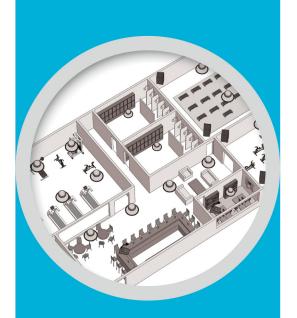
## PLUG & PLAY

SMALL AND MID-SIZED AUDIO APPLICATIONS







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#### Introduction

Offering the perfect audio system for a project is not always easy and takes a lot of time. What loudspeaker should I choose and how many should I install to get the best audio result? Which electronics do I need in this project? How do I connect my cables to which amplifier or music source? With this Plug & Play guide, Apart will help you to make the right choice in each application.

"Apart, Sounds like the right choice". Our purpose is to help our customers in the best way we can. Apart wants to be the installer's best friend by helping him in every possible way. This practical Plug & Play guide will definitely help you to save some of your valuable time and explains you how to set up an audio installation for different kinds of projects.

When you look into this Plug & Play guide, you will notice we have made some changes in this new version in order to make it easier for you to install our Apart products in different audio applications. To make it as easy as possible, we have made a 5-step process in each application. Every application begins with the customer requests and the floor plan. The next two steps contain the speaker and electronics choice (and cabling). The final step is a very handy shopping list so that you can easily see what kind of audio equipment you need in various applications.

We subdivided our Plug & Play into 6 different categories: Corporate, Retail, Sports & Leisure, Outdoor, Food & Hospitality and Education & Religion. You just need to go to the category you are interested in and find out the application you were looking for. It becomes even more easy when you look for your type of application in the alphabetical index at the back of the Plug & Play guide. How simple can life be?

Of course, many of the situations you will encounter in your daily practice won't be exact copies of the application examples in this guide. But no worries, your local Apart Advisor is always available to help you out, even in the most complex applications.

We wish you a lot of pleasure working with our new Plug & Play. We are convinced this will become a tool you can't miss.

Best regards

The Apart team







#### HOW TO USE THIS GUIDE? FIND OUT ON THIS PAGE



Discover the simplicity of audio in the frequently asked questions on the next pages.

Search for your project in the index of this book.

Go to the application page and check the situation & customers requests.

Where to position the speakers and how to wire them.

#### CUSTOMER REQUESTS

ON-WALL

Production hall Area: 850 m<sup>2</sup> - 1400 m<sup>2</sup>

**N** 0 One system versatile enough to cover the entire facility

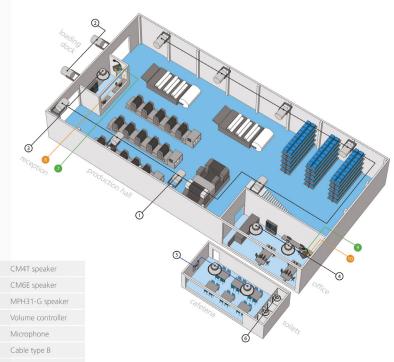
- Powerful enough to ensure clarity of messages and music even in a noisy production area
- Outdoor speakers weatherproc and rustfree
- Speakers in the office stylish and fitting with the interior
- Different music in production area compared to office, loading dock, cafeteria and toilets
- Independent volume control for offices, reception, production, cafeteria and loading dock

Corporate Production hall, Small factory,

# CM4T speaker CM6E speaker MPH31-G speaker Volume controller Microphone Cable type B Cable type F Cable type K CAT5 cable Audio signal cable

2-core speaker cable
 4-core speaker cable

#### FLOOR PLAN PRODUCTION HALL



#### Is your project larger than than the showroom in this example?

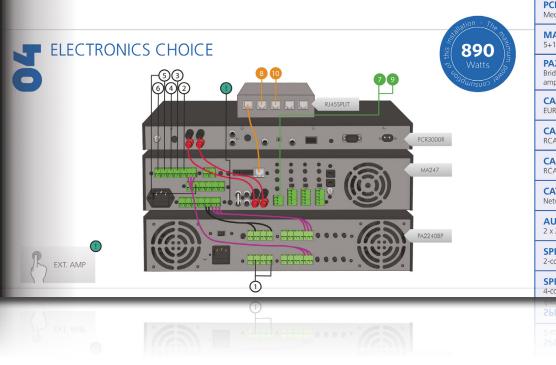
Check the other case studies in the corporate section of this book or contact your Apart dealer. He will help you to work out a project that exactly fits your clients requirements.

#### requirement

2-core speaker cable

eck the other case studies in the corporate section of this book or contact you art dealer. He will help you to work out a project that exactly fits your clients

SPE/	AKER CHOICE				
				B	C
	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
	production hall	600-1000 m <sup>2</sup>	8 x MPH31-G	30 Watts	
	loading dock	150-250 m <sup>2</sup>	2 x MPH31-G	30 Watts	
	reception	15-30 m <sup>2</sup>	1 x CM6E	6 Watts	$\bigcirc$ $\bigcirc$ $\bigcirc$
	office	30-60 m <sup>2</sup>	2 x CM6E	6 Watts	$\bigcirc$ $\bigcirc$ $\bigcirc$
	cafetaria	30-60 m <sup>2</sup>	2 x CM6E + E-VOL40	6 Watts	$\bigcirc$ $\bigcirc$ $\bigcirc$
	toilets	20-40 m <sup>2</sup>	2 x CM4T	3 Watts	$\bigcirc$ $\bigcirc$ $\bigcirc$







FAO

Hey, I do not have any experience in audio, what's the risk that I will end up in a complete failure?

Does Apart have sufficient experience to make this kind of guidebook?

How strict do I have to follow the examples in this application guide?

What are the attention points if I need to adapt an example in this guide to my particular situation?

What is wrong with the idea of car speakers in the ceiling connected to a consumer HiFi component system?

 I can't find the right example in this guide! Can someone help me out? Be confident, my friend! Audio is not rocket science, it's all about the same basic electrical laws as applied in main distribution boards, home appliances and certainly in lighting, where the 'light output' can be interpreted as the sound you hear in audio systems. Basic audio systems, as shown in this book, are not really critical. Apart products are also 'foolproof' and easy to use, so you will not end up in a failure...

Apart was founded by installers. We've been on top of that ladder for many years, wiring amplifiers, installing speakers and facing the same challenges as you.

This experience and the close collaboration with our worldwide dealer network is the cornerstone to our know-how.

Installed sound is a lot like installing lighting products, so you know there is some margin in power and coverage. A volume control ('dimmer') is standard here and allows you to adjust the volume within a wide margin, so don't worry.

For 100 V systems, make sure not to add too many extra speakers, neither to increase their suggested power settings. The sum of all speakers power (watts) should be same or LESS than the amplifiers power output. If higher, then look in this guide for an example that better fits your needs. If lower, no problem, but consider reduced sound coverage and poor listening comfort when too few speakers are installed.

Car speakers are not designed to work with a HiFi component system. Those systems are not meant for continuous operation, and they will never offer the reliability of a professional system. And often, this kind of installation looks cheap and messy. That is not the professional image you are after.

Certainly! Apart advisors are trained to guide you through your project, no matter how complicated. Besides, this guide only has a small part of our extended product range. You can find our complete line up in our product catalogue or on our website www.apart-audio.com.

Why are most of the installations in this book mono, and not stereo?	Stereo is very nice to listen to if you stay in one specific spot, e.g. the sofa in your living room. An audio installation in public areas is used to bring background music to an audience walking around. Hence, mono is the solution of choice, and not old-fashioned at all! The complete sound (mono = sum of left and right) will come through every loudspeaker, everywhere in the area.
What mainly determines the sound quality: speaker, cables, amplifier?	A loudspeaker is the last step in bringing the audio signal to the audience, and that is the most important part in the chain. Even when using top notch electronics, a bad or wrong model of speaker will still ruin the sound. Apart offers a wide range of quality speakers, and because of their competitive price you can install more speakers for the same budget and this will result in a better sound with more dispersed coverage.
Why are there so many loudspeaker models?	Similar to the lighting business, there are many different situations and applications in audio too, e.g. background music, loud music, focused announcements, outdoor, indoor, Apart offers a wide range of speakers, and in this guide, an essential selection from this range will fulfill the requirements in each shown application.
What is the difference between indoor and outdoor speakers?	You can use outdoor speakers in humid environments, wind, dust, cold, snow Special materials and construction will avoid rust, break-down, reduced sound quality A standard indoor- or HiFi consumer speaker will not survive such outdoor conditions.
What kind of cables do I use to wire loudspeakers?	In a low-impedance system (e.g. 8 ohm) you can use standard loudspeaker cable. In a 100 V installation you must use double insulated cable for higher voltage purposes, such as the 230 volts mains voltage.
<ul> <li>How important is speaker</li> <li>polarity (+ , - , COM connections on the amplifier, cable, loudspeaker)?</li> </ul>	Very important! If you do not respect the polarity, the total sound image will be poor and suffer reduced low frequency (bass) response and bad or wrong sound coverage. So this will be a very uncomfortable listening experience.

FAQ Audio for dummies



FAO

FAC

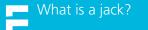
Audio for dummies

 Is it possible to send a
 telephone signal or emergency call to the amplifier?

What is a cinch or RCA connection?

What is a RJ45 connector, and what does UTP, CAT 5 mean?

• What is an XLR connector?



Also called TS or TRS connector, Phone jack, stereo audio jack, ¼" or 6.35mm (diameter) jack. It's one of the oldest and most common connectors in the industry, and used to connect just about everything from headphones to musical instruments. A smaller version, 3.5 mm diameter, is named 'mini-jack', like seen on portable MP3 players.

What is a DIN-5?

This connector is also an old one, and difficult to solder. It is still popular on paging microphones or CB-equipment. Step by step, it will be replaced by the more robust 5-pin XLR.

Yes, many Apart amplifiers have an emergency input, check on our website. This input will override the normal program and give priority. Be aware that those telephone or emergency signals are not always an audio-standard, please double check with your 'telephone' supplier or your APart dealer.

A connector that is used a lot in consumer audio and video. It's most commonly used to bring an audio signal from a source (e.g. a CD-player) to an amplifier or pre-amplifier. Stereo connectors come in double cables L+R. Cinch is also called RCA-, PHONO-, tulip- or lotus connector.

An RJ45 connector is an 8-pin connector used to terminate a UTP (unshielded twisted pair) cable or 'CAT5'. Apart uses them to make a connection between amplifiers and its remote controls or multi-zone paging microphones. Beware though: RJ45 is also seen on computers and networks (LAN), but you can NOT link them with Apart devices! Always read the user manuals.

XLR is a connector that is used for connecting microphones and line signals. Most common is the XLR3, a 3-pin model. It is strong, robust and lockable, so often used in rough or mobile applications.



Can I connect a PC or MP3-player to my sound system? Euroblock, often in a green colour, is the type of terminal connector most often used to connect speaker or signal cables in a quick and easy way.

You do not need to solder to make a Euroblock connection. Instead, the wire is stripped, inserted into a hole on the connector and fastened by tightening a screw with a screwdriver.

This is possible with the line-inputs on your pre-amplifier or mixer-amplifier. The connection cable will often be a mini-jack to stereo rca cinch (phono) cable, easy to find at your PC or MP3 store.



What are the advantages of alow impedance sound system?

FAQ

How many 8 ohm speakers can I put on one amplifier channel?

How many 16 ohm speakers can I put on one amplifier channel?

What is the maximum speaker cable length?

What happens if I wire a 100 V speaker to a low impedance amplifier?

• Can I easily blow up a low impedance audio system? For example, your home sound system is a low impedance system, your speakers will be 4 or 8 ohms. Compared to 100 V, a low impedance system has the advantage to reproduce a slightly wider frequency range (bass and high tones) at a much higher output level, but its disadvantage is that this ability is limited to a few number of speakers per amplifier only.

2 speakers per channel if the amplifier can be loaded to minimum 4 ohm, like most Apart low impedance amplifiers. Be aware, most of the consumer HiFi systems can only drive 6 or 8 ohm per channel, and thus only one 8 ohm speaker per channel is then allowed.

4 speakers per channel if the amplifier can be loaded to minimum 4 ohm, like most APart low impedance amplifiers. Be aware, most consumer HiFi systems can only drive 6 or 8 ohm per channel, and thus only two 16 ohm speaker per channel are then allowed.

For good strong power performance, we recommend max. 10 meters if a 2 x 1.5 mm<sup>2</sup> cable is used. Longer distances require 2 x 2.5 mm<sup>2</sup> or even more.

It will not damage anything in your system, but the sound output of this 100 V speaker will be too low. This setup is not recommended, so keep 100 V speakers for a 100 V amplifier, and low-impedance speakers for a low-impedance amplifier system.

Yes, consumer HiFi systems generally have no protection when the volume is turned up too loud. This causes a lot of distortion, and this might result in a breakdown. Luckily, most Apart equipment have limiters inside which automatically reduce the output level to a safe level when the user pushes too hard. Must I keep amplifiers cool and how to keep them within safe temperature limits? Especially in high power applications, the thermodynamics and the dust are the biggest thread towards long term reliability. That's why Apart amplifiers are build with enough cooling capacity, without the need of ever-turning cooling fans which have reduced lifetime and cause dust inside. However, this special approach requires a cool and free airflow around the equipment, pay attention to this to avoid thermal protection of the amps.



What are the advantages of a100 V system?

FAQ

Is installing 100 V difficult and dangerous?

I heard that 100 V systems stand for bad sound and oldfashioned?

How do I calculate the maximum speaker load on a 100 V amplifier?

Isn't it a waste to not fully use the rated power of an 100 V amplifier?

Why put a 30 watts speaker on the 7.5 W setting? Why can't I put it on 30 watts? It's the best solution to distribute sound over large areas or into many different places. You can use a lot of speakers on one line with long cable lengths, even more than 100 meters with only 2 x 1.5 mm<sup>2</sup> is possible. On this same one line, each speaker can be individually set to the required output power without interfering with the other speakers. In addition, different models of 100 volt speakers can be connected on this line too.

It is like installing lamps parallel on one line, so it is not more complicated than connecting a line of halogen lamps onto the appropriate transformer. Of course, because it is 100 volts, you should always observe the safety precautions as you do with 230 volts mains systems.

Not at all, like all technology the 100 volt technology has improved a lot, and Apart was a pioneer in doing that by upgrading it to HiFi standards. Nowadays, people will not hear the difference between a 100 V background music system and a 'modern' regular system.

Easy: the sum of all watts of all speakers should be same or less than the output power (in watts) of the amplifier. Be aware that the speaker load on a low-impedance systems is much more critical. See the other chapter here.

No, it is better to have some margin, and there is never a risk of 'overpowering' your speakers in 100 V systems. Also consider possible future expansions which might require additional speakers, e.g. bigger showroom. At that time, the cost of an extra amplifier will be much higher compared to your investment now of an amplifier with some margin left.

When your amplifier is sufficiently strong you could do that, but always keep in mind the maximum load rule for 100 V amplifiers! Everything depends on the requested sound level of the speaker in its particular area. When you put your speaker on 30 watts, it will sound very loud, but this might be unnecessary for background music in a small area.

Can I have a local volume control for one room only? If so, will I always hear the announcements?

Can some zones have different music than others?

Isn't a 3 watts power setting too silent? My speakers at home have 2 x 100 watts! True, but your speakers at home playing at a normal comfortable listening level will only consume 2 x 2 watts or even less! It is interesting to understand that the relation between watts and sound level is not linear, and in this way your background music requires a very few watts only while a very loud concert music requires many thousands of watts.

A 100 V speaker with a 3 watts setting in a quiet or small area is perfectly OK.

No, and this is dangerous to do! Your 8 ohm or low-impedance speaker will play much too loud for some time before it blows up!

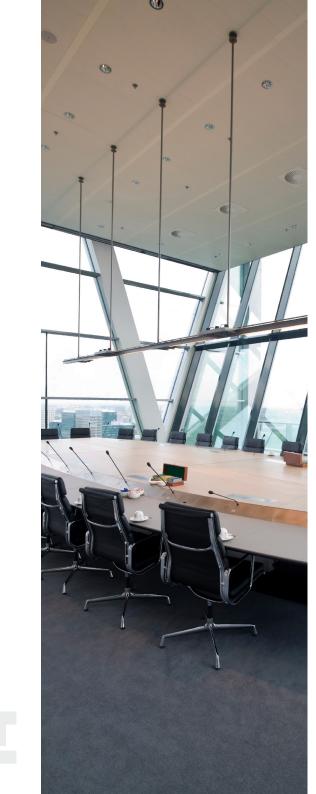
Also the 100 V speaker line will be shut down by doing this mismatch. Never mix a 100 volt system with low-impedance speakers.

That is possible in systems with a multi-zoning amplifier like the MA247. You'll find examples in this book. If

you need more zones, then your dealer can help you with other models of the extended Apart product range.

FAQ 100 volt, PA or public address systems

Why can't I wire an 8 ohm home hifi speaker to a 100 V system?







**BUILT-IN** 

Boardroom Area: 80 m<sup>2</sup> - 160 m<sup>2</sup>

#### CUSTOMER REQUESTS

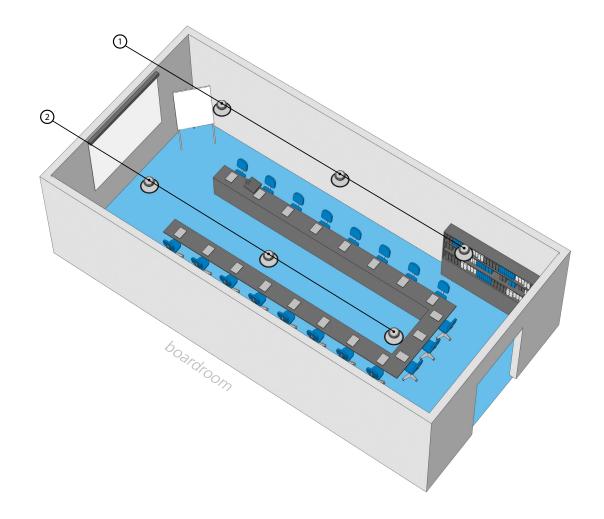
- Excellent intelligibility all over the room
- Possibility to connect laptop for presentations
- Discrete and stylish ceiling speakers
- Music from radio, CD or MP3 player

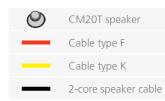
#### Corporate

Boardroom, Conference room, Meeting room, ...

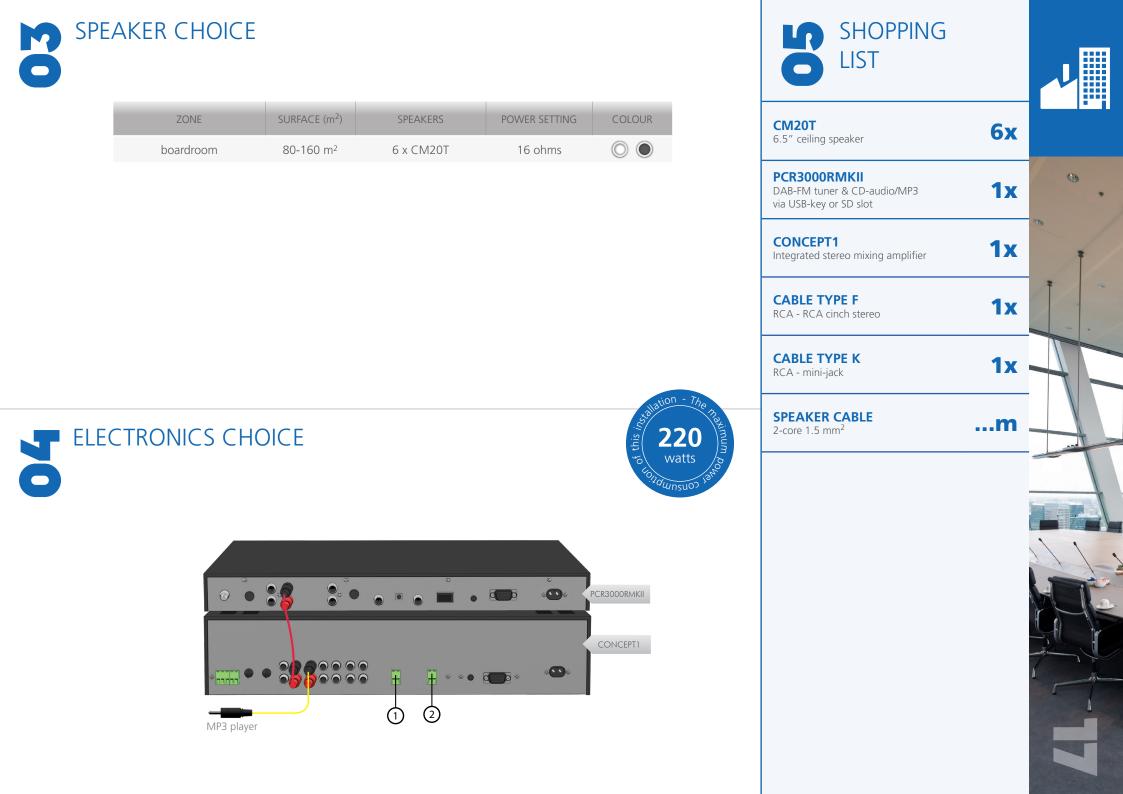


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#### Is your project larger than the boardroom in this example?





Boardroom Area: 80 m<sup>2</sup> - 160 m<sup>2</sup>

## CUSTOMERREQUESTS

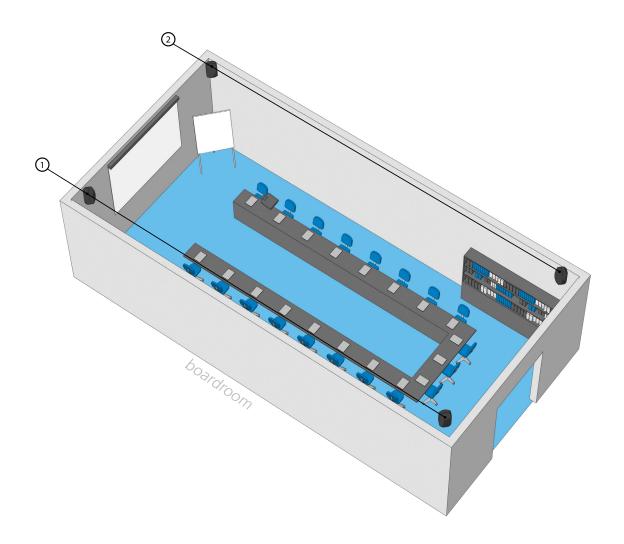
- Excellent intelligibility all over the room
- Possibility to connect laptop for presentations
- $\equiv$  Microphone input possible
- Cabinet speakers that fit the style and interior of the room
- Music from radio, CD or MP3 player

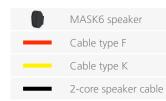
#### Corporate

Boardroom, Conference room, Meeting room, ...

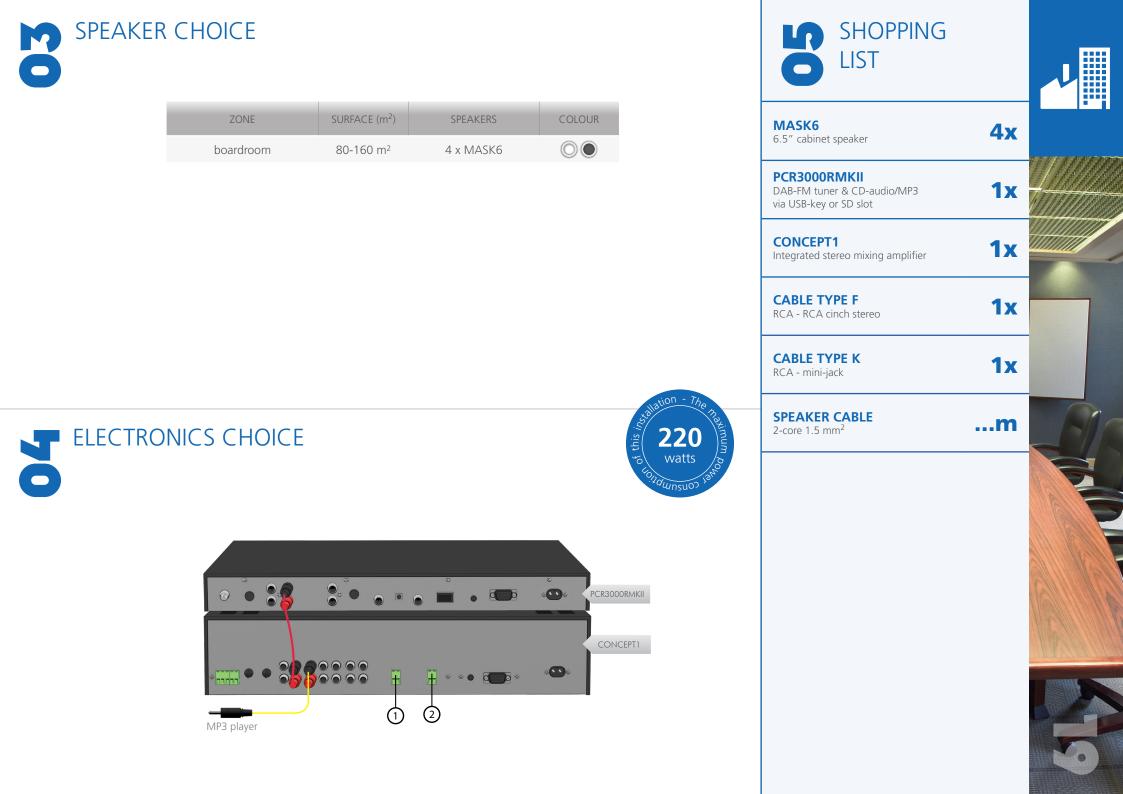


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#### Is your project larger than the boardroom in this example?





