

User Guide Konftel 70

ENGLISH





Konftel AB hereby declares that this conference phone is in conformity with all the essential requirements and other relevant provisions of Radio Equipment Directive 2014/53/EU (RED). Please visit www.konftel.com to view the complete declaration of conformity.



Warning!

Do not expose the Konftel 70 to water or moisture.



Warning!

Do not open the casing of the Konftel 70.

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INTRODUCTION

PURPOSE

This document describes the procedures for using Konftel 70 and is primarily intended for the end users.

OVERVIEW

KONFTEL 70 OVERVIEW

Konftel 70 is a speakerphone that you can use to conduct virtual meetings and listen to music with excellent quality with OmniSound® audio optimization technology. It provides an improved user experience with full-duplex and echo cancellation functionality.

You can connect Konftel 70 to your mobile phone, tablet, or computer and get support for various communication applications, such as Teams and Zoom. Konftel 70 also supports simplified Bluetooth® pairing and connection using the near-field communications (NFC) technology to ease the device usage.

OVERVIEW

PHYSICAL LAYOUT

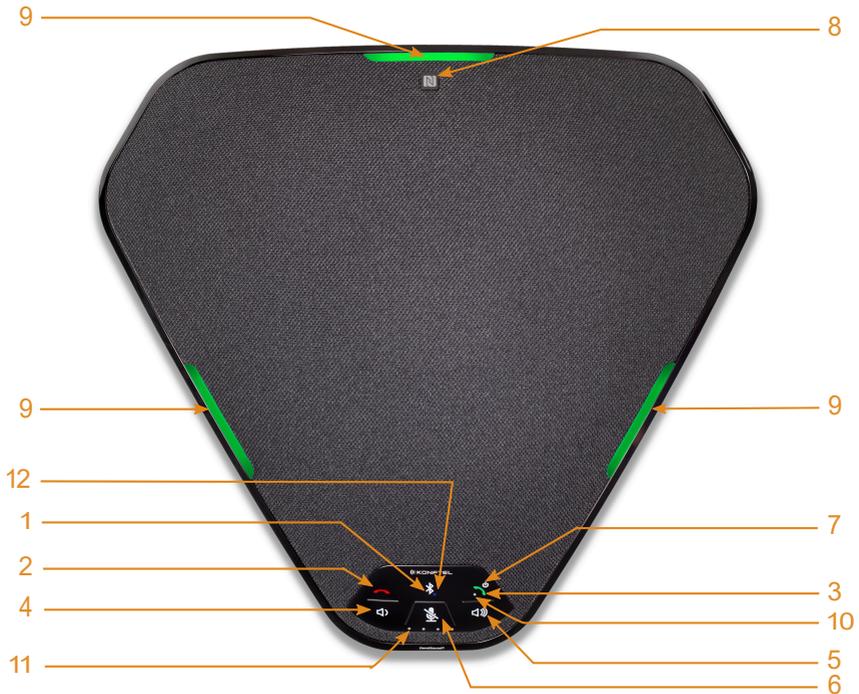


Figure 1: Front view of Konftel 70.

The following table lists the touch buttons and the other elements of Konftel 70.

Callout number	Description
1	Bluetooth® touch button
2	On hook touch button
3	Off hook touch button
4	Volume down touch button

OVERVIEW

Callout number	Description
5	Volume up touch button
6	Mute touch button
7	Power touch button (shares the same touch area with the Off hook button)
8	NFC tag for Bluetooth® connectivity
9	LED Indicator for call status
10	LED indicator for power mode
11	LED indicator for battery status
12	LED indicator for Bluetooth® in the Bluetooth® logo

OVERVIEW

CONNECTION LAYOUT



Figure 2: Connection layout of Konftel 70

The following table lists the sockets and ports available on Konftel 70 for connection.

Callout number	Description
1	Power cable socket
2	USB Type micro B
3	Kensington® security lock port

OVERVIEW

DIMENSIONS AND WEIGHT

The following table shows the dimensions of Konftel 70.

