BSS

Battery connection on the BSS case

Technical Notes

Never connect 230 V mains voltage to the battery connection. There is danger to life! Do not connect any other low voltages than the permissible 12 V-14.4 V DC voltage to the battery connection.

The battery connection on the BSS case is used to supply the built-in components and those connected to the optional charging connection. All 12 V-14.4 V batteries/accumulators that allow a permissible continuous load of at least 5 A are suitable as a voltage source.

Do not connect batteries that do not meet these requirements. There is a risk of overheating, short circuit and fire.



Case with inserted battery connector (XLR 4-pin female version)

Optionally, you can operate the case with the car adapter cable ART-000325 via a 12 V on-board power socket or the cigarette lighter. When connecting to an on-board voltage socket, make sure that it provides 12 V/5 A. Attention, on-board voltage sockets in trucks are often operated with 24 V!

Voltages greater than 14.4 V can damage or destroy the control electronics in the BSS case.

The on/off switch on the front of the housing switches both mains and battery voltage. As long as mains voltage is present, the electronics give priority to this. As long as there is no mains voltage, in the event of a power failure or when the mains plug is removed, the electronics automatically switch to battery power. As soon as the case is powered by battery voltage, the red LED on the front of the case lights up.

Overload safety fuse - over-voltage protection

If 5 A or more are constantly consumed by the connected devices, the overload protection on the front can trigger. In this case, disconnect unnecessary loads (e.g. from the USB charging port) from the power supply. Change the fuse. A spare fuse is located in the fuse holder on the top panel (ATEM Mini) or behind the foldable screen (ATEM Extreme) next to the right magnet holder.

The fuse also triggers in the event of a connected over-voltage $(\geq 17.3 \text{ V})$ to protect the connected devices. In this case, before reinserting the fuse, check the voltage source for the correct voltage value (12 V-14.4 V). Please note that the open-circuit voltage (without consumers connected) of batteries or accumulators can be higher and this may trigger the fuse. The in-



LED & battery power fuse on the front of a case for ATEM Extreme

ternal electronics are calibrated for additional loads (e.g. on an optional USB charging port) up to a 1.5 A load. Loads exceeding this should be avoided in order to ensure safe switching between mains and battery voltage.

Backup fuse

Glass tube fuse 5x20 mm; 5.0 A Trigger characteristic: **FAST**

Use only and exclusively the specified fuse with the corresponding technical values. Otherwise, the control electronics or the connected consumers may be damaged or destroyed.

「BSS」

Battery connection on the BSS case

Technical Notes - continuation

Reverse polarity protection

The built-in Case on-board electronics have reverse polarity protection. In rare cases, it can be the case with vehicle on-board voltage sockets that these lead to ground (-) on the pin contact instead of +12 V. If, after connecting the case to an on-board voltage socket, no function of the devices is apparent, please check this possibility as well.

Using the adapter cable ART-000326 with its open cable end, various customer-specific plugs can be assembled for connection to a 12 V DC voltage source. Please note that all plugs or connecting elements used must be approved by the manufacturer for at least 5 A continuous current.

Pay attention to the type of attachment described by the manufacturer in order to minimize contact resistance and ensure a safe current flow.

Pin assignment

The assignment of the 4-pin battery connector follows the attached diagram.

The color coding of the open ended battery connector cable ART-000326 is as follows:

Brown = +12 V Blue = Ground

The assembly of cables may only be carried out by a specialist!



Connection diagram of the four-pin XLR panel socket for the battery voltage (top view in the installed position)

Available battery connection cables



D-TAP battery connection cable For batteries with D-Tap connection

Order number: ART-000318



Vehicle battery connection cable For 12V on-board voltage sockets

Order number: ART-000325



Battery connection cable with an open end

Order number: ART-000326