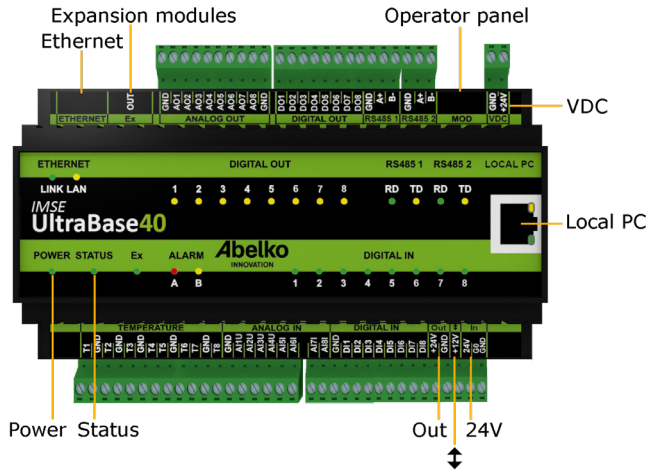


IMSE UltraBase40

Quick start guide

Welcome to Ultra!



All users of this product must carefully read the manual and take necessary safety precautions.

Safety instructions

If the product is not used as intended its protection and safety functions may not work.

Installation

The unit is to be mounted on a DIN rail in a locked cabinet. Installation is carried out by a qualified electrician. Cables must be fastened and secured so that no risk for injury or fire exists. Ventilation openings in the device housing may not be covered.

A circuit breaker shall be installed close to the unit and its power supply. Function and position shall be clearly labelled. External voltage source connected to **DIGITAL OUT** must be limited to a maximum of 0.5 A. The equipment must be unplugged from the mains and other possibly dangerous voltage sources during installation and service.

Power supply

UltraBase40 can be powered in several ways. Requirements and characteristics of the unit's inputs and outputs can be found in the table below.

Port	Supply	Supply expansion module (port Ex)	24 V out (port Out)	↕ (out +12V)
↕ (in +12V**)	12 VDC* (>300 mA)	No	No	Not available
VDC	24 VDC* (>300 mA)	24 VDC, 1A	24 VDC, 100 mA	12 VDC, 100 mA
24V	24 VAC (>300 mA)	No	No	12 VDC, 100 mA
	24 VDC* (>300 mA)	No	No	12 VDC, 100 mA

* Stabilized DC voltage.

** Use **GND** from the port **Out**.

The **Power** LED lights up when the device is energized and the **Status** LED lights up when the device has started up and is working.

Safety instructions



All external equipment connected to the device must have double or enhanced isolation (class II) from power mains or other dangerous voltage source (>50 VAC or > 75 VDC).



Note that all cables used must be approved for at least 50 °C ambient temperature.



At high ambient temperatures there is a risk for burning injuries. Wait for the equipment to cool down, and use protective gloves.

Network connection

The unit is connected to a permanent network by the **Ethernet** port. The factory default IP address is **10.0.48.94**.

Local PC is used only to connect the unit directly to a PC. It has IP address **192.168.142.1**, and can be used to configure the regular network connection in the UltraBase40.

When you use the **Local PC** port, the computer should be configured for **DHCP** (which it usually is).

1. Open a web browser and enter the IP address <https://192.168.142.1> in the address bar. This will take you to the login page.

User name and password the first time you log in:

User name: **config**
Password: **ef56**

- Go to the menu **Communication** and **Network**, and set the **IP address** and **netmask**, in order to configure the settings for the port marked **Ethernet**.

You can also use DHCP, the unit will then automatically get network settings. After a while, you can see which IP address it received. You can use this IP address to access the device from a PC, connected to the same network.

HTTPS

The first time that you log in to an Ultra, you will be warned that the connection is not private, secure, or similar. This is because the system uses HTTPS for a secure and encrypted connection. The security is guaranteed by a certificate that is issued for a specific address. Since the address is adjustable, there is only a self-signed certificate for the unit.

You need to accept and add this exception. The procedure differs depending on which browser you are currently using. The communication is still encrypted, so no-one can see, for example, which passwords are being used.

Graphical programming

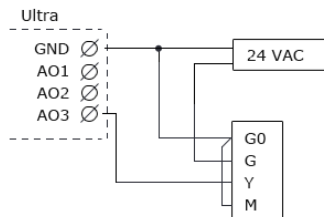
Graphical programming is available as an installable program. Download it at www.abelko.se.

There is also a link to the program in your units user interface under **Configuration** and **Graphical programming**.

Analog outputs

There are eight analog outputs for 0-10 V, marked **AO**.

The figure to the right is an example on how you can connect an AC-powered valve controller.

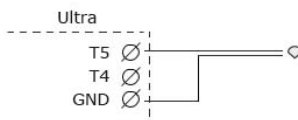


Digital outputs

There are eight digital outputs marked **DO**. These are open drain outputs with breaking capacity 0,5 A and 24 VDC at resistive load.

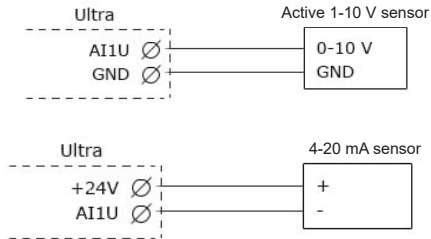
Temperature sensor inputs

There are eight inputs for resistive temperature sensors marked with **T**. They have a measurement range 800 till 1580 Ohm and works for example with PT1000 sensors (approximately -50°C till 150°C) and Ni1000 sensors.



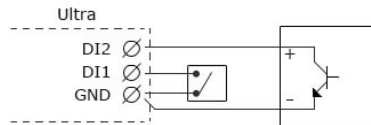
Analog inputs

There are eight analog inputs marked **AI**. Input 1-4 can measure 0-10 V. Input 5-8 can measure 0-20 mA.



Digital inputs

There are eight digital inputs marked **DI**. Digital inputs can be used for digital status. In addition to this, inputs 1-4 can be used as counters and for frequency measurement.



Cleaning

The housing is cleaned from dust and dirt using a dry cloth. Do not use chemicals.

Recycling

UltraBase40 should be recycled as electronics.

Repair and service

Reparation and service shall always be performed by Abelko Innovation. Contact your distributor first if the need arises.

Manuals, updates and other information are available at
www.abelko.se.