

MIPACK

USER'S GUIDE

22.490.200

SETTING PACKAGE
FOR SETTING PARAMETERS

MI4XX

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1 Introduction

1.1 *Setting Pack Features*

MIPACK package contains tools for changing various parameters in measuring devices without external communication. Beside that also devices with communication can be set. This package contains only MIPACK Setting Software, other programmes must be ordered separately. This document describes the use of MIPACK package only. For instructions how to set parameters and how to use software see corresponding service manual or help file. Look at **Chapter 4** for list of related documents.

2 Getting Started

2.1 *System Requirements*

The minimum hardware requirements are the same as required for the following operating systems:

- Windows 95
- Windows 98
- Windows ® NT 4.0
- Windows ME
- Windows 2000
- Windows XP
- 115200 baud RS-232 COM port
- Power supply cord (for communication adapter)

2.2 Unpacking the System

MIPACK Setting package contents (Figure 1):

- Communication adapter RS485 ↔ RS232 [1]
- Adapter board [2]
- RS232 cable [3]
- CD-ROM with MISET Setting Software [4]

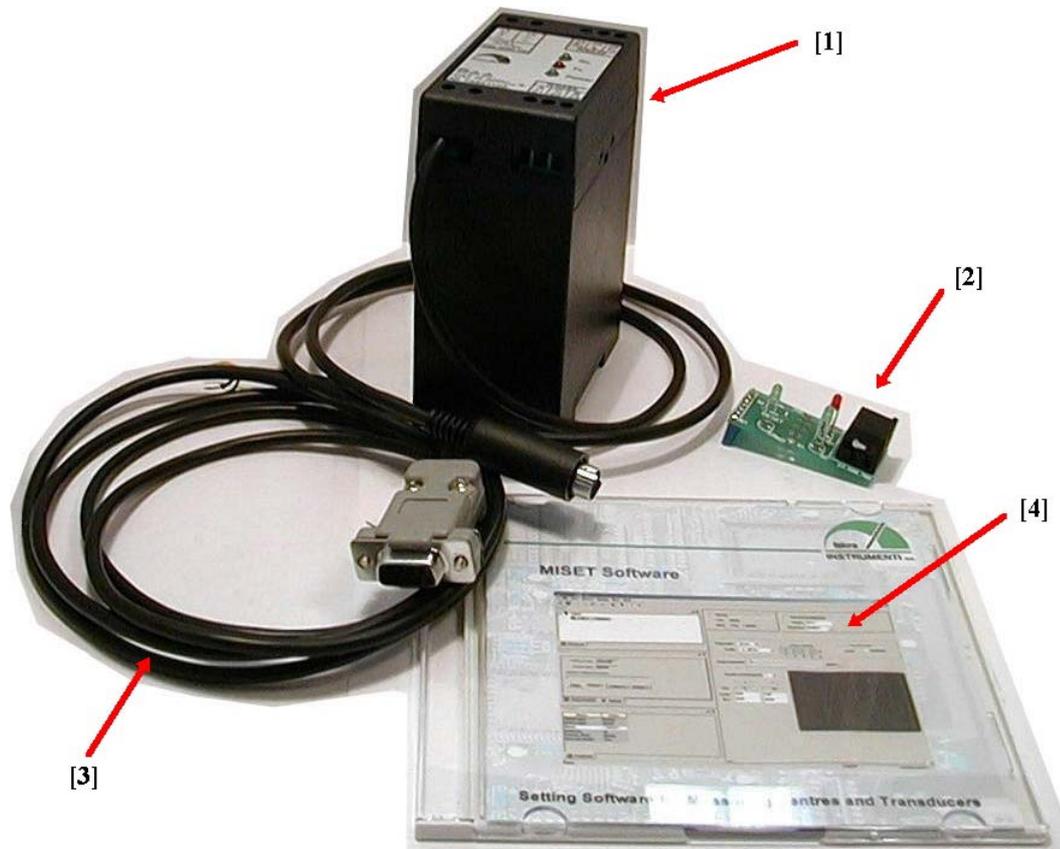


Figure 1: Setting Pack contents

3 Connecting the devices

3.1 General

Connect appropriate power supply cord to supply terminal of communication adapter [1]. Ensure not to exceed the maximum supply voltage, defined on label. Connect RS232 serial cable [3]; DB9 female connector to PC, three wires on other side of cable to communication adapter RS232 connector. For connection details see Table 1.