Parameter	Dimension
Width	278 mm
Length	250 mm
Height	59 mm

Konftel 70 net weight is 700 grams. The weight of the complete package is 1300 grams.

TOUCH BUTTONS

Touch buttons of Konftel 70

Icon	Name	Description
	Power	To switch the speakerphone on and off.
	Mute	To mute and unmute the speakerphone.
	Volume Up	To increase the speakerphone volume level.
	Volume Down	To decrease the speakerphone volume level.
	Off Hook or Answer	To indicate the speakerphone off-hook status, answer an incoming call, and put an active call on hold.
	On Hook or Hang Up	To indicate the speakerphone on-hook status, end a call, and reject an incoming call.

OVERVIEW

Icon	Name	Description
	Bluetooth	To indicate an active Bluetooth® connection and manage Bluetooth® pairing and connections.

LED STATUS INDICATORS

The LEDs on the speakerphone indicate the call status, the power connection, the battery state, the Bluetooth® connection, and the music mode. The LEDs emit bright red, green, white and blue colors that are visible over a distance to draw your attention to the speakerphone status as required.

The following table lists the LED status indicators:

LED color	Indication
Steady red	Microphones are on mute.
Flashing red	A call is on hold.
Steady green	A call is in progress.
Flashing green	An incoming call is ringing.
Steady blue	Call transfer to mobile phone or the music mode.
LEDs off	The speakerphone is inactive.

The LED indicator for Bluetooth® in Bluetooth® logo on the front part of the speakerphone emits steady blue color. It indicates Bluetooth® standby, pairing and music modes, and manual reconnect.

The LED indicator for power mode near the **Off Hook** touch button is white. It shows that the power is on in the idle and standby modes and during the active usage. When the white power LED indicator is off, the speaker phone is in the hibernate mode.

OVERVIEW

LED BATTERY STATE INDICATORS

Four step battery state indicators at the bottom of the touch keypad of Konftel 70 show the battery charge state.

If the phone has a USB or power connection and is fully charged, all four LED indicators are off. In case of full charge and no cable connection, all four LED indicators emit steady bright white.

When the battery is low, the speakerphone shows all four step LED indicators in a rolling sequence. When Konftel 70 is charging, it shows up to four step LEDs depending on the charge available.

The following table lists the LED battery state indicators:

LEDs	Description
Indicators do not emit light	The current state is one of the following: <ul style="list-style-type: none">• The speakerphone has a completely discharged battery, and the power is off.• The battery is charging, the charge is 96% to 100%.• The speakerphone is running on USB or DC power when the battery is fully charged.
Four blinking white indicators	The battery is charging, the charge is 0% to 25%.
One steady white indicator, three other LEDs are blinking	The battery is charging, the charge is 26% to 50%.
Two steady white indicators, two other LEDs are blinking	The battery is charging, the charge is 51% to 75%.
Three steady white indicators, one other LED is blinking	The battery is charging, the charge is 76% to 95%.

SPECIFICATIONS

The following table lists the specifications that Konftel 70 supports:

OVERVIEW

Name	Description
Power	<ul style="list-style-type: none">• USB 2.0• Power adapter in DC barrel jack• Battery
Connectivity	<ul style="list-style-type: none">• USB 2.0 type B• Built-in NFC• Bluetooth® Classic v.5.1
Audio codecs	<ul style="list-style-type: none">• Low-complexity sub-band codec (SBC) for A2DP• Modified SBC Codec (mSBC) for HFP Wide band speech
Music Mode	<ul style="list-style-type: none">• 44.1kHz• 48kHz• 32kHz• 16Khz
USB	Micro USB 2.0 device Type B
Bluetooth® Profiles	<ul style="list-style-type: none">• HFP v.1.7.2• HSP v.1.2• A2DP v.1.3.2
User interface	<ul style="list-style-type: none">• Functional touch keypad• LED indicators for call and battery status, power and Bluetooth® connection
Interoperability	<ul style="list-style-type: none">• Windows 10• MacOS• iOS• Android

SAFETY GUIDELINES

Ensure that you are familiar with the following safety guidelines before using, installing, configuring, and administering Konftel 70.

