

# Domino Classic

## Personal hearing system



**Bellman® Audio Domino** is a revolutionary personal hearing system that uses digital state-of-the-art sound processing and wireless wideband technology to bring out speech in difficult listening situations. Domino delivers crystal-clear stereo sound, free from background noise and feedback, and with no risk of eavesdropping.

Whether you only have trouble hearing from time to time or are already using a hearing device, it will make a big difference in your daily life.

**Easy to use.** Domino Classic's unique design makes use very intuitive. All common features can be accessed with a single push of a button, eliminating complicated menus.

**High quality.** Domino Classic is designed by Bellman & Symfon of Sweden and comes with a two-year worldwide warranty.

**How it works.** Domino Classic consists of a

transmitter and a receiver, equipped with state-of-the-art microphones.

Sound is picked up by the microphones and converted into digital data. Speech is clarified and annoying background noise is eliminated. The sound is then streamed over an encrypted wireless radio link to the receiver. The receiver amplifies the sound and sends it to your headphones, earphones or neck loop.

From the receiver, you can easily control the functions of both units.

**More than speech.** You can also stream high quality audio from your TV, MP3 player, computer or stereo system.

**All inclusive.** Domino Classic comes with everything you need in order to use your system. There is also a wide range of original accessories available. Choose Domino Classic as your personal hearing system and discover how easily you can improve your hearing.

**Bellman® audio**  
FOR EASY COMMUNICATION



### Features

**100% digital sound processing**  
Crystal clear stereo sound

**Encrypted wideband link**  
Secure from eavesdropping

**Intuitive to use**  
No complicated menus

**Works all over the world**  
Use Domino while travelling



#### High Definition Audio

Domino uses all-digital technology to stream audio in full stereo. The result is crystal-clear stereo sound with outstanding clarity and definition.



#### Wireless Secure Encryption

Domino uses state-of-the-art digital encryption technology, resulting in interference-free speech, absolutely impossible to eavesdrop.



#### Travel Smart 2.4GHz

Domino uses the 2.4 GHz global frequency standard. This means you can use your Domino system anywhere in the world.



#### Easy Connect

Domino is ready for action with the touch of a button, and you can just as easily connect it to your TV, stereo system or MP3 player.



#### Worldwide Warranty

Domino is developed in Sweden by Bellman & Symfon and comes with a two year worldwide warranty.

# Technical specifications

## Size and weight

Height:	<b>99 mm</b>
Width:	<b>48 mm</b>
Depth:	<b>22 mm</b>
Weight:	<b>74 grams / unit</b>



## Input signals

- Microphone: Built in omnidirectional microphone on both units
- External sound source input: 2.5 mm stereo jack plug (0 dBV max input signal)

## Output signals

- Headphone socket: 3.5 mm stereo jack plug
- Distortion: 0.05% THD (electrical)
- Frequency range: 40-10 000 Hz
- Tone control: 9 steps
- Volume control: 9 steps
- Output power: 100 mW (16 Ω load)

## Radio communication

- Frequency 2.4 GHz, uses 3 frequencies
- Range 25 m indoors, clear line of sight  
100 m outdoors, clear line of sight
- Characteristics:  
Encrypted communication  
Automatic channel searching  
Coexists with other radio transmitters operating on the 2.4 GHz frequency band

## Environmental requirements

- Operating temperature: 32° to 95° F (0° to 35° C)
- Relative humidity: 5% to 95% (non condensing)

## In the box



The package (BE8015) includes everything you normally need in order to use your Domino system.

- BE2250 Receiver unit
- BE2270 Transmitter unit
- BE9147 Semi-soft travel case



- BE9142 USB universal charger including 4 mains plugs for EU, USA, Australia & China
- BE9139 Charger cable, USB
- BE9135 Neck strap with safety clasp (2)
- BE9124 In-ear earphones
- User manual
- Available bundled with BE9128 Neck loop (BE8017)

## Power and battery

- Built in rechargeable lithium-ion batteries
- Operating time: 8-12 hours (With included light weight battery)
- Charging time: 2.5 hours (With included light weight battery)