**BUILT-IN** 

AV room

Area: 160 m<sup>2</sup> - 320 m<sup>2</sup>

#### CUSTOMER REQUESTS

- Simple to control Audio-Video system with beamer.
- Cabinet front speakers for music sources.
- Ceiling speakers for music sources and microphones.
- $\equiv$  Up to 6 microphones possible
- Audio from laptop
- Audio from CD player
- Local mono line input
- Control panel with 12 preprogrammed buttons for Source and volume selection, control of beamer, control of CD player, control of electrical screen, control of lights.
- physical push-buttons for activating the presets "Meeting" and "Presentation"

Corporate

AV room, Conference room, Meeting room, ...

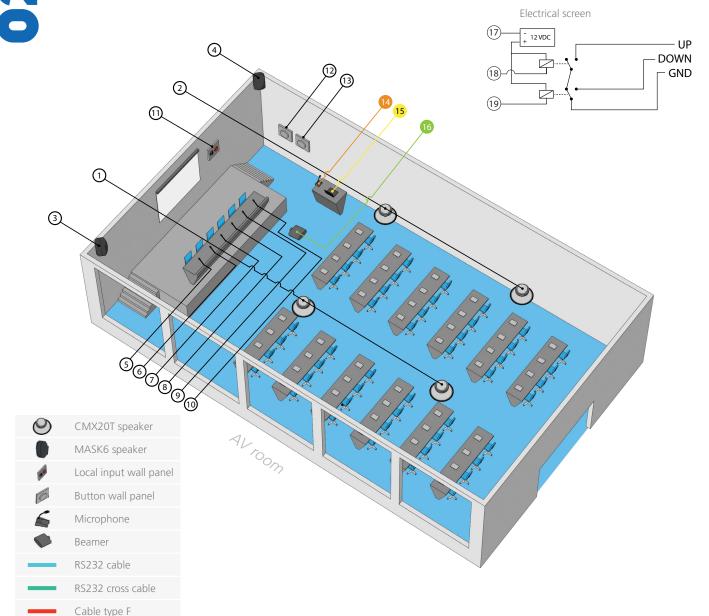


Cable type K

CAT5 cable

Microphone cable

2-core speaker cable

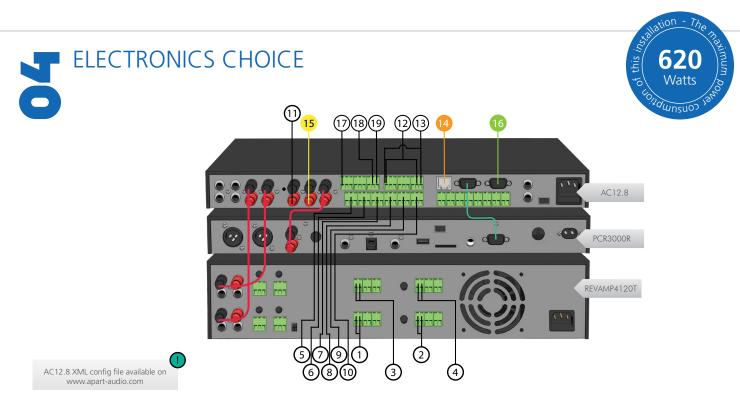


#### Is your project larger than the AV room in this example?

Check the other case studies in the corporate section of this book or contact your Apart dealer. He will help you to work out a project that exactly fits your clients requirements.

M	SPEAKER CHOICE	
0		

ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
AV room	80-160 m <sup>2</sup>	4 x CMX20T	16 ohm	$\bigcirc$ $\bigcirc$
AV room	80-160 m <sup>2</sup>	2 x MASK6	8 ohm	$\bigcirc$ $\bigcirc$



SHOPPING LIST		لار
CMX20T 8" ceiling speaker	<b>4</b> x	
MASK6 6.5" cabinet speaker	<b>2</b> x	
LOCAL INPUT WALL PANEL Wall input with RCA connector	<b>1</b> x	
PUSH BUTTON PANEL Wall panel with momentary push button	<b>2</b> x	
DIMIC12 Multi-zone digital paging & control station	<b>1</b> x	
MICROPHONE Microphone	<b>6x</b>	-
AUDIOCONTROL12.8 SET Audio matrix with DSP and feature pack	<b>1</b> x	1
<b>REVAMP4120T</b> 4-channel 100V bridgeable digital power amplifier	<b>1</b> x	
BEAMER OPTIMA DLP Beamer	<b>1</b> x	
PROJECTOR SCREEN Finder Serie 59	<b>1</b> x	
RS232 CABLE RS232 cable male - female	<b>1</b> x	4
RS232 CROSS CABLE RS232 cross cable male - male	<b>1</b> x	1
CABLE TYPE F RCA - RCA cinch stereo	<b>1</b> x	
CABLE TYPE K RCA - mini-jack	<b>1</b> x	100
CAT5 NETWORK CABLE Network cable	m	
MICROPHONE CABLE Microphone cable	m	N
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



**BUILT-IN** 

Dental practice Area: 130 m<sup>2</sup> - 275 m<sup>2</sup>

## CUSTOMERREQUESTS

- Background multi-room music system that makes patients and dentists feel at ease
- Individual source select and volume control for each dental cabinet
- Different music in every room
- ≡ 4 tuners
- Paging microphone at the entrance desk
- System control via pc at the reception
- Qualilty design ceiling loudspeakers to fit the interior of the dental practice

#### Corporate Dental practice,

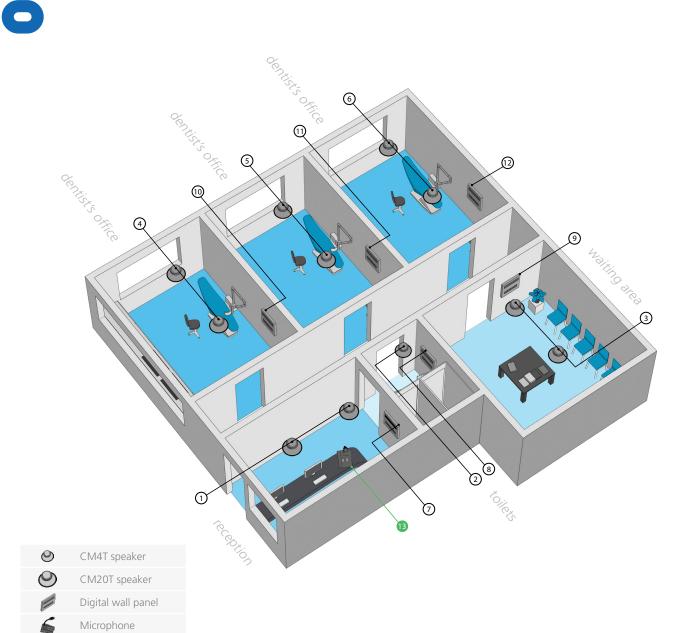
Doctor's practice, ...



CAT5 cable

Audio signal cable

2-core speaker cable

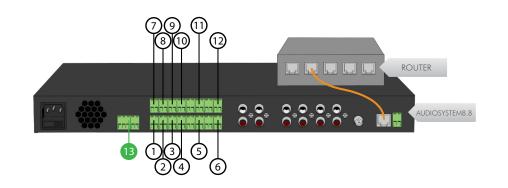


#### Is your project larger than the dental practice in this example?

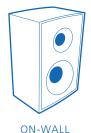


ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
reception	25-50 m <sup>2</sup>	2 x CM20T + DIWAC	16 ohms	$\bigcirc \bigcirc$
toilets	4-25 m <sup>2</sup>	1 x CM4T + DIWAC	16 ohms	$\bigcirc \bigcirc \bigcirc \bigcirc$
waiting room	25-50 m <sup>2</sup>	2 x CM20T + DIWAC	16 ohms	$\bigcirc \bigcirc$
dentist's office	25-50 m <sup>2</sup>	2 x CM20T + DIWAC	16 ohms	$\bigcirc \bigcirc$
dentist's office	25-50 m <sup>2</sup>	2 x CM20T + DIWAC	16 ohms	$\bigcirc \bigcirc$
dentist's office	25-50 m <sup>2</sup>	2 x CM20T + DIWAC	16 ohms	$\bigcirc \bigcirc$





SHOPPING LIST		
CM4T 4.2" ceiling speaker	<b>1</b> x	
<b>CM20T</b> 6.5" ceiling speaker	<b>10x</b>	
<b>DIWAC</b> Digital programmable wall control	<b>6x</b>	
<b>MICPAT-D</b> 1-zone table type dynamic microphone	<b>1</b> x	
AUDIOSYSTEM8.8 Audio matrix with 4 built-in FM tuners	<b>1</b> x	6
CAT5 NETWORK CABLE Network cable	m	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
		26



Dental practice Area: 130 m<sup>2</sup> - 275 m<sup>2</sup> CUSTOMERREQUESTS

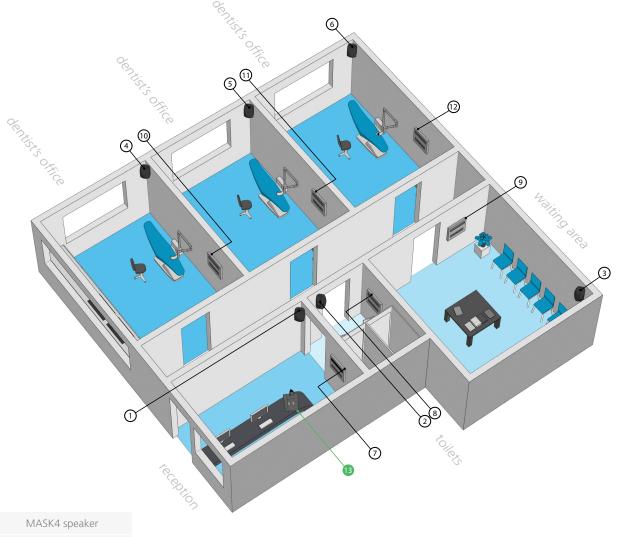
Background multi-room music system that makes patients and dentists feel at ease 0

- Individual source select and volume control for each dental cabinet
- ≡ 4 tuners
- Paging microphone at the entrance desk
- System control via pc at the reception
- Qualilty design cabinet loudspeakers to fit the interior of the dental practice



Dental practice, Doctor's practice, ...





## Digital wall panel Microphone CAT5 cable Audio signal cable

2-core speaker cable

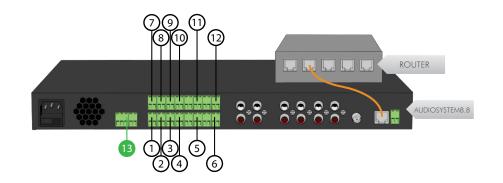
#### Is your project larger than the dental practice in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
reception	25-50 m <sup>2</sup>	1 x MASK4 + DIWAC	8 ohms	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets	4-25 m <sup>2</sup>	1 x MASK4 + DIWAC	8 ohms	$\bigcirc \bigcirc \bigcirc \bigcirc$
waiting room	25-50 m <sup>2</sup>	1 x MASK4 + DIWAC	8 ohms	$\bigcirc \bigcirc \bigcirc \bigcirc$
dentist's office	25-50 m <sup>2</sup>	1 x MASK4 + DIWAC	8 ohms	$\bigcirc$ $\bigcirc$ $\bigcirc$
dentist's office	25-50 m <sup>2</sup>	1 x MASK4 + DIWAC	8 ohms	$\bigcirc \bigcirc \bigcirc \bigcirc$
dentist's office	25-50 m <sup>2</sup>	1 x MASK4 + DIWAC	8 ohms	$\bigcirc \bigcirc \bigcirc \bigcirc$









**BUILT-IN** 

Office Area: 200 m<sup>2</sup> - 480 m<sup>2</sup>

## CUSTOMERREQUESTS

- A sound system for background music and paging
- Music from radio, CD and MP3 player
- One paging zone, adjustable volume per room
- Paging should have priority over the music and volume control in the offices, not in the meeting rooms
- Discrete and elegant ceiling speakers to go with the building style

### Corporate

Office, Reception, Sun centre, Waiting room, Tanning studio, Bank, ...



4-core speaker cable

#### FLOOR PLAN OFFICE

0

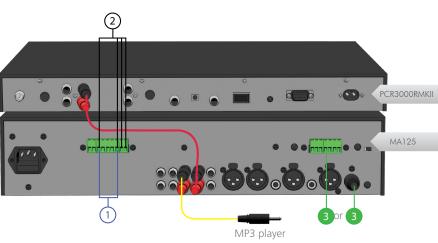


#### Is your project larger than the office in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
financial manager	15-30 m <sup>2</sup>	1 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc$
operation manager	15-30 m <sup>2</sup>	1 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
account manager	15-30 m <sup>2</sup>	1 x CM6E + E-VOL40	6 watts	$\bigcirc$ $\bigcirc$ $\bigcirc$
meeting room 1	15-30 m <sup>2</sup>	1 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
meeting room 2	15-30 m <sup>2</sup>	1 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
sales office	60-120 m <sup>2</sup>	4 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets	20-40 m <sup>2</sup>	2 x CM4T	3 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
kitchen	15-30 m <sup>2</sup>	1 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
accounting	30-60 m <sup>2</sup>	2 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$

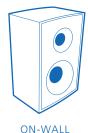
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250 watts

unsuo?



Office

Area: 200 m<sup>2</sup> - 480 m<sup>2</sup>

## CUSTOMERREQUESTS

- A sound system for background music and paging
- Music from radio, CD and MP3 player
- One paging zone, adjustable volume per room
- Paging should have priority over the music and volume control in the offices, not in the meeting rooms
- Stylish cabinet speakers to fit the interior style



Office, Reception, Sun centre, Waiting room, Tanning studio, Bank, ...



Cable type K Audio signal cable

2-core speaker cable

4-core speaker cable

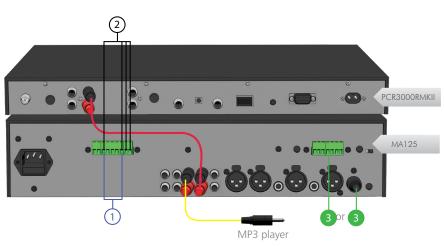
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#### Is your project larger than the office in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
financial manager	15-30 m <sup>2</sup>	1 x MASK4T + E-VOL40	5 watts	$\bigcirc$ $\bigcirc$ $\bigcirc$
operation manager	15-30 m <sup>2</sup>	1 x MASK4T + E-VOL40	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
account manager	15-30 m <sup>2</sup>	1 x MASK4T + E-VOL40	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
meeting room 1	15-30 m <sup>2</sup>	1 x MASK4T + E-VOL40	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
meeting room 2	15-30 m <sup>2</sup>	1 x MASK4T + E-VOL40	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
sales office	60-120 m <sup>2</sup>	4 x MASK4T + E-VOL40	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets	20-40 m <sup>2</sup>	2 x MASK4T	2.5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
kitchen	15-30 m <sup>2</sup>	1 x MASK4T + E-VOL40	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
accounting	30-60 m <sup>2</sup>	2 x MASK4T + E-VOL40	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$

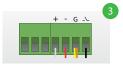


SHOPPING LIST		
<b>MASK4T</b> 4.2" cabinet speaker	14x	
<b>E-VOL40</b> 40 watts euro volume controller	<b>8x</b>	
MICPAT-D 1-zone table type dynamic microphone	1x	A PORT
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	6
MA125 100 volt mixing amplifier	<b>1</b> x	E
<b>CABLE TYPE F</b> RCA - RCA cinch stereo	1x	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
<b>AUDIO CABLE</b> 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
SPEAKER CABLE 4-core 1.5 mm <sup>2</sup>	m	
		R

250

Winsuo?

of this





**BUILT-IN** 

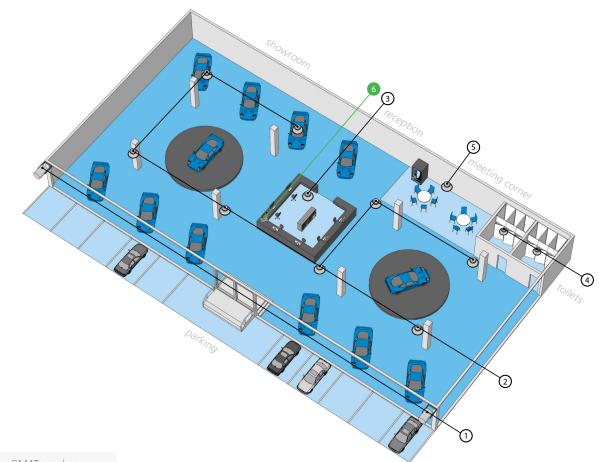
Area: 400 m<sup>2</sup> - 900 m<sup>2</sup>

Showroom

#### CUSTOMER REQUESTS

- Quality background music that makes people feel welcome and at ease
- Music from radio, CD and MP3 player
- Inconspicious ceiling speakers for closed ceiling showroom
- Background music and paging for showroom, reception desk, toilets and meeting corner
- Selective paging for outside parking area
- Independent volume control for following zones: showroom, reception, meeting corner, toilets, parking area

FLOOR PLAN SHOWROOM



### Corporate Car dealer, Showroom,

Car dealer, Showrool Canteen, ...

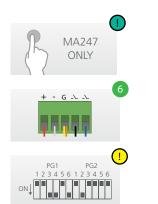


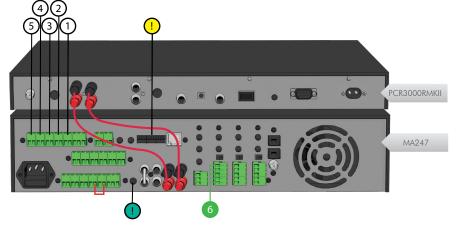
2-core speaker cable

#### Is your project larger than the showroom in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
showroom	340-800 m <sup>2</sup>	8 x CM20T	10 watts	$\bigcirc \bigcirc$
reception	30-90 m <sup>2</sup>	1 x CM20T	5 watts	$\bigcirc$ $\bigcirc$
meeting corner	30-90 m <sup>2</sup>	1 x CM20T	5 watts	$\bigcirc$ $\bigcirc$
toilets	20-40 m <sup>2</sup>	2 x CM4T	3 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
parking	120-200 m <sup>2</sup>	2 x MPH31-G	30 watts	$\bigcirc$









**SPEAKER CABLE** 2-core 1.5 mm<sup>2</sup> ...m



ON-WALL

## CUSTOMERREQUESTS

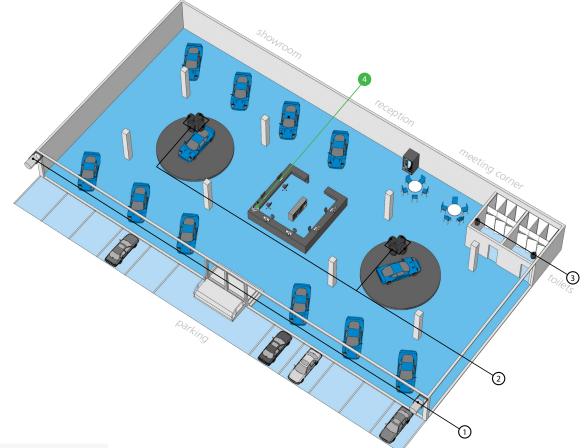
- Quality background music that makes people feel welcome and at ease
- Music from radio, CD and MP3 player
- Design cabinet speakers for open ceiling room
- Background music and paging for showroom, reception desk, toilets and meeting corner
- Selective paging for outside parking area
- Independent volume control for following zones: showroom, reception, meeting corner, toilets, parking area

Corporate Car dealer, Showroom,

Canteen, ...



#### FLOOR PLAN SHOWROOM



#### Is your project larger than the showroom in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
showroom	340-800 m <sup>2</sup>	8 x MASK6T	15 watts	$\bigcirc$ $\bigcirc$
toilets	20-40 m <sup>2</sup>	2 x MASK4T	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
parking	120-200 m <sup>2</sup>	2 x MPH31-G	30 watts	$\bigcirc$

MA247

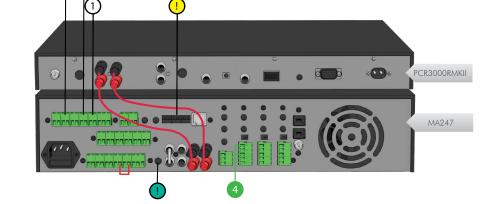
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PG1 PG2 123456123456 ON

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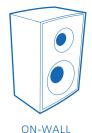
MASK4T 4.2" cabinet speaker	<b>2</b> x	
MASK6T 6.5" cabinet speaker	<b>8x</b>	
MASKW cluster mount kit	<b>2</b> x	
MPH31-G Horn loaded music projector	<b>2</b> x	
MICPAT-2 2-zone table type dynamic microphone	<b>1</b> x	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	

SHOPPING

LIST

NA A CIZAT





Production hall Area: 850 m<sup>2</sup> - 1400 m<sup>2</sup>

#### CUSTOMER REQUESTS

■ One system versatile enough to cover the entire facility

lacksquare

Cable type K

CAT5 cable

Audio signal cable

2-core speaker cable

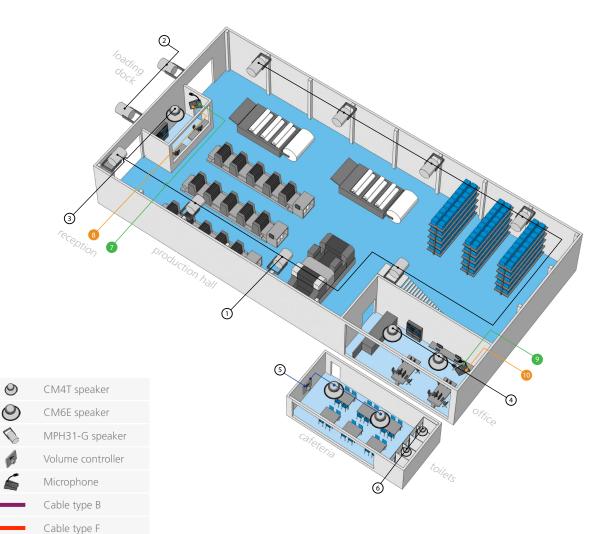
4-core speaker cable

- Powerful enough to ensure clarity of messages and music even in a noisy production area
- Outdoor speakers weatherproof and rustfree
- Stylish speakers in the office fitting with the interior
- Different music in production area compared to office, loading dock, cafeteria and toilets
- Independent volume control for offices, reception, production, cafeteria and loading dock

Corporate

Production hall, Small factory, ...

