

SAUNA LIGHT.SOUND

Product Catalogue Season 2023/2024

www.collaxx.com

Infrared Cabin for wooden cabins

with infrared heaters



for wooden cabins with evaporator unit



for saunas up to 125°C also in the ceiling area



for tiled rooms with steam generator Utility Room

for installation outside the cabin

Legend



150°C Permanent Temperature for mounting directly above the sauna heater

125°C Permanent Temperature for use in saunas including the ceiling area



85°C Permanent Temperature suitable for steam bath



45°C Permanent Temperature for installation outside the cabin



Invisible Mounting

Steam Bath Proof for tiled rooms with steam generator



Lifetime Battery



LED Indicator for function control



Ma

Made in Austria

www.collaxx.com

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AUSTRIA

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Made in Austria collaxx products are exclusively developed and produced in Austria.



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Preface

19 years ago, when I drew the first sketches of a circuit diagram for a high-quality, sauna-proof colour light unit in my newly established engineering office, I could not have imagined what followed next. What started with a sketch turned into a lifelong passion. However, one commission led to the next one. Then we applied for our first patent and finally, I launched collaxx as a brand of mse elektronik gmbh, on the Austrian market.

collaxx colour light units are highly demanded because of their quality. As far as we can, we rely on Austrian suppliers, which pays back effectively. collaxx colour light units are unique: They were originally developed for commercial use. We are very proud of the fact that our products are the only ones resisting long-term temperatures of 125 ° C (257 ° F).

But all this would not be worth a penny, if I did not have an awesome, well-coordinated team that works together collaboratively. This is why this catalogue does not only include our products, it also takes you on a tour "behind the scenes". collaxx does not only represent colour authenticity and quality. collaxx also represents true dedication, commitment and attention to detail.

Thank you for sharing these values with us! On behalf of the whole collaxx-team I wish you an enjoyable read.

Martin Schmidlechner, MSc.



collaxx: Short introduction to a brand

collaxx is the brand of a company that has been known for many years for its innovative strength and ingenuity:

mse elektronik gmbh.

The company was founded by Martin Schmidlechner (MSc.) and Hannes Landertshamer (BSc.) in 2004 as a company in the field of industrial and automotive electronics in Frankenburg (Upper Austria).

Today the company has another headquarter in Graz. Since its founding, it has grown remarkably. One of our main principles is that the **development**, as well as the **production** take place in-house. Furthermore, we attach great importance to the use of **high-quality raw materials** only.

In 2008 the brand collaxx was established by mse elektronik gmbh. Our colour light units made in Austria have become a top brand, that is known for its outstanding quality. collaxx-products represent high standards in production and service.

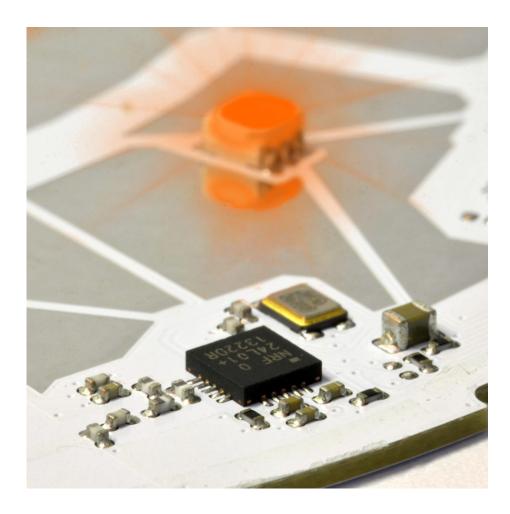


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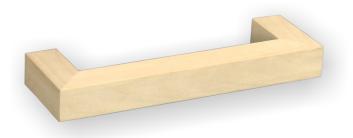
© Wellness design & Sauna manufacturer Georg Kammerlochner

Bio Sauna

Finnish Sauna



GENTLE SHINE GS26 Characterful Wall Lamp





- ⊘ LED replacement for spot lighting
- ⊘ Georg Kammerlochner design
- ⊘ Calibrated warm white with 2,700 Kelvin
- ⊘ Combinable with all collaxx products



CONTROL ADAPTER WITH INRUSH CURRENT LIMITER

By default, the Gentle Shine comes with a Control Adapter, which allows it to be directly connected to the light relay of any sauna controller.

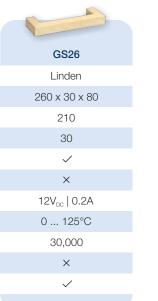


INVISIBLE MOUNTING

With a flush-set grub screw, mounting is reliable and nearly invisible. The enclosed drilling and sizing template ensures easy positioning.

TECHNICAL DATA

Type of wood	
Dimensions [mm]	260
Weight [g]	
Brightness [lm]	
Invisible mounting	
Pastel colours	
Operating voltage	12
Ambient temperature	0
LED lifetime [h]	
Automatic mode	
Status memory	





The Gentle Shine is ideal for staging wood designs.





Bio Sauna

Finnish Sauna



FL50 Little Miracle





- ⊘ Cabins up to 1.3 x 1.3m
- ⊘ 18 Power LEDs from Osram
- ⊘ Touch control or radio remote control
- ⊘ Programmable colour interval
- ⊘ Flicker-free and smooth colour transitions



FL50T WITH TOUCH CONTROL

The FL50T responds to a soft touch and has an automatic colour change with freely programmable time interval. The status memory always starts with white after an interruption of power supply.



FL50F WITH RADIO REMOTE CONTROL

Additionally the FL50F is dimmable and can be controlled wirelessly with all collaxx control options. For larger cabins, several lamps can be operated in parallel. The device is also popular as an indirect light source.

TECHNICAL DATA		
	FL50T	FL50F
Dimensions [mm]	Ø135 x 35	Ø135 x 35
Weight [g]	125	125
Brightness [lm]	96	96
Invisible mounting	\checkmark	\checkmark
Homogeneous light	\checkmark	\checkmark
Pastel colours	×	\checkmark
Operating voltage	12V _{DC} 1A	12V _{DC} 1A
Ambient temperature	0 125°C	0 125°C
LED lifetime [h]	30,000	30,000
Automatic mode	\checkmark	\checkmark
Status memory	\checkmark	\checkmark

INVISIBLE MOUNTING



All FL50 models are mounted with an invisible **bayonet lock.** They do not require a ceiling cutout and are therefore also ideal for **upgrading** existing saunas.





-

12

"We install collaxx colour lights in our saunas because it is a high quality and beautiful light with a good control. The devices are very durable and the service is perfect as well!"

> Peter Stoff Stoff GmbH

Bio Sauna

Finnish Sauna



FL201 Particularly Luminous





- ⊘ Cabins up to 2.5 x 2.5m
- ⊘ 56 Power LEDs from Osram
- ⊘ Homogeneous illumination
- ⊘ Unique design
- ⊘ Easy installation

FLUSH WITH THE CEILING



The flush version FL201VF can be seamlessly integrated into the ceiling with a protrusion of only 3.5mm.

It is developed and produced directly by us in Austria and designed for demanding commercial operation like all collaxx products.

On page 52 you will find the soundcapable Music Edition FL201 Music.

