



User Guide

Konftel 50 Conference Unit

US English

Conference phones for every situation



OmniSound®

This product is equipped with OmniSound®, the crystal clear sound.

WARNING: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.



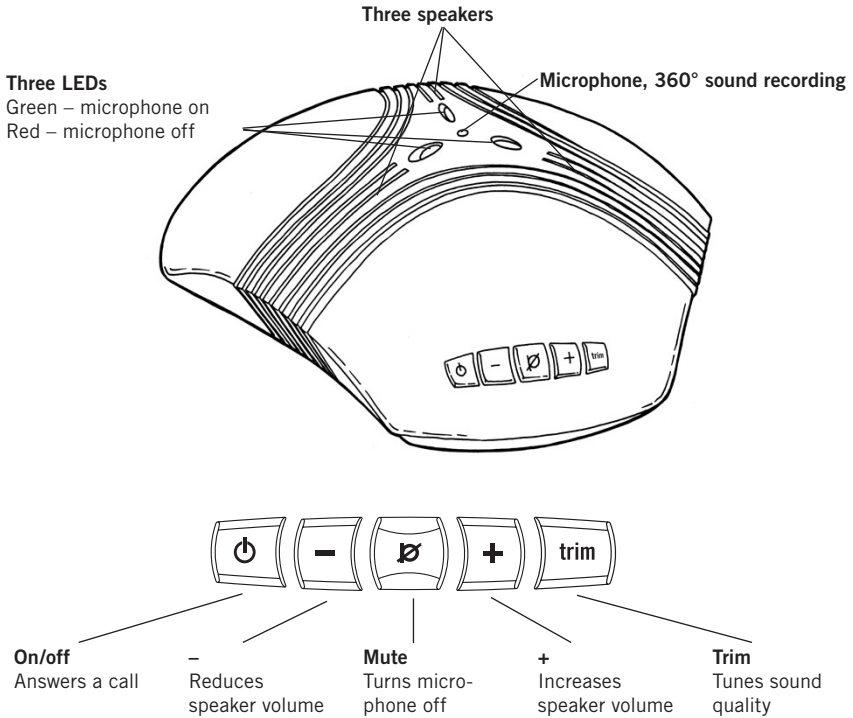
The lightning symbol is intended to alert you to the presence of uninsulated dangerous voltage within this product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



The exclamation symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

Description	2
Maintenance	3
Using a system telephone	4
Connecting and settings	4
Answering a call	6
Making a call.....	6
During a call	6
Ending a call	7
Using a computer	8
General.....	8
Connecting via a sound card	8
Other connection options	12
Connecting a computer using a USB Adapter (accessory)	12
Connecting to a mobile or DECT telephone via a cable (accessory)	13
Troubleshooting	14
Connection	14
Sound	15
Technical data	16
Accessories	18
Order numbers for accessories.....	18
Limited Warranty	19
Warranty, service, FCC and IC statement	19
Service Agreements	20
FCC Statement.....	21
Industry Canada (IC) Statement	22
RF exposure	22

DESCRIPTION

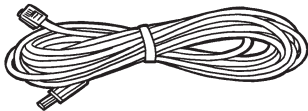
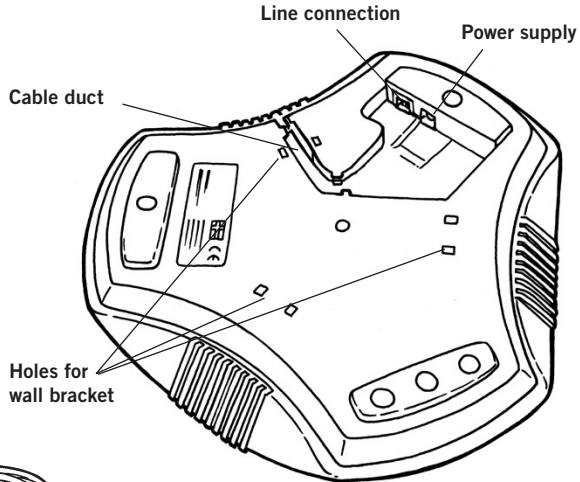


Konftel 50 is a conference unit for connecting to existing fixed system telephones, DECT telephones, cell phones or computers. Konftel 50 has an omnidirectional, highly-sensitive microphone and three speakers which, together with Konftel's OmniSound® provide optimal sound quality and maximum reduction of room echo, even when the person speaking is standing at a slight distance from the unit.

