HYGIENIC BY DESIGN

**ANDERSON-NEGELE**

# Programming Adapter MPU-P 9701

## Application / Specified Usage

· Configuration of internal temperature transmitter for TFP temperature series
  type: **MPU-4, MPU-4 (B), MPU-H and MPU-M (B)**
· Configuration of internal transmitter **MPU-4 (B)** type of level switch NFP series

## Authorizations

CE

## Functional description

The programming adapter **MPU-P 9701** is a handy configuration tool for the temperature transmitter with 4...20 mA output signals. The **MPU-P 9701** has a cable connection which allowed a connection to a USB-Port of a standard PC. The other cable connection is leading to the transmitter.

## Programming adapter MPU-P 9701



## Features

· The **MPU-P 9701** has an integrated display for monitoring of the product configuration in case the **MPU-P 9701** is brought to a remote product location. The push buttons are for scrolling the display data and store/load of data to/from the transmitter.
· The product parameters can be handled in the dedicated software.
· Field configuration with battery operation possible

## MPU-P 9701 included in delivery carrying strap, software, cables



## Provided accessories

· USB cable
· Transmitter cable
· CD with software and documentation

## Options

· Adaptercable for connection via M12 plug: HSG-M12-TEST

| Technical data MPU-P 9701 | | |
|---|---|---|
| **Temperature ranges** | ambient<br>storage | 0...50 °C<br>-10...+70 °C |
| **Weight** | | 200 g |
| **Dimensions** | l x w x h | 165 mm x 50 mm x 30 mm |
| **Electrical connection** | external supply<br>internal supply | via USB-Port<br>NiMH 2,4 V, 450 mAh accumulator |
| **Protection class** | | IP 42 |

## Installation advice for PC driver software

1. **Warning:** Do not connect the MPU-P 9701 to your PC before the installation of the driver software.
   The MPU-P 9701 needs installation of a special USB driver which is included in the software package.

2. Quit all programs and insert the CD.
   · The CD will start an automatic installation.
   · If your autorun function has been disabled the installation should be done manually.
     Select the folder "NegeleProgram_Package" at the CD and run the exe file.

3. During installation you will be prompted for:
   · User rights for the software
   · Folder name for the program installation

4. After the installation the program will start automatically.

5. Open the Help/Contents in the program and follow the instructions very carefully.

## Hardware

1. Direct configuration mode (Programming adapter is connected to transmitter and PC):
   In this mode the programming adapter is connected to and supplied from a PC´s USB port.
   The product is connected to the product cable and the MPU-P 9701 is acting as a signal converter.
   The integrated display and the push buttons have no function.

2. Remote configuration mode:
   The MPU-P9701 is disconnected from the PC and brought to the product site. The internal rechargeable battery
   supplies the MPU-P 9701.

   · Prior to the disconnection from the PC the product configuration data have been stored from the PC software to
     the MPU-P 9701.
     The transmitter will be connected with the programming adapter. Then it would be possible transfering data,
     stored on the adapter, by uploading to the transmitter.

   · At a remote site the MPU-P 9701 can be used for control of the actual product configuration. The integrated display
     shows the configuration details. The buttons are activated for scrolling the data.

## Charging of battery

· **Warning:**
  Do not connect the programming adapter MPU-P 9701 to the PC before the USB-driver has been installed!

· Connect the MPU-P 9701 to your PC to insure that the battery will be recharged.
· The battery will be discharged if the MPU-P 9701 is not connected to a PC for some time.
· It takes 16 hours to fully charge the MPU-P 9701.
· When receiving the MPU-P 9701 it may be necessary to charge it before use.

## Advice

The MPU-P 9701 is not designed to interface with HART or Profibus-PA signals. To be able to configure
Profibus-PA products, a corresponding interface unit is needed (e.g. included in delivery of PLC).

## Advice

It is not possible to operate more than one MPU-P 9701 per PC at the same time.

**Warning**

Disconnect the power supply of the transmitter at the TFP- respectively NFP-sensor to the product before connecting the MPU-P 9701.

**Connection MPU-4, MPU-4 (B), MPU-H**
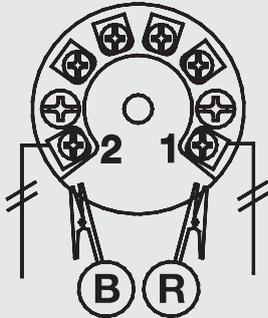
R: red clip (+supply)

B: black clip (-supply)

**Connection via pins of the M12-plug of MPU-M (B)**
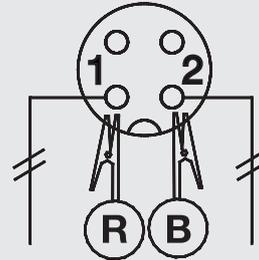
R: red clip (+supply)

B: black clip (-supply)

**Button functions MPU-P 9701**

Write data to transmitter                    Read data from transmitter

negele

Show menu and values on display
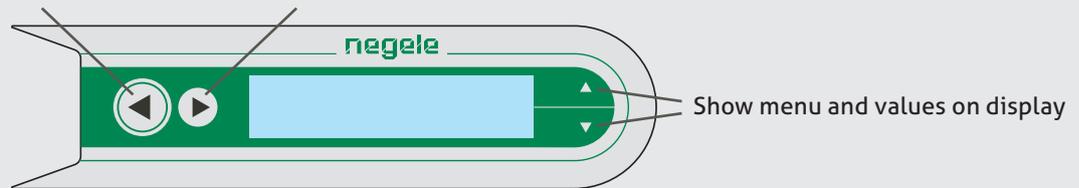
**Menu MPU-P 9701**

Press ↕ simultaneously to enter the internal operation menu containing e.g. Teach-in and Autozero functionalities
· Press ▲ / ▼ to browse the internal operation menu
· Press ◄ to access submenu of current operation menu point
· Press ► to return from submenu to operation menu

**Reset**

If you don't want to change every value individually within the PC software, then press ◄ and ► simultaneously for 5 seconds. This will reset the programming adapter.

**Advice to EMC**

· The device agrees to following standards:
  EMC directive 2004/118/EC.

**Disposal**

· This instrument is not subject to the WEEE directive 2002/96/EC and the respective national laws.
· Pass the instrument directly on to a specialised recycling company and do not use the municipal collecting points.

**Transport / Storage**

· Use suitable transport packaging only to avoid damage of the equipment!
· No outdoor storage
· Store dry and dust free
· Not exposed to corrosive media
· Protected against solar radiation
· Avoiding mechanical shock and vibration
· Storage temperature -10...+70 °C
· Relative humidity maximum 90 %

## Order code

| | |
|---|---|
| **MPU-P 9701** | Programming adapter for MPU-4, MPU-4 (B), MPU-H, MPU-M (B) |

## Overview Transmitters that can be programmed with the MPU-9701

| | | | |
|---|---|---|---|
| |  |  |  |
| **Type** | **MPU-4** (also version B) | **MPU-H** | **MPU-M** (version B from calender week 13 / 2010) |
| **suitable for sensors with wiring head** | **Ø 50 mm, Ø 55 mm** (DIN-B housing) | **Ø 50 mm, Ø 55 mm** (DIN-B housing) | **Ø 18 mm** |
| **Output / Signal** | analog 4...20 mA 2-wire | analog 4...20 mA 2-wire, HART communication | analog 4...20 mA 2-wire |
| **Measurement range** | Range free programmable by **MPU-P 9701** and software | Range free programmable by **MPU-P 9701** and software | Range free programmable by **MPU-P 9701** and software |

## Notes