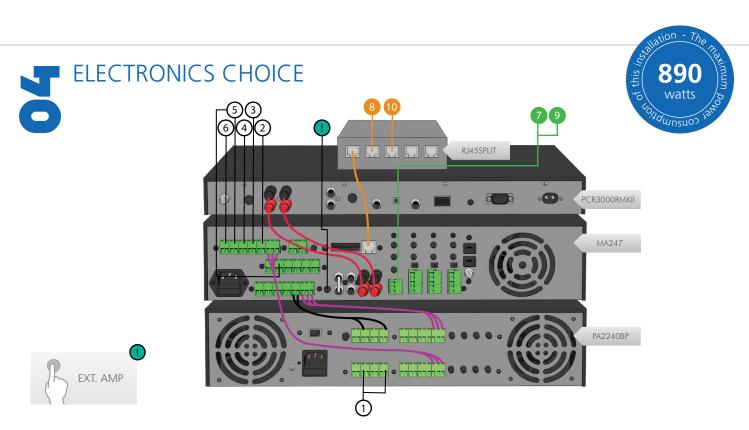




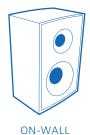
#### Is your project larger than than the showroom in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
production hall	600-1000 m <sup>2</sup>	8 x MPH31-G	30 watts	$\bigcirc$
loading dock	150-250 m <sup>2</sup>	2 x MPH31-G	30 watts	$\bigcirc$
reception	15-30 m <sup>2</sup>	1 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
office	30-60 m <sup>2</sup>	2 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
cafeteria	30-60 m <sup>2</sup>	2 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets	20-40 m <sup>2</sup>	2 x CM4T	3 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		<u> </u>
<b>CM4T</b> 4.2" ceiling speaker	<b>2</b> x	
<b>CM6E</b> 6.5" ceiling speaker	<b>5</b> x	••••
MPH31-G Horn loaded music projector	<b>10x</b>	
<b>E-VOL40</b> 40 watts euro volume controller	<b>1</b> x	
<b>MICPAT-6</b> 6-zone table type dynamic microphone	<b>2</b> x	
<b>RJ45SPLIT</b> Microphone junction box	<b>1</b> x	
PCR3000RMKII Media source	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
<b>PA2240BP</b> Bridgeable 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>2</b> x	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
CAT5 NETWORK CABLE Network cable	<b>3</b> x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	-
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
SPEAKER CABLE 4-core 1.5 mm <sup>2</sup>	m	



- A flexible system and versatile enough to cover the entire facility
- Radio 'Gaga' in the warehouse, CD/MP3 'Serious' in other zones
- Individual volume control per zone
- paging in 2 different groups of zones
- Horns rustfree and weatherproof

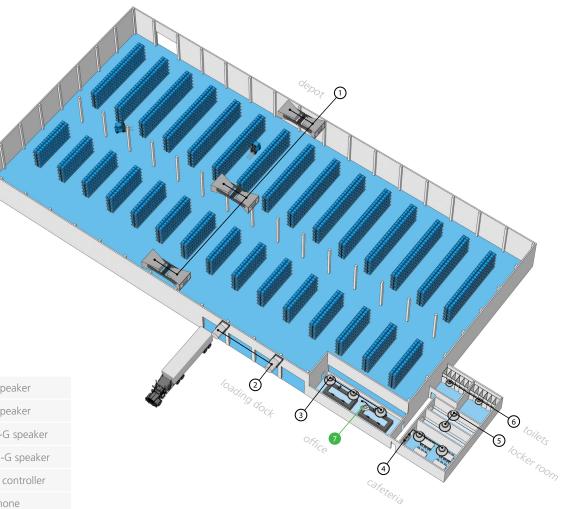
Corporate Warehouse,

Do-it-yourself store, ...



2-core speaker cable

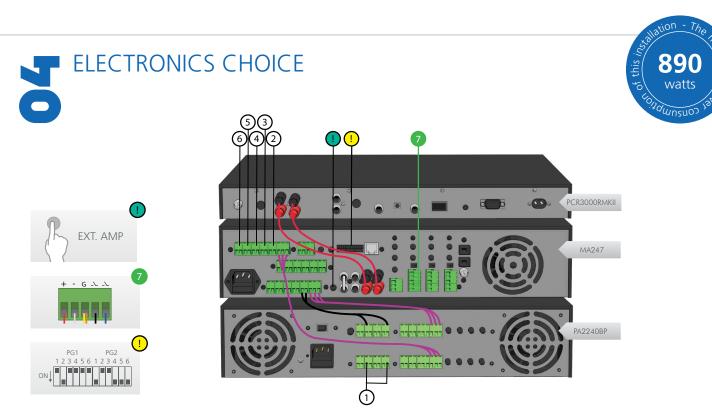
#### FLOOR PLAN WAREHOUSE



#### Is your project larger than the warehouse in this example?



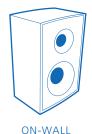
ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
depot	3500-5500 m <sup>2</sup>	6 x MPLT62-G	32 watts	$\bigcirc$
office	50-100 m <sup>2</sup>	3 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
loading dock	150-250 m <sup>2</sup>	2 x MPH31-G	30 watts	$\bigcirc$
cafeteria	40-80 m <sup>2</sup>	2 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
locker room	40-80 m <sup>2</sup>	2 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets	20-40 m <sup>2</sup>	2 x CM4T	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



CM4T 4.2" ceiling speaker	<b>2x</b>	
CM6E 6.5" ceiling speaker	<b>7</b> x	
MPH31-G Horn loaded music projector	<b>2x</b>	
MPLT62-G Long throw music projector	<b>6x</b>	
<b>E-VOL40</b> 40 watts euro volume controller	<b>1</b> x	
<b>MICPAT-2</b> 2-zone table type dynamic microphone	<b>1</b> x	17
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
<b>PA2240BP</b> Bridgeable 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2x</b>	
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	E
CABLE TYPE K RCA - mini-jack	<b>1</b> x	J.
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	t
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	

SHOPPING

LIST



Warehouse - noisy environment

Area: 3800 m<sup>2</sup> - 6000 m<sup>2</sup>

# CUSTOMERREQUESTS

- A versatile system that can cover the entire facility
- Enough power and coverage to overcome the background noise in the warehouse
- Radio 'gaga' in the warehouse, MP3/CD 'serious' in other zones
- Individual volume control and individual paging per group
- Outdoor speakers rustfree and weatherproof

Corporate Warehouse,

Do-it-yourself store, ...

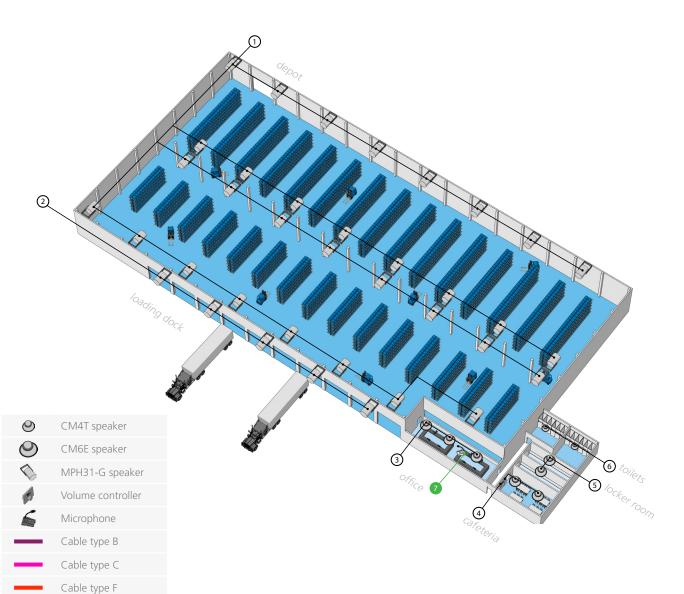


Cable type K

Audio signal cable

2-core speaker cable

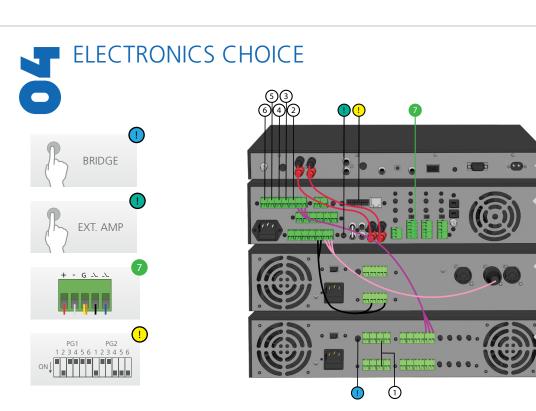
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#### Is your project larger than the warehouse in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
depot	3500-5500 m <sup>2</sup>	32 x MPH31-G	15 watts	$\bigcirc$
office	50-100 m <sup>2</sup>	3 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
loading dock	150-250 m <sup>2</sup>	5 x MPH31-G	30 watts	$\bigcirc$
cafeteria	40-80 m <sup>2</sup>	2 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
locker room	40-80 m <sup>2</sup>	2 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets	20-40 m <sup>2</sup>	2 x CM4T	6 watts	$\bigcirc$ $\bigcirc$ $\bigcirc$





PCR3000RMKII

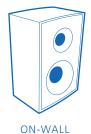
MA247

PA240P

PA2240BP



SHOPPING



Parking garage Area: 4800 m<sup>2</sup> - 6600 m<sup>2</sup>

# CUSTOMERREQUESTS

- Background music from radio, CD or MP3 player
- Excellent intelligibility throughout the parking area
- Rustproof and sturdy sound projectors
- $\equiv$  24/7 operation and reliability
- Microphone for paging messages

Corporate Parking garage, ...

Microphone

Cable type F

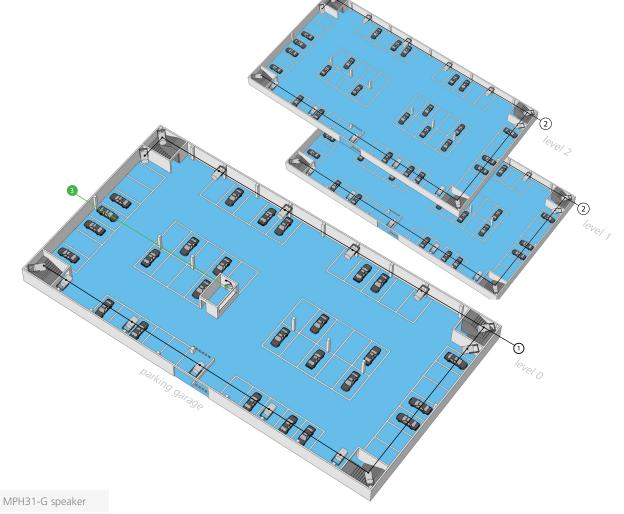
Cable type G

Audio signal cable

2-core speaker cable

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FLOOR PLAN PARKING GARAGE



#### Is your project larger than the parking garage in this example?



1	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
	level 0	1600-2200 m <sup>2</sup>	11 x MPH31-G	5 watts	
	level 1	1600-2200 m <sup>2</sup>	11 x MPH31-G	5 watts	$\bigcirc$
	level 2	1600-2200 m <sup>2</sup>	11 x MPH31-G	5 watts	$\bigcirc$
	staircase	20-40 m <sup>2</sup>	12 x MPH31-G	5 watts	

ELECTRONICS CHOICE 550 of this (1)quinsuo •**••**•• PCR3000RMKII MA125 กกกกกกกกก PA240P רקדת ס (2)

SHOPPING LIST		
MPH31-G Horn loaded music projector	<b>45x</b>	
MICPAT-D 1-zone table type dynamic microphone	<b>1</b> x	-
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA125 100 volt mixing amplifier	<b>1</b> x	-
PA240P 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	C 🛞
CABLE TYPE G XLR3 female - RCA cinch stereo	<b>1</b> x	-1
ADAPTOR TYPE J XLR3 male - XLR3 male	<b>1</b> x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
		-





Supermarket Area: 2200 m<sup>2</sup> - 3300 m<sup>2</sup>

# CUSTOMERREQUESTS

- One system that can cover the entire building
- **=** Background music and paging
- Individual paging and volume control per zone
- ≡ 5 microphones: 1 office and 4 checkout counters
- Radio and MP3 from CD/USBkey or SD-card
- Discrete ceiling speakers

Retail Supermarket, foodcourt,

Do-it-yourself store, ...

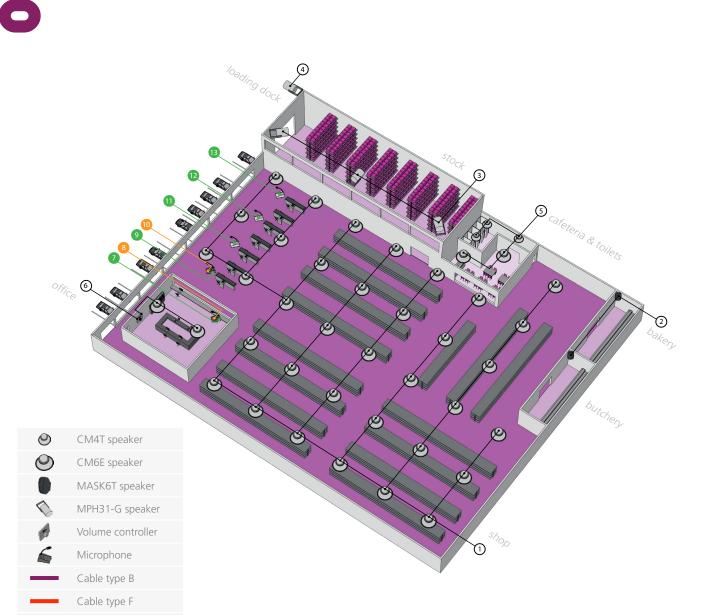


Cable type K

CAT5 cable

Audio signal cable

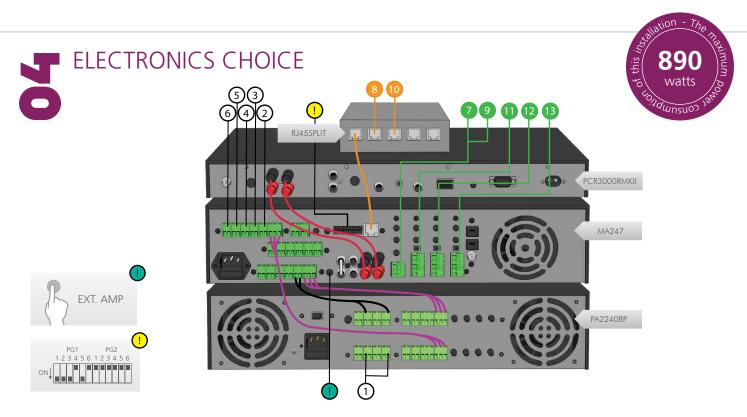
2-core speaker cable



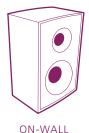
#### Is your project larger than the supermarket in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
shop	1800-2400 m <sup>2</sup>	35 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
bakery & butchery	60-120 m <sup>2</sup>	2 x MASK6T	15 watts	$\bigcirc igodot$
stock	250-400 m <sup>2</sup>	3 x MPH31-G	15 watts	۲
loading dock	100-200 m <sup>2</sup>	1 x MPH31-G	30 watts	
cafeteria & toilets	70-120 m <sup>2</sup>	2 x CM6E + 3 x CM4T	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc / \bigcirc \bigcirc$
office	30-60 m <sup>2</sup>	2 x CM6E + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		
<b>CM4T</b> 4.2" ceiling speaker	<b>3x</b>	
CM6E 6.5" ceiling speaker	39x	
MPH31-G Horn loaded music projector	<b>4x</b>	V
MASK6T 6.5" cabinet speaker	<b>2x</b>	
E-VOL40 40 watts euro volume controller	<b>1</b> x	
<b>MICPAT-6</b> 6-zone table type dynamic microphone	<b>2x</b>	0
MICPACB-D CB-type dynamic paging microphone	3x	M.
<b>RJ45SPLIT</b> Microphone junction box	<b>1</b> x	
PCR3000RMKII media source	<b>1</b> x	-
<b>MA247</b> 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
<b>PA2240BP</b> 2 x 240 watts 100 volt power amplifier	<b>1</b> x	10
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	2
CABLE TYPE K RCA - mini-jack	<b>1</b> x	17/19/
CAT5 NETWORK CABLE Network cable	3x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	3



Supermarket Area: 2200 m<sup>2</sup> - 3300 m<sup>2</sup>

## CUSTOMER REQUESTS

- $\blacksquare$  One system that can cover the entire building
- **E** Background music and paging
- Individual paging and volume control per zone
- $\equiv$  5 microphones: 1 office and 4 checkout counters
- Radio and MP3 from CD/USBkey or SD-card
- $\equiv$  Speakers that fit a high open ceiling and provide good coverage



Do-it-yourself store, ...

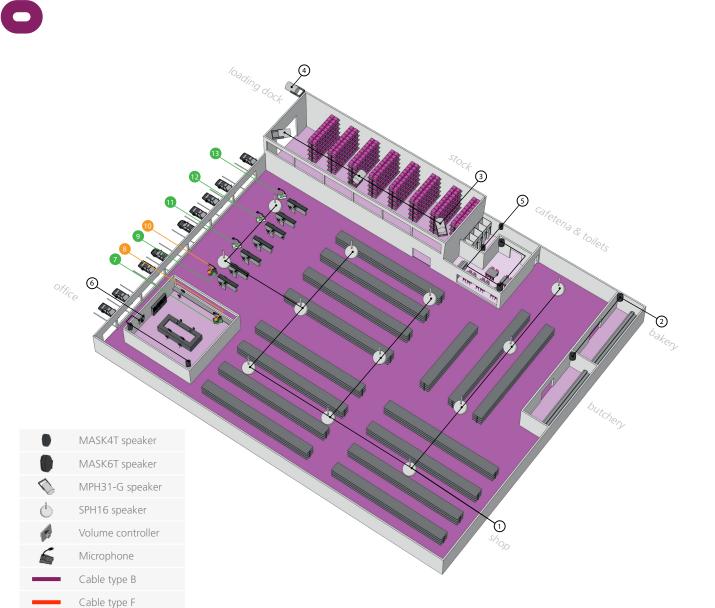


Cable type K

CAT5 cable

Audio signal cable

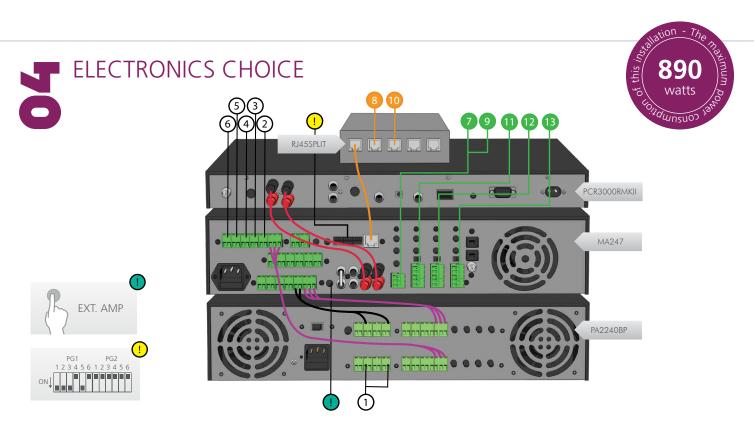
2-core speaker cable



#### Is your project larger than the supermarket in this example?



ZONE	SURFACE (m <sup>2</sup> )	(m <sup>2</sup> ) SPEAKERS POWER SETTING		COLOUR
shop	1800-2400 m <sup>2</sup>	12 x SPH16	6 watts	$\bigcirc$
bakery & butchery	60-120 m <sup>2</sup>	2 x MASK6T	15 watts	$\bigcirc \bigcirc$
stock	250-400 m <sup>2</sup>	3 x MPH31-G	15 watts	$\bigcirc$
loading dock	100-200 m <sup>2</sup>	1 x MPH31-G	30 watts	$\bigcirc$
cafeteria & toilets	70-120 m <sup>2</sup>	2 x MASK6T + 2 x MASK4T	6 watts	$\bigcirc \bigcirc / \bigcirc \bigcirc \bigcirc$
office	30-60 m <sup>2</sup>	2 x MASK4T + E-VOL40	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		
MASK4T 4.2" cabinet speaker	<b>4x</b>	
MASK6T 6.5" cabinet speaker	<b>4x</b>	
SPH16 2-way sphere speaker	12x	
MPH31-G Horn loaded music projector	<b>4x</b>	
<b>E-VOL40</b> 40 watts euro volume controller	<b>1</b> x	
MICPAT-6 6-zone table type dynamic microphone	<b>2x</b>	21
<b>MICPACB-D</b> CB-type dynamic paging microphone	Зx	
<b>RJ45SPLIT</b> Microphone junction box	<b>1</b> x	ZZAS
PCR3000RMKII Media source	<b>1</b> x	PIZZAS
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
PA2240BP 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2x</b>	
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	
CABLE TYPE K RCA - mini-jack	<b>1</b> x	
CAT5 NETWORK CABLE Network cable	3x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



## CUSTOMERREQUESTS

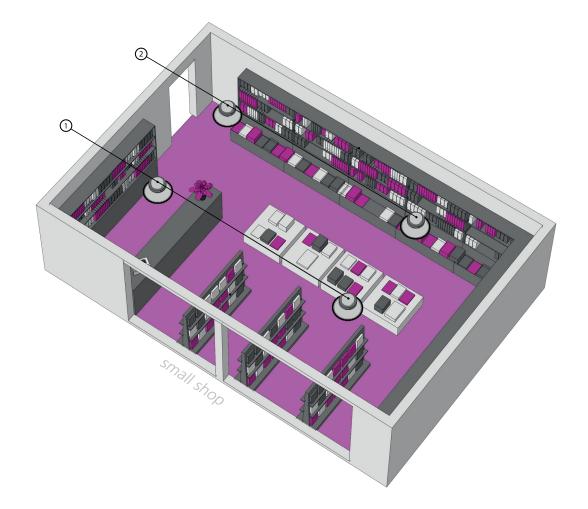
■ Clear background music without being intrusive from radio and CD/MP3 player 0

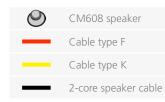
■ Stylish and discrete ceiling speakers



Newspaper shop, Drugstore, Take-away restaurant, Snack bar, Tobacco shop, ...

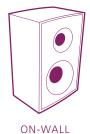






#### Is your project larger than than the store in this example?

SPEAKER	R CHOICE					SHOPPING LIST		
	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	COLOUR		CM608	<b>4</b> x	
	small shop	80-160 m <sup>2</sup>	4 x CM608	$\bigcirc \bigcirc \bigcirc \bigcirc$		6.5" ceiling speaker		
						PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
						<b>CONCEPT1</b> Integrated stereo mixing amplifier	<b>1</b> x	
						CABLE TYPE F RCA - RCA cinch stereo	<b>1</b> x	6
						<b>CABLE TYPE K</b> RCA - RCA mini-jack	<b>1</b> x	B
	NICS CHOICE				allation - The maximum	SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	1
0					watts watts watts watts watts			
								1
	MP3 player		2					6



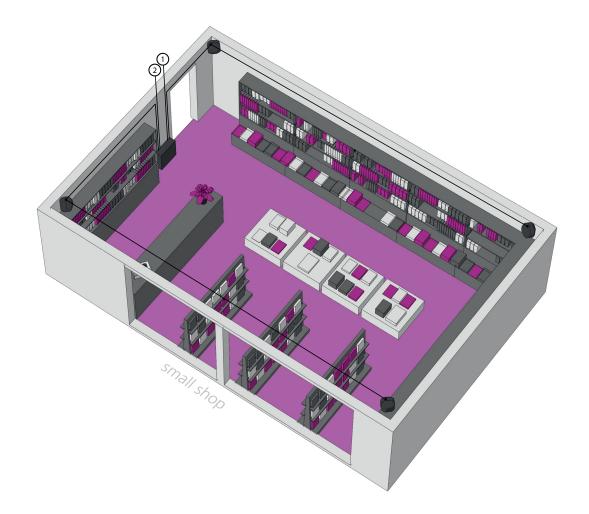
Clear background music without being intrusive from radio and CD/MP3 player 0

■ Discrete, elegant and trendy cabinet speakers



Newspaper shop, Drugstore, Take-away restaurant, Snack bar, Tobacco shop, ...







#### Is your project larger than the store in this example?

SPEAKER	R CHOICE					SHOPPING LIST		
	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	COLOUR		MASK2 2.5" cabinet speaker	<b>4x</b>	
	small shop	80-160 m <sup>2</sup>	4 x MASK2 + 1 x SUBLIME	$\bigcirc \bigcirc$				
						SUBLIME Passive subwoofer	<b>1</b> x	T
						PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
						<b>CONCEPT1</b> Integrated stereo mixing amplifier	<b>1</b> x	
						CABLE TYPE F RCA - RCA cinch stereo	<b>1</b> x	
	NICS CHOICE				220	CABLE TYPE K RCA - mini-jack	<b>1</b> x	
Ò				4	watts o Louiduinsuon 18 <sup>10</sup>	SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
	MP3 player			CONCEPT				C.