Konftel 50 has five buttons. The most common functions for power, speaker volume and mute are obvious, but all the buttons have other functions for activating various special functions and settings. Therefore, you should read the sections of the handbook that deal with the connections you intend to use so that you do not miss any important options.

Plug adapter

Connection cable electricity–mains socket

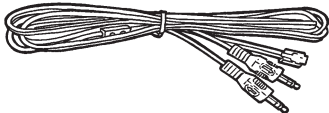


Connection cable electricity, 19 ft (6 m)
(Konftel 50–plug adapter)

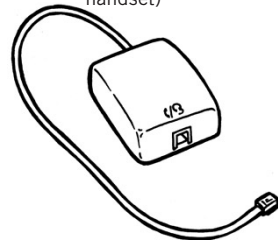
Switchbox
(Konftel 50–telephone handset)



Connection cable telephone, 9 ft (3 m)
(Konftel 50–switchbox)



Connection cable computer, 4 ft (1.5 m)
(Konftel 50–computer)



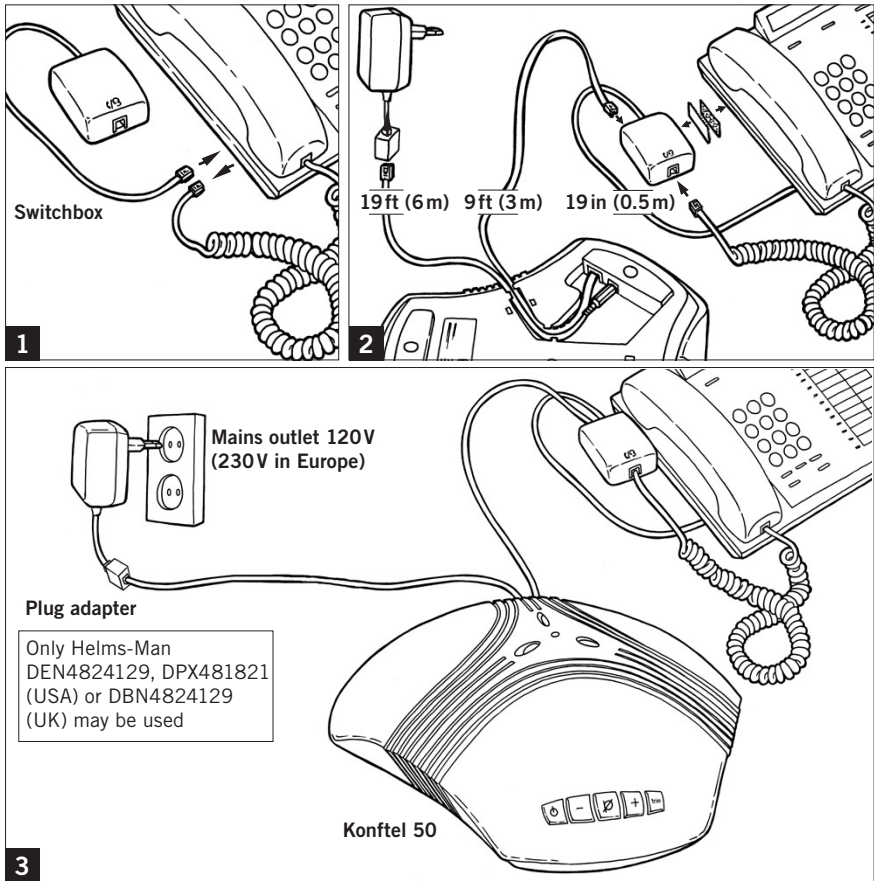
Konftel's website www.konftel.com offers suggestions for various applications and accessories for the Konftel 50 and other products.

If the GSM network has reduced functionality, e.g. due to poor coverage, the sound quality may be affected. This is not due to the Konftel 50.

MAINTENANCE

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

USING A SYSTEM TELEPHONE



CONNECTING AND SETTINGS

- ⇒ Connect Konftel 50 to the telephone via the switchbox as per the pictures above.
- ⇒ Plug Konftel 50 in using the power adapter as shown in the picture.
- ⇒ Make a test call to check that everything works and to adjust the microphone setting.