DB9 Female	Communication adapter	Wire Colour
Rx (2)	Tx (26)	Yellow
Tx (3)	Rx (24)	Green
GND (5)	GND (25)	Brown

Table 1: Connection details – communication adapter

Install MISET Setting Software. Install guide can be found on supplied CD [4].

3.2 *Devices without external communication (only for trained personnel)*

3.2.1 Energy meters with power display / Universal power meter OLD TYPE

Warning!

Personnel undertaking actions on this equipment should be aware of the correct working procedures to ensure safety. During the setting of parameters parts of equipment may present a hazardous voltage.

Disconnect the instrument you wish to change parameters. Remove protection cap on the back side of the instrument (see Figure 2). Connect mini-DIN plug from communication adapter [1] into socket on instrument. Power up communication adapter and instrument. Change parameters you wish. For more information which parameters can be changed see product documentation. After you changed the desired parameters, turn the supply off, remove the mini-DIN plug and close the socket on the instrument with protection cap. For more details on specific instrument see product documentation.

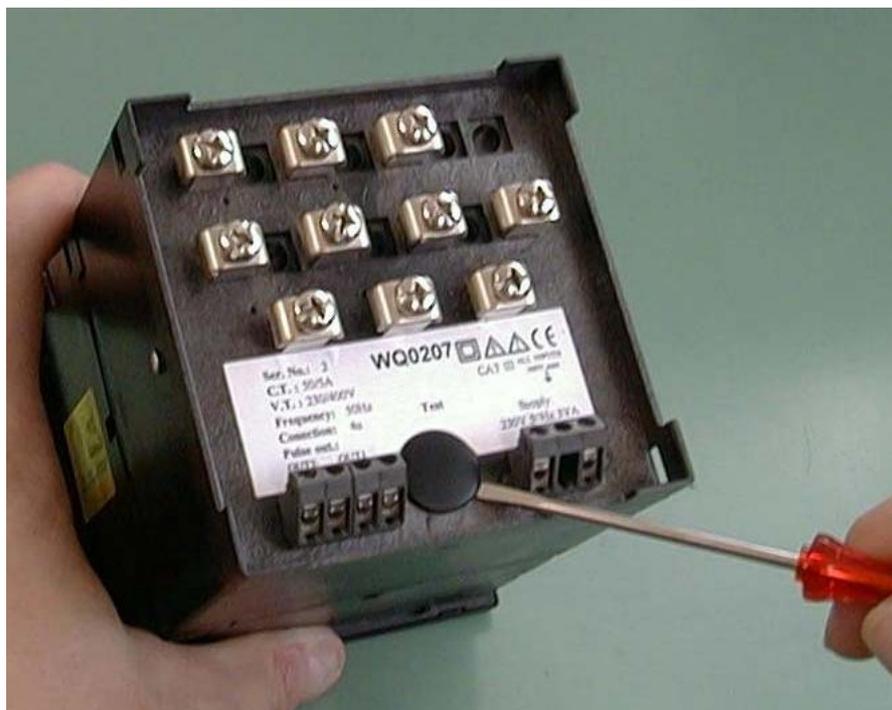


Figure 2: Removing protection cap – OLD TYPE

3.2.2 Energy meters with power display / Universal power meter NEW TYPE

Procedure is the same as in chapter 3.2.1 (old type of energy meters), only difference is the position of the socket on the back side of the instrument. You can see position of the socket in Figure 3.

