E. Grouping of the local switches on the Motor Controller

1. Identify the Motor Controllers to program and disconnect them from the IB+ bus. Connect the WTT to the Motor Controller(s) which have to be programmed.

2. Enable the function by pushing the button on the back of the WTT at least 3 seconds. On = 2 x outside-inside running light on the WTT.

3. Choose the wanted switch configuration with the Up-button on the WTT.

You have 8 possibilities to choose from. The choice will be displayed with the 4 LEDs on the WTT.
Red = Motor 1, Orange = Motor 2, Yellow = Motor 3, Green = Motor 4.

Example: All 4 LEDs on the WTT blink one by one = Each switch controls 1 motor

F. Battery
1. Unloose screws and remove cover of Wiring Test Tool.
2. Remove used battery and insert new one (Type CR 2430).
3. Proper disposal of used battery.

Batteries or accumulators have to be separated from other type of waste and must be recycled through your local treatment and recycling system.

A. This installation test tool offers the following possibilities

1. Sending of animeo IB+ telegrams for examination of the C and IB+ ( ) wires on the 4 wire bus as well as the correct rotation direction of the motors.

2. Sending of animeo IB up/down orders for examination of the C, Up and Down ( ) wires of the IB bus.

3. Short circuit detection between the C and IB+ ( ) wires of the animeo 4 wire bus.

4. Programming of the Motor Controller local switch allocation to the motor outputs, individual or grouped.

B. Preliminary conditions

1. All blinds within the tested zone should be in the upper end limit position (completely up).
Check the position of the blinds from the outside of the building!

2. Examine whether wind conditions allow to drive the blinds.

3. Connections of the local switches between Motor Controller of different zones are not allowed without using the switch zone splitter.

4. Battery test of the WTT (3 V battery type CR 2430). A "low battery" is indicated by 4 simultaneously flashing LEDs on the WTT after pressing one of the buttons on the device. Be sure that the device is not yet connected to the system. If the "low battery" indication appears, replace it before continuing! The life span of the battery amounts to approx. 2000 send instructions.

5. Remove the bus connection from the Building Controller to the Motor Controller zone and attach the WTT to the Motor Controller zone.
C. Detectable errors

Error 1: Motor Controller without supply
Error 2: Missing IB+ transmission to the Motor Controller
Error 3: Short circuit in the IB+ bus, between the C and IB+ wire (a short circuit is indicated by 4 simultaneously flashing LEDs on the wiring test tool)
Error 4: Inverted up/down motor connection
Error 5: Broken fuse for the corresponding motor output
Error 6: Broken motor or missing connections
Error 7: Inverted up/down wires or short circuit on the IB bus. Start to look for the error from the Motor Controller which is closest to the Building Controller
Error 8: Wiring mistake on the local switches

Remark: When running long test sequences the thermal protection of the motors could be activated. In this case wait 30 minutes before continuing.

D. Wiring test sequence

### WTT Command | Reaction | Possible error
--- | --- | ---
1. **Testmode on** by pressing (1 sec) the button on the back of the tool.

   - Testmode on = orange LED blinks 3 x. Running light on all connected Motor Controllers. During the test mode, all local switches are disabled!

   - Error 1
   - Error 2
   - Error 3

   - *After correction, repeat this step until the running light is enabled on all Motor Controllers*

2a. **IB+ Down order**. Order indicated on WTT by blinking of the red and the green LED.

   - Visual check of all blinds in the zone. All blinds move down for approx. 10 sec.

   - Wrong running direction
     - Error 4
   - Does not move
     - Error 5
     - Error 6

   - *After correction, repeat step 2a and 2b until o.k.*

2b. **IB+ Up order**. Order indicated on WTT by blinking of the red and the green LED.

   - Visual check of all blinds in the zone. All blinds move up for approx. 10 sec.

   - Error 7

3a. **Switching to IB mode** in order to test the C, up and down (▲▼) wires of the IB bus.

3b. **IB Down order**. Order indicated on WTT by blinking of the red and the yellow LED.

   - Visual check of all blinds in the zone. All blinds move down to the lower end limit.

   - Error 7

3c. **IB Up order**. Order indicated on WTT by blinking of the red and the orange LED.

   - Visual check of all blinds in the zone. All blinds move up to the upper end limit.

4. **Test mode off** by pressing (1 sec) the button on the back of the tool.

   - Test mode off = yellow LED blinks 3 x. The running light on the Motor Controller stops. All local switches are enabled again!

5. **Check each of the local switches in the building individually!**

   - Error 8