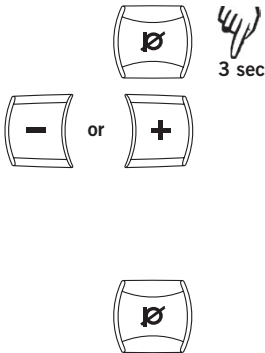
Please note that the selector switch for different types of telephone is located on the bottom of the switchbox. See troubleshooting for more information if something does not work.

Using a headset instead of the handset

You can connect a headset to the switchbox instead of a handset. Please note that the headset must be suitable for the telephone system.

Adjusting the microphone volume

The microphone volume can be adjusted during the call, but to avoid disturbing the call, it may be best to adjust it during a test call following connection. There are 5 volume settings.



⇒ Press and hold the **mute** button for about 3 seconds until the LEDs start to flash and you hear a tone.

⇒ Increase the microphone volume using the + and reduce it using -.

Adjust the microphone volume one level at a time until you can hear well in the other end. Please note that too high a level may cause echoes and feedback.

⇒ Press the **mute** button to conclude setting the selected microphone volume.

The volume setting is saved in the event of a power-failure.

USING A SYSTEM TELEPHONE

ANSWERING A CALL



- ⇒ Answer the call using the telephone in the normal way.
- ⇒ Press the **on/off** button to switch on Konftel 50 and change to speaker call.
- ⇒ Place the handset to one side – it is now disconnected.

MAKING A CALL



- ⇒ Lift the handset and dial the number.
- ⇒ Press the **on/off** button to switch on Konftel 50 and change to speaker call.
- ⇒ Place the handset to one side – it is now disconnected.

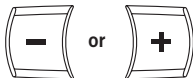
DURING A CALL

Transferring a call between Konftel 50 and a telephone



- ⇒ Press the **on/off** to switch off Konftel 50 and transfer the call back to the telephone.

Adjusting the speaker volume



- ⇒ Increase the speaker volume using **+** and reduce it using **-**.

There are 15 volume settings. Please note that the telephone's volume setting also affects the speaker volume in Konftel 50.



Mute function

⇒ Press the **mute** button to turn off the microphone.

The LEDs change from green to red. The other party cannot hear what you are saying.



⇒ Press the **mute** button again to switch the microphone back on.

Tuning the sound manually

Konftel 50 adjusts itself automatically when you switch it on to eliminate echo. It also senses changes in the room and continually adapts during the call. If, despite this, you still experience reduced sound quality, Konftel 50 can be tuned manually at any time.



⇒ Press **trim**.

A short noise is heard.

ENDING A CALL



⇒ Hang up the handset.



⇒ Press the **on/off** button to turn off Konftel 50.

USING A COMPUTER

GENERAL

Konftel 50 functions as a speaker and microphone for all computers that have a microphone input and a line output for sound. Konftel 50 can also be connected via a USB sound card (see page 12).

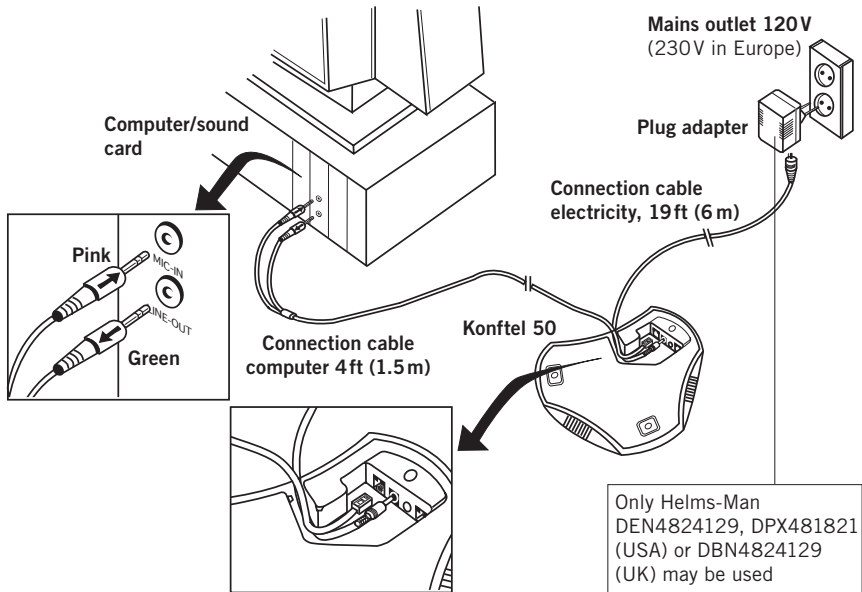
Use

You can use Konftel 50 for programs that communicate over the Internet (e.g. Skype). You make, answer and end calls in the program. Konftel 50 functions as a speaker and microphone when it is switched on.

