

E-8000

Power Supply/Readout and Control System

Quick Installation Guide

Doc nr.: 9.17.077E Date: 09-03-2017



Start-up E-8000 in 6 steps

SCOPE OF THIS GUIDE

The Bronkhorst® series **E-8000** is a modular Readout and Control (R/C) system for digital mass flow / pressure meters and controllers. Every model can be fitted with or without displays.

This Quick Installation Guide covers the instructions for **E-8000** regarding:

- | | |
|----------------------------|----------------------------------|
| 1. Check E-8000 properties | 4. Safety precautions |
| 2. Installation | 5. EMC requirements |
| 3. Power consumption | 6. Inserting and removing cables |

This Quick Installation Guide also contains a short explanation of the basic operation for the E-8000 which will help you to start-up your **E-8000**. More detailed information can be found in documents listed below:

Instruction Manual E-8000

(doc. nr. 9.17.076)

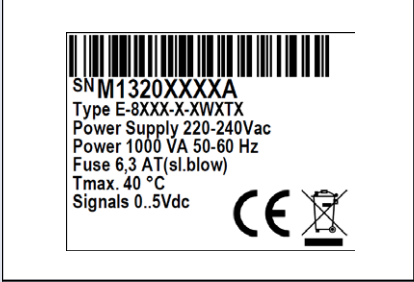





Consists information for general and advanced operation, more detailed information and instructions for troubleshooting.

Hookup diagrams

Consists information for electrical installation.



These documents can be downloaded from the website: www.bronkhorst.com/en/downloads/instruction_manuals or can be sent by e-mail on request.

	<p>1. Check E-8000 properties Before installing an E-8000 system it is important to read the attached labels on the rear side of the instrument and check:</p> <ul style="list-style-type: none"> • Instrument type • Power supply • Power • Fuse • T_{max} • Signals 	 <p>SN M1320XXXXA Type E-8XXX-X-XWXTX Power Supply 220-240Vac Power 1000 VA 50-60 Hz Fuse 6.3 AT(sl.blow) T_{max} 40 °C Signals 0..5Vdc</p>
	<p>2. Installation The E-8000 is rated IP20, implying that the electronics housing and electrical connections do not offer any protection against moist environments. Make sure to create sufficient space for proper heat dissipation.</p>	
	<p>3. Power consumption The various available configurations have a restricted power supply. Typical for Cassette and ½ 19" systems P_{max} = 30W for 19" systems P_{max} = 2x30W. Refer to chapter 2 of the Instruction Manual (9.17.076) to calculate the power consumption of your Bronkhorst instruments and to check if the power supply is sufficient.</p>	
	<p>4. Safety Precautions Safety precautions should be observed before using this product and any associated instrumentation. The safety precautions can be found in the E-8000 Instruction Manual (9.17.076). This document can be downloaded from the website: www.bronkhorst.com or can be sent by e-mail on request.</p>	
	<p>5. EMC requirements All E-8000 configurations carry the CE-mark. Therefore they have to comply with the EMC requirements which are valid for this kind of equipment. However, compliance with the EMC requirements is not possible without the use of proper cables and connector assemblies. More information about EMC can be found in the Instruction Manual (9.17.076, chapter 4)</p>	
	<p>6. Inserting and removing cables Before switching on power, please check if all external connections with meters/controllers and bus interfaces (if applicable) are properly connected. Before removing cables from the E-8000 always switch off power first. Your E-8000 is now ready for operation.</p>	

Basic operation

	<p>Buttons</p> <p>The buttons have the following functions:</p>	
	<ul style="list-style-type: none"> • Enter selected menu • Enter edit mode • Confirm selection/changes 	
	<ul style="list-style-type: none"> • Menu selection up • Select information field • Next character in edit mode • Up in table 	
	<ul style="list-style-type: none"> • Menu selection down • Select information field • Previous character in edit mode • Down in table 	
	<ul style="list-style-type: none"> • Return to previous screen • Undo, cancel and exit edit mode • Switch content in the 'Custom readout 2' field 	
	<p>Display</p> <p>The display contains the following readout areas:</p> <p>Ⓐ Top line Ⓒ Custom readout 1</p> <p>Ⓑ Measure readout Ⓓ Custom readout 2</p>	
	<p>Select instrument</p> <p>To enter the 'instrument' mode, press the button until the red line appears above 'Custom readout 2' than press to activate this field.</p>	
	<p>Instruments will be indicated with their node address. Press or to search for an instrument on the bus. While the message “search” is displayed, the E-8000 is searching for a valid node address and it will not show any specific instrument info until an active node is found. When an active node address is found, the E-8000 will show the corresponding USERTAG or Serial Number in the 'Top line'. It will also show the actual measure and, if applicable, the actual setpoint.</p>	
	<p>Press to select this instrument to be operated by the E-8000 or press to return to the previous selected instrument.</p>	
	<p>When the instrument is connected to a FLOW-BUS system, it is possible to select another instrument on this bus to operate. Check 'Select instrument' in section 3.1.4 of the Instruction Manual (9.17.076) how to select the 'instrument' item.</p>	
	<p>The number of displays that have the same instrument selected must not exceed 3.</p>	

Edit setpoint

Setpoint can only be edited when the setpoint parameter is displayed in 'Custom readout 1' or 'Custom readout 2'.

To edit the setpoint press to select the readout area in which this parameter is displayed. Press to enter the edit mode, the first digit will lighten.

Use or to change the digits, press to select the next digit.

After the last digit is confirmed by pressing , the setpoint will be sent to the instrument.



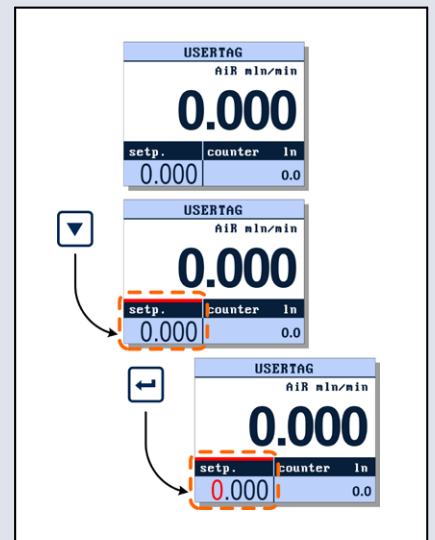
Use the button to exit the edit mode and cancel the changes.



You can change the setpoint edit mode into 'step'. This enables you to change the setpoint using fixed steps. See chapter 'Customize display info' in **section 3.2.22** of the Instruction Manual (9.17.076).



If the entered setpoint is ignored, check controller mode. See chapter 'Controller mode' in **section 3.2.8** of the Instruction Manual (9.17.076).



Reset alarm

Alarm messages will be shown in the 'Top line' of the display and 'Custom readout 2' will be selected automatically.

Enter the edit mode by pressing . Use or to select 'yes' and press again to confirm.

An alarm message will be occurring as long as the cause has not been removed/repaired.

The button can be used to exit the edit mode and cancel the changes. If you are not intending to reset the alarm, you can press to deactivate 'Custom readout 2'. Actual alarm messages will always been shown in the 'Top line'.



Security settings

The security settings screen allows you to define the access of the crucial menu items of the E-8000. For every item, you can choose for enable, disable or password. These settings can be assigned to the following items.

- Edit setpoint
- Reset counter
- Reset alarm
- Select instrument
- Settings menu
- Advanced menu item



To enter the security settings from the readout screen press both and for 5 seconds till 'enter password' display appears. The default password is 'abc'. Please refer to 'Security settings' in **section 3.4.2** of the Instruction Manual (9.17.076) for more information.

