

Current Transformer for MultiPlus-II modification to wire-end

Technote August 2022

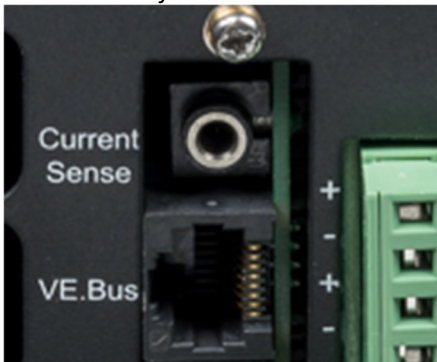
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1. Introduction

On MultiPlus-II and EasySolar-II the external **Current Sense** connection type 3.5mm audio jack has been changed to a 3-pin connector. The currently available Current Transformer (optional feature) is wired with 3.5mm audio jack and therefore needs to be modified for making the wired connection to the 3-pin connector possible.

MultiPlus-II external **Current Sense** connection types:

3.5mm audio jack



3-pin connector (NEW)



2. PN details of Transformers for MultiPlus-II

The below part numbers are with the 3.5mm audio jack that needs to have this modification. Refer to §4 for the modification instructions.

- CTR110000500 Current Transformer 100A:50mA for MultiPlus-II (1m)
- CTR110000550 Current Transformer 100A:50mA for MultiPlus-II (5m)
- CTR110002050 Current Transformer 100A:50mA for MultiPlus-II (20 m)

The below [new](#) part numbers are with the wire-end cables and available in stock soon. Since these parts are not available on stock yet.

- CTR120000500 Current Transformer 100A:50mA for MultiPlus-II (1m) [Wire-end](#)
- CTR120000550 Current Transformer 100A:50mA for MultiPlus-II (5m) [Wire-end](#)
- CTR120002050 Current Transformer 100A:50mA for MultiPlus-II (20 m) [Wire-end](#)

3. Details & identification MultiPlus-II/EasySolar-II

The below table shows per which serial numbers the product has the new Current Sense connector.

Part number	Model	Implemented serial nrs ⁽¹⁾
PMP122305010	MultiPlus-II 12/3000/120-32 230V	Yet to be produced expected HQ224x
PMP122305100	MultiPlus-II 12/3000/120-50 2x120V	NOT, replaced by PMP122305102
PMP122305102	MultiPlus-II 12/3000/120-50 2x120V (UL)	Onwards from HQ2227
PMP122305110	MultiPlus-II 12/3000/120-50 120V	NOT, replaced by PMP122305120
PMP122305120	MultiPlus-II 12/3000/120-50 120V	Yet to be produced expected HQ23xx
PMP242305010	MultiPlus-II 24/3000/70-32 230V	Onwards from HQ2222
PMP242305100	MultiPlus-II 24/3000/70-50 120V	Yet to be produced expected HQ2232
PMP242305130	MultiPlus-II 24/3000/70-50 2x120V	Yet to be produced expected HQ2231
PMP242306000	MultiPlus-II 24/3000/70-32 230V GX	Onwards from HQ2231
PMP242307010	EasySolar-II 24/3000/70-32 MPPT 250/70 GX	Onwards from HQ2231
PMP242505010	MultiPlus-II 24/5000/120-50 230V	Onwards from HQ2222
PMP482305010	MultiPlus-II 48/3000/35-32 230V	Onwards from HQ2215
PMP482305100	MultiPlus-II 48/3000/35-50 120V	Yet to be produced expected HQ224x
PMP482306000	MultiPlus-II 48/3000/35-32 230V GX	Onwards from HQ2216
PMP482307010	EasySolar-II 48/3000/35-32 MPPT 250/70 GX	Onwards from HQ2229
PMP482505010	MultiPlus-II 48/5000/70-50 230V	Onwards from HQ2225
PMP482506000	MultiPlus-II 48/5000/70-50 230V GX	Onwards from HQ2231
PMP482507010	EasySolar-II 48/5000/70-50 MPPT 250/100 GX	Onwards from HQ2230
PMP482805000	MultiPlus-II 48/8000/110-100/100 230V	Onwards from HQ2232
PMP483105000	MultiPlus-II 48/10000/140-100/100 230V	Onwards from HQ2229
PMP483150000	MultiPlus-II 48/15000/200-100/100 230V	All

(1) Format of the serial number is HQyywwzzzzz in which yy is the year, ww is the week number, and zzzzz is random. The serial number (SN) can be found on the label on the enclosure, on the label on the carton and in the VictronConnect App.