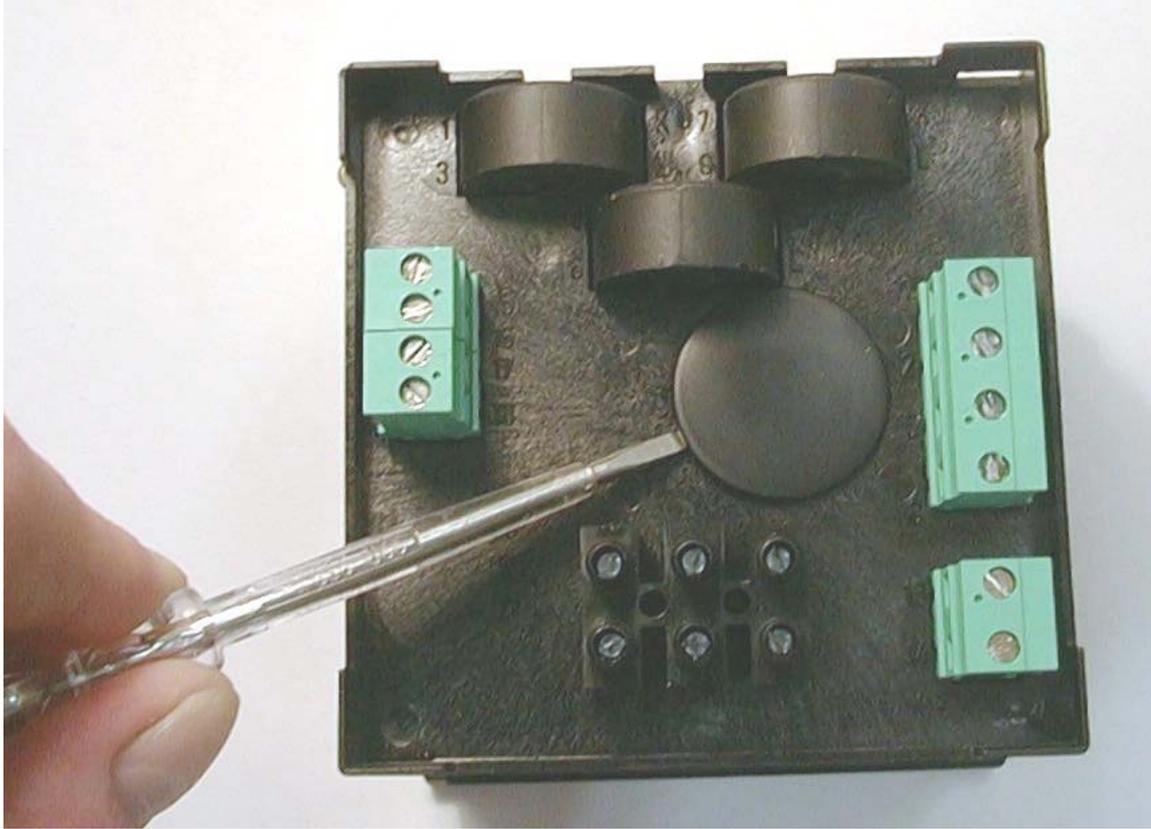


Figure 3: Socket position – NEW TYPE

3.2.3 Power meters and power factor meters

Disconnect the instrument you wish to change parameters. Remove protection cap on the back side of the instrument (see Figure 4). Connect mini-DIN plug from communication adapter [1] into socket on instrument. Power up communication adapter and instrument (nominal input voltage). With EQset software change parameters you wish. For more information which parameters can be changed see EQset manual. After you changed the desired parameters, turn the supply off, remove the mini-DIN plug and close the socket on the instrument with protection cap. For more details on specific instrument see product documentation.

