

BELLMAN
BE2210 Domino
Personal Hearing
System



Bellman and Symfon BE2210 Domino Personal Hearing System Instruction Manual

[Home](#) » [Bellman and Symfon](#) » Bellman and Symfon BE2210 Domino Personal Hearing System Instruction Manual 

Contents

- 1 Bellman and Symfon BE2210 Domino Personal Hearing System
- 2 Product Information
- 3 Usage Instructions
- 4 Introduction
- 5 IMPORTANT SAFETY INSTRUCTIONS
- 6 What is in the box
- 7 Getting started
- 8 How to use Bellman Audio Domino
- 9 Symbols and indicators
- 10 Using the Transmitter Unit
- 11 Settings
- 12 Testing
- 13 Troubleshooting
- 14 Technical information
- 15 FCC compliance statement
- 16 Areas of application
- 17 Warranty conditions
- 18 Documents / Resources
 - 18.1 References

BELLMAN



Specifications

- Product: Bellman Audio Domino Personal Hearing System
- Model: BE2210/BE2230
- Manufacturer: Bellman & Symfon

Product Information

The Bellman Audio Domino Personal Hearing System is designed to assist individuals in various listening situations. It includes a receiver unit (BE2210) and a transmitter unit (BE2230) that work together to enhance sound clarity and volume.

Usage Instructions

Getting Started

Before using the product, read the user manual thoroughly to understand its functionalities. Ensure you have all the accessories mentioned in the manual.

Charging

Use only the recommended charging accessories provided by Bellman & Symfon to charge the system. Avoid exposure to moisture during charging.

Using the Receiver Unit

To switch on the receiver unit, follow the instructions in the manual. Adjust the sound volume and tone according to your preference.

Using the Transmitter Unit

Turn on the transmitter unit as per the manual instructions. You can listen via the transmitter unit or use the receiver unit's microphone for listening.

Choice of Microphones

The system offers options for choosing microphones on both the receiver and transmitter units. Refer to the manual for detailed instructions.

External Sound Source

You can connect external sound sources or microphones to the system for combined signal sources. Follow the guidelines provided in the user manual.

FAQ

- Q: Can I use the Bellman Audio Domino as a hearing aid?

A: The Bellman Audio Domino Personal Hearing System is not a hearing instrument. It is designed to assist in enhancing sound clarity and volume under various circumstances. For hearing loss issues, consult a doctor.

- Q: How do I establish a temporary link with another Transmitter Unit?

A: Refer to the user manual for instructions on establishing a temporary link with another Transmitter Unit for wireless digital transfer.

Bellman Audio Domino

Personal Hearing System, BE2210/BE2230

Introduction

Thank you for choosing products from Bellman & Symfon.

Bellman Audio is an assistive listening system. The system consists of a number of units which facilitate listening under different circumstances. Bellman Audio products make everyday life easier for many people and give them the free-dom to freely pursue their interests.

Bellman Audio Domino comprises easy-to-use wireless audio products which have been specially developed to help in circumstances where listening is difficult. The use of the latest technology in digital signal processing, encryption and wireless technology provides you with fantastic sound quality, secure and reliable radio transmission and great flexibility in how you use the system. The radio solution used and the flexible battery charging ensure that the products can be used safely and easily throughout the world.

Read through the entire user manual before starting to use the product. Refer to the diagrams showing the accessories and connection options.

IMPORTANT SAFETY INSTRUCTIONS

- Read these Instructions.
- Keep these Instructions.
- Heed all Warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding – type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.

- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- **Please note:** The BE2210 and BE2230 Bellman Audio Domino Personal Hearing Systems are not hearing instruments. Bellman & Symfon AB recommend that anyone who is experiencing hearing loss should consult a doctor.

Warning! The BE2210 and BE2230 Bellman Audio Domino Personal Hearing Systems have a very powerful amplifier and the sound level can cause discomfort or, in serious cases, endanger hearing if the product is used carelessly. Always turn the volume down to a low level before putting on the headphones!

- **Warning!** The Bellman Audio Domino Personal Hearing System is powered by rechargeable Lithium-Ion batteries. Do not expose the batteries to fire or to direct sunlight. The batteries must only be changed by Bellman & Symfon staff and must only be replaced by batteries of the same type. Danger of explosion if the batteries are incorrectly replaced. The batteries must be charged fully before using the products for the first time. Batteries should be charged in temperatures of between +5°C and +40°C.
- **Warning!** The Bellman Audio Domino Personal Hearing System must only be charged by charging accessories recommended by Bellman & Symfon.
- **Warning!** The AC/DC adaptor shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on apparatus. To completely disconnect the power input, the mains plug of AC/DC adaptor shall be disconnected from the mains. The mains plug of AC/DC adaptor should not be obstructed or should be easily accessed during intended use. The marking information is located at the bottom of AC/DC adaptor.
- **Warning!** To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.
- **Warning!** For the safety of your children – Please be aware that this product may include small parts. Ensure that the package and small parts are kept out of reach of children.
- This symbol indicates that integral electrical equipment must not be treated as household waste. It should be taken to the relevant collection depot for the recycling of electrical and electronic equipment. You can obtain more detailed information about recycling of the product from your local authorities, from the nearest recycling station or from the shop you purchased the product from.

What is in the box

The box contains everything you normally need in order to use Bellman Audio Domino. There are storage areas in the lining of the box for accessories supplied with the equipment. The box contains:

- a BE2210 Receiver unit
- B BE2230 Transmitter unit
- c BE9141 Travel case
- D User manual
- e Pocket Reference Guide f BE9142 Universal charger with 4 mains plugs
- G BE9139 Charging cable, USB
- H BE9136 Microphone with clip
- I BE9137 Stereo cable, 1.5 m with adapter from 3.5 mm jack to RCA (phono) connectors

- J BE9135 Neck strap with safety clasp (2 off)
- K BE9124 In-ear Phones

Figure referencesFigure references

Receiver unit

1. Internal microphone for Receiver Unit
2. Internal microphone setting LED Green: Omnidirectional microphone Orange: Directional microphone
3. Battery status LED
 1. Green: Switched on with well charged battery
 2. Blinking Green: Switched on but the battery charge is low
 3. Blinking Orange: Switched on with flat battery – will soon switch itself off
 4. Orange: Charging
4. LED for listening via transmitter
 1. Green: Omnidirectional microphone
 2. Orange: Directional microphone
 3. Orange and Green: Line in (external sound source)
5. Button for selecting internal microphone
6. On/off button
7. Button for selecting listening via transmitter
8. Volume and Tone LED Indicator
9. Button for increasing sound level
10. Button for reducing sound level
11. Button for reducing treble
12. Button for increasing treble
13. Headphone output 3.5 mm jack plug
14. Charging socket
15. Clip

Transmitter unit

16. Internal microphone for Transmitter Unit
17. Battery status LED

Green: Switched on with well charged battery

Blinking Orange and Green several times: An external sound source has been connected

Blinking Green: Switched on but the battery charge is low

Blinking Orange: Switched on with flat battery – will soon switch itself off Orange: Charging
18. On/off button
19. Button for pairing up Transmitter Unit with Receiver Units
20. External sound source input 2.5 mm jack plug
21. Charging socket
22. Clip

Getting started

Testing

1. Both the Transmitter and Receiver Units are supplied with built-in rechargeable batteries. The batteries in both the Transmitter and Receiver Units must be fully charged before using the products for the first time. Please use the charger supplied.
2. Connect the Headphones to the headphone output (13) and switch on the Receiver Unit with the On/Off button i (6). Listen to the Receiver Unit's microphone and adjust the volume using the Volume Buttons + or – (9 or 10).
3. Switch on the Transmitter Unit using the On/Off button i (18) and switch over to listen via the Transmitter Unit's microphone by pressing the external sound button (7). If you connect the Transmitter Unit Sound Input (20) to the headphone output on an external sound source, you can, for example, listen to music via the Transmitter.
4. The volume control adjusts the sound level. + (9) raises and – (10) lowers the volume while the Volume and Tone LED Indicator (8) shows the sound level.
5. The more LEDs that are lit the higher the volume. The LED indicator goes out 5 seconds after the sound volume has been set.
6. The tone control adjusts the sound quality. > (12) increases and < (11) reduces the treble. The Volume and Tone LED Indicator (8) shows the tone setting. The LED indicator goes out 5 seconds after the sound quality has been set.
7. When you have finished, you can switch off the Transmitter and Receiver Units by pressing the On/Off buttons i (6, 18) and holding them down until the Battery Status LEDs (3, 17) go out.