OVERVIEW

- ① This speakerphone is not designed for making emergency telephone calls when the power fails. Make alternative arrangements for access to emergency services.
- Read, understand, and follow all the instructions.
- Do not place this device on an unstable cart, stand, or table. If it falls, serious damages can be caused to the speakerphone.
- Do not drop, knock, or shake the device. Rough handling can break internal circuit boards.
- Ensure that the power cord or plug is not damaged.
- Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
- Avoid wetting the device to prevent fire or electrical shock hazard.
- Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners, harsh chemicals, cleaning solvents, or strong detergents to clean the device. Use a damp cloth for cleaning.
- Avoid exposing the device to high temperatures above 40°C (104°F), low temperatures below 0°C (32°F), or high humidity.
- Do not block or cover slots and openings of the device. These openings are provided for ventilation, to protect the phone from overheating.
- Never push objects of any kind into this device through cabinet slots as they might touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.
- Do not disassemble this product to reduce the risk of electric shock. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock during subsequent use.
- Do not use the device to report a gas leak in the vicinity of the leak.
- Do not use the device near intensive care medical equipment or close to persons with pacemakers.
- Do not place the device too close to electrical equipment such as answering machines, TV sets, radios, computers, and microwave ovens to avoid interference.
- ① In case Konftel 70 and the corresponding accessories are damaged, the device does not operate normally or exhibits a distinct change in performance, refer for servicing to the qualified service personnel.

CONNECTIVITY

CONNECTION PRIORITY

Konftel 70 supports personal computer or Bluetooth® host connection to enhance the sound quality. OmniSound® provides automatic echo cancellation and eliminates distracting background noise.

To make a Voice over IP (VoIP) call, you can use an applicable VoIP software or listen to music from your personal computer or a Bluetooth® host. The computer normally activates the speaker in Konftel 70, if no other software that can use the microphone is running. Here, Konftel 70 functions as a powerful speaker to play music. When you make or take a call, the music mode automatically turns off, and Konftel 70 enables the microphone and acts as a conference unit.

For several activities, Konftel 70 handles the connections in line with its predefined connection priorities. The connection priorities are the following:

- Bluetooth® calls
- USB calls
- Bluetooth® audio streaming
- USB audio streaming

CONNECTION TO A COMPUTER

Konftel 70 performs as a high-quality conferencing equipment with OmniSound®, when you connect it to your computer. Unlike standard computer speakers and microphones, Konftel 70 provides full-duplex (two-way audio), efficient echo cancellation, and noise reduction.

The computer identifies Konftel 70 as an Echo Cancelling Speakerphone. The communication software usually leaves the audio processing to Konftel 70, resulting in better sound quality.

If you play music or other one-way audio streams, Konftel 70 switches automatically to the music mode.

- ① OmniSound® performs over the full audio bandwidth (the microphone: 100-7000 Hz, the loudspeaker: 100-20000 Hz). However, some factors can limit the sound quality, depending on the equipment in the network and the equipment used by other call participants.

CONNECTIVITY

Connecting to a computer

Connect Konftel 70 to a computer to use the speakerphone as a high-quality conferencing equipment.

The computer operating system automatically selects Konftel 70 as a speaker and microphone. If your computer does not automatically select Konftel 70 as an audio device, manually select **Konftel 70** in your computer settings.

Connect Konftel 70 to the computer using a suitable USB cable.

Cable retention

The Konftel 70 device has a retention mechanism for connection of the USB and power cables. When pulling, the cable retention mechanism prevents disconnection of the USB and power cables. The cable retention feature ensures that data communication between Konftel 70, the computer, and the device battery charging does not abruptly end.

BLUETOOTH CONNECTION

Konftel 70 supports connection to a Bluetooth® host. You can connect the speakerphone to a mobile phone, tablet, and computer over Bluetooth®. For that, you must enable Bluetooth® in the Bluetooth® host settings.

