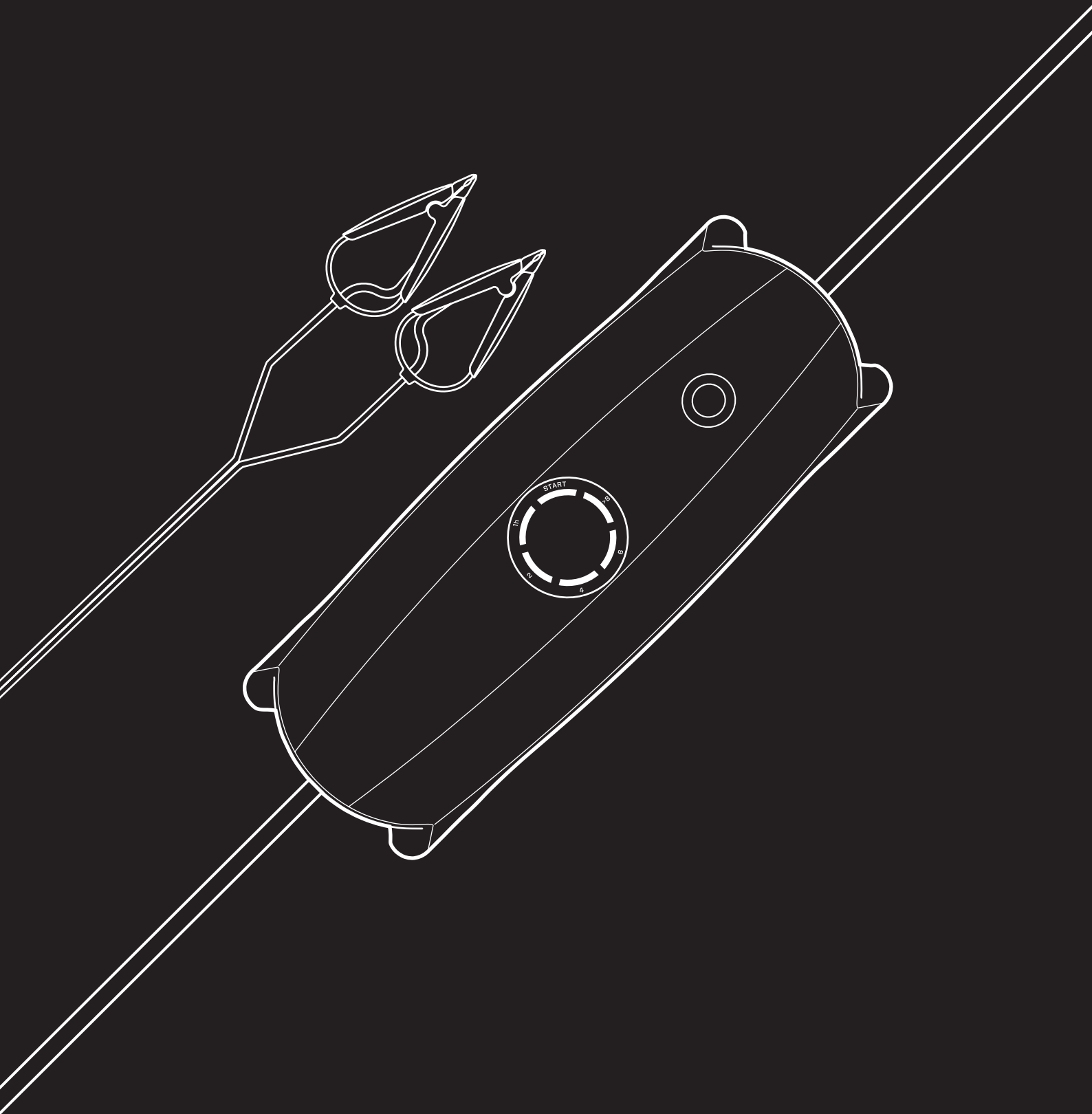


CTEK

FAQ

CS FREE

Part No: 40-462



What type of batteries can the CS FREE charge?

All types of 12V lead acid and lithium iron phosphate batteries (LiFePo₄) batteries. Simply press the ON/OFF button and the charger will take care of the rest.