Accessories

The following accessories are available:

- BE9122 Stereo headphones
- BE9124 Ear phones
- BE9125 Stetoclips
- BE9126 Stereo Cable Kit, 5m (16 feet)
- BE9127 External microphone, 5m (16 feet)
- BE9128 Neck loop
- BE9143 USB car charger
- BE1360 Scart switch box
- BE2210 Receiver unit

For all accessories and for more information about the latest accessories please visit our website at <http://www.bellman.com>.

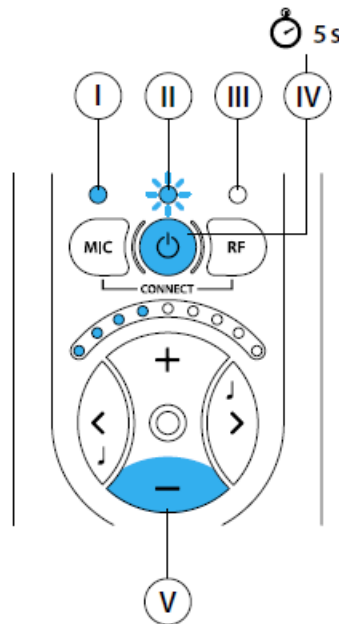
How to use Bellman Audio Domino

The BE2210 and BE2230 Bellman Audio Domino Personal Hearing Systems are personal hearing systems which have been specifically developed to provide an excellent sound experience even in demanding situations. Bellman Audio Domino works extremely well for speech and music. You can use the built-in microphones in the Receiver Unit and the Transmitter Unit or use an external sound source. You can use the external microphone supplied as an external sound source or connect the Stereo Cable Set supplied to a stereo sound source.

Symbols and indicators

The following symbols are used in the user manual and can be explained as follows:

- The warning triangle indicates information which must be followed in order to guarantee operation and also in some cases to ensure personal safety.
- The light bulb (tip, note) indicates information which can be useful to help you get the most out of the product



1. A permanently lit LED is indicated by a solid indicator.
2. A blinking LED is indicated by a sunlike solid indicator.
3. Indicators that are switched off are indicated by an empty circle.
4. If a button must be held down for more than a certain time, this is indicated by a blue button and a stop watch symbol with a figure which corresponds to the number of seconds that the button must be held down for.
5. Button presses are marked in blue on the specified button.

Charging

Both the Transmitter and Receiver Units are supplied with built-in rechargeable batteries. The batteries in both the Transmitter and Receiver Units must be charged before using the products for the first time.

Bellman Audio Domino contains Lithium-Ion batteries and a universal charger with plugs for the EU, United Kingdom, USA and Australia to suit the majority of wall sockets used around the world.

Warning: The product may only be charged with the charger supplied or using accessories from Bellman & Symfon.

- Connect the charger as illustrated in the fold-out section of the manual.
- Select the mains plug for the appropriate region and check that it is locked properly before it is connected to the wall socket. When the charging connectors are connected to the charger, the Transmitter Unit and the Receiver Unit, the Battery Status LEDs (3 and 17) change from green to orange to indicate that charging is taking place. When charging is finished, after about 2.5 h, the LEDs turn green again. You can charge one unit at a time or two at the same time.

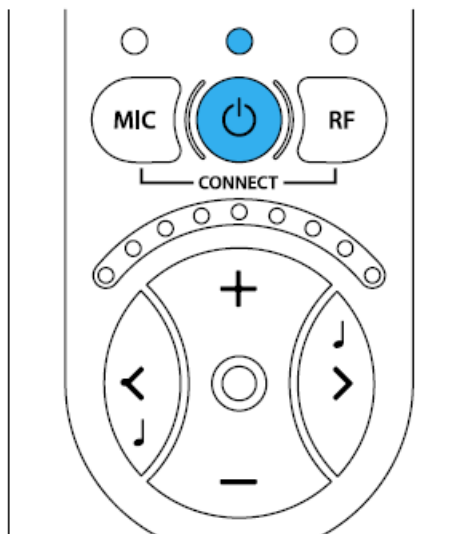
Using the Receiver Unit

Connect BE9122 Bellman Stereo Headphones, BE9128 Bellman Neck Loop, BE9125 Bellman Stetoclip, BE9124

Bellman In-ear Phones or another listening product recommended by Bellman & Symfon to the headphone output (13) on the right-hand side as illustrated in the fold-out section of the manual.

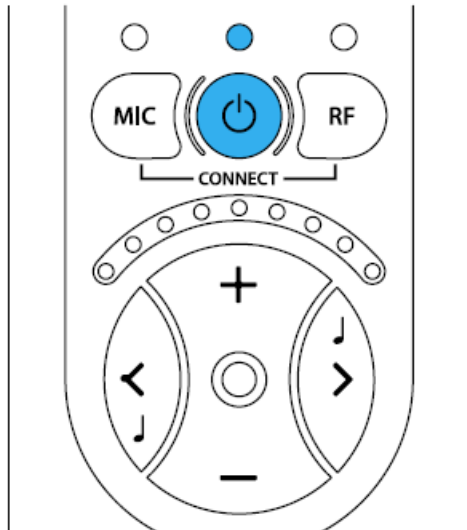
Switching on the receiver unit

Press the On/Off button i (6). The Battery Status LED (3) starts to shine with a green light to indicate that the unit is on.



Selecting the sound volume

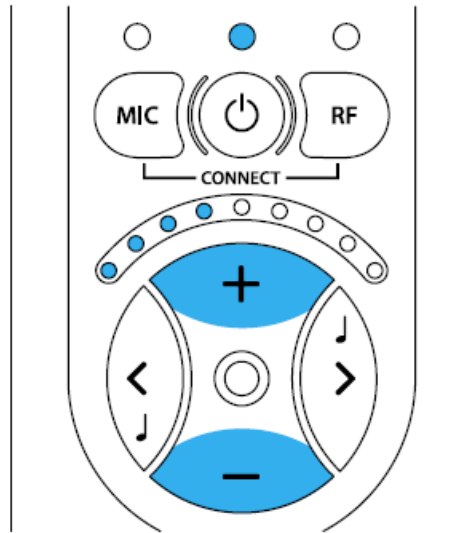
Use the volume control's + button (9) to increase and the – button (10) to decrease the sound level. The Volume and Tone LED Indicator (8) shows the sound level. The more LEDs that are lit the higher the volume. The LED indicator goes out 5 seconds after the sound volume has been set.



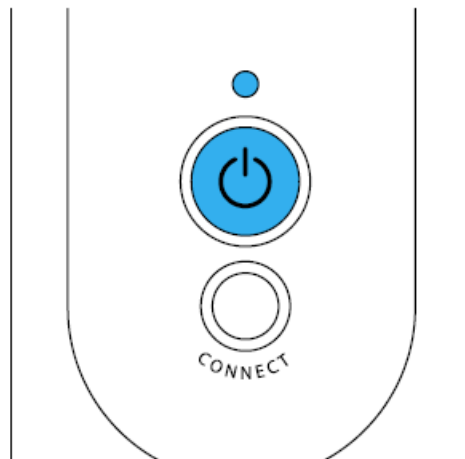
Selecting the tone

Use the tone control's < button (11) to reduce and the button (12) to increase the treble in the tone. The Volume and Tone LED Indicator (8) shows the selected setting. The LED indicator goes out 5 seconds after the sound quality has been set.

The Receiver Unit can be used as a small and adaptable self-contained call amplifier, but together with the Transmitter Unit it opens up a whole new range of possibilities. You can achieve the greatest flexibility when using the Receiver Unit together with the Transmitter Unit.



Using the Transmitter Unit

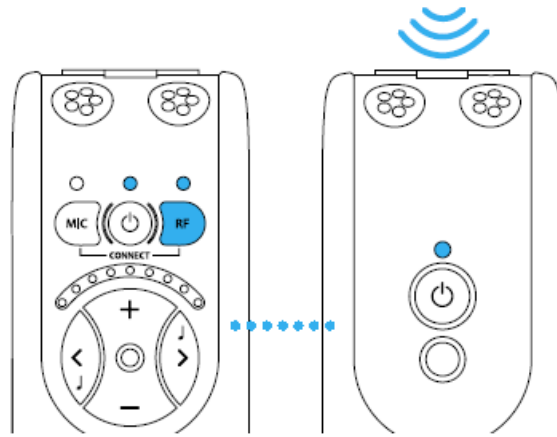


Switching on the transmitter unit

Press the On/Off button i (18). The Battery Status LED (17) starts to shine with a green light to indicate that the unit is on.

