



XC 60

TWIN ENGINE

QUICK GUIDE

VÄLKOMMEN!

This Quick Guide describes a selection of the functions in your Volvo. More detailed owner's information is available in the car, in the app and on the web.



THE CAR'S CENTRE DISPLAY

The owner's manual is available in the car's centre display, where it can be accessed via the top view.



MOBILE APP

The owner's manual is available as an app (Volvo Manual) for smartphones and tablets. The app also contains video tutorials for selected functions.



VOLVO'S SUPPORT SITE

The Volvo Cars support site (support.volvocars.com) contains manuals and video tutorials, as well as additional information and assistance for your Volvo and your car ownership.



PRINTED INFORMATION

There is a supplement to the owner's manual in the glovebox that contains information on fuses and specifications, as well as a summary of important and practical information. A printed owner's manual and associated supplement can be ordered.

CONTENTS

01. GET TO KNOW YOUR VOLVO

In this chapter you can find information about how to get started with your Volvo and you get an overview of the inside and outside as well as the centre display.

02. CHARGING

This chapter describes the car's charging status, how you operate the charging unit, and the different symbols in the driver display.

03. INTERIOR AND CONNECTIONS

Here you can read about seat settings, steering wheel buttons and levers, the car's passenger compartment climate control, Internet connection, Bluetooth connections, etc.

04. THE CENTRE DISPLAY'S VIEWS

Here you can find information on the centre display's various main views. You can use them to control many of the car's functions.

05. SMART DRIVING

This chapter describes the various functions that the car has to support your driving, as well as some tips for how you can enjoy a purer driving experience.

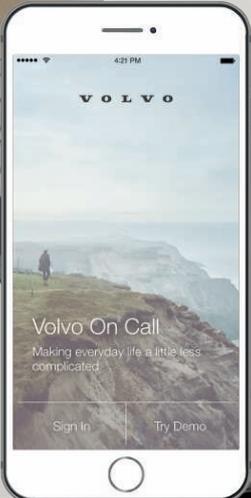
06. VOICE RECOGNITION

Here you can find the various commands/phrases you can use with the car's voice recognition system.

07. SPECIAL TEXTS

Warning, important and note texts, which must be read.

Options in the Quick Guide are highlighted with an asterisk*.



GETTING STARTED

To get started with your Volvo in the best possible way there are several functions, terms and tips that can be useful to know about.

Volvo ID

Volvo ID is a personal ID that gives access to several services online¹. Some examples are Volvo On Call*, map services, a personal login at volvocars.com, and the option to book service and repair. You can create a Volvo ID via volvocars.com, the Volvo On Call app or directly in your car.

Sensus

Sensus is the car's intelligent interface and covers all solutions in the car associated with entertainment, Internet connection, navigation* and information services. It is Sensus that makes possible the communication between you, the car and the outside world.

Volvo On Call*

Volvo On Call is a built-in assistance system with an app that gives you the facility to control your Volvo remotely. With the Volvo On Call app you can, amongst other things, precondition the car before driving, lock/unlock your car, see where it is parked, log journeys and receive theft warnings. Download the Volvo On Call app to get started.

Volvo On Call also includes roadside assistance and emergency assistance using the **ON CALL** and **SOS** buttons in the car's roof console.

Driver profiles

Many of the settings made in the car can be adapted according to the driver's personal preferences and can then be saved in one or more driver profiles. Each key can be linked to a driver profile. See the section Top view in this Quick Guide for more information on driver profiles.

Preconditioning before you travel

Make it a habit to always precondition the car before departure. It increases the range and reduces the wear on the car, while at the same time you get a comfortable passenger compartment temperature. From

the centre display's climate view, select the **Parking climate** tab or activate the function via the Volvo On Call app.

¹ The services vary depending on the car's configuration and market.



OVERVIEW, EXTERIOR

- 1 **Checking the engine oil level and tyre pressures** is performed from the **Car status** app in the centre display's app view. In **Car status**, you can also see status messages and book service and repair*.
- 2 **Charging the hybrid battery** is performed via the charging input socket in the front hatch. Open the hatch with a gentle push. For optimum range, start the journey with a fully charged battery.
- 3 **Rearview mirrors** are angled down automatically* when reverse gear is engaged, so that the driver can see the edge of the road during parking, for example. The rearview mirrors are folded in/out automatically when the car is locked/unlocked.
- 4 **Keyless locking/unlocking*** means that you simply need to have the remote control key with you in a pocket, for example, in order to lock or unlock the car. The remote control key must be within a range of approx. 1 metre of the car.
Grip a door handle or press the tailgate's rubberised pressure plate to unlock the car. To lock the car, press gently on one of the door handle recesses. Avoid touching both pressure surfaces at the same time.
- 5 **Panoramic roof*** includes opening glass cover and sun blind, and is operated by a control above the rearview mirror when the car is in at least ignition position **I**. Open to ventilation position by pressing the control upward, and close by pulling the control downward. To fully open the panoramic roof, pull the control backward twice. Close by pulling the control downward twice.
- 6 **The power operated tailgate*** can be opened either with the handle on the tailgate or with a slow forward kicking motion* under the left-hand section of the rear bumper. Close and lock the tailgate using  on its lower edge. Or close the tailgate with a kicking motion.

In order to prevent the tailgate from e.g. hitting the ceiling in a garage, it is possible to program maximum opening. Set maximum

opening by opening the tailgate and stopping it in the desired opening position. Then push  for at least 3 seconds to save the position.



LOCKING/UNLOCKING

Remote control key

-  One short press locks doors, tailgate and fuel filler flap and arms the alarm*. A long press closes the panoramic roof* and all side windows simultaneously.
-  A short press unlocks doors and tailgate and disarms the alarm. A long press opens all side windows simultaneously.
-  One short press unlocks and disarms the alarm for the tailgate only. A long press opens or closes the power operated* tailgate.
-  The panic function activates the direction indicators and the horn to attract attention when required. Press and hold the button for 3 seconds to activate.

Charging hatch

Make sure that the car is unlocked and switched off before you plug in or unplug the charging cable.

1. Press in the rear section of the hatch and release.
2. Open the hatch.

The cable is locked into the socket after charging has started. Charging is stopped if the car is unlocked, but resumes after a short while if the cable is not unplugged.

Private locking



Private locking locks the tailgate, which can be practical when, for example, the car is taken in for service. Locking the glove-box is done manually with the enclosed key.