4. Modification instructions

Required part and tools

- Wire cutter/stripper
- 2pcs of Cable Ferrules, contact pin must be 10~12mm length, wire size is 0.2mm² (AWG24).
- Crimping tool

Instructions

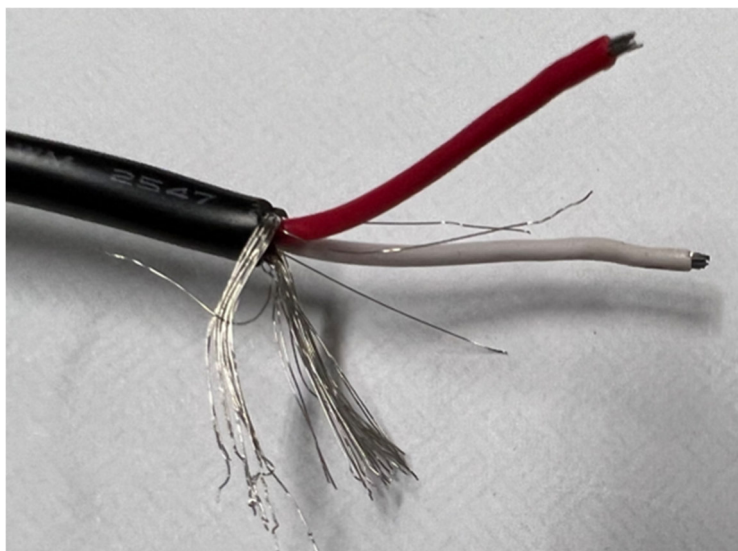
Step 1.

Cut off the jack-plug from the cable



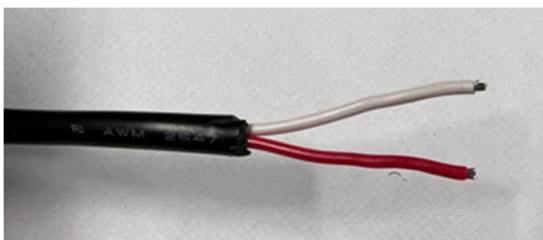
Step 2.

Remove the black cable jacket (length 20-25mm)



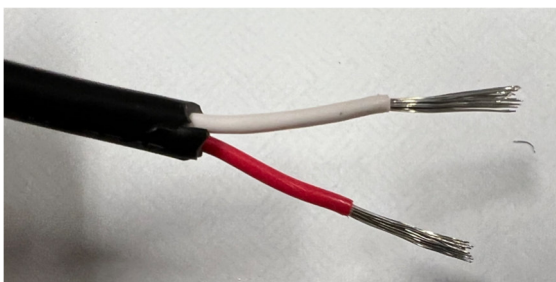
Step 3.

Cut off the cable shielding braid



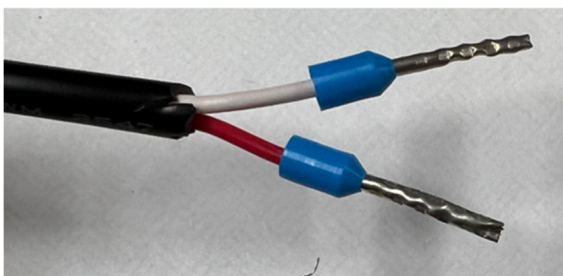
Step 3.

