# ((KONFTEL



The Konftel Ego User Guide

#### OmniSound® - superior audio quality

OmniSound®'s patented audio optimisation technology guarantees impressive, crystal-clear, full-duplex audio in both directions for efficient and effective virtual meetings. The sound is powerfully transmitted to all attendees thanks to two hypersensitive microphones with 360° audio pick-up and speakers.

OmniSound® delivers HD audio during VoIP calls. It also incorporates automatic echo cancellation and noise suppression, which minimises background noise interference, and an equaliser for personal adaptation of the audio properties. You can walk freely around the room, talking, sharing and discussing with others without loss of sound quality and without any annoying audio clipping, muffling or echoes. It's as close to real sound as you can get.



Konftel AB hereby declares that this conference phone is in conformity with all the essential requirements and other relevant provisions of Directive 1999/5/EC.

Please visit www.konftel.com/doc to view the complete declaration of conformity.



#### Warning!

Do not expose the Konftel Ego to water or moisture.



### Warning!

Do not open the casing of the Konftel Ego.

## CONTENTS

Introduction	2
Maintenance	2
Description	3
Connections and buttons	
Information on the LCD display	
Turning off and on	5
Using with a computer	6
Connecting to a computer	6
Using as a computer speaker (music mode)	
Using as a conference unit	7
Using with a Bluetooth device	8
Pairing and connecting	8
Reconnecting already paired devices	9
Using as a speaker (music mode)	
Using as a conference unit	10
Using a headset	11
Settings	12
Keypad tone	12
Clearing the list of paired devices	12
Upgrading software	13
Installing Konftel Upgrade Utility	13
Upgrading software	
Technical data	14

## INTRODUCTION

The Konftel Ego is a conference unit that can be connected to your mobile phone, tablet and computer to obtain crystal-clear, powerful OmniSound® audio in your virtual meetings.

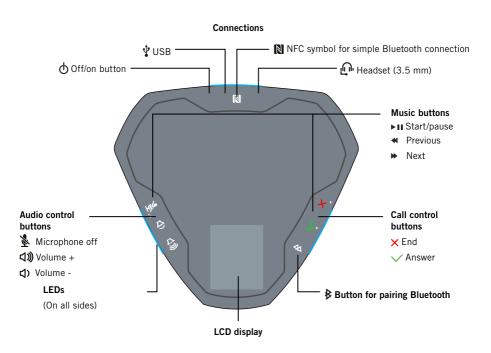
- OmniSound® audio optimisation technology with full duplex, echo cancellation and static reduction in HD bandwidth. (The bandwidth may be limited by the connection)
- Support for UC applications. Optimised for Skype for Business, but also supports other UC applications such as Avaya Communicator and Cisco Jabber.
- LCD display for easy viewing and use.
- Support for simplified Bluetooth pairing and connection using NFC (near-field communications).
- Support for Bluetooth A2DP (advanced audio distribution profile) for superior audio quality when playing music.
- USB port for connection to a computer or other compatible USB device.
- Integrated battery makes the Konftel Ego completely cordless with a Bluetoothconnected phone. The battery is charged from a USB port.
- Headset connectivity option allows easy switching between headset and speaker function.
- · Upgradeable.
- 2-year warranty.

## **MAINTENANCE**

Clean the equipment with a soft, dry cloth. Never use liquids.

## **DESCRIPTION**

#### **CONNECTIONS AND BUTTONS**



#### **LEDs**

Faint green light The Konftel Ego is switched on

Steady blue light Microphone is enabled/call in progress (Bluetooth, Lync®)

Flashing blue light Incoming call (Bluetooth, Lync®)

or

Pairing or connecting in progress (Bluetooth)

Steady red light Microphone switched off during calls (mute)

Flashing red light Low battery

Flashing slowly:

The call is placed on hold (Bluetooth, Lync®)

#### INFORMATION ON THE LCD DISPLAY

The icons are normally displayed for a couple of seconds on connection. The same symbol is displayed in red when the connection is broken.

Incoming call or call in progress via USB

Music mode via USB

Lync/Skype for Business connected (via USB)

Incoming call or call in progress via Lync/Skype for Business

**((**≰)) Visible for pairing via Bluetooth

Reconnecting to Bluetooth device

Bluetooth device connected

Incoming call or call in progress via Bluetooth

Music mode via Bluetooth

Headset connected

Volume adjustment (number of bars indicates the volume selected)

Microphone switched off (mute)

Battery status

Displayed automatically when there is 1 hour remaining and then every 5 minutes. The number of bars in the battery icon indicates the charging status. The battery needs charging when the icon turns red.

