PROFI-MFII Interface

Keyboard Adapter for PROFITEST 204

3-349-066-03
1/10.99

1 Applications

The PROFI-MFII Interface keyboard adapter allows for complete remote operation of the PROFITEST 204 test instrument, as well as convenient entry of comments for individual test points and descriptions for the system under test. All MF-II keyboard functions are made available via the interface.

Note
This adapter is only intended for use with PROFITEST 204 test instruments. Connection to other instrument types is not allowed and may result in damage to the connected instrument or the PROFI-MFII Interface.
Only type MF-II multifunctional keyboards in accordance with DIN may be connected to the interface. The use of old PC, XT, or AT keyboards is not possible. These keyboards do not function together with the PROFI-MFII Interface, and may lead to malfunctioning, or damage to the adapter.

The interface works together with all commercially available, German language (QWERTZ) MF-II keyboards which support the 02 code set. In case of doubt, use one of the following recommended keyboards:

– Cherry G83-6105 German, 105 Key
– Cherry G81-3000 German, 105 Key
– Unikey KWD 205-D0 German

Suitable keyboards are available from ourselves or our distributors if required.

The device may not be used:

- With open housing
- If visible, external damage is apparent
- If it no longer functions flawlessly
- After excessive stress due to transport
- After long periods of storage under unfavorable conditions (e.g. humidity, dust)
- After extreme overstressing

2 Functional Principle

The PROFI-MFII Interface is equipped with a microprocessor which detects and evaluates all of the so-called make and break codes which are generated by the interconnected keyboard. If the activation of an alphanumeric key is detected, the corresponding character is transmitted to the PROFITEST 204 under consideration of shift and cap-lock key status. If the interface detects activation of any of the function keys from F1 to F8, the ESC key or the up and down scroll keys, a remote control command is transmitted to the test instrument.

3 Connection

- Switch the test instrument off and disconnect or unplug it from the mains before connecting it to the interface.
- Connect the PROFI-MFII Interface to the 9-pole socket at the test instrument with the included connector cable, and secure the plug to the test instrument with the screws.
- Carefully insert the 6-pin PS/2 plug from your keyboard into the socket at the narrow side of the interface housing which faces away from the connector cable.
- Reconnect the test instrument to the mains. The three indicator LEDs at your keyboard should flicker briefly, and the NUM LOCK LED should then light up continuously. If all three or none of the LEDs light up continuously, the keyboard has been incorrectly initialized. Repeat the connection procedure in this case, or use a different keyboard.

Note
The PROFI-MFII Interface is operative as soon as the test instrument has been connected to the mains and its fan is running. The function selector switch position is of no significance.
If your keyboard is equipped with a 5-pin DIN connector, use a suitable plug adapter. Suitable adapters are available from computer hardware retailers.

4 Using the Keyboard

Use the keyboard in the same way you would with your PC. Please be aware of the following points:

- The ESC key and function keys F1 through F8 are used for remote control:
  - ESC key: MENU key
  - F1 key: INFO / STORE keys
  - F2 key: STORE + Comment (version AN+ or higher)
  - F3 key: START key
  - F4 key: MENU key
  - F5 key: set selector switch to TEST
  - F6 key: set selector switch to DATA
  - F7 key: set selector switch to PRINTER
  - F8 key: set selector switch to SETUP
- Use the included template for quick and easy identification of the key functions.
- The STORE + Comment function is equivalent to pressing and holding the STORE key after completion of a measurement with the test instrument. This allows for the entry of a description for the measuring point. This function is only supported by test instruments with software version “AN” or higher. Order a software update for your test instrument if the F2 key does not have any function.
- The ENTER key must be used to conclude an alphanumeric entry (not the RETURN key). The RETURN key generates a carriage return and a new line within the entered description. The current entry line is exited by pressing the ENTER key.
- The NUM LOCK function is permanently activated, and it cannot be deactivated.
- The Ctrl, Alt and Alt Gr keys, as well as any available “Windows” keys, are not functional. The Scroll Lock, Print and Pause keys are also non-functional. The ← and → scroll keys have no function. The Insert, Home, Page Up, Page Down, Delete and End keys have no function. The F9 and F10 keys have no function.
- The F11 and F12 keys can be used to enter the characters “[”and “]” respectively.

- Only those characters can be transmitted to the test instrument, which it is also capable of displaying. The displayable set of characters is restricted accordingly. For example, the "§" character is converted to a vertical line ("|").
- If the test instrument no longer responds correctly to your commands, press the RETURN key. Communications between the interface and the test instrument are re-initiated in this way.

The interfaced must be reprogrammed for keyboards which are laid out for languages other than German. Special models are available upon request.

5 Characteristic Values

Power Supply

Voltage	8 … 12 V DC
Intrinsic Power Consumption	20 mA
Keyboard	5 V DC ±5%, max. 300 mA

Electromagnetic Compatibility

EMC	EN 50081-1 / EN 50082-1

Serial Interface

Baud Rate	9600 baud
Data Bits	8
Parity	none
Stop Bits	1

Connector Pin Assignments

9-Pin Sub-D	pin 1 – NC
	pin 2 – RxD
	pin 3 – TxD
	pin 4 – NC
	pin 5 – GND
	pin 6 – +5 V
	pin 7 – NC
	pin 8 – NC
	pin 9 – +9 V

Keyboard Interface

Connector Pin Assignments

6-Pin PS/2	pin 1 – Data (I/O)
	pin 2 – NC
	pin 3 – GND
	pin 4 – +5 V, 300 mA max.
	pin 5 – Clock (I/O)
	pin 6 – NC

Mechanical Design

Protection	IP 20
Dimensions (LxWxH)	80 mm x 40 mm x 22 mm
Weight	approx. 90 gr.
Cable Length	approx. 100 cm

6 Housing Maintenance

Use a dry or slightly dampened cloth to clean the housing. Avoid the use of cleansers, abrasives or solvents. No liquids may be allowed to enter the housing!

7 Repair and Replacement Parts Service DKD Calibration Lab and Rental Instrument Service

When you need service, please contact:

GOSSEN-METRAWATT GMBH
Service-Center
Thomas-Mann-Str. 20
90471 Nuremberg, Germany
Phone +49 911 86 02 - 410 / 256
Fax +49 911 86 02 - 2 53
e-mail fr1.info@gmc-instruments.com

This address is for Germany only. Abroad, our representatives or establishments are at your disposal

8 Product Support

When you need support, please contact:

GOSSEN-METRAWATT GMBH
Product Support Hotline
Phone +49 911 86 02 - 112
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