TECHNICAL DATA

DAIA		Section and the section of the secti
	surface mounted	flush with the ceiling
Type of wood	Alder	Alder
Dimensions [mm]	320 x 235 x 35	320 x 235 x 35
Ceiling cutout [mm]	-	300 x 215
Weight [g]	730	600
Brightness [lm]	290	290
Invisible mounting	×	×
Homogeneous light	\checkmark	\checkmark
Pastel colours	\checkmark	\checkmark
Operating voltage	12V _{DC} 2A	12V _{DC} 2A
Ambient temperature	0 125°C	0 125°C
LED lifetime [h]	30,000	30,000
Automatic mode	\checkmark	\checkmark
Status memory	\checkmark	\checkmark
Sound capable	×	→ page 52





Bio Sauna

Finnish Sauna



FL202 Powerful and Trendy







FL202 Acacia



made in Austria

- ⊘ Cabins up to 2.5 x 2.5m
- ⊘ 56 Power LEDs from Osram
- ⊘ Outstanding product design
- ⊘ Homogeneous illumination
- ⊘ Flicker-free and dimmable

CONTROL OPTIONS

4 keys



Wall Remote Control 12 different types of wood available → page 40

Hand Remote Control

Patented operation with



DMX Interface Compatible with Sentiotec, KNX, Loxone...→ page 42

→ page 41







Control Adapter Switching the light with the light relay \rightarrow page 44

TECHNICAL DATA

Type of wood	Obeche	Steamed Acacia
Dimensions [mm]	275 x 190 x 33	275 x 190 x 33
Ceiling cutout [mm]	-	-
Weight [g]	450	450
Brightness [lm]	290	290
Invisible mounting	\checkmark	\checkmark
Homogeneous light	\checkmark	\checkmark
Pastel colours	\checkmark	\checkmark
Operating voltage	12V _{DC} 2A	12V _{DC} 2A
Ambient temperature	0 125°C	0 125°C
LED lifetime [h]	30,000	30,000
Automatic mode	\checkmark	\checkmark
Status memory	\checkmark	\checkmark
Sound capable	×	×

FL202 Obeche







"At Delfin Wellness, we are about class not mass, people not markets, and sustainability. For us, longterm success is closely linked to high-quality products. Therefore, we use colour light units and batten lights from collaxx. The products made in Austria impress with their intense, homogeneous light. Thanks to their patented Heat Proof Technology, they are extremely durable."

> Reinhard Scharinger Delfin Wellness GmbH

(Bio Sauna)

(Finnish Sauna)

Steam Bath)

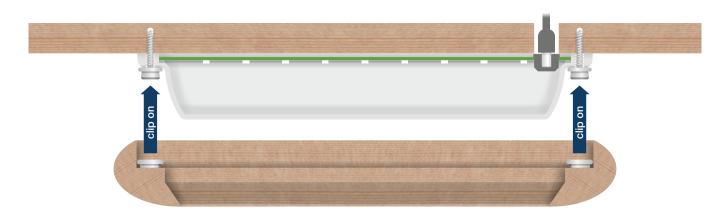


BRIGHTNESS

FL2000 Versatile Top Model

	360 lm
	260 lm
Constitues	245 lm
	360 lm
125°C flicker-free dimmable invisible integrated commercial made in Austria	460 lm
125°C flicker-free dimmable invisible integrated commercial made in Austria mounting LED controller use	365 lm
\odot Sufficient for cabins up to 3.5 x 3.5m	\bigcirc
Ø Super bright due to 90 Power LEDs from Osram	345 lm
⊘ Perfectly homogeneous due to specially developed diffusing plastomer	

- ⊘ Synchronous operation for large commercial saunas
- ⊘ Undestroyable due to Heat Proof Technology







FL2000 frameless





- ⊘ Perfectly integrated
- ⊘ Homogeneous and intensive
- ⊘ Robust and indestructible



FL2000 steam bath proof

- ⊘ Electronics with silicone encapsulation
- ⊘ Without wooden frame
- ⊘ Waterproof for steam baths

TECHNICAL DATA	classic	modern	exclusive	flush w. ceiling	frameless	steam bath
Available types of wood	Obeche, Alder, Cedar	Alder, Hemlock, American Nut	Obeche/Wenge, Wenge/Obeche	Alder, Hemlock, Linden, Swiss Stone Pine	-	-
Dimensions [mm]	363 x 267 x 35	352 x 256 x 35	360 x 264 x 35	361 x 266 x 35	336 x 241 x 35	336 x 241 x 35
Ceiling cutout [mm]	_	_	_	345 x 255	ev. 291 x 196 w. miter 30°	_
Weight [g]	900	900	900	850	620	900
Brightness [lm]	460	460	460	460	460	460
Invisible mounting	\checkmark	\checkmark	\checkmark	\checkmark	0	×
Homogeneous light	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Pastel colours	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Operating voltage	12V _{DC} 2A	12V _{DC} 2A	12V _{DC} 2A	12V _{DC} 2A	12V _{DC} 2A	12V _{DC} 2A
Ambient temperature	0 125°C	0 125°C	0 125°C	0 125°C	0 125°C	0 125°C
LED lifetime [h]	30,000	30,000	30,000	30,000	30,000	30,000
Automatic mode	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Sound capable	×	×	×	→ page 52	→ page 52	×



Finnish Sauna



EDGE LIT COLOUR LIGHT 50x50 | 75x30 Large and Modular





- ⊘ Cabins up to 3.5 x 3.5m
- ⊘ High quality finishing
- ⊘ Extremely flat design
- ⊘ Homogeneous light till the edge



FLUSH INSTALLATION

INVISIBLE MOUNTING

the ceiling.

The protruding **mounting flange** allows the lamp to be recessed completely flush into the sauna ceiling.

With the optional **clip-on wooden frame**, the light can be mounted easily and invisibly on

TWO SIZES AVAILABLE



The luminaire is available in the square version **KE 50x50cm** as well as in the oblong version **KE 75x30cm** to match the cabin design.

TECHNICAL DATA	KE 50x50cm	KE 50x50cm with wooden frame	KE 75x30cm	KE 75x30cm with wooden frame
Dimensions [mm]	530 x 530 x 18	539 x 539 x 18	780 x 330 x 18	790 x 339 x 18
Ceiling cutout [mm]	503 x 503	-	754 x 302	-
Weight [kg]	4.4	4.7	5.9	6.2
Brightness [lm]	250	250	250	250
Invisible mounting	\checkmark	\checkmark	\checkmark	\checkmark
Homogeneous light	\checkmark	\checkmark	\checkmark	\checkmark
Pastel colours	\checkmark	\checkmark	\checkmark	\checkmark
Operating voltage	12V _{DC} 1.5A	12V _{DC} 1.5A	12V _{DC} 1.6A	12V _{DC} 1.6A
Ambient temperature	0 125°C	0 125°C	0 125°C	0 125°C
LED lifetime [h]	30,000	30,000	30,000	30,000
Automatic mode	\checkmark	\checkmark	\checkmark	\checkmark
Status memory	\checkmark	\checkmark	\checkmark	\checkmark



Finnish Sauna



EDGE LIT COLOUR LIGHT 66x27 | 127x27 Real Eyecatcher





- ⊘ Cabins up to 3.5 x 3.5m
- ⊘ No separate frame required
- ⊘ Extremely flat design
- ⊘ Perfectly homogeneous light

FLUSH WITH THE CEILING



- just 3mm protrusion
- modern metallic look
- perfectly homogeneous illumination

TWO DIFFERENT LENGTHS



There are two sizes for you to choose from. The extremely compact design protrudes only 15mm into the ceiling. Thus, there is no thermal bridge, as it is not necessary to break the vapor barrier or add cut outs to the insulation.

