klevio

Customer Support

Klevio Omni

Instruction Manual
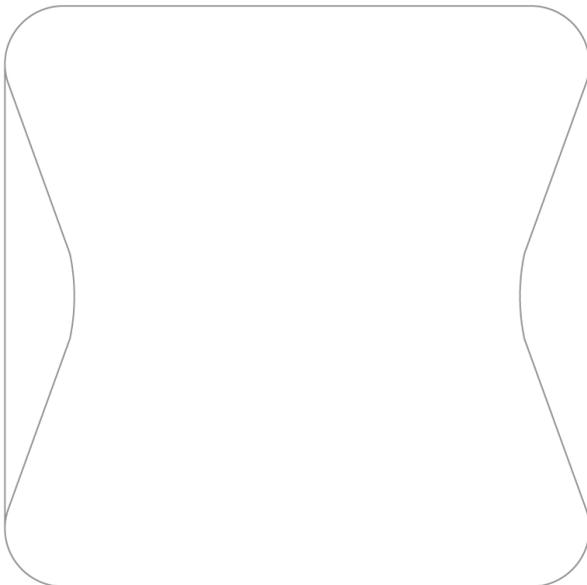
Welcome to Klevio

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 via the free [Klevio Smartphone App](#) or the [Klevio Web Dashboard](#) with digital keys.

This manual focuses on *Klevio Omni,* Klevio's premium 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 Omni Device

Klevio Omni enables you to control your connected locks remotely with the [Klevio App](#) or [Klevio Dashboard](#). In addition to various other access features and options for integration with other access hardware, the Omni can also be used as a standalone intercom unit.

There are four buttons on the front of the device and two on the back.

Fig. 1: Buttons on a Klevio Omni device
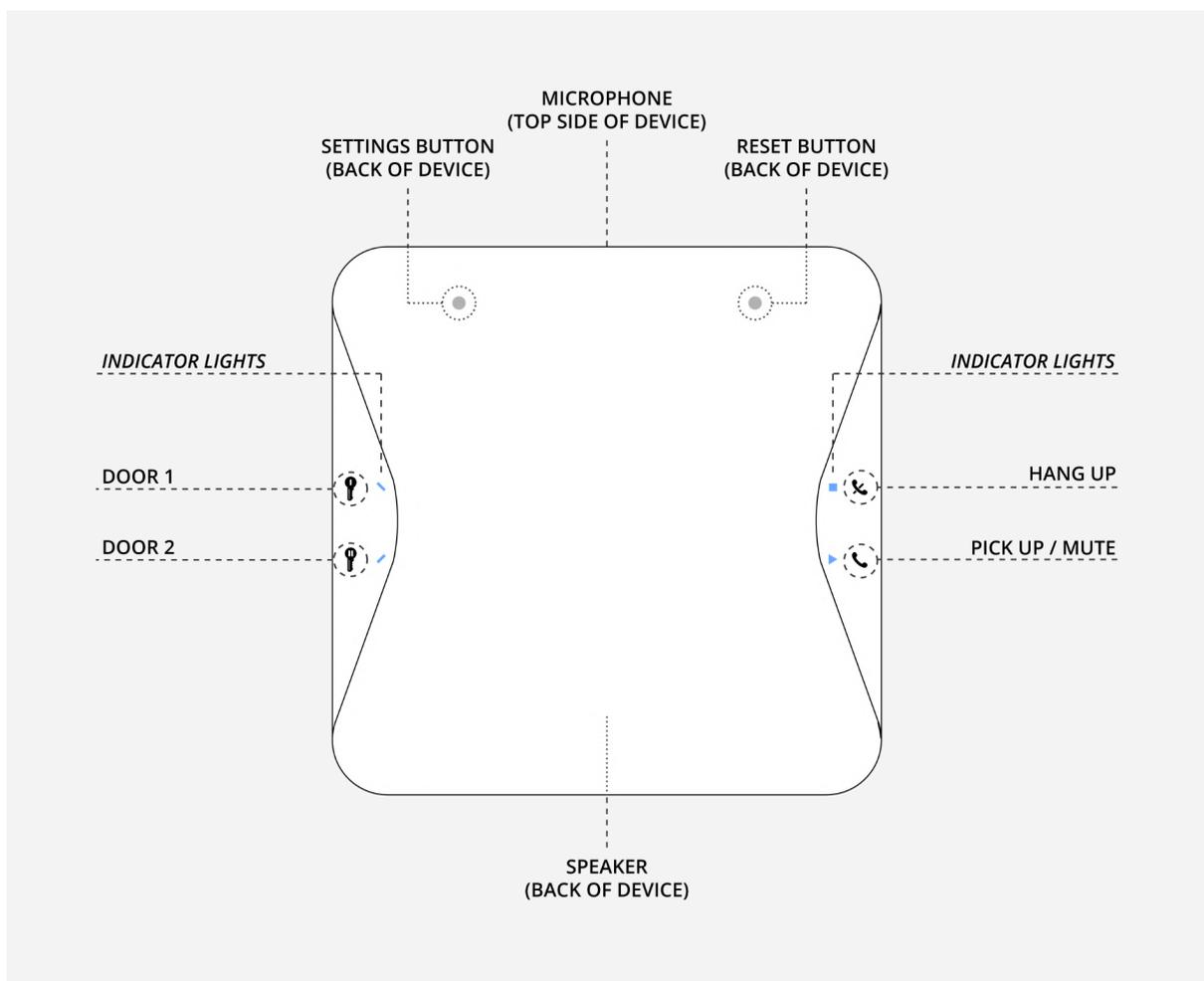
Front of device		Back of device	
🔑 *Door 1*	press to open door 1 (usually communal doors)	*Reset*	resets the device
🔑 *Door 2*	press to open door 2 (usually private doors)	*Settings*	lets you access your device settings via the web page www.klevio.zone *(Wi-Fi connection and audio)*
📞 *Pick up / Mute*	press to answer call, press again to mute and again to unmute		
📞 *Hang up*	press to end call		

