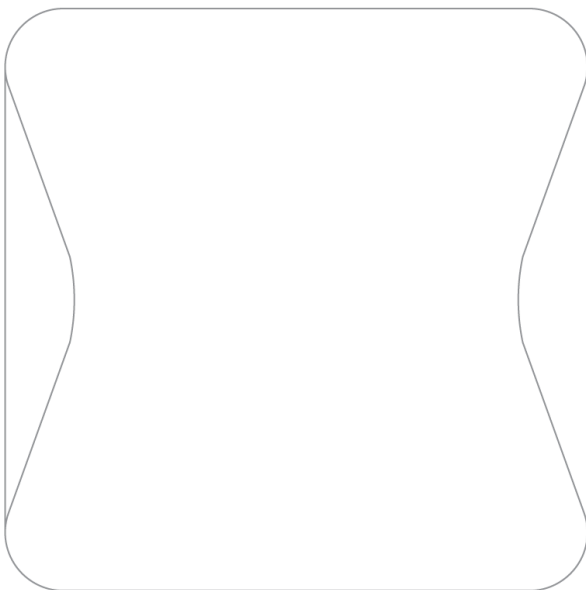# Klevio Opener

Instruction Manual

Welcome to Klevio

Klevio is a smart entry control system that connects to the locks on your doors via a Klevio smart access device. This enables you to control access to your property with the free [Klevio Smartphone App](#) or the [Klevio Web Dashboard](#).

This manual focuses on *Klevio Opener,* Klevio's entry-level access device.

The Klevio system includes the Klevio web Dashboard, Klevio smart access devices & the Klevio smartphone App

Contents

Getting started

Interacting with the Klevio Opener device

Klevio Opener enables you to control your connected locks remotely with the [Klevio App](#) and the [Klevio Dashboard](#).

It has two buttons on the front for unlocking your doors and two buttons on the back for accessing device settings / resetting the device.

Fig. 1: Buttons on a Klevio Opener device
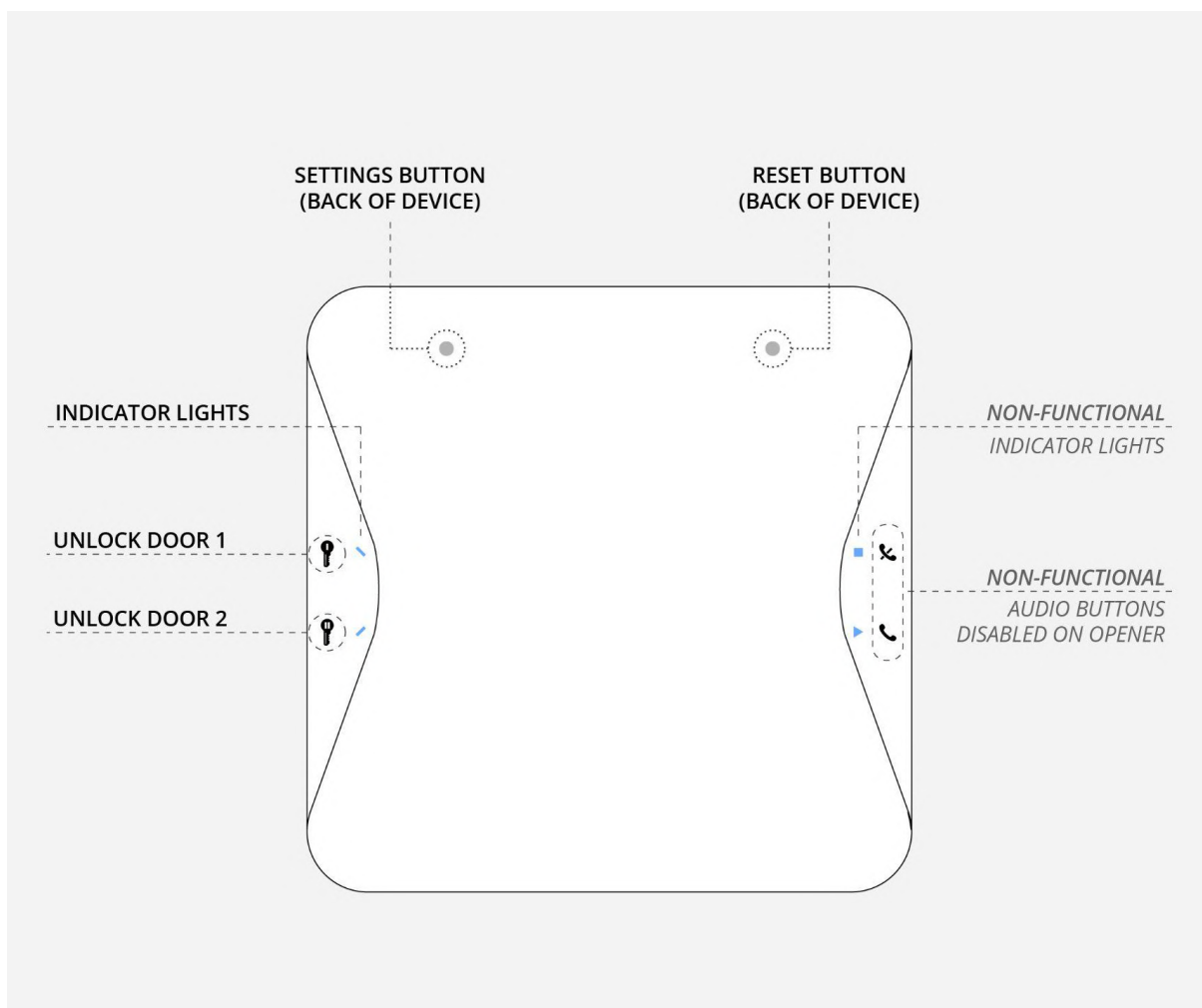
Front of device		Back of device	
♥ *Door 1*	press to open door 1 (usually communal doors)	*Reset*	resets the device
♥ *Door 2*	press to open door 2 (usually private doors)	*Settings*	lets you access your device settings via the web page www.klevio.zone *(Wi-Fi and other settings)*
📞 *Pick up / Mute*	**Non-functional** Klevio Opener does not support audio features		
📞 *Hang up*	**Non-functional** Klevio Opener does not support audio features		

❗ Please note

For Klevio Opener to work, it needs to be **plugged in and connected to Wi-Fi/4G at all times.**

Opening your door if your device stops working

You can trigger a manual unlock of your door (usually your communal door) by pressing the small round **'Emergency unlock' button** on the console behind the device (see Fig. 2). This push button (also called 'SW2') manually actuates the OP1/OP2 relay, which means it can be used to manually open a door wired to the OP1/OP2 relay in case of emergencies. The button can be accessed by unmounting the device with an upward sliding motion (see Fig. 2).

❗ Emergency Unlock Button

The Emergency unlock button will not work if the device does not have power.