TECHNICAL DATA

DATA		
	KE 66x27cm	KE 127x27cm
Dimensions [mm]	745 x 355 x 18	1.355 x 355 x 18
Ceiling cutout [mm]	670 x 280 x 15	1.280 x 280 x 15
Weight [kg]	4.1	7.9
Brightness[lm]	250	450
Invisible mounting	×	×
Homogeneous light	\checkmark	\checkmark
Pastel colours	\checkmark	\checkmark
Operating voltage	12V _{DC} 1.4A	12V _{DC} 2.6A
Ambient temperature	0 125°C	0 125°C
LED lifetime [h]	30,000	30,000
Automatic mode	\checkmark	\checkmark
Status memory	\checkmark	\checkmark

REPLACE TUBE LIGHTS



The dimensions of the two models KE 66x27cm as well as KE 127x27cm are perfect for replacing and old EOS FL 2000 or EOS FL 2001 **tube lamp**.

collaxx: Impossible? – Not for us!

Our **product development** is best described using one word: flexible. Thanks to our motivated team, a flat hierarchy and little bureaucracy, we achieve what others still dream of: We develop high-end products and are dedicated to fulfil almost every customer's wish in the shortest possible time.

We develop our own software — and are thus proud pioneers in the field of colour lights!

Only the collaxx software guarantees high-temperatureresistant products with flicker-free light quality. Our development team is always happy to solve new challenges and come up with something special.

In the next paragraph you will get an insight of Dietmar's work for collaxx and the development of our proprietary software.

Dietmar is an experienced technician at collaxx and specialises in development of static firmware. This is the absolute supreme discipline of software development. In contrast to today's practice, it is not possible to correct any errors in our products by means of subsequent updates. Dietmar is a true expert in this field and his expertise is of great value to the company.

As a very conscientious person, Dietmar attaches great importance to ensuring that every detail is solved correctly and that the products developed offer the highest quality. He is always striving to meet the customer's demands and fulfil individual customer requests. With his technical expertise and knowledge, he consistently succeeds in developing innovative solutions. Dietmar enjoys tinkering and continuously improving the products. He is always looking for new ways to optimise the performance and functionality of the firmware. With Dietmar as part of the team, collaxx can be confident that the products are equipped with the best firmware available. His expertise, drive for perfection and passion for technical innovation make him a valuable asset to the company.

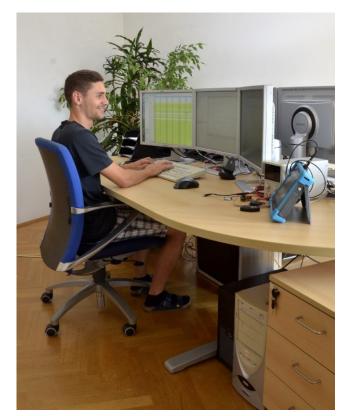


Fig. 1: A colour light unit runs over 10,000 lines of code

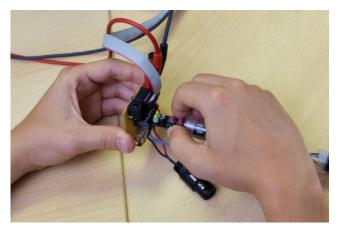


Fig. 2: Dietmar programming a DMX Interface



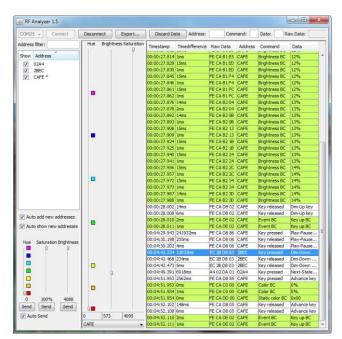


Fig. 1: The radio protocol of the colour light units is always monitored with an in-house developed diagnostic tool

Unique know-how

collaxx colour lights are smart devices that make your everyday life easier. Integrated temperature sensors allow the LEDs to respond to heat individually. So they are guaranteed to be protected from overheating for a whole service-life.

What Dietmar thinks about working for mse elektronik gmbh, manufacturer of collaxx:

"Even when I started as a trainee at mse elektronik gmbh, I was trusted to work on own projects such as the collaxx DMX Interface. Today, I am studying at Graz University of Technology. I think this is a great opportunity to combine my university know-how with collaxx software development."

collaxx-Tipp!

Our colour light devices can be controlled in many different ways.

More about this starting on page 38!

7 Reasons in favour of collaxx



Heat Proof Technology

The patented control process allows 30,000 hours of operation and permanently protects the LEDs at temperatures up to 150°C.



Designed for commercial saunas

Our know-how as well as high quality components allow maximum stress: Proven commercial operation since 18 years.



Product innovation factor

Every year, 25% of our sales are invested in product development. In-house research ensures highest quality.



2,500 working hours

At least 2,500 working hours of development time go into every new collaxx product. That's more than 1½ man-years.

10,000 lines of source code

from our own software development are required for the reliable operation of each individual colour light unit.



10 different programming languages

are used daily by the in-house development team to create the extremely robust operating software of our collaxx products.

Worldwide unique



The temperature resistance of up to 125°C required by the standard can only be achieved by our directly integrated LED drivers.

BATTEN LIGHTS

© manz-döbele GmbH



"We produce high quality saunas, infrared cabins and steam baths in our factory in Murg am Hochrhein. However, we can only deliver an exquisite end product if the choice of basic materials has already been made carefully. That is why we are partners of collaxx and appreciate their products."

> Steffen Manz manz-döbele GmbH

Bio Sauna

Finnish Sauna

MODULAR BATTEN LIGHTS Playing With Possibilities

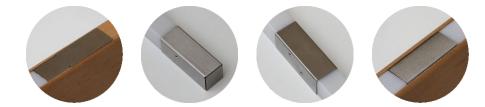




- ⊘ Available in 22cm and 49cm
- ⊘ Calibrated colours
- ⊘ Dimmable and flicker-free
- ⊘ Combinable with all devices
- ⊘ Multiple mounting possibilities
- ⊘ With Heat Proof Technology

COVER CLASPS

For a high-quality look at the junctions and ends, even with flushmounted modules.



