Operating Instructions

for

Software PITeRescaler

PITeRescaler

1. Contents

2. Note

2.1 General

Before unpacking and commissioning the device, the operating instructions and the "General Safety Instructions" document must be read and followed carefully. The general safety instructions, the operating instructions, the data sheet as well as approvals and further information can be downloaded via the QR code on the device or under the respective product on www.kobold.com.

Operating instructions, data sheet, approvals and further information via the QR code on the device or via www.kobold.com

The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

When used in machines, the device should be used only when the entire machine fulfils the EU machinery directive.

2.2 Validity and version of the operating instructions

Due to technical changes, the device documentation available online may not always correspond to the product version you have purchased. If you need an instruction manual that corresponds to the purchased product version, you can request it from us free of charge by email (info.de@kobold.com) in PDF format, specifying the relevant invoice number and serial number. If you wish, the operating instructions can also be sent to you by post in paper form.

2.3 Hazard warnings

The following instructions are intended to ensure your personal safety and to prevent damage to the product described or connected devices. Safety instructions and warnings to prevent danger to the life and health of users or maintenance personnel, or to prevent damage to property, are highlighted in this documentation using the symbols defined here. *The symbols and terms used have the following meaning in the documentation itself:*

Symbol	Explanation	Symbol	Explanation
NOTE Note	Is important information about the product, the handling of the product or the respective part of the documentation to which particular attention should be drawn.	⚠ Caution	Means that minor personal injury or minor property damage may occur if proper precautions are not taken.

Symbol	Explanation	Symbol	Explanation
Warning	Indicates that serious personal injury or substantial property damage may occur if proper precautions are not taken.	Danger	Means that death can occur if proper precautions are not taken.
Warning	Attention: Hot surface!	Warning	Warning: Dangerous electrical voltage

2.4 Safety relevant information

Read and carefully observe these operating instructions before unpacking and before use.
The PITe/U-PACE devices may only be rescaled by persons who are familiar with this operating manual and with the operating manual of the PITe/U-PACE magnetic-inductive plug-in sensor, as well as with the applicable regulations on occupational safety and accident prevention.

3. Introduction

This operating instruction provides Kobold Messring GmbH customers with assistance and instructions for rescaling the PITe/U-PACE type flow meter to pipe inner diameters that differ from the factory settings.
This operating instruction supplements existing documents such as drawings, data sheets, and operating instructions for the PITe/U-PACE type magnetic-inductive flow meter.
Changes due to technical improvements are reserved. This version supersedes all previous editions of this document.

4. Intended use

The PITeRescaler software can only be used in conjunction with the optionally available KOFICOM-IFMU PC interface set.

The PITeRescaler software package is solely for customer-specific parameterization of the PITe/U-PACE and is considered an accessory for the PITe/U-PACE magnetic-inductive measuring device.

Using the PITeRescaler user interface, the customer can independently replace the factory-installed parameter set for 82.5 mm pipe inner diameter to install the PITe/U-PACE in other pipe systems and simultaneously save their individually configured user interface as a factory data set.

The calibration set may only be used for this purpose. Trouble-free operation of the device is only guaranteed if all points in these operating instructions are observed. No liability can be accepted for damage resulting from failure to observe these instructions.

5. Installation

The following components are required to exchange media data:

a. PITeRescaler Package

This software package includes:
- The executable program "*PITeRescaler.exe*"
- Windows driver for PC-Interface Set KOFICOM-IFMU

b. PC-Interface Set KOFICOM-IFMU

Minimum hardware requirement:
100 megabytes of hard disk space and ideally a processor with more than 2 GHz clock frequency and 1 gigabyte of RAM, 1 free USB port

System requirements:
The following operating systems are supported: Windows 10 and 11.

