BAB TECHNOLOGIE

EIB**PORT** V3
Short Manual

(STATUS 9 June 2016)

Item no.
10104 / 13104 / 11104 / 10304 / 13304 / 11304 / 10504 / 11504

[LABEL]

Character reference 'lower case letters':
abcdefghijklmnopqrstuvwxyz Ø= zero
Character reference 'upper case letters':
ABCDEFGHIJKLMNOPQRSTUVWXYZ

EIBPORT standard IP:	**192.168.1.222**
Default user name:	admin
Default password:	eibPort

SAFETY INFORMATION

Electronic devices may be mounted and assembled by qualified electricians only. The applicable accident prevention regulations shall be observed.

- **Network technology skills are required for the initial operation.**
- **The choked bus voltage must not be used as operating voltage 12–30 V DC.**
- **The EIBPORT string (character string) can be found on a label on the back of the device and in these instructions (see above). Please keep this string in a safe place. In case of loss, it is no longer possible to make configuration changes or to create backups.**
- **If the device is connected to the internet, please observe the common safety measures in order to protect it from unauthorised access (firewall rules, passwords etc.).**

Failure to observe these instructions can result in damage to the device, fire or other dangers. The Short Manual is part of the product and must remain with the end user.

DEVICE STRUCTURE

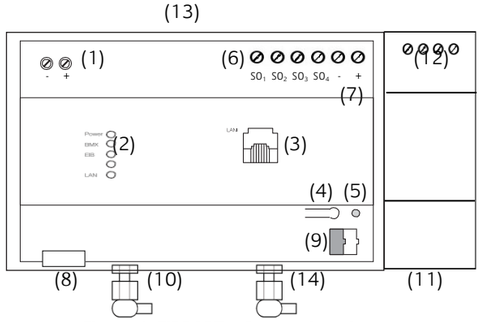


Figure 1: EIBPORT – Connection diagram

(1) Connecting terminal for voltage supply 12–30 V DC, <= 5 VA
(2) Signal LEDs
(3) RJ-45 connector for Ethernet LAN
(4) Programming button KNX/EIB, only for reviewing the bus voltage
(5) Programming LED KNX/EIB
(6) S0 interface (e. g. for energy amount counter)
(7) Connecting terminal for S0 voltage supply 24V DC
(8) USB-2.0 interface for 1-Wire ("bus master" required, see separate compatibility list)
(9) Bus connecting terminal KNX/EIB *(for type 10104 / 10504 / 10304)*
(10) SMA female connector for EnOcean antenna *(for type 10504 / 13104 / 11504 / 13304)*
(11) Powernet KNX mains connection relay *(for type 11104 / 11504 / 11304)*
(12) Connecting terminal KNX/EIB *(for type 11104 / 11504 / 11304)*
(13) SIM card slot *(for type 10304 / 13304/ 11304)*
(14) SMA female connector for GSM antenna *(for type 10304 / 13304 / 11304)*

INFORMATION FOR QUALIFIED ELECTRICIANS

Assembly of the device

- Snap the device onto the mounting rail according to DIN EN 60715.
- The device heats up in operation. Observe maximum operating temperature. Provide sufficient heat dissipation.

Connection of the device (image 1)

- For KNX: Connect bus line with the bus connecting terminal (figure 1, 9).
- For Powernet KNX: Connect line with connecting terminal (figure 1, 12).
- For EnOcean: Connect antenna for SMA female connector for EnOcean antenna (figure 1, 10).
- For GSM: Connect antenna for SMA female connector for GSM antenna (figure 1, 14). Further explanation see chapter "INITIAL SETUP".
- Connect voltage supply with the screw-type terminal (figure 1, 1) according to label (observe power consumption).
- Plug network line (LAN) in the RJ45 female connector (figure 1, 3).
- When using S0: Connect 24 V DC with the connecting terminal for the voltage supply of the S0 interface (figure 2, 5). **Do not connect 230V!**
- Connect S0 devices to S0 interfaces as follows (see figure 2, 4).