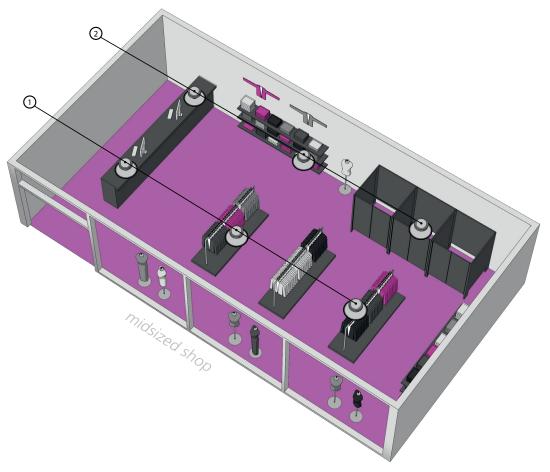


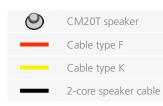
## CUSTOMER REQUESTS

- Appealing & trendy atmosphere
- Quality background music from radio or CD/MP3 player
- Good sound quality needed but should not be loud
- Stylish and inconspicious ceiling speakers

0

FLOOR PLAN SHOP, MIDSIZED - BACKGROUND MUSIC





#### Is your project larger than the store in this example?

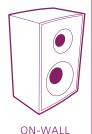
Check the other case studies in the Plug & Play section on the Apart Audio website or contact your Apart dealer. He will help you to work out a project that exactly fits your clients requirements.

Boutique, Drugstore,

Retail

Fashion store, ...

SPEA	KER CHOICE						SHOPPING LIST		
- 1	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR		CM20T 6.5" ceiling speaker	6x	
	midsized shop	120-220 m <sup>2</sup>	6 x CM20T	16 ohms			PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	1x	
							<b>CONCEPT1</b> Integrated stereo mixing amplifier	<b>1</b> x	-
							CABLE TYPE F RCA - RCA cinch stereo	<b>1</b> x	
							<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
S ELEC	TRONICS CHO	DICE				20 atts	SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
	v v mm € MP3 player				R3000RMKII				Sa



■ Refined and fashionable feeling

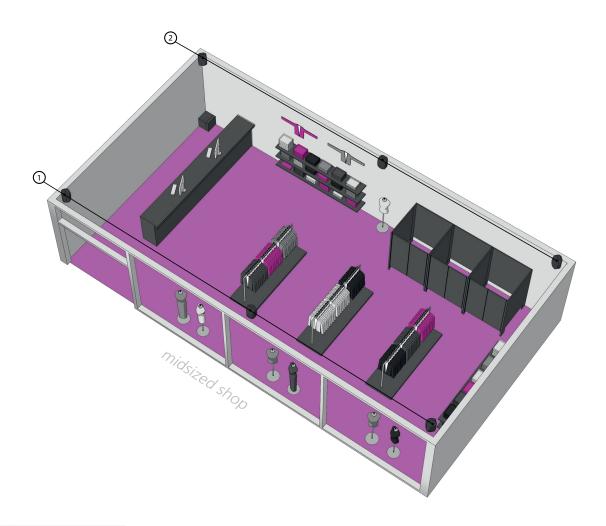
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- Quality background music from radio or CD/MP3 player
- Music should have body but should remain background
- Stylish and small cabinet speakers to go with the interior and fashion design

Retail Boutique, Drugstore,

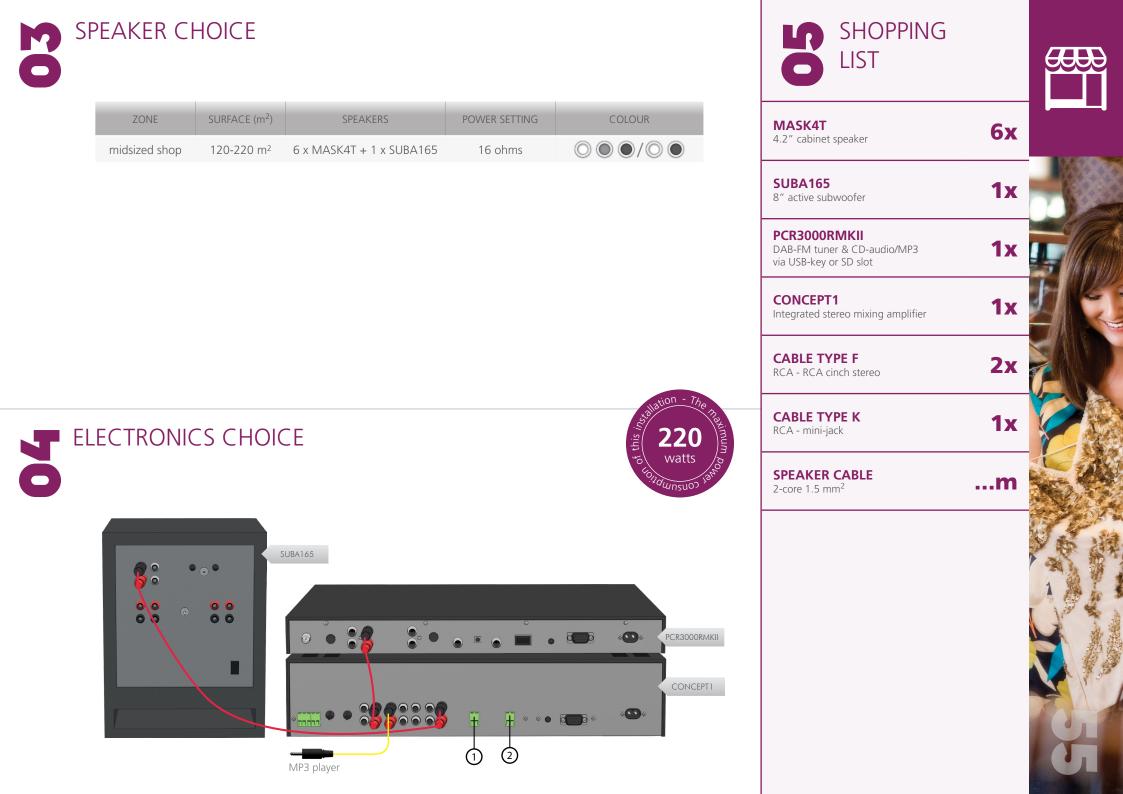
Fashion store, ...







#### Is your project larger than the store in this example?





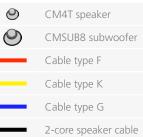
 $\equiv$  Hip and attractive atmosphere

- Different volume control in 2 zones
- Men and women's zone with independent volume control
- Music (CD/MP3) should draw people in the store and in relation with the style and image of the brand
- Elegant and stylish ceiling speakers to match the design



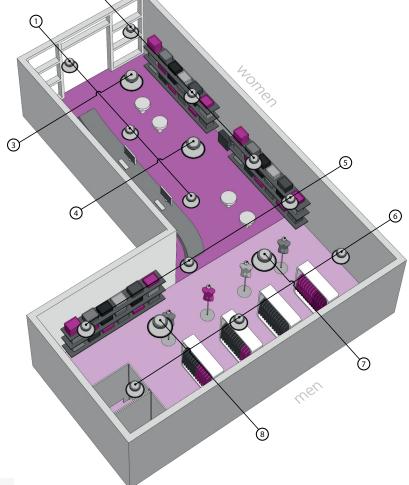
Fashion store, Games arcade, ...

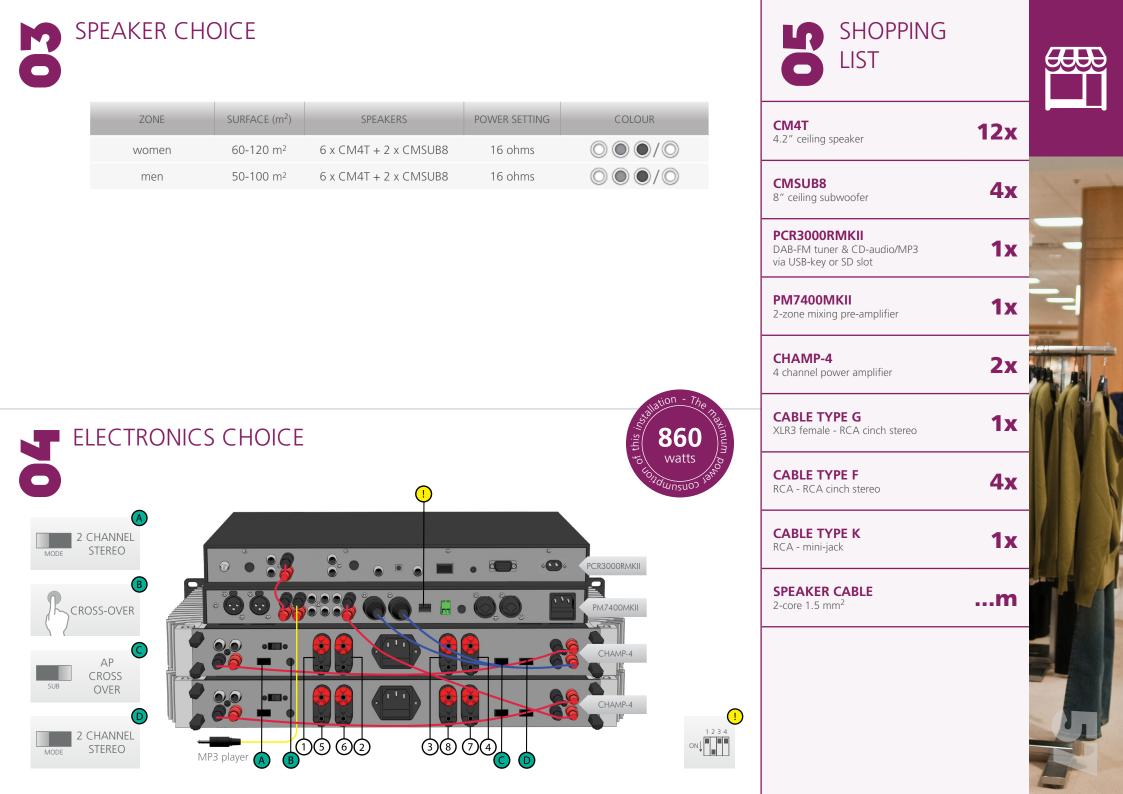


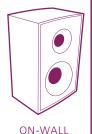


#### Is your project larger than the store in this example?



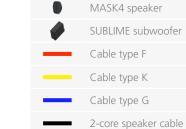






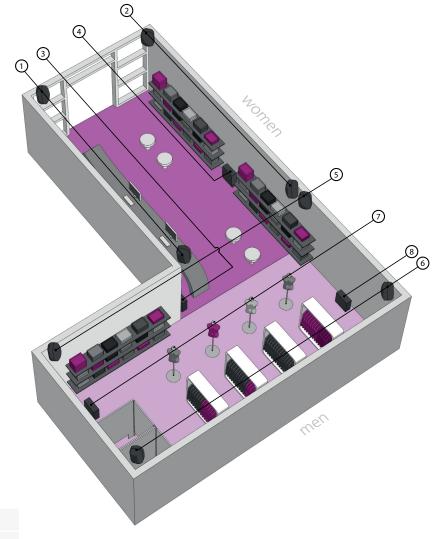
- Flashy and appealing feeling
- Men and women's zone with independent volume control
- Music should draw people in the store and in relation with the style and image of the brand
- Radio or CD / MP3 from CD, USB-key or SD-card
- Elegant and stylish cabinet speakers to fit interior and fashion



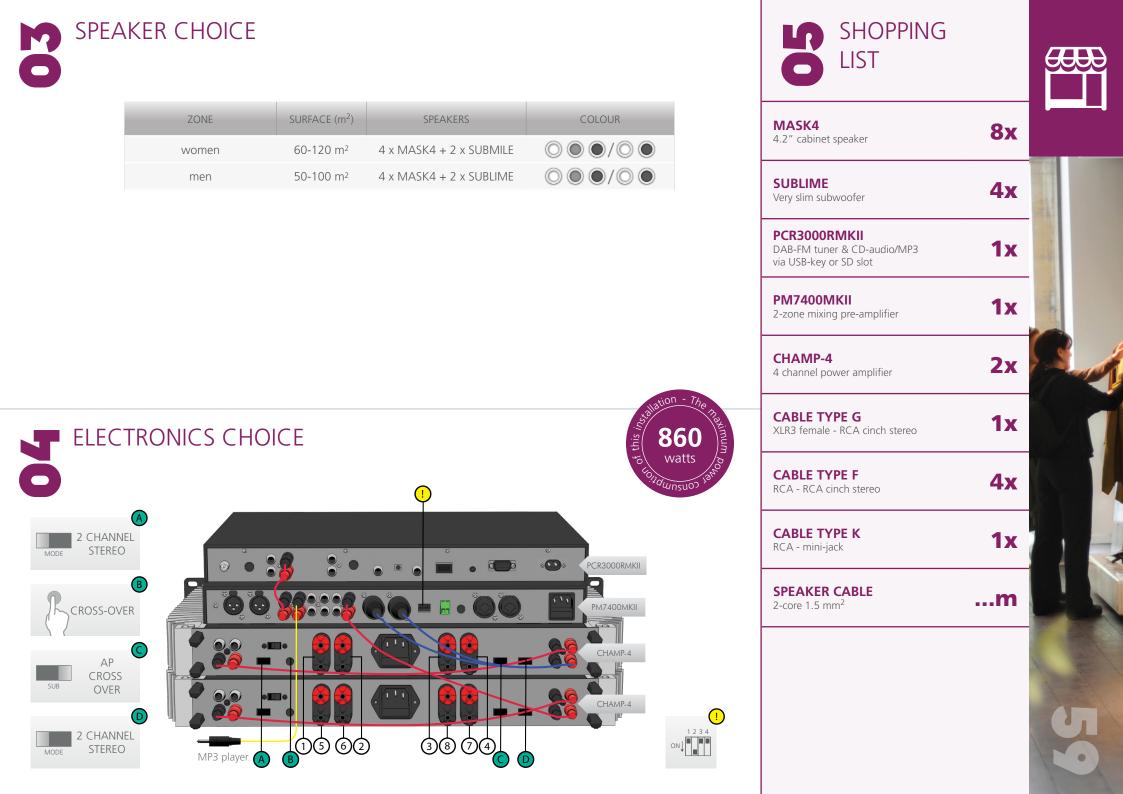


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#### FLOOR PLAN SHOP, MIDSIZED - LOUD MUSIC



#### Is your project larger than the store in this example?





## CUSTOMERREQUESTS

- Dispersed background music from radio, CD or MP3 player
- Selective zone paging (indoor & outdoor) with clear intelligibility

- Stylish ceiling speakers indoor

Retail Gas station, ...

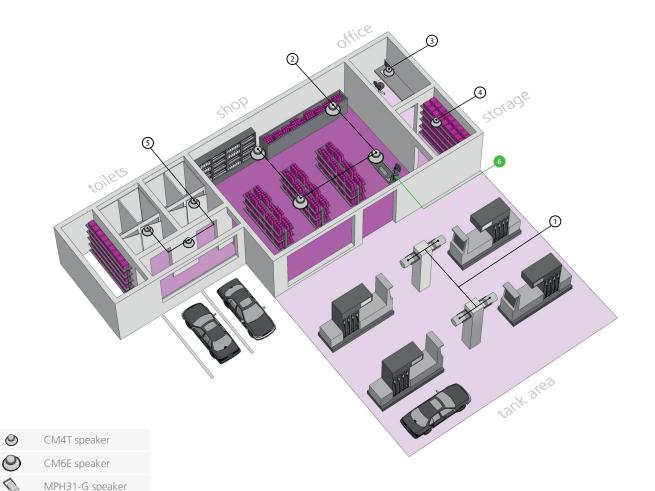


Cable type C

Cable type F Cable type K

Audio signal cable

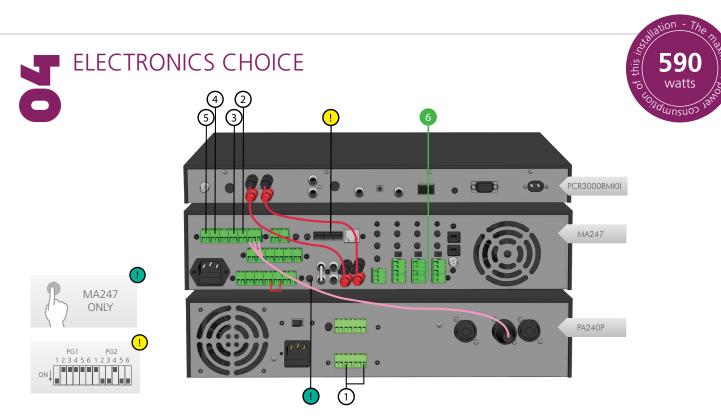
2-core speaker cable



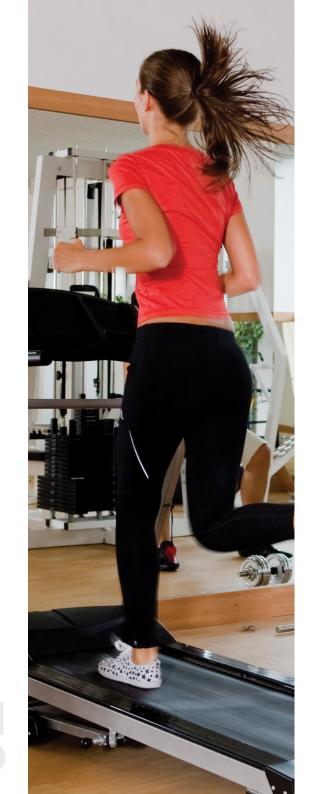
#### Is your project larger than the gas station in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
tank area	150-350 m <sup>2</sup>	4 x MPH31-G	20 watts	$\bigcirc$
shop	60-120 m <sup>2</sup>	4 x CM6E	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
office	10-20 m <sup>2</sup>	1 x CM4T	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets	30-60 m <sup>2</sup>	3 x CM4T	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
storage	10-20 m <sup>2</sup>	1 x CM4T	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		
<b>CM4T</b> 4.2" ceiling speaker	<b>5</b> x	
<b>CM6E</b> 6.5" ceiling speaker	<b>4</b> x	
MPH31-G Horn loaded music projector	<b>4</b> x	
MICPAT-2 2-zone table type dynamic microphone	<b>1</b> x	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
<b>PA240P</b> 240 watts 100 volt power amplifier	<b>1</b> x	TITUS
CABLE TYPE C EUROBLOCK - XLR3 male	<b>1</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>2</b> x	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



# SPORTS & LEISURE





Fitness center Area: 450 m<sup>2</sup> - 750 m<sup>2</sup>

# CUSTOMERREQUESTS

- An excellent value for money sound system that can assure background music and paging for the entire building
- Separate sound systems for louder music in the spinning, aerobics area
- 6 zones, separate paging and volume control per zone
- Background music throughout the building, prominent in the bar
- Music from radio, CD, MP3 player

Sports & Leisure

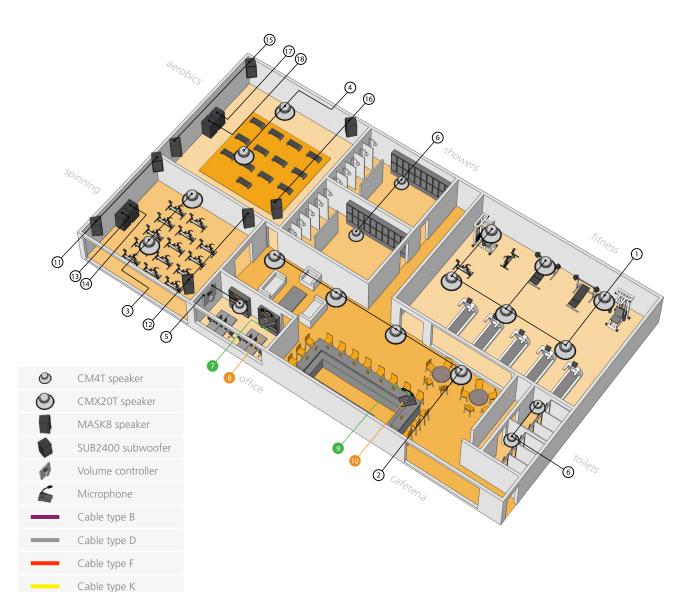
itness center, Boxing club, Dance studio, ...



CAT5 cable

Audio signal cable

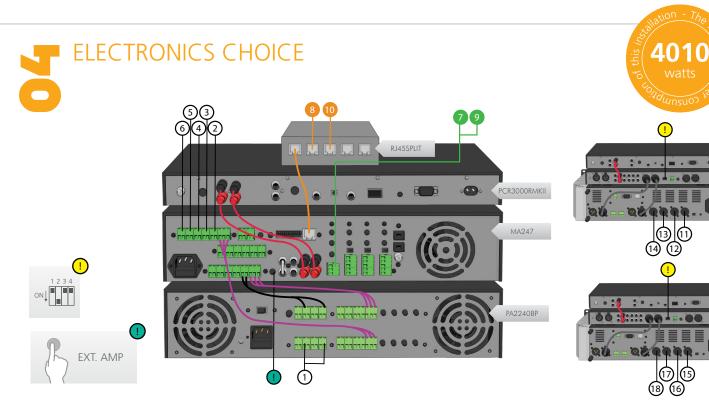
2-core speaker cable



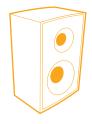
#### Is your project larger than the fitness center in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
fitness area	150-200 m <sup>2</sup>	6 x CMX20T	6 watts	$\bigcirc \bigcirc$
cafeteria	100-165 m <sup>2</sup>	4 x CMX20T	15 watts	$\bigcirc$ $\bigcirc$
spinning	50-100 m <sup>2</sup>	2 x CMX20T	15 watts	$\bigcirc$ $\bigcirc$
spinning	50-100 m <sup>2</sup>	4 x MASK8 + 2 x SUB2400	4 or 16 ohms	$\bigcirc \bigcirc / \bigcirc \bigcirc$
aerobics	50-100 m <sup>2</sup>	2 x CMX20T	30 watts	$\bigcirc$ $\bigcirc$
aerobics	50-100 m <sup>2</sup>	4 x MASK8 + 2 x SUB2400	4 or 16 ohms	$\bigcirc \bigcirc / \bigcirc \bigcirc$
office	10-20 m <sup>2</sup>	1 x CM4T + 1 x E-VOL40	6 watts	$\bigcirc$ $\bigcirc$ $\bigcirc$
showers	20-40 m <sup>2</sup>	2 x CM4T	6 watts	$\bigcirc$ $\bigcirc$ $\bigcirc$
toilets	20-40 m <sup>2</sup>	2 x CM4T	6 watts	$\bigcirc$ $\bigcirc$ $\bigcirc$



SHOPPING LIST		<b>R</b>
CM4T 4.2" ceiling speaker	<b>5x</b>	
CMX20T 8" ceiling speaker	<b>14x</b>	
MASK8 8" cabinet speaker	<b>8x</b>	
SUB2400 Tandem Driven High power subwoofer	<b>4x</b>	-
<b>E-VOL40</b> 40 watts euro volume controller	<b>1</b> x	
<b>MICPAT-6</b> 6-zone table type dynamic microphone	<b>2x</b>	T
RJ45SPLIT Microphone junction box	<b>1</b> x	10
PCR3000RMKII Media source	3x	
PM7400MKII 2-zone mixing pre-amplifier	<b>2x</b>	
CHAMP-3D 3-channel digital amplifier	<b>2x</b>	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
<b>PA2240BP</b> 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2x</b>	
CABLE TYPE D XLR3 female - XLR3 male	<b>4</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>4</b> x	
ADAPTOR TYPE H SPEAKON connector	<b>24x</b>	
CABLE TYPE K RCA - mini-jack	3x	
CAT5 NETWORK CABLE Network cable	3x	
<b>AUDIO CABLE</b> 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



Fitness center Area: 450 m<sup>2</sup> - 750 m<sup>2</sup>

## CUSTOMERREQUESTS

- An excellent value for money sound system that can assure background music and paging for the entire building
- Separate sound systems for louder music in the spinning, aerobics area
- 6 zones, separate paging and volume control per zone
- Background music throughout the building, prominent in the bar
- Music from radio, CD, MP3 player

Sports & Leisure

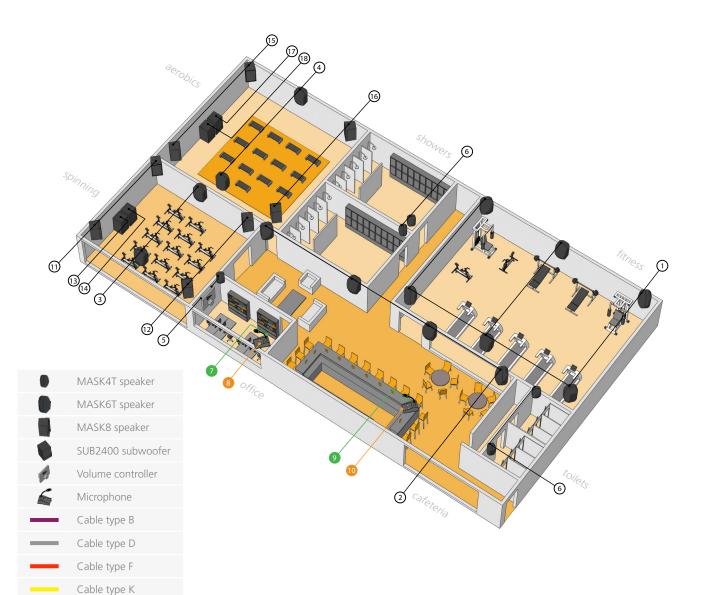
Fitness center, Boxing club, Dance studio, ...



