Manuals+ — User Manuals Simplified.

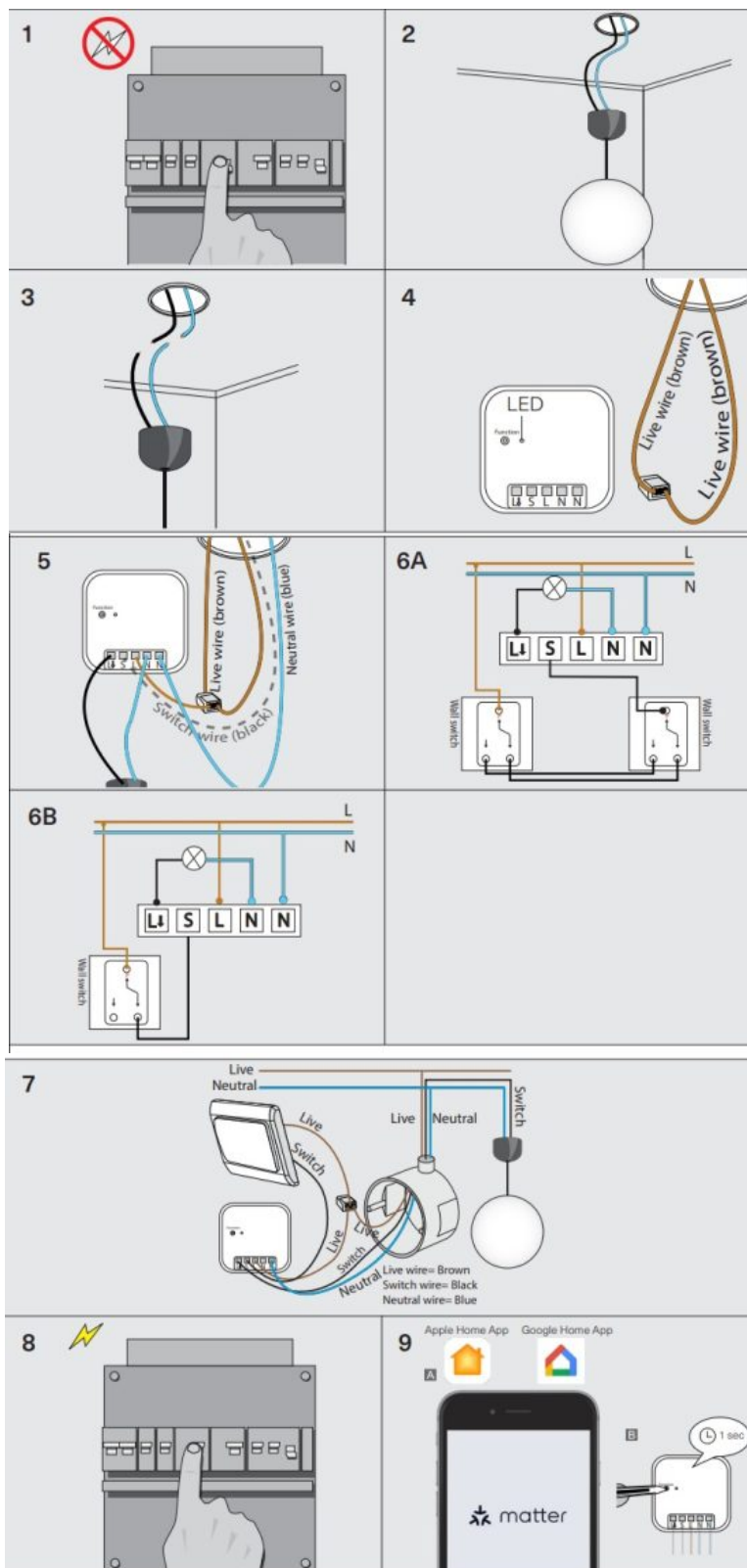# Trust MACM-250 Smart Built In Dimmer User Manual