- In the centre display's function view, tap on **Private Locking** to activate/deactivate the function.

A pop-up window is shown for activation/deactivation. A four-digit code is selected each time locking is used. An extra security code must be selected the first time the function is used.



3

2

1

7

4

5

6

OVERVIEW, INTERIOR

- 1 **Centre display** is used to control many of the car's main functions, e.g. climate control, driver support systems and in-car apps.
- 2 **Driver display** shows most of what is related to driving such as speed, engine speed, navigation* and active driver support. You can yourself choose what should be shown in the driver display via **Settings → My Car → Displays** in the centre display's top view.
- 3 **Head-up display*** is a complement to the car's driver display and projects information on the windscreen. It is activated via the centre display's function view.
- 4 **Start/switch off the car** with the start knob in the centre, between the seats. Select gear position **P** or **N**. Turn clockwise and release for ignition position **I**, depress and hold the brake pedal, then turn the start knob and hold it depressed to start the car. Switch off by turning the start knob clockwise.
- 5 **Drive modes** are set with the control in the centre, between the seats. Press in the control and roll it to select between **Pure**, **Off Road**, **AWD**, **Hybrid**, **Power** and **Individual** in the centre display. Confirm by pressing the wheel. With **Individual** you can adapt a drive mode according to your own desired driving characteristics. It is activated in **Settings → My Car → Individual Drive Mode** in the centre display's top view.
- 6 **Parking brake** is activated when you pull the **(P)** control upwards, a symbol in the driver display illuminates. Release it manually by pressing the control down at the same time as holding the brake pedal depressed. Using Auto Hold **(A)** you can release the brake pedal with maintained brake force when the car has stopped at e.g. traffic lights.

Remember that both Auto hold and **Auto Activate Parking Brake** must be deactivated for an automatic car wash. The latter can be performed in the centre display's top view under **Settings → My**

Car → Parking Brake and Suspension. Then select gear position **N** and turn the start knob clockwise for at least 4 seconds.

- 7 **Switch for passenger airbag*** is located on the end face of the instrument panel on the passenger side and can be accessed when the door is open. Pull the switch out and turn to **ON/OFF** in order to activate/deactivate the airbag function.

Storage spaces

Your car has a wide range of storage spaces. There are storage compartments under the outer seats in the rear seat that can be used to store e.g. a tablet

13:45



Ånäsvägen



Lune - Leave The World...



Daniel's Phone

Telenor



Studio

Sound optimised for driver

22°C



22°C

CENTRE DISPLAY

You can make settings and control most of the functions in the **centre display**. Centre display has three main views, which you reach by swiping right/left: home view, function view and app view. There is also a top view that you access by dragging down the top part of the display.

Change the appearance in the centre display and in the driver display by selecting a theme in **Settings → My Car → Displays** in the top view. Here you can also select a dark or a light background for the centre display.

Go back in the menu structure by means of a short press on the physical home button under the display. A longer press takes you to the home view.

For cleaning the centre display, lock the touch function with a long press on the physical home button under the display. Reactivate the display with a short press on the home button.

Status bar at the top of the display shows the activities in the car. Network information and connection information are shown on the left, and media-related information and the clock are shown on the right.

In the climate row at the bottom you can set temperature, seat comfort and fan speed by tapping on the respective icon.



CHARGING

Your Volvo is equipped with an electric motor that mainly drives the car at low speeds, as well as a petrol engine that drives the car at higher speeds and for more active driving. The charging time of the hybrid battery depends on the charging current that the socket can supply. The hybrid battery is also charged during smooth braking or engine braking, e.g. on a downhill gradient. All types of charging are indicated in the driver display.

Storing the charging cable

The charging cable is located under the floor hatch in the cargo area.

Control unit on the charging cable

The enclosed charging cable is equipped with a control unit that shows the charging status. It supports temperature monitoring and has a built-in ground fault breaker.

Starting charging

When the hybrid battery is charged, the car's starter battery is also charged.

1. Connect the charging cable to a socket. Never use an extension cable.
2. Set the correct charging current on the control unit with ▲ and ▼.
If you are uncertain about the socket's charging current rating, select the lowest charging current on the control unit.
3. Open the charging hatch with a gentle push.
4. Remove the charging handle's protective cover and then press the handle the whole way into the socket for the car. The charging cable is locked automatically into the charging input socket and charging starts within 5 seconds.
5. Position the charging handle's protective cover so that it does not touch the car in order to avoid damage to the paintwork.

Finishing charging

1. Unlock the car with the remote control key's  button. Charging is finished and the charging cable releases/is unlocked.
2. Unplug the charging cable from the car and close the hatch.
3. Detach the charging cable from the socket.
4. Return the charging cable to its place under the floor hatch in the cargo area.

If the charging cable is not unplugged from the charging input socket, it is locked automatically again a short time after unlocking to maximise charging and range, as well as to allow preconditioning before departure. The charging cable can be unplugged again if the car is unlocked with the remote control key. For cars with Passive Entry*, you can lock and lock with the handle again.



CHARGING STATUS

The car's charging status can be checked at the charging input socket, on the control unit, in the driver display and in Volvo On Call* app.

Via the lamps for the charging input socket

- White - LED light.
- Yellow - Waiting mode, waiting for the charging to start.
- Flashing green - Charging in progress.
- Green constant glow - charging complete, extinguishes after a while.
- Red constant glow - A fault has occurred.

Via the control unit

- The car symbol illuminates with a green constant glow and the charging indicator is extinguished: Standby.
- The car symbol and the charging indicator illuminate with a green constant glow: Charging in progress.
- The car symbol flashes red and the charging indicator is extinguished: Charging is not possible. Check all connections, or use another socket, then restart charging.
- The car symbol illuminates with a red constant glow: Charging is not possible. Unplug the charging cable from the socket and restart charging.
- The house symbol and the charging indicator flash red: Charging is not possible. Restart charging. If the problem persists – contact a qualified professional.

Via the driver display

The different colours of the symbol indicate charging status.



Blue light - charging in progress.

Green light - the battery is fully charged.

Red light - charging error, check the connection of the charging cable with the car and the 230 V socket.

HYBRID INFORMATION IN THE DRIVER DISPLAY

A number of symbols and animations are shown in the driver display depending on drive mode selected.

Electricity and petrol consumption are shown in the gauge on the right. The consumption varies depending on driving style. When the thin white pointer passes the white arrow at the top, the car is changed over to the internal combustion engine. When the pointer is in the orange-coloured zone, the battery is being charged, e.g. during braking.

