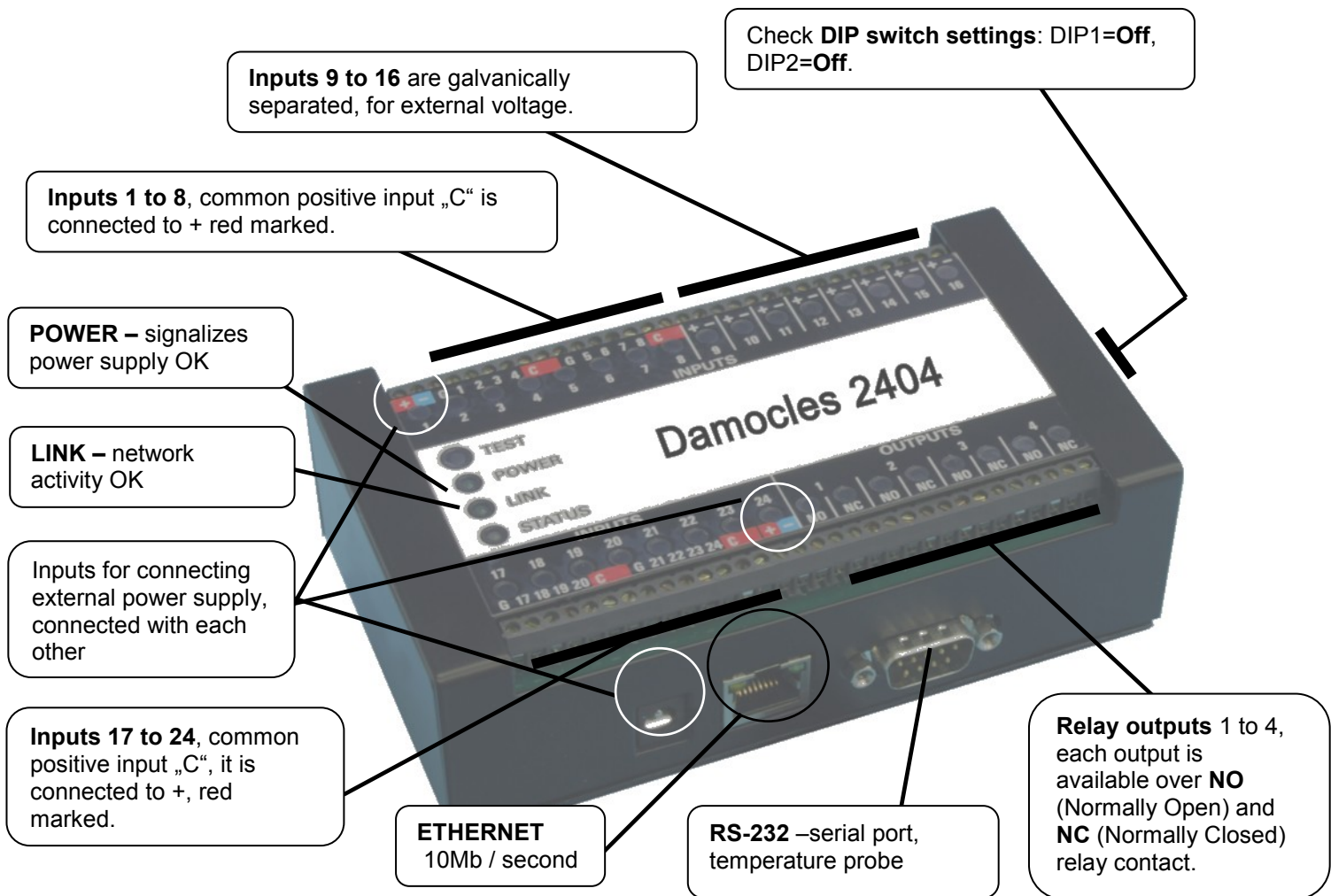


Starting Guide - Damocles 2404

Unit with inputs and outputs



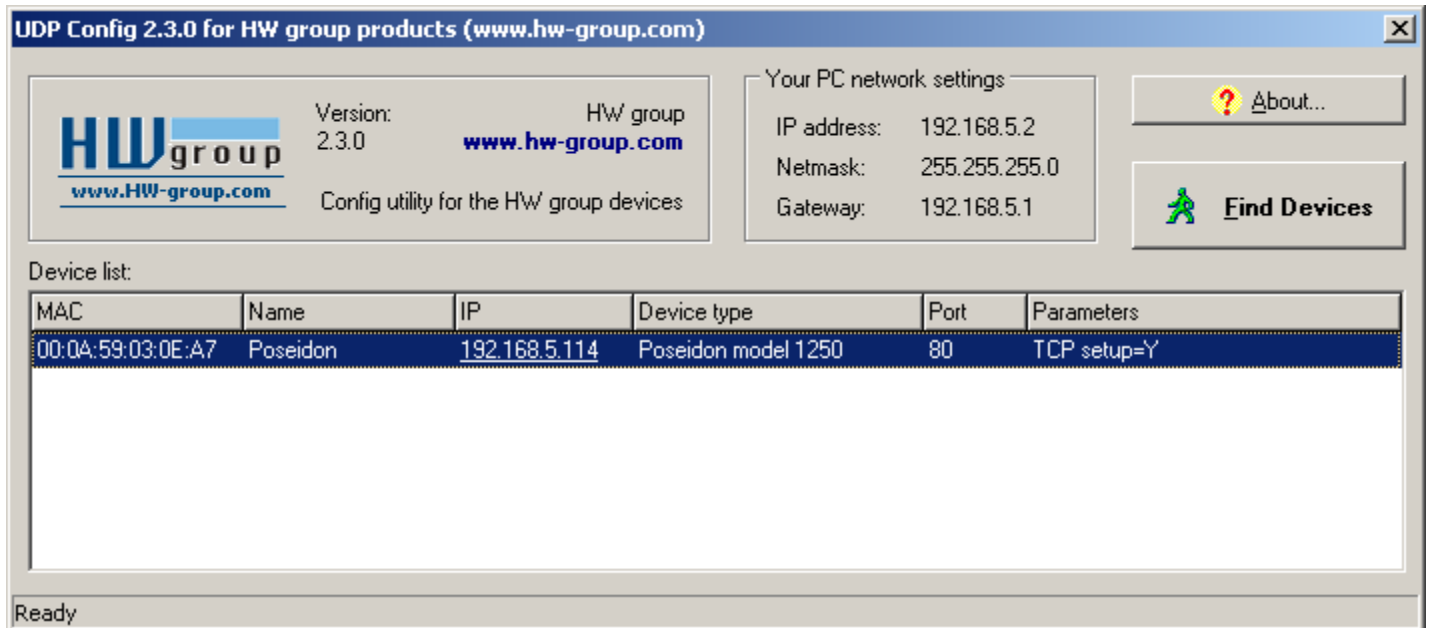
Wirings

- Turn the box upside down and write down device MAC address
- Turn **DIP1=Off**, **DIP2=Off**, setting of other DIPs does not matter
- Connect Damocles to the Ethernet (direct cable to Switch, cross-cable to PC) port RJ-45
- Connect power adapter to power supply and to power connector on Damocles device
- Green LED **POWER** will light up
- If connection to the Ethernet is all right, **LINK** (green) will light up few moments later and flash during data transfer (activity signalization).