**MATTER & START-LINE SMART
BUILT-IN DIMMER
MACM-250
USER MANUAL**

Contents
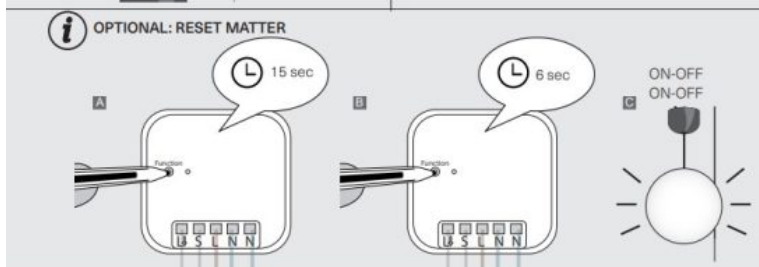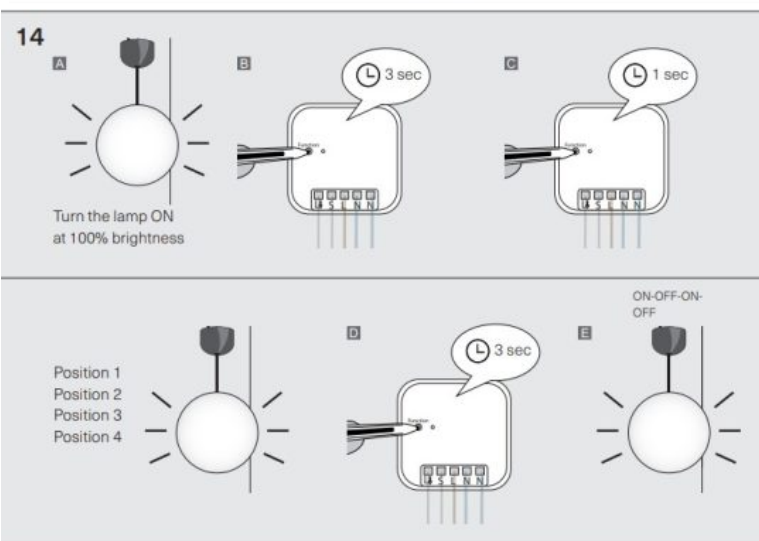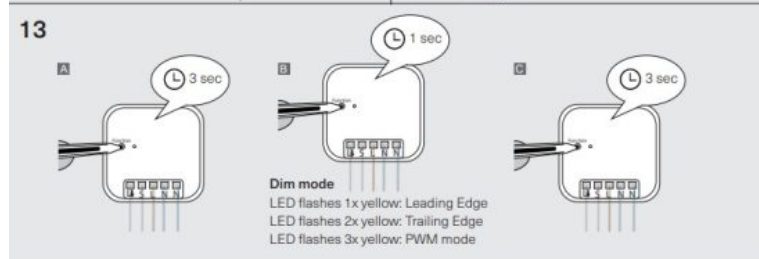
MACM-250 Smart Built In Dimmer

MACM-250 MATTER & START-LINE SMART BUILT-IN DIMMER

1

2

3

4

LED

Live wire (brown)

Live wire (brown)

5

Live wire (brown)

Neutral wire (blue)

Switch wire (black)

6A

L

N

Li S L N N

Wall switch

Wall switch

6B

L

N

Li S L N N

Wall switch

7

Live

Neutral

Live   Neutral

Switch

Live

Switch

Live

Switch

Neutral

Live wire= Brown
Switch wire= Black
Neutral wire= Blue

8

9

Apple Home App   Google Home App

A

matter

B

1 sec

10

A 1 sec

B ON

C

ON-OFF-
ON-OFF

11-12

ON

13

A 3 sec

B 1 sec

C 3 sec

Dim mode
LED flashes 1x yellow: Leading Edge
LED flashes 2x yellow: Trailing Edge
LED flashes 3x yellow: PWM mode

14

A

Turn the lamp ON
at 100% brightness

B 3 sec

C 1 sec

Position 1
Position 2
Position 3
Position 4

D 3 sec

E

ON-OFF-ON-
OFF

15

ⓘ OPTIONAL: RESET MATTER

A 15 sec

B 6 sec

C

ON-OFF
ON-OFF

OPTIONAL: REMOVE A SINGLE START-LINE TRANSMITTER

OPTIONAL: RESET START-LINE MEMORY

OPTIONAL: RESET START-LINE MEMORY WITH REMOTE

1. SWITCH OFF THE MAINS POWER

   Always switch OFF the power supply (at the fuse box) before installing or removing this product. The built-in dimmer can be used for two wall switches connected to one light (stairwell / hotel circuit) or for a single wall switch connected to one light.

2. DISCONNECT CEILING LIGHT

   Remove the existing lighting from the ceiling and leave wires connected to the lighting. The lighting must not exceed the maximum wattage (250 Watt). If there is no live wire (brown) present, it must be pulled. Consult an electrician if in doubt.

