Viessmann 5560 Sound Module with Without Synchronous Control User Manual

**Sound module
with/without synchronous control**

Operation Manual

Contents

Important information

Please read this manual completely and attentively before using the product for the first time.
Keep this manual. It is part of the product.

1.1 Safety instructions

⚠️ **Caution:**

Risk of injury!
Due to the detailed reproduction of the original and the intended use, this product can have peaks, edges and breakable parts.
For installation tools are required.
Electrical hazard!
Never put the connecting cables into a power socket! Regularly examine the transformer for damage. In case of any damage, do not use the transformer!
Make sure that the power supply is switched off when you mount the device and connect the cables!
Only use VDE/EN tested special model traintransformers for the power supply!
The power sources must be protected to prevent the risk of burning cables.

1.2 Using the product for its correct purpose
This product is intended:

- For installation in model railroad layouts and dioramas.

- For connection to an authorized model railroad transformer (e. g. item-No. 5200).

- For operation in dry rooms only.

Using the product for any other purpose is not approved and is considered incorrect. The manufacturer is not responsible for any damage resulting from the improper use of this product.

1.3 Checking the package contents
Check the contents of the package for completeness:

- Sound module

- Mounting material (2 screws, 6 plugs)

- Manual

Introduction

Enjoy the small worlds with all your senses. Model train layouts and dioramas become even more realistic and alive by the appropriate background sound.

Viessmann sound modules are available with sounds fitting for different subjects. They are very compact, immediately operational and easy to install due to the integrated loudspeaker. Of course, the volume can be adjusted. The sounds of the modules are an integral part and can not be exchanged.

2.1 Synchronized control

Various modules are equipped with a control input respectively control output so that they can generate motion synchronized sounds suitable for the respective models of the eMotion series.

In the standard operation mode without synchronized control the module will play the respective background noise in a loop. If the module receives a synchronizing impulse emitted from an appropriate eMotion-article it plays the background noise according to the movements of this functional model.
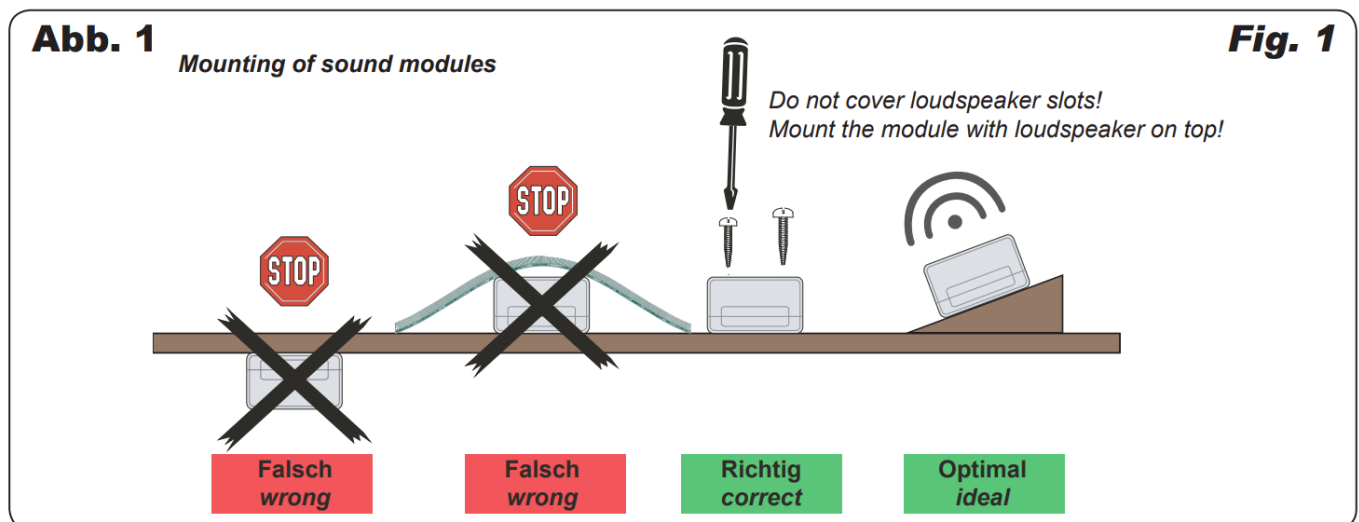
In case of some special models, e. g. helicopter, the sound module itself controls the functional model.