FITTINGS LL49 SETS

Set 1xLL49
Set 2xLL49
Set 3xLL49
Set 4xLL49
Set 5xLL49
Set 6xLL49
Set 7xLL49
Set 8xLL49

	Pe
cables	power supply
1x 3m	12V _{DC} 1A
1x 3m + 1x 1m	12V _{DC} 1A
2x 3m + 1x 1m	12V _{DC} 2A
2x 3m + 2x 1m	12V _{DC} 2A
3x 3m + 2x 1m	12V _{DC} 3,3A
3x 3m + 3x 1m	12V _{DC} 3,3A
4x 3m + 3x 1m	12V _{DC} 5A
4x 3m + 4x 1m	12V _{DC} 5A

FITTINGS
LL22 SETS

Set 1xLL22
Set 2xLL22
Set 3xLL22
Set 4xLL22
Set 5xLL22
Set 6xLL22
Set 7xLL22
Set 8xLL22
Set 9xLL22
Set 10xLL22

cables								
1x 3m								
1x 3m + 1x 1m								
2x 3m + 1x 1m								
2x 3m + 2x 1m								
3x 3m + 2x 1m								
3x 3m + 3x 1m								
4x 3m + 3x 1m								
4x 3m + 4x 1m								
5x 3m + 4x 1m								
5x 3m + 5x 1m								

	2
--	---

TECHNICAL DATA

TECHNICAL	2	
DATA	9	
	LL22	LL49
Dimensions [mm]	220 x 15 x 15	490 x 15 x 15
Weight [g]	29	61
Brightness [lm]	45	120
Invisible mounting	×	×
Homogeneous light	\checkmark	\checkmark
Pastel colours	\checkmark	\checkmark
Operating voltage	12V _{DC} 0.2A	12V _{DC} 0.5A
Ambient temperature	0 125°C	0 125°C
LED lifetime [h]	30,000	30,000
Automatic mode	\checkmark	\checkmark
Status memory	\checkmark	\checkmark



DIRECT CONNECTOR

DC double plug for direct connection of two modular batten lights without DC cable in between.







"It is important to me to treat each customer as I would like to experience a sales conversation as a customer. The continuous batten lights from collaxx are really easy to handle, flicker-free and dimmable. A perfect eye-catcher in every professionally made sauna!"

> Claudia Görs TEKA-Saunabau GmbH

an and Sarat (the second Sarat S

Bio Sauna

Finnish Sauna



CONTINUOUS BATTEN LIGHTS Seamless Integration



© TEKA-Saunabau GmbH



- ⊘ No glare thanks to milk glass
- ⊘ Easy plug & play installation
- ⊘ Direct or indirect mounting
- ⊘ Up to 7 meters continuous light
- ⊘ With Heat Proof Technology
- ⊘ Developed for commercial use

TECHNICAL DATA

DATA	continuous batten lights
Cross section [mm]	15 x 15
Weight [g/m]	130
Brightness [lm/m]	200
Invisible mounting	\checkmark
Homogeneous light	\checkmark
Pastel colours	\checkmark
Operating voltage	12V _{DC} 1.05A/m
Ambient temperature	0 125°C
LED lifetime [h]	30,000
Automatic mode	\checkmark
Status memory	\checkmark

HOLDING CLAMPS

The transparent holding clamps allow easy and servicefriendly installation.





AVAILABLE IN A 9cm LENGTH GRID

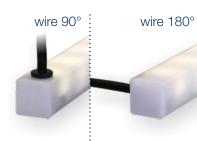
20cm	38cm	47cm	56cm	65cm	74cm	83cm
92cm	101cm	110cm	119cm	128cm	137cm	146cm
155cm	164cm	173cm	182cm	191cm	200cm	209cm
218cm	227cm	236cm	245cm	254cm	263cm	272cm
281cm	290cm	299cm	308cm	317cm	326cm	335cm
344cm	353cm					



on both sides

DC plug i wire on front side





wire 270°



Bio Sauna

Steam Bath



MAXIMUM LOADABLE BATTEN LIGHTS For Extreme Conditions



© WELLNESSBEREICHE SETZ GmbH



- ⊘ Silicone pottet aluminium profile
- ⊘ Extremely resistant up to 150/175°C
- ⊘ Installable directly above the sauna heater
- ⊘ Suitable for steam baths thanks to IP65
- ⊘ Extra flat design
- ⊘ Designed for commercial use

SILICONE POTTET ALUMINIUM PROFILE

Full functionality up to an ambient temperature of 150°C. At higher temperatures up to a maximum of 175°C, the power supply is switched off internally.

Intended for use in the ceiling area directly above the sauna heater. Water-proof due to the fully potted design and therefore also suitable for steam baths.

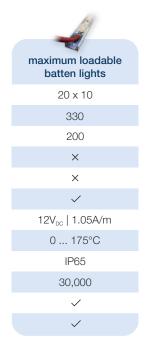


AVAILABLE IN A 9cm LENGTH GRID

24cm	42cm	51cm	60cm	69cm	78cm	87cm
96cm	105cm	114cm	123m	132cm	141cm	150cm
159cm	168cm	177cm	186cm	195cm	204cm	213cm
222cm	231cm	240cm	249cm			

TECHNICAL DATA

Cross section [mm] Weight [g/m] Brightness [lm/m] Invisible mounting Homogeneous light Pastel colours Operating voltage Ambient temperature Protection class LED lifetime [h] Automatic mode Status memory



collaxx: colour light units made in Austria

You would like to know how we manufacture collaxx colour lights? Excellent! Join us on a tour behind the scenes! We show you how our colour light units are produced.

Where it begins: The production department

Our manufacturing department is small, but powerful. Our team does not miss anything in terms of efficiency. Melanie is also a part of the team and works for mse elektronik, producing collaxx products, for 12 years now.

For this catalogue, she has agreed to return to her beginnings and to build one of our much beloved products: a continuous batten light. We accompanied her and documented some of the production steps for you.

25 production steps and 500 small components or: Joy for a whole sauna-life!

Up to 500 small components are processed in one LEDstrip (Fig. 1). Some of these small parts have a surface of only 0.5mm². Before processing these parts, Melanie mills and deburrs the end covers and DC jacks (Fig. 2).

In the next step, she calibrates, programs and tests the single PCBs (Fig. 3). Combining elements of different length guarantees flexible soultions. Our standard LED-strips consist of 22, 49 and 58cm long, fully autonomous segments.

Melanie uses press-fit technology in order to wire the strips (Fig. 4). This insulation displacing connection technology is more consistent than pure soldering, because it means more freedom of thermal movement for the boards.

Next, the light-strip is provided with a foil and tested with the supply wiring. If everything runs smoothly, Melanie glues the end-covers to the batten lights. Finally, the strip is packed, provided with a delivery note and dispatched to the customer.



Fig. 1: One LED strip consists of approximately 500 components. Each year, we process around 1 million of them.



Fig. 2: Melanie mills the end covers of the batten lights.



Fig. 3: Every LED-circuit has to pass 30 tests before it is released for assembly. Colours are calibrated to 0.25nm.



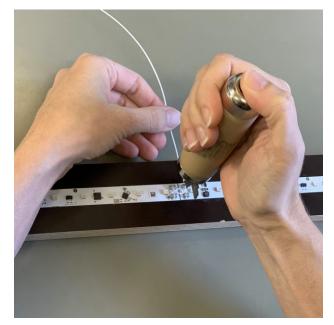


Fig. 4: Wiring the LED boards requires time and patience.

Convincing quality.

Purchasing collaxx lights is a safe investment in Austrian quality. They are infused with the passion for our products. The innovative **Heat Proof Technology** guarantees unique colour light units that privide you with homogeneous and long lasting light.

