This additional information is a complement to the original operation instructions delivered with the concerned PLUGSYS module. It is an addition to the chapter wiring instructions of the 24 volt of supply voltage in the PLUGSYS BASIC SYSTEM CASE Type 603!

This information have only to be taken in consideration if the module has to be installed in an already delivered PLUGSYS BASIC SYSTEM CASE Type 603. The following modules are concerned: **EFM** Type 693, **PCU** Type 687, **PPCM** Type 671, **VCM** Type 681, **VSM** Type 698 and **PSM** Type 676.

The following information has became necessary because **after the serial number 97301** (1997) another power supply is used.

The essential difference to the older instrument consists of the following:

- A) the output voltages of the power supply are connected by means of a 12-pin plug. At the older instrument the cables were screwed on one by one.
- B) the output voltage must be adjusted to the correct value (24V). Adjustment range: 5 to 25 volt. Therefor, for installation a voltmeter is required.
- A) connecting the 24 volts of supply



**HAZARD** 

Turn first the instrument off and pull the mains plug!

Open the case and connect the enclosed cables (white and black/white) with the sockets (red and black) at the connector pins of the mother board like it is described in the original operation instructions.

Spring contacts are fastened at the opposite ends of the cables. These contacts fit in the connector case of the 12-pin socket strip for the power supply. The contacts must be inserted there. For inserting the socket strip has to be removed from the 12 pin connector of the power supply.

**WARNING**: the connector on the power supply is protected against unintentional slipping out! For taking the connector out push the strip on the back side aside by means of a small screwdriver.

Then put the contact springs into the connector case:

1. white into position

into position 11 (+24V)

2. black/white into position 12 (zero ref.)

Take care that the safeguarding hooks of the contact springs "click shut" in the scheduled breakthroughs of the connector case so that they cannot slip out.

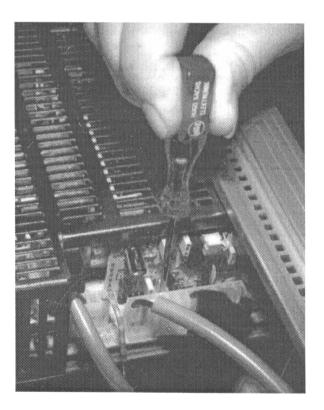
Connect the 12-pin socket strip at the power supply again.

## B) check / adjust the height of the voltage (24 volts)

Before you can take the equipment in operation now, you must check the voltage with a voltmeter and adjust to the correct value of 24 volts if necessary. At this work the instrument must be connected to the mains voltage and switched on in open condition. This work is very dangerous. Therefor it should be carried out by an expert trained correspondingly.



Warning: Danger of an electric shock! Only an expert should carry out this work!



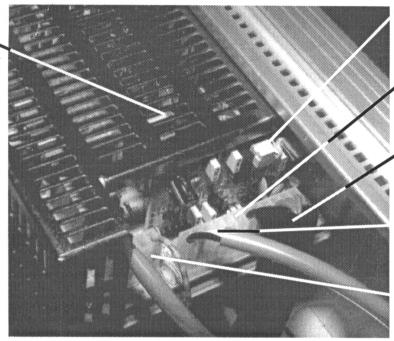
For pulling out the 12-pin connector push the safeguarding strip on the back side aside by means of screwdriver.

## **Trimmer potentiometer for 24 volts**

Adjustment range approx. 5 -28 volts, approx. 25 turns Note: The direction of rotation is not as expected!

clockwise: voltage becomes lower

contrary clockwise: voltage becomes higher



Trimmer potentiometer for 5 Volt. Please, do not change this setting!

Plug (12 pins) for supply voltage

Connection for 5 volts supply: red cables (pins 1 to 3) = +5 V black cables (pins 4 to 6) = ground

Connection for 24 volts: white cable (pins 11) = +24 V black/white cable (pin 12) = reference zero

Plug for connection of the mains voltage. **Attention mains voltage!** 

Position of trimmer potentiometer and connections of the power supply.

Attach the voltmeter e.g. at the connections of the two lines at the system bus now. Connect the instrument to the mains voltage.

## Pay attention to electric shock danger!

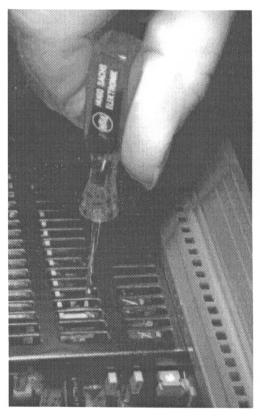
Switch the instrument on and check the voltage. It should be in the range of about 23 to 24,5 volts. If the voltage is outside this range, the trimmer potentiometer must be adjusted correspondingly by means of a small screwdriver like shown in the illustration.

## **WARNING: Danger! Take into account:**

- Introduce the screwdriver only in the slit of the trimmer potentiometer!
- Do not touch any other components with the screwdriver! The electronic circuit can be damaged
- High, dangerous voltages are available inside the shielding case!

**Note:** If necessary, if you don't have a voltmeter, you can adjust the voltage in the range of about 22 to 24 volts. In this case you should rotate the Trimmer Potentiometer's 30 turns counterclockwise (=ending position of the trimmer) first and then around 6 turns back (= clockwise). The adjustment of the voltage in the described way is not very exact. Therefore it can lead to malfunctions of the plug-in module.

**Warning:** if the voltage is adjusted too high (> 24,5 volts), the plug-in module can be damaged!



Inserting the screwdriver for adjusting the 24 volt

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