

HASSEB BNC MULTIPLEXER



hasseb BNC Multiplexer is an easy to use BNC multiplexer with five BNC connectors. Each BNC connector can be interconnected with any other BNC connector. The interconnections are utilized using relays, connecting both the positive and the negative pin of the BNC connector separately, thus all interconnections utilize galvanic isolation. The device is powered through a micro USB connector.

In addition for powering the device, the USB connector is used to connect the device to the host computer as well. The device is visible to the host computer as a virtual COM port and the operation of the device can be carried out using a Windows software provided by the manufacturer or any other software capable of sending data through serial COM port.

INSTALLATION

The device is power through the USB port so no external power supply is required. The device is visible to the host computer as a virtual COM port. If using Windows 10 operating system, no separate drivers are required. For older Windows versions, the device driver can be downloaded from internet address www.hasseb.fi/multiplexer.

CONTROL PROGRAMS

A simple Windows control software is provided to operate the device. After connecting the device to the host computer, open the control software *multiplexer.exe* and choose the appropriate COM port from the drop down menu.

The interconnections of the BNC connectors can be carried out using the applicable controls in the control software.

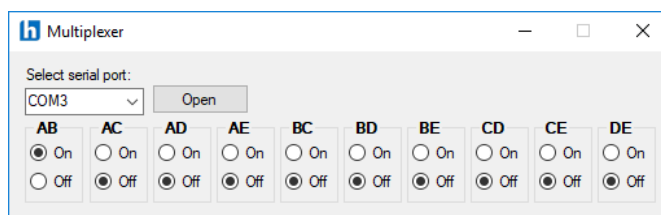


Figure 1. The BNC Multiplexer device can be operated using a simple Windows program.

SERIAL COMMANDS FOR OPERATING THE DEVICE USING CUSTOM SOFTWARE

If the software provided by the manufacturer is not suitable for your application, a custom control software can be utilized. The *BNC Multiplexer* device can be operated by sending two bytes length control commands through the virtual serial port. If you have several multiplexer devices attached to a single computer,

you can assign a serial number for each device to identify the different devices. The serial port settings can be found from Table I and the control commands from Table II.

Table 1. Serial port settings.

Baud rate	9600 kB/s
Stop bits	1
Parity	None
Data bits	8

Table 2. Serial port commands to operate the device using a custom software.

Setting	Command
Disconnect all ports	0x00 0x00
Interconnect all ports	0x00 0x01
Disconnect ports AB	0xAB 0x00
Interconnect ports AB	0xAB 0x01
Disconnect ports AC	0xAC 0x00
Interconnect ports AC	0xAC 0x01
Disconnect ports AD	0xAD 0x00
Interconnect ports AD	0xAD 0x01
Disconnect ports AE	0xAE 0x00
Interconnect ports AE	0xAE 0x01
Disconnect ports BC	0xBC 0x00
Interconnect ports BC	0xBC 0x01
Disconnect ports BD	0xBD 0x00
Interconnect ports BD	0xBD 0x01
Disconnect ports BE	0xBE 0x00
Interconnect ports BE	0xBE 0x01
Disconnect ports CD	0xCD 0x00
Interconnect ports CD	0xCD 0x01
Disconnect ports CE	0xCE 0x00
Interconnect ports CE	0xCE 0x01
Disconnect ports DE	0xDE 0x00
Interconnect ports DE	0xDE 0x01
Set serial number (SN)	0x02 0xSN
Get serial number	0x03 0x00

Specifications	
Input voltage	5 ± 0.5 VDC
Maximum input current	0.5 A
Operating temperature	0 – 50 °C
IP class	21
Dimensions	130 mm x 101 mm x 30 mm
Weight	230 g
Supported operating systems	Windows 11