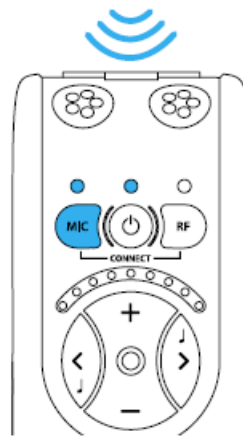
Listening via the trans- mitter unit

To listen on the microphone in the Transmitter Unit press the R button (7) on the Receiver Unit. The external sound LED (4) comes on and the sound detected in the Transmitter Unit is now heard in the headphones.



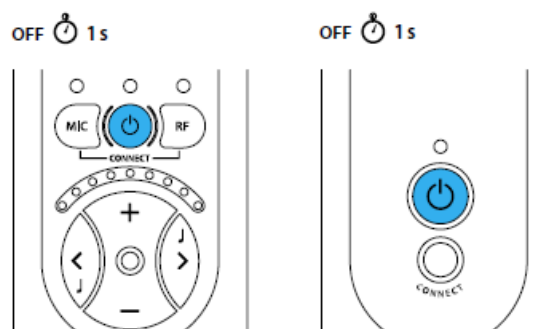
Listening on the receiver unit's microphone again

If you want to switch back to the internal micro-phone, give a short press on the M button (5). The internal microphone LED (2) comes on and the sound heard in the headphones now comes from the Internal Micro-phone (1) again.

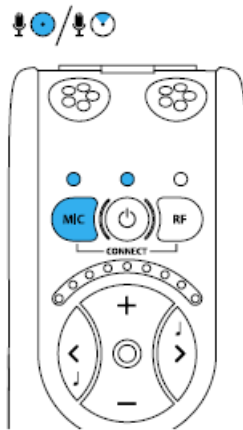


Switching off

When you have finished you can switch off the Transmitter and Receiver Units by press-ing the On/Off buttons i (6, 18) and holding them down until the Battery Status LEDs (3, 17) go out.



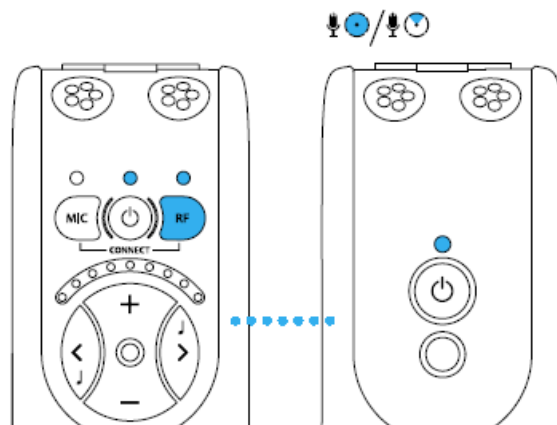
Choice of microphones



- Bellman Audio Domino contains two microphone options so that you can easily switch between an omnidirectional and a directional microphone.
- The microphones on both the Receiver Unit and Transmitter Unit have this function.
- The Receiver Unit remembers the previously selected microphone setting
- if you switch between the internal microphone and the Transmitter Unit's microphone.
- With the directional microphone you can "point" towards the sound source that you are interested in listening to while reducing sound from other directions. This is particularly useful in difficult listening situations such as in crowds or in very noisy environments.

Choice of microphone on the Receiver Unit

You can switch between omnidirectional and directional microphone reception by pressing the M button (5). The omnidirectional microphone is indicated by the Microphone LED (2) lighting up green and the directional microphone by it lighting up orange.



Choice of microphone on the Transmitter Unit

When you have chosen to listen via the Transmitter Unit by pressing the R button (7), you can switch between omnidirectional and directional microphone reception by pressing the R button (7).

The omnidirectional microphone is indicated by the External Sound LED (4) lighting up green and the directional microphone by it lighting up orange.

External sound source

- If the audio cable supplied, (which has a small 2.5 mm jack plug on one end), or if the External Microphone is connected to the Transmitter Unit's external sound source input (20), the Transmitter Unit's internal microphone

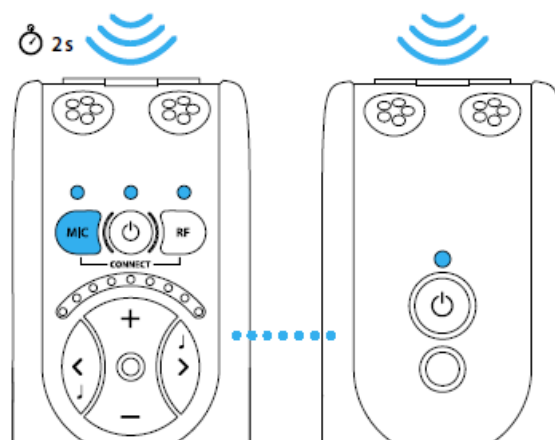
will be disconnected and the external sound source will be automatically selected. The Battery Status LED blinks orange several times to confirm that an external sound source has been connected. The External Sound LED (4) will light up green and orange at the same time to indicate that the sound is coming from an external sound source.

- If the audio cable is disconnected, the sound will be reconnected to the Transmitter Unit's microphone again.
- With the audio cable connected between a Transmitter Unit and a TV, hi-fi equipment, MP3 player or similar sound source you can listen to absolutely first class stereo sound without being limited by cables.
- The input sensitivity is automatically adjusted to suit different sound sources.

External microphone

You can connect an external microphone to the Transmitter's 2.5 mm socket (20). The Battery Status LED blinks orange several times to confirm that an external sound source has been connected. The External Sound LED (4) will light up green and orange at the same time to indicate that the sound is coming from an external sound source.

- In some cases it may, for example, be easier for a lecturer to have an external microphone and a Transmitter Unit in his/her pocket than to speak in a loud voice or carry a wired microphone.
- A Transmitter Unit can transmit speech to one or more Receiver Units at the same time.
- The input sensitivity is automatically adjusted to a suitable amplification when an external microphone is connected.
- Please note that the Transmitter Unit's Battery Status LED (17) blinks alternately green and orange several times when an external sound source is connected.

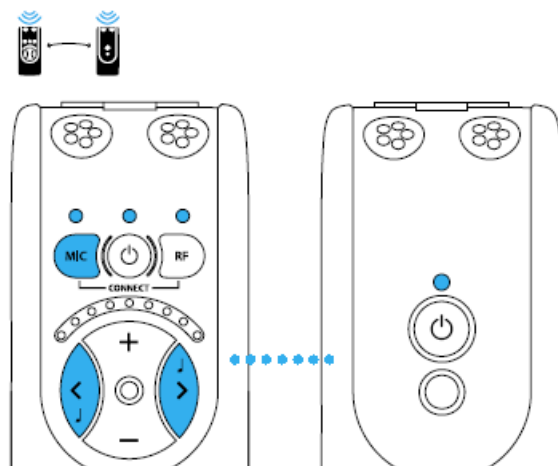


Combined signal sources

When you are listening via the Transmitter Unit's microphone or an External Sound Source, this sound can be combined with the sound that the internal microphone in the Receiver Unit is receiving. Choose to listen on the Transmitter Unit by pressing the R button (7). Hold down the M button (5) until both the MIC (2) and RF LEDs (4) light up.

The sound from the Transmitter Unit is mixed with the sound from the internal microphone. You can adjust the balance between the Receiver Unit and the Transmitter Unit's microphone by holding down the M button (5) at the same time as setting the balance using the (11) or > buttons (12).

If you want to go back to listening on the Transmitter Unit, press the R-button (7) and if you want to switch over to listening on the internal microphone, press the M button (5) instead.



Wireless digital transfer

Bellman Audio Domino uses the latest radio communications technology to digitally transfer sound with an exceptionally high sound quality in stereo. The radio transmission is encrypted to ensure the highest level of security and confidentiality.

Radio communication takes place on 2.4 GHz which is a frequency range whose use is permitted throughout the world.

Battery indicator

- The Battery Status LED (3, 17) normally lights up green. This indicates that the unit is switched on and the battery level is satisfactory.
- When the battery is low, the Battery Status LED (3, 17) blinks green until the battery is almost completely flat when it blinks orange instead. As soon as it blinks green it is time to charge the unit again. If the unit is not charged, it is switched off automatically.
- Charging starts automatically when you connect a charger to the Charging Socket (14, 21). Charging in progress is indicated on both the charger and the units by an orange light. Once the battery is fully charged, the indicator changes to green and the battery is continuously trickle charged until the charger is disconnected.