5.1 Installation of the PC-Interface Set KOFICOM-IFMU

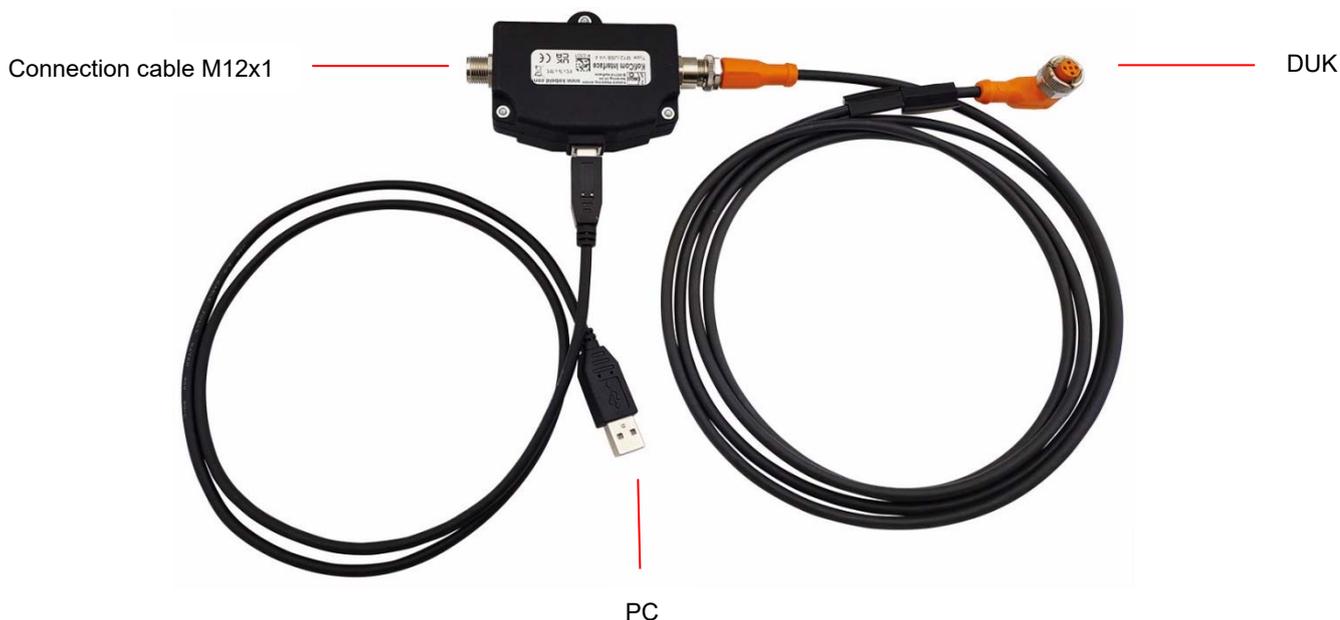Before installing the KOFICOM-IFMU PC-Interface Set, switch off the power to the structure.

Connection cable M12x1 ──────   ────── DUK

PC

illustration 1

Dismantle the existing M12x1 connection cable of your PITE/U-PACE and connect the removed cable to the M12x1 input plug of the PC-Interface Set (image 1 left connection). Now connect the M12x1 cable socket of the PC-Interface Set (picture 1 right connection) with the M12x1 housing plug of the PITE/U-PACE.

Finally, connect the USB port on the PC-Interface Set to a free USB port on your PC using the supplied USB cable.

The 24 VDC supply of the PITE/U-PACE can now be switched on again.

If the PC-Interface Set is connected to the PC via the USB cable, the hardware is usually recognized automatically and the necessary drivers are installed.
If the hardware is not recognized automatically, the necessary drivers must be installed manually using the driver package contained in the software package.

The executable installation package is located in the "Windows USB Driver" directory.

After installing the driver, check in the Windows device manager which COM port number was assigned to the configuration adapter:
To access Device Manager, the following steps must be performed:

- Right-click the Windows Start menu icon and select the "Device Manager" entry.
- A window opens in which all devices connected to the computer are displayed in a tree structure.
- Your PC-Interface Set with a specific port number is now also located under the "Ports (COM&LPT)" label. To check this, disconnect it from the PC and make sure that the associated Com port is no longer displayed.
- Please note the COM port number of the PC-Interface Set, as this number must be set when configuring the user interface in order to establish communication with the PITE/U-PACE.
- The automatically assigned COM port number will remain the same each time it is reconnected for that device.

NOTE Note	If the PC interface set is installed and active, only OUT2 can be used

5.2 Using the scaling software PITeRescaler

PITeRescaler is an open-source program that includes a graphical user interface and enables communication with the PITE/U-PACE.