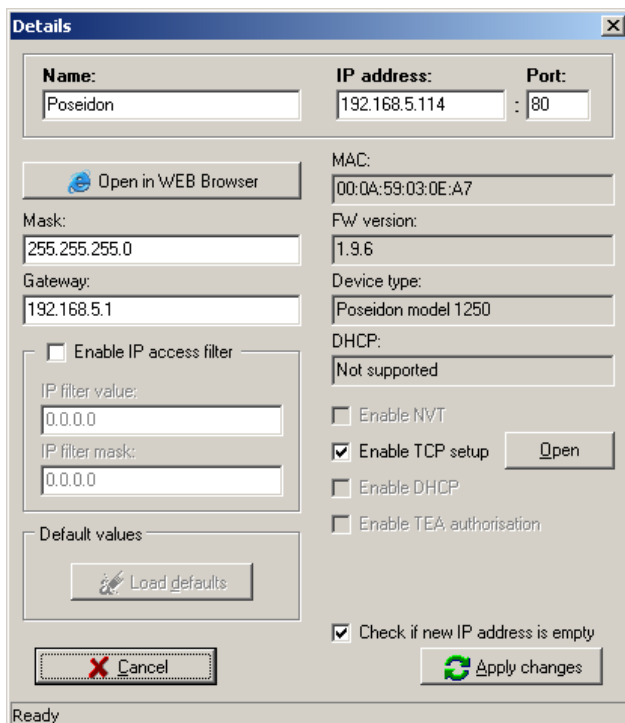
IP address setting - UDP Config

UDP Config to execute can be found on the supplied CD or downloaded from www.HW-group.com. Run the **UDP Config** and the program will search for connected devices.



The program searches in your local network. The Damocles identifies according to MAC address which is printed on the label on bottom part of each device.

Double click on device MAC address to open dialog window with basic settings.



- Setup IP address
- HTTP Port
- Network mask
- Gateway IP address
- Device name – optional

Note: Contact your system administrator in case you do not have the information

To save values into Damocles click **Apply Changes** button

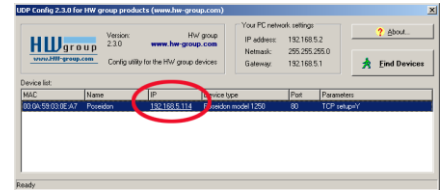
Note: You can use following programs to setup IP address as well;

- **UDP Config for Linux**
- **Hercules** (/Hercules.exe) (UDP Setup or terminal on serial port)
- **RS-232 serial port** (any terminal program 9600 8N1, DIP1=ON, restart)

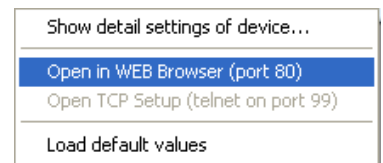
WWW page of the device

- Options to open web page:

- o Enter IP address into your web browser
- o Click on IP address in UDP Config program
- o Click on underlined IP address in UDP SETUP or use **right mouse button** on the device line. In context menu - „**Open in the WEB Browser (port 80)**“ – will open web page in your browser (Internet Explorer, Firefox etc.).



- Web page displays information about inputs and outputs states.
- Please note the very last line where „For more information try www.hw-group.com“ is. This text can be changed according to your needs in TCP Setup mode The text is limited to 160 chars. (Telnet on port 99)



- Click on „**Graphic Flash SETUP**“ link to open graphical setting interface (Flash Setup).

Damocles model 2404

Dry contact inputs					
Name	Current Value	Alarm Alert	Name	Current Value	Alarm Alert
Input 1	Open	Active if Open	Input 13	Open	Disabled
Input 2	Open	Active if Close	Input 14	Open	Disabled
Input 3	Open	Disabled	Input 15	Open	Disabled
Input 4	Open	Disabled	Input 16	Open	Disabled
Input 5	Open	Disabled	Input 17	Open	Disabled
Input 6	Open	Active if Open	Input 18	Open	Disabled
Input 7	Open	Disabled	Input 19	Open	Disabled
Input 8	Open	Disabled	Input 20	Open	Disabled
Input 9	Open	Active if Close	Input 21	Open	Disabled
Input 10	Open	Disabled	Input 22	Open	Disabled
Input 11	Open	Disabled	Input 23	Open	Disabled
Input 12	Open	Disabled	Input 24	Open	Disabled


Sensors			
Name	ID	Interface	Current Value
Temperature 1	0	RS232	29.5 °C

Device name: Damocles
 Web Configuration: [Graphic Flash SETUP](#)
 Firmware: Version: 1.2.2 ([update](#)) / [MIB](#) / [XSD](#)

For more information try www.HW-group.com

You need to have installed support of flash in your PC to open flash page. In case the PC is connected to internet needed Plug-in can be downloaded automatically. You can also install it from supplied CD - [\Poseidon\install flash player 7.msi](#). For detailed description see of Flash SETUP see **5th** chapter about **Flash interface**