Fig. 2: Detaching the controller to reach the Emergency unlock button
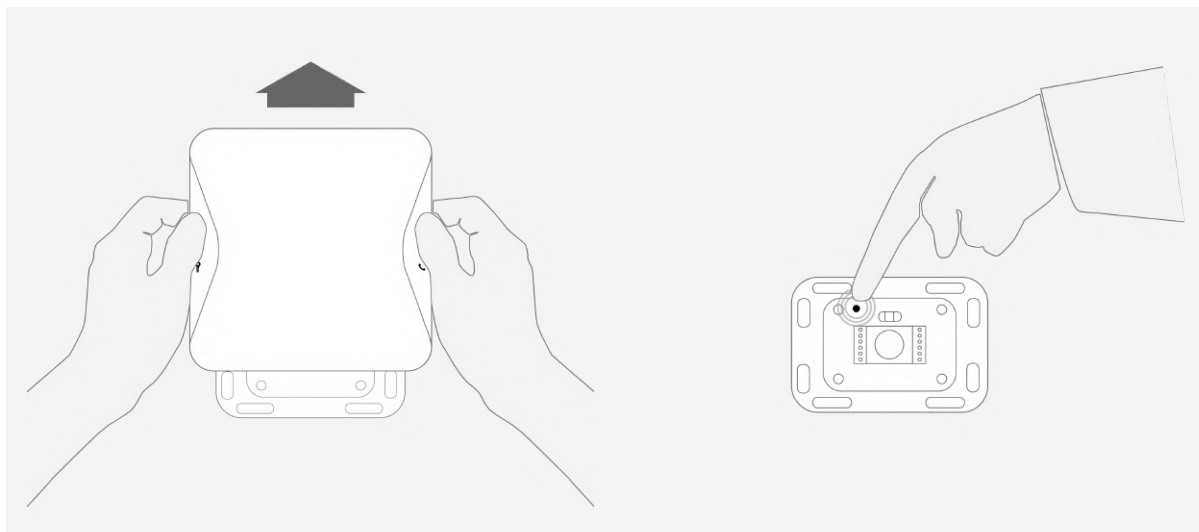
Accessing Device Settings

To modify your device's settings you will need to connect to it from another Wi-Fi enabled device such as a smartphone, tablet or computer. Complete the following steps:

1. Press and hold the 'Settings' (⬤) button (see Fig. 1) on the back of the Klevio device for at least one second.

2. At this point, the indicator lights on the front of the device will flash orange and blue - once they go pink this means Klevio has set up a Wi-Fi hotspot called **'KlevioHotspot'** which you can connect to from your phone/tablet/computer with the password **'lifeunlocked'**.

3. Once connected to the Klevio network, open a browser and navigate to the web page www.klevio.zone where you can edit your device settings.

Setting up Wi-Fi

Klevio Opener needs to be connected to Wi-Fi or 4G in order to work. Additionally, if any changes occur on the Wi-Fi network or the router gets replaced, you will need to manually adjust the Wi-Fi settings on the device.

To set up Wi-Fi on your device, access Device Settings as described in the 'Accessing device Settings' section.

Once you reach www.klevio.zone, find the input fields for Wi-Fi settings, type in your credentials and tap 'Store and exit settings'. After a few seconds, the blue and orange lights on your Klevio device should flash briefly and your Klevio should come online.

Other settings

You can also use the Device Settings page to adjust other aspects of your Klevio system such as unlock duration. Just follow the instructions in the ['Accessing Device Settings'](#) section to reach the www.klevio.zone page and use the interface to adjust the device to your liking. Changes need to be confirmed by clicking on the 'Store and exit settings' button in order for them to take effect.

Troubleshooting

Fig. 3: Troubleshooting Klevio Opener

Issue	Likely causes	Solution
When I try to use my digital keys **my doors won't open** and the message **'Uh-oh'** appears with a red **'X'** symbol on my app	*Your Klevio device has no power*	Check if your device has power by touching the unlock buttons to see if the indicator lights light up. If they don't: • Make sure your device is plugged in. If it isn't, plug it in and allow 30 seconds to reboot • Check that the controller (top part of the device) is properly clicked down onto the console
	Your internet is down ***or*** *You've changed your Wi-Fi password or replaced your router*	• If you're experiencing poor internet service, consult your internet provider (if you have a Wi-Fi-only Opener, you may want to consider upgrading to a 4G-enabled setup) • If your Wi-Fi setup has changed, follow the instructions in ['Setting up Wi-Fi'](#) of this document
Indicator lights do not flash when someone presses my doorbell	*Your Klevio device has no power*	*See the solution in the first row*
	Your Klevio device is working fine, but there's an issue with your building's intercom system	Speak to our team through the Support page of your Klevio app, our chat service on www.klevio.com, or contact us at support@klevio.com
When I try to use my digital keys **my doors won't open** and a **'Network error'** message appears on my app	*Your phone has a poor network connection so it can't communicate effectively with our servers*	• Check your phone's data or Wi-Fi connection • If your Wi-Fi signal strength is weak, consider switching Wi-Fi off temporarily to get a stronger 3G/4G connection. If you're standing outside your front door, your phone might be midway through the process of connecting to your home Wi-Fi, so wait a few seconds and try again. Failing this, reboot your phone

(Table continues on next page)

When I try to use my digital keys, the **'TA DA!'** message & **checkmark** appear on my app, but **my door won't open**	*Your Klevio device is working fine, but there's an issue with your lock or intercom system*	For possible solutions, go to the Troubleshooting section at help.klevio.com
I've been sent **digital keys** but **can't see them** in my app	*The Keys page on your app needs refreshing*	Go to your Keys page and swipe down to refresh, or press the refresh icon in the top right of your Keys page, depending on the version of your app.

For more information about troubleshooting and using the Klevio system, visit our online guide at help.klevio.com. If you need further help, you can write to us at support@klevio.com or speak to one of our team through the Live Chat on www.klevio.com or through the Support page on your Klevio app.

Installation

❗ Caution

*We strongly recommend that Klevio installations are carried out by an **approved Klevio installer**.*

Klevio Ltd disclaims any liability deriving from installations or modifications carried out by non-approved parties.

Klevio Opener device details

Klevio Opener is a door controller for unlocking private and communal doors in single units. It can be wired up to a maximum of 3 doors. Additional doors can be added when using Bluetooth-connected key turners.

[Klevio hardware product details >](#)

The Opener and other Klevio smart access devices are made up of two parts:

- The Klevio Console

- A console-compatible Klevio Controller

This manual covers the functionality of *Console v2.8* and its compatible *Controller v2.4a*.

Your device's **serial number** is located on the back of the controller.