Strip the two conductor wires (length 10-12mm)



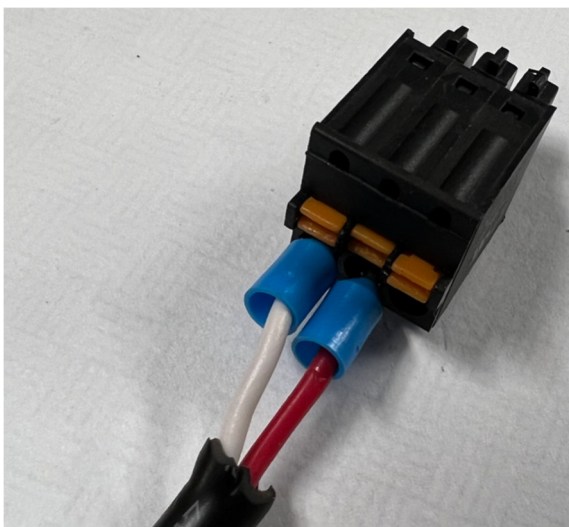
Step 4.

Place and crimp the cable ferrules (contact pin length 10-12mm)



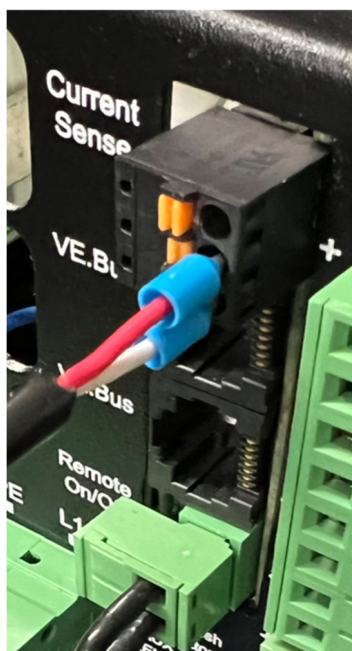
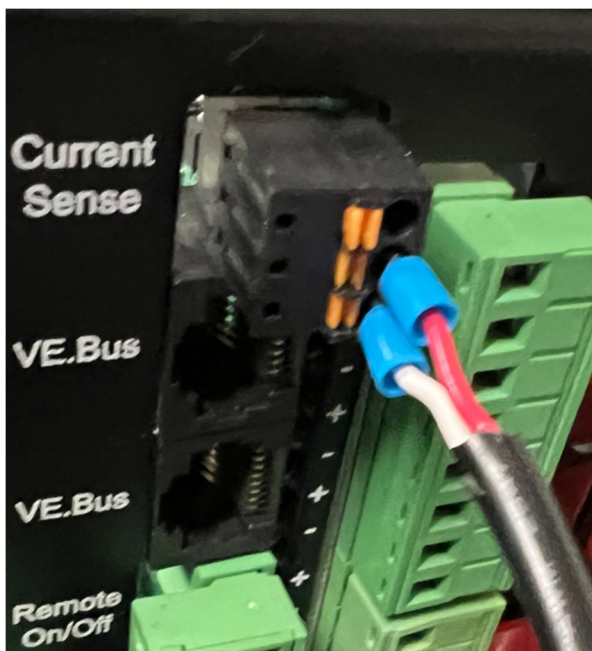
Step 5.

Insert the red and white wires to the connector in this sequence

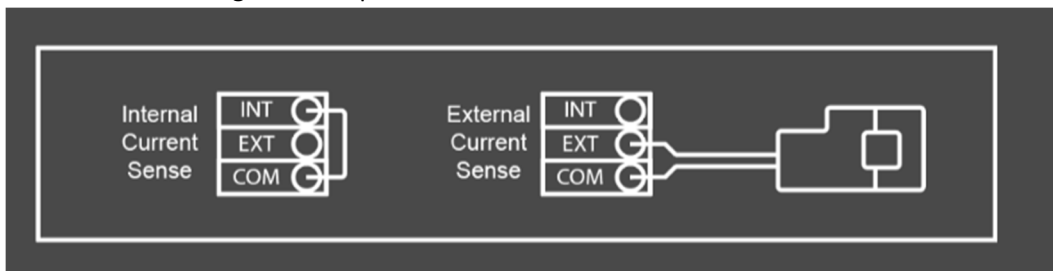


Step 6.

Insert to the MultiPlus-II like this



New connection diagram for 3-pin connector:



To connect the current sensor; remove the wire bridge between the INT and COM terminals, connect the red sensor wire to the EXT terminal and connect the white sensor wire to the COM terminal.