

BELLMAN AUDIO DOMINO



DE

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APP

PERSONAL HEARING SYSTEM

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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 freedom 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 references

Receiver unit

- 1 Internal microphone for Receiver Unit
- 2 Internal microphone setting LED
Green: Omnidirectional microphone
Orange: Directional microphone
- 3 Battery status LED
Green: Switched on with well charged battery
Blinking Green: Switched on but the battery charge is low
Blinking Orange: Switched on with flat battery - will soon switch itself off
Orange: Charging
- 4 LED for listening via transmitter
Green: Omnidirectional microphone
Orange: Directional microphone
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  (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  (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.

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. The more LEDs that are lit the higher the volume. The LED indicator goes out 5 seconds after the sound volume has been set.

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.

When you have finished, you can switch off the Transmitter and Receiver Units by pressing the On/Off buttons ⏻ (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)
- BE9159/BE9161 Neck loop
- BE2210 Receiver unit


How to use Bellman Audio Domino

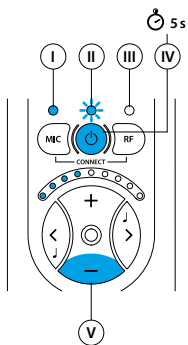
The BE2210 and BE2230 Bellman Audio Domino Personal Hearing Systems are personal hearing systems which have been specifically developed to provide an excellent sound experience even in demanding situations. Bellman Audio Domino works extremely well for speech and music. You can use the built-in microphones 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.




- I A permanently lit LED is indicated by a solid indicator.
- II A blinking LED is indicated by a sunlike solid indicator.
- III Indicators that are switched off are indicated by an empty circle.
- IV 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.
- V 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.

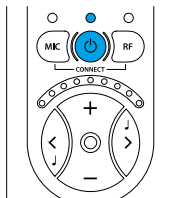
 **Warning:** The product may only be charged with the charger supplied or using accessories from Bellman & Symfon.

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 4 h, the LEDs turn green again. You can charge one unit at a time or two at the same time.

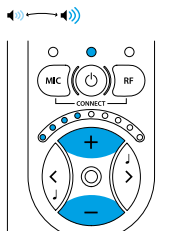
Using the Receiver Unit

Connect BE9122 Bellman Stereo Headphones, BE9159/BE9161 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.



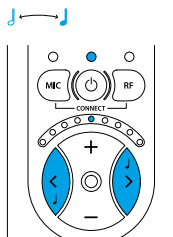
Switching on the Receiver Unit

Press the On/Off button  (6) for about 3 seconds. 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.

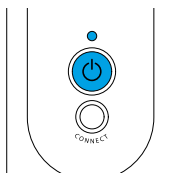


Selecting the tone

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.




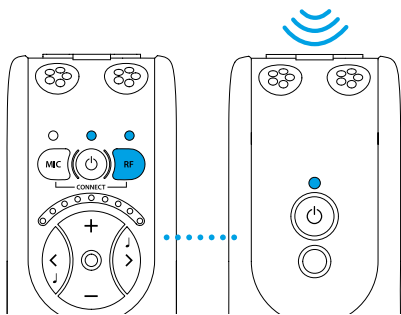
The Receiver Unit can be used as a small and adaptable self-contained call amplifier, but together with the Transmitter Unit it opens up a whole new range of possibilities. You can achieve the greatest flexibility when using the Receiver Unit together with the Transmitter Unit.



Using the Transmitter Unit

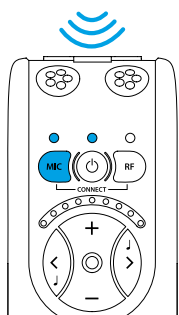
Switching on the Transmitter Unit

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



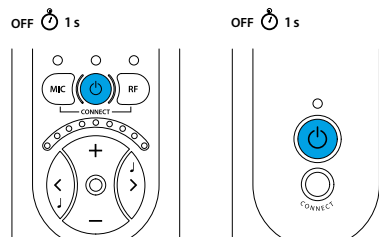
Listening via the Transmitter Unit

To listen on the microphone in the Transmitter Unit press the **RF** 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 microphone, give a short press on the **MIC** button (5). The internal microphone LED (2) comes on and the sound heard in the headphones now comes from the Internal Microphone (1) again.



