



Imagine, a sound system that fills every room with crystal clear music & offers unequalled performance, flexibility & simplicity.





asano high-quality music, tailored to your needs

Asano is a **high-end multiroom audio system** by Basalte, designed for **KNX** home automation systems and developed to fit the needs of projects all over the world. It offers **excellent sound quality** in a comprehensive, flexible and reliable audio solution. **Connect your music to the system** and enjoy the integrated **internet radio** and **music streaming** services. Play different music genres in separate rooms or play that one great song throughout your home.

The result is a high-performance, networked multiroom audio solution for a virtually unlimited number of rooms, modularly customisable to your wishes and needs.

Use the **intuitive app** and KNX home automation controls for easy access to all your music: whenever you need it, wherever you are.





asano every room, your music

The Asano multiroom audio system consists of high standard audio products, including a music server, amplifiers and integration modules.

The multiroom stereo amplifiers P1, P4 & M4 are developed with excellent sound quality to cover all rooms. Modularly add amplifiers if you want to add music zones. You can even integrate third-party amplifiers with the A3 output module.

Furthermore, you can **link any music source** to the Asano amplifiers or N1 input module: from a

CD player and mobile device to your favourite streaming service and internet radio!

S4 is Asano's **multi-user music server**, combining multiple music streams in one comprehensive device, introducing a world of music in the comfort of your home.

With the **intuitive app**, you can enjoy your personal choice of music while it follows you from room to room, fully synchronised and always readily available.

Learn more about the modular setup and customisation options **Э**

asano professional audio quality in your home

Asano is a **decentralised**, **networked system**. It does not need a central master unit to connect all speakers and sources. Instead, sources and a virtually unlimited number of amplifiers can freely be added, anywhere in the house.

As a result, cable runs to speakers and sources are dramatically reduced. You have **no single point of failure** because all devices intelligently intercommunicate with each other.

CobraNet is the biggest standard in professional audio distribution and the core of Asano. Its **robust, reliable and high-quality technology** has globally been deployed in stadiums, concert halls and even live touring shows. CobraNet transports **uncompressed**, digital audio over a dedicated Ethernet network. By using standard CAT5E cabling, audio is distributed with **no signal degradation** or interference.

The result? Crystal clear audio everywhere and **perfectly synchronised music** in all rooms.

Welcome home ...

Learn more about the full integration of your music in your KNX automation system **O**





a perfectly integrated solution for KNX systems

Asano seamlessly integrates with KNX, the **worldwide standard for home automation.** This creates a whole new level of simplicity, flexibility and ease of installation for multiroom audio in KNX systems.

Select your audio source and change tracks & volume with your KNX switches and room controllers. Use the **integrated scene functionality** to set scenes for any occasion, like one for the morning, with your preferred playlist and volume.

The **override function** enables immediate switching to a priority source like an alarm or an intercom message. After an override, the music zone gently returns to its previous state. The **party mode** allows for all selected rooms to play in perfect sync like one big system. The integrated 5-band equaliser even lets you fine-tune the sound in every room.

Discover the music server, amplifiers and integration modules on the next pages ⊃





music server ___p14 amplifiers ___p18 integration modules ___p24 diagrams ___p32

specifications _____



asano S4

S4 hosts **4 digital music streams**, assigned to 4 individual users, to directly integrate in the Asano multiroom audio system. Let the music follow you in your home by selecting your stream when you enter a room.

Access your music library and **iTunes**[®] playlists from a USB or network drive (NAS). Connect S4 to the internet for **internet radio** and **streaming services**.

Play your music in individual rooms or multiple rooms at once, all **perfectly synchronised.**

Integrate external sources like turntables or CD players and select these from the beautiful app.

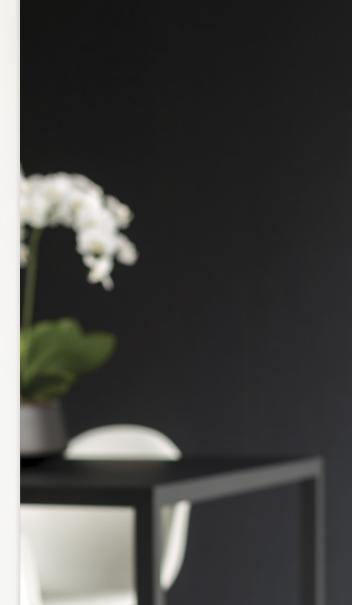
Use the **digital S/PDIF output** as an additional Asano music zone. Connect a third-party amplifier or surround sound system and use the Asano app to control volume and source.

