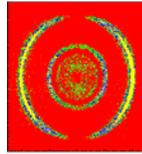


The USB-IO2 DA-controller



RoentDek
Handels GmbH
Supersonic Gas Jets
Detection Techniques
Data Acquisition Systems
Multifragment Imaging Systems

The **RoentDek USB-IO2** is a unit for digitally setting analogue voltages (-5V to +5V). It is controlled via USB by a PC (USB2.0 ports recommended*). Simple C++ example code, a LabView example and a control GUI for Windows10 OS is available, direct integration into the data acquisition software *CoboldPC* can be provided.

The **USB-IO2** is integrated in certain **RoentDek CFD8/7x** modules for threshold setting control.

Summary of features:

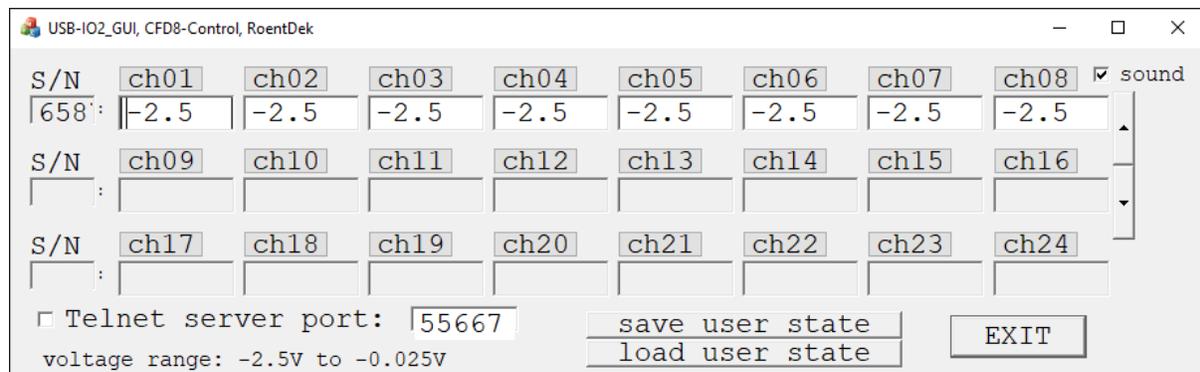
- 8 analogue outputs (-5 to +5V)
- output range factory-fixed by internal jumpers:
 $\pm 0-2.5V$, $\pm 0-5V$, $\pm 2.5V$, $\pm 5V$, do not change!
- output current: max. 6mA per channel
- resolution: input 12bits
- accuracy: ± 2 LSB
- operating temp.: $0\text{ }^{\circ}\text{C}$ to $70\text{ }^{\circ}\text{C}$

Driver installation:

Please install the driver with filename :
USB-DA12-8E Install_RoentDek-2020-07-06.exe,
as provided by **RoentDek**



The software *USB-IO2_GUI.exe* allows controlling up to 24 channels of 3 external (see figure above) or CFD-integrated **iUSB-IO2** units. The software recognizes each connected unit and will display the corresponding serial numbers according to the label on its case (for **iUSB-IO2** units the CFD serial number is relevant, the addressable voltage range limited from -25 mV to -2.5 V here, see figure below).



Set values can be stored in a file on disc and individually in an internal EPROM of any connected **USB-IO2** unit, also the last settings after program termination is automatically stored. Previously set or earlier-stored output levels will be maintained as long as the unit is powered. In case of CFD-integrated units the power state is determined by the main on/off switch on the CFD case. The internal unit will maintain the last setting even when the USB cable is removed.

Operation via USB hubs is supported but may not always be functional depending on the hardware.

* some PC brands may not support **USB-IO2** operation on all USB ports.