## Acoustic specifications

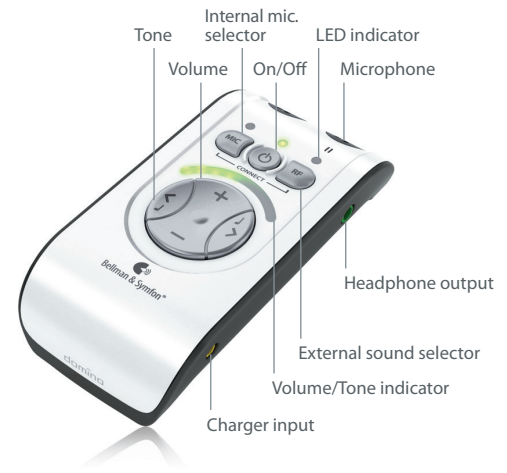
- Maximum output using BE9124 earphones 132 dB SPL
- Gain at full volume using BE9124 earphones (60 dB SPL input signal):  
57,5 dB @ 1kHz      56 dB HFA
- Distortion  
Using BE9124      0,08 % THD  
Using BE9122      0,6 % THD

## Regulatory requirements

- Complies with the following requirements: **CE, FCC, RoHS, WEEE and C-Tick**



## Receiver button and controls



## Transmitter button and controls



## Accessories

The following accessories are available:

- BE2250 Additional receiver unit
- BE9122 Stereo headphones
- BE9124 Stereo in-ear earphones
- BE9125 Stetoclips
- BE9127 Tie-clip microphone
- BE9137 Cable kit, 5 m (stereo) incl. adapter from 3,5 mm stereo tele jack to RCA (phono)
- BE9128 Neck loop
- BE9143 USB car charger
- BE1360 Scart switch

Visit [www.bellman.se/dominoclassic](http://www.bellman.se/dominoclassic) for detailed information

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Bellman & Symfon®

# In-depth technical information

## Features

- Digital Signal Processing, DSP
- Built in omnidirectional electret micro-phones on both units
- 10 channel dynamic range compressor
- 10 channel dynamic noise suppression
- Adaptive feedback manager
- Digital radio transmission using broadband technology
  - Uses the non-licensed 2.4GHz ISM band
  - 128 bit encrypted radio communication
  - One transmitter to one or multiple receivers
- Intuitive user interface
  - LED lightbar for excellent readability
  - 9 step volume control (5 dB/step)
  - 9 step tone control
  - Clear indication of Volume, Tone, Mic & RF mode
  - Low battery warning indicator
- Auxiliary stereo signal input (2.5 mm tele jack)
- Headphones stereo output (3.5 mm tele jack)
- Mix mode mixes sound from transmitter and receiver
- Auto mute when switching between signal sources
- High gloss finish to minimize handling sound
- Requires no individual fitting
- Built-in rechargeable lithium-ion batteries
- BE9142 USB universal charger with 4 mains plugs for EU, USA & Australia are included
- BE9147 Semi-soft travel case included
- BE9124 Earphones included
- BE9135 Neck strap with safety clasp included (2)
- Polished stainless steel belt clip included (2)
- Supported configuration  
Consists of one Domino Pro transmitter and one or more Domino Classic receiver(s) and Domino Pro receiver(s), in any combination.
- Non recommended configuration  
Consists of one Domino Classic transmitter and one or more Domino Classic receiver(s) and Domino Pro receiver(s), in any combination.