The Klevio Console (v2.8)

Fig. 4: The Klevio Console v2.8
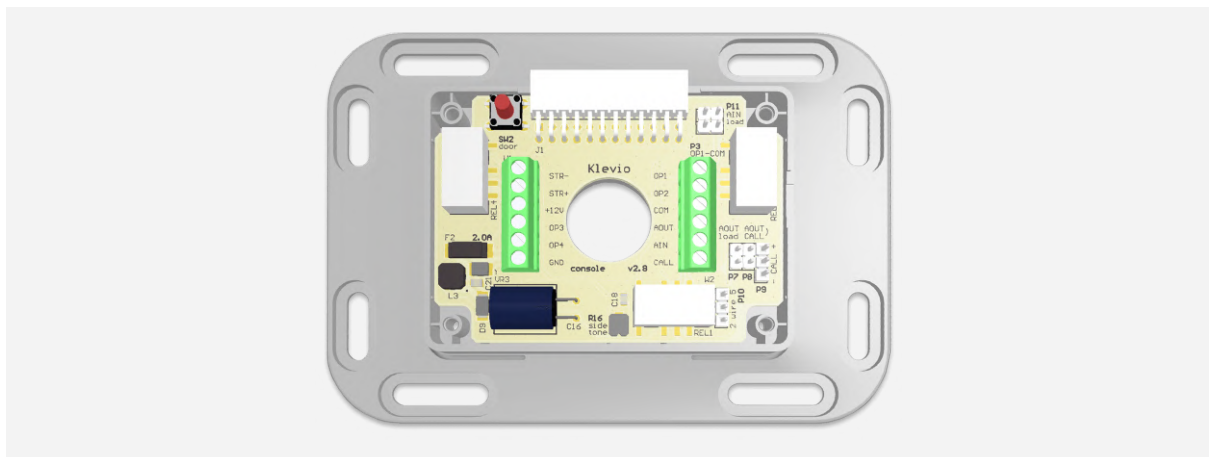
The Console is a circuit mounted on the wall and connected to power and intercom wires via terminal blocks. The Klevio Controller mounts onto the Console via the 24 pin connector. The

Console's purpose is to provide power supply for the Controller and to handle low-level details for interfacing with various intercom systems.

Klevio Controller compatibility (v2.4a)

Fig. 5: A Klevio Controller

Console v2.8 is hardware compatible with the **v2.4a version of Klevio Controllers**.

Installing Klevio Opener

> ❗ **Important**
>
> *Never connect mains (230 V AC) voltage or any lines referenced to the mains directly to the console. If a lock is operated by the mains voltage, use an appropriate external relay.*

General information

Klevio Opener functional diagram

Fig. 6: Klevio Opener functional diagram

NOTE: *Klevio Opener does not support voice functionality. Audio in/out wires are required for integrations where an audio connection with an existing intercom is necessary for unlocking to work. See* [Integrating with intercom systems](#) *for more.*
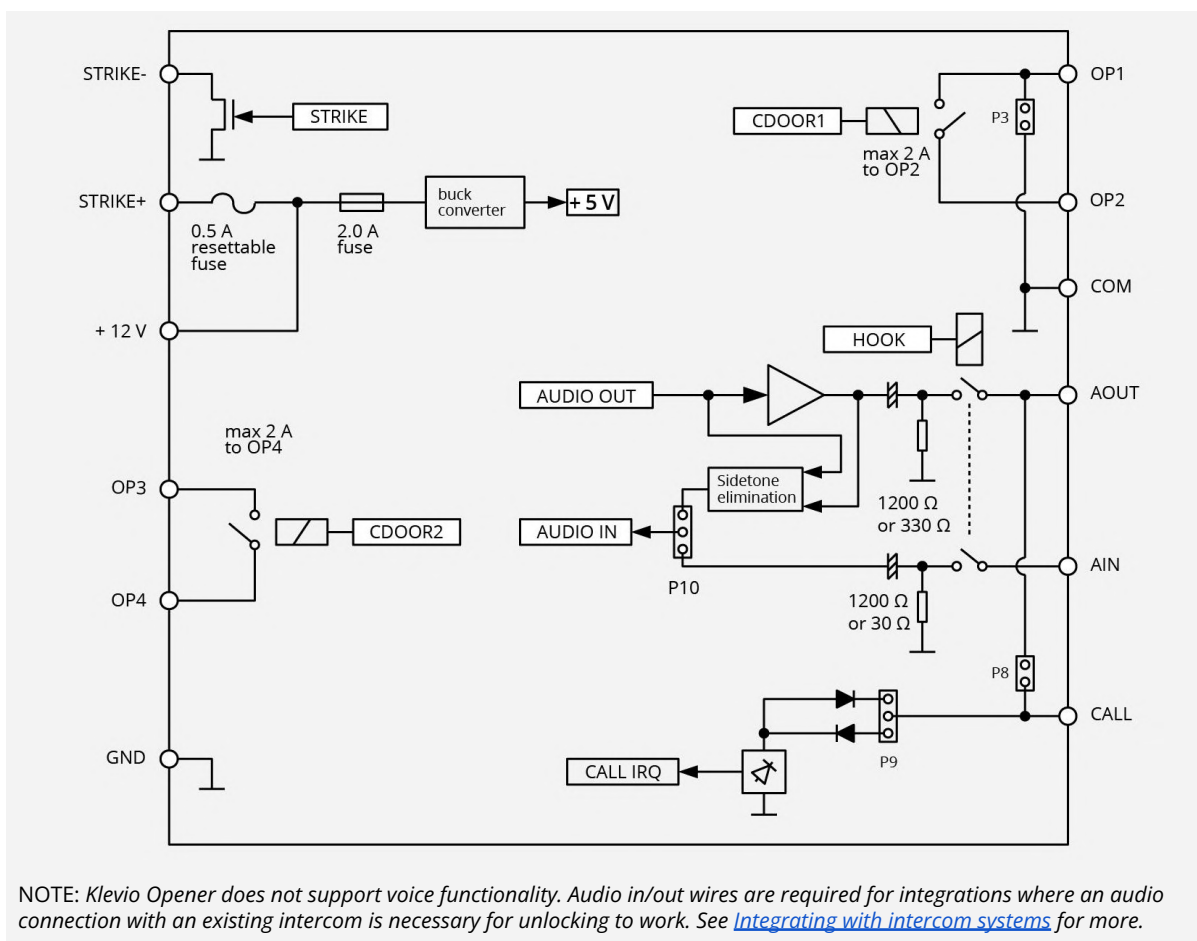
Common materials & consumables required for installation

Depending on the type of installation required, additional hardware consumables and tools will be needed when installing a Klevio device. The most common additional items are:

- Power supply unit with an output of 12 V DC, 2000 mA*

- Electric strike with an input of 12 V DC and max consumption of 500 mA

- CW1308 telephone cable or similar for wiring

- Four wall screws and four wall plugs appropriate for the surface on which Klevio is being mounted

The unit shall be supplied from external DC power supply source, which complies with clause 2.5 of standard IEC 60950-1+A1+A2 / EN 60950-1+A1+A2+A11+A12, requirements for Limited Power Source. The AC-DC power supply shall be protected by external fuse in building installation (16 A for EU, 13 A for UK).