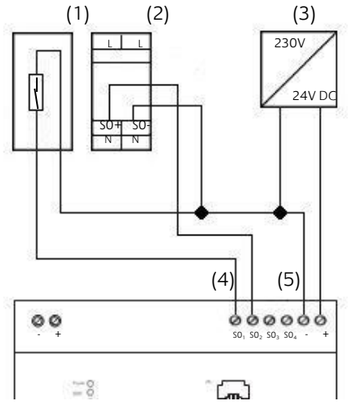


Figure 2: Connection diagram S0

(1) Reed contact for placing on the counter.
(2) e. g. Eltako alternating current meter WSZ12D-32A
(3) Voltage supply 24V DC
(4) S0 interface (e. g. for energy amount counter)
(5) Connecting terminal for S0 voltage supply 24V DC

Make ready for operation

- Switch on voltage supply. The device is ready for operation when the upper 3 LEDs (Power, BMX and EIB) and the LAN LED are green or flashing depending on the communication on LAN and KNX. Starting the device takes 3 minutes.
- For KNX: Switch on bus voltage. EIB**PORT** does not require any ETS application. It is not required to programme the BCU. Further explanation see chapter "INITIAL SETUP".
- For Powernet: Please set correct System ID. Further explanation see chapter "INITIAL SETUP".
- For GSM: Please insert SIM card (device must be switched off) and observe further explanation in chapter "INITIAL SETUP".

OPERATING STATUS INDICATION

Signal LEDs on the front of the device indicate the current operating status of the EIBPORT:

POWER LED

OFF	The device is not ready for operation. No operating voltage is supplied.
GREEN	The operating system has been started
ORANGE	The EIB**PORT** is starting

BMX LED

OFF	The application server has not been started. Only access to the EIB**PORT** start page.
GREEN	The application server is ready for operation.
Flashing GREEN	Communication takes place via the BMX protocol.

EIB LED

OFF	The KNX driver has not been started.
GREEN	KNX driver has been started.
flashing ORANGE	KNX driver is processing telegrams.

LAN LED

OFF	The EIB**PORT** is not connected to the LAN.
GREEN	"Link" LED of the network connection
flashing ORANGE	The EIB**PORT** exchanges Data with the LAN.

CORRECT OPERATING STATUS

POWER	green
BMX	green
EIB	green
LAN	green (flashes during traffic)

ACCESS ESTABLISHMENT

If the device has been started correctly according to the LEDs, the network access to the device can be established. If the device is located in another network area (observe standard IP address, see above), the IP address of the device must be adjusted first!

Please use the program "BAB STARTER" for this purpose. The program can be found on the accompanying CD or can be downloaded from www.bab-tec.de.

(Please read the document "JVM_Settings_de" in order to access the device with the help of the web browser and the local Java installation. http://download.bab-tec.de/jvm_settings_de.pdf).

BAB STARTER installation

For Microsoft Windows you receive a *.zip file to download. For MAC OS X, a *.mpkg file is available.

Note: A detailed description of the BAB STARTER can be found in the accompanying documentation on the accompanying CD or can be downloaded from www.bab-tec.de.

Windows installation

- Carry out "BAB_STARTER_[Version]_setup.exe" in order to start the installation.
- Follow the instructions in the InstallShield Wizard and click on "Continue".
- At the end, confirm the installation with "Finish".

Thereafter, the BAB STARTER can be found in the Windows Start menu file under "BAB TECHNOLOGIE GmbH".

MAC OS installation

- Double click on "BAB STARTER_[Version].mpkg".

Note: It is possible that your system will advise you of a non-verified developer. In this regard, please note the information on the "Apple Gatekeeper", see:
https://support.apple.com/de-de/HT202491, (Status 5 October 2015)

- Follow the instructions of the installation process and click on "Continue" in order to continue the installation.

The message "The installation was successful" confirms the successful installation. The BAB STARTER symbol now appears in the "Programs" folder.

Adjust IP address

Use BAB STARTER in order to find the EIB**PORT** in the local network and change its IP address.

- Start BAB STARTER via the following program icon:

- Click on "Search for Devices..." in order to discover all currently available devices.

Note: Entries under "Visited devices" may be outdated!

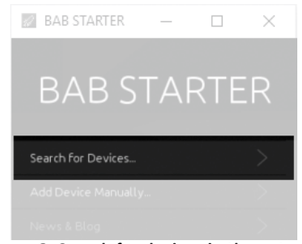


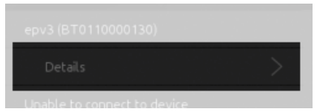
Figure 3: Search for devices in the network

Please also observe the following notes:

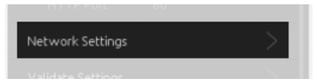
- In order for BAB devices to be recognised, communication via "Multicast" in the network must be enabled.
- Devices which are located in the same network area are displayed lighter than devices which are located in another network area.
- Search for the required EIB**PORT** from the list and click on the entry.

Note: The EIBPORT can be identified with certainty based on the serial number (BTXXXXXXXXX), the displayed devices are possibly not clear.

