

**Solid Yellow** Sync EV is not connected to Internet. Charger requires connection to Internet and Sync EV backend platform either via GSM, WIFI or Ethernet connection

**My Sync EV has previously been connected via GSM (SIM) but is now showing a yellow halo?**

If the unit is connected to the Internet via a GSM (SIM) connection, the likely cause is that the 2G/3G signal strength does not meet the minimum required level to ensure a continued, stable connection to the network.

**How do I resolve this?**

Power recycling the Sync EV for a period of 10-15 seconds should force the Sync EV unit to establish a connection regardless of the current signal strength (RSSI). In cases of frequent disconnects, Sync EV recommend where available the unit is connected to an available WIFI network. (Please see below). Also an external aerial could be installed to improve signal strength.

**My Sync EV is connected via my home WIFI network but has lost its connection?**

WIFI network strength is most optimal at distances between 1-6 metres but not limited too. (Please note, there are many variables that can be detrimental to this factor, such as building construction, router location alongside alternative electronic device interference within the network). As with any WIFI enabled device, the Sync EV requires a strong, stable connection to ensure connectivity issues are minimised.

If the unit has previously been connected, firstly, please check on your network service to ensure this is no disruption to your service. Please also check with your service provider there have been no security/firewall updates to your network.

Power recycling the Sync EV for a period of 10-15 seconds should force the Sync EV to re-establish its connection to the specified home WIFI network. In the rare event this is unsuccessful, the Sync EV may require recommissioning for home WIFI credentials to be applied. Also try and power recycle the home internet router.

**How do I resolve this?**

Contact Sync EV customer support at the following - <https://www.syncev.co.uk/call-back.aspx>

Our customer support team will get in contact to provide a video guide explaining this process, or alternatively, walk through this process with the end user.

In the event where frequent disconnects are present, this indicates the home WIFI network is not providing the required signal strength to ensure a continued, stable connection.

In this instance, Sync EV recommend installation of a WIFI repeater/extender/booster be installed at the possible closest location to the Sync EV.

**Can I use my charger still whilst it is in an "Offline" state?**

Yes. You are still able to use the Sync EV to charge your vehicle whilst it has no enabled internet connection. Please note, whilst the unit is disconnected, no charging information will be recorded within the Sync EV smart application and all smart features (such as scheduled charging) will be disabled unless these requirements are set within the vehicles API.

If the Sync EV is set to "Authentication Required" within the smart application, you will need to use the supplied RFID card to act as your method of authorisation in this instance.

**Solid Blue** Sync EV is connected to Internet

Indicates that the Sync EV has an established connection to the internet and Sync EVs backend service platform either via GSM (SIM), WIFI or Ethernet.

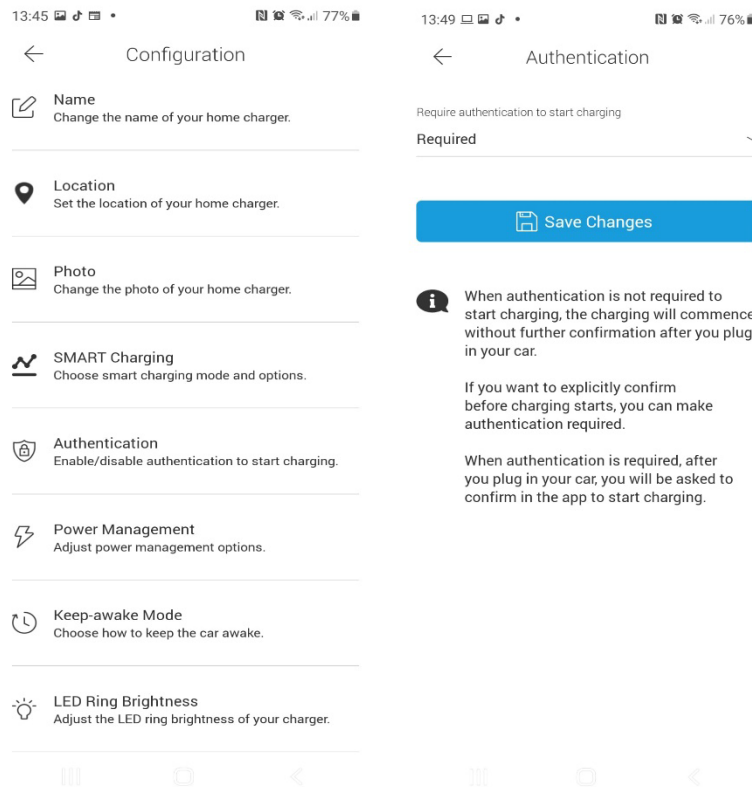
Whilst the Sync EV has an established internet connection, the end user will be able to benefit from the smart application and its associated features.