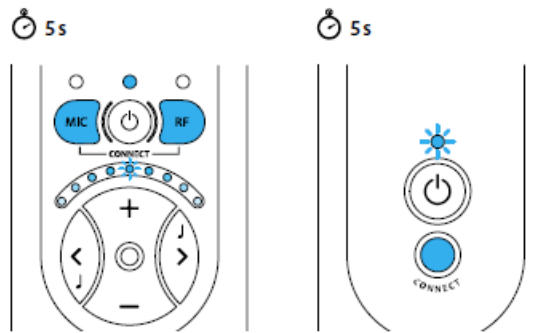
Establishing a temporary link with another Transmitter Unit

The radio link between the Transmitter and Receiver Units in the Bellman Audio Domino must be established in order for radio communication to operate. To make it easier to get started, Receiver Units and Transmitter Units which are supplied together are always paired up so that they will work together.

Whenever you want to listen on another Transmitter Unit you can establish a temporary link with it. As soon as you switch off the Receiver Unit it returns to working with the paired Transmitter Unit again.

Proceed as follows to establish a temporary radio link between a transmitter and a receiver:

- Start both the units with the On/Off buttons i (6, 18).
- Hold down CONNECT (19) on the Transmitter Unit.




- Hold down both the M button (5) and the R button (7) on the Receiver Unit.


A "running light" on the Receiver Unit's Volume and Tone LED Indicator (8) moving towards the centre indicates that the link has been established.

The link can only be established while the Transmitter Unit's connection button is pressed down – this is for safety reasons to prevent a Receiver from being able to connect to another Transmitter unobserved.

Please note that it is possible to connect several Receiver Units to the same Transmitter Unit by repeating the above procedure. There is, however, a risk that the number of receivers may affect the performance of the system.

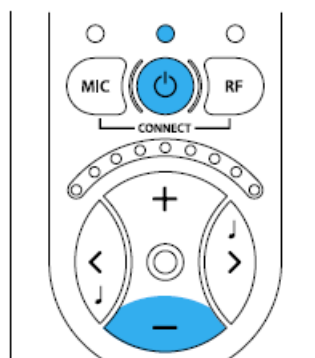
Troubleshooting in brief

Problem	Solution
Nothing happens when you try to start the units.	<p>Connect the charger and check that charging starts within 10 seconds.</p> <p> <i>Please note! If charging does not start within 10 seconds, disconnect the charger immediately and contact the nearest dealer!</i></p>
No sound can be heard in the headphones when the Receiver Unit is switched on.	<p>Turn up the volume using the volume control (9).</p> <p>Check that the internal microphone has been selected as the signal source and that it works by gently scraping on the microphones (1).</p> <p>Check that the headphone plug is securely inserted in the headphone output.</p> <p>Connect the headphones to another sound source (with a 3.5 mm head-phone output) to test whether the headphones are working.</p>
No sound can be heard in the headphones when the Receiver Unit is switched on and External Sound is selected.	<p>Check that the Transmitter Unit is switched on.</p> <p>Check that the external microphone has been selected as the signal source and that it works by gently scraping on the microphones (16).</p> <p>Check that the Transmitter is within range.</p>

Problem	Solution
	<p>Connect the radio link and check that the connection is made without problems.</p> <p>Check that the Transmitter Unit can switch between the omnidirectional and directional microphone position.</p> <p>Check that the sound source is correctly connected to the Transmitter if the stereo cable is connected to the External Sound Source Input (20).</p>
A high-pitched noise is heard in the headphones.	<p>Turn down the volume or increase the distance between the micro-phone and headphones.</p> <p>Direct the microphone away from you.</p>
The sound breaks up or comes and goes.	<p>The Receiver Unit is too far away from the Transmitter Unit. Move the units closer together.</p> <p>More than one Receiver is connected to the Transmitter and at least one Receiver is too far away from the Transmitter.</p> <p>Too many Receivers are connected to the same Transmitter.</p> <p>There are too many transmitters on 2.4 GHz or too many Domino systems nearby which affect one another.</p> <p> Please note that walls, concrete panels and metal reduce the range.</p>

Settings

Bellman Audio Domino has more settings than those you can access in user mode. By going into the Settings Menu you can adjust settings that you do not to be changed again.



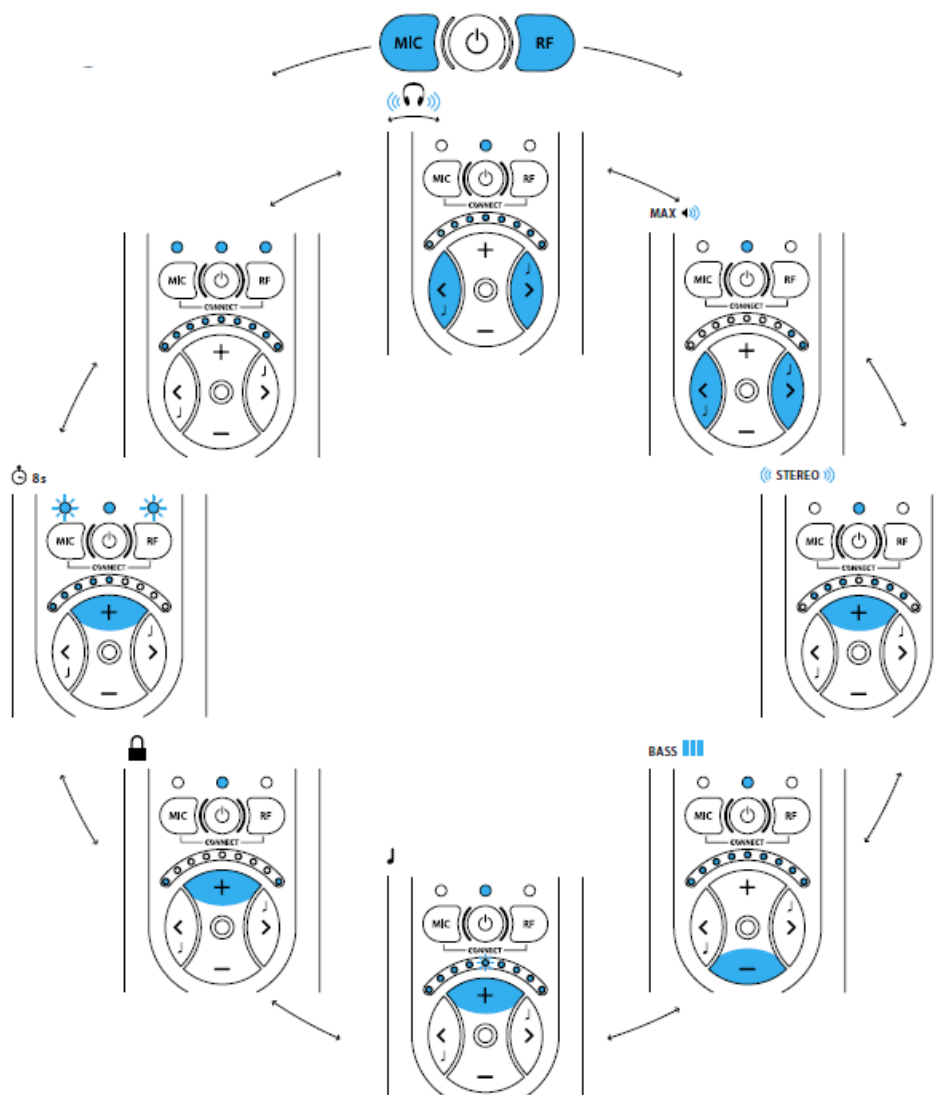
Settings menu

Start the Receiver Unit with the On/Off button 0 (6).

Hold down the On/Off button 0 (6) and press the Volume Button — (10) within 1 second for at least 3 seconds.

You are now in Balance Control mode.

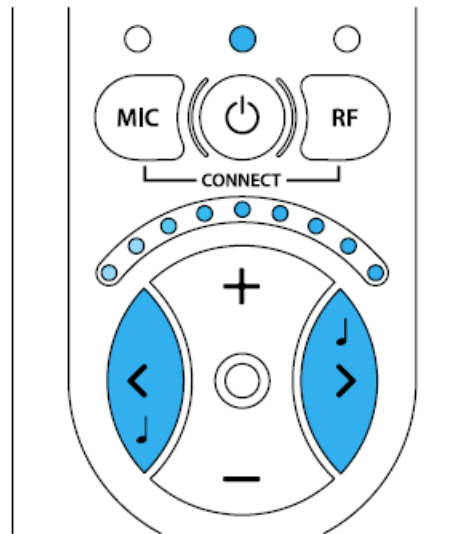
Overview of the Settings Menu



- In the settings menu you can move between the different settings by pressing the RF button (7) or the MiCbutton (5).
- Each press on the RF button moves you clockwise on to the next setting in the list and the MIC button takes you anti-clockwise to the previous setting in the list.
- When you have finished adjusting your settings, give a short press on the On/Off button 0(6) to return to normal user mode.