To use the program, follow these steps:
- Download the current PITeRescaler Package as a ZIP file from the KOBOLD homepage www.kobold.com/qr/PIT
- Unpack the ZIP file in a local directory of your choice
- The software can be started directly without any further installation. To do this, run the „PITeRescaler.exe" file directly

If this does not work, it is necessary to run the "VC_redist.x64.exe" file. After this process, you can launch the tool by running „PITeRescaler.exe".

6. User interface and rescaling of pipe inner diameters

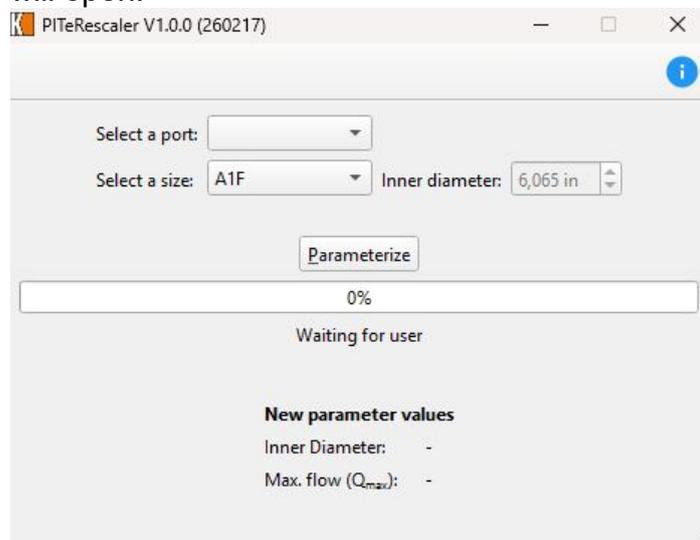Start the "PITeRescaler" by double-clicking "PITeRescaler.exe". A user interface will open.

Figure 1: User interface

Select the COM port number of the PC interface set determined in section 5.1 from the drop-down list.

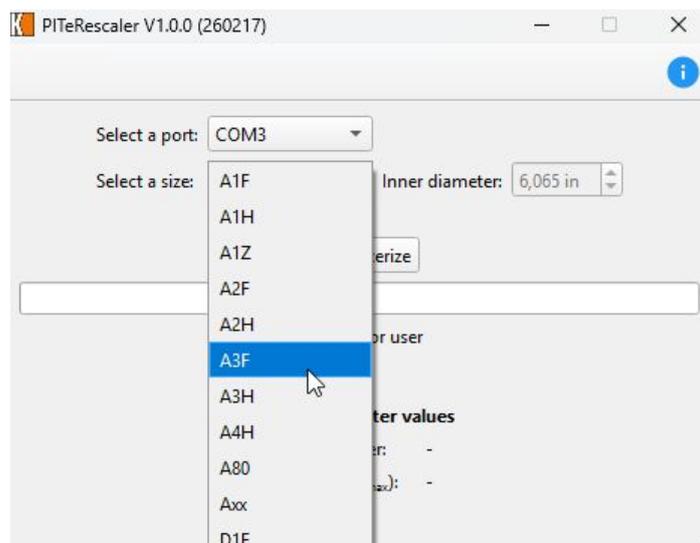Select the desired pipe inner diameter from the drop-down list.

Figure 2: Selection Internal pipe diameter according to order code table

Alternatively, you can enter your own pipe inner diameter by selecting "Axx" for measuring instruments in the target unit "inch" or "Dxx" for measuring instruments in the target unit "mm".
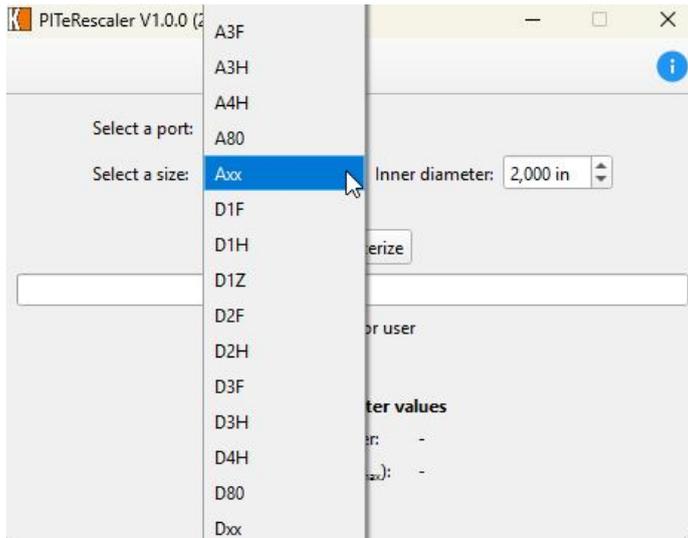
Figure 3: Preparation for entering a custom pipe inner diameter