CAT5 cable

Audio signal cable

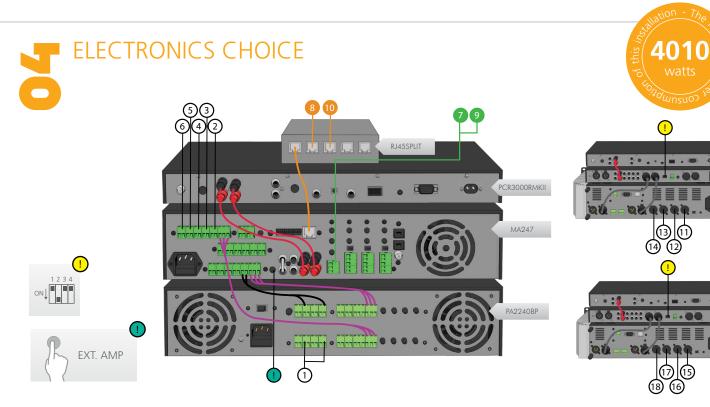
2-core speaker cable



#### Is your project larger than the fitness center in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
fitness area	150-200 m <sup>2</sup>	6 x MASK6T	30 watts	$\bigcirc \bigcirc$
cafeteria	100-165 m <sup>2</sup>	4 x MASK6T	30 watts	$\bigcirc \bigcirc$
spinning	50-100 m <sup>2</sup>	2 x MASK6T	15 watts	$\bigcirc \bigcirc / \bigcirc \bigcirc / \bigcirc \bigcirc$
spinning	50-100 m <sup>2</sup>	4 x MASK8 + 2 x SUB2400	4 or 16 ohms	$\bigcirc \bigcirc / \bigcirc \bigcirc$
aerobics	50-100 m <sup>2</sup>	2 x MASK6T	15 watts	$\bigcirc$ $\bigcirc$
aerobics	50-100 m <sup>2</sup>	4 x MASK8 + 2 x SUB2400	4 or 16 ohms	$\bigcirc \bigcirc / \bigcirc \bigcirc$
office	10-20 m <sup>2</sup>	1 x MASK4T + 1 x E-VOL40	10 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
showers	20-40 m <sup>2</sup>	2 x MASK4T	10 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets	20-40 m <sup>2</sup>	2 x MASK4T	10 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		
MASK4T 4.2" cabinet speaker	<b>5x</b>	)
MASK6T 6.5" cabinet speaker	14x	
MASK8 8" cabinet speaker	<b>8x</b>	
SUB2400 Tandem driven high power subwoofer	<b>4x</b>	
E-VOL40 40 watts euro volume controller	<b>1</b> x	
MICPAT-6 6-zone table type dynamic microphone	<b>2x</b>	
RJ45SPLIT Microphone junction box	<b>1</b> x	
PCR3000RMKII Media source	<b>3x</b>	and a second
<b>PM7400MKII</b> 2-zone mixing pre-amplifier	<b>2x</b>	0
CHAMP-3D 3-channel digital amplifier	<b>2x</b>	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
PA2240BP 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2x</b>	
CABLE TYPE C XLR3 female - XLR3 male	<b>4x</b>	
CABLE TYPE F RCA - RCA cinch stereo	<b>4x</b>	20.000
ADAPTOR TYPE H SPEAKON connector	<b>24x</b>	<u></u>
CABLE TYPE K RCA - mini-jack	<b>3</b> x	
CAT5 NETWORK CABLE Network cable	<b>3x</b>	37
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	ľ
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	

.O



Swimming pool Area: 800 m<sup>2</sup> - 1300 m<sup>2</sup>

## CUSTOMER REQUESTS

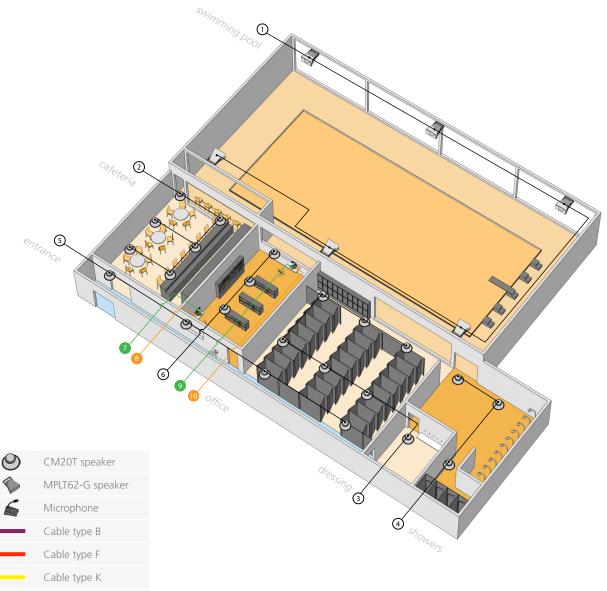
CAT5 cable

Audio signal cable

2-core speaker cable

## Sports & Leisure

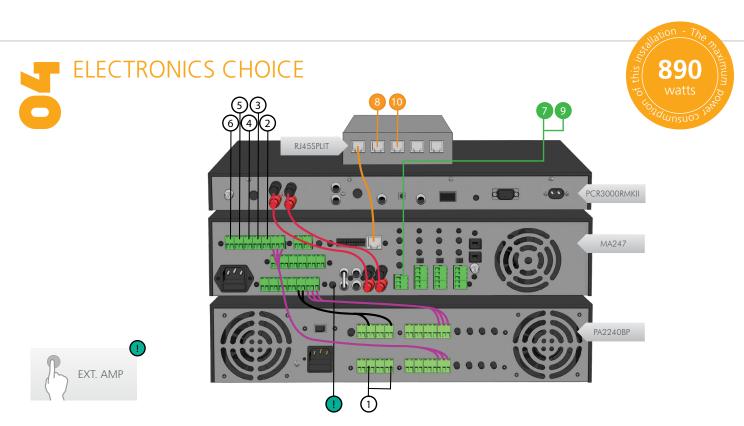




#### Is your project larger than the swimming pool in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
swimming pool	400-700 m <sup>2</sup>	6 x MPLT62-G	32 watts	$\bigcirc$
showers	50-100 m <sup>2</sup>	3 x CM20T	5 watts	$\bigcirc \bigcirc$
dressing room	140-220 m <sup>2</sup>	7 x CM20T	5 watts	$\bigcirc \bigcirc$
office	50-100 m <sup>2</sup>	3 x CM20T	5 watts	$\bigcirc \bigcirc$
entrance	65-120 m <sup>2</sup>	4 x CM20T	5 watts	$\bigcirc \bigcirc$
cafeteria	100-150 m <sup>2</sup>	6 x CM20T	20 watts	$\bigcirc \bigcirc$



SHOPPING LIST		
<b>CM20T</b> 6.5" ceiling speaker	<b>23x</b>	
MPLT62-G Long throw music projector	<mark>6</mark> x	
<b>MICPAT-6</b> 6-zone table type dynamic microphone	<b>2x</b>	
<b>RJ45SPLIT</b> Microphone junction box	<b>1</b> x	I
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
PA2240BP Bridgeable 2 x 240 watts 100 volt power amplifier	1x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2x</b>	
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	T
CABLE TYPE K RCA - mini-jack	<b>1</b> x	
CAT5 NETWORK CABLE Network cable	Зх	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



Sports hall Area: 800 m<sup>2</sup> - 1800 m<sup>2</sup>

## CUSTOMERREQUESTS

- A sound system for background music and paging
- One system that covers the entire building with respect for the budget
- Music from radio/CD and MP3 from CD/USB-key or SD-card
- Sound projectors around the hall, built-in speakers in general areas, quality music through built-in speakers in the cafeteria
- 6 different zones, possibility to page zones independently
- Different music in zone sports hall compared to other zones
- Local volume control in the referee cabin

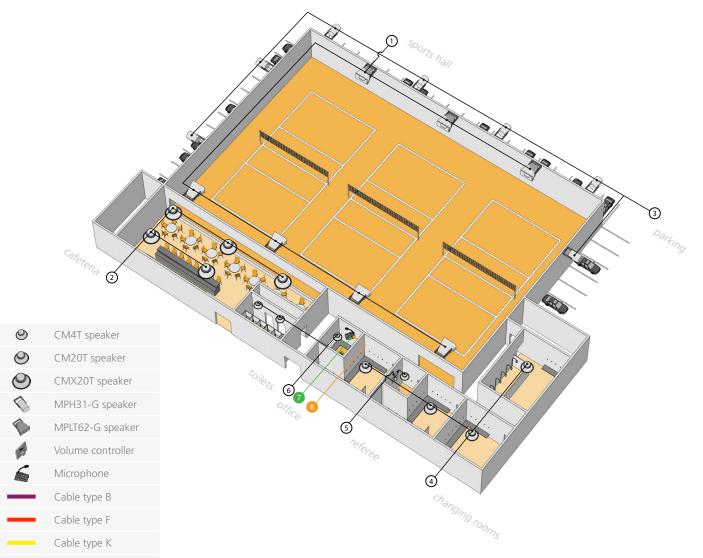
Sports & Leisure Sports hall, Tennis club,



CAT5 cable

Audio signal cable

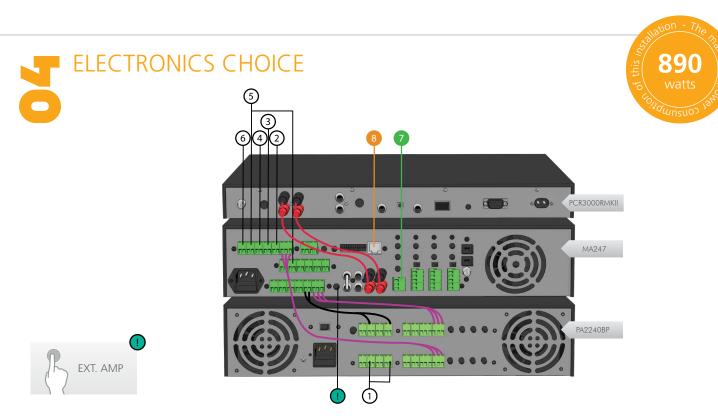
2-core speaker cable



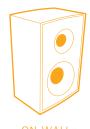
#### Is your project larger than the sports hall in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
sports hall	850-1100 m <sup>2</sup>	7 x MPLT62-G	32 watts	
cafeteria	100-150 m <sup>2</sup>	5 x CMX20T	20 watts	$\bigcirc \bigcirc$
parking	350-600 m <sup>2</sup>	7 x MPH31-G	7.5 watts	$\bigcirc$
changing rooms	60-180 m <sup>2</sup>	4 x CM20T	5 watts	$\bigcirc$ $\bigcirc$
referee	10-20 m <sup>2</sup>	1 x CM4T + 1 x E-VOL40	3 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets & office	30-60 m <sup>2</sup>	3 x CM4T	3 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		<b>K</b>
CM4T 4.2" ceiling speaker	<b>4x</b>	
CM20T 6.5" ceiling speaker	<b>4x</b>	
CMX20T 8" ceiling speaker	<b>5x</b>	
MPH31-G Horn loaded music projector	<b>7</b> x	
MPLT62-G Long throw music projector	<b>7</b> x	
E-VOL40 40 watts euro volume controller	<b>1</b> x	
<b>MICPAT-6</b> 6-zone table type dynamic microphone	<b>1</b> x	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	-
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	16
<b>PA2240BP</b> Bridgeable 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2x</b>	
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	
CABLE TYPE K RCA - mini-jack	<b>1</b> x	
CAT5 NETWORK CABLE Network cable	<b>1</b> x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



Sports hall Area: 800 m<sup>2</sup> - 1800 m<sup>2</sup>

### CUSTOMER REQUESTS

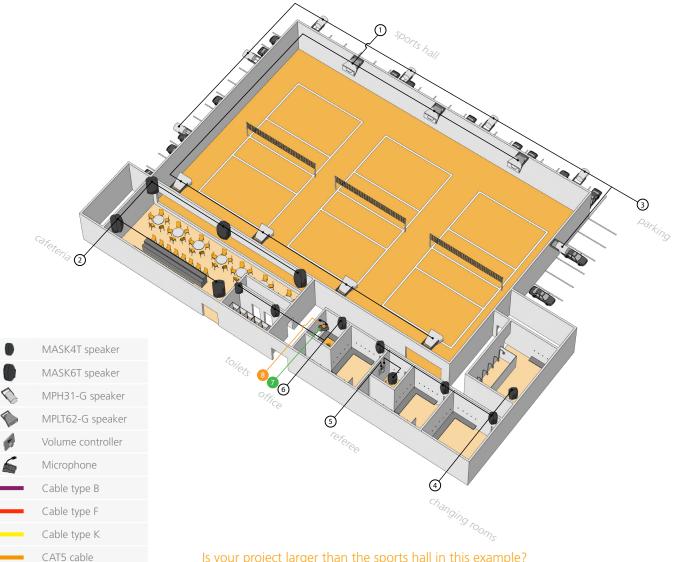
Sports & Leisure



Audio signal cable

2-core speaker cable

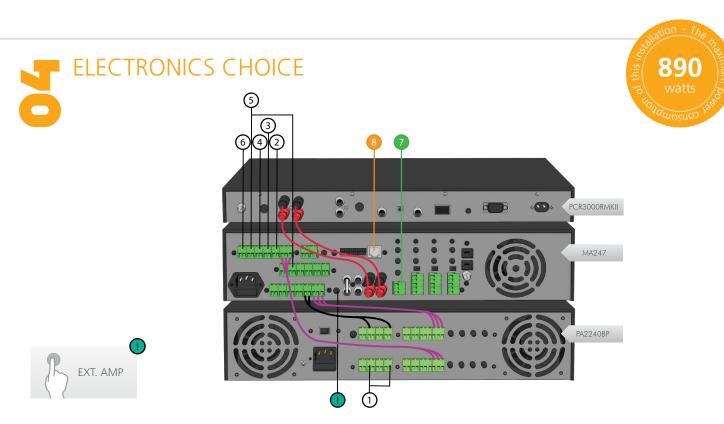
FLOOR PLAN SPORTS HALL



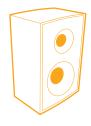
#### Is your project larger than the sports hall in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
sports hall	850-1100 m <sup>2</sup>	7 x MPLT62-G	32 watts	$\bigcirc$
cafeteria	100-150 m <sup>2</sup>	5 x MASK6T	30 watts	$\bigcirc \bigcirc$
parking	350-600 m <sup>2</sup>	7 x MPH31-G	7.5 watts	$\bigcirc$
changing rooms	60-180 m <sup>2</sup>	4 x MASK4T	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
referee	10-20 m <sup>2</sup>	1 x MASK4T + 1 x E-VOL40	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
toilets & office	30-60 m <sup>2</sup>	3 x MASK4T	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		
MASK4T 4.2" cabinet speaker	<b>8x</b>	
MASK6T 6.5" cabinet speaker	<b>5x</b>	1
MPH31-G Horn loaded music projector	<b>7</b> x	7
MPLT62-G Long throw music projector	<b>7</b> x	4
<b>E-VOL40</b> 40 watts euro volume controller	<b>1</b> x	
MICPAT-6 6-zone table type dynamic microphone	<b>1</b> x	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
PA2240BP Bridgeable 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2x</b>	
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
CAT5 NETWORK CABLE Network cable	<b>1</b> x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	N
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	2



Indoor ice rink Area: 1500 m<sup>2</sup> - 3000 m<sup>2</sup>

# CUSTOMERREQUESTS

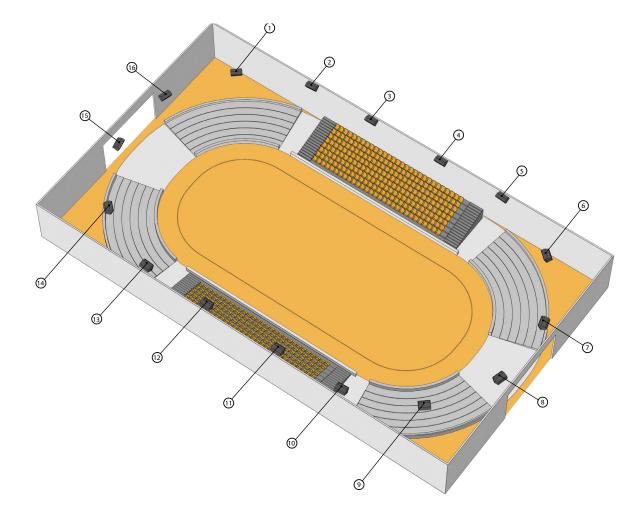
- Qualitative music for background to foreground music
- Sufficient power for theme skating events
- Music from radio / MP3 (hdd) / UPnP-DLNA / internet radio
- $\equiv$  Local input for disk jockey
- Microphone for spoken messages

### Sports & Leisure

Indoor skate hall, Sports hall Indoor ice rink, ...



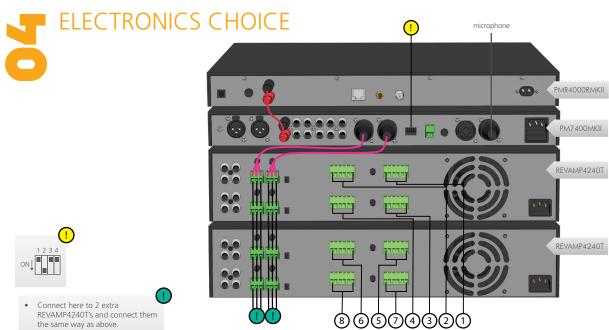
#### FLOOR PLAN INDOOR ICE RINK



#### Is your project larger than the indoor ice rink in this example?

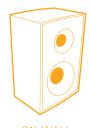
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0				

ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	COLOUR
ice rink	1500-3000 m <sup>2</sup>	16 x MASK12T-BL	$\bigcirc \bigcirc$



SHOPPING LIST		
MASK12T 12" full range cabinet speaker	<b>16x</b>	
MASK12UBRA Turn & tilt bracket for MASK12	16x	
PMR4000RMKII USB, UPnP, FM & internet music player	<b>1</b> x	The last
<b>PM7400MKII</b> 2-zone mixing pre-amplifier	<b>1</b> x	1
<b>REVAMP4240T</b> Bridgeable 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE C EUROBLOCK - XLR3 male	<b>2</b> x	
CABLE TYPE D XLR3 female - XLR3 male	<b>1</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>1</b> x	
ADAPTOR TYPE I XLR3 female - XLR3 female	<b>1</b> x	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
		15

 Connect loudspeaker 9-16 like you did with the other loudspeakers.



Football field Area: 8100 m<sup>2</sup> - 10700 m<sup>2</sup>

# CUSTOMERREQUESTS

- Punchy, high quality music in the cafeteria
- Music from radio/CD, MP3 from CD, USB-key or SD-card
- Powerful, weatherproof and rustfree horns outdoors for football field and stands
- Connection for 2 optional wireless microphones

## Sports & Leisure

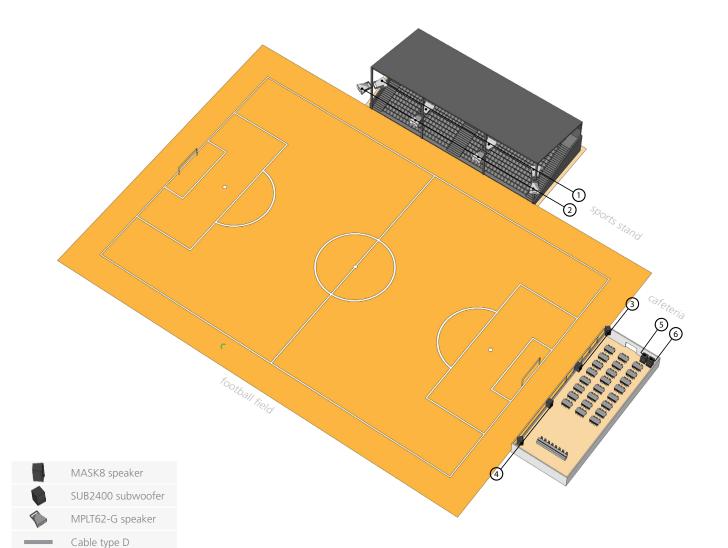
ootball field, Baseball field Cricket field, ...



Cable type E Cable type F

Cable type K

2-core speaker cable



#### Is your project larger than the football field in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
football field	7000-9000 m <sup>2</sup>	4 x MPLT62-G	62 watts	
sports stand	800-1200 m <sup>2</sup>	4 x MPLT62-G	32 watts	
cafeteria	300-500 m <sup>2</sup>	4 x MASK8 + 2 x SUB2400	8 ohms	$\bigcirc \bigcirc / \bigcirc \bigcirc$





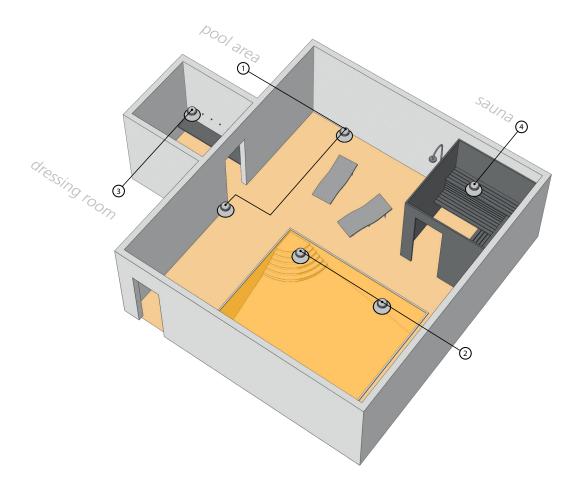


Private pool Area: 80 m<sup>2</sup> - 120 m<sup>2</sup>

# CUSTOMERREQUESTS

- Quality background music system
- Relaxing atmosphere
- Radio, CD and MP3 player
- Individual volume in swimming pool, sauna and dressing
- Moisture resistant and rust free loudspeakers
- Stylish and inconspicuous ceiling speakers
- Superb sound and efficiency ir humid environments
- Loudspeaker in sauna resistant to temperatures up to 95°C





### Sports & Leisure

Private swimming pool, sauna, Wellness center, ...