Balance control


- The balance between the right and left-hand channels can be set to compensate, for example, for a hearing loss in one ear.

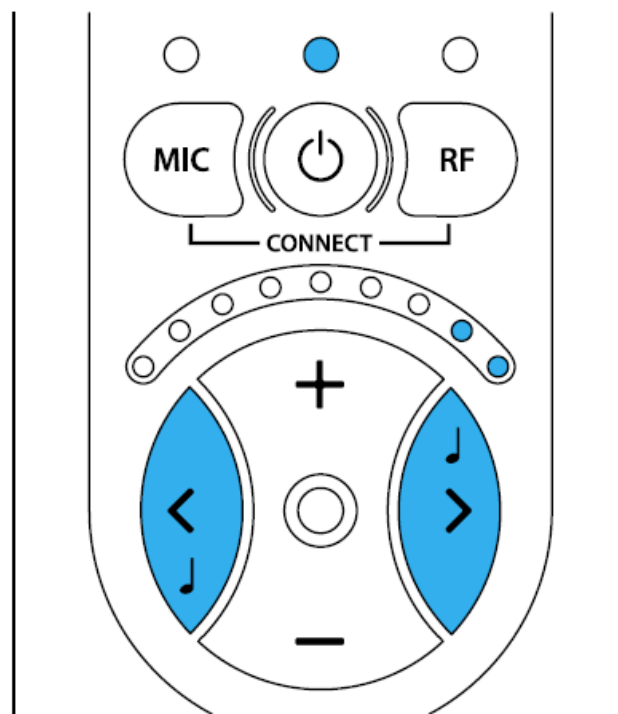


- Press the < button (11) to adjust the balance on the left and the > button (12) to adjust the balance on the right.
- The standard setting is centred balance.

Basic attenuation

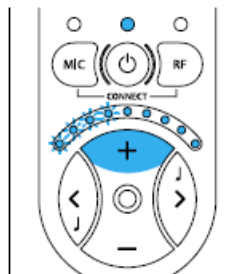
- Different headphones have different sensitivity levels and you can compensate for this with basic attenuation. What you actually set is the attenuation you require at the maximum power output you want to have (which is therefore 0 dB attenuation). This settings is useful when you want to adjust the maximum volume in user mode for a pair of headphones or in-ear phones with a higher sensitivity than the BE9122 Bellman Stereo Headphones or, for example, if you want to limit the volume for a child.
- Use the > button (12) to reduce the basic attenuation (increase the volume) and the < button (11) to increase the basic attenuation (reduce the volume). The basic attenuation is adjusted in increments of 3 dB.
- The standard setting is 0 dB attenuation, which corresponds to the maximum output signal.

MAX 

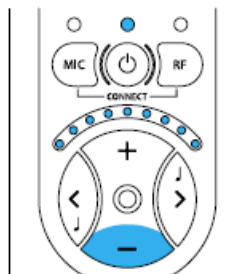


Stereo/Mono

BASS 



BASS 



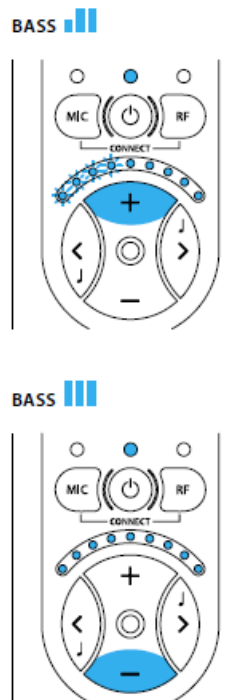
The line-in signal can be rendered in either Stereo or in Mono. The speech intelligibility can be increased in certain listening situations such as when watching TV if the signal is in Mono.

- Press the + button to select Stereo.
- Press the — button to select Mono.

- The standard setting is Stereo.

Bass reduction

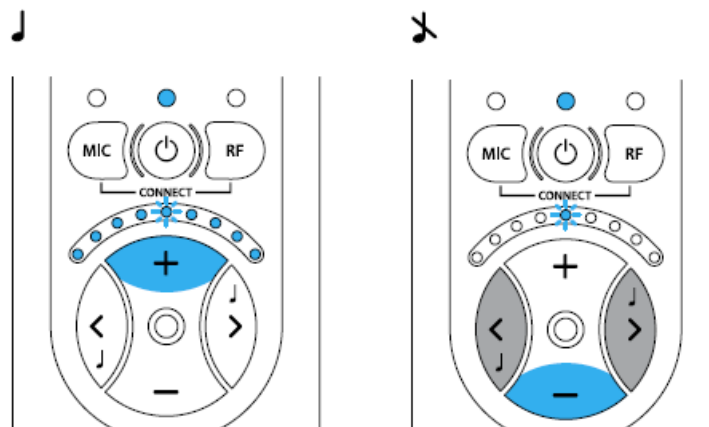
Low-frequency interference such as fans and road noise can be tiring if you are exposed to it for a long period. By activating bass reduction, low-frequency interference and sounds are reduced.



- Press the + button (9) to activate Bass Reduction.
- Press the — button (10) to deactivate Bass Reduction and get level frequency response.
- The standard setting is deactivated Bass Reduction.

Adjusting the Tone Control

The Tone Control Blocking function has been developed in case you want to make it easier for the user to use Bellman Audio Domino. This setting can be used to choose whether the user should be able to adjust the tone control or not. If you choose to switch off the tone control buttons, you can preset the tone control that will be used in user mode.

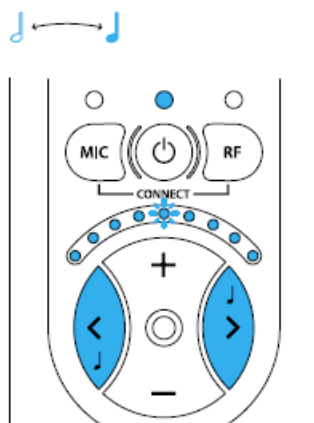


Activating and deactivating Tone Control in User Mode

Press the + button (9) to activate the tone control buttons and the — button (10) to deactivate them.

The standard setting is tone control activated.

Presetting the Tone Control

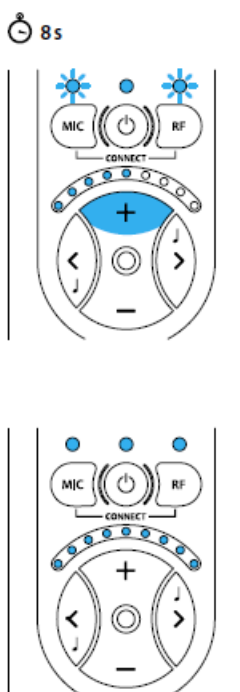


Press the < button (11) and the > button (12) to preset the tone control to the level that will be used in user mode. The standard setting is Tone Control centred (level frequency response).

Please note that if the tone control is on, the preset value will be changed as soon as the Tone Control is changed in user mode.

Resetting to the factory setting

You can use this to reset all settings to the standard settings that the products were supplied with from the factory. Press and hold down the + button (9) until all the LEDs on the display are lit. After resetting is completed, the display will blink for a short period.

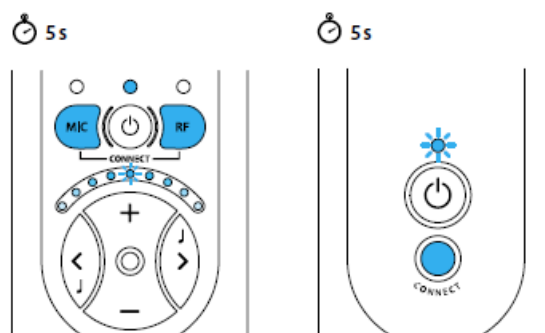


Version information

The product version information is presented here via a pattern of lit and blinking LEDs. This internal information is only intended as an aid for servicing and support.