Power supply wiring

Klevio can be powered by a **plug and socket power supply** (international sockets available) or by a **mains power supply.** Please refer to the following diagrams marked Fig. 7 and Fig. 8 to see how the Klevio console should be wired in either case. To avoid the possibility of short circuits during cable wiring, *connect the wires to the Klevio console first* and only then plug the power supply into the socket.

If you want to make sure the cables you are using are the appropriate length, you can partially mount the console first to give you a better idea of how the finished installation will look like. Please see STEP 3 in the 'Installation instructions' section for more details.

OPTION 1: Plug power supply unit wiring

Fig. 7: Wiring the Klevio Console to a plug power supply unit

Cable	Function	Klevio Terminal
RED	DC+	+12V
BLACK	DC-	GND
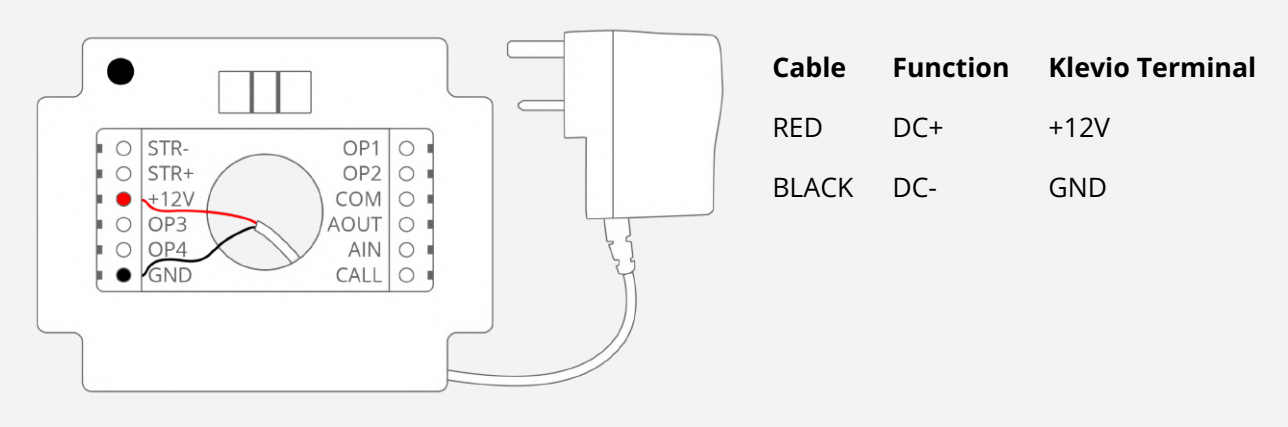
OPTION 2: Mains power supply unit wiring

Fig. 8: Wiring the Klevio Console to a mains power supply unit

Power Supply Terminal	Function	Klevio Terminal
+V	DC+	+12V
-V	DC-	GND

🛈 *Mains wiring should only be performed by a* **qualified electrician.**
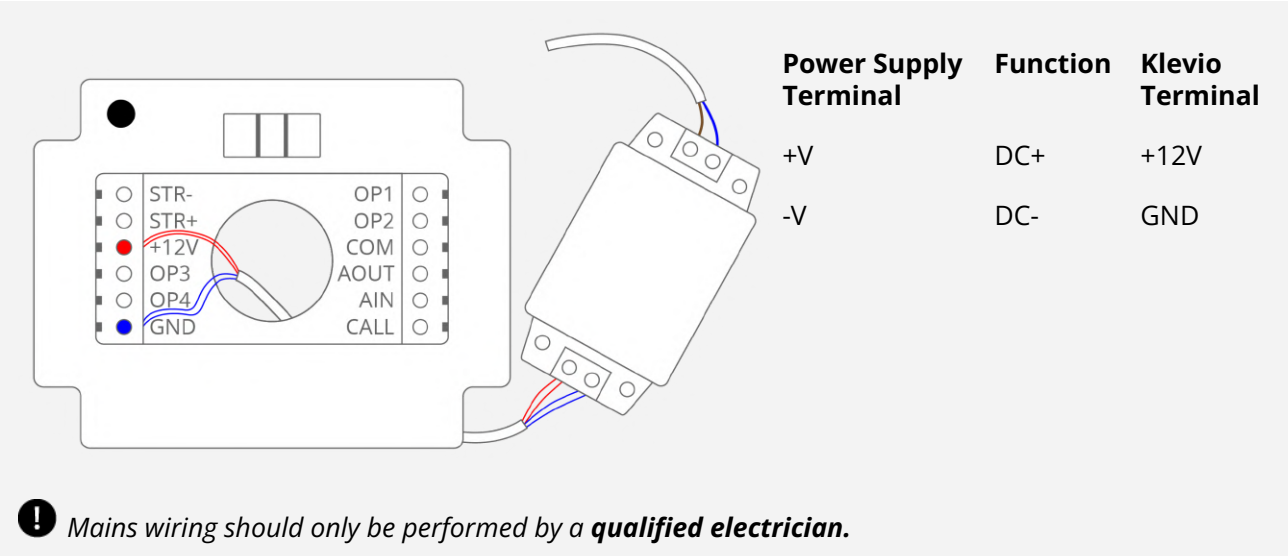
Installation instructions

The Klevio Console and Klevio Controller that make up a Klevio device need to be installed separately. The Klevio device comes assembled out of the box, so you will need to separate the Console from the Controller before you can proceed with your installation.

The Klevio console should be installed in an appropriate area inside the property - preferably mounted on a wall (next to the door, in an electrical cupboard, etc.) and connected to power. You can then **connect it to your locks, access systems or any other hardware** you want to control with Klevio.

The Klevio controller is attached to the mounted console at the end of the installation to form a complete Klevio device.

The installation must be executed properly in order for your Klevio representative to issue your digital keys. Please complete the following steps to correctly install the Klevio system at your property.

STEP 1 Take your Klevio device & separate the Console from the Controller

Take your assembled Klevio device out of the box, orient it upwards (so that the Klevio logo on the front is the right way around), and push down on the console. The console should click out of place and become completely loose, allowing you to remove it from the controller. See Fig. 9 for details.

Learn more about the Console and Controller in the [Klevio Opener device details](#) section.

