The Avee Bluelink Ultimate

Thank you for purchasing the Avee Bluelink !
The Bluelink Ultimate is a fairly sophisticated device which we hope will give you lots of joy - and as little frustration as possible.

Testing how it works - from home

You can pair the Bluelink to your phone or pad from home, and you can test out all functionality which is implemented in the current software version from your home - no aircraft is needed !
We will tell you how this is done from page 5 - but please continue reading to get a basic understanding of how the Bluelink works!

About this document

This document is valid for version Bluelink software versions:
1.8.35 and 1.8.36

If you have a different software version on your Bluelink, please download the lates document from the Avee website.
Please note that this manual is valid for Bluelink versions **with production dates** after October 1st 2026.
The production date on the Bluelink can be seen on the back side of it.

Basic features - and the more advanced ones

Please take the time to learn how to use the Bluelink.
We have implemented an 'aircraft simulation' mode in the Bluelink - and this makes it easy to familiarise yourself with how its functions works;

The basic features include:

- Pairing your Bluelink to a phone or pad
- playing and pausing music,
- adjusting the music audio level,
- checking out the the mute system
- Level Mute
- Audio Book mute, and
- Mixed audio

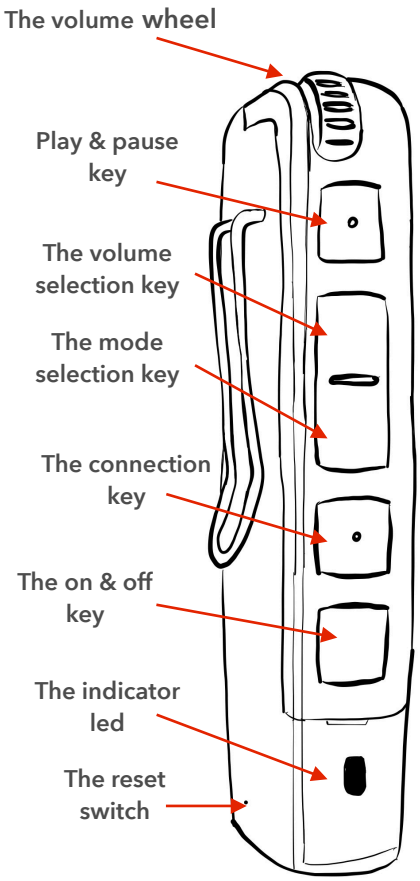
The more advanced features in the Bluelink, let you:

- Set the music mute level, message level and the sidetone level (when in simulation mode)
- Adjust the mute length - how long the Bluelink should be muted after ATC and intercom audio is detected.

The Bluelink Ultimate user interface

To operate the Bluelink, we have five keys and one encoder volume wheel.
In addition we have a full colour led which is used for indicating battery- and charging status in addition to a visual connection and paring information.

When operating the Bluelink, it responds to most user input with spoken audio messages.



The Bluelink keys

The volume encoder wheel

The volume encoder wheel is used to adjust volume levels on the Bluelink.
Which volume level you are adjusting, depends on the choice you have done with the volume mode key.
The default volume setting is however the bluetooth music level: you will always automatically return to this volume setting if you have been setting a different volume.

Turn the wheel towards you to increase the volume, and push it away from you to decrease the volume ('pull' to increase and 'push' to decrease).

- When the *minimum level* for a specific volume level is reached, you will hear two short (600hz) tones in the headset.
- When the *maximum level* for a specific volume level is reached, you will hear two short (1000Hz) tones in the headset.

The Play & pause key

The Play and pause key is used to play, pause music.
Tap once to switch between play and pause. Double tap to go to the next song, and hold the key to go to the previous song.

The volume mode key

From the volume mode key, you choose which volume you would like to set by tapping or multi-tapping the key. We are coming back to this in a later chapter.
The active mode is announced as a spoken audio message. by single-tapping the mode key.

The mute mode key

From the mute mode key, you choose which mute mode the Bluelink should use. We are coming back with details in a later chapter.
By single-tapping the key, the Bluelink announces the active mode as a spoken audio message.

The Bluetooth connection key

The bluetooth connection gives you information regarding Bluetooth connection and aircraft connection status, and is is also used for pairing to a new device and to clear a paired device.

- By single-tapping the Connection key, it announces Bluetooth connection status and aircraft connection status:
  - The message *Bluelink is connected to bluetooth device* - or *Bluelink is not connected to Bluetooth device* is issued.
  - If the Bluelink is not connected to an aircraft, the message *Bluelink is in aircraft simulation mode* is issued.
  - If the Bluelink is connected to an aircraft, the message *Bluelink is connected to aircraft* is issued.