The buttons for mute and manual tuning also function when connected to a computer (see page 7).

CONNECTING VIA A SOUND CARD

Connect in the order shown on the next page.



- ⇒ Connect Konftel 50 to the sound card using the accompanying Y-cable as per the picture.

LINE OUTPUT ----- OUT --- Green
MICROPHONE INPUT - IN ----- Pink

- ⇒ Plug Konftel 50 in using the power adapter as shown in the picture.



- ⇒ Start the computer and switch on Konftel 50 (the **on/off button**).

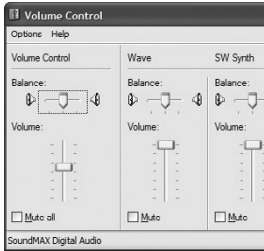
- ⇒ Check and adjust the computer's sound and volume settings as per the next section.

Checking the sound unit in Windows

There follows an example of how such items appear on a computer with Windows XP. Please note that it may look different on your computer. In a Macintosh you open the computer's system settings to select sound inputs and adjust sound levels.



- ⇒ Open **Properties** for **Sound and Audio Devices**. (Right click on the speaker symbol in the Activity field and select **Adjust Audio Properties** from the quick menu or use the start menu: **Start > Control panel > Sound and Audio Devices**.)
- ⇒ Click on the **Audio** tab and check that the computer's **sound card** is selected as the standard unit. Otherwise you must actively select the computer's sound card in your application (e.g. Skype®) each time you re-start the computer.



Adjust the speaker volume in Windows

- ⇒ Click on the **Volume...** button under **Sound playback** on the tab **Audio**.
- ⇒ Adjust the sound level for **Volume Control** so that it is between the intermediate and maximum level.

This setting adjusts the line output level from the computer. A low sound level here means that you must increase the volume on Konftel 50 to the maximum level, which may lead to fuzzy sound and a low sound level. A high sound level means that the volume on Konftel 50 can be set to an intermediate setting and still produce excellent sound through the speakers.

- ⇒ Check the sound level when you playback sounds (any sound source in the computer). Please note that Konftel 50 must be switched on.

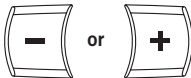
Note that you also have separate volume controls for various sound sources in the computer. These volume controls apply to playback from each sound source. Choose **Mute** for microphone input if you do not want to hear your own voice through the speakers. A high volume may cause echoes and feedback.

Adjusting the speaker volume on Konftel 50

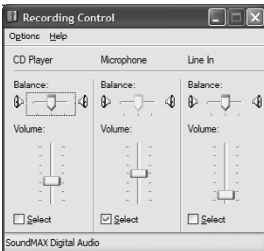
If necessary, the volume on Konftel 50 can be adjusted during a call.

- ⇒ Increase the speaker volume using **+** and reduce it using **-**.

There are 15 volume settings.



Adjusting the microphone volume in Windows



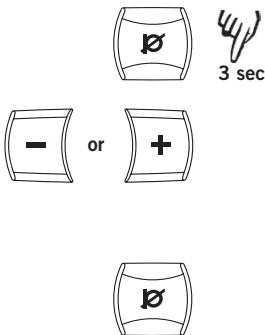
⇒ Click on the **Volume...** button under **Sound recording** on the tab **Audio**.

⇒ Adjust the microphone input between the intermediate and maximum level. Connect a call and adjust the volume if required.

It is best to use the communication program you intend to use with Konftel 50 when testing the microphone volume.

Adjusting the microphone volume on Konftel 50

Adjust the microphone volume on Konftel 50 if required. There are 5 volume settings. Please note that Konftel 50 must be switched on.