## Manual display of battery status

⇒ Quickly press ( (off/on).

The battery status is displayed on the Konftel Ego.

## **DESCRIPTION**

#### **TURNING OFF AND ON**

The Konftel Ego starts automatically when it is connected with a USB cable to a powered-up computer. The three LEDs show a faint green light to indicate that it is switched on. The battery is simultaneously trickle charged.

- $\Rightarrow$  Hold  $\Diamond$  (off/on) down for five seconds to manually switch the Konftel Ego off or on.
- 1 To save the battery when the unit is not being used and it is not connected via USB, you can switch it off by pressing 5.
  - If the Konftel Ego is connected via USB, it will continue charging even if it is switched off, but at a reduced rate.

The Konftel Ego switches off automatically after 3 hours to save the battery unless it is being charged via USB or is connected via Bluetooth. Restart the Konftel Ego by connecting it to a USB port or by pressing  $\phi$  (off/on).

## **USING WITH A COMPUTER**

The Konftel Ego transforms your computer into high-quality conferencing equipment with OmniSound®. Unlike normal computer speakers and microphones, the Konftel Ego provides full duplex (two-way audio) and efficient echo cancellation and static reduction.

The computer identifies the Konftel Ego as an echo cancellation device which means that communication software usually leaves the audio processing to the Konftel Ego, resulting in better sound quality. This can also be manually adjusted, for example in Skype<sup>®</sup>.

(i) OmniSound® performs over the full audio bandwidth (50–7,000 Hz). However, there may be some factors that limit the sound quality, depending on the equipment in the network and that used by the other call participants.

If you are playing music, or some other one-way audio stream, the Konftel Ego switches automatically to music mode so that the sound is not altered by OmniSound®.

#### **CONNECTING TO A COMPUTER**

- ⇒ Connect the computer to the Konftel Ego with a suitable USB cable.

  The (♠) icon is displayed on the Konftel Ego.
  - If Lync or Skype for Business is started on the computer, the status icon (§) is displayed instead.
- The computer's operating system normally automatically selects the Konftel Ego as a speaker and microphone. If the Konftel Ego is not automatically selected as an audio device in the computer, you may have to access the computer settings and manually select Konftel Ego.
- If the computer has active software that is using the computer's built-in speakers, you may need to restart the software to switch to the new speaker (Konftel Ego).

## **USING AS A COMPUTER SPEAKER (MUSIC MODE)**

The computer normally only activates the speaker in the Konftel Ego if no other software is running that can use the microphone. This means that the Konftel Ego acts as a computer speaker and that the audio processing in OmniSound® is turned off so that the sound is not altered.

(1) When the Konftel Ego is connected via USB, you have to use the computer to control the music. The ◄, ➤ and ➤ ■ buttons only work for music via Bluetooth.

## Adjusting the volume

- ⇒ Press **4**) and **4**)) to adjust the volume.
- The volume can also be controlled from the computer.

## **USING WITH A COMPUTER**

#### USING AS A CONFERENCE UNIT

To make a VoIP call from the computer, use Skype®, Microsoft® Lync®, Skype® for Business, an online meeting service or some other VoIP (Voice over IP) software.

The Konftel Ego microphone will be automatically enabled when you start a VOIP call or a recording using audio recording software on the computer. OmniSound® now handles full duplex and echo cancellation.

#### Starting a call

⇒ Starting the call from the computer.

The LEDs on the Konftel Ego show a steady blue light.

#### Answering incoming calls

- ⇒ Answering a call from the computer.

  The LEDs on the Konftel Ego show a steady blue light.
- ① If you are using Lync®/Skype® for Business, you can also answer by pressing ✓ on the Konftel Ego.

#### **Ending calls**

- ⇒ Ending a call from the computer.

  The LEDs on the Konftel Ego go out.
- ① If you are using Lync®/Skype® for Business, you can also end a call by pressing x on the Konftel Ego.

## Switching the microphone off during a call (mute)

- ⇒ Press ½ to switch the microphone off temporarily during a call.

  The LEDs on the Konftel Ego flash red.
- ⇒ Press once more to switch the microphone on again.

## Holding a call

- (i) This only works with Lync®/Skype® for Business.
- $\Rightarrow$  Press  $\checkmark$  to put the call on hold.
- ⇒ Press once again to return to the call.

## Adjusting the volume during calls

 $\Rightarrow$  Press  $\triangleleft$ ) and  $\triangleleft$ ) to adjust the volume.