Clearing the paired device

By holding the Connection key for 5 seconds, the connected Bluetooth device is cleared. The message *Bluetooth device is cleared* is issued.
The Bluelink will go to paring mode after this procedure.

Factory resetting the Bluelink

By holding the Connection key for 10 seconds, the Bluelink is reset to factory values. A connected Bluetooth device is cleared. The message *Bluelink is reset to factory values* is issued.
The Bluelink will power off after this procedure.

The Power key

The Power key (or On & Off key if you like) , is used to switch the Bluelink On and Off, but has some additional functions as well.

- **Switching the Bluelink on**
  The Bluelink is switched on by pressing the Power key for 1-2 seconds.
  The Bluelink will respond with the message *Avee Bluelink power on*.
- **Switching the Bluelink off**
  The Bluelink is switched off by pressing and holding the On & off key for four seconds.
  The Bluelink will respond with the message *Avee Bluelink is powering on*.

The battery level

By single tapping the Power key, the Bluelink will announce the battery level.

The software version

By double-tapping the Power key, the Bluelink will announce the software version installed.
This user manual is valid for software version 1.8.33 - October 21st only. Check out the chapter Updating the Bluelink software to get information on how to update the Bluelink software.

Hardware resetting the Bluelink

To do a hardware reset of the Bluelink (it is like unplugging the power and plugging it back again), press and hold the the Power key for 12 seconds.
A number of on & off messages will be given, but hold for 12 seconds. This will force the internal power supply inside the Bluelink to do a full power off & on.

The Bluelink indication led

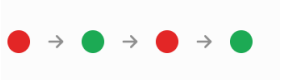
The multi-colour led found below the on & off key, gives you a visual indication of which state the Bluelink is in.

Aircraft Mode & Simulation mode – Normal Operation



One battery-coloured flash per second. The LED turns off after 10 seconds of inactivity. Pressing a button or adjusting the volume activates the LED for another 10 seconds.

Aircraft Mode – connection to aircraft lost



Two flashes per second. The first flash is RED, indicating Simulation Mode.
The second flash shows battery level (red/yellow/green), or BLUE if Bluetooth is disconnected.
The LED will continue to blink even off after 10 seconds of inactivity. T
Please note that the simulation mode indications are overruling all other indications by adding a red blink before the other indication(s).

Bluetooth Disconnected / Pairing



Two blue flashes indicate that Bluetooth is not connected. **Four blue flashes** that pairing is required. Simulation Mode warnings take priority over normal Bluetooth indications.

Battery charging



A slowly pulsing LED indicates battery charge level, from red (low) through yellow to green (full). A fully charged battery is indicated by a gentle green pulse (see next chapter).

Which situation gives audio and/or led error indication	Bluelink mode	Automatic audio message	Led indication
Bluelink started at home - no aircraft = simulation mode	Simulation mode	No warning	None
Bluelink connected to Aircraft	Aircraft mode	Aircraft connected	Nei
Bluelink disconnected from aircraft	Bluelink loss of aircraft connection mode	Aircraft disconnected	Ja
Bluelink reconnected to Aircraft	Aircraft mode	Aircraft connected	Nei

The Bluelink indication led

The Bluelink indication led is giving you valuable feedback on how the Bluelink works. The basic rule is that when everything is ok, the Bluelink is giving you green flashes for 10 seconds when a key or the volume adjustment wheel is touched.

- **When you are testing the Bluelink at home** (without an aircraft to connect the bluelink to), the Bluelink is in Aircraft simulation mode. It will never inform you that it is not connected to the aircraft - apart from the audio message you get when you press the connection key.
- **When you have connected the Bluelink to the aircraft** (via the Avee aircraft adapter), the Bluelink detects the aircraft connection. If you now unplug the Bluelink from the aircraft, it will give you an audio warning and the Bluelink led will give a red flash every second. This red led will flash as long as the Bluelink is not connected to the aircraft.
  When you reconnect the Bluelink to the aircraft, this will be detected and an audio message is issued. the red led will disappear.