3. DISCONNECT THE SWITCH WIRE (BLACK) AND THE NEUTRAL WIRE (BLUE)

   To install the built-in dimmer, disconnect the switch wire (black) and the neutral wire (blue) from the lamp. (Disconnect from the terminal block or cut the wires if necessary) Consult an electrician if you are unsure about the wire colors.

4. CONNECT THE LIVE WIRE TO A TERMINAL BLOCK

   Connect the live wire (brown) from the ceiling box to a terminal block. Connect the other end of the phase wire (brown) to the same terminal block.

5. CONNECT THE WIRES TO THE BUILT-IN SWITCH

   • Connect the neutral wire (blue) from the ceiling box to the outer [N] contact of the built-in dimmer.

   • Optional: The S contact does not need to be connected. Connect the switch wire (black) from the ceiling box to the [S] contact if you want to (continue to) use a wall switch.

   • Connect the neutral wire (blue) from the lamp to the middle [N] contact.

   • Connect the switch wire (black) from the lamp to the [⎘] contact.

   • Connect one new live wire (brown) from the terminal block to the [L] contact.

   • Tighten the terminal screws firmly.

6A. INSTALLATION DIAGRAM DOUBLE WALL SWITCH
This is the technical installation diagram of the built-in dimmer with two wall switches (hotel / staircase circuit).

CONNECTION BEHIND WALL SWITCH (NOT SUITABLE FOR HOTEL SWITCHING)

- Note how the existing wires are connected and disconnect the wall switch.
- Connect the switch wire (black) from the wall box to the [LL] contact.
- Connect the live wire (brown) to a terminal block.
- Connect a new live wire (brown) from the terminal block to the L contact.
- Connect a new live wire (brown) from the terminal block to the wall switch (where the live wire (brown) was previously placed)
- Connect a (blue) neutral wire to the right [N] contact. If there is no neutral wire, it must be pulled. Consult an electrician if in doubt.
- Connect a new black switch wire to the S contact and connect it to the wall switch (where the black switch wire was previously placed)

TURN ON THE MAINS POWER
Turn on the mains power before continuing with the installation. After this step, make sure that no stripped parts of the wires are touched.
To connect the built-in switch to a Matter App, proceed to step 9.
To connect the built-in switch to a Trust Switch-in Start-Line transmitter, proceed to step 10.

CONNECT TO MATTER APP

Make sure the phone or tablet is connected to a 2.4 Ghz WiFi network and not to a 5 Ghz WiFi network.
A Open the Matter App (e.g. Apple Home or Google Home App) on your phone or tablet.
B Short press the "FUNCTION" button to start Matter pairing mode. The LED indicator on the dimmer will flash green. (Matter pairing mode lasts for 5 min, connect the dimmer to a Matter App within these 5 min)
C Follow the instructions in the App to connect a new Matter device. If you are unable to connect the built-in dimmer, reset it according to the step "Reset Matter Built-in Dimmer"
PAIRING WITH START-LINE TRANSMITTER
A Press the "FUNCTION" button shortly to activate pairing mode. Pairing mode will be active for 12 seconds and the LED indicator on the built-in switch will flash green.
B During pairing mode (within 12 seconds), send an ON signal with a Trust Switch-in Start-Line transmitter.
C The connected lighting will go ON-OFF-ON-OFF to confirm that the transmitter has been paired. The built-in dimmer can store up to 32 different transmitters in its memory.
WIRELESS CONTROL WITH START-LINE TRANSMITTER
Send an ON signal with the paired Start-Line transmitter to switch on the light/device wirelessly.
Send an OFF signal with the paired Start-Line transmitter to switch off the light/device wirelessly.
ACTIVATE DIMMING SEQUENCE
– Press the ON button of a paired transmitter to switch on the dimmer.
– Press ON again to activate the dimming sequence
– Press ON a third time to lock the desired dimming level
The dimming sequence automatically stops and locks the dimming level at the highest or lowest point when no signal is given with a transmitter.
ACTIVATE DIMMING SEQUENCE WITH 230V WALL SWITCH
To activate the dimming sequence with a 230V wall switch, first switch it ON.
Then quickly switch the wall switch OFF and ON. To fix the dimming level, quickly switch the wall switch OFF and ON again.