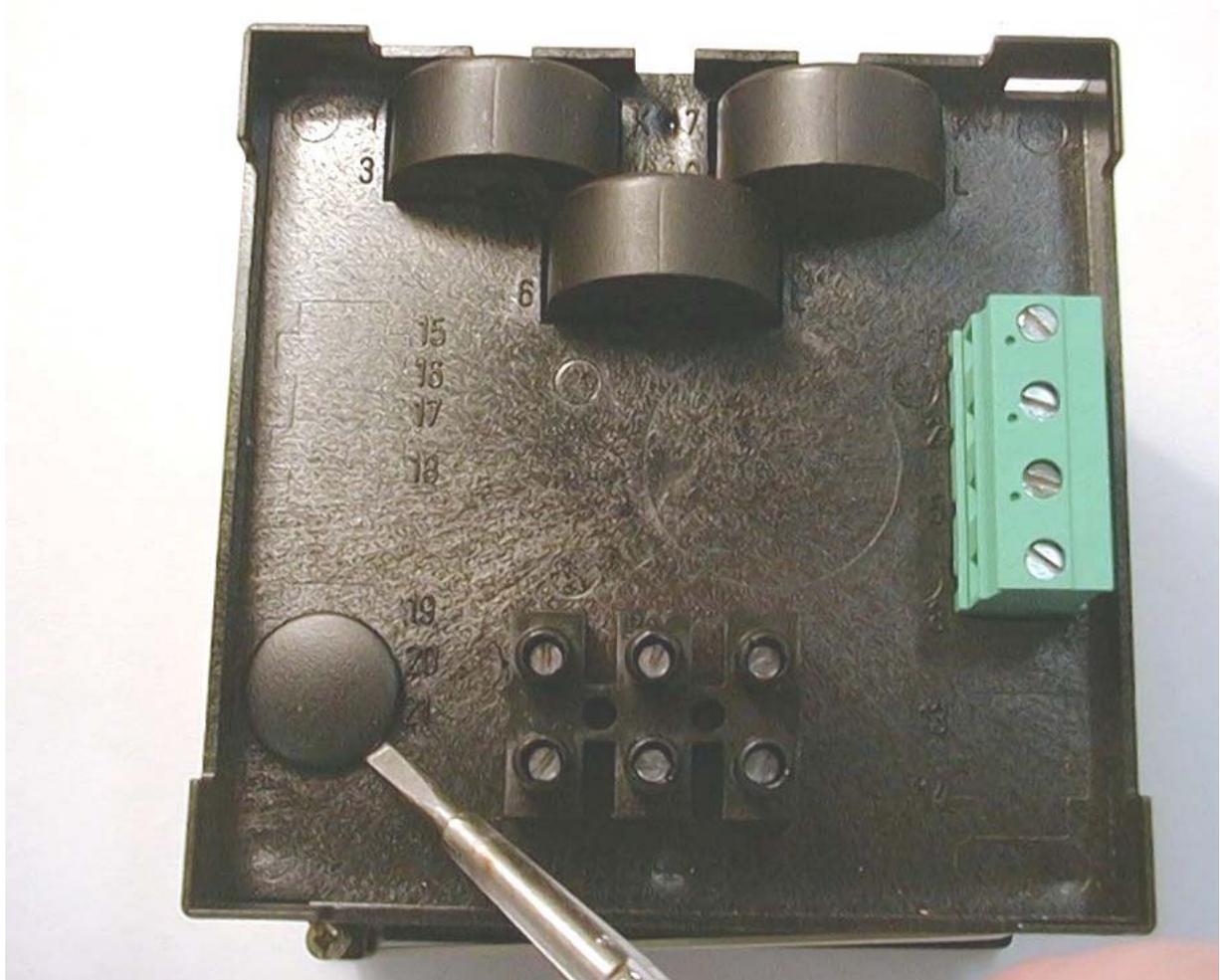


Figure 4: Protection cap on power meters

3.2.4 Synchrosopes SQ02x4

Setting of the synchroscope parameters can only be done if the instrument is opened. Detailed instructions can be found in the SQ02x4 service manual. In order to set the parameters you must connect mini-DIN plug from communication adapter into socket on adapter board [2] (see Figure 10). Connect adapter board [2] on 8 pole connector K3 on the synchroscope PCB board, keep in mind that you connect pin 1 of adapter to pin 1 on PCB. You can see connection layout on Figure 5.

Power up communication adapter [1] and synchroscope. Change parameters you wish. For more information which parameters can be changed see SQ02x4 service manual.