Operating State	Normal LED Indication	Aircraft connection error blink	LED Timeout	Voice Announcement
Power-on / Startup	Dim blue/cyan, steady	None	Until startup completes	Startup announcement
Bluetooth Pairing (no stored device)	4 short blue flashes, repeating	None	Never	Pairing announcement
Bluetooth Searching (previously paired)	2 blue flashes, repeating	None	Never	Connection announcements, when applicable
Aircraft Mode – Bluetooth Connected	Battery-level color, once per second	None	10 seconds	Aircraft Mode announcement, when applicable
Simulation Mode – Bluetooth Connected	Battery-level color, once per second	None	10 seconds	Simulation Mode announcement, when applicable
Aircraft Connection Lost – Bluetooth Connected	Battery-level color, once per second	Yes	Never	Aircraft Connection Lost
Aircraft Connection Lost – Bluetooth Pairing	4 short blue flashes, repeating	Yes	Never	Aircraft Connection Lost
Aircraft Connection Lost – Bluetooth Searching	2 blue flashes, repeating	Yes	Never	Aircraft Connection Lost
Aircraft Connection Restored	Normal LED indication resumes	None	10 seconds when connected	Aircraft Mode announcement, when applicable
Power-off / Shutdown	Steady red	None	Until power is removed	Power-off announcement
Powered Off	Off	None	Not applicable	None
Battery Charging	Pulsing battery-level color	None	Never	None
Battery Fully Charged	Slowly pulsing green	None	Never	None

Charging the battery - and battery status indications

The battery is charged by plugging in a standard USB charger in the charging connector of Bluelink.
The ÙSB C standard is used.
When the Bluelink is being charged, the Bluelink led will flash every second indicating charging status:

The battery level is indicated on the status led found below the keys. Red colour indicates 0% charge while a green colour indicates 100% charge.



Batteri status	**LED-indikasjon**
0 %	Red, breathing
25 %	Orange, breathing
50 %	Yellow, breathing
75 %	Yellow green, breathing
100 %	Green, quiet pulsating

Charging an empty battery to full, will typically take around 2 hours.
Please note that the battery can be charged while the Bluelink is in operation.

Charge the Bluelink before initial startup

Before we start connecting the headset to the Bluelink, please charge the Bluelink via the USB C port situated on the base of the Bluelink.

Let the Bluelink charge for some 1-2 hours or until it is showing a quiet pulsating green light; indicating it is fully charged.

Getting started

We will now connect the Bluelink to your headset and start getting familiarised with how the Bluelink works. This initial connection **can be done from home**, we will not connect to the aircraft at this stage.

Get your headset and your basic Avee kit ready !
Please note that for this initial connection, you will not need the Avee Aircraft adapter (dual GA or XLR-5).

- Plug the Avee headset adapter into your headset (please follow the procedure that came with the Avee headset adapter).
- Connect the included 55cm Avee Bluelink cable into the Avee headset adapter, and plug the Avee adapter into the Bluelink top-most connector named Headset.

  Hint: *It might be practical to use the included 130cm or 180cm Avee cable cable for this initial test: it is convenient to let the Bluelink rest on a table in front of you for this initial setup and verification.*
- Switch on the headset ANR, **turn the headset volume to maximum,** and put the headset on your head. Sony headsets: Switch off the *Speak to chat* function*!*
- Turn the Bluelink on by pressing the On/Off key for 2 seconds.
  The Bluelink will respond by switching on the indication led indication, and the audio information: Avee Bluelink Power On -> Battery status -> Bluelink is in Aircraft simulation mode.

  The information 'Bluelink is in aircraft simulation mode' tells you that the Avee is not connected to an aircraft yet - which is correct for this initial setup.
- Tap the Connection key to hear if the Bluelink is connected to a device like a phone or a pad.
  Since the Bluelink is not connected to a device yet, it will respond with the message 'Bluelink is not connected to a Bluetooth device'.

Pairing the Bluelink to a Bluetooth device

When the Bluelink is started the first time, it will automatically go into paring mode. This is indicated with four rapids led blinks every second.
The Bluelink can only be paired to one device at a time.

Pairing the Bluelink to your phone, pad or computer

Go to your phone, pad or computer and pair from this device. The Bluelink is coming up as Bluelink Pro. No password is needed.

After successful paring, the Bluelink will issue the message 'Bluelink paired to device' and the Bluelink indication led will start flashing (green) every second.

Clearing a paired device

You can clear the paired devices to the Bluelink, by holding the Connection key for five seconds.

- The device paired to the Bluelink will be cleared, and the Bluelink will respond with the message Bluetooth connection cleared.
- The Bluelink will again go back to paring mode (indicated with four rapid blue led blinks). Go to your phone, pad or computer and pair from this device. The Bluelink is coming is up as Bluelink Pro. No password is needed.

Automatic reconnect

The Bluelink will always try to reconnect to the last device it was connected to.

- Reconnection mode is indicated with two rapid blue led flashes every second.
- A reconnection is typically done in 2-5 seconds.
- When the bluelink is connected to a device, it will initially indicate this with a green flash every second.