Fig. 9: Detaching the Klevio console from the Klevio controller - push down to unmount and then remove the console
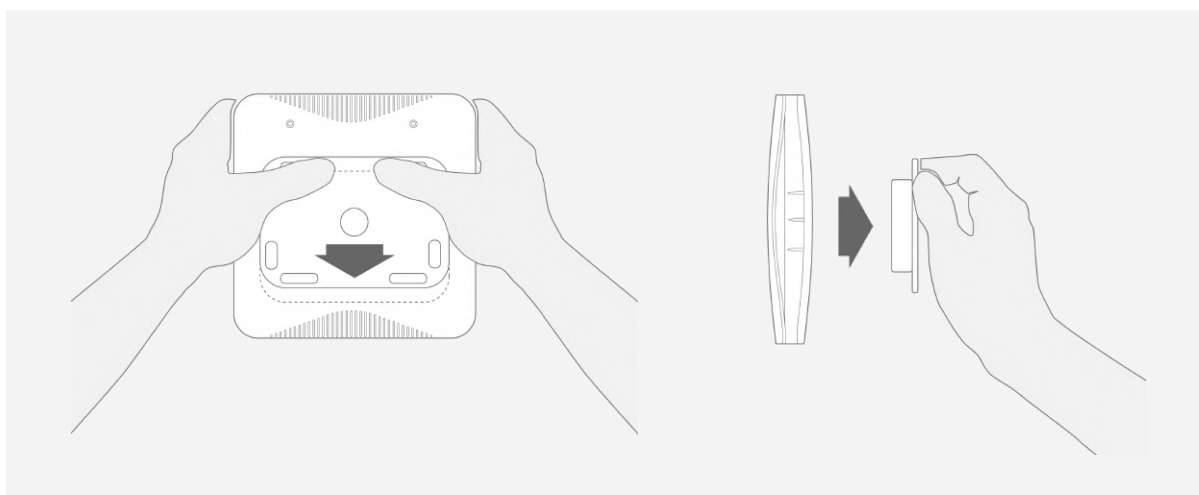
STEP 2 Connect the Klevio console to power

Please refer to the ['Power supply wiring'](#) section in this chapter to correctly connect the Klevio console to your preferred power supply option.

STEP 3 Mount the Klevio console on a wall

Please note that if any of the cables that should connect to the console do not come out of the wall directly behind where you'd like to mount it, you can guide the cables through the indented areas on the edge of the console. Keeping that in mind, please take the steps described in Fig. 10 to mount your console to the wall.

Fig. 10: Mounting the Klevio Console on a wall

1. Place the console on the wall and use the spirit level in the top middle part of the console to align its position. Use the holes in the console's plastic casing to mark where you will need to drill **at least four 6mm holes** to mount the console to the wall.

   Remove the console and drill holes for the screws where you marked them.

2. If you are using plugs, insert them into the drilled holes. Replace the console over the drilled holes and **screw the console to the wall.**

STEP 4 Check mounted console for power

Once wired and mounted on the wall, you can test if the console has been properly connected to power by pressing the small round **'Emergency unlock' button** (see Fig. 2 in the section 'Opening your door if your device stops working'). You should hear an audible clicking noise, which means the OP1/OP2 relay is being triggered.

If you cannot hear the relay being triggered, please check that the console has been properly wired to your power supply in accordance with the diagrams in the 'Power supply wiring' section.

STEP 5 Connect the device to your locks, access system or other hardware

Klevio Opener can be integrated in different ways depending on the context and existing setup. A few common examples are presented in the 'Integrating with intercom systems' & 'Connecting other hardware' sections of this manual. If you require a different type of installation, or simply require technical support for your integration, please contact your Klevio representative at support@klevio.com for assistance.

Integrating with intercom systems >

Connecting other hardware >

STEP 6 Attach the Klevio controller & boot up the device

Once your access hardware is properly connected, place the Klevio controller over the console, so both parts are properly aligned. With a downward motion, using light force, push the controller to the console until you hear a click or feel it snap into place. Please see Fig. 11 for reference.

Fig. 11: Attaching the Klevio controller onto a Klevio console that's mounted on a wall
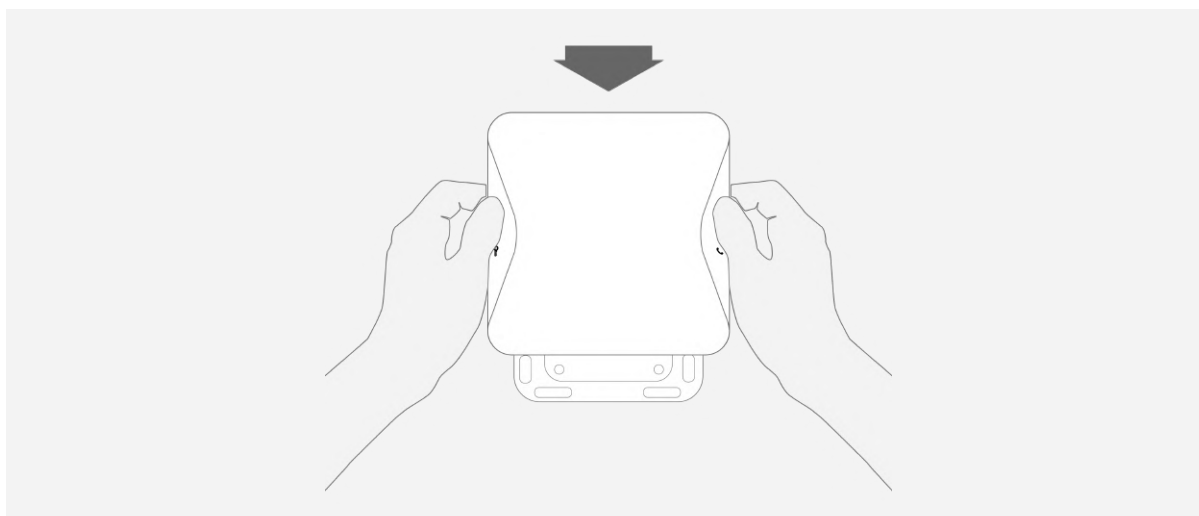
If the console is properly connected to power, the device will start booting up once the Klevio controller is attached. This is indicated by **the indicator lights on the controller lighting up during boot.**

Once the device is ready, some of the lights may turn off first, and after a couple of seconds, all the lights will turn off completely.

If the indicator lights stay on, there may be an issue with the device. If this happens, please contact your Klevio representative at support@klevio.com for assistance.

STEP 7 Test your locks are working from the Klevio device

Once your Klevio device is running, press the unlock buttons (see Fig. 1 in 'Interacting with the Klevio Opener device') to check if the integration was successful. Pressing the appropriate button should successfully unlock the corresponding lock that's wired to it.

The unlock buttons can also be configured in Device Settings - please see 'Accessing Device Settings' for more details on how to modify your device.

STEP 8 Download the Klevio app & create a Klevio account

Once your device is working properly, you can start the process of acquiring your digital keys.

First, you need to download the Klevio app and create a Klevio account that will hold your master keys. The Klevio app is available for free on the App Store (iOS) and Google Play (Android).