0	CMAR6 speaker
_	Cable type F
_	Cable type G
_	Cable type K
	2-core speaker cable

#### Is your project larger than the private pool in this example?



ELECTRONICS CHOICE

1	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	COLOUR
	pool area	80 m <sup>2</sup>	4 x CMAR6	$\bigcirc$
	sauna	9 m <sup>2</sup>	1 x CMAR6	$\bigcirc$
	dressing room	9 m <sup>2</sup>	1 x CMAR6	$\bigcirc$

SHOPPING LIST CMAR6 **6**x 6.5" marine ceiling speaker PCR3000RMKII **1**x DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot **PM7400MKII 1**x 2-zone mixing pre-amplifier CHAMP-4 **1**x 4 channel power amplifier

CABLE TYPE F RCA - RCA cinch stereo

**CABLE TYPE G** XLR3 female - RCA cinch stereo

460

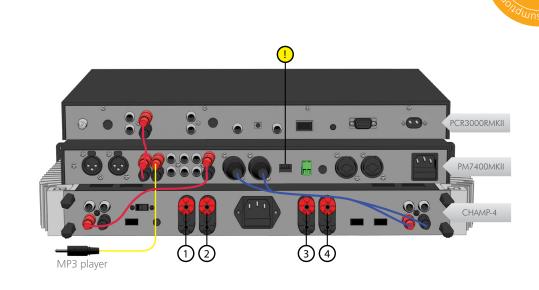
**CABLE TYPE K** RCA - mini-jack

**ADAPTOR TYPE J** XLR3 male - XLR3 male

**SPEAKER CABLE** 2-core 1.5 mm<sup>2</sup>

**2x 1**x **1**x **2x** ...m







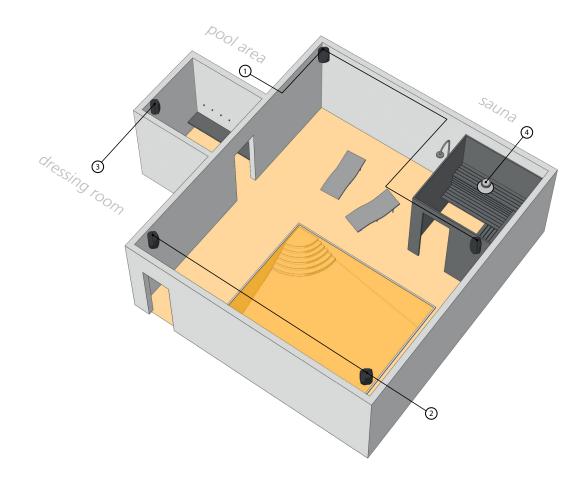


Private pool Area: 80 m<sup>2</sup> - 120 m<sup>2</sup>

# CUSTOMERREQUESTS

- Quality background music system
- Relaxing atmosphere
- Radio, CD and MP3 player
- Individual volume in swimming pool, sauna and dressing
- Moisture resistant and rust free loudspeakers
- Discrete, elegant and trendy cabinet speakers
- Superb sound and efficiency ir humid environments
- Loudspeaker in sauna resistant to temperatures up to 95°C



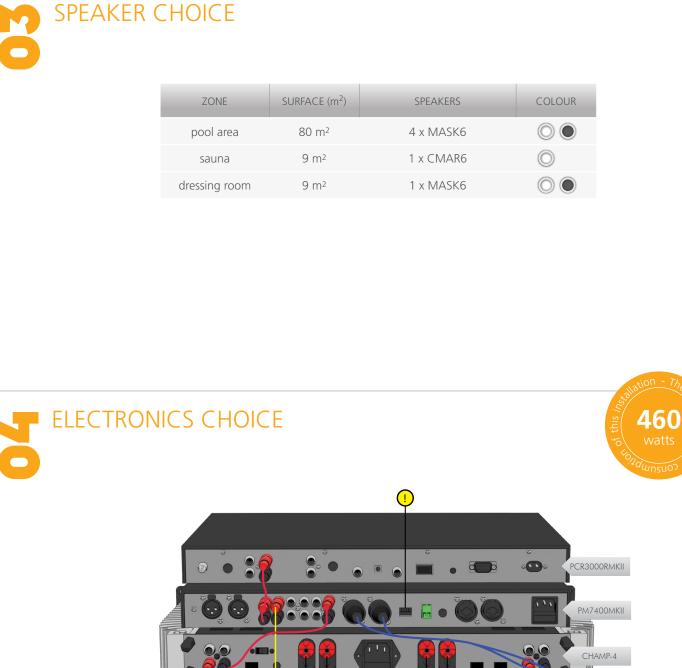


## Sports & Leisure

Private swimming pool, sauna Wellness center, ...



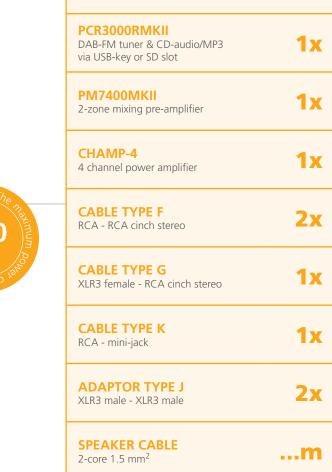
#### Is your project larger than the private pool in this example?



 $\hat{1}\hat{2}$ 

MP3 player

34





MASK6

CMAR6

6.5" cabinet speaker

SHOPPING LIST 



• •

**5**x

**1**x

1234



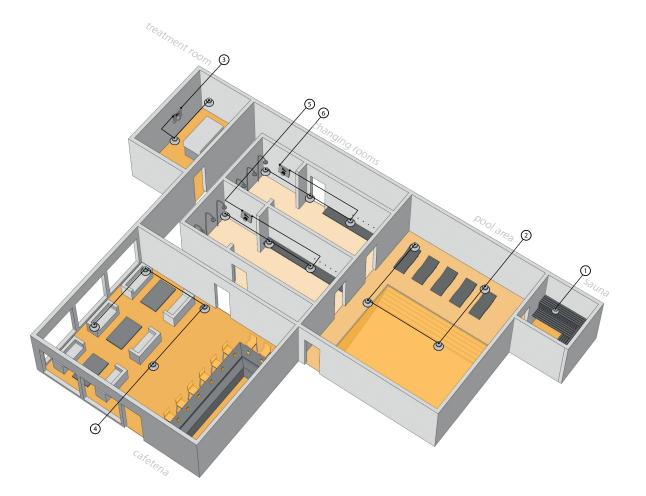
Wellness center Area: 250 m<sup>2</sup> - 350 m<sup>2</sup>

# CUSTOMERREQUESTS

- Sound system for relaxing background music
- Music from radio, CD and MP3 player

- 6 different zones, possibility to control the volume per zone
- Moisture resistant and rust free loudspeakers
- Superb sound and efficiency in humid environments
- Loudspeaker in sauna resistant to temperatures up to 95°C





### Sports & Leisure

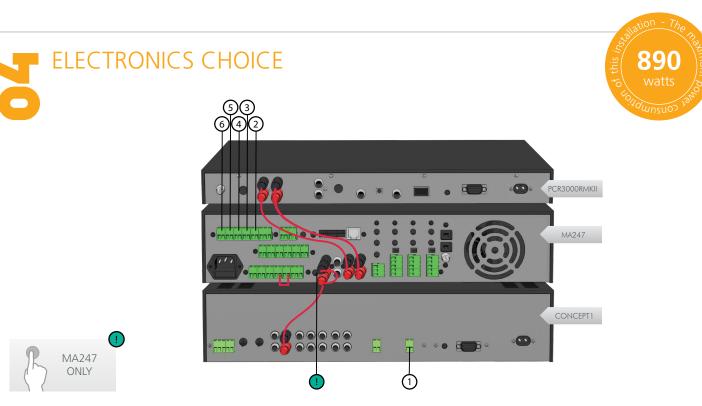
3eauty parlour, sauna Solarium, ...

0	CMAR6 speaker
$\odot$	CMX20T speaker
5	Volume controller
	Cable type K
	2-core speaker cable

#### Is your project larger than the wellness center in this example?

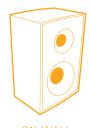


ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
treatment room	15 m <sup>2</sup>	2 x CMX20T + 1 x E-VOL40	5 watts	$\bigcirc \bigcirc$
pool area	80 m <sup>2</sup>	4 x CMX20T	20 watts	$\bigcirc \bigcirc$
sauna	15 m <sup>2</sup>	1 x CMAR6	/	$\bigcirc$
cafeteria	90 m <sup>2</sup>	4 x CMX20T	20 watts	$\bigcirc \bigcirc$
changing room 1 & shower	35 m <sup>2</sup>	3 x CMX20T + 1 x E-VOL40	10 watts	$\bigcirc \bigcirc$
changing room 2 & shower	35 m <sup>2</sup>	3 x CMX20T + 1 x E-VOL40	10 watts	$\bigcirc \bigcirc$



SHOPPING LIST		<b>K</b>
<b>CMAR6</b> 6.5" marine ceiling speaker	<b>1</b> x	
CMX20T 8" ceiling speaker	<b>16x</b>	
<b>E-VOL40</b> 40 watts euro volume controller	Зх	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
<b>CONCEPT1</b> Integrated stereo mixing amplifier	<b>1</b> x	Add
CABLE TYPE F RCA - RCA cinch stereo	<b>4x</b>	1
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	4

1.0 5 10



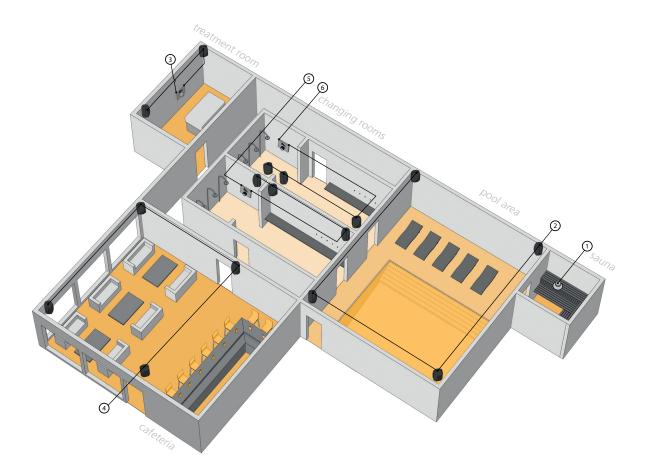
Wellness center Area: 250 m<sup>2</sup> - 350 m<sup>2</sup>

# CUSTOMERREQUESTS

- Sound system for relaxing background music
- Music from radio, CD and MP3 player

- 6 different zones, possibility to control the volume per zone
- Moisture resistant and rust free loudspeakers
- Superb sound and efficiency in humid environments
- Loudspeaker in sauna resistant to temperatures up to 95°C





### Sports & Leisure

Beauty parlour,sauna Solarium,…

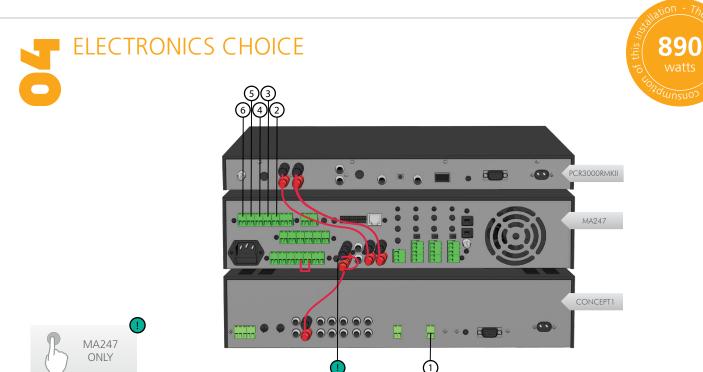


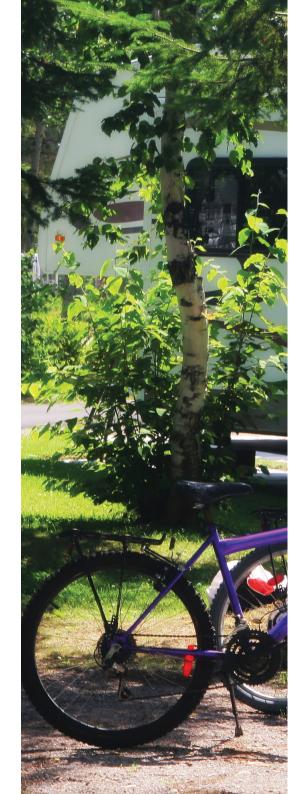
#### Is your project larger than the wellness center in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
treatment room	15 m <sup>2</sup>	2 x MASK4T + 1 x E-VOL40	5 watts	$\bigcirc \bigcirc$
pool area	80 m <sup>2</sup>	4 x MASK4T	20 watts	$\bigcirc \bigcirc$
sauna	15 m <sup>2</sup>	1 x CMAR6	/	$\bigcirc$
cafeteria	90 m <sup>2</sup>	4 x MASK4T	20 watts	$\bigcirc \bigcirc$
changing room 1 & shower	35 m <sup>2</sup>	3 x MASK4T + 1 x E-VOL40	10 watts	$\bigcirc \bigcirc$
changing room 2 & shower	35 m <sup>2</sup>	3 x MASK4T + 1 x E-VOL40	10 watts	$\bigcirc \bigcirc$

SHOPPING LIST MASK4T **16x** 4.2" cabinet speaker CMAR6 **1**x 6.5" marine ceiling speaker E-VOL40 **3x** 40 watts euro volume controller PCR3000RMKII **1**x DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot **MA247 1**x 5+1 zone 100 volt zone mixing amplifier **CONCEPT1 1**x Integrated stereo mixing amplifier **CABLE TYPE F 4x** RCA - RCA cinch stereo CABLE TYPE K **1x** RCA - mini-jack **SPEAKER CABLE** ...m 2-core 1.5 mm<sup>2</sup>





# OUTDOOR



Campground Area: 3100 m<sup>2</sup> - 5300 m<sup>2</sup>

### CUSTOMER REQUESTS

- One sound system for paging and background music
- campground: paging, music possible
- Inside zones & terrace: background music and paging
- Discrete and powerful ceiling speakers inside, high quality weatherproof cabinet speakers on the terrace, rustproof sturdy and powerful horns on pylons
- Music from radio/CD, MP3 from CD, USB-key or SD-card
- Selective paging microphone and volume control in the office

Outdoor

Campground, Animal park, County fair, Garden center, Holiday park, Public market, Theme park, Mini golf, Zoo, ...

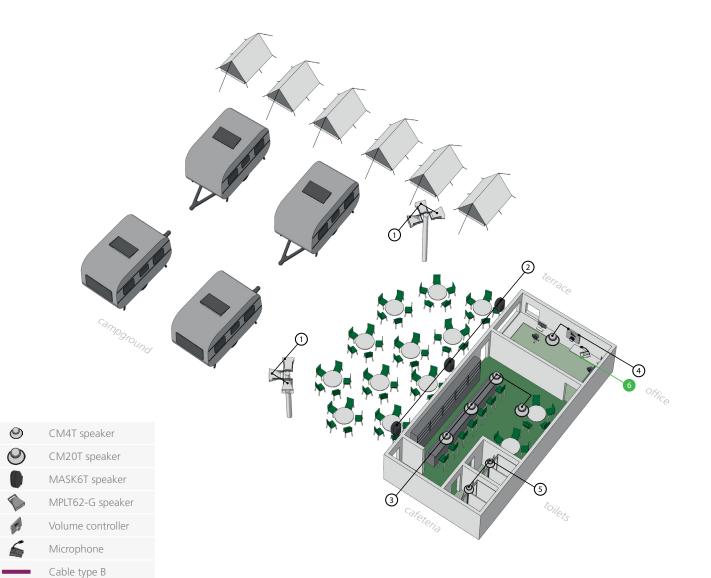


Cable type F

Cable type K

Audio signal cable

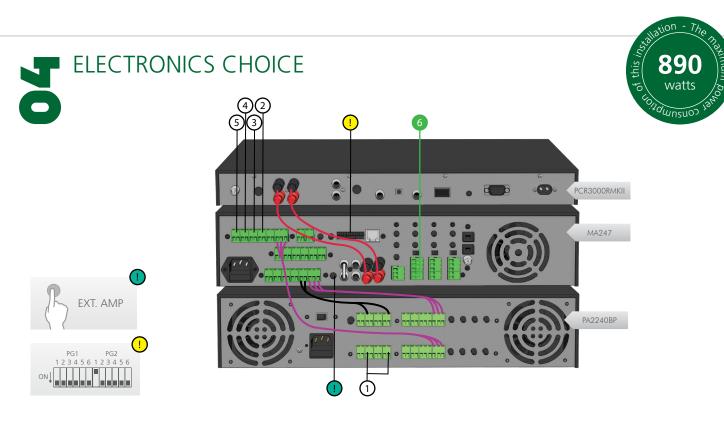
2-core speaker cable



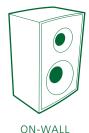
#### Is your project larger than the campground in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
campground	3000-5000 m <sup>2</sup>	6 x MPLT62-G	32 watts	$\bigcirc$
office	15-30 m <sup>2</sup>	1 x CM20T + 1 x E-VOL40	5 watts	$\bigcirc \bigcirc$
cafeteria	160-250 m <sup>2</sup>	4 x CM20T	20 watts	$\bigcirc \bigcirc$
terrace	60-200 m <sup>2</sup>	3 x MASK6T	30 watts	$\bigcirc$ $\bigcirc$
toilets	20-40 m <sup>2</sup>	2 x CM4T	6 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		
<b>CM4T</b> 4.2" ceiling speaker	<b>2x</b>	
<b>CM20T</b> 6.5" ceiling speaker	<b>5x</b>	
MASK6T 6.5" cabinet speaker	3x	
MPLT62-G Long throw music projector	<b>6x</b>	
<b>E-VOL40</b> 40 watts euro volume controller	<b>1</b> x	
MICPAT-2 2-zone table type dynamic microphone	<b>1</b> x	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	
<b>PA2240BP</b> Bridgeable 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2</b> x	tan anna an anna an an anna an an an an a
CABLE TYPE F RCA - RCA cinch stereo	<b>2x</b>	
CABLE TYPE K RCA - mini-jack	<b>1</b> x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



Campground Area: 3100 m<sup>2</sup> - 5300 m<sup>2</sup>

# CUSTOMERREQUESTS

- One sound system for paging and background music
- campground: paging, music possible
- Inside zones & terrace: background music and paging
- Discrete and powerful cabinet speakers inside, high quality weatherproof cabinet speakers on the terrace, rustproof sturdy and powerful horns on pylons
- Music from radio/CD, MP3 from CD, USB-key or SD-card
- Selective paging microphone and volume control in the office

### Outdoor

Campground, Animal park, County fair, Garden centre, Holiday park, Public market, Theme park, Mini golf, Zoo, ...



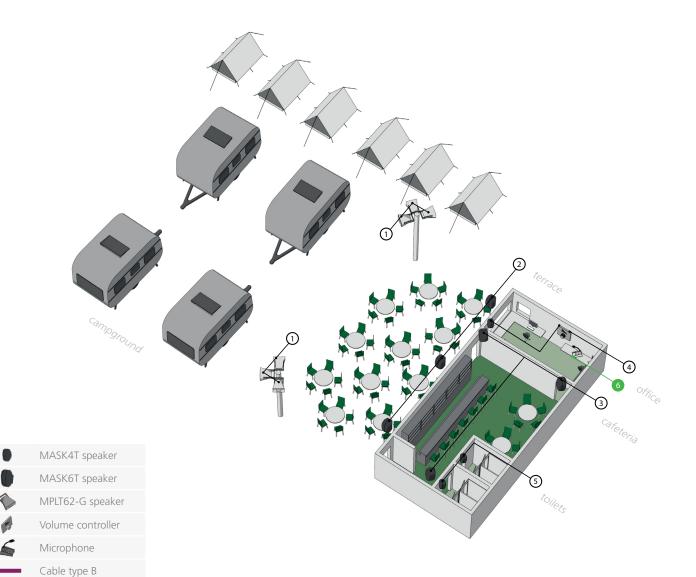
0

Cable type F

Cable type K

Audio signal cable

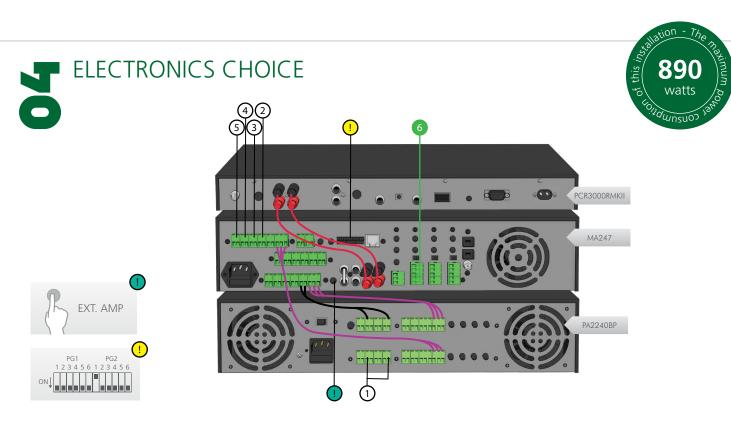
2-core speaker cable



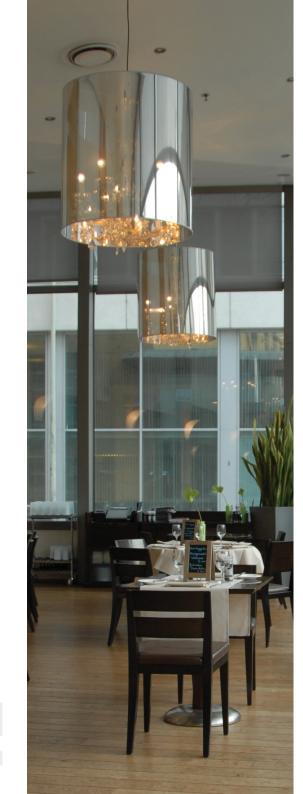
#### Is your project larger than the campground in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
campground	3000-5000 m <sup>2</sup>	6 x MPLT62-G	32 watts	$\bigcirc$
office	15-30 m <sup>2</sup>	1 x MASK4T + 1 x E-VOL40	10 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$
cafeteria	160-250 m <sup>2</sup>	3 x MASK6T	30 watts	$\bigcirc$ $\bigcirc$
terrace	60-200 m <sup>2</sup>	3 x MASK6T	30 watts	$\bigcirc$ $\bigcirc$
toilets	20-40 m <sup>2</sup>	2 x MASK4T	5 watts	$\bigcirc \bigcirc \bigcirc \bigcirc$



SHOPPING LIST		
MASK4T 4.2" cabinet speaker	3x	•
MASK6T 6.5" cabinet speaker	<b>6x</b>	
MPLT62-G Long throw music projector	<b>6</b> x	
E-VOL40 40 watts euro volume controller	<b>1</b> x	the second
MICPAT-2 2-zone table type dynamic microphone	<b>1</b> x	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
MA247 5+1 zone 100 volt zone mixing amplifier	<b>1</b> x	100
PA2240BP Bridgeable 2 x 240 watts 100 volt power amplifier	<b>1</b> x	
CABLE TYPE B EUROBLOCK - EUROBLOCK	<b>2</b> x	- All
CABLE TYPE F RCA - RCA cinch stereo	2x	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
AUDIO CABLE 2 x 2 x 0.22 mm <sup>2</sup> audio signal cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



# FOODSERVICE & HOSPITALITY

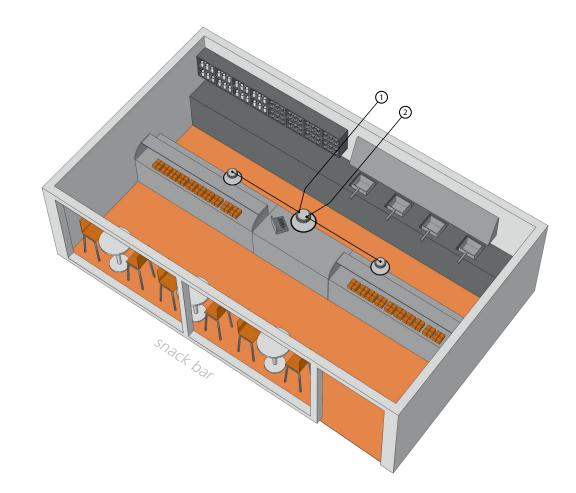


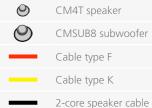
Snack bar Area: 40 m<sup>2</sup> - 70 m<sup>2</sup>

# CUSTOMERREQUESTS

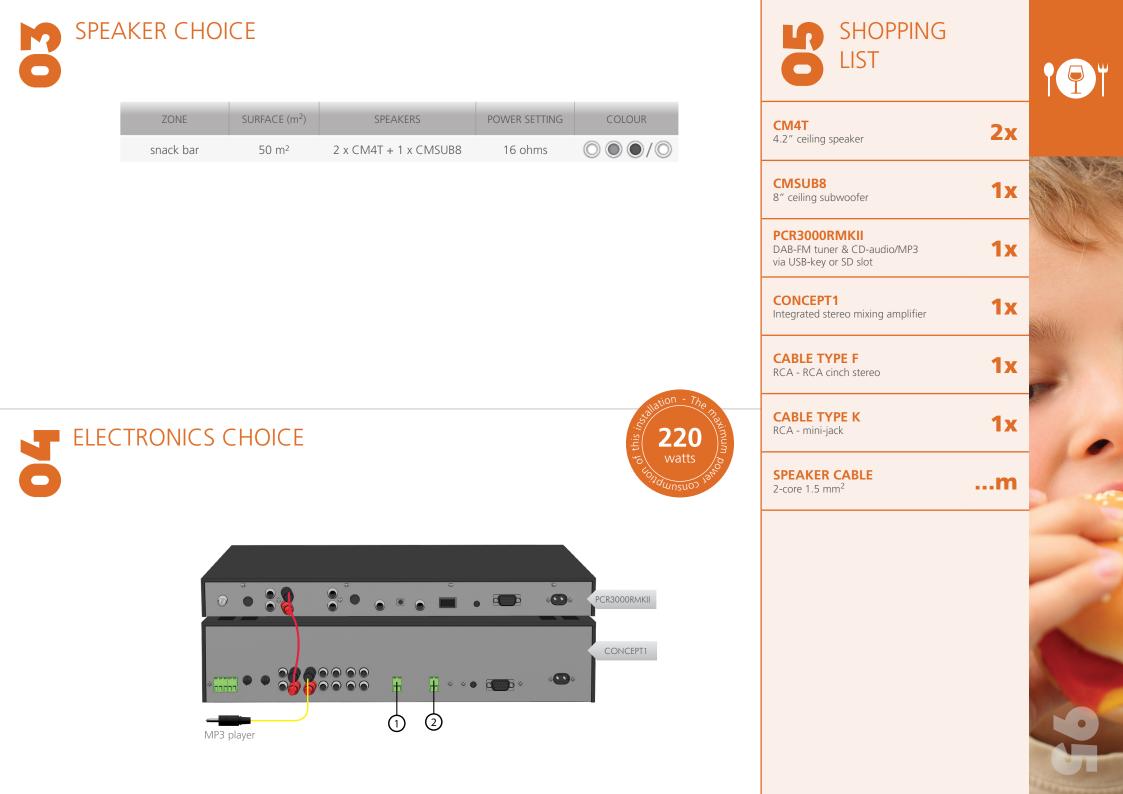
- Quality background music system
- Radio, CD and MP3 player
- Appealing & trendy atmosphere
- Good sound quality needed but should not be too loud
- Stylish and inconspicuous ceiling speakers

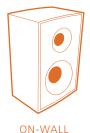






#### Is your project larger than the snack bar in this example?





Snack bar Area: 40 m<sup>2</sup> - 70 m<sup>2</sup>

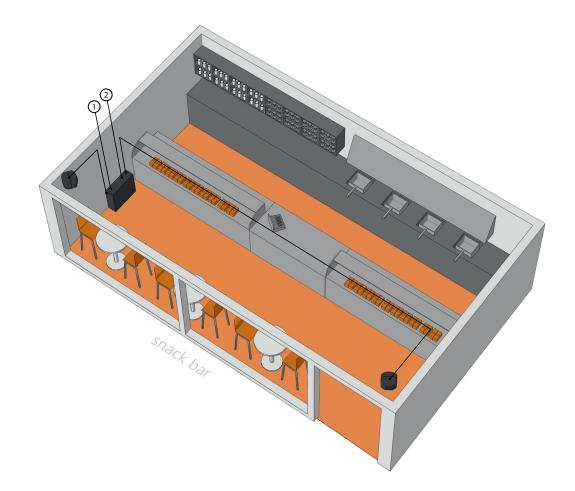
# CUSTOMERREQUESTS

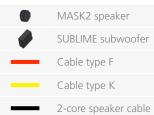
- Quality background music system
- Radio, CD and MP3 player
- $\equiv$  Appealing & trendy atmosphere
- Good sound quality needed but should not be too loud
- Discrete and fancy looking cabinet speakers



Pita bar, Fish & chij Take-away, ...