## USING WITH A BLUETOOTH DEVICE

The Konftel Ego can be connected to a mobile phone, tablet and computer via Bluetooth. We are using a mobile phone in these examples. Bluetooth must be enabled in the mobile phone's settings.

Audio can be transmitted in two different ways via Bluetooth. One is two-way and is optimised for speech. The other (A2DP) has higher audio bandwidth, is one-way and is optimised for music. The Konftel Ego supports both of these.

(i) OmniSound® performs over the full audio bandwidth (50–7,000 Hz). However, limitations in the telecommunications networks and in Bluetooth technology reduce the bandwidth somewhat and the sound is compressed. This has an effect on the sound quality.

#### PAIRING AND CONNECTING

Two devices have to be paired before they can communicate with Bluetooth. You do this in different ways depending on whether your telephone supports simplified pairing via NFC (near-field communications) or not.

A maximum of eight devices can be paired with the Konftel Ego. If another device is then paired, the oldest pairing information is deleted. It is also possible to delete all pairings, see page 12.

#### Pairing and connecting with NFC

- (i) NFC must be enabled on your mobile phone and the screen unlocked.
- $\Rightarrow$  Hold the mobile phone next to the NFC symbol  $\blacksquare$  on the Konftel Ego.
- (i) You might need to move the phone closer then further away from the Konftel Ego to make contact via NFC. The range is only about one centimetre.

The mobile phone and the Konftel Ego are paired and connected.

## Pairing without NFC

⇒ Turn Bluetooth on in your mobile phone.

This normally makes the phone visible to other Bluetooth devices and even starts a search on some phones.

⇒ Hold \$\down for two seconds on the Konftel Ego.

This makes the Konftel Ego visible to other Bluetooth devices. The ((\*)) icon is displayed and the LEDs flash blue.

- ⇒ Start a search on your mobile phone.
- ⇒ Select the Konftel Ego from the list of devices found and select pairing. (It may take a while for the devices to find one another.)

The devices are paired and usually automatically connect to one another.

- The (\*) icon is displayed on the Konftel Ego.
- ① After 60 seconds in pairing mode, the Konftel Ego returns to normal mode even if pairing has not been established.

## USING WITH A BLUETOOTH DEVICE

#### RECONNECTING ALREADY PAIRED DEVICES

A pairing means that the phone and the Konftel Ego save information about one another. This information is saved, even if the connection is broken.

The connection is broken if:

- The devices are far apart (Bluetooth has a range of about 10 metres).
- You turn off Bluetooth in your mobile phone.

The next time your mobile phone and the Konftel Ego are within range of one another, you will not need to pair them. Simply connect.

- (i) Your mobile phone must have Bluetooth switched on.
- ⇒ Press **\$** when the phone is within range.
- (i) If you have a call in progress on your mobile phone, it is transferred to the Konftel Ego.
- (i) Some mobile phones try to connect automatically to a paired handsfree (Konftel Ego) when you make or take a call.

## **USING AS A SPEAKER (MUSIC MODE)**

The Konftel Ego functions as a powerful speaker for playing music from your mobile phone. If your phone supports A2DP, you'll get the best audio quality. When music is being played, the audio processing feature in OmniSound® is turned off so that the sound is not altered.

### Adjusting the volume

- $\Rightarrow$  Press  $\triangleleft$ ) and  $\triangleleft$ ) to adjust the volume.
- i) The volume can also be controlled from the computer.

#### Controlling the music

⇒ Press ►II, ◄, and ➤ to simply pause, play and skip tracks in the playlist on your mobile phone.

## USING WITH A BLUETOOTH DEVICE

#### **USING AS A CONFERENCE UNIT**

When you make or take a call, music mode automatically stops and the Konftel Ego microphone is enabled. OmniSound® now handles full duplex and echo cancellation.

#### Making calls

⇒ Dial the number on your mobile phone.

The LEDs on the Konftel Ego light up blue and the sound is audible there.

On some mobile phones, you can choose to have the sound play through your mobile or headset (Konftel Ego) when you make the call.

#### Answering incoming calls

⇒ Answer by pressing ∨ on the Konftel Ego.

The LEDs on the Konftel Ego light up blue and the sound is audible there.

- (i) The call will play through your mobile phone if you take the call there.
- (i) You can reject the call by pressing X.

#### Transferring a mobile call in progress

⇒ Press \$ on the Konftel Ego.

The call is transferred between the Konftel Ego and the mobile phone each time you press.