Perfectly integrate S4 in **KNX** home automation and control it with KNX switches, scenes etc.

A 19" rack mount is optionally available (719-05).

Learn more on the controls & functionalities on the next page **O**





asano S4

The intuitive music app is fit to your daily needs by Basalte's usability standards. Use the **clearly arranged interface** for the most important functions like music on/off, volume control and selecting favourites.

In bigger projects with many music zones, keeping an overview can be difficult. Where you traditionally have an unorganised list of rooms, S4 lets you **organise rooms per floor** or **tag rooms by category**, like 'guest' and 'kids'. **Group rooms** in a virtual zone and control for example the ground floor area as it would be one music zone.

Additionally, you can **create individual users with custom restrictions** to access certain audio sources, rooms, listening zones and alarms. For example: guests can only play music in the guest area and not in the other music zones.



asano M4

Asano M4 is a networked **4-zone stereo amplifier** with **1 digital and 1 analogue source input**.

M4 can only be used in combination with the S4 music server and is **fully controlled over CobraNet**.

To deliver superior audio performance, all zone outputs are powered with **2x80W** ICEpower[®] amplification.

Advanced DSP processing provides perfect equalisation with bass and treble control.

A source connected to one of the inputs, immediately becomes a source for all the other zones of the Asano system.

All inputs have **signal sensing** to automatically switch on a zone.

Neatly integrate Asano M4, in combination with an S4, in a **KNX** home automation system using the S4's integrated KNX control.

A **19" rack mount** is optionally available (719-05). Find all specifications on page 39.









asano P1

KNX[®]

Asano P1 is a single zone networked stereo amplifier with 2 analogue source inputs: the perfect solution to add an extra room in your project.

Asano P1 can also be configured to be used as **2 independent mono zones** for smaller areas like a dressing room or a bathroom.

To deliver superior audio performance, Asano P1 is powered with **2x125W** ICEpower® amplification.

Furthermore, Asano P1 offers the possibility to **connect an active subwoofer.** A source connected to one of the inputs, immediately becomes a source for all the other zones of the Asano system.

All inputs have **signal sensing** to automatically switch on a zone or to trigger KNX events.

Advanced DSP processing provides 5-band equalisation with bass and treble control and the selection of up to 8 different EQ-presets.

P1 is completely configured and controlled with **KNX**. There is no need for any network configuration. Simply connect the amplifier to KNX and a standard Ethernet switch.

Find all specifications on page 39.



asano P4



Asano P4 is a **networked 4-zone stereo amplifier** with **4 analogue source inputs**.

Use a P4 per 4 rooms and combine with other Asano components to perfectly match Asano with your total number of rooms.

To deliver superior audio performance, all zone outputs are powered with **2x125W** ICEpower[®] amplification.

Two zones can even be bridged to produce an astonishing 2x450W audiophile amplification.

Advanced DSP processing provides 5-band equalisation with bass and treble control and the selection of up to 8 different EQ-presets for every zone or room. A source connected to one of the inputs, immediately becomes a source for all the other zones of the Asano system.

All inputs have **signal sensing** to automatically switch on a zone or to trigger KNX events.

P4 is completely configured and controlled with **KNX**. There is no need for any network configuration. Simply connect the amplifier to KNX and a standard Ethernet switch.

A 19" rack mount is optionally available (719-04).

Find all specifications on page 39.



A3 Audio Splitter



asano A3



Asano A3 is a networked stereo output module to connect up to 3 zones (1 digital S/PDIF and 2 analogue) of **third-party amplifiers** or **active speakers** with the Asano system.

The two analogue zones are connected with RJ45 over shielded cabling, which can be converted to RCA connectors using the optional **A3 Audio Splitter**.

Every zone output has a separate trigger output to switch on/off the third-party amplifier or active speaker.

Advanced DSP processing provides 5-band equalisation with bass and treble control and the selection of up to 8 different EQ-presets for every zone or room. You can also **connect two local sources**: 1 digital S/PDIF and 1 analogue.

A source connected to one of the inputs, immediately becomes a source for all other zones of the Asano system.

Both inputs have **signal sensing** to automatically switch on a zone or to trigger KNX events.

A3 is completely configured and controlled with **KNX**. There is no need for any network configuration. Simply connect the module to KNX and a standard Ethernet switch.

Find all specifications on page 38.



asano N1

Asano N1 is a network node to **connect an extra source** to the Asano system: analogue, S/PDIF, optical or USB.

The N1 module can perfectly be hidden behind TV sets to seamlessly integrate TV sound as a source for the Asano music system, without any delay.