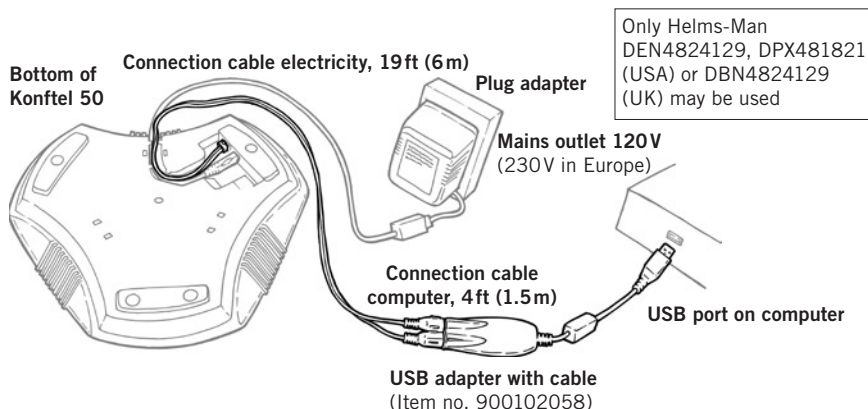
⇒ Press and hold the **mute** button for about 3 seconds until the LEDs start to flash and you hear a tone.

⇒ Increase the microphone volume using **+** and reduce it using **-**.

Adjust the microphone volume one level at a time until the correct level is achieved.

⇒ Press the **mute** button to conclude setting the selected microphone volume.

OTHER CONNECTION OPTIONS

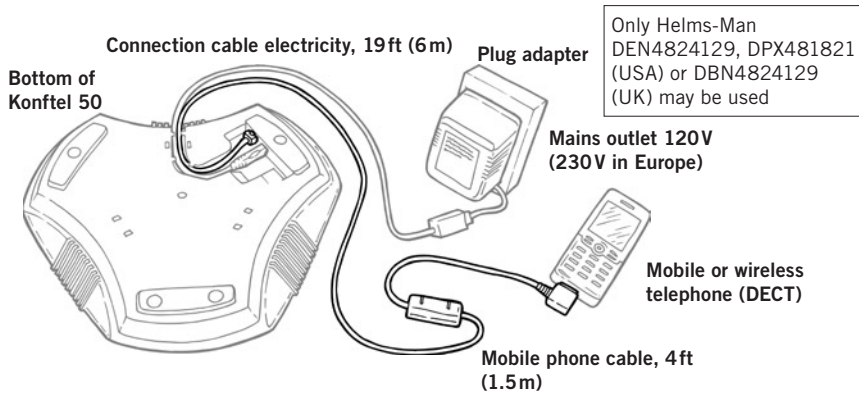


CONNECTING A COMPUTER USING A USB ADAPTER (ACCESSORY)

The USB adapter functions as a sound card in a computer without inputs and outputs for sound.

- ⇒ Connect the USB adapter to Konftel 50 as shown in the picture.
Green plug --Output labelled SPK on USB adapter
Pink plug ----Output labelled MIC on USB adapter
- ⇒ Connect the USB adapter to a USB port on the computer as shown in the picture.
- ⇒ Plug Konftel 50 in using the power adapter as shown in the picture.
- ⇒ Check the sound properties and adjust the sound volume in the same way as for a computer with built-in inputs and outputs for sound (see pages 9–11).

Please note that you must ensure that a **USB headset** is specified as the standard unit. Otherwise you must actively select USB headset as a sound unit in your application (e.g. Skype®) each time you re-start the computer.



CONNECTING TO A MOBILE OR DECT TELEPHONE VIA A CABLE (ACCESSORY)

The Konftel 50 can be connected to a GSM or wireless DECT telephone using an accessory cable, as illustrated. Cables are available for most models on the market. Visit www.konftel.com for more information on accessories.

- ⇒ Plug Konftel 50 in using the power adapter as shown in the picture.
- ⇒ Connect the telephone to Konftel 50 as shown in the picture.
- ⇒ Adjust the microphone and speaker volume in the same way as when connecting to system telephones (see pages 5–6).

Use

See pages 6–7 for descriptions of how to make and answer calls and how the mute and tuning functions work.

TROUBLESHOOTING

A number of problems that may arise when connecting and using Konftel 50 are described below.

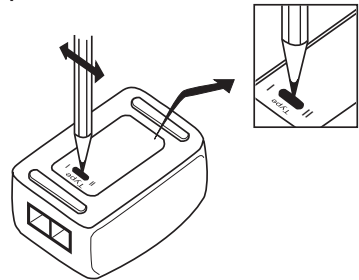
CONNECTION

System telephone via switchbox

1. Is Konftel 50 correctly connected? See the instructions for connecting the telephone.
2. Have you added extension cords to the system? Remove them and re-connect to see if the system is working.
3. Check the position of the selector switch on the bottom of the switchbox. Select position **I** or **II** depending on which system telephone you are connecting Konftel 50 to.