## Flashing Blue Charging session is in Preparing state

Indicates that communications process (handshake) between the vehicle and Sync EV have commenced to initiate a charging session.

### I've connected my vehicle but the Sync EV halo continues to flash blue and states "Preparing" on the smart application?

Please confirm if **Authentication** within the smart application is set to **Required** or **Not Required**. If this option is set to **Required**, this will indicate the Sync EV is waiting for the user to confirm authorisation via the smart application of the charging session to commence. If this is set to **Not Required**, this will enable the Sync EV Plug & Charge (basic) protocol.



### Authentication is Not Required on my Sync EV but the halo is still flashing blue and states "Preparing" on the smart application?

The initial communication (handshake) between the Sync EV and the electric vehicle needs to commence and complete within a certain duration, otherwise this communication will fail and time out.

Intermittent dips in signal strength on the home WIFI network may delay or disrupt necessary communication responses between the vehicle and the Sync EV.

#### How do I resolve this?

Confirm there are no settings within the vehicle or the vehicle manufacturers application, such as timed charging, delayed charging, authorisation requirements or max charge/battery % that are delaying/disrupting the charging session initialisation.

Please remove the charging cable from both your vehicle and Sync EV. Within the smart application, select the reboot option. (This can be found by selecting the configurations icon on the top righthand corner of the home screen within the smart application).

This will soft reboot the Sync EV, clearing down any failed communications and charging cache history and reset the unit back to its **Ready** state for commencement of the next charging session.

Alternatively, power recycling the unit for a period of 10-15 seconds will clear down the communication cache.

If the issue persists, contact Sync EV customer support at - <https://www.syncev.co.uk/call-back.aspx>

## I have the smart application but I don't want to use the application and rather the supplied RFID card for my authorisation method for charging? Is this possible?

Yes. The Sync EV includes RFID as a standard function. Once the Sync EV has been set to Authentication **Required** within the smart application and a user account has been created and the charger registered to the user account, an RFID tag will need to be created to assign the supplied RFID card to the registered user.

- Start by selecting the Profile icon (displayed by 3 horizontal lines) in the top lefthand corner of the home page of the smart application.
- Select **RFID Cards**
- Select **Add RFID Tag**
- Select **Scan QR Code**
- Select **Enter ID Manually**

You will be prompted to enter the QR Code ID for your Sync EV, located on the supplied RFID card. Please follow the instructions on screen and scan your RFID card in front of Sync EV.

This will assign the RFID card tag with the registered user and you will be prompted to assign a card label to the RFID card for your records.

Once the above process has been completed, the RFID card can be used as your chosen method of authorisation when the Sync EV is set to Authentication **Required** state.

## Pulsing Green Active charging session (Full Charging state / Low Power Keep Awake)

Indicates the Sync EV and vehicle are in an active charging session or the Sync EV and vehicle are in an active scheduled charging/off-peak charging session utilising the **Charging at Minimum Power** keep awake mode. Please note, **Charging at Minimum Power** is the Sync EVs default keep awake method and is compatible with all electric vehicles.