Use the **USB input** to connect a computer as a source for the audio system, having a fully digital path all the way up to the amplifier.

You can also use N1 to add an additional **analogue** or **digital** source when it is remotely located or when all audio inputs on the amplifiers are already taken.

There is no **need for any network configuration**. Two rotary dials configure the source number in the Asano system, easy and simple.

Power for the module can be supplied with a separate power supply (12V) or by Power over Ethernet (PoE).

Find all specifications on page 38.





B.link is a **DIN rail module** that integrates B.link flex IP-modules with KNX.

With B.link, you can **control any IR**, **serial RS232 or compatible IP device with KNX**. CD players, tuners or digital settopboxes, all become part of the Asano system.

B.link can be combined with up to **16 B.link flex IP modules**, being placed anywhere in your home. To each B.link flex, you can connect up to 3 IR transmitters using a splitter or a single Serial RS232 cable. Power for B.link flex is provided over Ethernet.

As a bonus, up to 3 surround receivers can be integrated directly over IP. Use KNX commands to control source selection and volume control through B.link. B.link supports receivers from Pioneer, Marantz, Integra, Onkyo and Denon. B.link comes with a configuration tool that allows you to program **macros** that include sending out KNX commands in combination with IR and serial commands so that you can create powerful welcome and goodbye scenarios.

B.link has two LAN ports with integrated switch for daisy chaining.







BO.sensor integrates Bang & Olufsen® infrared remote **controls with KNX** systems to control KNX lights, screens and scenes with the Beo 4 and the BeoRemote One®.

BO.sensor also **supports all AV controls** like TV, radio and DVD, allowing you to control the complete Asano system.

In combination with B.link, powerful macros can be started by a single button press.

The BO.sensor module is mounted on the back of the original Bang & Olufsen® infrared sensor, powering it directly from the KNX bus without any additional power supply. (Bang & Olufsen® infrared sensor not included)

BeoRemote One





Examples for project design

Asano's **decentralised structure** offers an **unequalled flexibility** that lets you combine Asano components to exactly fit your number of rooms, sources, third-party product integrations etc.

Accordingly, you can choose where to physically place each component. This flexibility results in a system that is **scalable to any size**, with the freedom to add components wherever and whenever. As a **standalone** or **KNX** integrated solution, Asano enables hi-fi music in projects of any size.

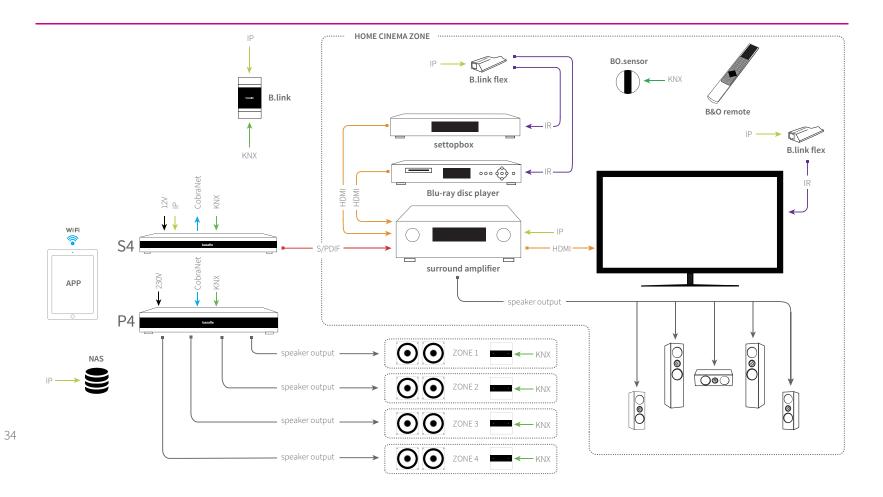
The following pages feature a few examples to show the flexibility and variety of possibilities with Asano.

Find all specifications on p. 38-39.