Pairing of units

The Transmitter and Receiver Units in the Bellman Audio Domino system must have the radio link established in order for radio communication to operate. To make it easier to get started, a Receiver Unit and a Transmitter Unit which are paired together are always supplied so that they will work together. Where you want to pair a Receiver Unit with a Transmitter Unit which is different from the Receiver Unit it was originally supplied with, you can do this in the Settings Menu. Proceed as follows to pair up the units:



- Start both the units with the On/Off buttons I (6, 18).
- Go into the Settings Menu.
- Hold down the CONNECT button (19) on the Transmitter Unit.
- Hold down both the M button (5) and the R button (7) on the Receiver Unit.

A "running light" on the Receiver Unit's Volume and Tone LED Indicator (8) moving towards the centre indicates that the link has been established.

Please note! If you pair up a Transmitter Unit and a Receiver Unit in the Settings Menu, this replaces the pairing carried out in the factory. This can be useful when changing a Transmitter Unit under guarantee or if you want to pair up several Receiver Units to a Transmitter Unit (e.g. in a conferenceroom).

Testing

It is easy to test the Bellman Audio Domino Personal Hearing System. If Bellman Audio Domino does not operate as described below, you can carry out further troubleshooting as instructed under Troubleshooting.

How to test

The testing of Bellman Audio Domino has been divided into three parts. One part for the Receiver Unit for which only the Receiver Unit is required, one part for the Transmitter Unit for which both units are required and finally one for charging the two units.

Receiver Unit

- Switch on the unit and make sure that the Battery Status LED (3) lights up green.
- Connect the headphones to the Headphone Socket (13) and scrape carefully on the round microphone (1) with your finger and check that there is a scraping sound in the headphones.
- Press the M button (5) and make sure that the Microphone LED (2) changes colour and lights up orange.
- Scrape carefully on the small microphone hole on the top (1) and the round microphone (1) with your finger and check that there is a scraping sound in the headphones.
- Press the buttons (9, 10, 11, 12) and check that the Volume and Tone Indicator changes.

Transmitter Unit

- Switch on the unit and make sure that the Battery Status LED (17) lights up green.

- Press the R button (7) and make sure that the External Sound LED (4) lights up green.
- Carefully scrape on the round microphone hole (16) on the top of the Transmitter Unit with the finger and check that there is a scraping sound in the headphones.
- Press the R button (7) and make sure that the External Sound LED (4) changes colour and lights up orange.
- Carefully scrape on the round microphone (16) on the Transmitter Unit with the finger and check that there is a scraping sound in the headphones.
- Connect an external sound source to the External Sound Source Input (20) and check that the sound from the sound source is heard in the headphones. The external sound source input (20) can be tested, for example, by connecting a CD player or a radio to the input via the audio cable supplied. The transmitter unit automatically switches to an external sound source when a connector is connected to the External Sound Source Input (20).

Charging

- Connect the charger to the mains socket and check that the LED on the charger light up green.
- Connect the charging cables to both the charger and to the charging sockets on the Receiver Unit and the Transmitter Unit (14, 21), see the fold-out section of the manual.
- Check that the LED on the charger change from green to red.
- Check that the Battery Status LEDs on both the Transmitter Unit and Receiver Unit light up orange.

Troubleshooting

Problem	Solution
The sound is louder in one ear than in the other.	Adjust the Balance in the Settings Menu.
The sound volume is low even though the volume is set to max.	Adjust the Basic Attenuation in the Settings Menu.
The sound is only in Mono even though it is connected via a stereo cable to a sound source which provides stereo sound.	Change to Stereo in the Settings Menu.
The bass reproduction is weak.	Switch off Bass Reduction in the Settings Menu.
The Tone Control cannot be adjusted.	Use the Settings Menu to activate the Tone Control buttons or to adjust the sound.
The Receiver Unit is behaving strangely.	Reset the unit to the factory settings in the Settings Menu.
The Receiver Unit loses its link to the Transmitter Unit when you switch off the Receiver Unit.	Pair up the Receiver Unit and Transmitter unit permanently in the Settings Menu.

Problem	Solution
Humming occurs when connecting the stereo cable during charging.	Only use the charger supplied, BE9142.

Technical information

Power supply

Battery power	Internal Lithium-Ion type, 617 mAh, type NTA2617
---------------	--



CAUTION:

*Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.*

Operating time, fully charged	8-12 hours (standard battery)
-------------------------------	-------------------------------

Transmitter charging time	2.5 hours (standard battery)
---------------------------	------------------------------

Receiver charging time	2.5 hours (standard battery)
------------------------	------------------------------

Input signals

Microphone	Internal electret condenser type (omni-directional or directional)
------------	--

External sound source input	2.5 mm stereo tele jack plug 0 dBV sensitivity (max input level)
-----------------------------	--

Automatically selects Aux. in or Ext. mic.

Output signals

Headphone socket	3.5 mm stereo jack plug
------------------	-------------------------

Output power	100 mW @ 16 Ω load
--------------	---------------------------

Distortion	BE9122 Headphones 0.6 % THD BE9124 Ear Phones 0.08 % THD
------------	---

Dynamic range	95 dB SNR (electrical)
Frequency range	40 – 10.000 Hz (electrical)
Max output level, saturation	
BE9122 Headphones	BE2210: 124.3 dB SPL / BE2230: 124.3 dB SPL (@ 2.5 kHz)
BE9124 Ear Phones	BE2210: 132.0 dB SPL / BE2230: 130.5 dB SPL (@ 5 kHz)
BE9125 Stetoclips	BE2210: 133.7 dB SPL / BE2230: 133.6 dB SPL (@ 1 kHz)
Full on gain	(60 dB SPL input signal @ 1 kHz):
BE9122 Headphones	BE2210: 42.5 dB / BE2230: 44.0 dB
BE9124 Ear Phones	BE2210: 55.0 dB / BE2230: 57.5 dB
BE9125 Stetoclips	BE2210: 58.2 dB / BE2230: 64.2 dB
Full on gain	(60 dB SPL insignal, HFA):
BE9122 Headphones	BE2210: 46.5 dB / BE2230: 49.0 dB
BE9124 Ear Phones	BE2210: 51.5 dB / BE2230: 56.0 dB
BE9125 Stetoclips	BE2210: 52.0 dB / BE2230: 59.4 dB
Radio function	
Digital radio technology	2.4 GHz frequency band, three channels Co-exists with other equipment Automatic channel selection 128 bits encryption
Topology	Point-to-point or Point-to-multipoint
Diversity	2 antennas for reception, one antenna for transmission (Rx + Rx/Tx)
Transmitting output power	Max. 25 mW

Radio function

Operating range radio	Up to 25 meters indoors clear line of sight, up to 100 meters outdoors clear line of sight. Walls, concrete and metal reduce the range.
The following may also affect the performance:	<p>More than one Receiver is connected to a Transmitter and at least one of the Receivers is too far away from the Transmitter.</p> <p>Too many Receivers are connected to the same Transmitter.</p> <p>Too many transmitters on 2.4 GHz or too many Domino systems close to one another.</p>

Features

Volume control	9 steps (5 dB/step)
Tone control	+/- 10 dB in 9 steps, cutoff frequency 1,6 kHz
Power switch	On/Off toggle button
Microphone and RF-mode	Separate mode select buttons
R/L-channel balance setting	0-20 dB programmable attenuation (in steps of 5 dB)
Maximum volume setting	0-21 dB programmable attenuation (in steps of 3 dB)

Bass reduction setting	Attenuation of frequencies below 400 Hz with 10 dB
Dynamic compressor:	10 channels Dynamic gain range 0-35 dB Compression 3:1 Expansion 1:1,5 Attack time 20 ms <3kHz, 25 ms ≥3kHz Release time 110 ms <3kHz, 200 ms ≥3kHz
Dynamic noise reduction	10-channel adaptive noise reduction
Feedback cancellation	Adaptive phase shift type
Digital signal processing	22.050 kHz sampling frequency, 16-bit resolution in stereo
Additional information	Stereo/Mono setting Reset of factory default settings High-polished gloss coating for reduction of handling noise
Additional Information	
For indoor use only.	
Dimensions H x W x D	99 x 48 x 22 mm
Weight	BE2210: 74g, BE2230: 70g
Colour	Black/dark grey metallic, silver-coloured buttons.