❗ Please note

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

Answering a Call

When Klevio is rung from outside, the device will ring and the 'Pick up / Mute' button (📞) will flash blue (If you're close to the unit the indicator lights on the left will turn blue at the same time). To pick up the call, press the 'Pick up / Mute' button (📞), which will change from blue to orange, and you can now speak to the person outside.

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. 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 the buttons on your device cease to function. 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.

The Emergency unlock button will not open a communal door that is controlled through a digital intercom system (e.g. BPT X1 or Comelit SimpleBus).

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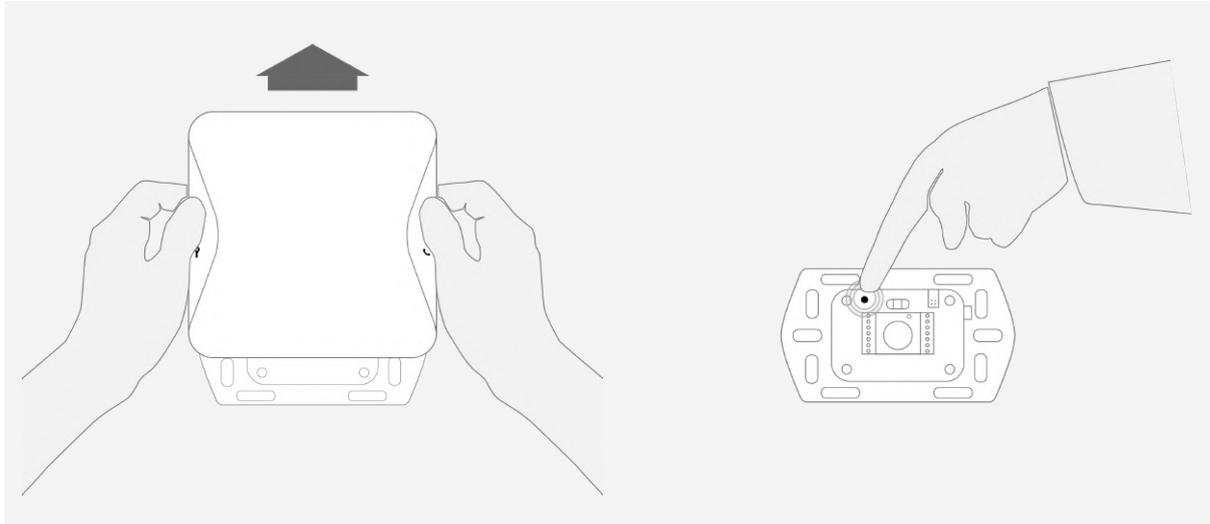
Accessing Device Settings