What Melanie thinks about working for mse elektronik gmbh, manufacturer of collaxx:

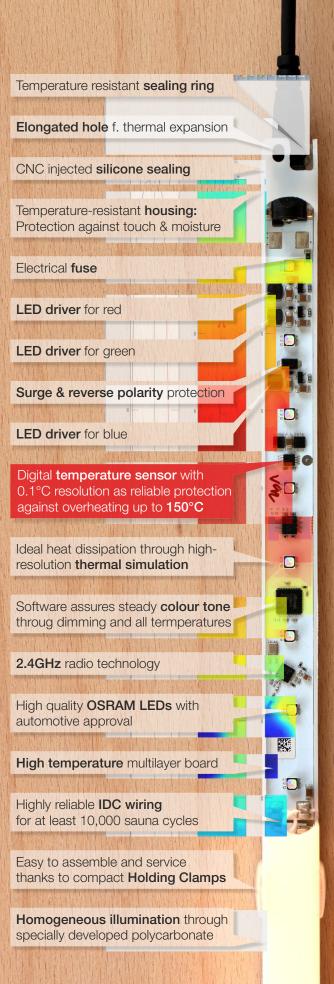
"When I start working in the morning, I just feel good. I feel like sitting in my living room and not necessarily at work. My colleagues are like some kind of extended part of my family. This joy that I feel flows into each and every collaxx light I produce. This is the kind of quality which I have fully dedicated myself."

collaxx-Tipp!

Our continuous light strips are available in lengths from **20cm to 353cm** and also in 2,700 Kelvin dimmable warm white or steam bath proof.

Get **up to 7 meters of seamless continuous light** by lining up two light strips and feeding them from the two corners of the room.

Read more on page 31!





Bio Sauna

WHITE LIGHT 2,700 Kelvin Dimmable Warm White



125°C integrated LED controller use made in Austria

- ⊘ Calibrated 2,700K warm white
- \odot Flicker free and dimmable
- ⊘ Any combination possible
- ⊘ 30,000h LED lifetime
- ⊘ Heat Proof Technology

© TEKA-Saunabau GmbH

Whether ceiling panels or batten lights, **all collaxx colour lights** are also available in **2,700 Kelvin dimmable warm white**. They can easily be controlled by a 3-button hand remote control. Our wall remote control can be used as well.

AVAILABLE FOR ALL COLLAXX COLOUR LIGHTS



Bio Sauna

Finnish Sauna



HAND REMOTE CONTROL for White Light





- ⊘ 3-button operating concept
- ⊘ Easy to integrate in existing cabins
- ⊘ Maintenance free long life battery
- ⊘ Control lamp

WALL REMOTE CONTROL for White Light





- ⊘ Quick and easy mounting
- ⊘ Wireless & easy to retrofit
- ⊘ Maintenance free long life battery
- \oslash 12 types of wood available from stock

Automatic button has no function with white light

TECHNICAL DATA	hand remote control	wall remote control	
Dimensions [mm]	75 x 39 x 16	55 x 55 x 10	
Weight [g]	25	40	clip on
Invisible mounting	-	\checkmark	
Protection class	IP54	IP44	
Typical battery lifetime	10 years	10 years	
Ambient temperature	0 125°C	0 125°C	
			:

Alder	Aspen	mod. Aspen	Beech	Red Cedar	Hemlock	Linden	Oak	Obeche	Spruce	mod. Spruce	Swiss Pine





Bio Sauna

WALL REMOTE CONTROL Noble Solid Wood











- ⊘ Quick and easy mounting
- ⊘ Patented 4-button operating concept
- ⊘ Easy to add
- ⊘ Compatible with all colour light devices
- ⊘ 12 different types of wood available
- ⊘ Horizontal or vertical grain

clip on

RECESSED MOUNTING



For a particularly high-end appearance, the wall remote control can be recessed flush into the sauna wall. This is an excellent protection against vandalism as well.



Spruce

th. mod. Spruce



Swiss Stone Pine

EASY MOUNTING

Bio Sauna





HAND REMOTE CONTROL The Popular Classic





- ⊘ Patented 4-button operating concept
- ⊘ Programmable colour interval
- ⊘ Compatible with all collaxx colour lights
- ⊘ Maintenance free long life battery
- ⊘ Control lamp

PATENTED 4-BUTTON OPERATING CONCEPT

Advance button

Switches to the next colour and activates the single colour mode.

Automatic button

Switches to the next colour and activates the automatic mode.

(<u>×</u>

→ |

C)

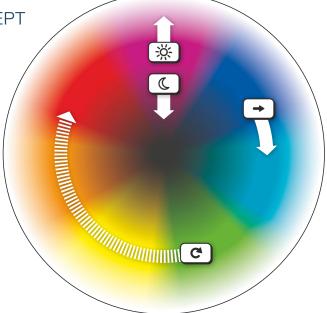
Increases the brightness or creates pastel colours and white.



Darker button

Brighter button

Decreases the brightness until the lamp is completely switched off.



TECHNICAL DATA

Dimensions [mm]
Weight [g]
Invisible mounting
Protection class
Typical battery lifetime
Ambient temperature

wall remote control	han
55 x 55 x 10	
40	
\checkmark	
IP44	
10 years	
0 125°C	



TEMPERATURE RESISTANT

All components – from the housing over the electronics to the battery – meet the specifications for "enginerelated electronics in the automotive sector". Therefore they are **extremely robust** and reliable and designed for operation at **125°C continuous temperature.**



DMX INTERFACE Maximum Compatibility





- ⊘ Up to 99 devices individually controllable
- ⊘ Adjustable hue, saturation and brightness
- ⊘ Allows complex lighting effects
- ⊘ No cable connection to the colour lights
- ⊘ 2 status LEDs allow easy diagnostics
- ⊘ No separate power supply required

COMPATIBLE WITH ALL DMX DEVICES



VARIOUS CONNECTING POSSIBILITIES





FASEL INTERFACE Plug & Play





- ⊘ 4 brightness levels
- ⊘ 7 colours available
- ⊘ Compatible with the Fasel RGB Extension
- ⊘ Available for Fasel FCU3xxx & FCU4xxx
- ⊘ 2 status LEDs allow easy diagnostics
- ⊘ No separate power supply required

COMBINA- BILITY	KNX	Loxone		Stand- alone	Light Mixer	PC Notebook	Sentiotec	Fasel
Single colour selectable	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Programmable colour change	\checkmark	\checkmark	\checkmark	\checkmark	×	\checkmark	×	\checkmark
Controllable from inside the cabin	\checkmark	\checkmark	×	\checkmark	×	\checkmark	×	\checkmark
Time control	\checkmark	\checkmark	×	\checkmark	×	~	×	\checkmark
Multiple colour groups	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	×
Effects	~	~	×	~	×	~	×	×

TECHNICAL DATA

DATA	Contraction of the second seco	PAK 67552
	DMX Interface	Fasel Interface
Dimensions [mm]	20 x 21 x 196	97 x 40 x 20
Weight [g]	89	33
Connectors	XLR plug & jack	RJ45 jack
Power supply	via DMX signal	via Fasel control
Protection class	IPX0	IPX0
Ambient temperature	0 45°C	0 45°C



CONTROL ADAPTER with Inrush Current Limiter





- ⊘ Protects weak light relays
- Ø UL1412 approval
- ⊘ Convenient on and off switching

- → Limiting the inrush current to only $5A_{eff}^*$ therefore even suitable for the weakest light relays.
- → Safety first: Current limiting by integrated fuse resistor with UL1412 approval.
- → Conveniently switch the Colour Light on and off directly with the light output of the oven control.
- → State memory retains last colour, automatic colour change or white light.
- → Euro coupling for easy connection of the power supply up to 12V/2A.
- → Cable end with **end sleeves** for direct connection to the light output of the sauna control.