The device can transmit audio over Bluetooth® in the following ways:

- Two-way transmission optimized for speech
- One-way transmission (A2DP) with higher audio bandwidth, optimized for music

Konftel 70 supports both options.

❗ OmniSound® performs over the full audio bandwidth (the microphone: 100-7000 Hz, the loudspeaker: 100-20000 Hz). However, limitations in the telecommunications networks and Bluetooth® technology reduce the bandwidth partially, that it compresses the sound and affects the sound quality.

Bluetooth pairing and connection

You must pair two devices before they can communicate over Bluetooth®. You can do it in different ways depending on whether your Bluetooth® host supports the simplified pairing using NFC.

NFC reading distance between devices is around two centimeters.

CONNECTIVITY

You can pair a maximum of eight devices with Konftel 70. To pair a new host that already has eight other paired devices in the list, Konftel 70 deletes the oldest pairing information.

Pairing and connecting with NFC

You can pair Konftel 70 with your Bluetooth® host using the NFC feature.

Enable NFC on your Bluetooth® host.

- ⇒ Unlock the screen of your Bluetooth® host.
- ⇒ Hold the Bluetooth® host next to the NFC tag on Konftel 70. The Bluetooth® LED on Konftel 70 flashes blue.

You might need to bring the Bluetooth® host closer to Konftel 70 to make contact over NFC. The connection range is about two centimeters.

The Bluetooth® host and Konftel 70 are paired and connected.

After establishing the pairing, the Bluetooth® LED becomes steady blue.

Pairing without NFC

If your Bluetooth® host does not support the NFC feature, you can still connect it to Konftel 70 over Bluetooth®.

Turn on Bluetooth® on your Bluetooth® host.

- ⇒ On Konftel 70, press and hold the **Bluetooth** button for two seconds.
Konftel 70 becomes discoverable for other Bluetooth® hosts.
The Bluetooth® LED on Konftel 70 flashes blue.
- ⇒ In the list of devices on your Bluetooth® host, select Konftel 70 and confirm the pairing.

The devices pair and automatically connect. On your Bluetooth® host, you get the connection confirmation.

The Bluetooth® LED on Konftel 70 turns steady blue.

After 60 seconds in the pairing mode with no pairing established, Konftel 70 returns to its regular operation mode. In this case, repeat the pairing procedure.

Reconnecting already paired devices

After successful pairing, you do not need to repeat pairing on subsequent connections.

CONNECTIVITY

The connection breaks up in the following cases:

- The devices are far apart. Konftel 70 Bluetooth® range is about 20 meters.
- You turn off Bluetooth® on your Bluetooth® host.

Konftel 70 and your Bluetooth® host are ready to connect the next time when they are within the connection range.

Turn on Bluetooth® on your Bluetooth® host.

- ⇒ On Konftel 70, press the **Bluetooth** button when your Bluetooth® host is within the connection range.
- ⇒ Optional: Proceed with a call in progress that your Bluetooth® host transferred to Konftel 70.

SPEAKERPHONE OPERATIONS

ANSWERING INCOMING CALLS

When there is an incoming call on your computer soft client or a Bluetooth® host, use Konftel 70 to answer it.

- Connect your Konftel 70 to a personal computer or a Bluetooth® host.
- Make sure there is an incoming call.

⇒ On Konftel 70, press the **Answer** button.

The call status LEDs on Konftel 70 show a steady green light.

⇒ Optional: To reject the incoming call, press **Hang Up**.

ADJUSTING THE VOLUME

Use this procedure to adjust the volume while listening to music or during calls on your Konftel 70.

Connect your Konftel 70 to a personal computer or a Bluetooth® host.

⇒ To decrease the volume, press the **Volume Down** button.

⇒ To increase the volume, press the **Volume Up** button.

MUTING THE MICROPHONE DURING A CALL

Use this procedure to mute the microphone on your Konftel 70 during a call.