- If the EIB**PORT** is not located in the same network, access the menu "Network settings"



via the menu "Details":



In this menu, you can change the IP address even if the computer is not located in the same network area as the EIB**PORT**. Overall, the menu allows the following settings:

- ⇨ EIBPORT name
- ⇨ Use DHCP
- ⇨ IP address
- ⇨ Subnet mask
- ⇨ Gateway
- ⇨ DNS server 1-3

- *EIBPORT name:* Assign a unique device name. This name will also be displayed in the BAB STARTER, in the UpdateTool or in the DiscoveryTool.
- *Use DHCP:* If activated, the EIB**PORT** waits for the automatic IP address assignment by a DHCP server.
- *IP address:* Field for the manual assignment of an IP address. Enter the new IP address here.
- *Subnet mask:* Enter the correct subnet mask. e. g. "255.255.255.0"
- *Standard gateway:* IP address of the gateway of the local network. E. g. the internal IP address of the router.
- *DNS server no. 1 – 3:* The IP address of a DNS server.

Note: The DNS service is required for the resolution of host names to IP addresses. When the DNS service is not available, many services in the EIBPORT such as e-mail or weather display cannot be executed.

In order to save the settings, you require the EIB**PORT** string and the password of the user "admin" (information on page 1).

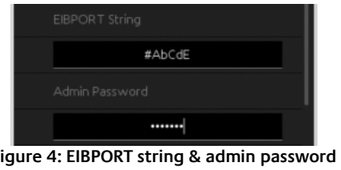


Figure 4: EIBPORT string & admin password

Please click on "Apply Configuration" in order to save your settings:

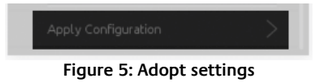


Figure 5: Adopt settings

A dialogue confirms the configuration change.

INITIAL SETUP

Parameters in the ConfigTool

After having adjusted the IP address, make further settings within the context of an initial setup. The initial setup is made via the "System" menu ("ConfigTool"). The following parameters should be considered:

- ⇨ NTP time server for time synchronisation
- ⇨ Physical address for KNX
- ⇨ Determination of the installation location
- ⇨ Assign Powernet system ID (only for Powernet devices)
- ⇨ Set GSM SIM card parameters (only for GSM devices)

- Access the EIB**PORT** in the BAB STARTER. The device can be identified based on the serial number
- Access the "System" menu of the device

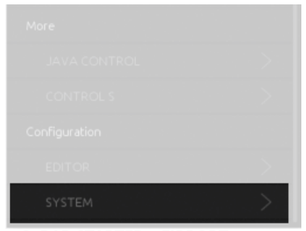
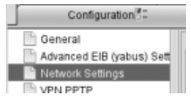


Figure 6: BAB STARTER – EIBPORT system menu

- Enter user data (default settings: admin/eibPort) and the EIB**PORT** string (see above).

NTP time server for time synchronisation

- Switch to "Configuration" > "Network Settings" in the ConfigTool ("System").



The "Time server settings" can be found in the lower third.

Figure 7: Time server settings

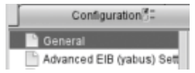
- Enter the valid address of a time server (e. g. 130.149.17.21).

Note: NTP is a time synchronisation service via the network. As the EIBPORT works with an internal state table which derives its time stamps from the EIBPORT system time, it is important that this time is always correct!

Physical address for KNX

There is no ETS application for the EIB**PORT**. The physical addressing is carried out via the web interface.

- Open the tab "Configuration" and the menu "General" in the ConfigTool.



- *Physical BCU address:* Enter the physical address for KNX here. The address must correspond to the place of installation in the KNX system.

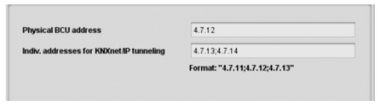


Figure 8: Config Tool – address for KNX

Note: Please use a "Dummy" application for the ETS project in order to document the use of the physical address of the EIBPORT.

- *Indiv. addresses for KNXnet/IP Tunneling:* Here, assign at least 2 free physical addresses from the EIB**PORT** line. Observe the notes concerning the entry of addresses.

Note: The ETS uses the "Tunneling" connection in order to be able to use the EIBPORT as interface to the KNX bus. KNXnet/IP Tunneling is activated by default in the EIBPORT (since f/w 3.4.2). The ETS requires the correct address in order to use the Tunneling connection!

Determination of the installation location

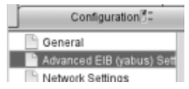
- *Installation location:* Choose the country in which the EIB**PORT** is installed.

Note: This setting determines the time zone and the information on the position of the sun of the Astro Timer.

- Click on "*Save data to eibPort*".