Therefore the specific sound module is equipped with an additional synchronized output which enables synchronization of sounds and movements (e. g. starting of the motor, beginning of the rotor, rotating movement, …).

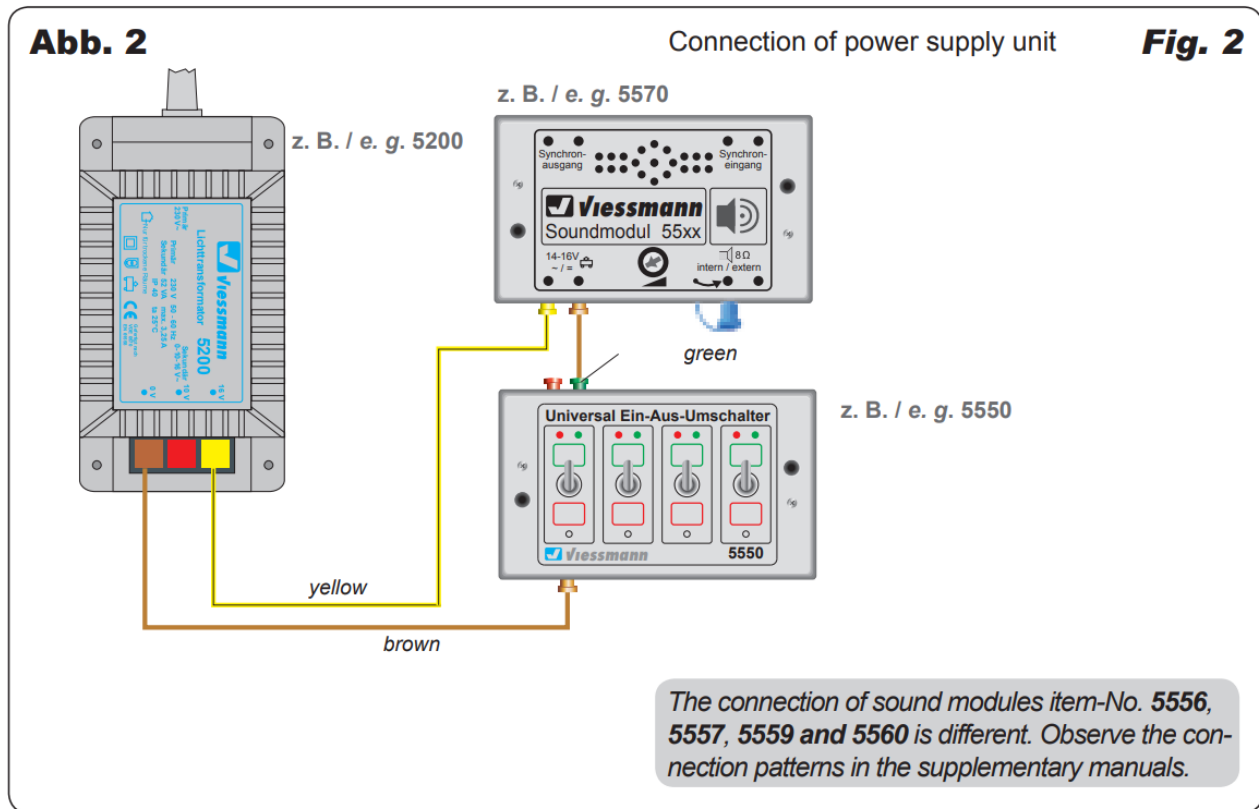You can find information concerning the connection in chapter 4.