Multiroom stereo configuration

with KNX controls & surround setup

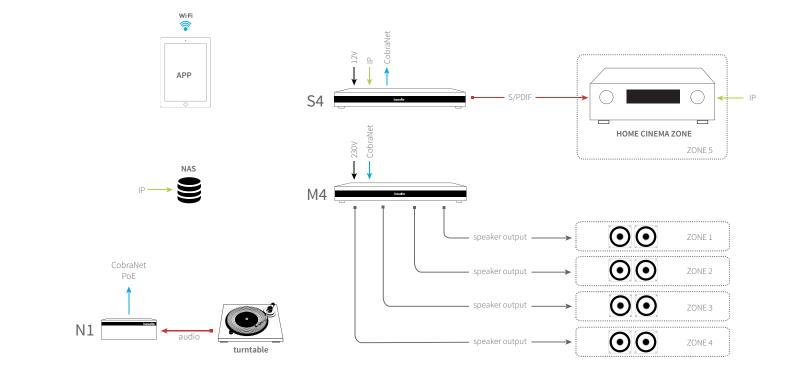
Add 4 stereo zones to Asano and connect up to 4 analogue sources (P4 amplifier), play your own & streamed music in all Asano zones (S4 music server with NAS) and integrate a third-party surround amplifier (via S4). Control your system with the app (via S4), KNX switches and the remote by Bang & Olufsen® (via BO.sensor).



Standalone multiroom stereo configuration

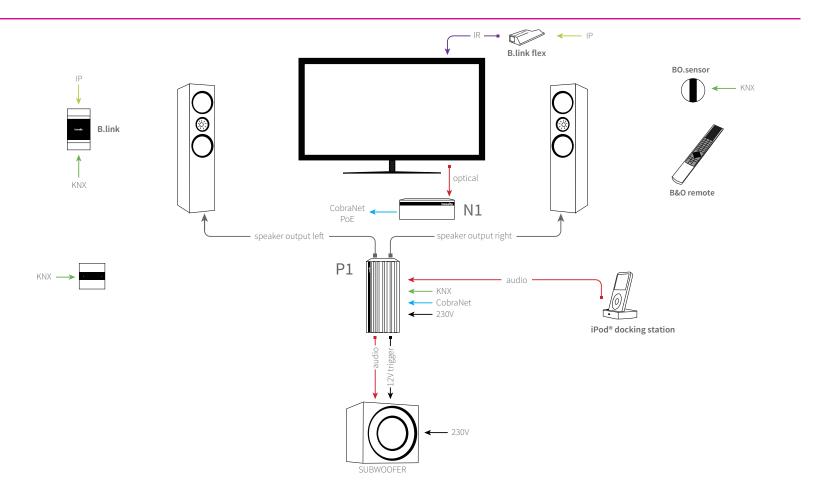
with music server & surround setup

Add 4 stereo zones to Asano and freely connect 1 analogue & 1 digital source (M4 amplifier), play your own & streamed music in all Asano zones (S4 music server with NAS), integrate a third-party surround amplifier (via S4) and connect the turntable as a source for all zones (N1 input module). Expand your system by adding M4s and N1s, according to your needs. Control it with the app (via S4).



Single stereo zone with subwoofer

Add 1 stereo zone to Asano and connect up to 2 analogue sources (P1 amplifier), connect an active subwoofer with trigger (P1) and connect the TV as a source for all zones (N1 input module). Control your system with KNX switches and the remote by Bang & Olufsen® (via BO.sensor). Add the S4 music server in your Asano system to also use the app.

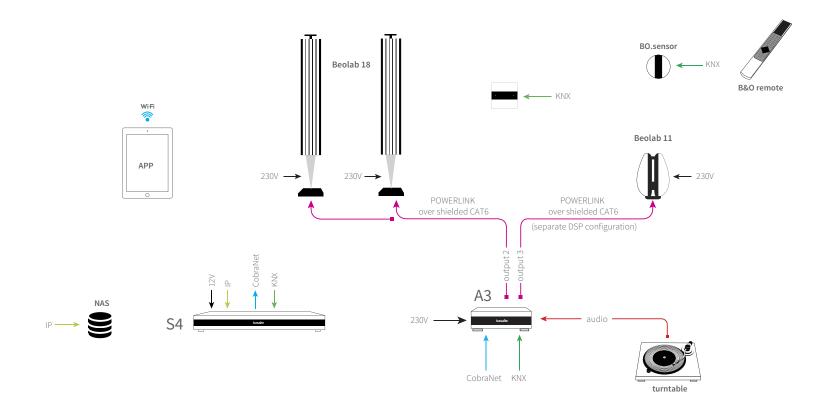


36

Single stereo zone

with active Bang & Olufsen® speakers

Play all music in Asano with active speakers by Bang & Olufsen® (A3 output module), enjoy your own & streamed music in all Asano zones (S4 music server with NAS) and connect the turntable as a source for all zones (A3 output module). Control your system with the app (via S4), KNX switches and the remote by Bang & Olufsen® (via BO.sensor).



