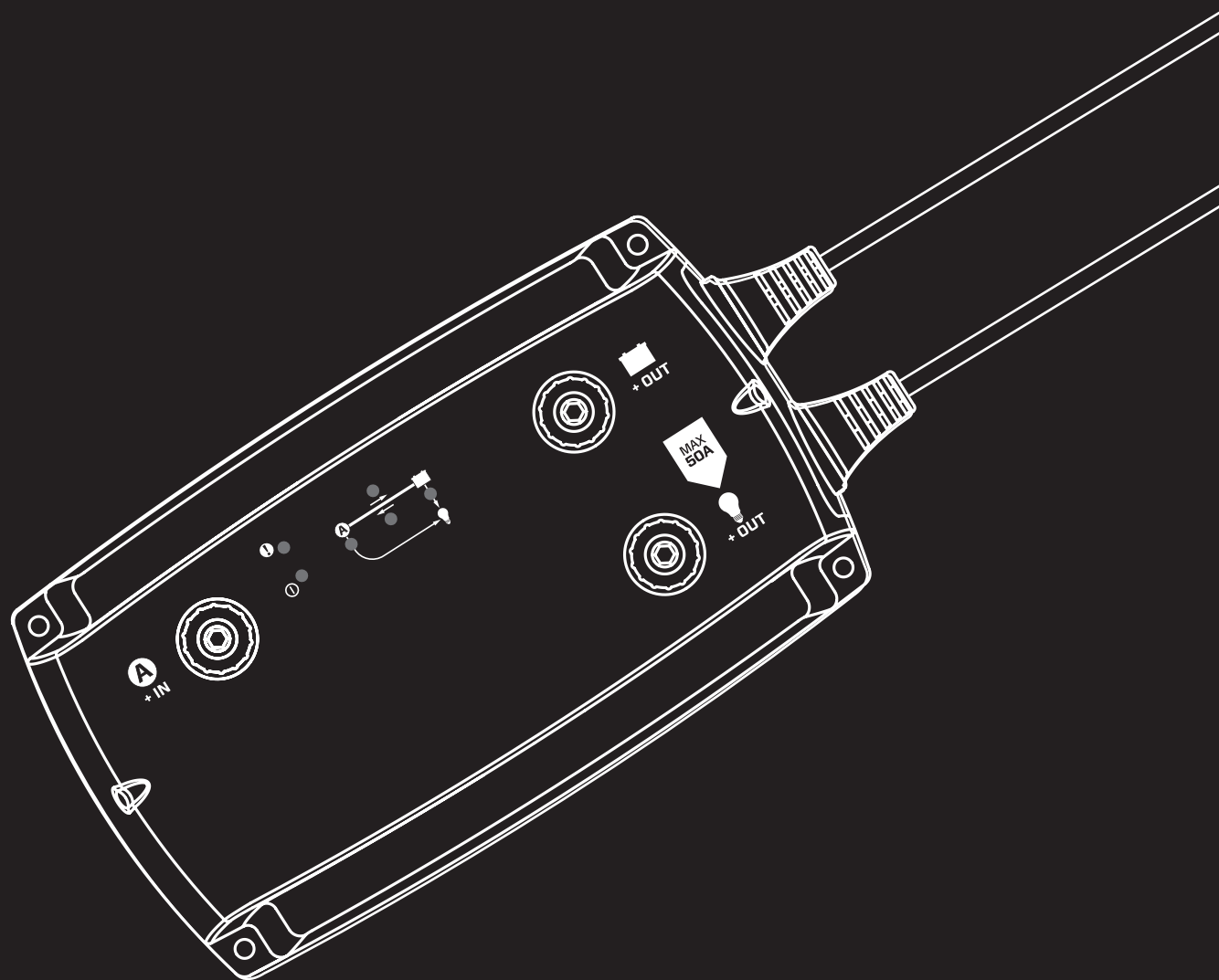


# CTEK

## FAQ

### SMARTPASS120/120S

Part No: 40-185/40-289



## **The SMARTPASS does not supply the consumers from the consumer battery.**

The SMARTPASS will turn off the consumer output if the consumer battery reaches 11.5V. This will prevent the battery from being damaged due to being drained too much. To turn on the consumer output again the consumer battery needs to be charged.

## **The SMARTPASS does not stop charging the target battery even though the alternator or charger on the supply battery has been turned off.**

When charging of the supply battery is turned off, the voltage will drop. The SMARTPASS will turn off when the voltage has dropped below 12.8V, if there are no parallel loads this will take some time.

## **The SMARTPASS does not start charging.**

In order to start charging, the supply voltage needs to be above 13.1V. The voltage on the target battery also needs to be above 5V.

Test using a voltmeter to verify that the voltages are within the levels specified above.

## **Where in the vehicle shall I fit the Smartpass 120?**

Close to the secondary battery and as cool as possible.

## **How can I tell if Smartpass 120 is working?**

Please refer to the manual for explanation of light sequence.

## **Smartpass 120 indicates error, what does it mean?**

Please refer to the manual for explanation of light sequence.

## **Do I need an external battery watch?**

No, there is an inbuilt battery watch in both the D250 and Smartpass variants.

## **Smartpass 120S indicates error, what does it mean?**

Please refer to the manual for explanation of light sequence.

## **Which battery sizes can Smartpass 120S be used with?**

28 – 800Ah

## **Do I need to use Smartpass 120S together with D250SA and D250SE?**

No – Each can be used on its own as a standalone unit, which unit to use would depend on the installation.

