Starting Guide – Damocles MINI
First steps for I/O control with Damocles

1) Connecting the Damocles MINI

1.1) Check the DIP switches. For installation, set them as shown in the picture (DIP1=**Off**, DIP2=**Off**).

1.2) Output (double-throw relay contact) to turn on/off external devices (fans, A/C, heating, horn, etc.)

1.3) Connect the power adapter to an outlet (230 / 110V) and to the 12V power supply connector.

1.4) Dry contact **inputs** to connect sensors with Dry Contact outputs (buttons, relay contacts, door contacts).

1.5) Connect Damocles to the Ethernet (patch cable to switch, or cross-over cable to

- Green POWER LED on the RJ45 socket lights up – power supply is OK
- Yellow LED on the RJ45 socket flashes – connection to 10 Mbit network is OK

2) Configuring the IP address – UDP Config

The **UDP Config** executable is located in the root of the supplied CD (Windows and Linux version), or it can be downloaded at www.HW-group.com, Software -> **UDP Config**.

- Click the icon to run **UDP Config**. The program automatically starts searching for connected devices.
- Click the **Find Devices** button to start searching for devices.

The program looks for devices on your local network. To identify a particular Poseidon unit, look at its MAC address (printed on the label at the bottom of the unit). Double click a MAC address to open a dialog window with basic device settings.

Click the **Apply Changes** button to save the settings.

Note: *Contact your network administrator if you are unsure about these settings.*
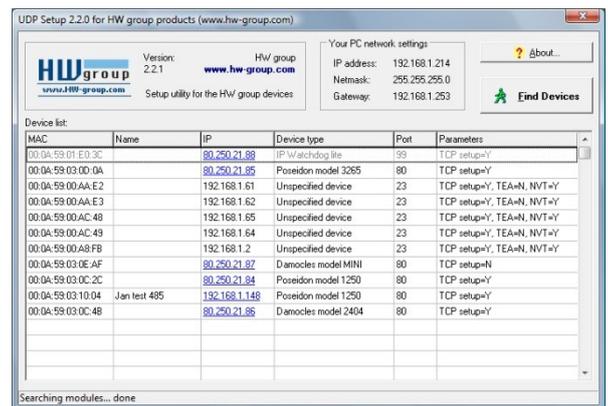
DIP1
- **Reset to factory defaults**
  Toggle DIP1 several times within 5 seconds after powering up. Default settings contains none passwords.

DIP2
- **Disable any configuration changes** (online demo mode)
  While **DIP2=On** any configuration change disabled.
  Note: Set Dip2=Off to be able change IP address configuration

3) WWW pages of the device

Enter the IP address of the device to the address field in your web browser, or run **UDP Config** and click the IP address in the list of devices.

Show detail settings of device…
Open in WEB Browser (port 80)
Open TCP Setup (telnet on port 99)
Load default values

Click on the link „**Graphic Flash SETUP**" to open graphic Setup interface (Flash Setup).
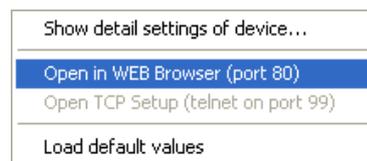
IP address of Damocles unit

Damocles model mini - Windows Internet Explorer

http://192.168.1.102/

Damocles model mini

Damocles model mini

Statement of the setting of ALARM for each input

Current state of **inputs**

Dry contact inputs

Name	Current Value	Alarm Alert	Name	Current Value	Alarm Alert
Input 1	Open	Disabled	Input 3	Open	Disabled
Input 2	Close	Active if Close	Input 4	Open	Disabled

Name of the particular unit of Damocles

Current state of **outputs**

Digital outputs

Name	Current Value	Name	Current Value
Output 1	Open	Output 2	Close

Device name: Damocles
Web Configuration: Graphic Flash SETUP
Terminal Configuration (TCP Setup):   Connect with Telnet to 192.168.1.102 Port 99
Firmware: Version: **1.2.5** (update) / MIB / XSD

Click to open Flash SETUP – graphical interface

For more information try www.HW-group.com

Adjustable link to service organization

Done   Internet   100%

Retrieving current readings

- **XML** – **/values.xml** file, format described using XSD – for download on the main page, detailed comments on XML structure are available in the manual.

- **SNMP** – the **poseidon.mib** description file can be downloaded from the main page. The SNMP ports (defaults are 161 and 162) can be changed in Flash setup.

- **Modbus/TCP** – structure description is available in the manual, or in application examples. Standard port 502 is open for reading.

4) Flash SETUP of device

To open the FLASH page, support of FLASH application has to be installed in your PC. If PC is connected to Internet, necessary Plug-in is downloaded automatically, if the computer isn´t connected, it is necessary to install **Plug-in** from supplied CD -
\Damocles\install_flash_player_7.msi.