Figure 5: Connection layout for SQ02x4

3.2.5 Measuring transducers (DIN rail box)

Disconnect the transducer you wish to change parameters. Remove top cover of the transducer. This can be done with help of 3mm wide screwdriver (see Figure 6). Pull out the entire circuit assembly.

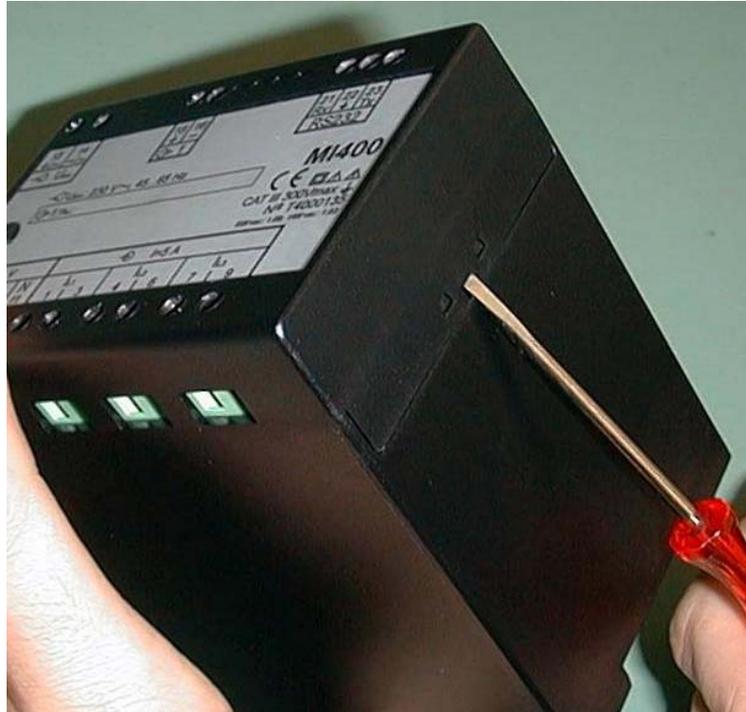


Figure 6: Opening MI4xx transducer

On the printed circuit board (PCB) you will find 7 pole female connector. Currently there are three different types of PCBs used. For transducers MI400, MI413, MI414 and MI421 the picture is shown at Figure 7. Transducers MI416, MI418 and MI420 are shown in figure 8. Transducers MI45x (in development) are shown in figure 9.