Mounting

Fix the module with the enclosed screws. To ensure an optimal sound reproduction of the module, please note the following tips:

Abb. 1 — **Fig. 1**
Mounting of sound modules

Do not cover loudspeaker slots!
Mount the module with loudspeaker on top!

| Falsch *wrong* | Falsch *wrong* | Richtig *correct* | Optimal *ideal* |

1. The loudspeaker is an integrated part of the module. The upper surface of the module must always be uncovered in order to enable a good sound dispersion.
2. The sound module must always be adjusted to the direction of the spectator, so please no upside down mounting under the layout.
3. The sound module should be installed near to the respective functional model on your layout. You can install the module on the layout itself, e. g. in a building. This way you can even have a better sound and an optimal concordance between the visible and the audible sound source.

Connection

Fitting cables: Due to the low current consumption thin cables can be used which can easily be hidden. It is recommended to use a cross section of 0,14 mm² (e. g. Viessmann item-No. 6860 – 6869 or 68603 – 68693). The sound module has no on-off-switch. In case you want to switch off or disconnect the sound module from power supply, you can add a switch in one of the two power supply wires (brown or yellow), see fig. 2. Note the safety instructions mentioned above.
Connect the sound module to the power supply according to fig. 2.

Abb. 2 — Connection of power supply unit — **Fig. 2**

The connection of sound modules item-No. 5556, 5557, 5559 and 5560 is different. Observe the connection patterns in the supplementary manuals.

4.1 Connection of the synchronized input
(only sound modules item-No. 5570, 5572, 5574)
This chapter describes how to connect an appropriate eMotion-item equipped with a control output for motion synchronized sounds to sound modules with appropriate input.

⚠️ **Tip:**
You get the most efficient effect if you place the noise-releasing eMotion-item to the sound module as near as possible.

- Switch off the power supply of the eMotion-item and the sound module.
- Connect the two black control wires of the eMotionitem to the two synchronized input connection jacks of the sound module (see fig. 3).

Abb. 3 **Fig. 3**

Caution: Connect at first the control wires (black) to avoid short circuit.

z. B. / e. g. 5200

z. B. / e. g. 5570

Synchron-eingang

Viessmann
Soundmodul 55xx

14-16V ~ / ⎓   intern / extern   8Ω

grün / green

schwarz
black

Universal Ein-Aus-Umschalter

Viessmann   5550

z. B. / e. g. 1515

gelb / yellow

braun / brown
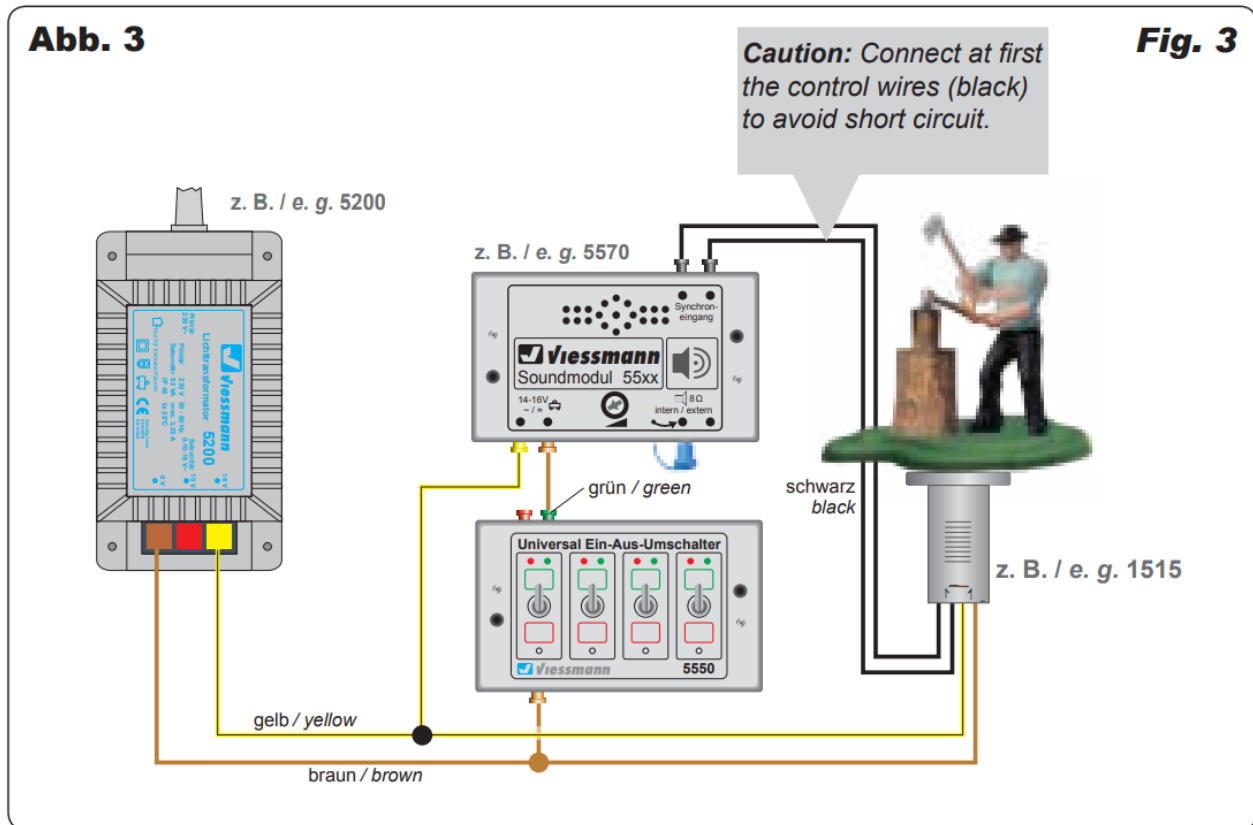
4.2 Connection of the synchronized output (only sound modules item-No. 5556, 5557, 5573)