You should now be up and running

After performing the steps needed to connect the Bluelink to a device, you should be up and running.
There is no need to pair the device to your device again - unless you want to connect to a new device.
And as mentioned, reconnection to the last device you were connected to is done automatically.

Playing music

To play and pause music, press the play & pause buttons briefly. Please note that some devices need a kick-start by pressing the play&pause button on the phone or pad device itself.
The Bluelink responds by announcing Play and Pause when the Play & Pause button is pressed.

To skip to the next song double click the Play & Pause key. The Bluelink responds with the 'Play next' message.
To play the previous song, press and hold the Play & Pause key for a second. The Bluelink responds with the 'Play previous' message.

Bluelink Aircraft Simulation Mode

When you are talking into the microphone, you can hear your own voice. The reason you can hear your own voice, is because the Bluelink is detecting no aircraft - and then switching to this ‘test’ mode.

When playing music you can hear that the music is muted immediately when you start talking.
And it is being muted for a few seconds after you stop talking.
Now test out the Bluelink mute functionality in the next chapter.

Music muting

The Bluelink has three modes for muting or stopping the Bluetooth audio in your headset whenever incoming audio is detected.
Incoming audio can be your colleague talking, ATC calling in, callouts from the aircraft or your own voice.
[When you talk into the headset microphone, your voice is going into the aircraft avionics and fed back to your headset.
It is not possible for the headset or the Bluelink headset to detect the source of the audio coming in; for example if it is your own voice, ATC or your talkative colleague.]

Switching mute mode

Tap the **mute-mode key** to hear which mute mode is active. Then double tap the mute-mode key to cycle through and select one of the three modes:level mute, audiobook mute and mixed audio.

- **Level mute**
  The music coming from your phone or pad to the Bluelink, is muted to a certain level when incoming audio is detected. The mute level can be set: see the chapter Setting the music mute level.
  The bluetooth audio is slowly going back to normal bluetooth volume a few seconds after no incoming audio is detected.

- **Audio book mute**
  This mode is can be used when you for example are listening to an audio book on long quiet flights.
  The bluetooth audio is paused whenever incoming audio is detected - and it continues to play a few seconds after no incoming audio is detected.

- **Mixed audio**
  In this mode, the incoming audio and the bluetooth audio is simply mixed: no muting at all.

Adjusting the audio levels

The Bluelink has a number of audio sources which can be set individually.
All audio levels are adjusted using the volume wheel, and the default audio level to adjust is the music / bluetooth level. The bluelink will always revert to setting bluetooth audio level if you have not given any keyboard or volume input on the Bluelink for 20 seconds.

It is important to know that you **can not** set **the aircraft audio level** from the Bluelink. The audio from the aircraft (ATC-calls, your own voice and the copilot voice) is going right through the Bluelink without any amplifications. Hence; setting aircraft & intercom levels are done from the aircraft audio panels.

To set the audio levels, double tap **the volume key** to go from one audio level to the next one in a circular way. Adjust the level with the volume key, and press the volume key again to set & store the new level.
Doing nothing for 10 seconds will also set the new level.
Pressing any other key than the volume key will abort the function.

The audio levels that can be set from the Bluelink, are the following:

- **Music mute level**
  This is the level music is muted to when aircraft audio (ATC, co-pilot or your own voice) is detected by the Bluelink.
  Use the volume wheel to set the music mute level, and press the Mute-key when done.Press any other key to escape the function.

- **Voice prompts**
  The voice prompts are the messages generated by the Bluelink itself. Examples are the Play and Pause messages.
  A short message will be played every time you change the volume with the volume wheel.
  Press the Mute-key when done.Press any other key to escape the function.

- **Bluetooth / music audio level**
  The bluetooth audio level is the default volume level you are adjusting when you have not entered any of the other volume level adjustments.
  The Bluelink will always go back to this mode when either not doing any setting in any of the other audio level settings, or when doing nothing at all (20 seconds timeout).

- **The sidetone audio level (Aircraft simulation mode only)**
  The sidetone audio level is only available when the Bluelink is in aircraft simulation mode (no aircraft connected to the Bluelink).
  By going to this mode, you can adjust the voice level of the sidetone: your own voice back to the headset.

Volume level storing

All audio levels - apart from the Bluetooth / music audio level, are stored permanently in the Bluelink when they are adjusted.

Setting default volume levels

If you feel you lost control of all volume levels, it is simple to get back the factory default levels: press and hold **Volume Mode** key for some 5 seconds or until you hear the message *Reset volume levels to default values* in the headset.
The factory levels are then stored in the Bluelink.