| | S4 | A3 | N1 |
|---|---------------------------|-------------------------|-------------------------------------|
| | music server | 3-zone output module | 1-source input module |
| Product code | 790-04 | 702-03 | 701-01 |
| Total number of sources | 4 streams | 2 | 1 |
| Analogue input | - | 1 | 1 |
| S/PDIF coaxial input - 2 ch PCM | - | 1 | 1 |
| S/PDIF Toslink optical input - 2 ch PCM | - | - | 1 |
| USB digital audio 2 ch input | - | - | 1 |
| Resolution / sample frequency | 24 bit 48 kHz | 24 bit 48 kHz | 24 bit 48 kHz |
| Input signal sensing | - | yes | no |
| Total number of zones (stereo) | 1 (S/PDIF) | 1 (S/PDIF)/2 (analogue) | - |
| Total number of zones (mono) | - | - | - |
| Total number of zones (bridged) | - | - | - |
| Subwoofer analogue output | - | 2 | - |
| Trigger output | - | 2 | - |
| Party mode | - | yes | - |
| Override function | - | yes | - |
| Scene control | - | yes | - |
| KNX | yes | yes | no |
| Power | 12V DC (adapter included) | 220V - 240V AC | 12V DC - PoE (adapter not included) |
| Dimensions (w x h x d) mm | 430 x 50 x 220 | 215 x 40 x 160 | 188 x 30 x 105 |
| Weight (kg) | 3,3 | 1,0 | 0,6 |
| Certification | CE | CE | CE |

| | B.link - DIN module | B.link flex IP module | Audio Splitter for Asano A3 | BO.sensor |
|---|-----------------------------------|-------------------------|--------------------------------|------------------------|
| _ | 720-01 | 729-01 | 718-01 | 770-01 |
| | B.link flex serial RS232 extender | B.link flex IR extender | B.link flex triple IR extender | B.link flex IR blaster |
| | 729-10 | 729-11 | 729-12 | 729-13 |

| | P1 1-zone amplifier | P4 | M4 4-zone amplifier |
|--|------------------------|---------------------|------------------------|
| | | 4-zone amplifier | |
| Product code | 700-01 | 700-04 | 703-04 |
| Total number of sources | 2 | 4 | 2 |
| Analogue input | 2 | 4 | 1 |
| S/PDIF coaxial input - 2 ch PCM | - | - | 1 |
| S/PDIF Toslink optical input - 2 ch PCM | - | - | - |
| USB digital audio 2 ch input | - | - | - |
| Resolution / sample frequency | 24 bit 48 kHz | 24 bit 48 kHz | 24 bit 48 kHz |
| Input signal sensing | yes | yes | yes |
| Total number of zones (stereo) | 1 | 4 | 4 |
| Total number of zones (mono) | 2 | 4 | 4 |
| Total number of zones (bridged) | 1 (mono) | 2 (stereo) | - |
| Subwoofer analogue output | 1 | - | - |
| Trigger output | 1 | - | - |
| Party mode | yes | yes | in combination with S4 |
| Override function | yes | yes | in combination with S4 |
| Scene control | yes | yes | in combination with S4 |
| Speaker output power at 4 Ohm - 1% THD+N | 2 x 125W | 8 x 125W | 8 x 80W |
| Bridged output power at 4 Ohm - 1% THD+N | 1 x 450W | 4 x 450W | - |
| Minimum load | 3 Ohm | 3 Ohm | 3 Ohm |
| Frequency response 20Hz - 20kHz | +/- 0,5dB | +/- 0,5dB | +/- 0,5dB |
| THD+N 1kHz, 1W | 0,003% | 0,003% | 0,002% |
| KNX | yes | yes | no |
| Power | 220V - 240V AC/50Hz | 220V - 240V AC/50Hz | 100V - 240V AC/50-60Hz |
| Dimensions (w x h x d) mm | 300 x 55 x 140 | 430 x 66 x 265 | 430 x 50 x 220 |
| Weight (kg) | 3,0 | 7,2 | 4,1 |
| Certification | CE | CE | CE |

"Without deviation from the norm, progress is not possible."

Frank Zappa

every room, your music

basalte

basalte bvba hundelgemsesteenweg 1a 9820 merelbeke belgium

t +32(0)9 385 78 38

www.basalte.be info@basalte.be

© basalte 2017 v.1.0 Basalte is a registered trademark of basalte bvba. Asano is a registered trademark of basalte bvba. iPad is a registered trademark of Apple Inc. Apple is a registered trademark of Apple Inc. Bang & Olufsen® products are registered or unregistered trademarks of the Bang & Olufsen® Group. Photography: Basalte & Steytpeña productions. With the support of Flanders Investment & Trade.

www.basalte.be