Powernet system ID (for Powernet devices)

- Open the tab "Configuration" and the menu "Advanced EIB (yabus) settings" in the ConfigTool.



- In the window, scroll down to the line "*Powernet system* ID ".

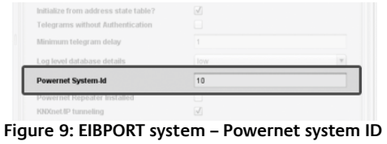


Figure 9: EIBPORT system – Powernet system ID

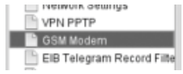
- Please change the Powernet system ID according to your system. By default, the Powernet system ID is set at 10.

Set GSM SIM card parameters

(For detailed information on the GSM modem, please observe the separate documentation "EIBPORT_GSM_Documentation" on the accompanying CD or download from www.bab-tec.de).

In order to start the initial commissioning of the SIM card, proceed as follows:

- Switch off the device
- Insert the correctly oriented SIM card in the SIM card slot (please observe detailed documentation!)
- Screw on the SMA connector of the antenna if this has not already been done
- Switch on the device
- Then switch to "Configuration" -> "GSM Modem" in the ConfigTool.



- Enter the PIN number of the SIM card in the "PIN" field.

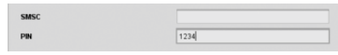


Figure 10: Enter PIN number

The field SMSC (SMS Service Center Number) will be uploaded from the SIM card after the EIB**PORT** has been rebooted (please observe the information in the GSM documentation).

- Save your settings and reboot the device.

After a successful reboot, the current connection data of the GSM modem are available in the window "Help" -> "GSM Info" of the EIB**PORT** Editor.

FURTHER PROGRAMMING

(A detailed description of all EIB**PORT** functions can be found in the EIB**PORT** documentation on the accompanying CD or downloaded from www.bab-tec.de).

For further programming, please use the EIB**PORT** editor. It includes:

- ⇨ Editor for free visualisation (CONTROL L / JAVA CONTROL)
- ⇨ Editor for CUBEVISION
- ⇨ Editor for CONTROL S
- ⇨ Editor for EIB**PORT** Jobs (services)
- ⇨ Configuration for Sonos/UPnP
- ⇨ EnOcean configuration (only for devices with EnOcean interface)
- ⇨ ESF data import

You have the following options for retrieving the visualisation:

- ⇨ CONTROL L = free visualisation, web-based
- ⇨ CUBEVISION = automatically generated 3D visualisation, web-based, automatically scaled to the different display sizes.
- ⇨ CUBEVISION APP = free for iOS and Android.
- ⇨ JAVA CONTROL = Java-based, free visualisation
- ⇨ CONTROL S = basic table visualisation for simpler terminal devices

Notes concerning browser use

The web-based EIB**PORT** visualisations (CONTROL L, CUBEVISION) use current browser technologies such as HTML 5 and CSS. Therefore please only use the following browsers for display:

- ⇨ Google Chrome
- ⇨ Mozilla Firefox
- ⇨ Apple Safari

EIBPORT interfaces (ports)

EIB**PORT** uses the following standard ports for communication:

⇨ HTTP (TCP) =	80
⇨ HTTPS (TCP) =	443
⇨ SSH (TCP) =	36
⇨ BMX (TCP/UDP) =	1735
⇨ KNXnet/IP (UDP) =	3671
⇨ VPN SSL (TCP) =	1724
⇨ VPN PPTP (TCP) =	1723

Note: The HTTP, SSH and BMX port numbers can be changed user "System" – "Configuration" – "Advanced EIB (yabus) settings".

Firmware updates

You can find information concerning firmware updates for the EIB**PORT** on our website and in our newsletter. A firmware update is carried out with the help of a separate UpdateTool.

TECHNICAL DATA

▪ Dimensions (W x H x D):	144 x 90 x 64.5 mm
▪ Operating voltage:	12–30V DC
▪ Power consumption:	≤ 5 VA
▪ Bus voltage via	KNX/EIB
▪ Operating temperature:	0 to 35 °C
▪ Processor:	Vortex 86DX@600Mhz
▪ Memory:	256 MB SD-RAM, 4 GB Flash
▪ Operating system:	Embedded Linux

WARRANTY

We reserve the right to make technical and formal changes to our product in the interest of technical progress. We provide a warranty in accordance with the statutory requirements.

If you are not sure whether your device is damaged, please contact our support:

- **+49 (0) 231 / 476 425 30** or
- **service@bab-tec.de**.

Please request a RMA form before you send the damaged device.

Please observe that we cannot accept unpaid deliveries or deliveries without RMA form!

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