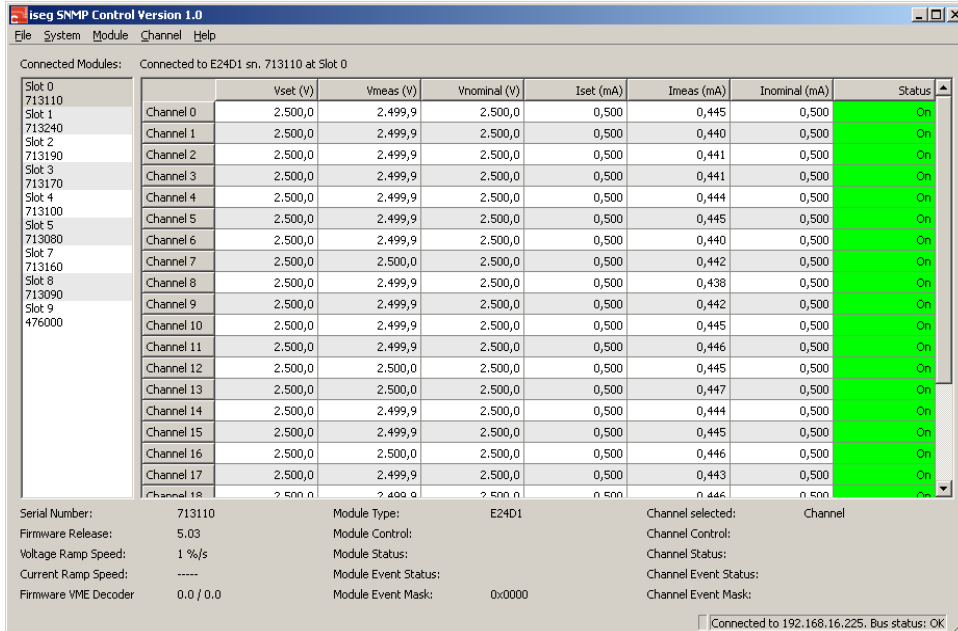


iseg SNMP Control – Short introduction

iseg SNMP Control is a control program for iseg High Voltage modules written in C++ using the Qt library. It runs under Windows or Linux. The network connection is done with the net-snmp library.



Slot	Channel	Yset (V)	Vmeas (V)	Vnominal (V)	Iset (mA)	Imeas (mA)	Inominal (mA)	Status
Slot 0								
713110	Channel 0	2.500,0	2.499,9	2.500,0	0,500	0,445	0,500	On
Slot 1								
713240	Channel 1	2.500,0	2.499,9	2.500,0	0,500	0,440	0,500	On
Slot 2								
713190	Channel 2	2.500,0	2.499,9	2.500,0	0,500	0,441	0,500	On
Slot 3								
713170	Channel 3	2.500,0	2.499,9	2.500,0	0,500	0,441	0,500	On
Slot 4								
713100	Channel 4	2.500,0	2.499,9	2.500,0	0,500	0,444	0,500	On
Slot 5								
713090	Channel 5	2.500,0	2.499,9	2.500,0	0,500	0,445	0,500	On
Slot 7								
713160	Channel 6	2.500,0	2.499,9	2.500,0	0,500	0,440	0,500	On
Slot 8								
713090	Channel 7	2.500,0	2.500,0	2.500,0	0,500	0,442	0,500	On
Slot 9								
476000	Channel 8	2.500,0	2.499,9	2.500,0	0,500	0,438	0,500	On
	Channel 9	2.500,0	2.499,9	2.500,0	0,500	0,442	0,500	On
	Channel 10	2.500,0	2.499,9	2.500,0	0,500	0,445	0,500	On
	Channel 11	2.500,0	2.499,9	2.500,0	0,500	0,446	0,500	On
	Channel 12	2.500,0	2.500,0	2.500,0	0,500	0,445	0,500	On
	Channel 13	2.500,0	2.500,0	2.500,0	0,500	0,447	0,500	On
	Channel 14	2.500,0	2.499,9	2.500,0	0,500	0,444	0,500	On
	Channel 15	2.500,0	2.499,9	2.500,0	0,500	0,445	0,500	On
	Channel 16	2.500,0	2.500,0	2.500,0	0,500	0,446	0,500	On
	Channel 17	2.500,0	2.499,9	2.500,0	0,500	0,443	0,500	On
	Channel 18	2.500,0	2.499,9	2.500,0	0,500	0,444	0,500	On

Serial Number: 713110 Module Type: E24D1 Channel selected: Channel
 Firmware Release: 5.03 Module Control: Channel Control: Channel Event Status: Channel Event Mask:
 Voltage Ramp Speed: 1 %/s Module Status: Channel Status: Channel Event Mask:
 Current Ramp Speed: ---- Module Event Status: Channel Event Status:
 Firmware VME Decoder 0.0 / 0.0 Module Event Mask: 0x0000 Channel Event Mask:

Connected to 192.168.16.225. Bus status: OK

Using iseg SNMP Control

iseg SNMP Control allows to control and monitor up to 10 iseg High Voltage or WIENER Low Voltage modules in a WIENER MPOD crate via an Ethernet network connection.