## Technical specifications

- Dimensions: 99 mm (h) x 48 mm (b) x 22 mm (d)
- Weight: BE2250: 74 g, BE2270: 70 g
- Batteries: Built in rechargeable lithium-ion, 617 mAh
- Operating time: 8-12 hours (fully charged)
- Charging time: 2.5 hours (max)
- Ext. Mic./Aux. in connector: 2.5 mm stereo tele jack
- Headphones connector: 3.5 mm stereo tele jack
- Volume control: 9 steps (5 dB/step)
- Tone control: 9 steps
- Power switch: On/Off toggle button
- Mic and RF mode: Separate mode select buttons
- External microphone / Aux in  
Selects automatically when plugged in
- Dynamic Compressor
  - Dynamic gain range 0-35 dB
  - Compression 3:1
  - Expansion 1:1.5
  - Attack time 20 (25) ms ( $\geq 3$  kHz)
  - Release time 110 (200) ms ( $> 3$  kHz)
- Dynamic noise reduction  
10 channel adaptive noise reduction
- Feedback cancellation  
Adaptive phase-invert feedback cancellation
- Digital signal processing
  - 22 050 kHz sampling frequency
  - 16 bit resolution in stereo
- Digital radio transmission
  - 2.4 GHz ISM band, 3 channels
  - Coexists with other radio transmitters using the 2.4 GHz ISM band
  - Automatic channel allocation
  - 128 bit encryption
- Topology  
Point-to-point or point-to-multipoint
- Diversity  
2 antennas receive, 1 antenna transmits Rx + Rx/Tx
- Radio range  
25 m indoors, clear line of sight  
100 m outdoors, clear line of sight
- Transmitter output: max 25 mW

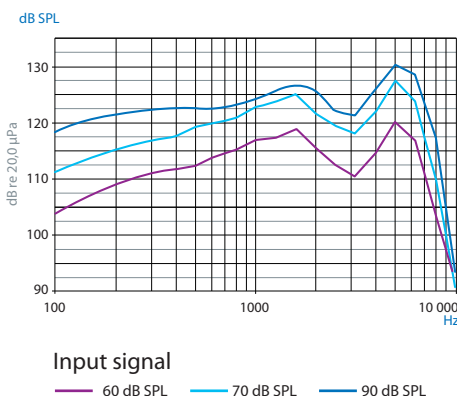
## Acoustic specifications

- Maximum output saturation
  - Using BE9122 Headphones  
BE2250: 124.3 dB SPL / BE2250: 124.3 dB SPL (@ 2.5 kHz)
  - Using BE9124 Earphones  
BE2250: 132.0 dB SPL / BE2250: 130.5 dB SPL (@ 5 kHz)
  - Using BE9125 Stetoclips  
BE2250: 133.7 dB SPL / BE2250: 133.6 dB SPL (@ 1 kHz)
- Gain, full volume (1 kHz, 60 dB SPL input signal)
  - Using BE9122 Headphones  
BE2250: 42.5 dB / BE2250: 44.0 dB
  - Using BE9124 Earphones  
BE2250: 55.0 dB / BE2250: 57.5 dB
  - Using BE9125 Stetoclips  
BE2250: 58.2 dB / BE2250: 64.2 dB
- Gain, full volume (60 dB SPL input signal, HFA)
  - Using BE9122 Headphones  
BE2250: 46.5 dB / BE2250: 49.0 dB
  - Using BE9124 Earphones  
BE2250: 51.5 dB / BE2250: 56.0 dB
  - Using BE9125 Stetoclips  
BE2250: 52.0 dB / BE2250: 59.4 dB
- Distortion
  - Using BE9122 Headphones  
0.6 % THD
  - Using BE9124 Earphones  
0.08 % THD

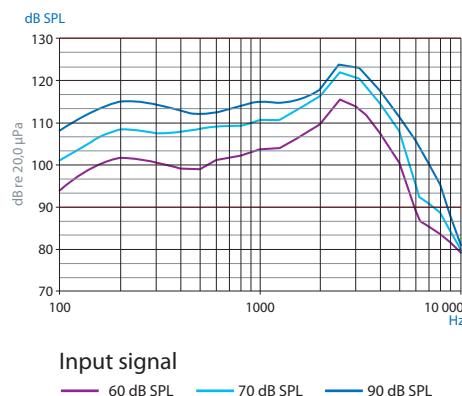
## Electrical specifications

- Output power tele-jack 100 mW w. 16  $\Omega$  last
- Distortion 0.05 % THD
- Dynamic range 95 dB
- Frequency range 40 – 10 000 Hz
- Tone control
  - Break point at 1.6 kHz
  - Tone, high: +10dB@3.15 kHz, -6dB@250Hz
  - Tone, mid: flat
  - Tone, low: -10dB@3.15 kHz  
No bass boost
- Line in sensitivity  
0 dBV (maximum input level)

## Output using BE9124 Earphones



## Output using BE9122 Headphones



## Output using BE9125 Stetoclips