*) This corresponds to the cold resistance of a normal 75W incandescent lamp.

Every modern plug-in power supply has a relatively high inrush current of approximately **60 amperes.**

Although this charging current just flows for a millisecond, it's sufficient to **weld the contacts** of a too small relay.

As a result, the light output is **broken,** and can never turn off again.

The Control Adapter solves this problem!

TECHNICAL DATA

Dimensions [mm] Weight [g] Line voltage [V_{AC}] Cable length [m] Output power [W] Ambient temperature



≤35 0 ... 45°C



LOCK/UNLOCK REMOTE CONTROL





- ⊘ Easy to use
- ⊘ For commercial installations
- Allows parallel operation of several collaxx wireless groups



If multiple cabins with collaxx products are in the same building, **disabling the synchronization** is adviced. Pairing between remote controls and cabins can be freezed with the **Lock/Unlock Remote Control**, such that a mis-synchronization can not occur.



It is essential to **make a record** when synchronization is locked on a particular project. Replacing the remote control or individual batten lights is only possible if the synchronization is unlocked – and subsequently locked again, if necessary. The Lock/Unlock Remote control is required on site then.

SELF EXPLANATORY OPERATION

Lock

Freezes an existing synchronization. The devices light up blue or turquoise for confirmation. Synchronizing is then no longer possible.



Unlock

Resolves an existing synchronization. The devices light up green for confirmation. Synchronization will then be possible again.

Locking and unlocking is only possible in the first 10 seconds after the supply voltage is switched on.

TECHNICAL DATA

Dimensions [mm] Weight [g] Protection class Typical battery lifetime Ambient temperature



collaxx: Support in every situation!

When Sandra started working for the company in 2006, her responsibilities included accounting, payroll processing, warehouse organization, and shipping. Although she doesn't have a formal technical education, she quickly adapted and developed an impressive technical understanding.

She now handles repairs independently and is often faster than our technicians (Fig. 1 and 2).

However, Sandra is not only an expert in her field but also a mother of two who inspires the team with her loving and caring nature.

She is always there for her colleagues, providing support and assistance. Her friendly and open personality makes her a trustworthy contact person for customers.

Sandra takes the time to listen to customers and understand their needs. With her organized approach, she ensures that no inquiry goes unanswered and every customer receives the attention they deserve.

She excels in her excellent organizational skills. This ensures awareness of deadlines, projects, and tasks. With her efficient planning and structuring, Sandra ensures that everything runs smoothly. Her colleagues appreciate her ability to maintain an overview and coordinate workflows.

Sandra is the heart and soul of the company's team. She spreads positivity and is always ready to help others. Her friendly nature and smile are contagious, creating a pleasant work atmosphere. Sandra is a valuable addition to our team and contributes to everyone giving their best.

collaxx-Tipp!

For all concerns related to your sauna project, you can reach Sandra by phone at +43 (0) 316 / 57 22 49 or simply by email at sales@collaxx.com.



Fig. 1: Sandra is measuring the voltage of the device.



Fig. 2: Sandra manually soldering a remote control.

What Sandra thinks about working for mse elektronik gmbh, manufacturer of collaxx:

"I always felt very comfortable working here. When I went on maternity leave for the first time in 2016, I had absolutely mixed feelings. On the one hand, there was the anticipation of my little wonder, on the other hand, I somehow missed work and the whole team very much."



Frequently asked Questions

Are collaxx colour lights also suitable for commercial saunas?

Yes. Our products have been developed primarily for commercial saunas. In contrast to conventional LED strips, our electronic is designed to withstand continuous temperatures of 125°C.

Do you really produce everything in Austria?

Yes. collaxx products are manufactured exclusively in our house by real handwork. Our name represents the excellence that comes with our products. This is the only way we can guarantee our high quality standards.

Why don't you use LED strips from China?

Back when collaxx was introduced to the European market, Chinese LED strips did not even exist. However, this does not matter at all, because Chinese LED strips are not suitable for ambient temperatures within sauna cabins. Only using highest quality electronic components and our own know-how guarantees the unreached reliability of our products.

Why is the battery in the remote control permanently soldered?

The battery is a special high temperature resistant type. This is not available in retail stores. Conventional coin cells are only suitable up to 70°C. The solder connection also prevents contact failures due to corroded battery contacts in humid environments.

Rumor says, LEDs last a maximum of 5 years. Is that correct?

No. To be honest, we are our biggest competition to our company. Once installed, our LEDs last at least 10 years thanks to the Heat Proof Technology. Even in saunas that are used commercially. It is important to us that our customers can enjoy collaxx products for many, many years.

7 Reasons in favour of collaxx



High quality raw materials

We acquire 50% of our components directly in Austria. 40% are supplied from our neighbor countries and only 10% from other countries.



Handmade guaranteed

Each colour light unit is handmade in our production and tested with all accessories before delivery.



Easy installation

Plug & Play is our slogan: All products are easy to install and work out of the box – therefore ideal for retrofitting.



Combinability

All collaxx colour light units can be combined with each other and are thus ideal for large commercial installations.

Homogeneous luminosity

Energy-efficient and continuously dimmable: Our LED technology guarantees absolutely flicker-free and intense enjoyment.



Calibrated colours

For each collaxx colour light unit, the colours are calibrated individually. Smooth colour transitions support your regeneration.

Made in Austria



Our products are developed and produced exclusively in our company in Austria and are extremely durable.

AUDIO SOLUTIONS



BLUETOOTHPLAYER Flexible and Reliable





- Ø Wirelessly connectable to smartphone
- ⊘ Line input and output
- ⊘ Digital amplifier with 2x18W
- ⊘ Optionally with radio remote control
- Tool-free assembly due to pluggable cables

5 DIFFERENT MODES OF OPERATION







FL201 Music





FREELY CONFIGURABLE

Numerous functions can be easily **activated or deactivated** by DIP switch:

- Bluetooth function
- ☑ Line input
- Automatic reconnection
- PIN code
- Automatic signal detection
- Mono or stereo
- ☑ Line output

DIAGNOSTIC LEDS

Bluetooth 🛛 📢 Amplifier

Remote control

TECHNICAL DATA

Dimensions [mm]
Weight [g]
Operating voltage
Output power
Output impedance [Ω]
Bluetooth profiles
Bluetooth version
Bluetooth codec
Bluetooth class
Protection class
Ambient temperature



Bluetoothplayer

0

 $12V_{\text{DC}} \mid 2A$

2x18W_{RMS} @ 4Ω

4 ... 8 A2DP | AVRCP-CT

2.1 ... 5.0

SBC 2 (approx. 10m)