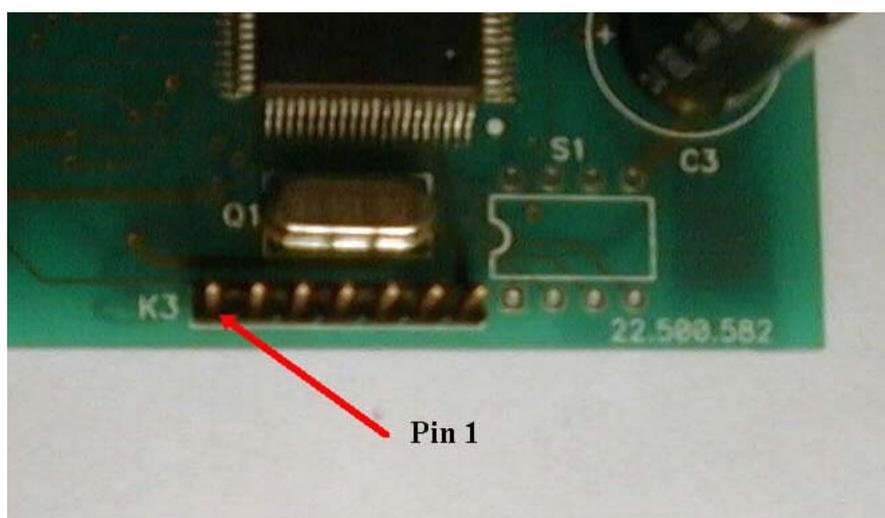


Figure 7: MI400, MI413, MI414 and MI421 connector layout

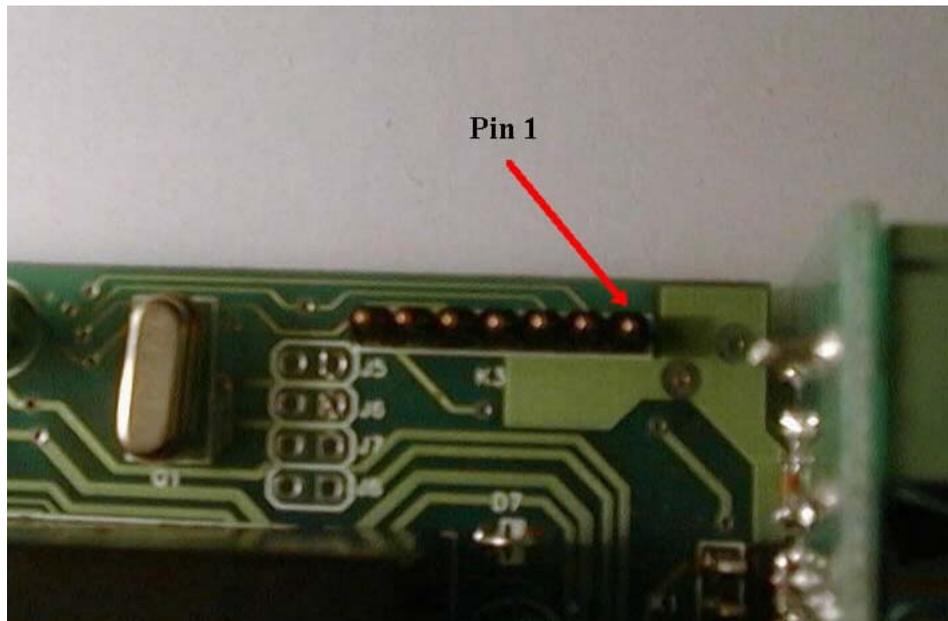


Figure 8: MI416, MI418 and MI420 connector layout

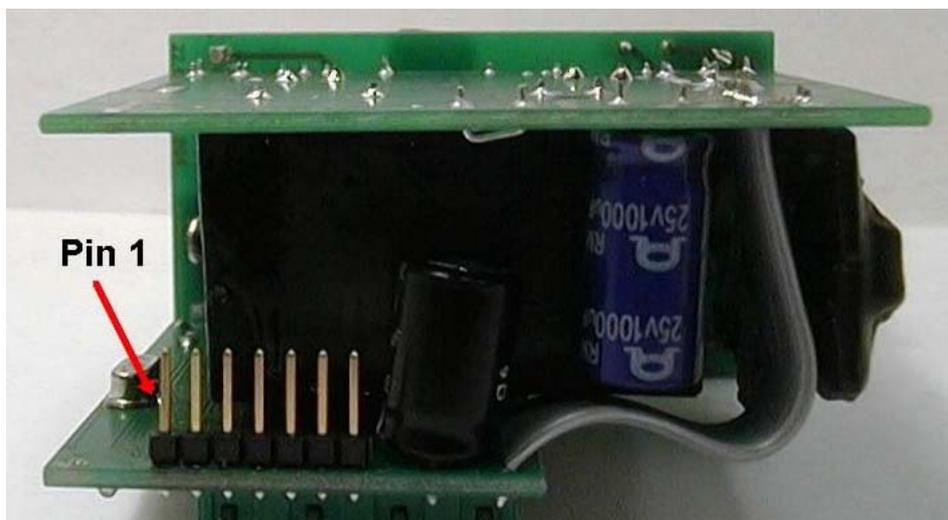


Figure 9: MI45x connector layout

Connect adapter board [2] on 7 pole connector, keep in mind that you connect pin 1 of adapter to pin 1 on PCB. Adapter board picture is shown in Figure 10. There are three LEDs on the adapter board; D3 indicates that the supply voltage is present, D1 and D2 indicate data flow.