Manufacturer	Type of switchboard	Selector switch position
--------------	---------------------	--------------------------

ERICSSON	MD110	I
	BUSINESS PHONE	I
NORTEL	MERIDIAN 1	I
	COSMOS	I
PHILIPS	SOPHO	II
	ERGOLINE	I
ALCATEL	4200	I
	4400	I
SIEMENS	HIPATH	I
	HICOM	I



For other types of switchboard, try position I first, and then position II.

Computers

If a call can be heard via the computer's headset or built-in speaker, but not via Konftel 50, check that the software and sound card can handle full duplex.

SOUND

No sound

1. Are the LEDs red? If so, the mute button is activated. Press to deactivate.

Poor sound quality, echo

1. Check the position. The unit is intended to stand flat on a table. Avoid moving the unit around during a call. Do not place the unit too close to a wall or underneath objects such as lampshades or pot plants.
2. Tune Konftel 50 manually. See instructions for manual tuning.
3. Is the volume correctly adjusted? See the instructions for adjusting the volume setting for the microphone.
4. Is the other party using a conference unit, sound card or software that cannot handle full duplex?
5. When the unit is connected to a computer, radio frequency interference may cause discernible sound. The sound will end when the interference stops.

TECHNICAL DATA

Konftel 50

Power supply:	Transformer 12 V DC/230V AC, 700 mA (Europe) Transformer 12 V DC/120V AC, 700 mA (USA)
Inputs:	Analogue line in/out, modular 6/6 Rec (speaker) -10 dBV (adjustable) Broadcast (microphone) -30 dBV (adjustable)
Speaker volume:	Adjusts to 15 levels
Microphone volume:	Adjusts to 5 levels
Room echo reduction:	208 ms
Line echo reduction:	38 ms
Environment:	Reception area <320 sq ft (30 m ²) Reverberation time in room <500 ms Background noise <45 dBA Temperature range: 0–40° C
Electrical safety:	UL60950-1 CAN/CSA C22.2 No. 60950 EN60950
RF/EMC:	EN 55022 : 1998+A1 : 2000 EN 61000-3-2 : 2000 EN 61000-3-3 : 1995 EN 55024 : 1998+A1 : 2001
Telecom:	FCC Part 68 Registration IC CS-03
Dimensions:	Diameter 9.15 inches (232 mm)
Weight:	1.6 pounds (700 grams)

Switchbox

Input telephone handset:	Modular 4/4
Input Konftel 50:	Cable, modular 6/6
Output telephone:	Cable, modular 4/4. The contact for connecting a switchbox to a system telephone may only be connected to SELV current in accordance with SS-EN60950
Compatibility:	Can be connected to most system telephones on the market

Computer cable

Y-cable: 1 x modular 6/4, 2 x Tele 13 inches (3.5 mm). Contact for connecting a Konftel 50 to a computer may only be connected to SELV current in accordance with SS-EN60950

USB adapter for sound (accessory)

USB connection: USB 1.1 Full-speed

System req. PC: Pentium >200MHz, min 256 MB RAM, spare USB port

ORDER NUMBERS FOR ACCESSORIES

Item no.	Designation
9146030	Wall mounting bracket
900102058	USB adapter for sound
900102070	Soft bag
900103328	Extension cord telephone, 32 ft (10 m)
900103339	Extension cord electrical, 32 ft (10 m)
	Connection cables GSM/DECT see www.konftel.com , under Accessories Konftel 50

LIMITED WARRANTY

Konftel warrants to the end user ("Customer") that this product will be free from defects in workmanship and materials, under normal use and service, for two (2) years from the date of purchase from its authorized reseller. Konftel's sole obligation under this express warranty shall be, at Konftel's option and expense, to repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item.

All products that are replaced will become the property of Konftel. Replacement products or parts may be new or reconditioned. Konftel warrants any replaced or repaired product or part for ninety (90) days from shipment, or the remainder of the initial warranty period, whichever is longer. Products returned to Konftel must be sent prepaid and packaged appropriately for safe shipment, and it is recommended that they be insured or sent by a method that provides for tracking of the package.

Responsibility for loss or damage does not transfer to Konftel until the returned item is received by Konftel. The repaired or replaced item will be shipped to Customer, at Konftel's expense, not later than twelve (12) days after Konftel receives the defective product, and Konftel will retain risk of loss or damage until the item is delivered to Customer.