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 Omni 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 (audio, unlock duration, button configuration …)

You can also use the Device Settings page to adjust other aspects of your Klevio system such as audio settings, unlock duration, button actions, … 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 Omni

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 home 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 or consider upgrading your Klevio to a 4G-enabled device • If your Wi-Fi setup has changed, follow the instructions in 'Accessing Device Settings' of this document
Klevio doesn't ring 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
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

When I try to use my digital keys, the **'TA DA!'** message and **tick symbol** 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 **can't hear the person outside** while talking through my device, or **they can't hear me**	*Audio levels are set incorrectly*	You can adjust the volume of your intercom by pressing the 'Settings' button at the back of your device, as per the 'Accessing Device Settings' section of this document
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 function on www.klevio.com or through the Support page on your app.

Installation

> ## ❗ Caution
>
> *We strongly recommend that Klevio installations are carried out by an **approved Klevio installer**.*
>
> *Some Klevio installations require assistance from the Klevio Development Team to correctly implement, connect & register the hardware.*
>
> *Klevio Ltd disclaims any liability deriving from installations or modifications carried out by non-approved parties.*

Klevio Omni Device Details

In addition to being a door controller, *Klevio Omni* can also integrate with other access accessories (keypads, fob readers …), can be used in combination with Klevio Extenders to control up to 144 doors, and can provide useful features such as audio functionalities.

Klevio hardware product details >

The Omni 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 v3.x* and its compatible controllers.

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

The Klevio Console (v3.x)

Fig. 4: The Klevio Console v3
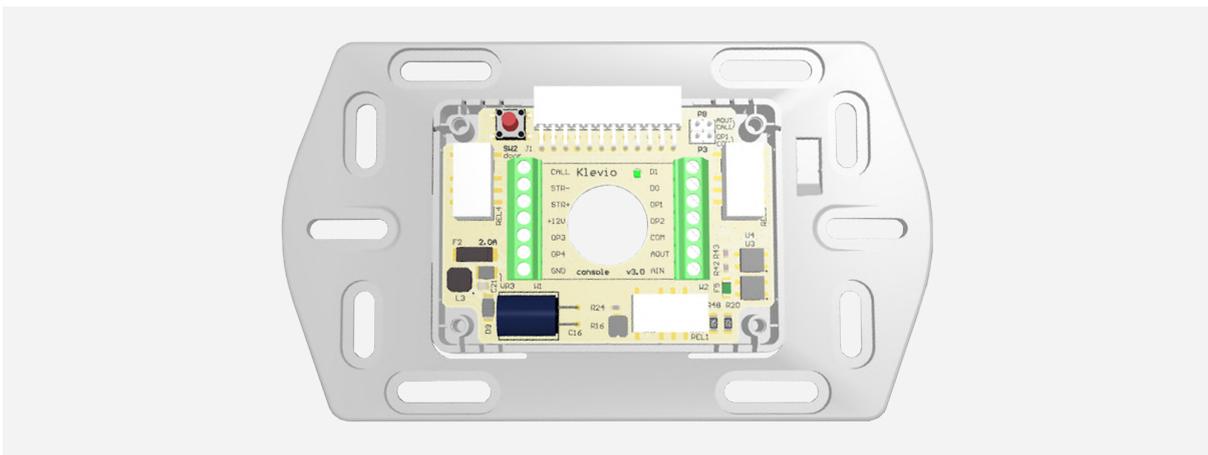
The Console is a circuit mounted on the wall and connected to power and intercom wires via terminal blocks. The Klevio Controller mounts onto the console via the 24 pin connector. The

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

Fig. 5: A Klevio Controller

Console v3.x is hardware compatible with the **v2.4 version of Klevio Controllers.**