IPX0

0 ... 45°C

| Bio Sauna

Finnish Sauna



HAND REMOTE CONTROL for Bluetoothplayer





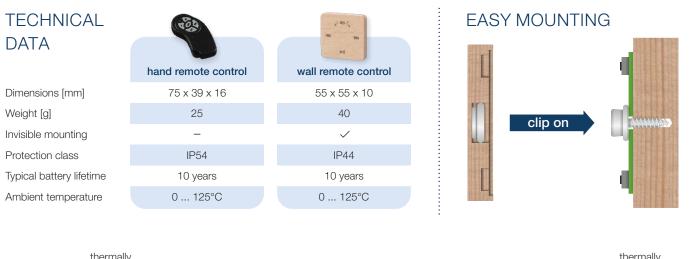
- ⊘ 5-button operating concept
- ⊘ Easy to add
- ⊘ Maintenance free long life battery
- ⊘ Control lamp

WALL REMOTE CONTROL for Bluetoothplayer





- ⊘ Quick and easy mounting
- ⊘ Wireless & easy to add
- ⊘ Maintenance free long life battery
- ⊘ 12 types of wood available



Alder	Aspen	thermally mod. Aspen	Beech	Red Cedar	Hemlock	Linden	Oak	Obeche	Spruce	thermally mod. Spruce	Swiss Pine
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Bio Sauna

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MUSIC EDITION Favorites with Hi-Fi Sound





- ⊘ Invisible speaker
- ⊘ Calibrated frequency response
- ⊘ Digital sound processor
- ⊘ Dynamic sound adjustment
- Wirelessly connectable with the smartphone

AVAILABLE ACCESSORIES

	colour light control	bluetooth audio control
Scope of delivery	included	optional
Hand remote control <i>(default)</i>		REA
Wall remote control (alternative)	*** • C	
Technical data	→ page 41	→ page 51

RECESSED MOUNTING

A partially recessed mounting of the wall remote controls points out the high-quality integration.



Combination for light and sound: All functions in any type of wood at your fingertips - control the music playback directly from inside the cabin!



COLLAXX BLUETOOTHPLAYER INCLUDED



- \odot Line input and output
- ⊘ Individually configurable
- ⊘ Service friendly

The **collaxx Bluetooth Player** is included in the package and enables connection to existing audio sources or amplifiers. Due to the lossless digital amplifier with 2x18W output power, two FL2000 Music can be connected in **stereo mode.** See page 50 for all details!

FL201 MUSIC



The **basic model** is unrivaled in price, but unbeaten in quality!

FL2000 MUSIC

Best materials and high quality inhouse workmanship are the hallmarks of our flagship product.



Invisible mounting: Completely screwless and with only 3.5mm protrusion, the FL2000 Music blends into your high-end ambiance. An enormous luminosity, homogeneous surface and balanced sound result in pure perfection.

TECHNICAL DATA	FL201 Music	FL2000 Music
Available types of wood	Alder	Alder, Hemlock, Linden, Swiss Stone Pine
Dimensions [mm]	320 x 235 x 51	361 x 266 x 53
Ceiling cutout [mm]	300 x 215	345 x 255
Weight [g]	620	900
Brightness [Im]	290	460
Invisible mounting	×	\checkmark
Homogeneous light	\checkmark	\checkmark
Pastel colours	\checkmark	\checkmark
Operating voltage	2x 12V _{DC} 2A	2x 12V _{DC} 2A
Ambient temperature	0 125°C	0 125°C
LED lifetime [h]	30,000	30,000
Automatic mode	\checkmark	\checkmark
Status memory	\checkmark	\checkmark
Audio inputs	Bluetooth Line in	Bluetooth Line in



Bio Sauna

Finnish Sauna

CUBUS 22 Perfect Sound and Finishing









- ⊘ All sides miter glued teak wood
- ⊘ Temperature and water resistant chassis
- ⊘ Temperature and water resistant gluing
- ⊘ Easy plug & play installation
- ⊘ Well-balanced sound due to DSP

INCLUDED: BLUETOOTHPLAYER

Only the connection to our Bluetooth player turns the Cubus 22 system into a real miracle.



The integrated sound processor ensures perfect sound in every sauna cabin - see page 50 for all details.

OPTIONAL: RADIO REMOTE CONTROL

With a wireless remote control, you effortlessly control the music directly from inside the cabin.

The wall remote control is available in 12 different types of wood to match each cabin.





The phone can stay out and will not be exposed to high humidity or temperature.

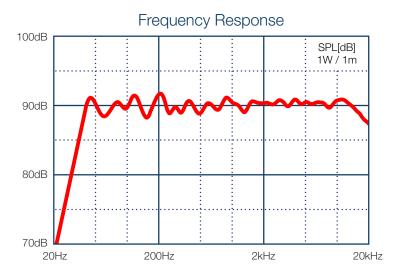


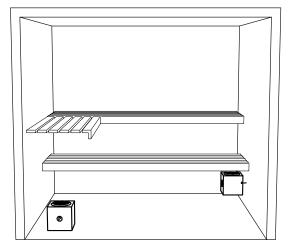
PERFECT SOUND

The Cubus 22 were calibrated in several typical sauna cabins. Based on these measurement curves, the integrated signal processor was programmed.

This results in a perfectly balanced sound image over the entire audible frequency range. The sound experience is additionally enhanced by a fully automatic loudness function.

Due to the neutral frequency response of the Cubus 22 your music sounds like in a recording studio. In the diagram you can see the linear frequency range from 40Hz to 20kHz.





OPTIMAL ACOUSTICS

The Cubus 22 are placed in the space under the benches.

They are suspended just above the floor by one screw each. So they are not in the way when mopping up.

It is essential that they are always mounted in pairs in opposite corners to get the best out of Cubus 22.

TECHNICAL DATA

Dimensions [mm]
Weight [kg]
Impedance $[\Omega]$
Maximum power [W]
Rated power [W]
Frequency range ±3dB
Ambient temperature

1 miles
Cubus 22
220 x 220 x 220
2.5
4
80
60
37Hz 21kHz
0 125°C

INVISIBLE MOUNTING

With only one screw using a recessed suspension connector on the back.

The speaker terminals are also located on the back.

A mirrored pair design allows for optimal installation in every cabin.





Bio Sauna

Finnish Sauna

SOUND EXCITER Invisible Music Pleasure



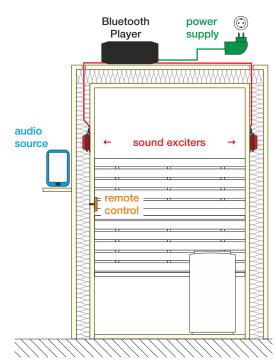


- ⊘ Perfect add-on for the Bluetooth Player
- ⊘ Invisible mounting behind the walls
- ⊘ Low height
- ⊘ Stereo sound with two speakers possible

TECHNICAL DATA

	10W	20W
Dimensions [mm]	67 x 46 x 17	71 x 58 x 21
Weight [g]	60	120
Voice coil [mm]	Ø 25	Ø 32
Power [W]	10	20
Cabin size [m]	1.3 x 1.3	2.5 x 2.5
Ambient temperature	0 85°C	0 85°C

MOUNTING SUGGESTION





collaxx: Perfect sound truly brings music to life!