For detailed description of Flash SETUP, see product manual.
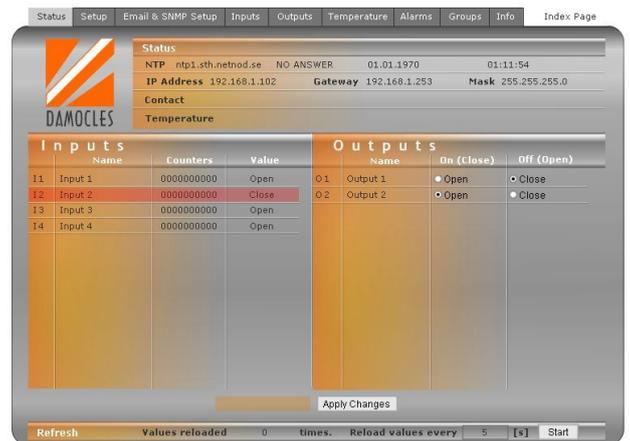
5) We test the inputs and outputs

To prove state of inputs and control outputs, use **WEB** >> **Flash Setup** >> bookmark **Status**

- **Outputs**
    - o Set „**Reload values every 1 [s]**" below on the right and press "**Start**"
    - o In the category Outputs, change the value of one of the outputs and press „**Apply Changes**". You will hear a click of relay in Damocles unit and signal indicator LED of output will signal the state of output relay.
    - o The outputs are labelled **NO** (Normally Open) and **NC** (Normally Close), middle pin is common. Interconnection of inner contact relay corresponds with the states on the picture.

- **Inputs**
    - o To prove the inputs, it´s enough to connect the inputs by wire or clip.
    - o Switch the function „Counter" on, from **Flash Setup** interface you can find the number of pulses.
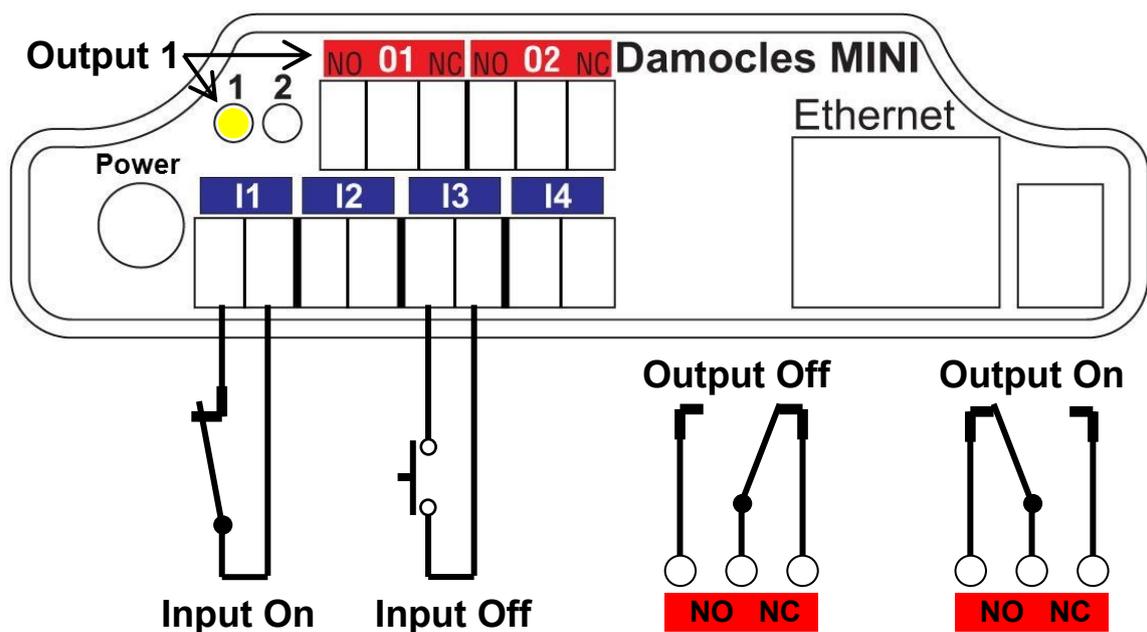
6) Alarms and Alarm Alert via Email

Damocles supports warning of state change on one input – „**Single Alarm**", and at same time warning of presence of certain combination of inputs „**Group Alarm**".

- For each input, you can set Alarm state (at value On or Off) and you´ll be informed about state change by sending Email or SNMP Trap. >> Bookmark **Inputs**, green column „**Single Alarm**".

- You need to activate each Alarm >> Bookmark **Alarms**, column „**Enable**".

- For each Alarm, you need to set where it´ll be sent. Four destinations for SNMP Traps (labelled A,B,C,D) and two destinations for Email (labelled E,F) are available >> Bookmark **Alarms**, column „**SNMP**" or „**E-mail**".

- It´s necessary set and permit the destinations A up to D for SNMP and E,F for Email.

Test sending Email

For sending Email directly from device, check the setting of these variables

- IP address GateWay >> Bookmarker **Setup**, group „**Network Settings**" item „**Gateway**".
- DNS server Settings >> Bookmarker **Setup**, group „**Network Settings**" item „**DNS**".
- SMTP server Settings >> Bookmarker **Email & SNM Setup**, group „**Email Settings**"
- Use sending test Email for function test
  >> Bookmarker **Email & SNM Setup**, group „**Email Settings**"

Group Alarm

An adjustable combination of states of some inputs can cause Alarm state which can locally connect output up. Description of these conditions setting and examples, you can find in detailed manual.

7) Output setting from your SW

- Your own SW can use protocols SNMP, XML or Modbus/TCP for outputs setting

- For simple output setting from command line, you can use program **DamPosIO**. This program records XML file with required outputs state on defined IP address. Program is available for Windows, for Linux in source codes, included in supplied SDK. >> *find on supplied CD.*

- For outputs control, you can use program **PD Hawk**, which is able to answer to coming alert state of Alarm, for example, connect relay up over network. >> *find on supplied CD.*

You can protect the change of outputs state by password, range of IP addresses or you can completely prohibit it by setting of DIP 2 to ON position. After put DIP 2 on, it´s impossible change the outputs state.

Others information about setting, you can find in the manual or on the pages: www.HW-group.com.