Installing Klevio Omni

> ### ❗ 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.*

Klevio Omni functional diagram

Fig. 6: Klevio Omni functional diagram
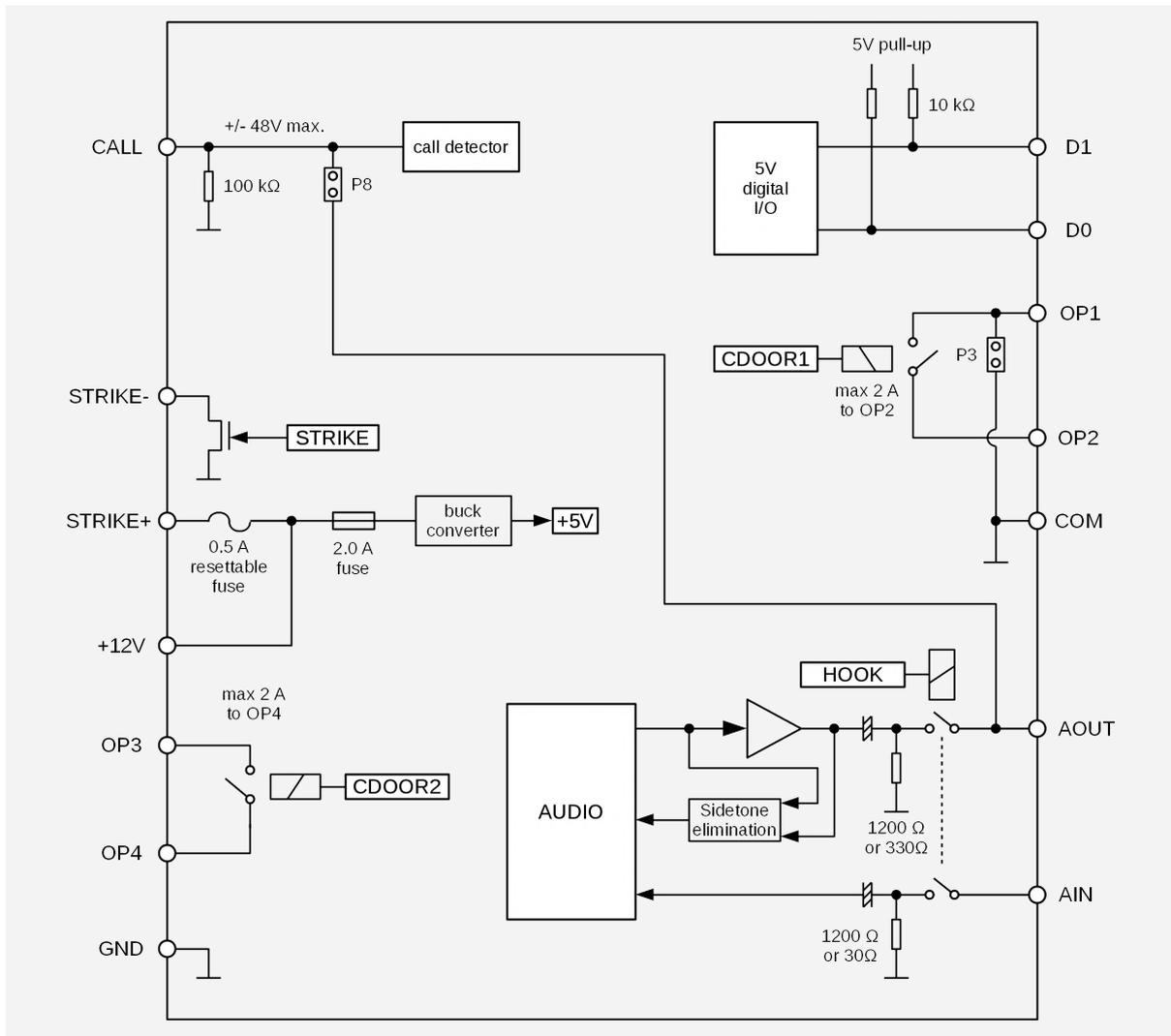
Common materials & consumables required for installation

