

# Brief Instruction System Modifications and Extensions

## miniControl *plus*

### 1 Modifications or extensions of your miniControl *plus* system

Shut down the system prior to all modifications and extensions. Afterwards it has to be made ready for operation again. The necessary steps are shown below.

### 2 Shutting down the system

1. Switch the system to charging mode (operation mode switch (16) to position "0")  
**Note:** Check that the LC-display (15) shows "charging mode".
2. Disconnect the system from mains (mains switch (9) to position "0")
3. Remove battery fuses F2/F3/F4 (11)
4. Remove mains fuse F1 (11)
5. De-energise the system and protect it against unintentional restart

```
time:           08:00
                17/08/13
battery:        245.0 V
                0.1 A
State:          mains ok
                off (charging) ←
help  test  menu
```

Status "charging mode" (arrow)

### 3 Modifications/extensions/maintenance

You can now start working on the de-energised system and e.g. connect the BUS-line of a remote control unit (MCT-12 or MCT-12S) to the terminals of the RS485-interface (for exact pin assignment see connection diagram).

### 4 Restart the system

1. Remove restart protection and energise the system
2. Insert battery fuses F2/F3/F4 (11)
3. Insert mains fuses F1 (11)
4. Connect the system to mains (mains switch (9) to position "1")  
  
The system starts booting. This process can take several minutes.  
**Caution:** Do not shut down the system during the booting process!
5. Switch the system to "ready to operate" (operation mode switch (16) to position "1")