Connect mini-DIN plug from communication adapter into socket on adapter board [2]. Power up communication adapter [1] and transducer. Change parameters you wish. For more information which parameters can be changed see product documentation. After you changed the desired parameters, turn the supply off, remove the mini-DIN plug and adapter board. Put the circuit assembly back in box and close it with cover. For more details on specific instrument see product documentation.

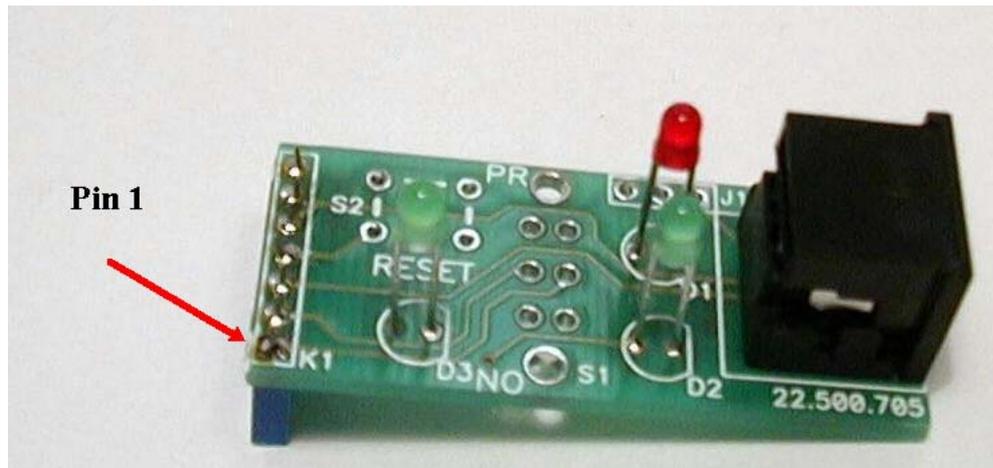


Figure 10: Adapter board

3.3 Devices with RS232 communication

Devices with RS232 communication can be connected directly to PC with supplied RS232 cable [3]. See Figure 11.

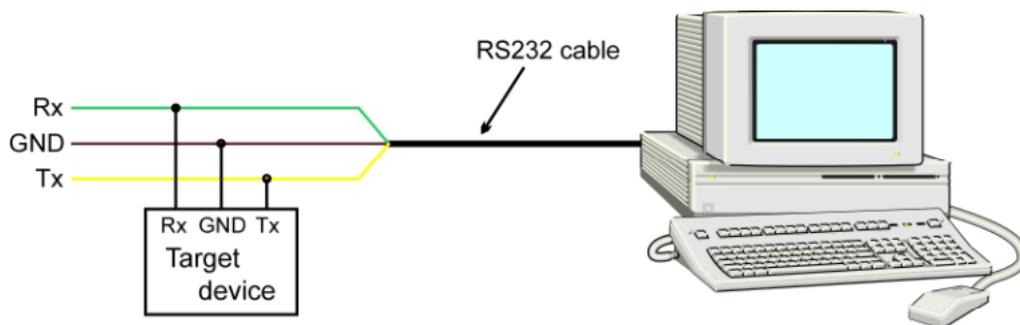


Figure 11: Connecting devices with RS232 communication

3.3.1 Measuring Centres

Disconnect the instrument you wish to change parameters. Connect RS232 serial cable [3]; DB9 female connector to PC, three wires on other side of cable to RS232 terminal on the back side of the instrument. For connection details see Table 2.

DB9 Female	Measuring Centres	Wire Colour
Rx (2)	Tx (3)	Yellow
Tx (3)	Rx (1)	Green
GND (5)	GND (2)	Brown

Table 2: Connection details – Measuring Centres with RS232

Power up the instrument. Change parameters you wish. For more information which parameters can be changed see product documentation. After you changed the desired parameters, turn the supply off and remove the RS232 cable [3]. For more details on specific instrument see product documentation.

3.3.2 Measuring transducers

Disconnect the transducer you wish to change parameters. Connect RS232 serial cable [3]; DB9 female connector to PC, three wires on other side of cable to RS232 terminal of the transducer. For connection details see Table 3.

