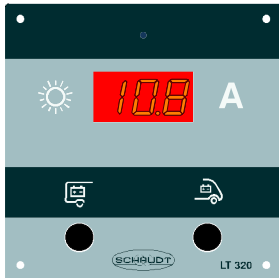


# Operating and Installation Instructions for the LT 320 Control Panel (Solar Display)



## 1 Operating instructions

### 1.1 Purpose

The LT 320 control panel enables the current charging current being supplied from the solar regulator to the leisure area and starter batteries to be displayed.

The panel has 2 buttons and a three-digit 7-segment display for this purpose.

### 1.2 Operation

➤ Press the "Leisure Battery" button.

- The "Leisure Battery" symbol and the current flowing into the leisure battery are displayed.
- The display automatically goes out after about 20 seconds.

➤ Press the "Starter Battery" button.

- The "Starter Battery" symbol and the current flowing into the starter battery are displayed.
- The display automatically goes out after about 20 seconds.



▲ Re-pressing the relevant button enables the current display to be switched off immediately.

Proceed as follows to have a continual display:

➤ Press the "Starter Battery" or "Leisure Battery" button and keep it pressed for longer than 5 seconds.

- The relevant symbol and the current flowing are displayed. The display does not go out until after 4 hours.

➤ The continual display can be exited at any time by briefly re-pressing the relevant button.

## 2 Installation instructions

### 2.1 Mechanical installation

The device is designed for installation into the front of a piece of furniture.

➤ Install in a dry, sufficiently ventilated location.

#### Minimum clearance

➤ Ensure a minimum clearance to the surrounding fixtures and fittings:

- The installation depth, including free space necessary for the connectors and cables, is 35 mm.
- The ambient temperature may not exceed +50 °C during operation.

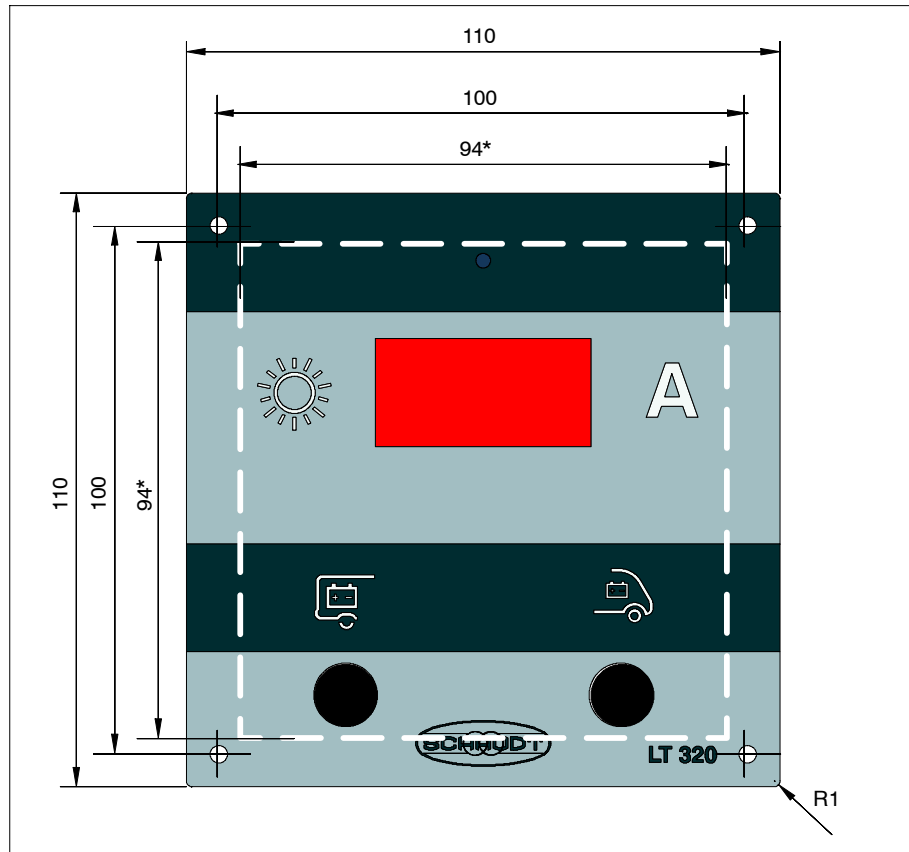


Fig. 1 Dimensional diagram for LT 320 (dimensions in mm)  
 \* Dimensions for furniture cut-out, installation depth including plug-in connector approx. 35 mm

**Fitting** Tighten the LT 320 control panel:

- Establish an installation opening as in Fig. 1.
- Mark out the hole pattern (see Fig. 1).
- Pre-drill the holes (to 2 mm).
- Use four x 2.9 cylinder head screws.
- Ensure that the screws only gently touch against the front panel (until it is no longer possible to move the panel).

## 2.2 Electrical connection

The LT 320 control panel is intended for connecting to Schaudt solar regulators

- LRM 1218 (MPP regulator)
- LR 1218 (series regulator)

Appropriate 4-pin connector cables (LRM 1218) and a connector set (LR 1218) are available for these.