#### Is your project larger than the snack bar in this example?

SPEAKER	CHOICE					SHOPPING LIST		<b>!</b> ₽ĭ
	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	COLOUR		MASK2 2.5" cabinet speaker	<b>2x</b>	
	snack bar	50 m <sup>2</sup>	2 x MASK2 + 1 x SUBLIME	$\bigcirc \bigcirc / \bigcirc \bigcirc$		SUBLIME Passive subwoofer	<b>1</b> x	21
						PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	1
						<b>CONCEPT1</b> Integrated stereo mixing amplifier	<b>1</b> x	
						CABLE TYPE F RCA - RCA cinch stereo	<b>1</b> x	
	NICS CHOI	CE			the radius of th	<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
Ò					to watts o	SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
	MP3 player	0 <b>0</b> 00000						



Restaurant

Area: 120 m<sup>2</sup> - 220 m<sup>2</sup>

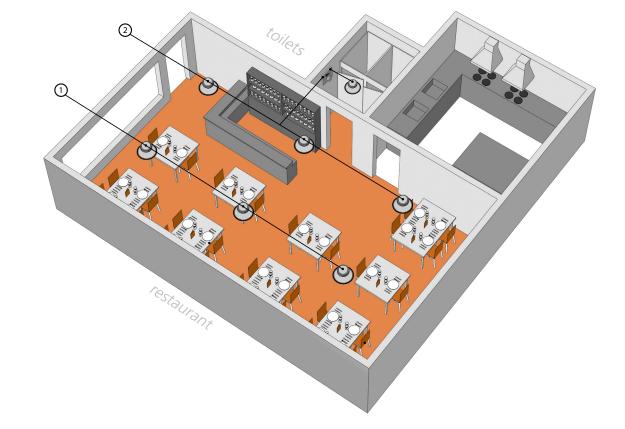
# CUSTOMERREQUESTS

- Classy atmosphere through quality background music
- Music from CD/MP3 or radio in restaurant and toilets
- Stylish ceiling speakers to match the interior style



Restaurant, Coffee house Tea house , ...





0	CM4T speaker
0	CM20T speaker
5	Volume controller
—	Cable type F
	Cable type K
	2-core speaker cable

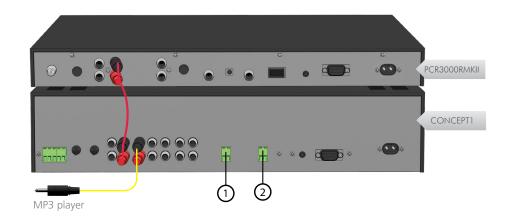
#### Is your project larger than the restaurant in this example?



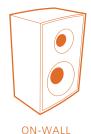
ł	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
	restaurant	120-220 m <sup>2</sup>	6 x CM20T	16 ohms	$\bigcirc$ $\bigcirc$
	toilets	10-20 m <sup>2</sup>	1 x CM4T + 1 x E-VOLST	16 ohms	$\bigcirc$ $\bigcirc$ $\bigcirc$

ELECTRONICS CHOICE





SHOPPING LIST		1 <b>9</b> ĭ
<b>CM4T</b> 4.2" ceiling speaker	<b>1</b> x	
<b>CM20T</b> 6.5" ceiling speaker	<b>6x</b>	•
<b>E-VOLST</b> 2 x 40 watts stereo volume controller	<b>1</b> x	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
<b>CONCEPT1</b> Integrated stereo 100 V mixing amplifier	<b>1</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>1</b> x	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	



Restaurant

Area: 120 m<sup>2</sup> - 220 m<sup>2</sup>

# CUSTOMERREQUESTS

- Quality background music to create a feelgood atmosphere
- Music from CD/MP3 or radio in restaurant and toilets
- Cabinet speakers to go with the interior style

### Foodservice & hospitality Restaurant, Coffee house,

Restaurant, Coffee house Tea house , ...



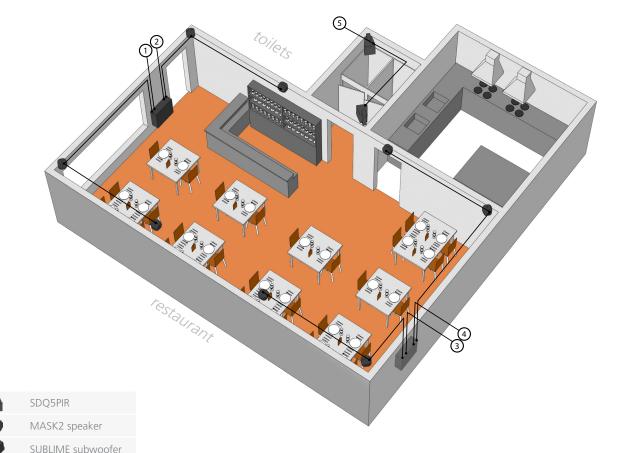
Wall controller Cable type C

Cable type F

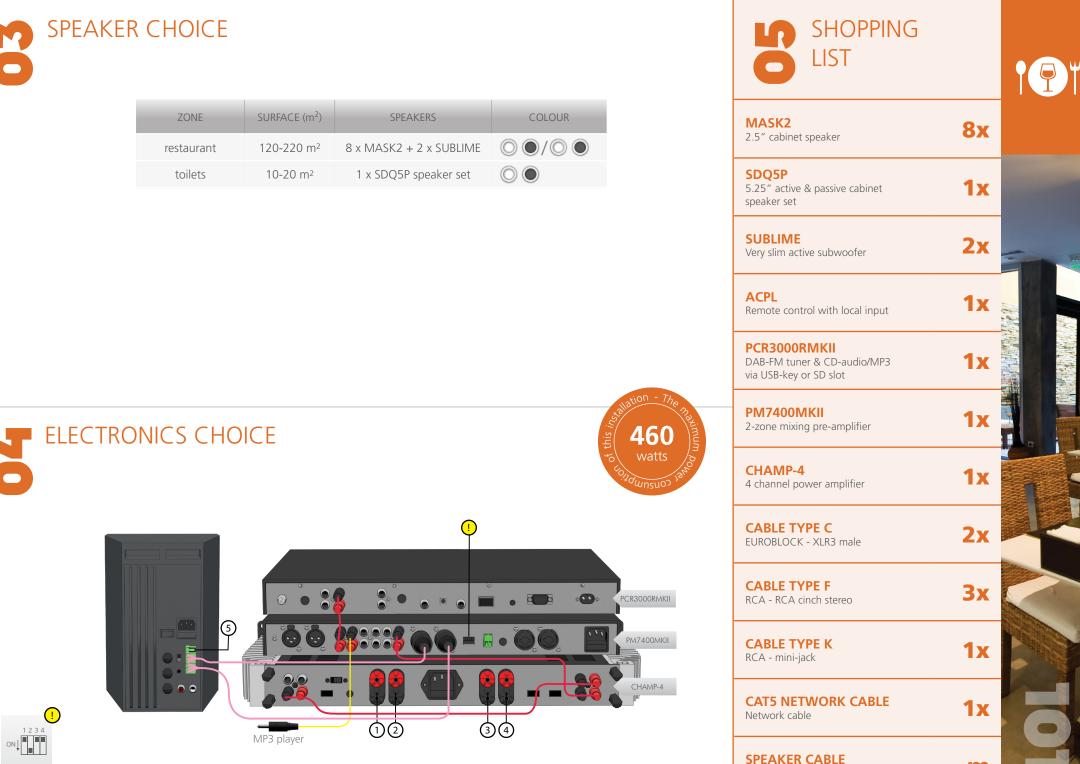
Cable type K

CAT5 cable

2-core speaker cable



#### Is your project larger than the restaurant in this example?



...m

2-core 1.5 mm<sup>2</sup>

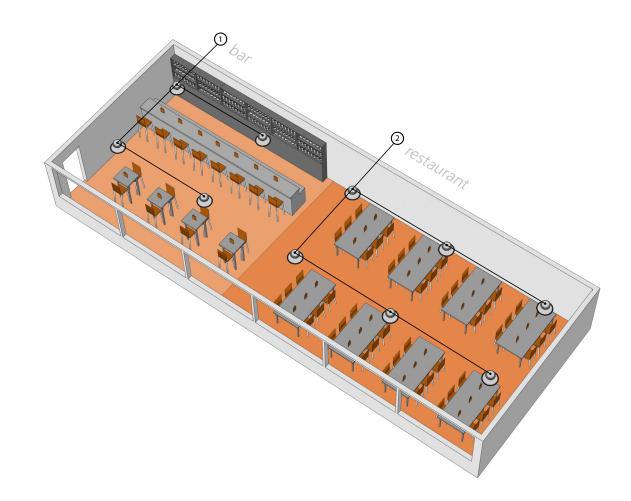


Cafeteria Area: 200 m<sup>2</sup> - 300 m<sup>2</sup>

# CUSTOMERREQUESTS

- Quality background music for a warm atmosphere
- Radio or CD / MP-3 from CD, USB-key or SD-card
- Quiet eating area louder bar area
- $\equiv$  Respect for the budget
- Ceiling speakers to go with functionality of the venue
- Possibility to connect one microphone





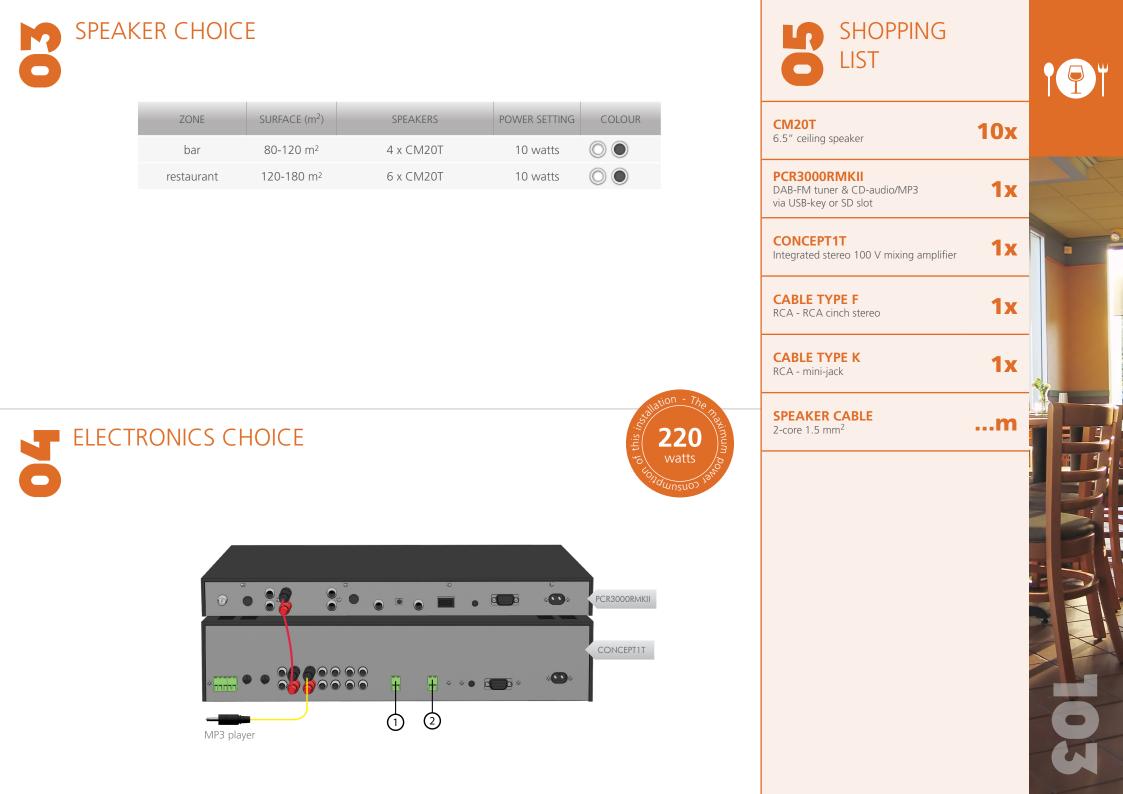


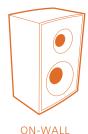
# Foodservice & hospitality

Billiard hall, Café, Tavern, Pub, Fast food restaurant, ...



#### Is your project larger than the cafeteria in this example?





Cafeteria Area: 200 m<sup>2</sup> - 300 m<sup>2</sup>

# CUSTOMERREQUESTS

- Quality background music for a warm atmosphere
- Radio or CD / MP-3 from CD, USB-key or SD-card
- Quiet eating area louder bar area
- Respect for the budget
- Stylish cabinet speakers to go with functionality of the venue
- Possibility to connect one microphone

Foodservice &

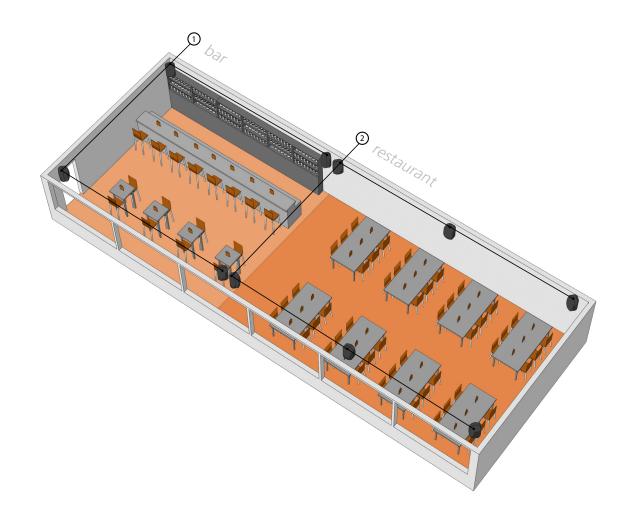
Fast food restaurant, ...

Billiard hall, Café, Tavern, Pub,

hospitality



0





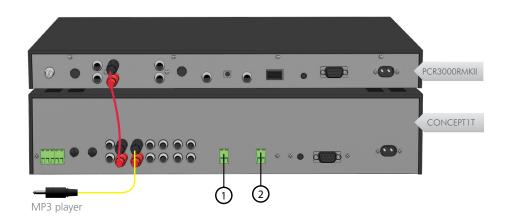
#### Is your project larger than the cafeteria in this example?



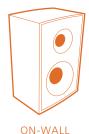
ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
bar	80-120 m <sup>2</sup>	4 x MASK6T	15 watts	$\bigcirc$ $\bigcirc$
restaurant	120-180 m <sup>2</sup>	6 x MASK6T	6 watts	$\bigcirc \bigcirc$

Ō





SHOPPING LIST		<b>19</b> ĭ
MASK6T 6.5" cabinet speaker	<b>10x</b>	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	
<b>CONCEPT1T</b> Integrated stereo 100 V mixing amplifier	<b>1</b> x	
CABLE TYPE F RCA - RCA cinch stereo	<b>1</b> x	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
		L L L L L L L L L L L L L L L L L L L



Bar 200 m<sup>2</sup>

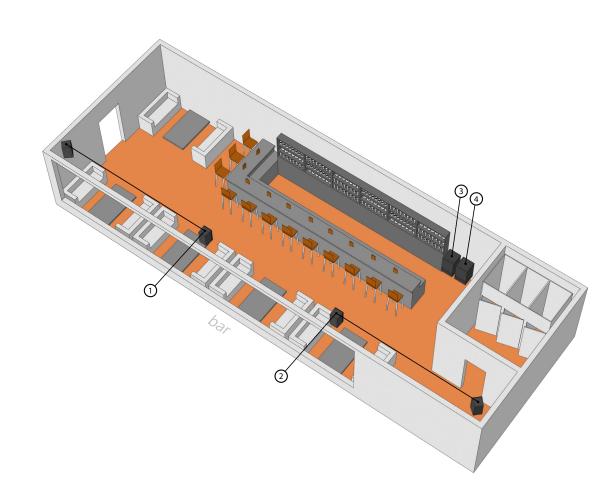
Т.

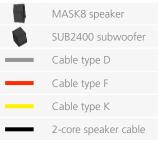
Area: 100 m<sup>2</sup>

# CUSTOMERREQUESTS

- Quality & Dynamic music determines the image of the bar
- Weekdays mostly quiet, but weekends are party nights
- Music from radio, CD or MP3, from background music to dance level
- Design cabinet speakers that fit the interior of the bar
- Possibility to connect 2 microphones







#### Is your project larger than the bar in this example?

Check the other case studies in the Plug & Play section on the Apart Audio website or contact your Apart dealer. He will help you to work out a project that exactly fits your clients requirements.

# Foodservice & hospitality

Bar, Café, Tavern, Pub, Lounge to dance, ...





**BUILT-IN** 

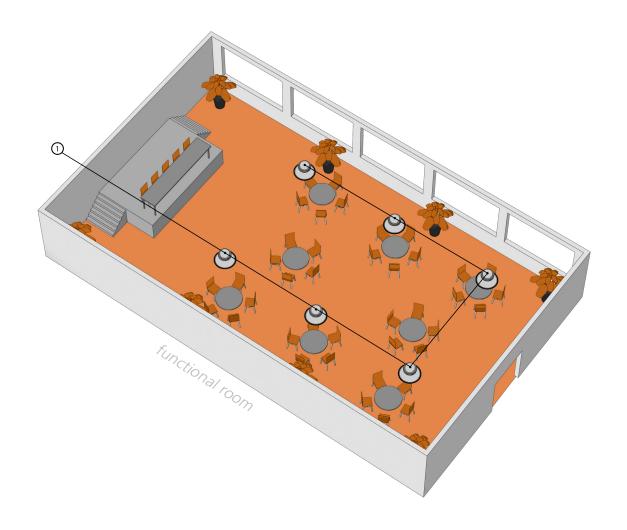
Functional room Area: 160 m<sup>2</sup> - 320 m<sup>2</sup>

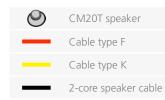
### CUSTOMERREQUESTS

■ Versatile quality sound system for a multifunctional room

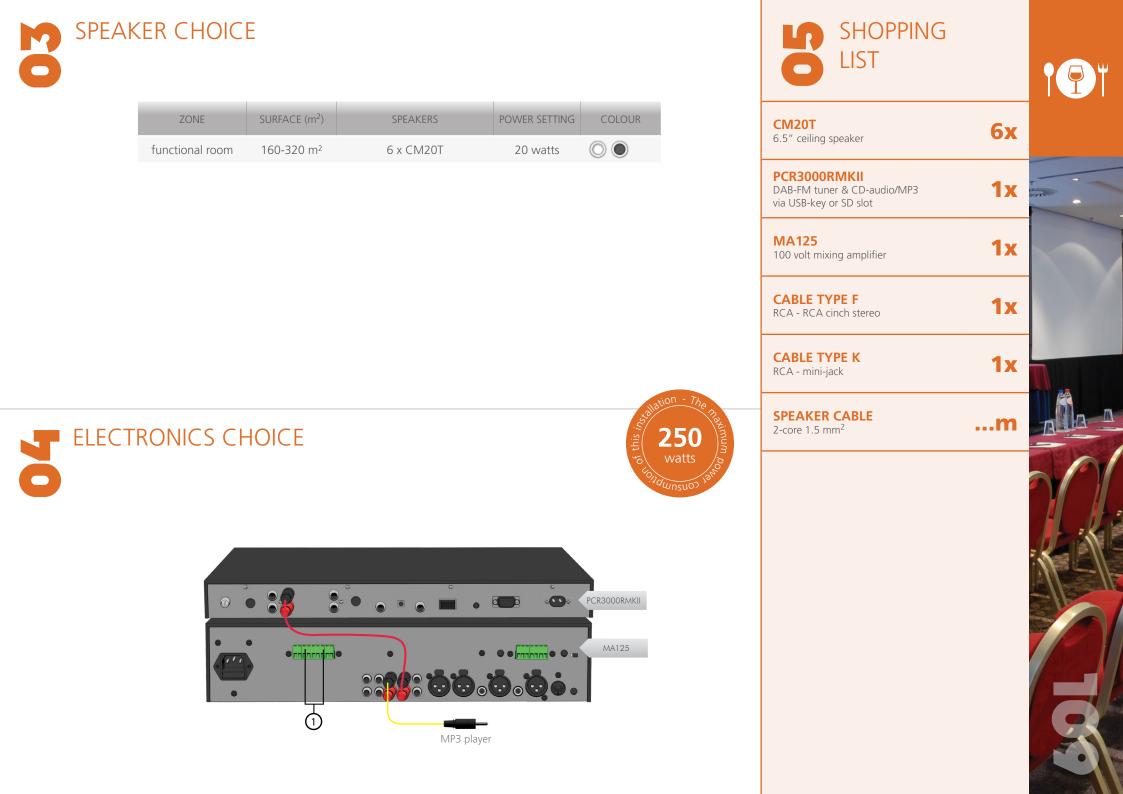
- Music from CD+radio and laptop. MP3 on CD/memory stick/SD card or personal audio device
- Possibility to use up to 4 microphones
- Inconspicious ceiling speakers to match the interior