[Status](#) | [Setup](#) | [Email & SNMP Setup](#) | [Inputs](#) | [Outputs](#) | [Temperature](#) | [Alarms](#) | [Groups](#) | [Info](#) | [Index Page](#)



Status

NTP ntp1.sth.netnod.se NO ANSWER 01.01.1970 02:03:27

IP Address 192.168.1.100 Gateway 192.168.1.253 Mask 255.255.255.0

Contact For more information try www.HW-group.com

Temperature Temperature 1 29.1

Inputs				Outputs			
	Name	Counters	Value		Name	On (Close)	Off (Open)
I1	Input 1	0000000000	0	O1	Output 1	<input type="radio"/> Open	<input type="radio"/> Close
I2	Input 2	0000000000	0	O2	Output 2	<input type="radio"/> Open	<input type="radio"/> Close
I3	Input 3	0000000000	0	O3	Output 3	<input type="radio"/> Open	<input type="radio"/> Close
I4	Input 4	0000000000	0	O4	Output 4	<input type="radio"/> Open	<input type="radio"/> Close
I5	Input 5	0000000000	0				
I6	Input 6	0000000000	0				
I7	Input 7	0000000000	0				
I8	Input 8	0000000000	0				
I9	Input 9	0000000000	0				
I10	Input 10	0000000000	0				
I11	Input 11	0000000000	0				
I12	Input 12	0000000000	0				
I13	Input 13	0000000000	0				
I14	Input 14	0000000000	0				

Apply Changes

Refresh Values reloaded 0 times. Reload values every 5 [s] Start

Flash Setup can be used to:

- Name input and outputs including states.
- Monitor actual sensor value, they are reloaded in set periods
- Configure SNMP parameters (Community names & rights) and define target IP address where SNMP Traps will be sent in case of Alarm
- Setup name, password and ranges of safe IP addresses
- a lot more

How to work with Alarms and notification via Email

The Damocles supports notification of state change of one input – „**Single Alarm**“ and combination of inputs as well - „**Group Alarm**“.

- It is possible to setup Alarm state for each input (for On or Off value) that will be used to react to with Email or SNMP Trap sending. >> **Inputs** tab, green column „**Single Alarm**“.
- Each alarm needs to be activated >> **Alarms** tab, column „**Enable**“.
- Each alarm needs target where to send it to. 4 targets are available for SNMP Traps (named A,B,C,D) and 2 targets for Email (named E,F) >> **Alarms** tab, column „**SNMP**“ or „**E-mail**“.
- Target destination A to D for SNMP and E,F for Email needs to be configured and enabled

Sending test Email

Check following before you send Email directly from device

- GateWay IP address >> **Setup** tab, „**Network Settings**“ group and „**Gateway**“ item.
- DNS server >> **Setup** tab, „**Network Settings**“ group „**DNS**“.
- SMTP server>> **Email & SNM Setup** tab, „**Email Settings**“group
- Use sending test Email to test function
>> **Email & SNM Setup** tab, „**Email Settings**“group

Group Alarm

Any optional combination of inputs states can raise Alarm which can locally switch an output. Description of conditions and examples are available in manual.