Distance to empty battery

- ➔  The indicator shows the approximate distance to empty battery. The distance is affected by several factors, e.g. driving style, speed and outside temperature, and may vary during the journey. Normally you can expect a range of 20-40 km. The start value shown when the car is fully charged indicates an up-to figure instead of a forecast for the range for electrical operation and is adapted during the journey. No guaranteed range on electric power remains when the driver display shows "----".

Symbols in the driver display

-  An all-white symbol indicates whether the electric motor or the engine is being used. A lightning bolt indicates electric motor, a drop indicates petrol engine.
-  Indicates that the battery is being charged, e.g. during engine braking.
-  The gauge shows how much energy is available in the battery for the electric motor. The energy is also used for the climate control.
-  Shows that the **Charge** or **Hold** functions are activated. They are activated from the centre display's function view. **Charge** means that the hybrid battery is charged when the state of charge is low. **Hold** means that the battery level is maintained for later use.



Starting and stopping the internal combustion engine

The car calculates the extent of the need to use the internal combustion engine, electric motor or both simultaneously. During electrical operation, the car may sometimes need to start the internal combustion engine automatically due to external circumstances, e.g. in low outside temperatures. The internal combustion engine always starts when the hybrid battery reaches its lowest state of charge.



3. Change the setting by pressing in the upper/lower/front/rear part of the control.

Saving settings

1. Set the seat, door mirrors and head-up display* to the desired position and press the **M** button on the door panel. The light indicator in the button illuminates.
2. Within 3 seconds, press the memory button **1** or **2**. An acoustic signal sounds and the light indicator in the **M** button extinguishes.

To use your saved seat settings:

With the door open - push and release one of the memory buttons.

With the door closed - hold one of the memory buttons pressed in until the stored position is reached.

POWER* FRONT SEATS

Use the controls on the outside of the seats to adjust the seat position, lumbar support*, etc. One control is shaped like a seat so you can more easily understand how you change position, the other one, the multi-function control, is used for adjusting lumbar support, massage*, etc.

The seat-shaped control

Adjust the seat cushion or move the whole seat using the lower control. Adjust the angle of the backrest using the rear control.

Multi-function control

Settings for massage*, side support*, lumbar support* and seat cushion extension are linked to the multi-function control*.

1. Activate seat setting in the centre display by turning the control.
2. Select the desired function in the centre display by turning the control.

FOLDING THE BACKRESTS IN THE REAR SEAT

Ensure that a backrest with head restraint does not come into contact with the backrest of the seat in front when lowering. The front seats may need adjusting in order for the backrests to be lowered.

The backrests can be folded manually using the handle on the tops of the outer seats. If the car is equipped with electronic folding of the rear seat* there are buttons for folding located in the cargo area.

Folding the backrests electronically

1. Lower the centre seat's head restraint manually.
2. Hold the button depressed to fold the seats. The buttons are marked **L** and **R** for left and right backrest section respectively.
3. The backrests are lowered automatically to horizontal position. The head restraints are also lowered automatically.

Raising the backrests

1. Move the backrest upwards/backwards by hand until the lock engages.
2. The head restraint is extended manually.
3. If necessary, raise the centre seat's head restraint.



03





STEERING WHEEL

You can set the height and depth position of the steering wheel by pulling the lever under the steering wheel towards/from² you. Set the desired position and move the lever back to locked position.

Left-hand keypad

Driver support is selected in the driver display using the arrows in the steering wheel's left-hand keypad (◀ and ▶). When the driver support symbol is WHITE the function is active. GREY means that the function is stopped or in standby mode.

Display symbols in the driver display:

-  **Speed limiter*** helps to avoid exceeding a preselected/preset maximum speed.
-  **Cruise control** helps to maintain a constant speed.

-  **Adaptive cruise control*** helps to maintain a constant speed, combined with a preselected time interval to the vehicle ahead.
-  **Pilot Assist*** helps the driver to keep the car between the lane's side markings using steering assistance as well as to maintain a constant speed, combined with a preselected time interval to the vehicle ahead.

Press  to start or stop the selected function.

A short press on  increases/decreases the stored speed by 5 km/h. Press and hold the button to change steplessly - release the button for the required speed.

 /  decreases/increases the distance to the vehicle ahead when using Adaptive cruise control and Pilot Assist.

One press on \odot^+ also resumes the stored speed for the selected function.

Right-hand keypad

Use the steering wheel's right-hand keypad to navigate in the diver display.

-  The driver display's app menu opens/closes. From here the trip computer, media player, telephone and navigation can be controlled.
-   Scroll between the different apps available by pressing the left or right arrow.
-  Select, deselect or confirm an option, e.g. select the trip computer's menu or delete a message in the driver display.
-   Browse among the functions for the selected app by tapping up or down.

Raise/lower the media volume by pressing \blacktriangledown and \blacktriangle . If no other function is active, these buttons act as volume control.

Voice control is activated using the Ⓢ button and allows you to control e.g. media, navigation and climate control using your voice. Say e.g. "Play Avicii", "Raise temperature" or "Cancel".

See the chapter Voice control in this Quick Guide for more voice commands.

Trip computer

The trip computer shows e.g. mileage, fuel consumption and average speed. It is possible to select which information from the trip computer should be shown in the driver display. The trip computer calculates the remaining distance to empty tank or empty hybrid battery. To show the different options, use the steering wheel's right-hand keypad. No guaranteed range remains when the driver display shows "----".

² Depending on market.



Resetting the trip meter

Reset all information in the manual trip meter (TM) with a long press on the **RESET** button. A short press only resets the mileage. Trip meter, automatic (TA), is reset automatically when the car has not been used for 4 hours.

LEFT-HAND STALK SWITCH

Headlamp functions are controlled using the left-hand stalk switch.

If you select **AUTO** mode, the car detects when it is dark/light and the lighting is set accordingly, e.g. when evening falls or when you drive into a tunnel. You can also turn the stalk switch's thumbwheel to  for main beam, which is dimmed automatically for oncoming traffic. Manual main beam is activated by moving the stalk switch away from you. Deactivate by moving the stalk switch towards you.

Active bending lights* are designed to provide maximum lighting in bends and at junctions by means of the light following steering wheel movements. The function is activated automatically when the car is started and can be deactivated in the centre display's function view.

Approach lighting* switches on the outside lighting when you unlock the car with the key, and helps you to reach the car safely in the dark.