Regulatory requirements

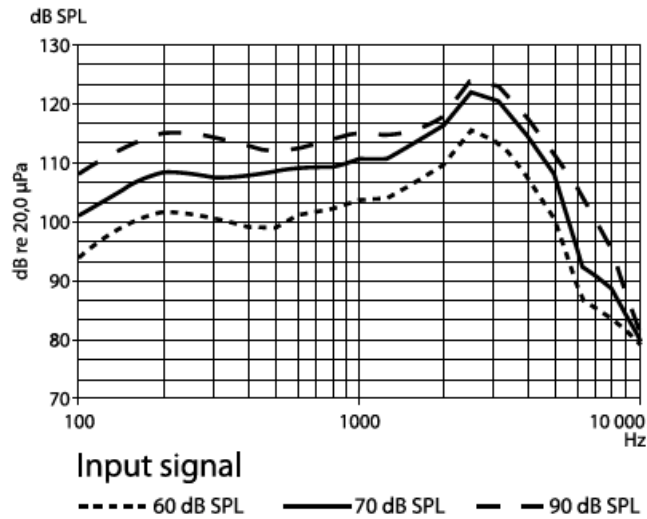
CE, RoHS, WEEE, FCC, C-tick



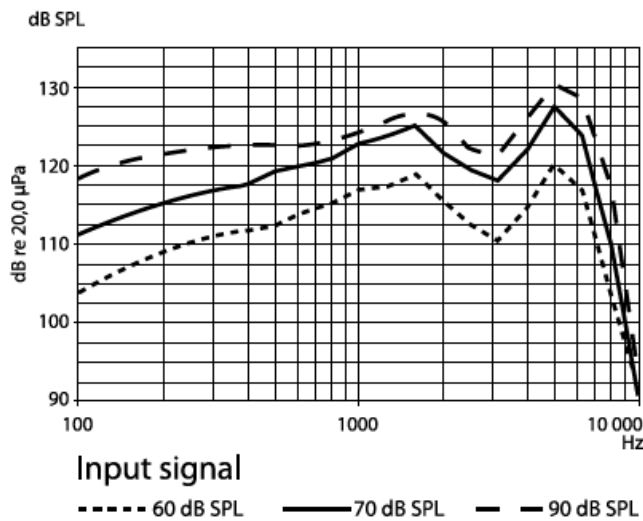
Measurements

• Frequency response

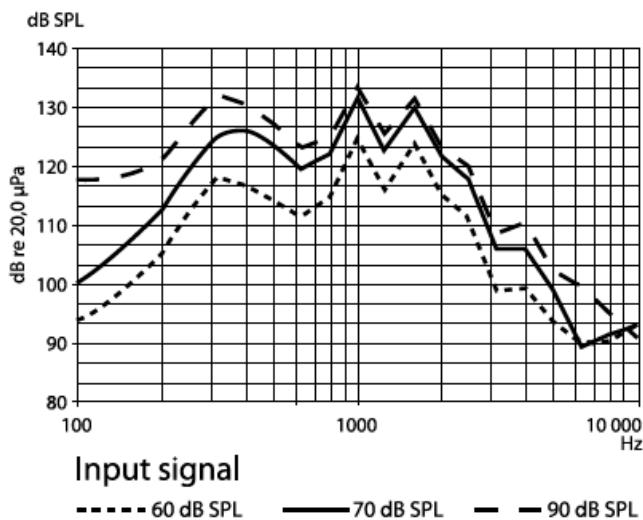
- Acoustical (BE9122 Headphones, BE9124 Ear Phones and BE9125 Stetoclips). See diagrams below.



*Output signal with
BE9122, Stereo head-
phones*



*Output signal with
BE9124, In-ear phones*



*Output signal with
BE9125, Stetoclips*

FCC compliance statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

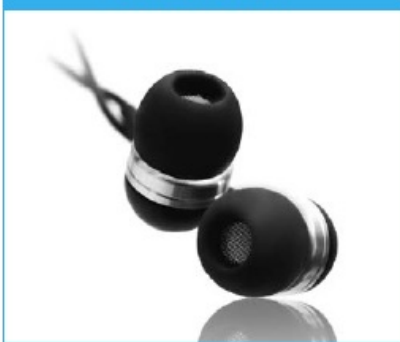
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to

Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. Statement for Industry Canada

These original accessories are specially developed to maximize the performance of your Domino. Contact your nearest dealer or visit: www.bellman.com

EAR PHONES



HEADPHONES



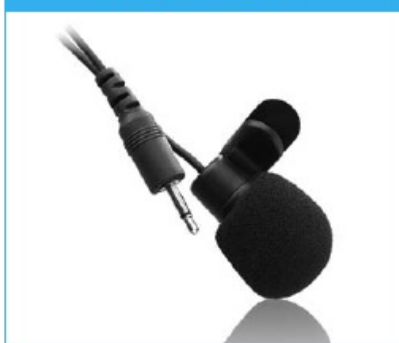
STETOCIPS



NECK LOOP



MICROPHONE



These original accessories are especially developed to maximize the performance of your Domino. Contact your nearest dealer or visit: www.bellman.com

SCART SWITCH



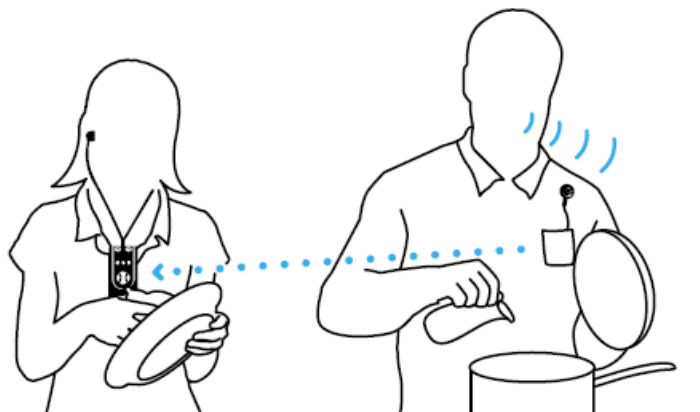
CABLE KIT, 16 FEET



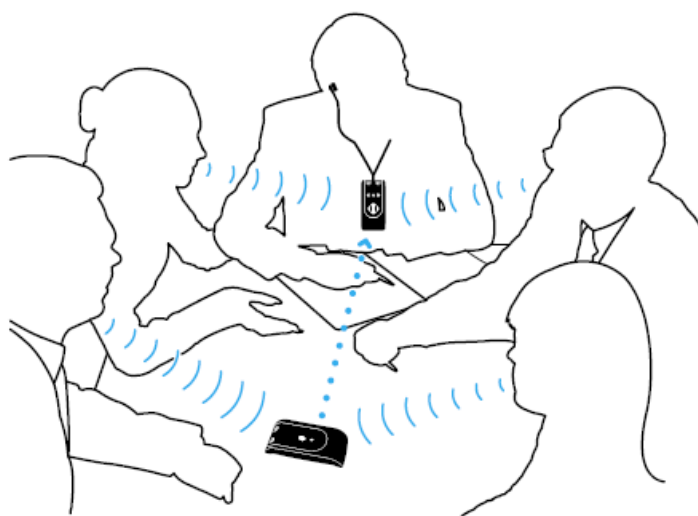
CAR CHARGER



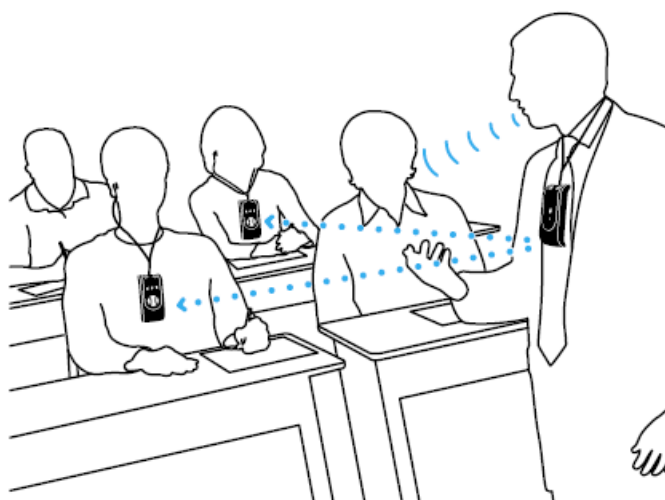
Areas of application



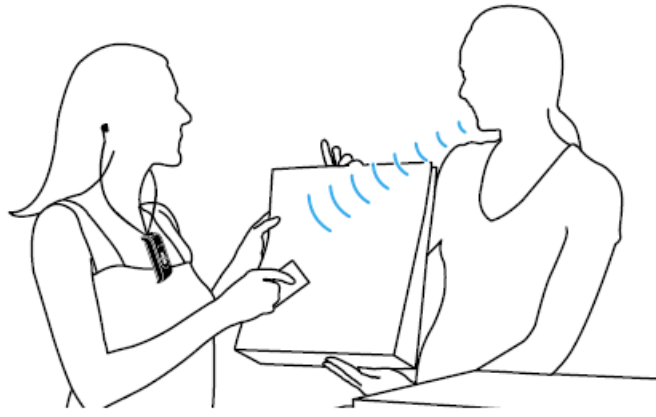
Zuhause • Indendørs • Indoors • Interiores • Sisätiloissa • À l'intérieur • Interni •
室内 • Binnen • W budynkach • Inomhus • 在室内 • 在室内