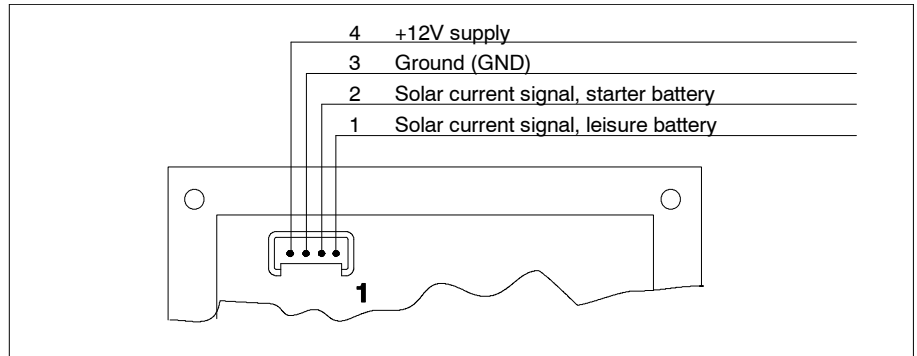


Fig. 2 LT 320 signals

### Connecting the LRM 1218 with the 4-pin connector cable

- Plug the 4-pin Lumberg connector on the relevant connector cable into the LT 320 control panel (see Fig. 2).
- Plug the 4-pin Lumberg connector on the relevant connector cable into the solar regulator (the "Solar charging currents signal" connector).



- ▲ If the connector cable is too long, it can be coiled up and secured at a suitable place within the vehicle.

### LR 1218 connector with connector set

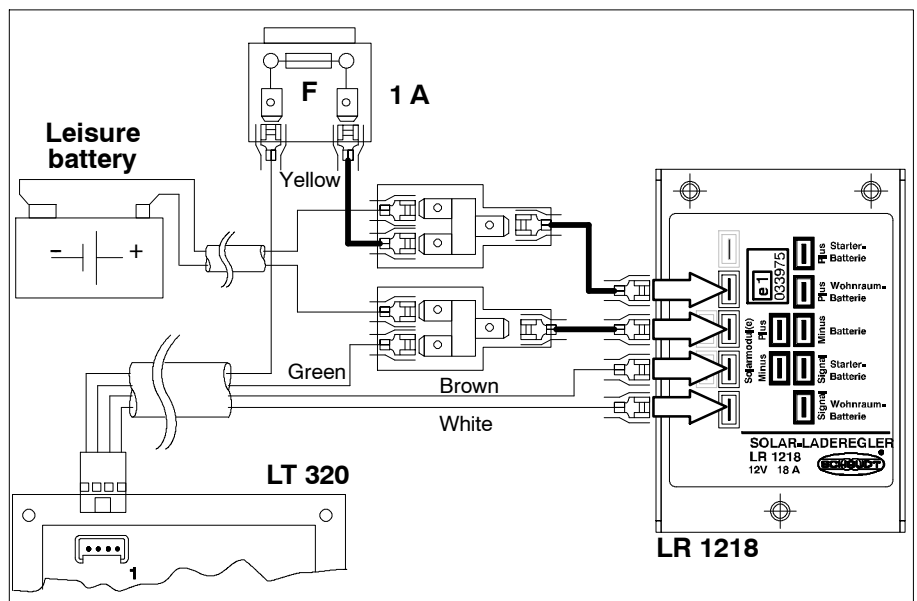


Fig. 3 Circuit diagram for connecting the LT 320 to the LR 1218 (the solar module and starter battery connectors are not shown)

The following parts are included in the connector set to connect the LT 320 control panel:

- One connector cable with a 4-pin Lumberg connector on one side and four x 6.3 mm plug connectors on the other
  - 2 x Y-type plug connectors
  - A fuse holder with a 1 A fuse
  - Three x 5 cm long cables (each with 2 x 6.3 mm plug connectors).
- Plug the 4-pin Lumberg connector on the relevant connector cable into the LT 320 control panel (see Fig. 3).
  - Establish the connection on the LR 1218 solar regulator as in Fig. 3.



## ▲ ATTENTION!

Be sure to observe the correct polarity when plugging the cables into the leisure battery. An incorrect connection will result in irreparable damage to the solar regulator and panel.



▲ If the connector cable is too long, it can be coiled up and secured at a suitable place within the vehicle (such as near the solar regulator). It is also possible to shorten the cable and fix to it four new 6.3 mm flat push-on contacts (not included in the delivery).

## 2.3 Maintenance

The LT 320 control panel requires no maintenance.

## 2.4 Technical details

### 2.4.1 Mechanical details

<b>Dimensions</b>	110 x 110 x 35 (W x H x D in mm), D = depth, including connectors
<b>Weight</b>	75 g
<b>Casing</b>	Acrylic glass; printed on both sides, anthracite grey / white aluminium

### 2.4.2 Electrical details

<b>Operating voltage</b>	For 12 V DC systems (10.5 to 15 V)
<b>Standby current</b>	Approx. 3 mA
<b>Display</b>	3-digit 7-segment display; 0,2 ... 25 A, resolution 0.1 A

### 2.4.3 Environmental parameters

<b>Operating temperature</b>	-10 °C to +50 °C
<b>Storage temperature</b>	-20 °C to +70 °C
<b>Humidity</b>	Operation in dry environment only
<b>CE</b>	CE marked

## 2.5 Storage - packaging - transportation

Only transport and store the unit if the packing is suitable and ambient conditions are dry.

<b>Customer service address</b>	Schaudt GmbH, Elektrotechnik & Apparatebau Planckstraße 8 88677 Markdorf, Germany Phone: +49 (0)7544 9577-16 Email: kundendienst@schaudt-gmbh.de Web: www.schaudt-gmbh.de
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<b>Send in device</b>	Returning a faulty device: <ul style="list-style-type: none"><li>➤ Always use well-padded packaging.</li><li>➤ Include the fault report.</li><li>➤ Send it to the addressee (free delivery).</li></ul>
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