RIGHT-HAND STALK SWITCH

The right-hand stalk switch controls the wiper blades and the rain sensor.

- Move the stalk switch downward to make one single sweep on the windscreen.
- Move the lever in steps upwards for intermittent, normal and fast speeds.
- Adjust the interval speed using the stalk switch's thumbwheel.
- Move the stalk switch towards the steering wheel in order to start the windscreen and headlamp washers, and towards the instrument panel to start the rear window washers.

 Press the rain sensor button to activate/deactivate the rain sensor. The rain sensor automatically starts the windscreen wipers based on how much water it detects on the windscreen. Turn the thumbwheel up/down for higher/lower sensitivity.

 Press for intermittent wiping with the rear window wiper.

 Press for continuous speed with the rear window wiper.

 Use windscreen wiper service mode when, e.g. replacing, cleaning or lifting wiper blades. It is activated in the centre display's function view.





03

PASSENGER COMPARTMENT CLIMATE CONTROL

Preconditioning

Preconditioning can be set via the car's centre display and using the Volvo On Call* app. Preconditioning cools or heats the passenger compartment to comfort temperature before driving, which can also reduce wear and energy requirements while driving. It is possible to direct start or set preconditioning via the timer.

Direct-starting preconditioning

1. Open the centre display's climate view by tapping at the bottom of the display.
2. Select the **Parking climate** tab, tick an appropriate option and then tap on **Preconditioning**.

Setting the timer for preconditioning

- Select **Parking climate** → **Add timer** and set date/day as required.

In order that preconditioning should have full function, the car must be connected to an electrical socket (applies to cars with electric heater). Either a fuel-driven heater or electric heater³ is used depending on market.

Climate settings

The climate control functions for the front and rear section of the passenger compartment are controlled via the centre display and buttons on the centre console.



The icon used to access the climate view is located in the centre at the bottom of the centre display. When the text Clean Zone is BLUE, this indicates that the conditions have been met for good air quality in the passenger compartment.

- Tap on **AUTO** for fully automatic passenger compartment climate control according to desired temperature. Short press resets to previous settings for auto-regulated climate control. Long press changes to default settings (22 °C and fan level 3 in the front seat, level 2 in the rear seat). In **AUTO** mode the fan can also be set to five different automatic fan speeds as well as **Off** and **Max**.
- Tap on one of the icons in the climate row at the lower edge of the centre display to adjust temperature, seat heating and fan speed.

To synchronise the temperature for all zones with the temperature on the driver's side, tap on the temperature icon for the driver's side and on **Synchronise temperature**.

Air quality system IAQS*

IAQS is a part of the Clean Zone Interior Package* and is a fully-automatic system that cleans the air in the passenger compartment from contaminants such as particles, hydrocarbons, nitrous oxides and ground-level ozone. The function is activated in the centre display's top view via **Settings** → **Climate** → **Air Quality Sensor**.

³ An authorised Volvo dealer has information about which markets use which heater.



CONNECTIONS

You can play back/control media, SMS and phone calls using voice recognition, as well as connect the car to the Internet via different external devices, e.g. smartphones. The car's electrical system must be in at least ignition position **I** so that you can use the connected devices.

The car's modem⁴

The simplest and most effective way to connect your car to the Internet is via the car's own modem. It has the highest performance, is activated automatically for each journey and does not require connection to a smartphone.

1. Insert a personal SIM card into the holder by the floor on the passenger side.
2. Press **Settings** → **Communication** → **Car Modem Internet** in the top view.

3. Activate by ticking the box for **Car modem Internet**.

Tethering

When the car is connected to the Internet via the modem, you can share the Internet connection (Wi-Fi hotspot) with other devices under **Settings** in the top view. Press **Communication** → **Car Wi-Fi hotspot**.

Bluetooth

Use Bluetooth primarily to manage phone calls, SMS and media from your phone to the car's system. You can also connect the car to the Internet via Bluetooth. It is possible to have two Bluetooth devices connected at once in which case one of them can only be streaming media. The two most recently connected phones will be connected automatically when the car is used again, if the phone's Bluetooth is

active. Up to 20 devices are saved in a list to allow easier connection of them at a later time.

1. Activate Bluetooth in your phone. To connect to the Internet, activate tethering in the phone as well.
2. Open the **Phone** subview in the centre display's home view.
3. Tap on **Add phone**, or if a phone is already connected, tap on **Change** and then **Add phone**.
4. Select the phone to be connected and follow the steps on the centre display and the phone. Note that on certain phones the message function must be activated.

Wi-Fi

By connecting the car to the Internet via Wi-Fi you can stream online services at a higher speed than with Bluetooth, such as Internet radio and music via in-car apps, download/update software, etc. A Wi-Fi connection from a smartphone operates as a hotspot for the car as well as any other external devices in the car.

1. Activate tethering in your phone.
2. Tap on **Settings** in the centre display's top view.
3. Tap on **Communication** → **Wi-Fi** and activate by ticking the box for Wi-Fi connection.

Note that certain phones switch off tethering after the contact with the car has been disconnected. The tethering in the phone therefore needs to be reactivated the next time it is used.

USB

Via USB you can connect an external device to play back media. You can also use the USB port for Apple CarPlay and Android Auto. Your external device is charged while it is connected to the car.

- 1 USB ports are located in the armrest's storage compartment between the seats.

Electrical sockets

The following electrical sockets are available in your car:

- 2 12 V electrical socket.
- 3 12 V electrical socket and 230 V electrical socket*. There is also a 12 V electrical socket* in the cargo area.

⁴ Cars with Volvo On Call* only. When connecting using an in-car modem, the Volvo On Call services will use the connection.

USING CONNECTED DEVICES

When the car is connected via an external device you can, for example, manage phone calls and play back media via the car's audio and media system.

Managing phone calls⁵

It is possible to make and receive calls from a Bluetooth-connected phone.

Calling via the centre display

1. Open the subview **Phone** in the home view. Select to call from the call log, contact list or enter a number using the keypad.
2. Press **Call** or .

Calling with the steering wheel's right-hand keypad

1. Press  and navigate to **Phone** by pressing  or .
2. Scroll through the calls list with  and select with .

You can also manage calls using voice control. Press the voice control button  in the steering wheel's right-hand keypad. See the chapter Voice control in this Quick Guide for voice commands.

Playing back media

To play back audio from an external device, you need to connect it to the car using your chosen method, see the previous page for different connections.