Setting the mute lengths

When the bluelink detects audio from the aircraft (ATC calls or intercom audio) it is automatically muting or stopping the bluetooth audio; all depending on which mute mode has been selected.

It can be rather annoying that the bluetooth audio starts *immediately* after ATC/intercom audio is not detected, so we introduced a mute time variable: the time from ATC/intercom audio is not detected to when the Bluetooth un-mutes (in mute mode) or starts playing (audiobook mute).

The mute time can be set individually for Mute Mode and Audiobook mode in a very simple way:

- First set the Mute mode you want to adjust with Mute key. Press the Mute key once to hear what mode you are in , and double click to go to the next mode.

- To set the mute length for the mode you have selected, simply press and hold the mute key.

- Release the key when the desired mute length is achieved.
  Maximum mute length is 10 seconds.

Setting default mute times

If you feel you lost control of all volume levels, it is simple to get back the factory default levels: press and hold **Volume Mode** key for some 5 seconds or until you hear the message *Reset volume levels to default values* in the headset.
The factory levels are then stored in the Bluelink.

Using the Bluelink in the aircraft

If you have done all tests and verifications so far in this user manual, you have now gone through all Bluelink functionality.
The Bluelink will work exactly the same way in the aircraft as in simulation mode apart from one vital fact: the aircraft audio is taken from the aircraft and not generated by the Bluelink simulations mode.

You will also see that the (annoying) red flashing led will disappear when the Bluelink is connected to an aircraft.

Resetting the Bluelink

Normally there is no need to reset the Bluelink. The software has a built in “watchdog” function which is verifying that it works like it should. If it does not; the watchdog will automatically reset the Bluelink and reconnect to the last bluetooth device.
ATC / intercom communication will work as normal if a watchdog reset should occur.

There are however two ways of resetting the Bluelink - this is like disconnecting and plugging back the power cord on your computer:

1. Press and hold the on/off key for 10 seconds. The audio message Bluelink will be announced, but keep holding the on/off key.

2. The second method of resetting the Bluelink requires a straightened paper clip to be pushed into the reset hole in the bottom left corner of the Bluelink.
   A single tap will reset the Bluelink back to normal operation mode.

Resetting to factory defaults

You can restore the factory defaults by holding the Connection key for around four seconds.

- The volume levels will be reset to default values
- All devices will be paired from the Bluelink, and the Bluelink will switch off.

Remember to remove the Bluelink from your bluetooth device after this has been done.

Updating the Bluelink software

The software in the Bluelink can be updated (or even degraded) from a PC or a Mac without any special 'download tools' being required.

Go to https://www.avee.no/bluelinkupgrade/ to get more information on how to upgrade:

Bluelink update history

On this page you will find the update history for the Bluelink Revision 4.

Version	Date released	Changes made
1.8.33	21.10.2026	Initial version
1.8.35	30.10.2026	1. Added paring mode message when pairing is started. 2. Added pairing successful message 3. Improved volume wheel (encoder) functionality. 4. Added a 5 minute auto shutoff timeout with pre-warning message when not connected to bluetooth. 5. Added auto shutoff when battery level is less than 5%. The Bluelink will switch to 'safe mode', ensuring that you will be able to communicate via the Avee kit as normal. Unplug the Bluelink from the system and charge it when this happens. 6. Device name (the name that is shown when you are pairing the Bluelink to your phone or pad) is changed from Bluelink Pro (ADF) to Bluelink x.y.z. The letters x.y.z represents the software version (Bluelink 1.8.34 - meaning software version 1.8.34 is running on the Bluelink. 7. Resigned the way the the led indication system work in aircraft simulation mode 8. Added audio messages: 1. Added audio messages when pairing. 2. Added new message when loss of aircraft connection / reconnection
1.8.36	30.10.2026	Fixed keyboard decoding bug when not connected to USB: Volume mode could be decoded as Play & Pause key.
1.8.37	03.11.2026	Fixed the following issues: 1. Bluelink being visible from Bluetooth even after paired. 2. Bluelink not going to safe mode when switched off.

Updating the Bluelink software

The software in the Bluelink can be updated (or even degraded) from a PC or a Mac without any special 'download tools' being required.
Please note that you **MUST use the latest version of Firefox, Microsoft Edge or Google Chrome** to update the software on the Bluelink Revision 4.

You can verify that you got the latest software version by double tapping the power key when the Bluelink is switched on.

Go to https://www.avee.no/bluelinkupgrade/ (https://avee.no -> Help -> Bluelink Software upgrade) to get more information on how to upgrade the Bluelink software.

On this page you will also find this user manual - in addition to all previous ones.