DIMMING MODE

If your lighting vibrates, you can choose a different dimming mode.
Turn off the dimmer with the Matter App or Start-Line transmitter.
Press the "FUNCTION" button on the dimmer for 3 sec until the LED flashes yellow and then release.
For leading edge mode, the LED flashes yellow once: This mode is most suitable for dimmable incandescent,

halogen, lamps with a traditional (wound) dimmable transformer and specific LED lamps

Press the "FUNCTION" button briefly once again to go to the next dimming mode

For trailing edge mode, the LED flashes yellow twice: This mode is most suitable for LED lamps and lamps with an electronic dimmable transformer

Press the "FUNCTION" button briefly once again to go to the next dimming mode

For PWM (Pulse-width modulation) mode, the LED flashes yellow three times: This mode is often most suitable for dimming Filament LED lamps

C Press the "FUNCTION" button on the dimmer for 3 seconds to confirm the selection.

The dimmer is set to trailing edge by default.

ADJUSTING THE DIMMING RANGE

If the connected LED lighting does not dim deep enough or vibrates, you can adjust the lower limit of the dimming range.

A Turn on the lamp and set it to 100% brightness.

B Hold the "FUNCTION" button on the dimmer for 3 seconds. The lamp will go to the lowest brightness.

Then release the button.

C Shortly press the "FUNCTION" button on the dimmer to lower the minimum brightness.

The minimum brightness starts at position 1. Every time the "FUNCTION" button on the dimmer is pressed shortly, the lamp will dim 1 position deeper (1-2-3-4). If you press the "FUNCTION" button shortly again after position 4, the minimum dimming position will return to position 1.

D Hold the "FUNCTION" button on the dimmer down for 3 seconds again when the correct dimming range has been selected.

E The lamp will go ON-OFF-ON-OFF to confirm the selected dimming position.

INSTALL THE BUILT-IN DIMMER

First check that the lighting switches properly by switching it ON and OFF with the Matter App or paired StartLine transmitter.

Place the built-in dimmer in the ceiling box. Mount the lamp back in place. Make sure that you can always reach the built-in dimmer, for example to reset it or to reconnect it.

OPTIONAL: RESET MATTER BUILT-IN DIMMER

Warning: After performing this step, you will no longer be able to operate the built-in dimmer via Matter and you will need to remove the built-in dimmer from the Matter App. (The paired Start-Line transmitters will not be removed).

A To reset Matter, press and hold the "FUNCTION" button for 15 sec. until the LED flashes red.

B When the LED flashes red, press and hold the "FUNCTION" button again for 6 sec.

C The connected lighting will go ON-OFF-ON-OFF to confirm the reset.

OPTIONAL: REMOVING A SINGLE START-LINE TRANSMITTER

A Shortly press the "FUNCTION" button to activate pairing mode. Pairing mode will be active for 12 seconds and the LED indicator on the built-in dimmer will flash green.

B While pairing mode is active (within 12 sec) send an OFF signal with the connected Trust Switch-in transmitter. (If necessary, consult the transmitter manual).

C The connected lighting will go ON-OFF-ON-OFF to confirm that the transmitter has been removed.

OPTIONAL: RESET START-LINE MEMORY

Warning: This step will delete all paired Start-Line transmitters from the built-in dimmer memory. (Matter will not be reset)

A To reset the Start-Line memory, press and hold the "FUNCTION" button for 15 sec. until the LED flashes red.

B Press the "FUNCTION" button again shortly.

C The connected lighting will go ON-OFF-ON-OFF to confirm the reset.

OPTIONAL: RESET START-LINE MEMORY WITH REMOTE CONTROL

Warning: This step will delete all paired Start-Line transmitters from the memory of the built-in dimmer. (Matter will not be reset)

A Shortly press the "FUNCTION" button to activate pairing mode. Pairing mode will be active for 12 seconds and the LED indicator on the built-in dimmer will flash green.

B While pairing mode is active (within 12 sec) send a GROUP OFF signal with the connected Trust Switch-in transmitter. (If necessary, consult the transmitter manual).

C The connected lighting will go ON-OFF-ON-OFF to confirm the reset.

Safety Instructions

Product support: www.trust.com/71361. Warranty conditions: **www.trust.com/warranty**

To ensure safe handling of the device, follow the safety advice on: **www.trust.com/safety**

The Wireless range is strongly dependent on local conditions such as the presence of HR glass and reinforced concrete Never use Trust Smart Home products for life-support systems. This product is not water-resistant. Do

not attempt to repair this product. Wire colors may vary per country. Contact an electrician when in doubt about wiring. Never connect lights or equipment that exceed the maximum load of the receiver. Exercise caution when installing a receiver voltage may be present, even when a receiver is switched off. Maximum radio transmit power: 9.64 dBm. Radio transmission frequency range: 2412-2472 MHz

Disposal of packaging materials – Dispose of packaging materials which are no longer needed in accordance with applicable local regulations. The packaging materials have been selected for their environmental friendliness and ease of disposal and are therefore recyclable.

