V90-BLU5 HD

High Definition Bluetooth Receiver and flexible Input Extender!

MSRP - 399€ (incl. VAT)

V90-BLU5 HD in Brief

- High-Tech Bluetooth Streamer with special DAC and SRC Design for complete High-End Bluetooth Playback
- Bluetooth 5.0: more available bandwidth and transmission range
- AptX HD for wireless High-Resolution Bluetooth transmission
- Separate High-End DAC and SRC Circuit Design with Re-Clocking and Up-Sampling
- Input Extender with Flexible Input and Output Options
- Easy to integrate in any existing HiFi Setup

General Description

The V90-BLU5 HD is a sophisticated Bluetooth receiver ideal for streaming Hi-Res music formats from smartphones, tablets, MACs and PCs right to your favourite HiFi system. It comes with an improved Bluetooth 5.0 standard for increased range and transmission bandwidth and aptX HD support. Compared to the majority of Bluetooth receivers that use the integrated DAC on the Bluetooth chip itself, the V90-BLU5 HD goes the true high-end way. It is using a separate DAC with re-clocking and up-sampling, based on the first-class Burr-Brown chip PCM1781D. Bluetooth has never sounded this good, and you will finally have the proper integration for high-end systems, where Bluetooth is used for serious listening. Retain all the warmth, detail, transparency and dynamics in your music, which is unfortunately so often missing in other Bluetooth implementations.

Burr-Brown PCM 1781D 24/192 Internal DAC

The big majority of Bluetooth receivers are using digital-to-analogue converters which are directly built-in on the Bluetooth chip. These are mostly of mediocre quality, because what they were designed for - a hands-free car phone system or small handheld mobile speakers - there is no need for parameters which will suit the requirements of high-end audio. Their low quality negatively influences the sound. V90 BLU5 HD is using a separate DAC, based on the first-class Burr-Brown chip PCM1781D. The digital signal from the Bluetooth receiver is re-clocked and up-sampled. And after that is processed by the D/A converter.

Samplerate Converter SRC4392

A high-end sample rate converter from Burr Brown, its task is to re-clock all signals and convert them into 24 bits and 192 kHz. Up-sampling done in this sophisticated and clean implementation allows us to reach the lowest distortion levels and maintain and elevate the integrity of your wireless Bluetooth audio.

Qualcomm CSR8670 Bluetooth Chip

Th majority of Bluetooth receivers use standard "hands-free" chips. The V90 BLU5 HD has a HiFi audio-oriented chip from leading manufacturer Qualcomm. CSR8670 is a premium-tier product, designed to deliver high quality wireless audio performance and support the development of highly differentiated, premium wireless audio products. CSR8670 even has a relatively high-quality onboard DAC - also with 24/192 capability. After extensive listening tests however, we saw that we could do better and designed and built our own digital section consisting of a separate SRC and DAC in typical Musical Fidelity fashion. The result was worth it, because we have probably made the finest Bluetooth receiver on the market!

V90 BLU 5 HD is using the latest Bluetooth standard 5.0

Bluetooth 5.0 is the latest version of the Bluetooth wireless communication standard. It includes various improvements, but only when used with compatible peripherals. We were able to push the range of the Bluetooth connection all the way to 240 metres (compared to 30 metres in Bluetooth 2.0). Even with obstacles and walls in the way, we can access more bandwidth allowing us to ensure constant high bit-rates for your aptX HD transmission. Of course, this requires a mobile device that also supports these standards. Should you have an older phone without BT 5.0, the standard will still be fully backwards compatible and just fall back to previous BT versions, albeit with taking hits in range and bandwidth.

AptX HD

V90 BLU5 HD is equipped with aptX HD. It was designed to answer the growing demand for high resolution audio. This enhanced codec supports 24-bit, high-resolution formats over Bluetooth. For aptX HD to work, your mobile device needs to supports it too. With careful engineering and expert circuit board design we could improve the signal-to-noise ratio, resulting in lower background noise. Lower THD and no audible artefacts ensure you can enjoy your music with hardly any interference. This means, we can now enable you hear even the smallest details in your music with punchy dynamics and transient detail on a real high-end level.

Flexible Input Extender

The V90 BLU5 HD can be integrated into any audio system, even if there are no free inputs left. It will bypass the analogue RCA-in to its analogue out and digital-ins to its digital outs. Then, whenever you play a Bluetooth source, the V90 will automatically detect and play

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that signal instead. If a free input is available, then the V90 can be connected in the more traditional way and expand your range of inputs via its own analogue or digital inputs. We have also built in digital outputs, should you ever wish to feed your Bluetooth source to a different DAC.

V90-BLU5 HD

SPECIFICATION

Bluetooth Performance
- CSR8670 Bluetooth Chip
- Bluetooth Radio Specification v5.0
- SBC, Qualcomm® aptX™, aptX™ HD
- aptX™ HD max. 24bit/96kHz; 576kbit/s
- Carrier frequency 2.402 to 2.480 GHz
- Transmission power +10dBm (max)
- Class 5 up to 240M range
- Class 2 up to 30M range

DAC Section
- Burr-Brown PCM 1781D 24/192 DAC
- Burr-Brown SRC4392 Re-Clocking and Up-Sampling Chip
- THD(+ noise): <0.01% ('A' wtd)
- Frequency Response: +0, –0.1dB
- Seperation: -78dB
- Signal / Noise ratio: -80dB ('A' wtd)

Inputs
- 1x line level RCA
- 1x RCA coaxial up to SPDIF 24bit/192kHz
- 1x TOSLINK optical up to 24bit/96kHz

Outputs
- 1x line level RCA
- 1x RCA coaxial SPDIF up to 24bit/192kHz
- 1x TOSLINK optical up to 24bit/96kHz

General
- Dimensions - WxHxD (mm): 170 x 47 x 117
- Weight (unpacked / packed): 590g / 1.05 kg

Supplied Accessories
- 1x 12v 500mA DC power supply
- 1x Bluetooth Antenna
- User Manual