Please be mindful that the **email you choose for your Klevio account** will be the one to receive important notices from Klevio & will help identify you when you contact the Klevio Support Team to issue your keys.

STEP 9 Contact Klevio to issue your master keys

Once your Klevio account is ready, contact your Klevio representative at support@klevio.com to issue your keys. In the email, please include:

- The email address you used for your Klevio account
- **A photo of the wiring on your console** (or simply write down which terminals you connected your locks to)

Once your Klevio representative has issued your keys, they should appear in the "Keys" page of your Klevio app. You may need to hit the refresh button in your app for the keys to become visible. If you encounter any problems, don't hesitate to contact your Klevio representative again to help resolve the issue.

Integrating with intercom systems

The diagrams on the following pages show common examples of integrating Klevio Opener with an intercom system. If you require a different type of installation, or simply require technical support, please contact your Klevio representative at support@klevio.com for assistance.

> **❶ Important**
>
> *Never connect mains (230 V AC) voltage or any lines referenced to the mains directly to the console. If a lock is operated by the mains voltage, use an appropriate external relay.*

5-wire analog system (4+n)

For example: Bitron Video AV2058/51, Bell system model 61

Please see Fig. 12 for details on how to wire Klevio Opener to a 5-wire analog system. If the console has an R16, the setting in this case is irrelevant.

Fig. 12: Wiring Klevio Console v2.8 to a 5-wire analog system (4+n)

NOTE: Klevio Opener does not support voice functionality. Audio in/out wires are required for integrations where an audio connection with an existing intercom is necessary for unlocking to work.

2-wire analog system (1+n)

For example: Urmet 1145/67, Urmet Domus 1035/67

Please see Fig. 13 for details on how to wire Klevio Opener to a 2-wire analog system. If the console has an R16, it should be turned approximately ¼ in a clockwise direction (this is the factory default position).

Fig. 13: Wiring Klevio Console v2.8 to a 2-wire analog system (1+n)

NOTE: Klevio Opener does not support voice functionality. Audio in/out wires are required for integrations where an audio connection with an existing intercom is necessary for unlocking to work.
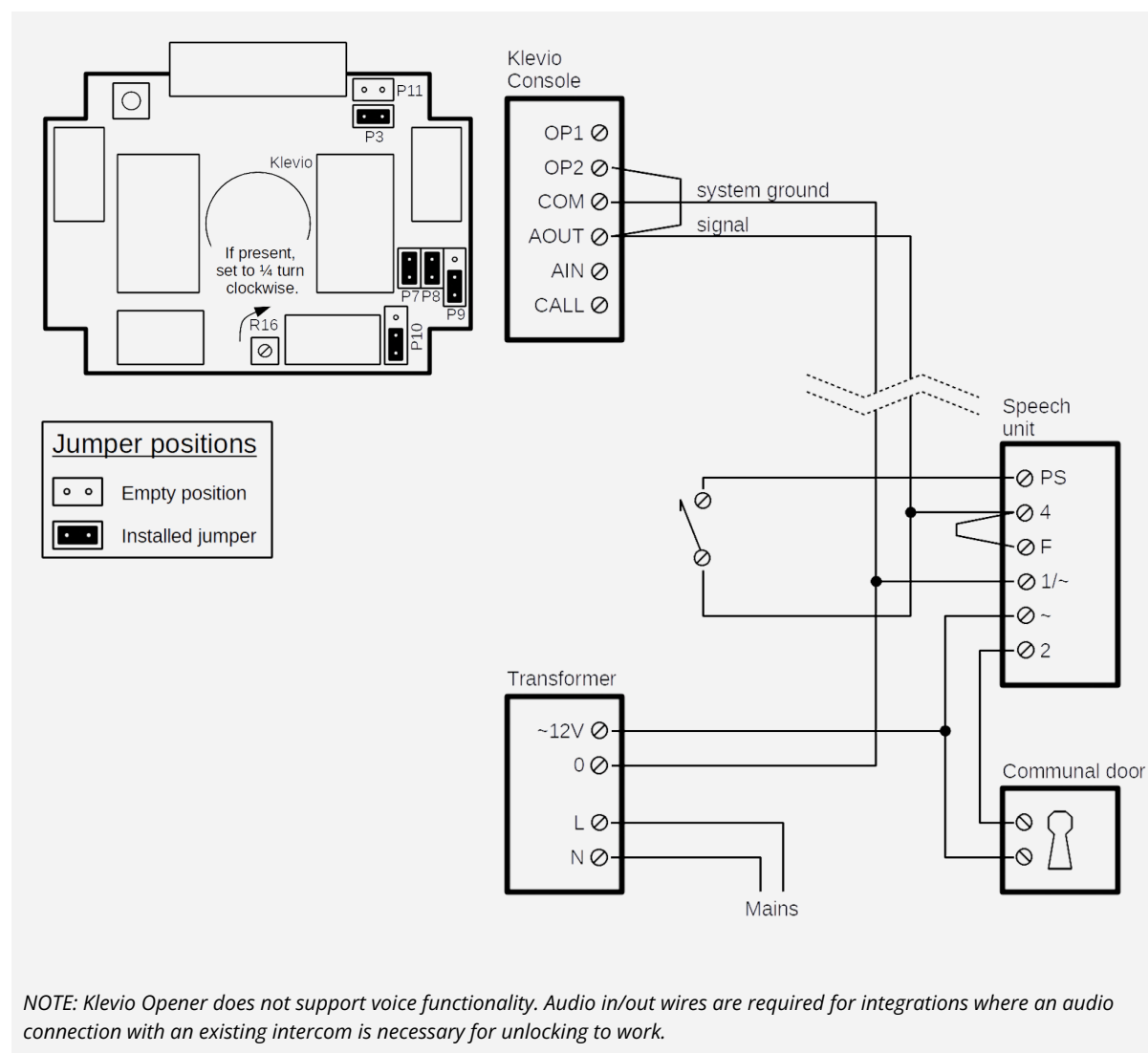
Connecting other hardware

The sections below show common examples of integrating Klevio Opener with other hardware. If you require a different type of installation, or simply require technical support, please contact your Klevio representative at support@klevio.com for assistance.