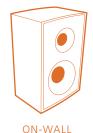






#### Is your project larger than the functional room in this example?





Functional room Area: 160 m<sup>2</sup> - 320 m<sup>2</sup>

#### CUSTOMER REQUESTS

■ Versatile quality sound system for a multifunctional room

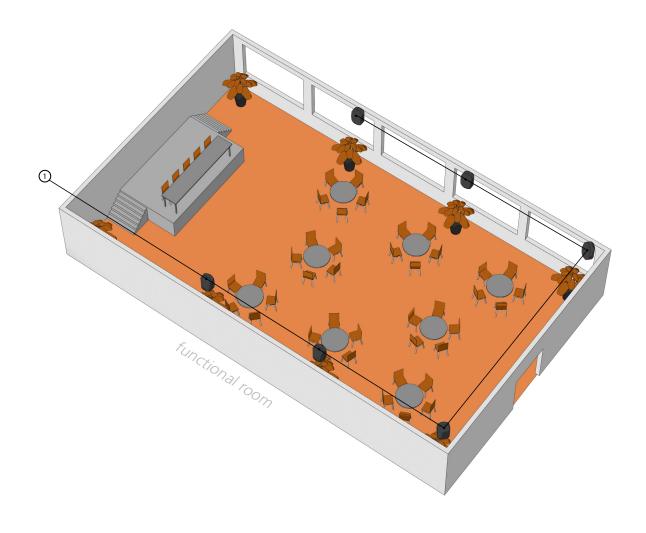
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- Music from CD+radio and laptop. MP3 on CD/memory stick/SD card or personal audio
- $\equiv$  Possibility to use up to 4
- Elegant cabinet speakers to match the interior

Foodservice &

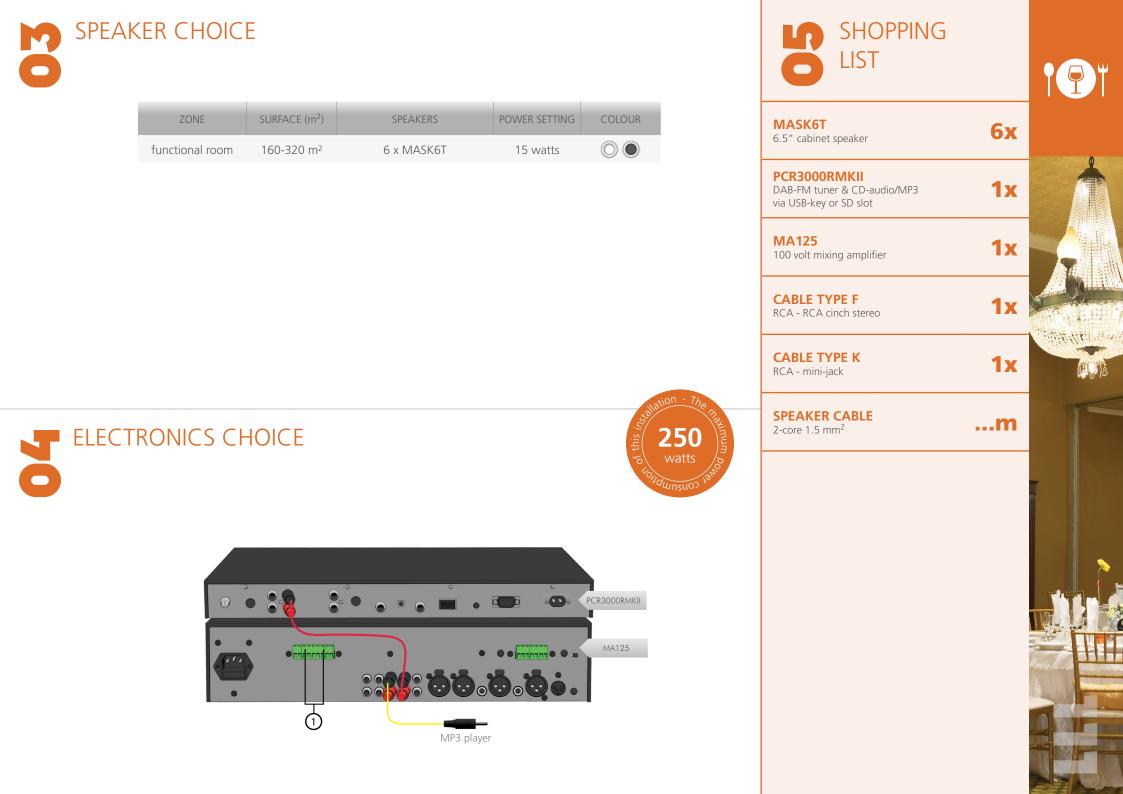
Functional room, Snooker hall,







#### Is your project larger than the functional room in this example?





# EDUCATION & RELIGION



BUILT-IN

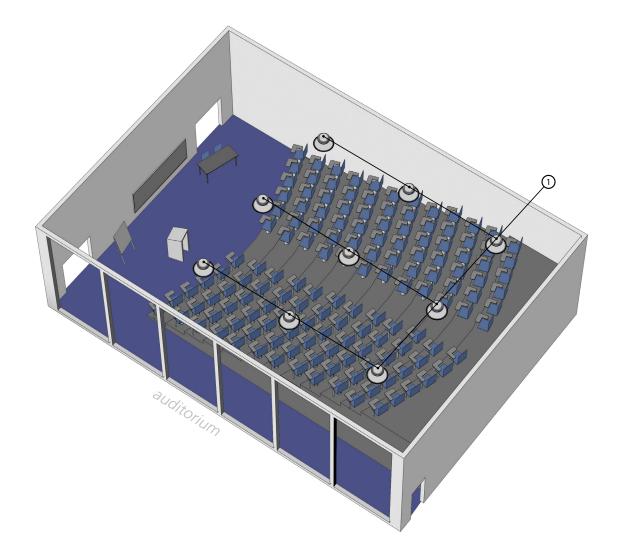
### CUSTOMERREQUESTS

- A sound system that is reliable and easy to use by non-technical staff
- Good audibility everywhere in the room
- Possibility to use up to 4 microphones
- Possibility to link a laptop. Music from radio, CD or MP3 player
- Stylish ceiling speakers to go with the style of the room



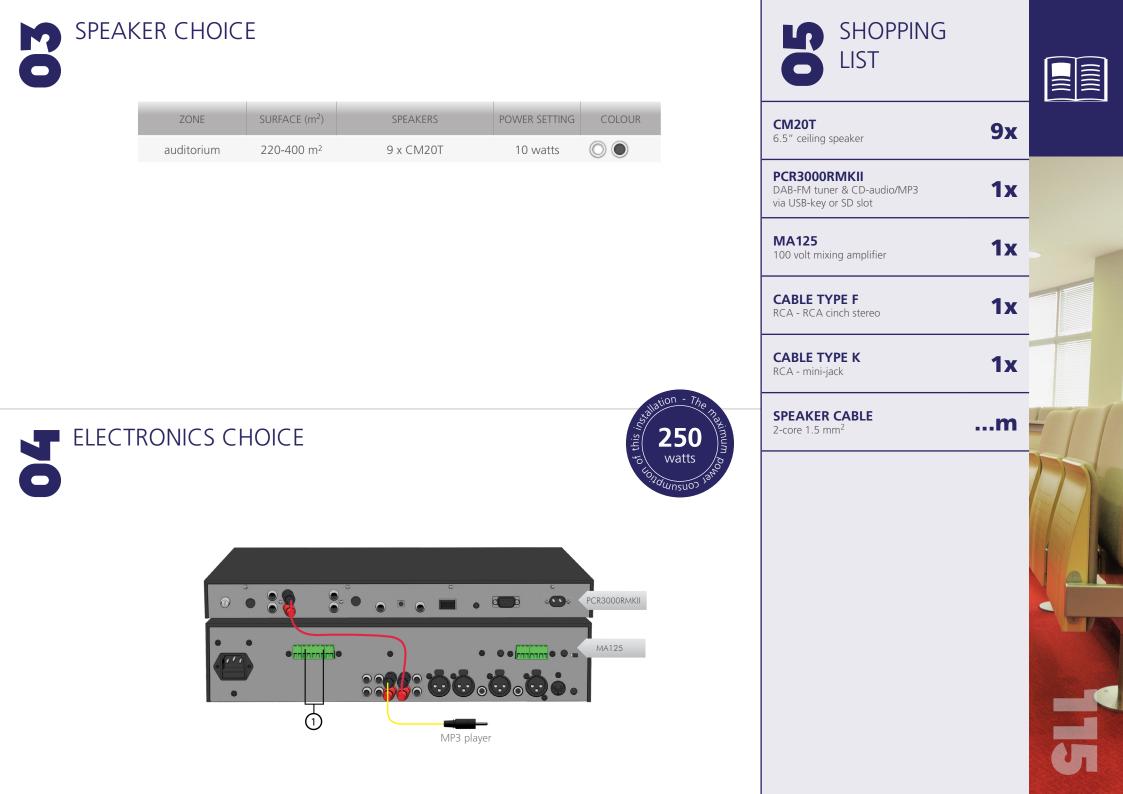


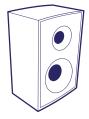
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#### Is your project larger than the auditorium in this example?





ON-WALL

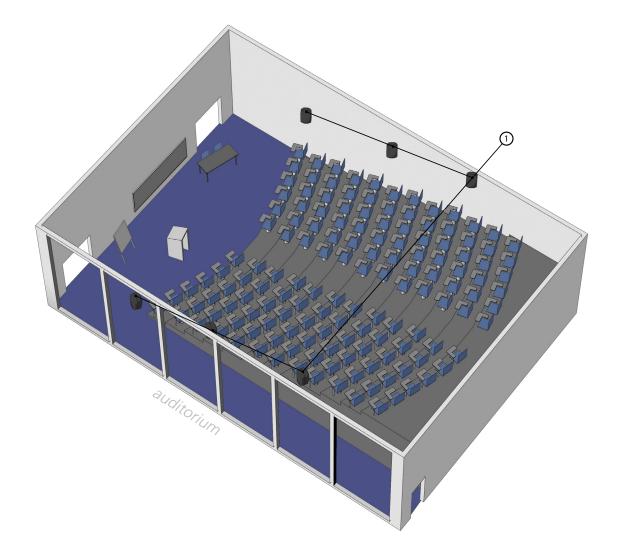
### CUSTOMERREQUESTS

- A sound system that is reliable and easy to use by non-technical staff
- Good audibility everywhere in the room
- Possibility to use up to 4 microphones
- Possibility to link a laptop. Music from radio, CD or MP3 player
- Design cabinet speakers to fit the interior style of the room



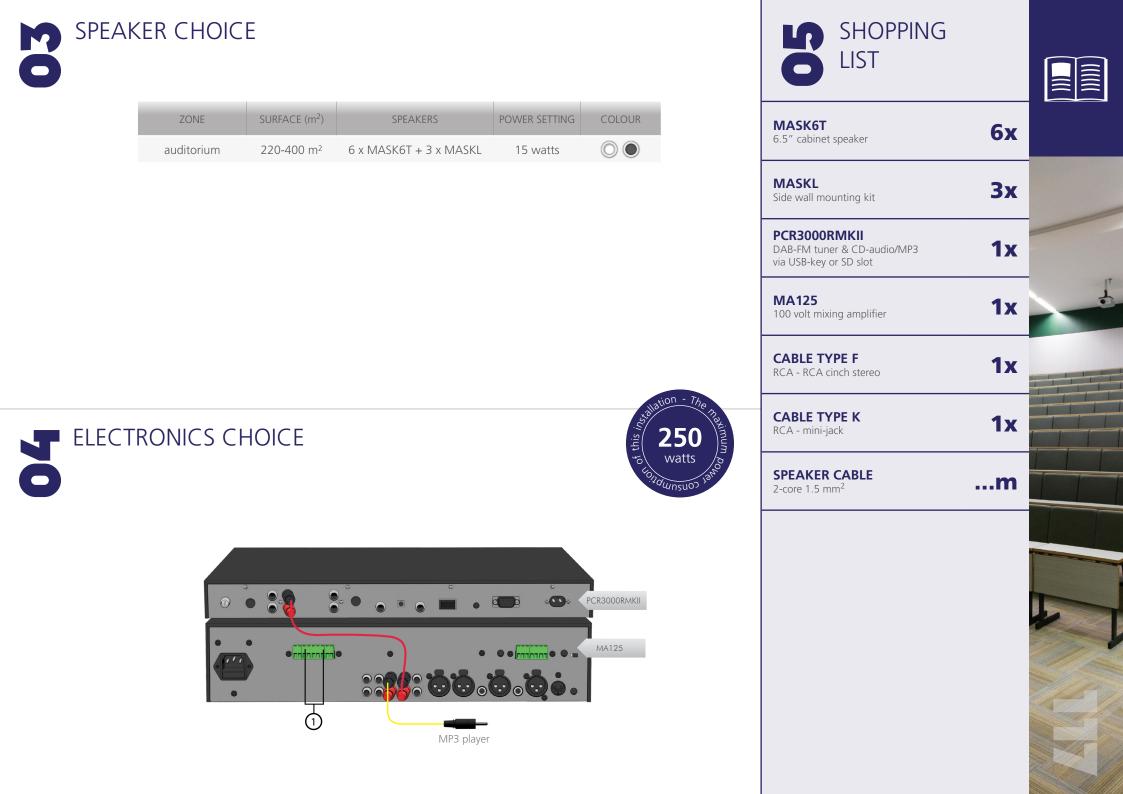


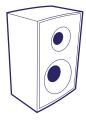
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#### Is your project larger than the auditorium in this example?





ON-WALL

### CUSTOMERREQUESTS

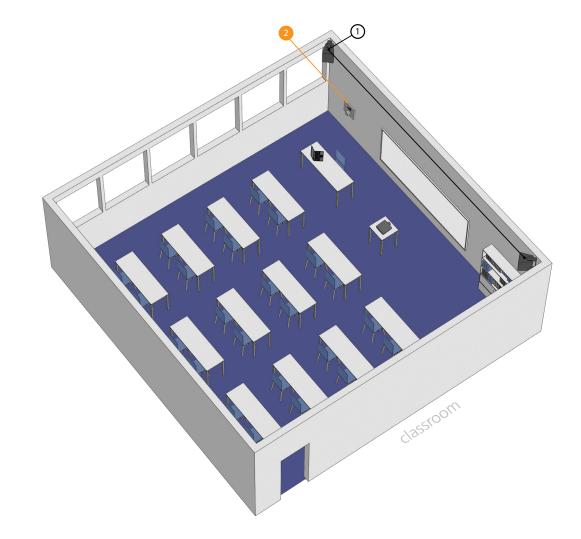
- Sound from laptop or microphone during presentations
- Wall controller for power and volume.
- Easy to operate by non technical staff
- Reliable and value for money





### FLOOR PLAN CLASSROOM

0

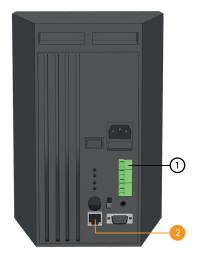


#### Is your project larger than the classroom in this example?



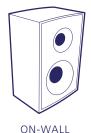
l	ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	COLOUR
	classroom	80-120 m <sup>2</sup>	1 x SDQ5PIR set + 1 x ACPL	$\bigcirc \bigcirc$

## 



SHOPPING LIST		
<b>SDQ5PIR SET</b> 5.25" active & passive cabinet speaker set	1x	
ACPL Remote control with local input	1x	
CAT5 NETWORK CABLE Network cable	1x	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	

sallation - The Inaximum of th



House of worship Area: 900 m<sup>2</sup> - 1200 m<sup>2</sup>

### CUSTOMERREQUESTS

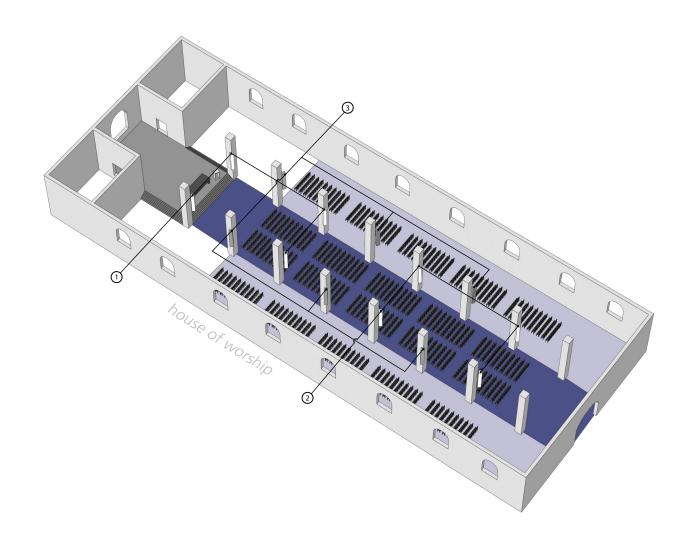
■ Excellent speech intelligibility and good music quality

0

- Column speakers that do not disturb the historical character of the building
- Possibility to use several microphones, music from CD or MP3 player
- A durable and easy-to-use sound system
- Individual volume control for 3 main seating areas



#### FLOOR PLAN HOUSE OF WORSHIP





#### Is your project larger than the house of worship in this example?



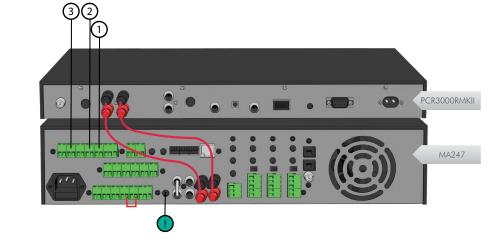
ELECTRONICS CHOICE

ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
center - front	200-300 m <sup>2</sup>	4 x COLW81	30 watts	$\bigcirc$
center	350-450 m <sup>2</sup>	6 x COLS81	6 watts	$\bigcirc$
center - rear	200-300 m <sup>2</sup>	4 x COLW81	30 watts	$\bigcirc$

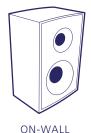
LIST COLS81 **6**x Extra slim column speaker **COLW81 8**x Slim column speaker PCR3000RMKII **1**x DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot **MA247 1**x 5+1 zone 100 volt zone mixing amplifier CABLE TYPE F **2x** RCA - RCA cinch stereo **CABLE TYPE K 1**x RCA - RCA cinch stereo **SPEAKER CABLE** ...m 2-core 1.5 mm<sup>2</sup>

SHOPPING









House of worship Area: 250 m<sup>2</sup> - 400 m<sup>2</sup>

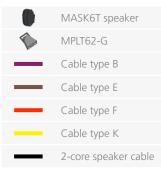
### CUSTOMERREQUESTS

■ Excellent speech intelligibility and good music quality

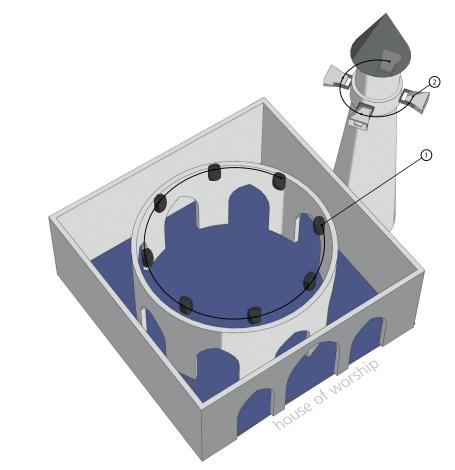
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- Minaret speakers with seperate volume control (Call to prayer)
- Possibility to use several microphones
- Music from radio, CD or MP3 player
- Minaret with separate volume control
- Design cabinet speakers to fit in the interior style
- Separate music source
- A durable and easy-to-use sound system

Education & Religion House of worship, ...



#### FLOOR PLAN HOUSE OF WORSHIP

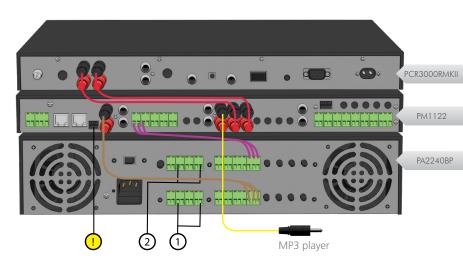


#### Is your project larger than the house of worship in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	POWER SETTING	COLOUR
house of wors	ship 300 m <sup>2</sup>	8 x MASK6T	30 watts	$\bigcirc \bigcirc$
outdoor	500 m <sup>2</sup>	4 x MPLT62-G	62 watts	$\bigcirc$

S ELECTRONICS CHOICE





SHOPPING LIST		
MASK6T 6.5" cabinet speaker	<b>8x</b>	
MPLT62-G Long throw music projector	<b>4</b> x	
PCR3000RMKII DAB-FM tuner & CD-audio/MP3 via USB-key or SD slot	<b>1</b> x	/
<b>PM1122</b> 4 channel power amplifier	<b>1</b> x	
<b>PA2240BP</b> Bridgeable 2 x 240 watts 100 volt power amplifier	<b>1</b> x	ф
<b>CABLE TYPE B</b> EUROBLOCK - EUROBLOCK	<b>1</b> x	
<b>CABLE TYPE E</b> EUROBLOCK - RCA cinch stereo	<b>1</b> x	
<b>CABLE TYPE F</b> RCA - RCA cinch stereo	<b>2</b> x	
<b>CABLE TYPE K</b> RCA - mini-jack	<b>1</b> x	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	
		R

ion

674 watts

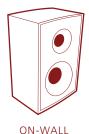
aunsu02

of this inc









Apartment Area: 200 m<sup>2</sup> - 300 m<sup>2</sup>

### CUSTOMERREQUESTS

- One multi-room system for the entire apartment
- Different music in all rooms of the apartment
- $\equiv$  4 tuners in one unit
- Control in each room via a wall control panel
- Doorbell signal audible through the loudspeakers
- Small and stylish cabinet loudspeakers in the living room
- Weatherproof cabinet loudspeakers on the terrace
- Good sound quality ceiling loudspeakers in bedroom and bathroom

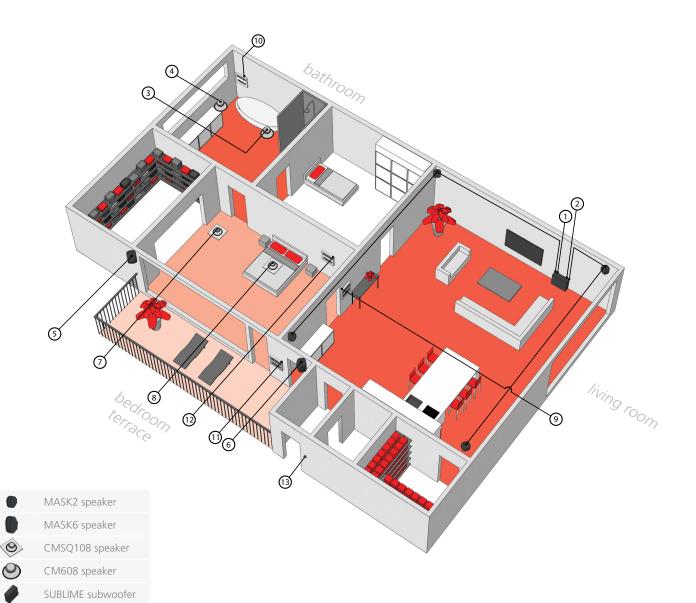
Residential Appartment , Residential house , ...



DIWAC wall control

2-core speaker cable

CAT5 cable



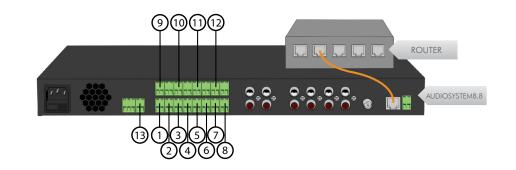
#### Is your project larger than the apartment in this example?



ZONE	SURFACE (m <sup>2</sup> )	SPEAKERS	COLOUR
living room	80 m <sup>2</sup>	4 x MASK2 + SUBLIME + DIWAC	$\bigcirc \bigcirc / \bigcirc \bigcirc$
bedroom	50 m <sup>2</sup>	2 x CMSQ108 + DIWAC	$\bigcirc$
bathroom	40 m <sup>2</sup>	2 x CM608 + DIWAC	$\bigcirc$ $\bigcirc$ $\bigcirc$
terrace	30 m <sup>2</sup>	2 x MASK6 + DIWAC	$\bigcirc$ $\bigcirc$

S ELECTRONICS CHOICE





SHOPPING LIST		
MASK2 2.5" cabinet speaker	<b>4x</b>	
MASK6 6.5" cabinet speaker	<b>2x</b>	
CMSQ108 5.25" two-way high-end loudspeaker	<b>2x</b>	
CM608 6.5" ceiling speaker	<b>2x</b>	
SUBLIME Passive subwoofer	<b>1</b> x	
AUDIOSYSTEM8.8 Audio matrix with 4 built-in FM tuners	1x	
<b>DIWAC</b> Digital programmable wall control	<b>4x</b>	
CAT5 NETWORK CABLE Network cable	m	
SPEAKER CABLE 2-core 1.5 mm <sup>2</sup>	m	

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