To connect to a MPOD, select File → Controller and enter the MPOD IP address. The program tries to connect to this MPOD after clicking Ok. The IP address is stored in the configuration file and used at next startup. If no connection is possible, the program prints an error message. Please make sure, the WIENER-CRATE-MIB.TXT is present under c:/usr/share/snmp/mibs.

Network troubleshooting:

- Check the network cabling
- Check the MPOD IP configuration (with MUSEcontrol)
- Check if the MPOD and the controlling computer are in the same subnet, otherwise it is necessary to setup a router
- Try to ping the MPOD

At the moment, no module hotplugging is supported. The program integrates all modules that were present at program startup in the module list. To force a re-scan of all modules, choose File → Controller → Ok.

Programming a new IP address

After a successful connection to a MPOD, it is possible to change the MPODs IP address. This can be achieved by the menu System → Set Crate Address..., entering the new address and then Ok. This function is password protected. To unprotect it, select File → Password → Enter "config" → Ok first.

The program automatically connects to the new address after five seconds.

Keyboard shortcuts

Commands for a single channel	
C	Open a dialog to select a channel
Up	Select previous channel in table
Down	Select next channel in table
V	Set new voltage for selected channel
I	Set new current for selected channel
T	Set new trip current and trip time for selected channel
O	Set selected channel on
F	Set selected channel off
Y	Set channel to state "Emergency Off"
M	Reset channel from state "Emergency Off"
S	Show dialogue "Channel Status / Control"
B	Set new bounds for selected channel
F9	Clear Events for selected channel
Commands for all channels	
Ctrl+V	Set new voltage for all channels
Ctrl+I	Set new current for all channels
Ctrl+T	Set new trip current and trip time for all channels
Ctrl+O	Set all channels on
Ctrl+F	Set all channels off
Ctrl+Y	Set all channels to state "Emergency Off"
Ctrl+M	Reset all channels from state "Emergency Off"
Module commands	
R	Set new Voltage Ramp Speed
Shift+R	Set new Current Ramp Speed
Ctrl+S	Show dialogue "Module Status / Control"
Ctrl+G	Show dialogue "Variable Groups"
Ctrl+E	Set Module to mode "Kill Enable"
Ctrl+D	Set Module to mode "Kill Disable"
F12	Show dialogue "Special Mode" for Firmware update
F11	Show dialogue "Factory Settings"
F10	Clear All Module Events
F8	Program a new Module VME Base Address

F7	Show dialogue "Interlock Out"
F6	Connect to an other MPOD crate
Page Up	Select previous Module in list
Page Down	Select next Module in list

Control a High Voltage channel

The following possibilities to control a HV channel exists:

1. via the main menu
2. via the context menu (right click on channel in table)
3. via keyboard short cuts
4. via double click and direct input in the table cell

To enter a set voltage for a channel (or a group of channels) and following turn the high voltage on, you can:

Select the channel with the mouse
Choose menu "Channel" → "Set Voltage...", input set voltage, click OK
Choose menu "Channel" → "Set On"

or

Right click on channel, choose "Set Voltage", input set voltage, click OK
Right click on channel, choose "Set On"

or

Select the channel with cursor up and down keys
Press V, input voltage, press Enter.
Press O

or

Double click on channels the channels Vset or Iset cell
Input voltage or current, press Enter
Press O

Controlling a load module

Load modules have internal voltage and current measurement and the possibility to select one channel for external voltage and ripple measurement.

The selected channel of a load module can be set in the following operating modes:

- External Measurement On
- Ripple Measurement On
- External And Ripple Measurement On
- Both Measurements Off (internal measurement is activated)

The operating modes are switched with the menu items in menu Channel → Load Module or with the Channel context menu when a load module is selected.

Event handling

Some events prevent to turn on a channel or the whole module, if the corresponding Event Mask bit is set. These Events are:

- Event Voltage Limit
- Event Current Limit
- Event Trip
- Event Voltage Bound
- Event Current Bound
- Event Safety Loop Not Good (Module-wide)
- Event Temperature Not Good (Module-wide)
- Event Supply Not Good (Module-wide)

If the corresponding Event Mask is set, then these Events have to be cleared before the high voltage can be turned on again.

The following possibilities to clear Events exists:

- All Events of the selected module are cleared with:
 - by Menu Module → Clear all Events
 - by pressing F10
- All Events of the selected channel are cleared with:
 - by Menu Channel → Clear Events
 - by pressing F9
 - by right click on the channel and choosing “Clear Events”