Bluetooth-connected device

1. Start playback in the connected device.
2. Open the **Bluetooth** app in the app view in the centre display - playback starts.



USB-connected device

1. Start the **USB** app in the app view.
2. Select what to play - the playback starts.



⁵ For information about which telephones are compatible with the car, see support.volvocars.com.

iPod



MP3 player or iPod connected device

1. Start playback in the device.
2. Open the **iPod** or **USB** app depending on the connection method. To play back music from an iPod, select the **iPod** app regardless of connection method - playback starts.

Apple CarPlay and Android Auto

Apple CarPlay and Android Auto allow you to use certain apps in your phone via the car to e.g. play back music or listen to podcasts. The interaction takes place via the car's centre display or a phone.

If you have an iPhone, Siri voice control must be activated before using Apple CarPlay.



1. Connect the phone to the USB port. If there is more than one port then use the one with the white frame.
2. Tap on **Apple CarPlay** or **Android Auto** in the app view to activate.



Activate voice control with Apple CarPlay and Android Auto by means of a long press on the  button in the steering wheel's right-hand keypad. A short press activates the car's own voice control system.

Bluetooth is switched off when Apple CarPlay is used. Use Wi-Fi or the car's modem* to connect the car to the Internet as required.

04

13:45



1
Ånäsvägen



2
Lune - Leave The World...



3
Daniel's Phone
Telenor



4
Studio
Sound optimised for driver

22°C



22°C



HOME VIEW

When the centre display starts it shows the home view, from where you can access the subviews for Navigation, Media and Phone, as well as the last used car function.

- 1 **Navigation** - tap here to access map navigation with Sensus Navigation*.

Set destination with free text - Tap on . The map image changes to free text search. Enter the search terms.

Set destination with map - Maximise the map with  and tap and hold at the destination you want to travel to.

Delete a destination - Tap on  to open the itinerary. Tap on the recycle bin to delete an intermediate destination in the itinerary, or tap on **Clear itinerary** to delete the whole itinerary.

Map update⁶ - Tap on **Download Centre** in the app view. The number of available map updates is shown at **Maps**. Tap on **Maps** → **Install** for map updating or installation of selected map. There is also the option to download maps from support.volvocars.com to a USB memory and then transfer them to the car.

- 2 **Media** - shown here is e.g. your music from an external device or if you have selected **FM radio** in the app view. Tap on the subview to access the settings. From here you can see your music library, radio stations, etc.
- 3 **Phone**, the phone function is accessed from here. Tap on the subview to expand it. Here, for example, you can dial from the call history or the contact list, or enter a number manually using the keypad. Once you have selected a number, tap on **Call** or .
- 4 **Last used car function** - here you can see the last used car function that is not shown in any of the other subviews, e.g. **Car Status** or **Driver performance**. You can tap on the subview to access the last used function.

⁶ Function availability may vary depending on market.

13:45

Car functions

ESC Sport Mode	Lane Keeping Aid	Park Assist
Cross Traffic Alert	Distance Alert	
Camera	Park In	Park Out
Headrest fold	Head-up display adjustments	Road Sign Information
Head-up display	BLIS	Active Bending Lights

22°C AUTO 22°C

FUNCTION VIEW AND APP VIEW

Function view

When you swipe from left to right⁷ in the home view you will reach the function view. From here you can activate/deactivate different car functions, e.g. **Head-up display** *, **Park Assist** and **Lane Keeping Aid**. They are activated/deactivated by tapping on the respective symbol. Some functions open in a separate window.

Go back in the menu structure by pressing the physical home button under the display.

App view

Swipe from right to left⁷ in the home view to access the app view. Here you can see the apps supplied with the car, as well as the apps that you can choose to download and install yourself.

Managing and updating apps and systems



In **Download Centre**, in the app view, you can update several of the car's systems. For this to be possible the car must be connected to the Internet. One tap on **Download Centre** opens a download application. Here you can:

Download apps - Tap on **New apps** and select the app required. Select **Install** to download the app.

Update apps - Tap on **Install all** to update all apps. Select **Application updates** to show a list of possible updates. Select the app required and tap on **Install**.

Uninstall apps - Tap on **Application updates** and select the app required. Tap on **Uninstall** to uninstall an app.

Update system software - Tap on **System updates** to show a list of updates that can be installed in the car. - Tap on **Install all** at the bottom of the list to update all software or on **Install** for an individual software program. If no list is required, select **Install all** at the **System updates** button.

Moving icons

The apps and buttons for car functions in the app view and function view can be moved as required.

1. Press and hold an icon.
2. Drag the icon to an unoccupied space in the view and release.

⁷ Applies to left-hand drive cars. For right-hand drive cars - swipe in the opposite direction.



Settings



Owner's manual



Profile



Car message stored in Car status application



Passenger

Restart



TuneIn is installing



New position received



22 °C



22 °C

TOP VIEW

The upper part of the display contains a tab that you can drag down to access the top view. From here you can access **Settings**, **Owner's manual**, **Profile** and the car's saved messages.

Personal preferences

Under **Settings** you can set many personal preferences, e.g. for displays, mirrors, front seat, navigation*, audio and media system, language and voice control.

Driver profiles



If the car is used by several drivers then each driver can have a personal driver profile in the car. Every time you get into the car you have the option to select your driver profile where your personal preferences⁸ are saved. The number of profiles depends on the number of keys available for the car. The **Guest** profile is not connected to any specific key.

The latest active driver profile is the one used for unlocking. Change driver profile by selecting **Profile** in the top view.

The driver profiles can be connected to the car's keys, and when it is unlocked, the car is automatically adapted to your personal preferences. Connect a key under **Settings** → **System** → **Driver Profiles**. Select one of the driver profiles (the **Guest** profile cannot be connected). The home view is shown again. Drag down the top view again, repeat in accordance with the above and select **Edit** on the chosen profile and then **Connect key**.

Individual drive mode

If you want to adapt one of the **Hybrid**, **Pure** or **Power** drive modes - activate the drive mode under **Settings** → **My Car** → **Individual Drive Mode**. Once you have made the settings, select **Individual** from the drive modes on the tunnel console.

System volumes

If you want to adjust or switch off the volume of the system sounds, e.g. the sound for tapping on the display, go to **Settings** → **Sound** → **System Volumes**.

⁸ For an overview of which settings are personal/global, see the owner's manual.