Will the CS FREE detect what chemistry the battery is which is connected to it?

CS FREE will charge lead acid as well as Lithium (LiFePO₄). The charge curve has been specially developed to charge both chemistries in a safe and effective way.

How do I connect CS FREE to the battery within the vehicle?

The charger should be connected according to the vehicle user manual.

If there are no other recommendations available, connecting the red connector to the positive battery terminal first and the black connector to the vehicle chassis is common practise for safety reasons.

Can the CS FREE be left under the bonnet while charging?

YES, but keep it away from hot surfaces and sharp edges and ensure there is room for the charger and the cable. **NOTE Do not drive your car with the CS FREE under the bonnet.**

Can the CS FREE be connected to the battery when I try to start the vehicle?

Yes, we recommend that the charger is connected and switched on when you attempt to start the vehicle. Please make sure all consumers (Fan, headlights wipers etc.) are turned off during the start attempt.

Can the CS FREE assist the car crank when the charger is connected?

YES, as with all CTEK chargers - it is recommended to be left connected and switched on when cranking attempt is made.

Does the MMI for the external battery show the state of charge (SoC)?

No, it does not show SoC of the battery. The MMI features a countdown display that shows you how long there is left to go until the battery is fully charged. Once the battery is fully charged the MMI will slowly pulse all six segments together.

Can I use the CS FREE with my other CTEK connectors?

No, the CS FREE is too powerful for standard CTEK connectors. The CS FREE will charge with up to 20A and the standard CTEK connectors can only handle up to 10A.

If the CS FREE is connected to mains, can it be used for maintenance charging for long periods of time?

When connected to a power source you can use it as a regular CTEK charger for charging and for short- or long-time maintenance.

Can I charge my battery anywhere?

YES, the CS FREE is a portable charger that you can bring with you and charge wherever you are no matter if there are mains available or not.

How "portable" is the CS FREE and aren't all CTEK chargers portable?

CTEK's new CS FREE is a completely portable battery charger and maintainer that can be used without mains power - so you really can use it any time at any place.

The connection between the solar panel and the CS FREE is this a CTEK solution or can any panel be used?

We recommend that the CS FREE is only used with the CS FREE SOLAR PANEL KIT specially developed to work with the CS FREE for maximum performance and efficiency.

What is the maximum output of panel that can be used?

THE CS SOLAR PANEL KIT features a 60W panel. We recommend that the CS FREE is only used with the CS FREE SOLAR PANEL KIT specially developed to work with the CS FREE for maximum performance and efficiency.

What is the maximum voltage from the panel to the CS FREE?

The CS FREE can handle inputs of up to 25V from the CS FREE SOLAR PANEL KIT - higher voltages risk damaging the CS FREE unit. To protect against this, we recommend that the CS FREE is only used with the CS FREE SOLAR PANEL KIT specially developed to work with the CS FREE for maximum performance and efficiency.

Is there a solar panel MPPT regulator inside the CS FREE or inside the solar panel?

The MPPT is within the CS FREE, and it works together with the safety box fitted on the cable to the solar panel charge kit. The safety box makes sure the voltage is within the range of what the CS FREE can take. For this reason, we only recommend you use the Solar panel charge kit together with the CS FREE.

How long is warranty time for CS FREE?

2 Years for the charger and accessories

Will there be any spare parts on cables and connectors for CS FREE available after the release?

For the time being there are no spare parts available

Is there an Auto Power Off on the CS FREE?

If the charger has no input and no output for 10 minutes, it will automatically power off.

Will there be a bag to store the CS FREE and the accessories?

The CS FREE is not supplied with a storage bag. You can purchase a CS storage bag (40-468) so you easily carry the charger and accessories with you.

What is the IP rating on the CS FREE?

The IP rating is 54. Dust and flush safe. This means that dust in harmful amounts cannot get into electrical components so that insulation faults can occur. The luminaire must be tight, and gaskets are therefore necessary. Tested in a dust chamber. IPx5 requires flushing resistance (not high-pressure flushing). So, use the charger outside! In rain and fog - the charger itself is built with a "heel" so even if it stands in some mm of water - it will work fine.

Is CS FREE a jump booster?

CS FREE is an Adaptive Booster which is a safer alternative to jump starting. It will talk to the battery to see how much charge it needs to get the vehicle started within 15 minutes. And it is safe for the battery and the electronics in the car.