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
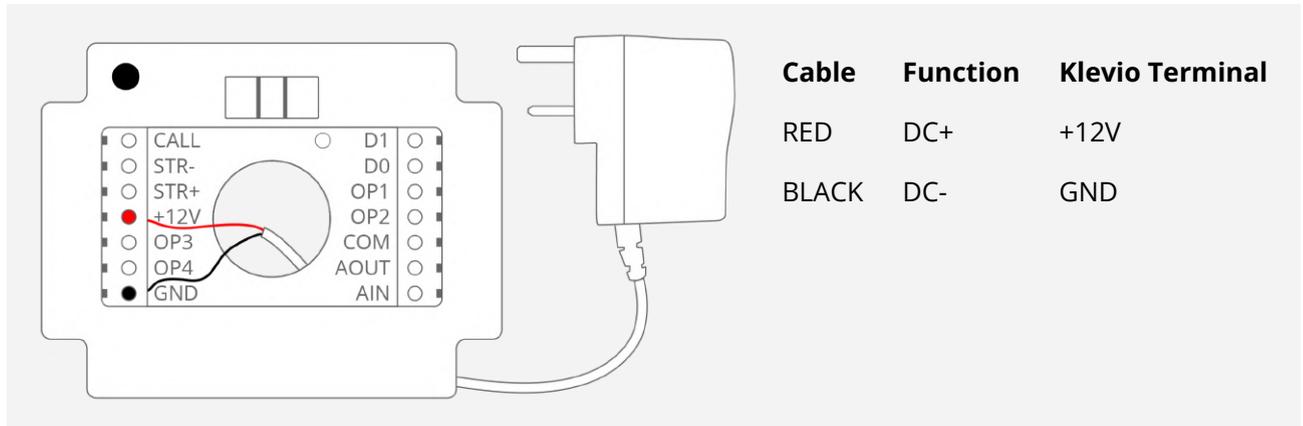
OPTION 2: Mains power supply unit wiring

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.***
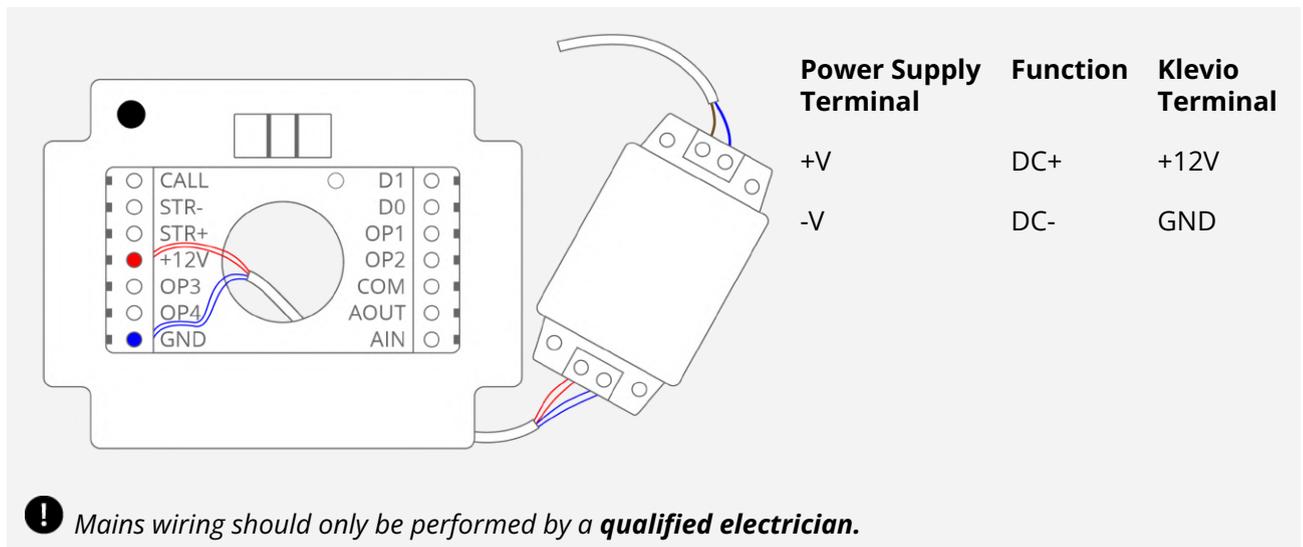
Installation instructions

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 Omni device details section.