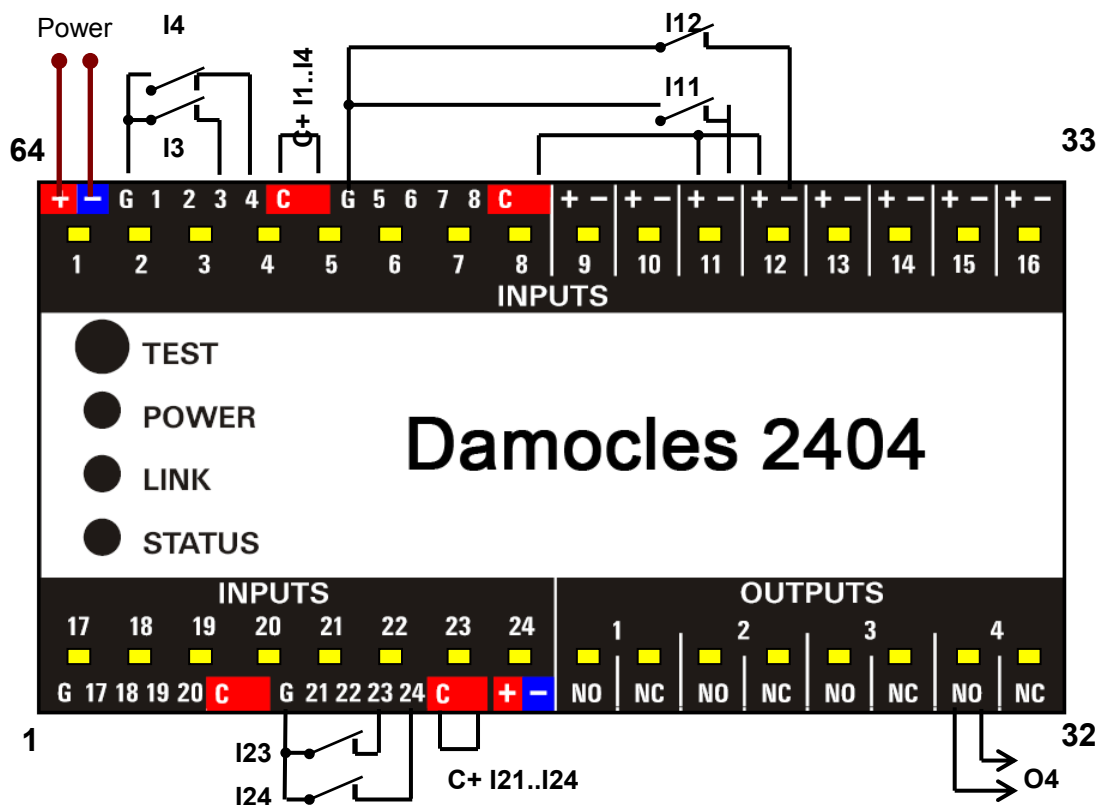
Configuration of output from your SW

- Your own SW can use SNMP, XML or Modbus/TCP protocols to configure outputs
- To easy configure outputs from command line **DamPosIO** program can be used. It records XML file with needed outputs states to particular IP address. The program is available for Windows, for Linux even in source codes as a part of distributed SDK. >> *available on supplied CD.*
- To control outputs **PD Hawk** program is suitable. It can respond to received alarm notification with relay switching over the network >> *available on supplied CD.*

Note: *Change in output state can be protected with password, range of IP addresses or forbidden it totally with DIP2 setting to ON position. When DIP 2 is in ON position it is not possible to change output state.*

We test inputs and outputs

- Use Flash Setup to switching inputs, respectively its first tab - **Status**
- Setup on the right bottom part „**Reload values every 1 [s]**” and press “**Start**”
- In Outputs group change values of some output and click „**Apply Changes**“. Signal LEDs of the output show change and the relay “clicks”.
- It is necessary to connect inputs according to picture with a wire to test them. The Damocles uses 2 types of inputs:
 - Inputs **1 to 8** and **17 to 24** have common Anoda (+) pin, it is expected to connect to Vcc input located next to it – see scheme – 2 red pins.
 - Inputs **9 to 16** have always both Anoda (+) pins and Cathoda (-) separately, for connecting input – see scheme.



Wiring description

- Power pins **Power** on the left top and pins below input 24 are connected with connector for power adapter which is lacerated on a side of the device. To supply power you can use any of them, pins of input 1 are used here.
- **I3** - Input 3 (59) is switched by contact against GND (G - 62), requests connecting of command input C (C+ I1..I4) with power supply and that is why a jumper on red pins 56 and 57 is necessary.
- **I4** – Input 4 (58) is switched by contact against GND (G - 62), requests connecting of command input C (C+ I1..I4) with power supply and that is why a jumper on red pins 56 and 57 is necessary
- **I11** – Input 11 connects pin „-“ (43) with switching contact against GND (G - 55), pin „+“ (44) is connected to red POWER (49).
- **I12** – Input 12 connects pin „-“ (41) with switching contact against GND (G - 55), pin „+“ (42) is connected to red POWER (49).
- **I23** and **24** – Inputs 23 and 24 are connected similarly as I3 and I4, jumper for common pin. (C+ I21 to I24) with power.
- **O4** – Output 4 connects NO contact (disconnected when turned off)