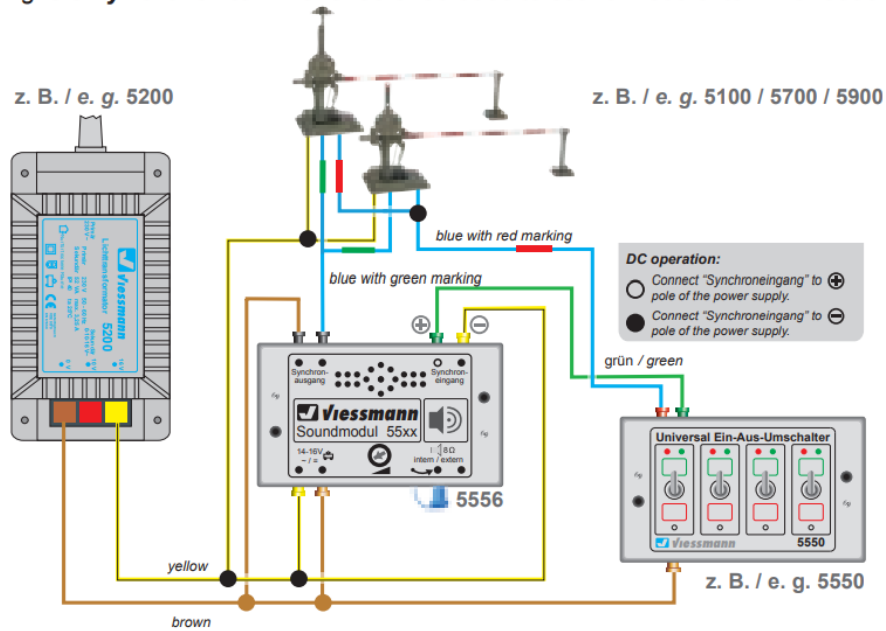In case of these sound modules, the sound module itself controls the functional model. Therefore it is necessary to consider the corresponding figures:

Sound module item-No. 5556 to item-No. 5100, 5700 or 5900 (fig. 4), sound module item-No. 5557 to item-No. 5164 (fig. 5), sound module item-No. 5556 to item-No. 5104 or 5107 (fig. 6) and sound module item-No. 5573 to item-No. 5119 (fig. 7).

Item-No. 5556/5557: You need a switch to switch on/off the model as well as the sound module. The switch is connected to the connection jacks "synchronous input". Viessmann recommends the universal on-off switch item-No. 5550.