### **Ending calls**

 $\Rightarrow$  Press  $\pmb{\times}$  on the Konftel Ego or end the call from the phone.

The blue LEDs on the Konftel Ego go out.

## Switching the microphone off during a call (mute)

⇒ Press ½ to switch the microphone off temporarily during a call.

The LEDs on the Konftel Ego flash red.

⇒ Press once more to switch the microphone on again.

## Holding a call

- $\Rightarrow$  Press  $\checkmark$  to put the call on hold.
- ⇒ Press once again to return to the call.

### Adjusting the volume during calls

 $\Rightarrow$  Press **4**) and **4**) to adjust the volume.

## **USING A HEADSET**



## Warning!

Use of headphones/earbuds at high volumes can damage your hearing.

⇒ Connect the headset to the ♠ port on the Konftel Ego.

The sound automatically transfers to the headset.

⇒ Unplug the headset.

The sound automatically transfers to the Konftel Ego speakers.

## **SETTINGS**

## **KEYPAD TONE**

 $\Rightarrow$  Hold  $\checkmark$  down for five seconds to disable or enable the button clicking sound on the Konftel Ego.

## **CLEARING THE LIST OF PAIRED DEVICES**

⇒ Hold \$ down for five seconds to clear the list of paired devices on the Konftel Ego.

## **UPGRADING SOFTWARE**

You can upgrade software in the Konftel Ego using **Konftel Upgrade Utility** via a USB-connected PC with Microsoft® Windows®.

Visit www.konftel.com/upgrades for more information.

#### **INSTALLING KONFTEL UPGRADE UTILITY**

- ⇒ Visit www.konftel.com/upgrades and select Konftel Ego.
- ⇒ Download Konftel Upgrade Utility.
- ⇒ Install the software on your computer.

  Follow the instructions given by the installation program.

#### UPGRADING SOFTWARE

- ⇒ Connect your Konftel Ego to the computer using a USB cable.
- i Bluetooth must not be enabled and there should be no audio playing on the computer.
- ⇒ Hold \( \frac{1}{2}\) down for eight seconds to put the Konftel Ego in upgrade mode.

  The \( \frac{1}{2}\) icon is displayed for two seconds.
- ⇒ Start Konftel Upgrade Utility on your computer.
- ⇒ Follow the software guide instructions.

  The Konftel Ego restarts automatically when the upgrade has been completed.
- ① You can check which software version is installed on the Konftel Ego by quickly pressing  $\phi$  (off/on) twice. The version of the software is displayed on the screen.
- (i) If you wish to exit upgrade mode without doing an upgrade, press this sequence of buttons: ﴿♦, ♦, ♦, ♦, ♦, ♦.

## **TECHNICAL DATA**

Size 145 x 134 x 32 mm.

Weight 230 g.

Display 1.77" Colour LCD, 128x160 pixels.

Upgrading Konftel upgrade utility (for Microsoft® Windows®) upgrades

Konftel Ego software via the USB connection.

Power supply

USB Power supply and battery charge via the USB.

Battery 1000 mAh Li-ion.
Stand-by 72 hours battery only
Talk time 12 hours battery only

**Connections** 

USB Micro USB. For computer connection.

Bluetooth Bluetooth 4.1. For connection to a mobile phone or other

equipment that supports the Bluetooth Handsfree profile.

Support for simplified Bluetooth pairing and connection using

NFC (near-field communications).

Support for A2DP (advanced audio distribution profile) is required to obtain the best audio quality when playing music and for music control via the music mode in the Konftel Ego.

Headset 3.5 mm phone plug (TRS/TRRS).

**Audio** 

Audio optimisation OmniSound®.

Microphone Two microphones with beamforming

Coverage range Up to 30 m<sup>2</sup>. Frequency range for music 50-24,000 Hz. Frequency range for speech 50-7,000 Hz

Volume 90 dB SPL 0.5 m.

**Environment** 

Temperature 5°-40°C.

Relative humidity 20-80% condensation free.

Recommended acoustics Reverberation period 0.5 S Rt 60.

Background noise < 45 dBA.

Konftel is a leading company and a strong brand in the teleconferencing industry. Since 1988, our mission has been to help people around the world to conduct meetings, regardless of distance. We know from experience that teleconferences are an efficient way to save time, money and contribute to a better environment. Superior audio quality is key to productive meetings which is why we incorporate OmniSound®, our patented audio technology, into all Konftel telephones. Our products are marketed worldwide under the Konftel name via our head offices in Umeå. Find out more about the company and our products at www.konftel.com.