DRIVER SUPPORT

Your car is equipped with a number of functions that help you to drive safely and which can prevent accidents. You can activate these functions in the centre display's function view. Remember that the driver support functions are only aids and that as the driver you always have full responsibility for driving the car in a safe manner.

City Safety

City Safety⁹ warns the driver of obstacles, by means of visual and acoustic signals. The car is braked automatically if the driver does not react in time in the event of a risk of collision. City Safety can, amongst other things, prevent a collision and assist in the event of a risk of colliding with e.g. vehicles, larger animals, pedestrians or cyclists. City Safety is activated automatically when the engine is started.

Cross Traffic Alert (CTA)*



CTA warns about crossing traffic behind the car and is activated if reverse gear is engaged or if the car is rolling backwards.

Blind Spot Information (BLIS)*



BLIS informs you about vehicles in the blind spot and quickly approaching vehicles in an adjacent lane.

Lane Keeping Aid



Lane assistance (Lane Keeping Aid) can help you reduce the risk of the car unintentionally leaving its own lane and/or colliding with another vehicle or obstacle by giving a warning, steering the car back and/or evasive steering.

The settings for Lane assistance are made via **Settings → My Car → IntelliSafe** in the centre display's top view. Required type of assistance can be selected in **Lane Keeping Aid Mode**. The subfunctions, Steering assistance at risk of run-off, Steering assistance at risk of collision with oncoming traffic and Steering assistance at risk of rear-end colli-

sion* can be deactivated by deselecting **Collision Avoidance Assistance**.

Pilot Assist

Pilot Assist is a comfort function that can help to keep the car in its lane and at a preset distance to the vehicle ahead.

Pilot Assist is selected and activated using the left-hand steering wheel keypad. For steering assistance to work requires, amongst other things, that the driver has his/her hands on the steering wheel and that the lane markings are visible. When steering assistance is active, the driver display shows a GREEN steering wheel symbol.

⁹ Not available for all markets.



PARK ASSIST

Park Assist Pilot*

Park Assist Pilot scans available parking space and then turns the steering wheel to steer the car in. Your task is to pay attention around the car, follow the centre display instructions, select gear, control the speed and brake/stop.

Parking with Park Assist Pilot



1. Press the **Driving in** button in the function view. Drive in at maximum 20 km/h. The distance between the car and the parking spaces should be approximately 1 metre when the function is searching for a parking space.
2. Stop the car when the graphic and text in the centre display advise that a suitable parking space has been found. A pop-up window is shown.
3. Follow the instructions that appear in the centre display. Be ready to stop the car when the information in the centre display advises you to do so.

Leaving a parking space

The function can only be used for a parallel-parked car.



1. Press the **Park out** button in the function view.
2. Follow the instructions in the centre display.

Park assist camera*



The park assist camera helps the driver to observe any obstacles around the car using camera images and graphics in the centre display. Selection of camera views and park assist lines is made in the centre display. The camera starts automatically when reverse gear is selected. The park assist camera can also be started manually:

- Press the **Camera** button in the function view to activate/deactivate the function.

05



PURER DRIVING PLEASURE

By planning your driving and by driving economically, you can extend the range for electric operation and reduce your impact on the environment at the same time. The conditions for achieving maximum range vary according to the different circumstances and conditions the car is driven in. You can influence some factors yourself, but not others. The longest range is achieved under very favourable conditions when all factors have a positive impact.

Plan your driving by always performing the following:

- Charge the car before departure.
- Precondition the car.

Drive economically by means of the following:

- Activate drive mode **Pure**.
- Lower the temperature in the passenger compartment and reduce the fan strength.
- Drive at a steady speed and keep a good distance to other vehicles and objects to minimise braking.
- Select **Hold** in the function view at higher speeds during journeys that are longer than the range for electric operation.
- Drive with the correct tyre pressure in the tyres and check them on a regular basis. Select **ECO** tyre pressure for best results.
- Avoid driving with the windows open.

Factors you cannot influence

- Traffic situation.
- Road conditions and topography.
- Outside temperature and headwind.

See the owner's manual for more tips on range and fuel-efficient driving.



VOICE COMMANDS

The voice control system gives you the option to use voice recognition¹⁰ to control certain functions of the media player, Bluetooth-connected phone, the climate system and Volvo's navigation system*. Voice control is activated with a press on the voice control button in the steering wheel's right-hand keypad.

The following commands are always available for use:

- Repeat
- Cancel
- Help

Voice commands for phone

- Call [contact]
- Call [telephone number]

- Recent calls
- Read message
- Message to [contact]

Voice commands for radio and media

- Media
- Play [artist]
- Play [song title]
- Play [song title] from [album]
- Play [TV channel name]
- Play [radio station]
- Tune to [frequency]
- Tune to [frequency] [wavelength]
- Radio
- Radio FM
- DAB
- TV*
- CD*
- USB
- iPod
- Bluetooth
- Similar music

Voice commands for climate control

- Climate
- Set temperature to X degrees
- Raise temperature/Lower temperature
- Sync temperature
- Air on feet/Air on body

- Air on feet off/Air on body off
- Set fan to max/Turn off fan
- Raise fan speed/Lower fan speed
- Turn on auto
- Air condition on/Air condition off
- Recirculation on/Recirculation off
- Turn on defroster /Turn off defroster
- Turn on max defroster/Turn max defroster off
- Turn on electric defroster/Turn off electric defroster*
- Turn on rear defroster/Turn off rear defroster
- Turn steering wheel heat on/Turn steering wheel heat off*
- Raise steering wheel heat/Lower steering wheel heat*
- Turn on seat heat/Turn off seat heat*
- Raise seat heat/Lower seat heat*
- Turn on seat ventilation/Turn off seat ventilation*
- Raise seat ventilation/Lower seat ventilation*

Voice commands for map navigation

- Navigation
- Take me home
- Go to [city]
- Go to [address]
- Add intersection
- Go to [postcode]
- Go to [contact]
- Search [POI category]
- Search [POI category] [city]
- Search [POI name]
- Change country/Change state^{11, 12}

- Show favourites
- Clear itinerary
- Repeat voice guidance
- Turn off voice guidance
- Turn on voice guidance

¹⁰ Applies to certain markets.

¹¹ In European countries, "Country" is used instead of "State".

¹² For Brazil and India, the search area is changed via the centre display.

SPECIAL TEXTS

The owner's manual and other manuals contain safety instructions and all warning, important and note texts, which must be read. Some functions only apply to certain markets.