Make sure you have an active call.

⇒ To mute the microphone during a call, press the **Mute** button.

The LEDs on Konftel 70 show a steady red light.

⇒ Optional: To unmute the microphone, press the **Mute** button again.

The LEDs turn green.

TRANSFERRING A BLUETOOTH CALL IN PROGRESS

Use this procedure to transfer a call between your Bluetooth® host and Konftel 70.

SPEAKERPHONE OPERATIONS

Establish the Bluetooth® connection between your Bluetooth® host and Konftel 70.

- ⇒ On Konftel 70, press the **Bluetooth** button.
- ⇒ Optional: Press the **Bluetooth** button again to transfer the call back to your Bluetooth® host.

PUTTING A CALL ON HOLD

Use this procedure to put an ongoing call on hold.

Transfer an ongoing call from your Bluetooth® host to Konftel 70.

- ⇒ To put the call on hold, press the **Answer** button.
 - The LEDs on Konftel 70 start flashing red.
- ⇒ To continue the call, press the **Answer** button again.

ENDING CALLS

Use this procedure to end an active call from your Konftel 70.

Make sure you have an active call.

- ⇒ On Konftel 70, press the **Hang Up** button.
 - The green LEDs on the Konftel 70 turn off.
- ⇒ Optional: End the call from your computer or Bluetooth® host.

POWER SUPPLY CHARACTERISTICS

POWER MODES

Konftel 70 supports different power modes to save power. The following power modes are available:

- *Hibernate mode.* The speakerphone consumes negligible power. Konftel 70 waits for its activation. The white power LED indicator is off.
- *Idle mode.* Konftel 70 works on battery, USB power or DC power. In this case the speakerphone is in operation but it has no Bluetooth® or USB connections.
- *Standby mode.* Konftel 70 receives power from the battery, USB power or DC power connections. It has Bluetooth® or USB connection but is not active.
- *Active operation mode.* Konftel 70 works on battery, USB power or DC power connection. There is an active call or music playing on the speakerphone.

Entering the idle power mode from the hibernate mode

Use this procedure to enter the idle power mode from the hibernate mode on your Konftel 70.

Make sure that the speakerphone is switched on and it is in the hibernate mode. Note that the white power LED indicator is off in the hibernate mode.

- To enter the idle mode, do one of the following:
 - Press the **Off Hook** button for 2 seconds.
 - Connect the USB cable.
 - Connect the power adapter cable.

The phone enters the idle mode, and the power mode LED becomes white.

- To return the speakerphone to the hibernate mode, do one of the following:
 - Press the **Off Hook** button for 2 seconds.
 - Have 30 minutes of inactivity with only battery power consumption.

The phone enters the hibernate mode, and the power mode LED turns off.

Entering the standby power mode from the idle mode

Use this procedure to enter the standby power mode from the idle mode on your Konftel 70.

Make sure that your Konftel 70 is in the idle mode.

POWER SUPPLY CHARACTERISTICS

- To enter the standby mode, do one of the following:
 - Connect the Bluetooth® host device.
 - Connect the USB host device.
- To return the speakerphone to the idle mode, do one of the following:
 - Disconnect the Bluetooth® host device.
 - Disconnect the USB host device.

POWER SUPPLY PRIORITY

Konftel 70 supports operation with power supply from different sources. In case of several power supply sources available the speakerphone handles its power supply in line with its predefined priorities. The power supply priorities are the following:

- Battery
- Power adapter
- USB power

If the battery is discharged, you need to attach a DC power cable or a USB cable to the device. The device starts up even if the battery is discharged.

BATTERY PACK

Konftel 70 has an integrated battery pack. It ensures the speakerphone continuous operation in case there is no USB connection or DC power connection. You cannot replace the battery pack.

Charge the battery in Konftel 70 either through the power adapter or using the USB Type A cable. If the battery is empty, it charges to the full over the following time:

- Using the power adapter: approximately 3.5 hours
- Using the USB Type A cable: approximately 15 hours

The following table shows the battery power lasting for the power modes:

Mode	Battery power
Active operation mode	The battery power lasts up to 9 hours.