Exclusions

KONFTEL will not be liable under this limited warranty if its testing and examination discloses that the alleged defect or malfunction in the product does not exist or results from:

- Failure to follow Konftel's installation, operation, or maintenance instructions.
- Unauthorized product modification or alteration.
- Unauthorized use of common carrier communication services accessed through the product.
- Abuse, misuse, negligent acts or omissions of Customer and persons under Customer's control; or
- Acts of third parties, acts of God, accident, fire, lighting, power surges or outages, or other hazards.

WARRANTY EXCLUSIVE. IF A KONFTEL PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, CUSTOMER'S SOLE REMEDY FOR BREACH OF THAT WARRANTY SHALL BE REPAIR OR REPLACEMENT AT KONFTEL'S OPTION. TO THE FULL EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, CORRESPONDENCE WITH DESCRIPTION, AND NON-INFRINGEMENT, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. KONFTEL NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY.

SERVICE AGREEMENTS

For information on KONFTEL service agreements, call or email KONFTELS helpdesk:

USA and Canada

+1 866-606-4728 Monday through Friday 8:00 AM to 5:00 PM Central Standard
email: konftel.usa@konftel.com

International

+46-90706489 Monday through Friday 8:00 AM to 5:00 PM (GMT:-1)
email: info@konftel.com

If you purchased your product from a Konftel Authorized Reseller, contact the Authorized Reseller for information about service agreements applicable to your product.

LIMITATION OF LIABILITY. TO THE FULL EXTENT ALLOWED BY LAW, KONFTEL EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, EVEN IF KONFTEL OR ITS AUTHORIZED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR OR REPLACE AT KONFTEL'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Disclaimer

Some countries, states, or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers, or the limitation of liability for personal injury, so the above limitations and exclusions may be limited in their application to you. When the implied warranties are not allowed to be excluded in their entirety, they will be limited to the duration of the applicable written warranty. This warranty gives you specific legal rights which may vary depending on local law.

FCC STATEMENT

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US:5RWOTNAN50. If requested, this number must be provided to the telephone company.

An applicable certification jack Universal Service Order Code (USOC) for the equipment is provided (i.e., RJ11C) in the packaging with each piece of approved terminal equipment.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0).

To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. [For products approved after July 23 2001, the REN for this product is part of the product identifier that has the format US:5RWOTNAN50. The digits represented by 05 are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.]

NOTICE: If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this Konftel 50 does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

NOTICE: According to telephone company reports, AC electrical surges, typically resulting from lightning strikes, are very destructive to telephone equipment connected to AC power sources. To minimize damage from these types of surges, a surge protector is recommended.

The FCC Wants You To Know

In the unlikely event that your phone causes problems on the phone line, the phone company can temporarily discontinue your service. If this happens, the phone company attempts to notify you in advance. If advance notice is not practical, the phone company notifies you as soon as possible and advises you of your right to file a complaint with the FCC.

Also, the phone company can make changes to its lines, equipment, operations, or procedures that could affect the operation of this telephone. The telephone company notifies you of these changes in advance, so you can take the necessary steps to prevent interruption of your telephone service.

This equipment complies with the limits for a Class B digital device as specified in Part 15 of FCC Rules. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- reorient or relocate the receiving antenna
- increase the distance between the equipment and the radio or TV.
- use outlets on different electrical circuits for the equipment and the radio or TV

Consult your local store if the problem still exists.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

Warning: Changes or modifications to this phone not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: Consent all party if the conversation was recorded.

LIGHTNING

Your telephone has built-in lightning protection to reduce the risk of damage from surges in telephone line and power line current. This lightning protection meets or exceeds FCC requirements. However, lightning striking the telephone or power lines can damage your telephone. Lightning damage is not common. Nevertheless, if you live in an area that has severe electrical storms, we suggest that you unplug your phone when storms approach to reduce the possibility of damage.

IC STATEMENT

This product meets the applicable Industry Canada technical specifications. The Ringer Equivalence Number is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

Konftel is a leading company within loudspeaker communication and audio technology. We develop and sell products and technology for telephone meetings based on cutting-edge expertise within acoustics and digital signal processing. Characteristic of our products is that all conference telephones contain the same high quality audio technology – OmniSound® – providing crystal clear sound. Learn more about Konftel and our other products on **www.konftel.com**

Developed by Konftel AB
Box 268, SE-901 06 Umeå, Sweden
Phone: +46 90 706 489 Fax: +46 90 131 435
E-mail: info@konftel.com Web: www.konftel.com