WARNING

GETTING STARTED

Volvo On Call – For cars with Volvo On Call, the system only works in areas where Volvo On Call's partners have mobile coverage and in the markets where the service is available. Atmospheric disturbances or weak transmitter coverage can cause the connection to fail, e.g. in sparsely populated areas.

For warning, important and note texts for Volvo On Call services, see the contract applicable to the Volvo On Call subscription as well as the Owner's Manual.

Sensus Navigation* – direct all your attention to the road and make sure that all your concentration is on driving. Follow applicable traffic legislation and drive with good judgment. Road and weather conditions may make certain recommendations less reliable.

OVERVIEW, EXTERIOR

Tailgate – bear in mind the risk of pinching when opening/closing the tailgate. Check that no one is near the tailgate as a pinching injury could have serious consequences. Always operate the tailgate with caution.

OVERVIEW, INTERIOR

If the car is not equipped with a switch for activating/deactivating the passenger airbag, then the **passenger airbag** is always activated. Never use a rear-facing child seat on the front passenger seat when the airbag is activated. The passenger airbag must always be activated when front-facing passengers (children and adults) are sitting in the front passenger seat. Do not put objects in front of or above the dashboard where the passenger airbag is located.

Remote control key must always be taken out from the car when you leave it, and make sure the car's electrical system is in ignition position **0** – especially if there are children in the car.

Parking brake should always be used when parking on a slope. Engaging a gear or the automatic transmission's **P** position is not sufficient to hold the car stationary in all situations.

CHARGING

- The hybrid battery must only be charged at maximum permitted charging current or lower in accordance with applicable local and national recommendations for hybrid charging from 230 V sockets/plugs.
- The hybrid battery may only be charged using an approved grounded 230 V socket (or equivalent socket with a different voltage depending on the market) or from a charging station with the loose charging cable supplied by Volvo (Mode 3).
- The control unit's ground fault breaker protects the car, but there may still be a risk of overloading the 230 V mains power circuit.
- The charging cable must not be used if any part of it is damaged - there is then the risk of electric shock and serious personal injury. A damaged or inoperative charging cable must only be repaired by a workshop - an authorised Volvo workshop is recommended.
- Avoid visible worn or damaged mains sockets since they may lead to fire damage and/or personal injury if used.
- Always position the charging cable where it cannot be run over, stepped on, tripped over, or otherwise cause damage or personal injury.
- Never use an extension cable or adapter.
- Unplug the charger from the wall socket before cleaning.
- Children should be supervised when in the vicinity of the charging cable when it is plugged in.

FOLDING THE BACKRESTS IN THE REAR SEAT Make sure the backrests are properly locked after they are lowered and raised. Make sure the head restraints are properly locked after they are raised.

PASSENGER COMPARTMENT CLIMATE CONTROL

Heated seats* must not be used by people who find it difficult to perceive an increase in temperature due to a lack of sensation or who otherwise have problems operating the controls for the heated seats. Otherwise they may suffer burn injuries.

Preconditioning can be started via a timer set far in advance. Do not use preconditioning (applies to fuel-driven heater):

- In unventilated spaces indoors. Exhaust gases are emitted if the heater starts.
- In locations with combustible or flammable material nearby. Fuel, gas, long grass, sawdust, etc. may ignite.
- When there is a risk that the heater's exhaust pipe may be blocked. The outlet is located in the front right-hand wheel housing and, for example, snow inside the front right-hand wheel housing may obstruct the heater's ventilation.

DRIVER SUPPORT

BLIS and **CTA** are supplementary driver support, but cannot handle all situations in all traffic, weather and road conditions. The responsibility for changing lanes safely and using good judgement always rests with the driver. They are not a substitute for the driver's attention and judgement. The driver is always responsible for ensuring the car is driven in a safe manner, at the appropriate speed, with an appropriate distance to other vehicles, and in accordance with current traffic rules and regulations. **BLIS** does not work in sharp curves or when reversing.

Lane Keeping Aid and Steering assistance at risk of lane departure are supplementary driver support, but cannot handle all situations in all traffic, weather and road conditions. The functions cannot detect barriers, rails or similar obstacles at the side of the road. Steering assistance is only activated if there is a high risk of collision – you must therefore never wait for the function to intervene. The functions are not a substitute for the driver's attention and judgement. The driver is always responsible for ensuring the car is driven in a safe manner, at the appropriate speed, with an appropriate distance to

other vehicles, and in accordance with current traffic rules and regulations.

City Safety is supplementary driver support, but cannot handle all situations in all traffic, weather and road conditions. The City Safety auto-brake function can prevent a collision or reduce collision speed, but to ensure full brake performance the driver should always depress the brake pedal – even if the car auto-brakes. The warning and steering assistance are only activated if there is a high risk of collision – you must therefore never wait for a collision warning or for City Safety to intervene. The warning and brake intervention for pedestrians and cyclists are deactivated at vehicle speeds exceeding 70 km/h (43 mph). City Safety does not activate any auto-brake functions in the event of heavy acceleration. City Safety is not a substitute for the driver's attention and judgement. The driver is always responsible for ensuring the car is driven in a safe manner, at the appropriate speed, with an appropriate distance to other vehicles, and in accordance with current traffic rules and regulations.

Pilot Assist is supplementary driver support, but cannot handle all situations in all traffic, weather and road conditions. Pilot Assist must only be used if there are clear lane lines painted on each side of the lane. All other use involves increased risk of contact with surrounding obstacles that cannot be detected by the function. Pilot Assist is not a substitute for the driver's attention and judgement. The driver is always responsible for ensuring the car is driven in a safe manner, at the appropriate speed, with an appropriate distance to other vehicles, and in accordance with current traffic rules and regulations. Pilot Assist is not a collision avoidance system. The driver must intervene if the system does not detect a vehicle in front. Pilot Assist does not brake for people, animals, objects, small vehicles, low trailers as well as oncoming, slow or stationary vehicles. Do not use Pilot Assist in situations such as in city traffic, at junctions, on slippery surfaces, with a lot of water or slush on the road, in heavy rain/snow, in poor visibility, on winding roads or on slip roads. Pilot Assist only gives warning about vehicles detected by its camera and radar unit.

PARK ASSIST

Park Assist Pilot is supplementary driver support, but cannot handle all situations in all traffic, weather and road conditions. Pay particular attention if there are people and animals near the car. Bear in mind that the front of the car may swing out towards oncoming traffic during the parking manoeuvre. Objects situated higher than the sensor detection area are not included when calculating the parking manoeuvre, which could cause the function to swing into the parking space too early – such parking spaces should be avoided for this reason. Park Assist Pilot is not a substitute for the driver's attention and judgement. The driver is always responsible for ensuring the car is driven in a safe manner, at the appropriate speed, with an appropriate distance to other vehicles, and in accordance with current traffic rules and regulations.