> ❗ **Important**
>
> *Never connect mains (230 V AC) voltage or any lines referenced to the mains directly to the console. If a lock is operated by the mains voltage, use an appropriate external relay.*
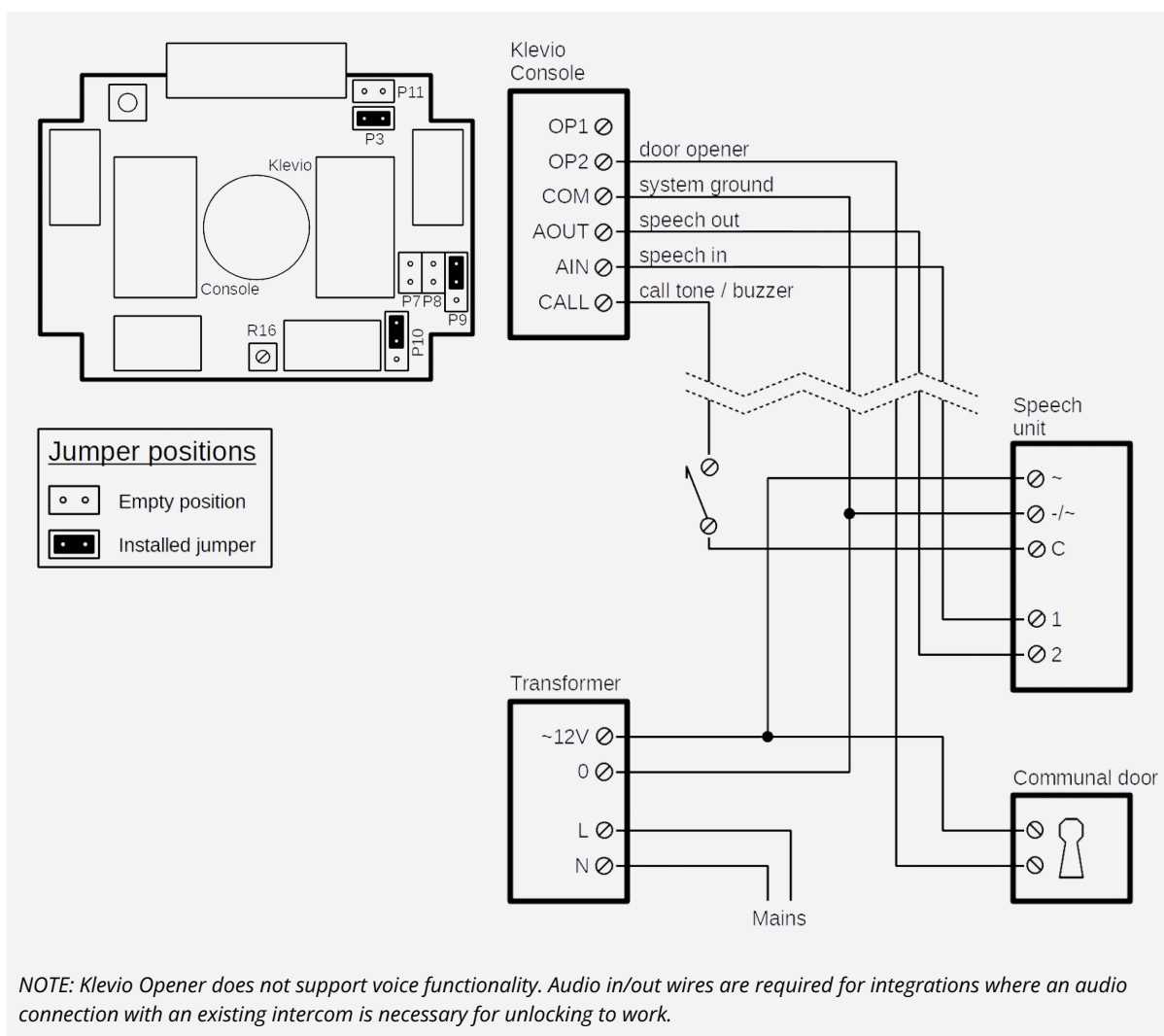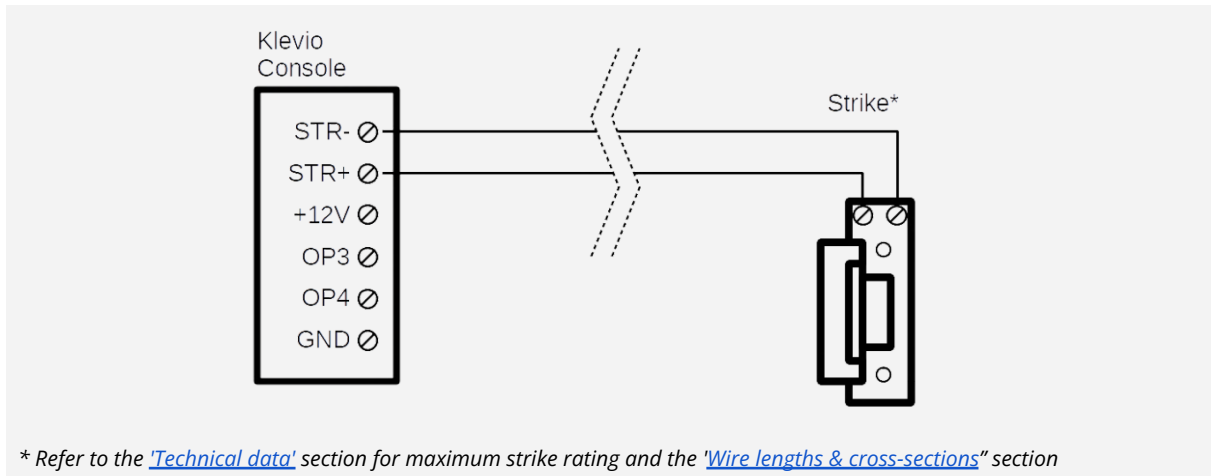
Electric strike

Fig. 14: Wiring Klevio Console v2.8 to an electric strike

* Refer to the 'Technical data' section for maximum strike rating and the 'Wire lengths & cross-sections" section

External NC or NO relay

Some installations require the use of an external relay board. This would be recommended to you by your Klevio representative at the point of sale; please contact us at support@klevio.com for more information.

Technical details

Terminal connections

> ❗ **Important**
>
> *Never connect mains (230 V AC) voltage or any lines referenced to the mains directly to the console. If a lock is operated by the mains voltage, use an appropriate external relay.*

Left terminal block

Fig. 15: Left terminal block connections on Klevio Console v2.8

Pin	Name	Comment
1	STRIKE-	MOSFET switch to GND. STRIKE- will sink up to 0.5 A to GND. Maximum voltage to GND is 12 V.
2	STRIKE+	Fused +12V DC supply for strike. STRIKE+ will source up to 0.5 A continuously. In case of overcurrent, a PTC fuse will trip. The fuse will reset automatically after the load has been removed and the fuse has cooled down.
3	+12V	+12V DC power supply input. Maximum input current 2 A.
4	OP3	Relay switch to OP4. Maximum switching current is 2 A. Maximum voltage to GND is 48 V DC. Not fused.
5	OP4	See OP3. Isolated from the rest of the circuit (volt-free contact).
6	GND	Power supply ground. Internally connected to COM.