Table continued...

POWER SUPPLY CHARACTERISTICS

Mode	Battery power
Standby / Bluetooth® connected	The battery power lasts up to 17 hours.
Hibernate mode	Konftel 70 works for over 1.5 years.

Charging the battery through the power adapter

Charge the battery in your Konftel 70 through the power adapter.

- ⇒ Connect the power adapter cable to the power cable socket on the back of your Konftel 70 device.
- ⇒ Plug the other end of the power adapter into the wall outlet.

The speaker phone shows four consequently flashing white indicators.

Charging the battery using USB cable

Charge the battery in your Konftel 70 using the USB Type A cable.

- ⇒ Plug the USB cable into the USB port on the back of your Konftel 70 device.
- ⇒ Connect the other end of the USB cable to a computer or a wall charger.

The speaker phone shows four consequently flashing white indicators.

SHUT OFF STATE

Konftel 70 shuts off when the battery pack is completely discharged. In this case, the device enters the Power Off mode from the following power modes:

- Active operation
- Standby
- Idle
- Hibernate

Konftel 70 warns about discharge with a single audio alarm. The discharge alarm actuates at 25% and 10% charge levels.

MAINTENANCE

FIRMWARE UPGRADE

You can upgrade your Konftel 70 using the Konftel Upgrade Utility firmware file through a USB-connected PC with Microsoft® Windows® or MacOS®.

For more information about the Konftel Upgrade Utility, see <https://www.konftel.com/en/support>.

Installing Konftel Upgrade Utility

- ⇒ Go to <https://www.konftel.com/en/support>.
- ⇒ Download the latest version of the Konftel Upgrade Utility firmware file.
- ⇒ Install Konftel Upgrade Utility on your computer. During the installation follow the instructions given by the installation program.

Upgrading firmware

Use this procedure to upgrade the firmware on your Konftel 70 using Konftel Upgrade Utility. The procedure takes three to five minutes depending on your Internet connection. Do not disconnect the USB cable or the device until the end of the upgrade procedure.

Ensure that:

- Konftel 70 power is on.
 - The speakerphone is in the Idle mode with no audio process active.
 - You have an Internet connection on the computer.
 - In case you are not sure if the battery is well charged, connect the power adapter cable to the wall outlet.
- ⇒ Connect Konftel 70 to the computer using a suitable USB cable.
 - ⇒ Start Konftel Upgrade Utility on your computer.
 - ⇒ Select **Konftel 70** and click **Next**.
 - ⇒ Fulfill the connection requirements and click **Next**
 - ⇒ Select the option **Upgrade to the latest firmware using automatic download from Konftel (internet connection needed)** and click **Next**.

You can see the current firmware version at the bottom of the window.

The download starts.

MAINTENANCE

⇒ Click **Install**.

The installation process starts. Do not switch off your computer or Konftel 70 during the installation.

The call status LED indicators start flashing red.

When the installation process ends, the speakerphone reboots.

⇒ Click **Finish**.

HARDWARE RESET

If you need to reset your Konftel 70, you can do it by pressing the **Power** touch button for more than 8 seconds.

ⓘ In this case all the speakerphone's settings return to the default ones.

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Konftel is a leading company within collaboration endpoint solutions. Since 1988, our mission has been to help people in businesses around the world to have meetings regardless of distance. We know that remote collaboration is an effective way to save time, money and contribute to a more sustainable world. We are Climate Neutral Certified, offering customers an option to purchase video conferencing equipment while keeping a clear climate conscience. Crystal clear audio and a sharp video image are essential for efficient meetings; this is why we only focus on cutting-edge technology in our Collaboration Solutions. Our audio technology OmniSound® is built into all Konftel Conference phones and devices. The products are sold globally under the Konftel brand and our headquarters are based in Sweden. Read more about the company and our products at konftel.com.

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