DB9 Female	Measuring transducer	Wire Colour
Rx (2)	Tx (23)	Yellow
Tx (3)	Rx (21)	Green
GND (5)	GND (22)	Brown

Table 3: Connection details – Measuring transducer with RS232

Power up the transducer. Change parameters you wish. For more information which parameters can be changed see product documentation. After you changed the desired parameters, turn the supply off and remove the RS232 cable [3]. For more details on specific instrument see product documentation.

3.4 Devices with RS485 communication

Devices with RS485 communication can be connected via communication adapter [1] directly to PC. See Figure 12 . Details how to connect communication adapter to PC are described in section 3.1

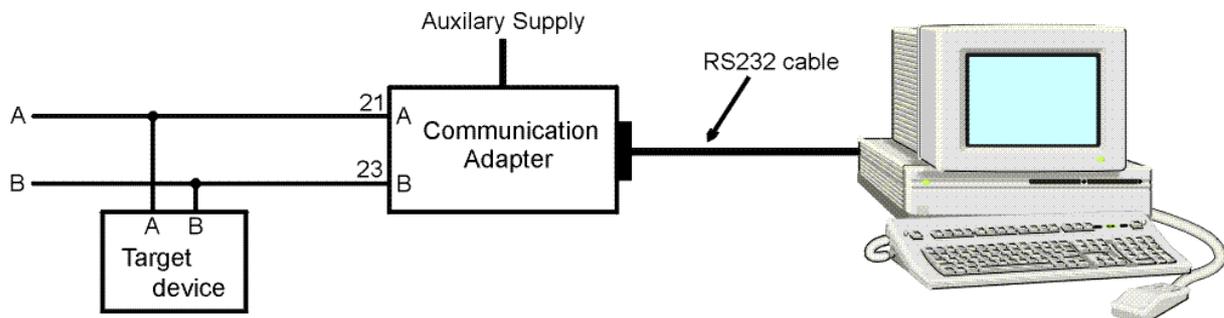


Figure 12: Connecting devices with RS485 communication

3.4.1 Measuring centres

Disconnect the instrument you wish to change parameters. Connect two wires from communication adapter to RS485 terminal on the back side of the instrument. For connection details see Table 4.

Communication adapter	Measuring Centres
A (21)	A (1)
B (23)	B (3)

Table 4: Connection details – Measuring Centres with RS485

Power up communication adapter and instrument. Change parameters you wish. For more information which parameters can be changed see product documentation. After you changed the desired parameters, turn the supply off and remove the wires. For more details on specific instrument see product documentation.

3.4.2 Measuring transducers

Disconnect the transducer you wish to change parameters. Connect two wires from communication adapter to RS485 terminal of the transducer. For connection details see Table 5.

Communication adapter	Measuring transducer
A (21)	A (21)
B (23)	B (23)

Table 5: Connection details – Measuring transducer with RS485

Power up communication adapter and instrument. Change parameters you wish. For more information which parameters can be changed see product documentation. After you changed the desired parameters, turn the supply off and remove the wires. For more details on specific instrument see product documentation.

4 Related Documents

Related documents provide more specific technical information about products mentioned above. These are:

1. MISET user's guide
2. MISET quick guide
3. SQ02x4 service manual
4. SQ02x4 user's manual
5. MI7125, MI7140, MI7150 user's manual
6. Service Manual for MI7120, MI713x, MI7140
7. Product documentation

5 Technical support

For technical support, please contact support@iskra-inst.si.

When requesting technical support for Setting Pack, please include the following information:

- Version number of MISET Setting Software. This can be found in the MISET Setting Software menu, "Help > About MISET".
- PC processor type and speed
- PC operating system and version
- What target device is used (type, serial number, etc.)
- A detailed description of the problem

6 Version Control

Issue	Author	Reason of change	Date
1.01	P. Poklukar	Original Issue	05.12.2001
1.10	P. Poklukar	Added new instruments	01.04.2004



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