What is the start voltage for the CS FREE?

The CS FREE will detect a battery if the voltage is over 3V. It will also choose not to charge if the voltage is over 14V.

Why is the start voltage limit 3V?

This is the CTEK safety system, 3V is an extremely discharged battery, with a battery this deeply discharged it is possible to reverse polarise the battery which would result in damage to the vehicle electronics.

What is current output of CS FREE in Amps?

If you have any power connected to the input side of the charger - it will charge up to 5A. If you do not have any power connected to the charger it will charge up to 20A as long as there is power left in the internal battery of the CS FREE.

Is there a SUPPLY mode?

NO there are no selectable charge modes it is fully automatic. If you need the SUPPLY-function we recommend you use another CTEK charger.

Is there a Desulphation mode and a RECOND mode on the CS FREE?

There are no Desulphation or Recond on the CS FREE as this might harm the LiFePO4 batteries. If you need Desulphation or Recond function, we recommend you use another CTEK charger.

If a LiFePO4 battery has shut down because of the under-voltage protection. How can I charge it?

The CS FREE does not have a wakeup function. If the LiFePO4 -battery has closed down, you have to use another power source to wake it up.

Can it take longer than 15 minutes with the CS FREE to get the battery ready to start the vehicle?

15 minutes is the time it can take to empty the internal CS FREE battery if the receiving battery is empty. Most cars are ready to start within 15 minutes. If it does not - please recharge the CS FREE and try again in any case, it can be a good idea to get the car battery tested as it might be in poor condition and needs to be replaced.

How do I charge the internal battery within CS FREE?

It can be charged in different ways: You can charge from mains with the PD adapter supplied in the box or with additional accessories (not supplied) through a 12V output in the car (USB-C CHARGE CABLE 12V PLUG) from another battery with battery clamps (USB-C CHARGE CABLE CLAMPS) or from the CTEK SOLAR PANEL CHARGE KIT.

How long will it take to charge the CS FREE internal battery from totally drained to fully charged?

From ""Less than 10% left"" - (first led blinking) to fully charged it will take just over 60 minutes as long as CTEK standard accessories are used.

What type of battery is within the CS FREE?

It is a lithium Polymer-battery.

Can I recharge the CS FREE from my vehicle?

Yes, you need to have the additional USB-C CHARGE CABLE 12V PLUG. It will start charging as soon the motor is running.

Can I charge the vehicle battery with the CS FREE through the 12V output in the car?

No, you cannot. The cables in your car from the 12V output to the battery are too weak for the high current (20A) so you cannot charge through the 12V output.

Can I have the CS FREE connected and charge the internal battery whilst driving?

Yes, you can! The internal battery will not get overcharged so when fully charged it will stop charging even if the input is still active.

Is it possible to charge the internal battery of the CS FREE from the USB-C port in the vehicle?

Yes, that is possible use the USB-C to USB-C cable included in the box.

How long lifespan does the internal battery of the CS FREE have?

The lifespan is 300 charges cycles with a remaining capacity of 80% or more. Warranty time for CS FREE is 2 years.

How do I know that the CS FREE is charging the vehicle battery?

The lights in the big circle on the top of the charger light up and one of the LEDs is blinking this tells you that the charger is charging.

How do I know when I can start my car?

When the first LED "START" is lit with a steady light the vehicle will most likely have power enough to start.

How do I know when the battery is fully charged?

All LEDs in the bigger circle are lit and the lights are slowly pulsing the battery is fully charged.

Can I leave the CS FREE unattended whilst charging?

Yes, like all CTEK chargers it can be connected for long periods of time. Please note that if the CS FREE is not connected to an external power source the charger will only work as long as there is power left in the internal battery.

Can I use the CS FREE with my other CTEK Comfort Connect accessories?

Our Comfort Connect accessories are not compatible with the CS FREE. CS FREE is too powerful for standard CTEK accessories. The CS FREE will charge with up to 20A while standard CTEK Comfort Connect accessories are designed for our chargers that produce 10 amps and less.

Can I use my CTEK charger with a start/stop vehicle?

Yes. CTEK chargers are safe to use on start/stop vehicles.

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