Disposal of the device – The adjacent symbol of a crossed-out wheelie bin means that this device is subject to Directive 2012/19/EU. his directive states that this device may not be disposed of in normal household waste at the end of its usable life, but must be handed over to specially set-up collection locations, recycling depots or disposal companies. This disposal is free of charge for the user.

Disposal of batteries – Used batteries may not be disposed of in household waste. Only dispose of batteries when they are fully discharged. Dispose of batteries according to local regulations. Cover the poles of partially discharged batteries with tape to prevent short circuits.

Trust Electronics Ltd. declares that item number 71361/71361-02/78361/78361-02 is in compliance with Directive Electromagnetic Compatibility Regulations 2016, Radio Equipment Regulations 2017. The full text of the declaration of conformity is available at the following internet address: **www.trust.com/compliance**

Trust International B.V. declares that item number 71361/71361-02/78361/78361-02 is in compliance with Directive 2014/53/EU – 2011/65/EU. The full text of the EU declaration of conformity is available at the following web address: **www.trust.com/compliance**

Safety Instructions

Read the warnings and safety instructions before using the product. Do not use the device in any way other than described in the operating instructions. Keep this information for future reference.

- Even when this product is switched off, there may still be voltage at the connection points. Switch off the mains voltage if you want to be sure that there is no voltage.

- This product must be powered via the mains (230V, 50Hz).

- Exceeding the maximum load (250 Watt) can lead to malfunctions and short circuits. This product is equipped with a thermal fuse, which automatically cuts off the power in the event of a short circuit or overload.

- This device transmits radio signals. Therefore, be careful when using wireless equipment if you have a pacemaker. Never use Trust Switch-in products for "life support" systems or applications where equipment malfunctions can be life-threatening.

- Do not open the device. You cannot and may not repair or modify this product. If you have any doubts about the correct functioning, return the product to the store where you purchased it.

- This product is not water-resistant and therefore not suitable for outdoor use. Only clean this product with a dry cloth after first disconnecting it from the mains.

- Do not expose the product to excessive heat or cold. Extreme temperatures have a negative effect on the lifespan of electronics. Do not drop the product. Shocks can damage the internal electronics. Keep the device and all loose parts away from children, pets and unauthorised persons.

- If the performance of the wireless signal decreases, this can be caused by metal objects or other wireless equipment near or between the transmitter and receiver. Metal particles in double glazing (HR glass) or concrete floors and ceilings can also affect the wireless signal.

CE Declaration of Conformity

Trust International B.V. declares that this Trust Smart Home-product:

Model:	MACM-250 Matter & START-LINE SMART BUILT-IN DIMMER
Item number:	71361/71361-02/78361/78361-02
Intended use:	Indoor

is in compliance with the essential requirements and other relevant provisions of the following directives:
ROHS 2 Directive (2011/65/EU)
RED Directive (2014/53/EU)
The full text of the EU declaration of conformity is available at the following web address:
www.trust.com/compliance

TECHNICAL SPECIFICATIONS

Frequency	433.92 MHz and 2412-2472 MHz (Matter)
Input Voltage	230VAC/50Hz
Size	HxWxL: 47 x 47 x 18 mm
Net weight	35.6 gr
Maximum load	250 Watt

SUPPORTED LOAD

Incandescent and halogen lamps	3-250W
Dimmable ESL/LED	3-120W

FOR SUPPORT AND EXTENSIVE COMPATIBILITY INFORMATION

Go to **trust.com/matter**

TRUST SMART HOME
LAAN VAN BARCELONA 600
3317DD DORDRECHT
NEDERLAND
www.trust.com
Trust Electronics Ltd.,
Sopwith Dr, Weybridge, KT13 0NT, UK.
All brand names are registered trademarks of their respective owners.
Specifications are subject to change without prior notice.
Made in China.
www.trust.com

Documents / Resources

Trust MACM-250 Smart Built In Dimmer [pdf] User Manual
MACM-250, 71361, MACM-250 Smart Built In Dimmer, MACM-250, Smart Built In Dimmer, In Dimmer, Dimmer

References

- **User Manual**