### My vehicle is plugged in but the smart application is displaying Keep Awake and my vehicle is only receiving a 6A charge? I want to charge at full power immediately?

The charging session has been started as a Scheduled (Smart) Charge and the Sync EV is utilising the **Charging at Minimum Power** keep awake setting to keep the vehicle out of its sleep mode until the set requested start time within the smart application.

#### How do I resolve this?

Ensure that either the Smart Charging mode is set to **Disabled** or from the smart application home screen, ensure the Smart Charging toggle switch is in the OFF position. This will ensure the vehicle commences a Plug & Charge session at full power as per the vehicles maximum charging rate.

### My vehicle is not charging at 7.4KW as per Sync EVs maximum charging rate?

Whilst the maximum charging rate the Sync EV offers is 7.4KW, please note, it is the onboard charger within the vehicle that determines the maximum charging rate accepted by the vehicle.

### The vehicle manufacturer has specified that my vehicle has a 7.4KW maximum charging rate, but my vehicle is still charging below this?

There are a number of reasons a vehicle (**outside of the vehicles onboard charger's maximum rate**) may not receive a potential maximum charging rate of 7.4Kw.

Sync EV include a safety function known as thermal throttling within its technology. To ensure compliance with regulation, thermal throttling will adjust charging rates accordingly to ensure temperatures remain within set perimeters and allow an active charging session to continue.

Other factors that may affect maximum charging rates include –

- Vehicle has a maximum charging rate set within the vehicles API
- Charging cable is restricted to 16A/20A to ensure compliance with Hybrid vehicles
- Dynamic Load Management is in place within the installation

## How do I resolve this?

Thermal Throttling and Dynamic Load Management are safety features of Sync EV and cannot be amended or adjusted to effect charging rates.

Please refer to the vehicle manufacturers handbook in relation to your vehicle to confirm maximum charging rates have not been applied to the vehicles charging protocol.

## Alternating Blue/Green Scheduled Charging Session (Pulse Charging mode)

Indicates the Sync EV and vehicle are in an active scheduled charging/off-peak charging session utilising the **Pulse Charging** keep awake mode. Please note, **Pulse Charging** is the more cost effective keep awake mode for minimising on-peak charging during the vehicles keep awake period but may not be compatible with all electric vehicles.

### What is Keep Awake and which method of Keep Awake should I use with my vehicle?

All electric vehicles have a sleep/idle function to conserve the 12V battery within the vehicle and avoid any potential drain. Unfortunately, the duration in which the vehicle switches between its awake and sleep states can vary between manufacturers and models. To ensure a scheduled charging session can commence correctly at the requested time, the vehicle needs to be in an awake state to allow communications between the vehicle and the Sync EV.

The Sync EV utilises two methods in which it stops the vehicle falling into its sleep state. **Charging at Minimum Power**, which offers the vehicle a consistent 6A trickle up until the requested start time at which the charging rate will then switch to the maximum charging rate. **Charging at Minimum Power** is Sync EVs recommended Keep Awake method and is compatible with all electric vehicle models.

The second option is **Pulse Charging**, which offers the vehicles a 6A trickle at every 5 minute period for a duration of 10 seconds.

Scheduled charging requirements can also be set within the vehicles API whilst the Sync EV smart charging mode is set to **Disabled**. This will disable the need for any keep awake trickle to be fed to the vehicle prior to the requested schedule start time. Please note, in some instances using the vehicles API to set scheduled requirements may result in charging data not transferring correctly to the Sync EV smart application.

### Why does my smart application show the charging session as "SuspendedEVSE"?

Whilst in **Pulse Charging** keep awake and whilst the vehicle is receiving the Pulse (6A trickle/5 minutes/10 seconds) as described above, the smart application will show the vehicle as charging. Once the pulse has ended, the smart application will revert to **Suspended EVSE** to allow the end user to determine the times in which the vehicle received any sort of import from the Sync EV. This information will also be displayed in the graph display above the charging current session information.

