

## 5. Large service battery with parallel consumers

### PREREQUISITES

A dual battery system where a D250SE together with a SMARTPASS 120S charges a 100–800Ah service battery. Current is supplied from a solar panel and/or an alternator. The starter battery is charged from an alternator.

It is advantageous to use this installation when:

- The alternator is not able to deliver the desired charging voltage.
- The service battery capacity is greater than 100Ah.

Parallel consumption takes place during charging. By connecting the consumers (See TECHNICAL SPECIFICATION) to the Output Consumers on the SMARTPASS 120S, the service battery will be able to charge without parallel

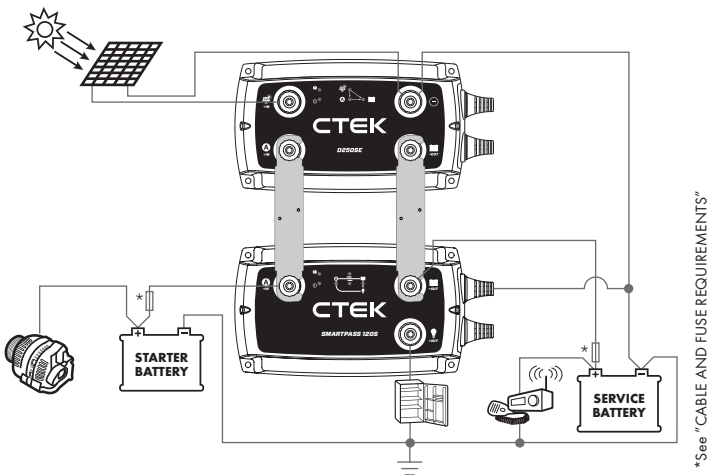
consumption and the consumers will instead be supplied with current from the alternator.

- The service battery shall be protected against deep discharge. Connect non-critical consumers to the Output Consumers on the SMARTPASS 120S. Connect critical consumers directly to the service battery. SMARTPASS 120S does not in that case switch off the critical consumers when the service battery is completely discharged.

### TIP 4

Connect the cabling from the starter and service batteries respectively to the SMARTPASS 120S and not to the D250SE.

See also tips 1, 2 and 3.



## 6. Connect an AC/DC charger

### PREREQUISITES

A dual battery system where there is a 230/110V charger and a D250SE that, together with a SMARTPASS 120S, charge a service battery with a capacity of 150–800Ah. Current is supplied from a solar panel and/or an alternator to the service battery. The starter battery is charged from an alternator.

It is advantageous to use this installation when:

- The charge from the alternator while it is charging (engine running) is not enough, so it has to be supplemented by a 230/110V charger.
- The alternator is not able to deliver the desired charge voltage.
- The service battery capacity is greater than 150Ah.

- Parallel consumption while charging is taking place. By connecting the consumers (see TECHNICAL SPECIFICATION) to the Output Consumers on the SMARTPASS 120S, the service battery will be able to charge without parallel consumption and the consumers will instead be supplied with current from the alternator.

### TIP 5

Connect a 230/110V charger to the starter battery if it needs charging. In that case both the starter and service batteries will be optimally charged from the 230/110V charger.

### TIP 6

Heavy current consumers (see TECHNICAL SPECIFICATION) must be connected directly to the service or starter battery.

See also tips 1, 2, 3 and 4.