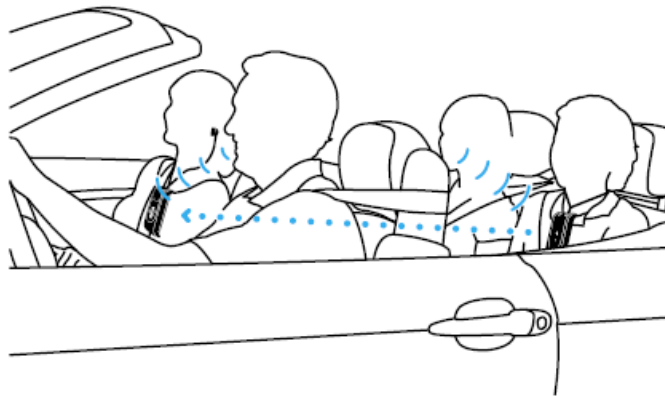
Auf der Arbeit • På arbejdspladsen • At work • En el trabajo • Työpaikalla •
Au travail • Al lavoro • 会議 • Op het werk • W pracy • På jobbet • 在工作 • 在工作



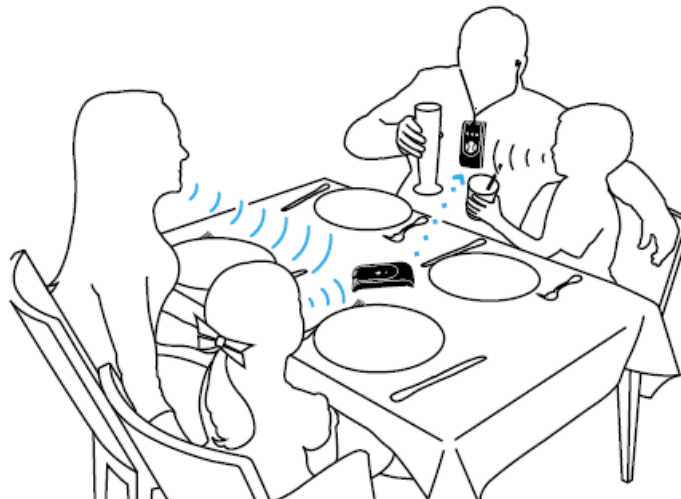
In der Schule • I skolen • At school • En clase • Koulussa • À l'école • A scuola •
学校 • Op school • W szkole • I skolan • 在学校 • 在学校



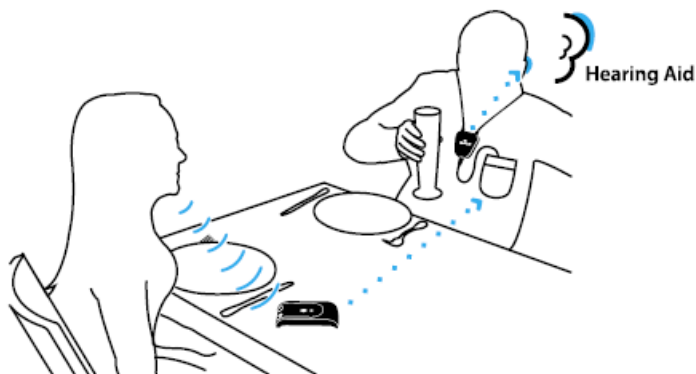
In der Stadt • I byen • In town • De paseo • Kaupungilla • En ville • In città •
街中 • In de stad • W mieście • På stan • 在城里 • 在城裏



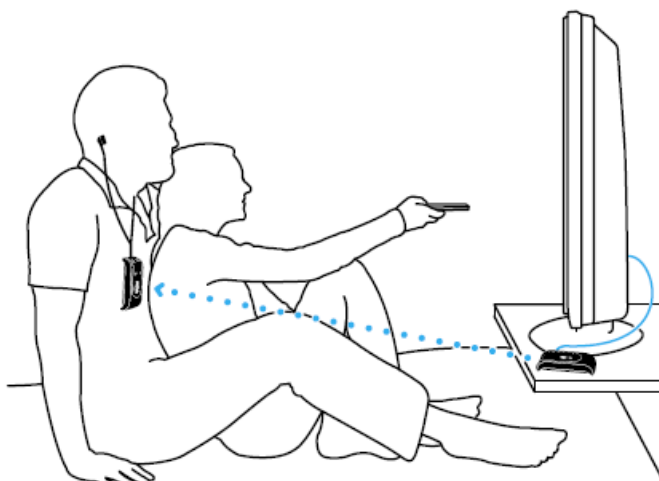
Auf Reisen • Under rejser • When travelling • De viaje • Matkoilla • En voyage •
Quando si viaggia • 旅行 • Op reis • W podróży • På resan • 在旅游 • 在旅遊



Beim Essen • Ved aftensmaden • At dinner • Durante una cena • Illallisella •
À table • A cena • 食卓 • Tijdens een diner • Na obiedzie • Vid middagen •
在餐厅 • 在餐廳



Mit Hörgerät • Med et høreapparat • With a hearing aid • Con un audifono •
 Kuulokojeen kanssa • Avec appareil audit • Con un apparecchio acustico •
 補聴器をしたまま • Met een gehoorapparaat • Z aparatem słuchowym •
 Med hörapparat • 配合助听器 • 配合助聴器



Vor dem Fernseher • Foran tv'et • In front of the TV • Frente al televisor •
 TV:n katselu • Devant la télévision • Di fronte alla TV • TVの前で •
 Voor de televisie • Przed telewizorem • Framför TV:n • 在看电视时 • 在看電視時

Warranty conditions

Dear customer. Thank you for your purchase of this Bellman & Symfon® product. Our vision is to supply outstanding products that are of great value for our customers. For this reason, we have put all our best efforts into designing and manufacturing this product. However, if you should have any questions about the product or if you require repair, please contact us.

General warranty conditions. Your Bellman & Symfon® product is covered by a limited warranty. Please read the following conditions carefully and keep this information in a safe place. Please also save your receipt or other proof of purchase as you will need this for warranty claims.

Warranty period. The warranty is depending on the type of product purchased and is valid from date of purchase. Bellman & Symfon offers warranty as per below

Warranty conditions

Bellman & Symfon warrants that the Product that you have purchased is free from manufacturing defects in materials and workmanship when dispatched from our warehouse. Your sales receipt is your proof of the date of purchase and the warranty period commences as of that date. During the warranty period, Bellman & Symfon will

have the option for the defective product to be repaired or replaced. The replacement product will be of equal or greater function and in good working and physical order. Such a replacement will be supplied from refurbished stock. The repaired or replaced product will be under warranty for the remainder of the original product's warranty period. Warranty limitations. This warranty automatically becomes void if the product has been physically damaged or rendered defective (a) as a result of accident, misuse, or abuse, or other circumstances beyond Bellman & Symfon's control; (b) by the use of parts or peripherals not authorized by Bellman & Symfon; (c) as a result of normal wear and tear; (d) by use within an improper operating environment; (e) by modification of the product; (f) by the serial number or product code sticker being removed or defaced; (g) as a result of service rendered by anyone other than a Bellman & Symfon Authorized Service Agent; (h) as a result of the product being operated other than in accordance with Bellman & Symfon AB's users manual. Neither does the warranty cover failure due to causes outside Bellman & Symfon's control such as failure in your phone carrier's line service (if applicable) or Acts of God. No warranty is offered for disposable batteries.

Return policies / warranty claim


Please see www.bellman.com/warranty

Documents / Resources



[Bellman and Symfon BE2210 Domino Personal Hearing System](#) [pdf] Instruction Manual
BE2210, BE2210 Domino Personal Hearing System, Domino Personal Hearing System, Person
al Hearing System, Hearing System, System

References

-  [Bellman & Symfon | Start](#)
- [User Manual](#)

Manuals+. [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.