Switching off

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

Choice of microphones

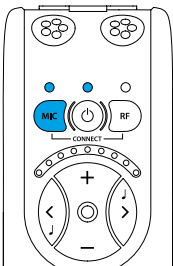
Bellman Audio Domino contains two microphone options so that you can easily switch between an omnidirectional and a directional microphone.

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.

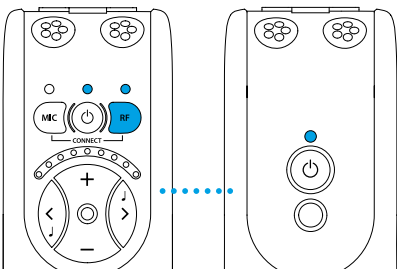


With the directional microphone you can "point" towards the sound source that you are interested in listening to while reducing sound from other directions. This is particularly useful in difficult listening situations such as in crowds or in very noisy environments.



Choice of microphone on the Receiver Unit

You can switch between omnidirectional and directional microphone reception by pressing the **MIC** button (2). 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 **RF** button (7), you can switch between omnidirectional and directional microphone reception by pressing the **RF** 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.

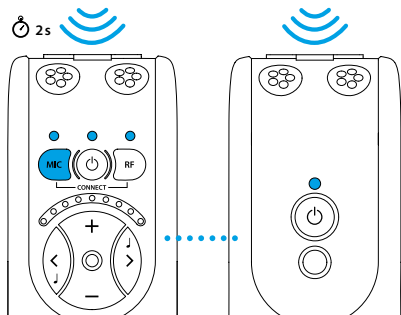
In some cases it may, for example, be easier for a lecturer to have an external microphone and a Transmitter Unit in his/her pocket than to speak in a loud voice or carry a wired microphone.

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.



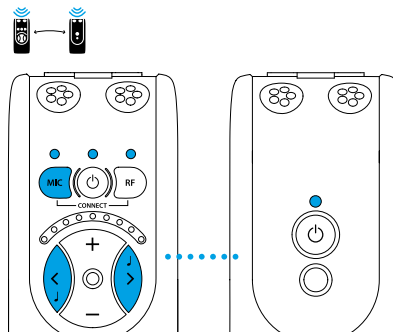
Please note that the Transmitter Unit's Battery Status LED (17) blinks alternately green and orange several times when an external sound source is connected.



the **MIC** button (5) until both the MIC (2) and RF LEDs (4) light up.

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 **RF** button (7). Hold down



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 **MIC** 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 **RF**-button (7) and if you want to switch over to listening on the internal microphone, press the **MIC** 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.

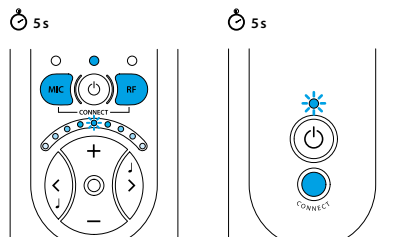
Establishing a temporary link with another Transmitter Unit

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  (6, 18).
- Hold down **CONNECT** (19) on the Transmitter Unit.
- Hold down both the **MIC** button (5) and the **RF** 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.	Connect the charger and check that charging starts within 10 seconds.  <i>Please note! If charging does not start within 10 seconds, disconnect the charger immediately and contact the nearest dealer!</i>
No sound can be heard in the headphones when the Receiver Unit is switched on.	Turn up the volume using the volume control (9). Check that the internal microphone has been selected as the signal source and that it works by gently scraping on the microphones (1). Check that the headphone plug is securely inserted in the headphone output. Connect the headphones to another sound source (with a 3.5 mm head-phone output) to test whether the headphones are working.
No sound can be heard in the headphones when the Receiver Unit is switched on and External Sound is selected.	Check that the Transmitter Unit is switched on. Check that the external microphone has been selected as the signal source and that it works by gently scraping on the microphones (16). Check that the Transmitter is within range.

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