Right terminal block

Fig. 16: Right terminal block connections on Klevio Console v2.8

Pin	Name	Comment
12	OP1	See OP2.
		Shorted to COM when **P3** is installed.
11	OP2	Relay switch between OP1 and OP2.
		Maximum switching current is 2 A. Maximum voltage to GND is 48 V DC. Not fused.
		Isolated from the rest of the circuit (volt-free contact) if **P3** is not installed.
10	COM	Intercom system and analog ground.
		Internally connected to power supply ground.
9	AOUT	Audio output (**P10** in position 2-3) or bi-directional transceiver (**P10** in position 1-2). There is a 1200 Ω or 330 Ω DC load towards COM (**P7**) when intercom is off-hook. Used for integrations where an audio connection from an existing intercom to Klevio is necessary for unlocking to work.
8	AIN	Audio input when **P10** is in position 2-3. Not connected otherwise. There is a 1200 Ω or 30 Ω DC load towards COM (**P11**) when intercom is off-hook. Used for integrations where an audio connection from an existing intercom to Klevio is necessary for unlocking to work.
7	CALL	Ring / call detector. Depending on the position of **P9**, the device will detect a call when level goes either positive or negative relative to ground. Shorted to AOUT when **P8** is installed.

Jumpers

By default, the Klevio Opener Console v2.8 is configured for a typical 5-wire system. To change the jumper configuration you will need to disassemble the Console v2.8 with a torx T10 screwdriver.

Fig. 17: Jumpers P3, P7, P8 and P11 for Klevio Console v2.8

	Installed	**Not installed**	**Comment**	**Default**
P3	First communal door relay connects OP2 to COM. OP1 is shorted to COM.	Communal door relay connects OP2 to OP1. OP1 and OP2 are isolated from COM and GND (volt free contacts).	Usually needed for driving a communal lock in analog systems.	Installed
P7	330 Ω DC load between AOUT and COM.	1200 Ω DC load between AOUT and COM.	Some 2-wire systems require termination with a DC load.	No
P8	CALL is shorted to AOUT.	CALL is isolated from AOUT.	Convenience jumper for installation in 2-wire systems.	No
P11	30 Ω DC load between AIN and COM.	1200 Ω DC load between AIN and COM.	Some 5-wire systems require AIN termination with a DC load.	No

Jumpers P9 and P10 must always be installed in one of the two possible positions (see Fig. 18).

Fig. 18: Jumpers P9 and P10 for Klevio Console v2.8

	Position 1-2	**Position 2-3**	**Default**
P9	Negative voltage on the CALL line signifies a ring. Typical for 2-wire systems.	Positive voltage on the CALL line signifies a ring. Typical for 5-wire systems.	2-3 (+ CALL)
P10	AOUT is bidirectional. AIN is not connected.	AOUT is audio output. AIN is audio input.	2-3 (5 wire)

Installation troubleshooting

The most common problems that occur during device installation are mentioned below. If you require additional assistance, please contact your Klevio representative at support@klevio.com.

Klevio does not respond to a call on an analog system

Try a different call polarity setting (jumper P9).

Wire lengths & cross-sections

Values calculated for copper wires.

Klevio power supply

1 V max. voltage drop

1.5 A max. (without 4G) / 2.0 A max. (with 4G)

Fig. 19: Klevio Opener power supply wire lengths

Cross-section	0.2 mm² 24 AWG	0.5 mm² 20 AWG	1.0 mm² 17 AWG	2.0 mm² 14 AWG
Max. length (without 4G)	3 m	9 m	17 m	30 m
Max. length (with 4G)	2 m	6 m	13 m	25 m

Strike

1 V max. voltage drop

0.5 A max.

Fig. 20: Electric strike integration wire lengths

Cross-section	0.1 mm² 27 AWG	0.2 mm² 24 AWG	0.5 mm² 20 AWG	1.0 mm² 17 AWG
Max. length	5 m	10 m	30 m	50 m

Safety & regulations

Device handling & legal documentation

Klevio Opener should only be used in official Klevio installations with the intent to enable the Klevio smart access system. Klevio Ltd disclaims any liability deriving from installations or modifications carried out by non-approved parties.

Klevio Opener:

- is intended for indoor use only,
- shall be kept away from water or excessive humidity,
- shall be kept away from children,
- should not be used or stored close to heaters, fireplaces or other sources of heat.

Read our legal documentation at www.klevio.com/legal.html

For more details please contact our customer support team at support@klevio.com

Certification

The device has been tested against and conforms with the following standards: EN 60950-1:2006 + A1:2010 + A2:2013 + A11:2009 + A12:2011, EN 55032:2012, EN 55024:2010, EN 61000-3-2:2014, EN 61000-3-3:2013 and draft EN 303 446-1 V1 .1.0.

Technical data

Power supply

Fig. 21: Klevio Opener power supply data

Power supply requirements	9.6 - 14.4 V DC 1.5 A (without 4G) 2.0 A (with 4G)
Power consumption	standby approx. 1.5 W (without 4G) standby approx. 2.5 W (with 4G) max. 18 W (without 4G) max. 24 W (with 4G)

Intercom

Fig. 22: Klevio Opener intercom compatibility details

Supported intercom types	Analog 2-wire / 1+N line Analog 5-wire / 4+N line
Audio line DC load	AIN: 1200 Ω / 30 Ω (selectable) AOUT: 1200 Ω / 330 Ω (selectable)
Audio line DC level	max. 48 V (high-impedance)
Call input	Electronic / digital call Buzzer
Call input voltage	max. 48 V DC / 34 V AC

Strike rating (STR+ / STR-)

Fig. 23: Klevio Opener strike rating

Voltage	12 V DC
Current	max. 500 mA

Communal door relays (OP1 / OP2 / OP3 / OP4)

Fig. 24: Klevio Opener communal door relay details

Maximum switching current	2.0 A DC / 1.4 A AC
Maximum switching voltage	48 V DC / 34 V AC
Maximum switching power	50 W

Wire terminals

Fig. 25: Klevio Opener wire terminal details

Wire cross section	Solid up to 1.5 mm2 / 16 AWG Stranded up to 1 mm2 / 16 AWG
Strip length	5 - 6 mm
Type	screw terminal, M2 flat-head

Connectivity

Fig. 26: Klevio Opener connectivity data

Wireless LAN	IEEE 802.11b/g/n
Bluetooth	4.2
Cellular	LTE (LTE FDD), UMTS (DC-HSDPA, HSUPA, WCDMA). Bands 1, 3, 7, 8, 20, 28.

Miscellaneous

Fig. 27: Klevio Opener miscellaneous data

Ambient temperature	Operation: 0°C - 45°C Storage: 0°C - 45°C
Dimensions	approx. 160 x 160 x 35 mm
Mass	approx. 330 g

Support

Contact our customer support team at support@klevio.com
You can speak to us directly via our chat service on www.klevio.com
Additional information is also available on our customer support website at help.klevio.com

List of manual modifications

2022-May-10   This is the first version of this manual.

Other

Opener-IM:1.0-202205-CS:v2.8-CT:v2.4a ©2022 Klevio

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