The parking camera is supplementary driver support, but cannot handle all situations in all traffic, weather and road conditions. The cameras have blind spots where obstacles cannot be detected. Pay particular attention if there are people and animals near the car. Objects/obstacles may be closer to the car than they appear to be on the screen. The cameras are not a substitute for the driver's attention and judgement. The driver is always responsible for ensuring the car is driven in a safe manner, at the appropriate speed, with an appropriate distance to other vehicles, and in accordance with current traffic rules and regulations.

VOICE COMMANDS

The driver always holds overall responsibility for driving the vehicle in a safe manner and complying with all applicable rules of the road.



IMPORTANT

OVERVIEW, INTERIOR

The **OFF ROAD drive mode** must not be used while driving with a trailer without trailer connector. Otherwise, there is a risk of damage to the air bellows.

The **head-up display unit*** from which the information is projected is located in the instrument panel. To avoid damage to the display unit's cover

glass - do not store any objects on the cover glass and make sure that no objects fall down onto it.

CENTRE DISPLAY

When cleaning the centre display, use a microfibre cloth that is free from sand and the like. The screen may otherwise be scratched. When cleaning the centre display, only use gentle pressure on the display. Heavy pressure can damage the display.

Do not spray any liquid or caustic chemicals directly on the centre display. Do not use window cleaning agent, other cleaning agents, aerosol spray, solvents, alcohol, ammonia or cleaning agent containing abrasive. Never use abrasive cloths, paper towels or tissue paper, as these could scratch the display.

CHARGING

Charging cable – never connect the charging cable when there is a risk of thunderstorm or lightning strike. Never unplug the charging cable from the 230 V socket while charging is in progress - there is then a risk of damaging the 230 V socket. Always stop charging first and then disconnect the charging cable - first of all from the car's charging socket, and then from the 230 V socket. The aim of this is to prevent damage to the system, as well as to prevent charging being stopped accidentally. The ground fault breaker does not protect the 230 V socket/electrical installation.

Power strips, surge protection boxes or similar devices must not be used together with the charging cable since this could involve a risk of fire, electric shock, etc. Only use an adapter between the 230 V socket and the charging cable if the adapter is marked with approval in accordance with IEC 61851 and IEC 62196.

The charging cable and its associated parts should not be swamped or immersed in water.

Control unit – avoid exposing the control unit and its plug to direct sunlight. In such cases, the overheating protection in the plug is at risk of reducing or interrupting the charging of the hybrid battery. Check that the 230 V socket has adequate power supply for charging electric vehicles - in the event of uncertainty, the socket must be checked by a qualified professional. If the socket has unknown

current intensity – use the lowest level on the control unit

FOLDING THE BACKRESTS IN THE REAR SEAT

There must be no objects on the rear seat when the backrest is to be folded down. Nor may the seatbelts be connected.

Armrest* on the centre seat must be in retracted position.

RIGHT-HAND STALK SWITCH

Before placing the wiper blades in the service position, make sure that they are not frozen down. If the wiper arms in service position have been folded up from the windscreen, they must be folded back down onto the windscreen before the wipers are activated. This is to avoid scraping the paint on the bonnet.

CONNECTIONS

Electrical socket – the maximum power usage for a 12 V electrical socket is 120 W (10 A) per socket.

The maximum power usage for a 230 V electrical socket is 150 W.



NOTE

OVERVIEW, EXTERIOR

Power operated tailgate – if the system has been operating continuously for a long time, it is switched off to avoid overload. It can be used again after about 2 minutes. There is a risk of reduced function, or no function, if the rear bumper is loaded with large amounts of ice, snow, dirt or similar. For this reason, make sure you keep it clean.

Electromagnetic fields and screening may interfere with the **functions of the remote control key**. Avoid storing the remote control key close to metal objects or electronic apparatus, e.g. mobile phones, tablets, laptops or chargers - preferably no closer than 10-15 cm.

OVERVIEW, INTERIOR

The **OFF ROAD drive mode** is not designed to be used on public roads.

Head-up display* - when City Safety* is activated, the information in the head-up display is replaced

by a graphic for City Safety. This graphic is illuminated even if the head-up display is switched off. The driver has less chance of seeing information in the head-up display if polarising sunglasses are worn, if the driver is not sitting centrally in the seat, if there are any objects on the cover glass of the display unit, or in unfavourable light conditions.

Certain visual defects may cause headaches and a feeling of stress during the use of the head-up display.

CHARGING

The **charging cable** will remember the last setting of the charging current. It is therefore important to adjust the setting if another 230 V socket is used at the next charging.

Volvo recommends a charging cable in accordance with IEC 62196 and IEC 61851 which supports temperature monitoring.

STEERING WHEEL

Trip computer – certain deviations may occur when calculating the distance travelled if the driving method is changed.

PASSENGER COMPARTMENT CLIMATE CONTROL

Heating or cooling cannot be hastened by selecting a higher or lower temperature than the actual desired temperature.

Preconditioning is available only when the car is connected to an electrical socket (applies to electric heater). A charging station which is not always active, e.g. due to a timer, may cause preconditioning to malfunction. If the car is not connected to an electrical socket, it is still possible to cool the passenger compartment briefly in a warm climate by starting preconditioning directly. The car's doors and windows should be closed during the preconditioning of the passenger compartment.

CONNECTIONS

Internet – data is transferred (data traffic) when using the Internet, and this may involve a cost. Activation of data roaming and Wi-Fi hotspots may involve further charges. Contact your network operator about data traffic costs. When downloading with a mobile phone, note the data download costs.

Data downloading can affect other services that transfer data, e.g. web radio. If the effect on other services is experienced as problematic, the download can be interrupted. Alternatively, it may be appropriate to switch off or cancel other services. If the phone's operating system is being updated, it is possible that the connection will be interrupted. Delete the phone from the car and reconnect.

USING CONNECTED DEVICES

Apple CarPlay and Android Auto - Volvo is not responsible for the content in the Apple CarPlay or Android Auto app.

PARK ASSIST

Keep the camera lens clear of dirt, snow and ice to ensure optimum function. This is particularly important in poor light.

V O L V O