Abb. 4 — Fig. 4

*The wiring is **only** valid for item-No. 5100/5700/5900 to sound module item-No. 5556*

z. B. / e. g. 5200

z. B. / e. g. 5100 / 5700 / 5900

blue with red marking

blue with green marking

DC operation:
○ Connect "Synchroneingang" to ⊕ pole of the power supply.
● Connect "Synchroneingang" to ⊖ pole of the power supply.

grün / green

Synchron-ausgang

Synchron-eingang

Viessmann
Soundmodul 55xx

14-16V
~ / =

intern / extern
8Ω

5556

Universal Ein-Aus-Umschalter

Viessmann   5550

z. B. / e. g. 5550

yellow

brown

Abb. 5 — Fig. 5

*The wiring is **only** valid for item-No. 5164 "Helicopter" to sound module item-No. 5557*

z. B. / e. g. 5200

z. B. / e. g. 5164

green

black

DC operation:
○ Connect "Synchroneingang" to ⊕ pole of the power supply.
● Connect "Synchroneingang" to ⊖ pole of the power supply.

Synchron-ausgang

Synchron-eingang

Viessmann
Soundmodul 55xx

14-16V
~ / =

intern / extern
8Ω

5557

Universal Ein-Aus-Umschalter

Viessmann   5550

z. B. / e. g. 5550

yellow

brown

z. B. / e. g. 5104, 5107

z. B. / e. g. 5200

positive

5215

z. B. / e. g. 5300 Commander

10 – 16 V AC ~
14 – 24 V DC =
13 – 24 V Digitalsignal

yellow

brown

green

orange

blue

brown
yellow

braun / brown
gelb / yellow

Barrier speed:
Original: 6 sec
After cutting the wire: 3 sec

blue

blue

orange
green

orange

green
green

330 Ohm
0,25 W

red marker

green marker

Soundmodul 5556

4-fach-Blinkgerät 5065

Universal Tasten - Stellpult
5547

yellow

brown

braun
brown

Connection is possible to digital station or transformer

To the St. Andrews crosses
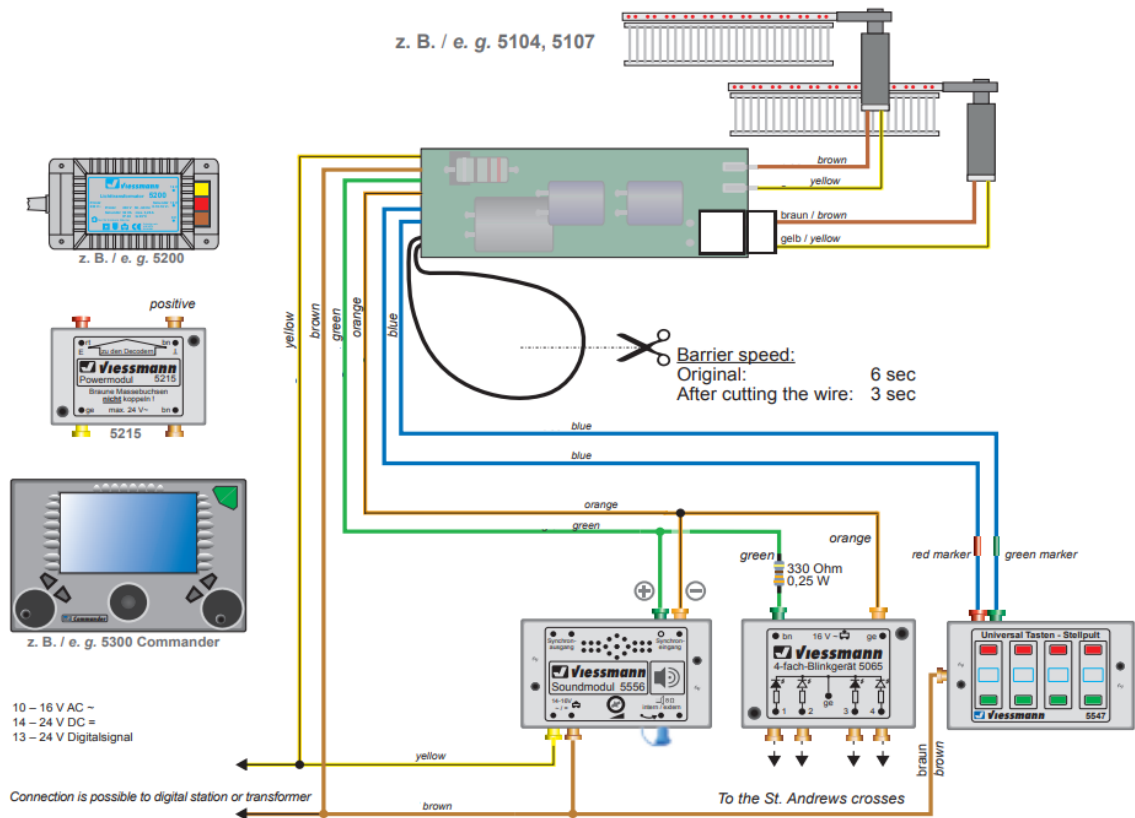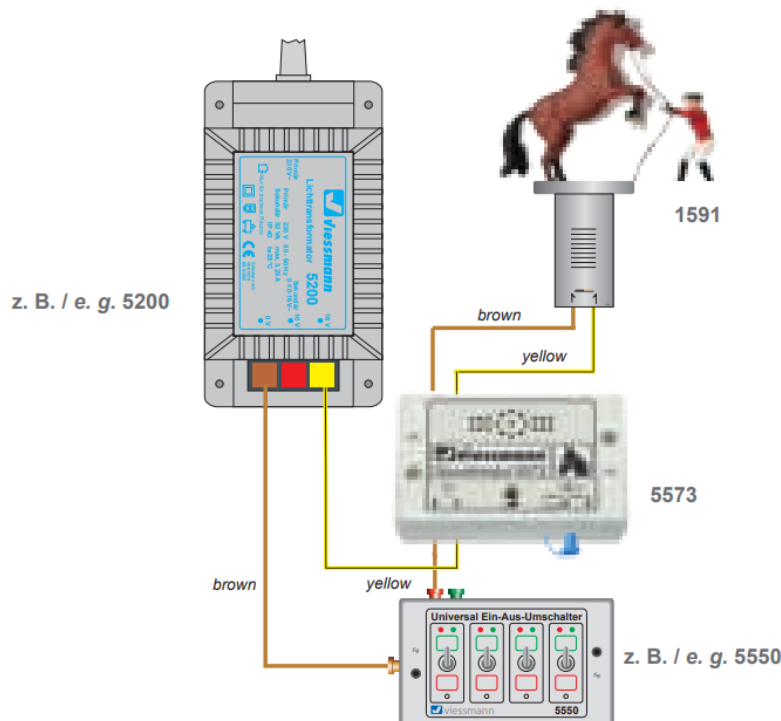

Abb. 7   Fig. 7

The wiring is **only** valid for item-No. 1591 "Rearing up horse" to soundmodule item-No. 5573