## **How do I connect Smartpass 120S?**

Please refer to manual or web page for fitting instructions.

[www.ctek.com/customersupport/dc-dc-support](http://www.ctek.com/customersupport/dc-dc-support)

## **Where would I use the Smartpass 120S?**

Large battery banks, large parallel loads and areas where current source priority is required – please refer to web page.

## **Can the starter battery and the service battery be different types of battery?**

Yes.

## **Which fuse size should I use for Smartpass 120S?**

300A.

## **Which cable dimensions should I use for Smartpass 120S?**

Please refer to the “Cable and fuse recommendations” in the manual.

## **How can I tell if Smartpass 120S is working?**

Please refer to the manual for explanation of light sequence.

## **The Power LED is flashing rapidly or glowing faint**

The charger has entered power save mode due to low voltage. There is no charger or alternator turned on for the supply battery.

## **Can I use a SMARTPASS without a D250S DUAL?**

Yes. If you do not need a charging function to the service battery, SMARTPASS can be a good solution to provide the service battery with current, especially if you use the service battery while charging (fridge, microwave oven etc.).

## **Why does the SMARTPASS not supply the consumers connected to the service battery?**

The SMARTPASS will turn off the consumer output if the service battery drops to 11.5V. This will prevent the battery from being damaged due to being drained too much. To turn on the consumer output again the service battery needs to be charged.

## **Why does the SMARTPASS not stop charging the service battery even though the alternator or charger on the starter battery has been turned off?**

When the engine is turned off, SMARTPASS will continue charging as long as the voltage of the starter battery is above 12.8V. Due to this, the end of charging will be briefly delayed. NOTE: It will NOT drain the starter battery. If there is power to the SMARTPASS from the solar panel, it will charge/maintain the service battery.

## **Why does the SMARTPASS not start charging?**

Check the connections, including the ground.

In order to start functioning, SMARTPASS needs over 13,1V from the starter battery. The voltage on the service battery needs to be above 5V.

Measure the voltage and verify that they are within the levels specified above.

## **Why is the POWER-led glowing faintly?**

SMARTPASS has gone into power save mode due to low voltage in the starter battery. There is no charger or alternator turned on for the starter battery.

## **Why is the POWER-led flashing rapidly?**

SMARTPASS has gone into power save mode due to low voltage in the starter battery. There is no charger or alternator turned on for the starter battery.

## **The error LED is lit, what has happened?**

The SMARTPASS has detected a problem. The LED flashes with other LEDs to indicate what the problem is.

Led 1 flashing: A problem is detected with the service battery. The current to the battery is too high or the SMARTPASS is overheated. If the current is too high the SMARTPASS will try five times to start charging the battery. If all five attempts fail, the SMARTPASS must be disconnected from both batteries before it can be restarted. In this situation, check the cables for short circuit. If the SMARTPASS is overheated charging will automatically restart when the temperature has dropped again.

Led 2 flashing: A problem is detected with the consumer output connected to the starter battery input. The current to the consumer output is too high or the SMARTPASS is

overheated. If the current is too high the SMARTPASS will try to start charging the battery five times. If all five attempts fail the SMARTPASS needs to be disconnected from both batteries before it can restart. If this is the case check the cables for short circuit, there could also be too many consumers connected. If the SMARTPASS is overheated output will automatically turn on when the temperature has dropped again.

Led 3 flashing: A problem is detected with the starter battery while maintenance charging. The current to the battery is too high or the SMARTPASS is overheated. If the current is too high the SMARTPASS will try to start charging the battery five times. If all five attempts fail the SMARTPASS needs to be disconnected from both batteries before it can restart. If this is the case, check the cables for short circuit. If the SMARTPASS is overheated output will automatically turn on when the temperature has dropped again.

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Led 4 flashing: A problem is detected with the consumer output connected to the service battery. The current to the output is too high or the SMARTPASS is overheated. If the current is too high the SMARTPASS will try to start charging the battery five times. If all five attempts fail the SMARTPASS needs to be disconnected from both batteries before it can restart. If this is the case check the cables for short circuit, there could also be too many consumers connected. If the SMARTPASS is overheated, output will automatically turn on when the temperature has dropped. It could also mean that the battery voltage on the consumer battery is too low.

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Led 1, 3 and 4 flashing: The temperature on the service battery is too high. The SMARTPASS will not charge the battery if the temperature is above 65 °C, as soon as the temperature is lower, the charging will automatically restart.

## **What do the led lamps mean?**

Please refer to the manual for explanation of light sequence.

## **Which battery sizes can Smartpass 120 be used with?**

28 – 800Ah.

## **Do I need to use Smartpass 120 together with D250SA?**

No.

## **How do I connect Smartpass 120?**

Please refer to manual or web page for fitting instructions.

[www.ctek.com/customersupport/dc-dc-support](http://www.ctek.com/customersupport/dc-dc-support)

## **Where would I use the Smartpass 120?**

Large battery banks, large loads and areas where current source priority is required – please refer to web page.

**Which fuse size shall I use for Smartpass 120?**

300A.

**Which cable dimensions should I use for Smartpass 120?**

Please refer to the "Cable and fuse recommendations" in the manual.

**Can I charge a lithium battery using my Smartpass 120/120S?**

No – Smartpass 120 is designed for 12V lead-acid and AGM service batteries.

Yes – Smartpass 120S is designed for 12V lead-acid, AGM and lithium service batteries.

# CTEK

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