After selecting the variant "Axx" or "Dxx", the field for entering the inner diameter will become active. Enter your pipe's inner diameter there.
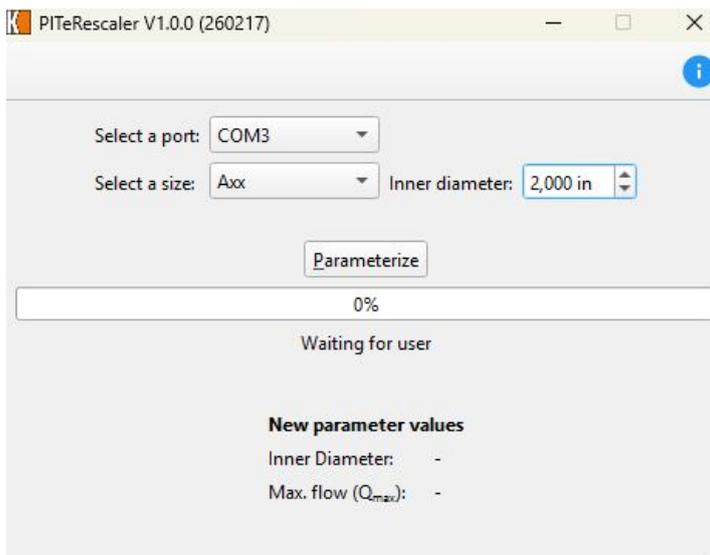

Figure 4: Input of an individual pipe inner diameter

Click "Parameterize"

The PC interface set will make an audible click, and the PITe/U-PACE will switch off and then back on. The connection is now established, and the device is being programmed.

It may take a short while initially for the progress bar to show any progress. The progress bar will fill several times while the new parameters are being programmed.

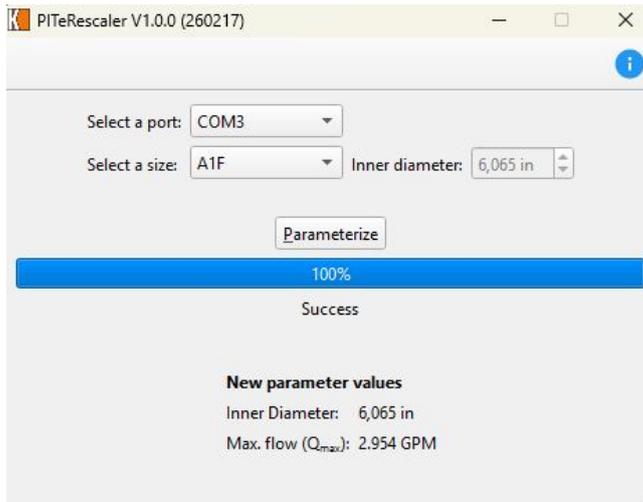Once the programming is complete, the message "Success" will appear.

Figure 5: Fully scaled device

For verification, the entered inner diameter will be confirmed again on the program interface, and the resulting end-of-range value will be displayed.

The new pipe inner diameter has been applied, all affected settings have been adjusted to the new end-of-range value, and the device settings have been saved as new factory defaults.

Please switch the device off and on again. It is now ready for use.

7. Error Handling

Problems with the communication interface
If the communication connection between PC and PITE/U-PACE fails, you must use the WINDOWS device manager to check whether the correct COM port number is set in the calibration program (see chapter 5.1).

If the connection still fails, you can try the following:
• close the calibration program and open it again.
• Unplug the calibration adapter and plug it back in
Then try again to establish the connection with the PITE/U-PACE.

Problems opening the program
If the tool cannot be opened via „PITeRescaler.exe", it is necessary to run the "VC_redist.x64.exe" file.
After this process, you can easily open the tool from the „PITeRescaler.exe" application.

8. Disposal

See "General Safety Instructions" - via the QR code on the device or via www.kobold.com