z. B. / e. g. 5200

1591

brown

yellow

5573

brown

yellow

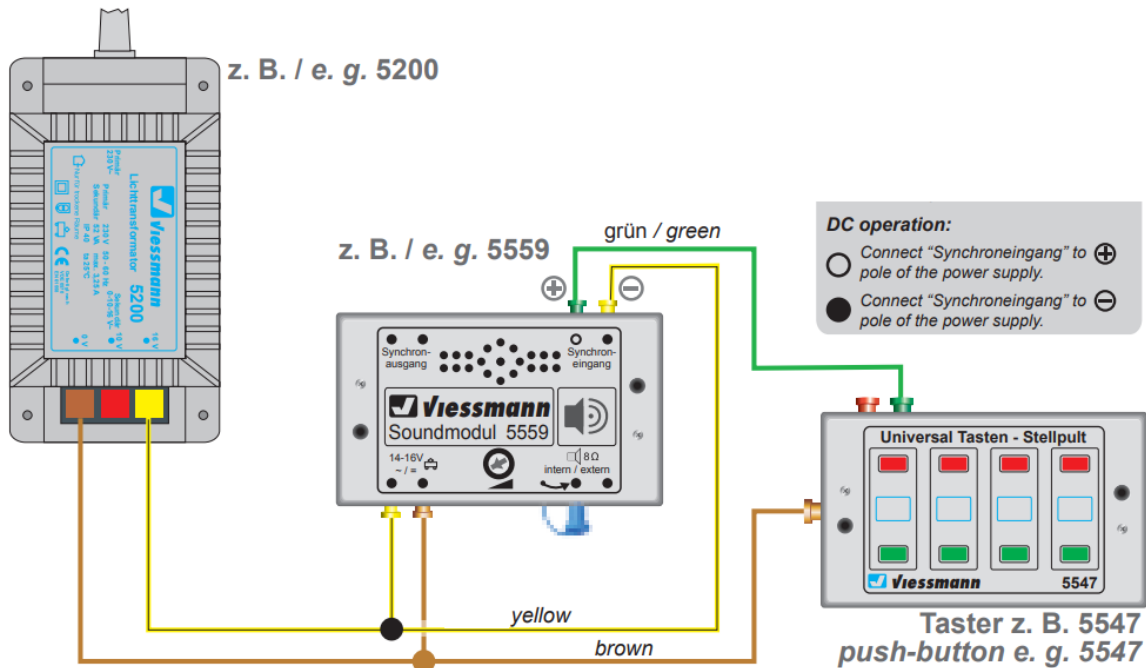Universal Ein-Aus-Umschalter
5550

z. B. / e. g. 5550

4.3 Connection of sound modules without synchronal functionality

Sound modules item-No. 5559 and 5560 are without synchronal function (fig.8).
The synchronous input is used to switch the sound on or off.

Abb. 8   **Fig. 8**

*Connection of sound modules **without** synchronal function:*

z. B. / e. g. 5200

grün / green

z. B. / e. g. 5559

DC operation:

Connect "Synchroneingang" to ⊕ pole of the power supply.

Connect "Synchroneingang" to ⊖ pole of the power supply.

Synchron-ausgang

Synchron-eingang

Viessmann Soundmodul 5559

14-16V ~ / =

8Ω intern / extern

Universal Tasten - Stellpult

Viessmann   5547

Taster z. B. 5547 push-button e. g. 5547

yellow

brown

4.4 Connection of an external loudspeaker

The sound module is equipped with an output for an external loudspeaker with electrical values of 8 ohm impedance at least and 1/2 watt power (can be purchased in an electronics specialised trade). In case you connect an external loudspeaker the incorporated loudspeaker will be switched off.

1. Please pull the short blue cable from the sound module out of the jack right beside it.

2. Isolate the blue cable, to avoid any contact with other cables.

3. Mount the external loudspeaker at the intended place.

4. Install the two wires of the external loudspeaker to the sound module.

5. Connect the two wires to the two jacks according to fig. 9.

You can use plugs and sockets for the connection, e. g. Viessmann item-No. 6875 (plug orange) and item-No. 6884 (socket orange).