Until 2015, we used an MP3 radio from China to play music in the saunas. However, we then suddenly received an unexpected "upgrade" in which all functions were announced loudly. Unfortunately, the announcement was made by a Chinese dubbing voice that sounded like a battle cry and was definitely not suitable for a relaxing atmosphere. We couldn't put our customers through this, so Stefan and his team decided to develop their own device.

End of 2015: Development of the collaxx Bluetoothplayer begins

After several months, towards the end of 2015, Dipl.-Ing. Schmidlechner granted approval to Stefan. More than 2,000 working hours followed, during which our technicians focused on developing a device that met our quality standards: The collaxx Bluetoothplayer.

But who is Stefan?

Stefan is our CTO, the lead electronics developer. He is always available when there is a need. If someone is urgently required, Stefan can always be relied upon. He also works extremely precisely and errors are a foreign to him. This is what distinguishes our quality. In addition, Stefan is unbeatably fast and finds ingenious solutions to tricky problems like the development of the Bluetoothplayer.

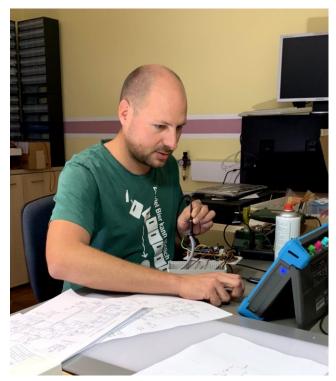


Fig. 2: Prototype of the power supply for the Bluetooth Player, hand soldered at a terminal pitch of 0.5mm
More than which our that met our er.

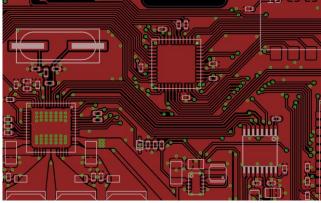


Fig. 3: The Bluetooth Player has 110 different signals

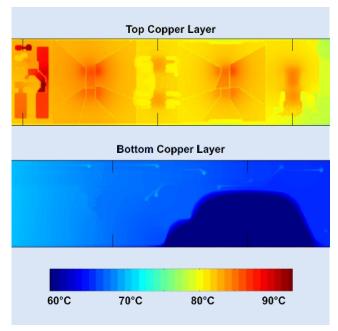


Fig. 4: Thermal simulation of the printed circuit board

Fig. 1: Stefan performing diagnostics on the prototype



Power Supply 12V / 1A





Wide range switching power supply with high efficiency for collaxx colour lights up to 1A.

Designed with a Euro plug, adapter plugs for international power plugs available.

Power Supply 12V / 2A





Wide range switching power supply with high efficiency for collaxx colour lights up to 2A.

Designed with a Euro plug, adapter plugs for international power plugs available.

Adapter for 1A and 2A Power Supplies





Adapter plugs for international power plugs.

Only required for the 1A and 2A power supplies. The 3.3A and 5A power supplies can be directly equipped with the appropriate power plug or power cord.



Power Supply 12V / 3.3A





Wide range switching power supply with high efficiency, optionally available with international power plugs:







Power Supply 12V / 5A



45°C LED indicator

Wide range switching power supply with high efficiency, optionally available with international power cords:



TECHNICAL DATA	12V/1A	12V/2A	12V / 3.3A	12V / 5A
Input voltage $[V_{AC}]$	90 264	90 264	90 264	90 264
Output voltage $[V_{\text{DC}}]$	12	12	12	12
Dimensions [mm]	64 x 30 x 45	75 x 34 x 43	100 x 100 x 40	115 x 53 x 37
Weight [g]	82	160	175	390
Ambient temperature	0 45°C	0 45°C	0 45°C	0 45°C
Input cable [m]	-	-	-	1.4
Output cable [m]	1.4	1.8	1.4	1.8



Infrared Cabin | Bio

Bio Sauna | Finnish

Finnish Sauna

Standard Cable





Heat-resistant DC cables with sealing rings for use in private installations.

Available lengths: 10cm 35cm 1m 2m 3m 5m 7.5m 10m

Silicone Cable





Handmade silicone cables with sealing rings for use in commercial installations.

Available lengths: 10cm 35cm 1m 2m 3m 5m 7.5m 10m 12.5m 15m

Direct Connector





DC double plug with sealing rings for connecting two modular batten lights as well as for cascading Y junctions.



DC Adapter





DC double plug for connecting the power supply cable to temperature-resistant standard or silicone cable.

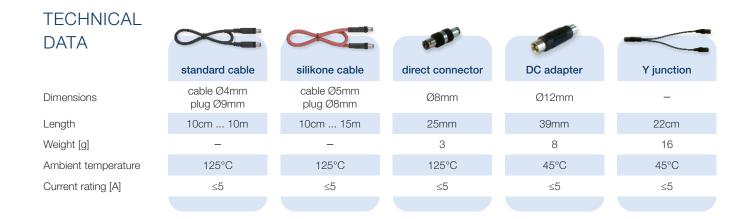
Y Junction





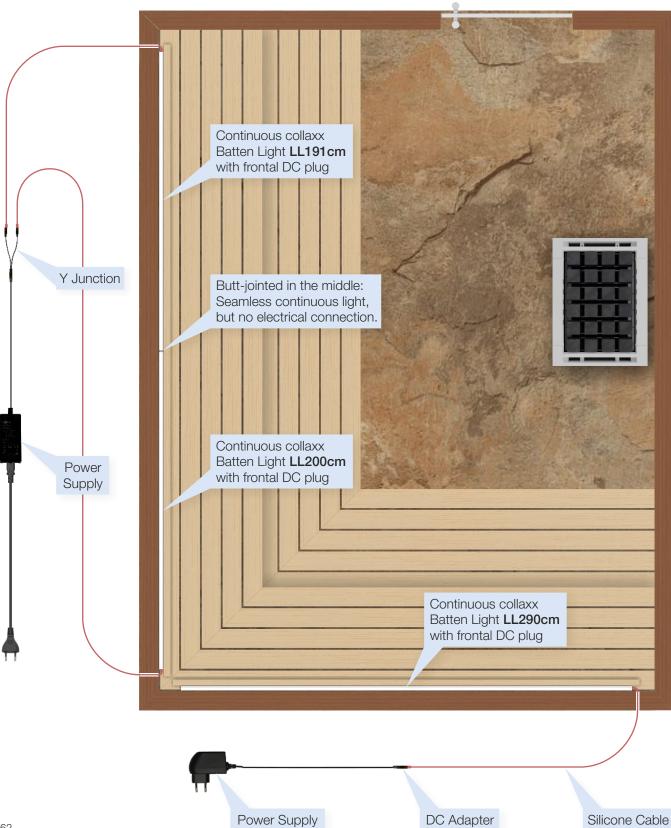
Splitter with three DC sockets for splitting the power supply into two separate supply lines.

For more than two outlets it can be cascaded with Direct Connectors.





Installation Example





Types of Wood



www.collaxx.com