## I've set a schedule using the Sync EV smart application for my off-peak electricity tariff but the charging session starts immediately once I plug my vehicle in?

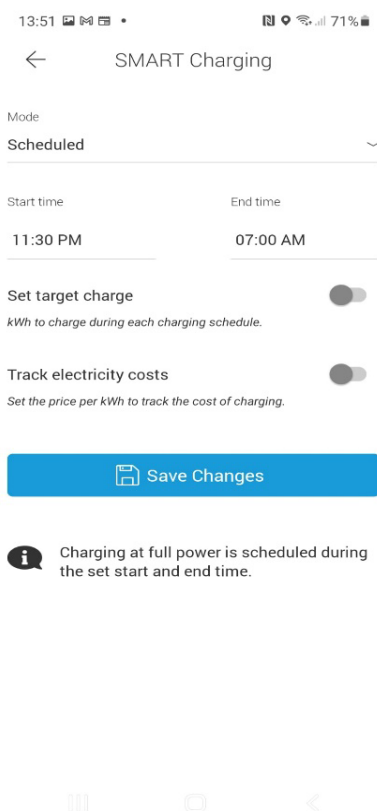
Please confirm firstly that smart charging has not been set to **Disabled**. This can be confirmed by reviewing the mode selection within the smart charging option within the configuration/settings screen. Alternatively, this can be quickly reviewed on the smart application home page, by ensuring the smart charging toggle switch is selected to the ON position.

If smart charging is set to either one of the correct scheduled charging modes (**Scheduled, Octopus Go, Octopus Agile**), please review settings within the vehicle itself to ensure no scheduled charging requirements have been set within the vehicles API.

Setting requirements via both the Sync EV smart application and within the vehicles API will create conflict and cause any potential schedule charging session to fail accordingly.

Finally, please review **Target Charge** settings within the Sync EV smart application.

If you wish to charge solely within your off-peak electricity period, please the **Set Target Charge** position to OFF.



The Sync EV is not able to obtain current battery levels of the vehicle as this requires access and direct implementation of the vehicle API within the charge point.

If the **Set Target Charge** option is selected to the ON position and minimum/maximum values are entered, please note this will dictate the attempted import value from the Sync EV to the vehicle.

The Sync EV can import a maximum of 7.4Kw (dependant on the vehicles onboard charger) per 60 mins of charging so please take this value into account when setting up any target charge values within the schedule. If the Sync EV is unable to achieve the value set as the minimum target charge within the scheduled charge duration set, the Sync EV will commence the charging session prior to the scheduled start time to ensure that the minimum target charge value is achieved by the scheduled end time of that charging session.

**Flashing Amber** Vehicle has been fully charged during the previous charging session, or pre-set charging requirements have been fulfilled (target charge value achieved, schedule charging session completed successfully)

**Pulsing Amber** Charging session is in Suspended EV status

I've tried to start either a basic Plug & Charge session and/or a Scheduled Charge session but the halo on my Sync EV is pulsing amber?

The Sync EV has attempted to initialise a charging session but has received a Suspended EV status command from the vehicle. This usually indicates there are conditions set within the vehicles API that have denied commencement of an active charging session.

**How do I resolve this?**

Confirm there are no pre-requisites or charging conditions set within the vehicles API, such as Timed Charging, Delayed Charging, Scheduled Charging, Max Charging (battery) % values, or authorisation settings within the vehicle manufacturers smart application.

**Red** Sync EV is in fault status

Contact Sync EV customer support on the following - <https://www.syncev.co.uk/call-back.aspx>

**My Sync EV has no colour indication on the halo LED display?**

Please confirm there is power to the unit by ensuring the circuit breaker supplying power to your unit is on.

If this is the case, please in the first instance contact your installer to advise who in turn, after an initial installation investigation, will contact Sync EV to discuss the next steps.