Abb. 9 / **Fig. 9**

Connection of an external loudspeaker
z. B. / e. g. 5570
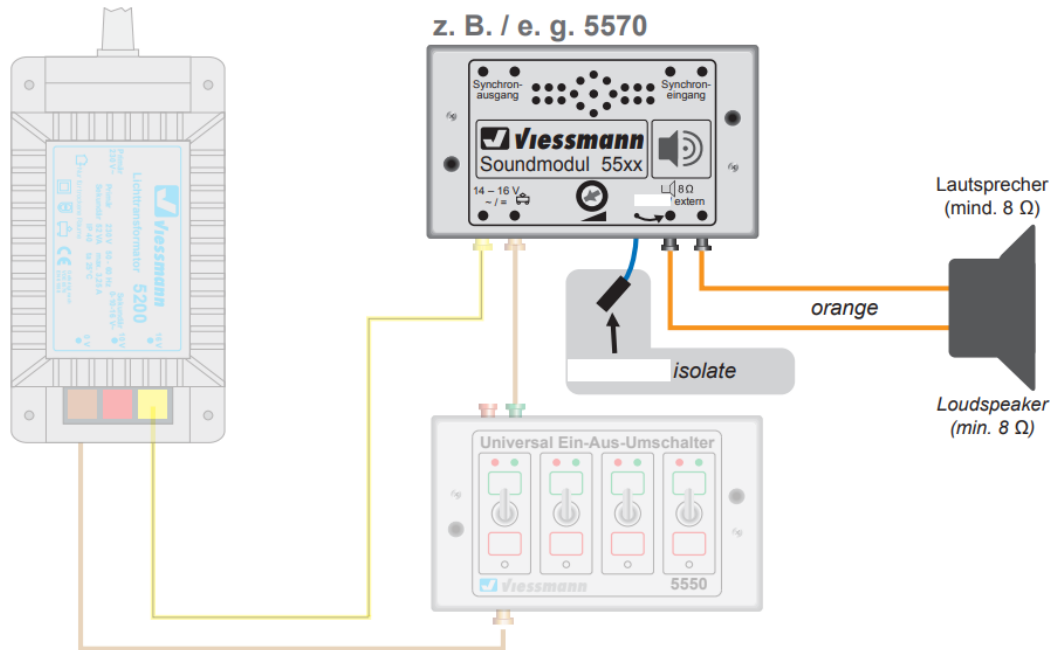
Operation

If the power supply is switched on, the sound module will play its integrated sound effects continuously either in a loop or synchronous to the movements (except item-No. 5556, 5557, 5559 and 5560).
Sound modules equipped with a synchronized output control the functional model. Switch them either on or off with the on-off switch. Sound modules equipped with a synchronized input are controlled by the models.
A switch is not necessary in this case (see also chapter 4.1).

Item-No. 5556 – 5557 – 5559 – 5560
To play a sound, one impulse to the synchronous input is needed. Once an impulse is set, the sequence of barrier ringing with item-No. 5556 runs for approx. 5 seconds, independent of the duration of the impulse.
With item-No. 5557 the acoustic start sequence of the helicopter sounds first, then the sound of the rotor follows. After open up the switch the running down sequence completes.

With item-No. 5559 and 5560 the sound starts and plays continuously as long as the signal is applied to the synchronous input. The sound stops only when the signal is interrupted.

Volume adjustment
The sound module is equipped with a volume control for the sound. The adjustment is valid as well for the integral loud speaker as for an external loud speaker.
To adjust the volume, use a slotted screwdriver and proceed as follows (see fig. 10):

- **Increase volume:**

  Turn the poti to the right.
- **Reduce volume:**

  Turn the poti to the left.

Abb. 10 / **Fig. 10**

Use a small screwdriver!

Notes

Trouble-shooting

Every Viessmann product is produced with high quality standard and controlled before delivery.
If there should occur any trouble nevertheless, please check first the power supply and the wiring. If the product is damaged, put it in the original packaging and bring it to your specialist dealer or send it directly to the Viessmann-service (address see below).

Examples for errors:

- No sound from the module.
- No sound from the external loudspeaker.

Trouble-shooting:

- Turn the poti to the right.
- Please make sure that the small blue plug at the housing of the sound module is removed from the jack and isolated

  Connect the external loudspeaker as is shown in fig. 9 on page 9.
- There are sound modules, e. g. item-No. 5570 and 5557 (see fig. 3 and 5) which play only a sound, if they receive a signal from the control wires of the eMotion item.

  Guarantee the connection.

Technical Data

Dimensions:	88 x 53 x 22 mm
Weight:	approx. 50 g
Operation voltage:	14 – 16 V AC / DC
Operation current:	approx. 150 mA
Insulation:	IP20
Temperature/humidity (operation):	0 – 40° C
Temperature/humidity (storage):	-10 – 60° C

The latest version of the manual can be looked up at the Viessmann homepage entering the item-No.

Model building item, not a toy! Not suitable for children under the age of 14 years! Keep these instructions!

Viessmann

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