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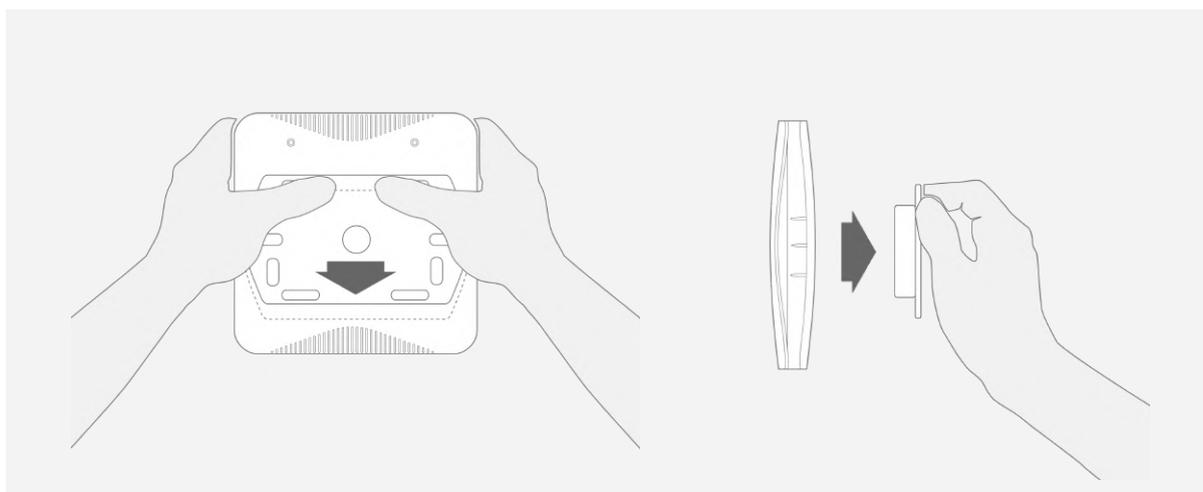
STEP 2 Connect the Klevio console to power

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.

In addition to that, you should also see a **blinking LED indicator on your console.** If the device hasn't been wired to an intercom system (yet), the indicator should blink in an 'Idle' (heartbeat) pattern - see the 'Console LED indicator' section to learn more about the indicator's different blinking patterns.

If you cannot hear the relay being triggered, or if the LED indicator stays dark, 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 Omni 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.

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 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
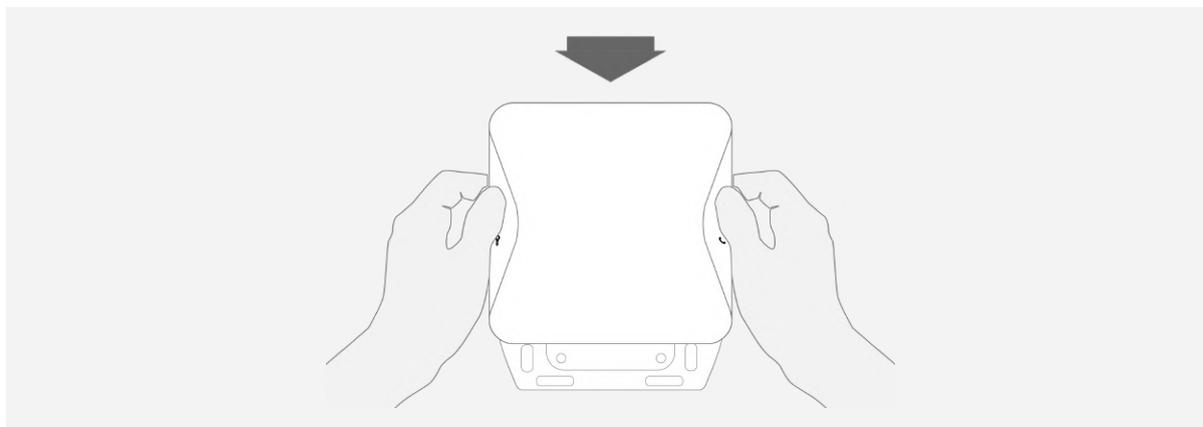
If the console is properly connected to power, the device will start booting up once the Klevio controller is attached. This is indicated by **all four indicator lights on the controller lighting up during boot.**

Once the device is ready, one of the lights will turn off, leaving only 3 indicator lights visible. After a couple of seconds, the lights will turn off.

If all four 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 Omni 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)
- A photo of your **device serial number** (visible on the device's box & on the back of the Klevio Controller)

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 only a few common examples of integrating Klevio Omni 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.

> ⓘ **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

Installed jumpers: **P3**

In your Klevio console settings, set call polarity to **positive**, AIN and AOUT loads to **"off".***

*These settings can currently only be altered with support from the Klevio Development Team. Please contact a Klevio representative at support@klevio.com for more details.

Fig. 12: Wiring Klevio Console v3 to a 5-wire analog system (4+n)
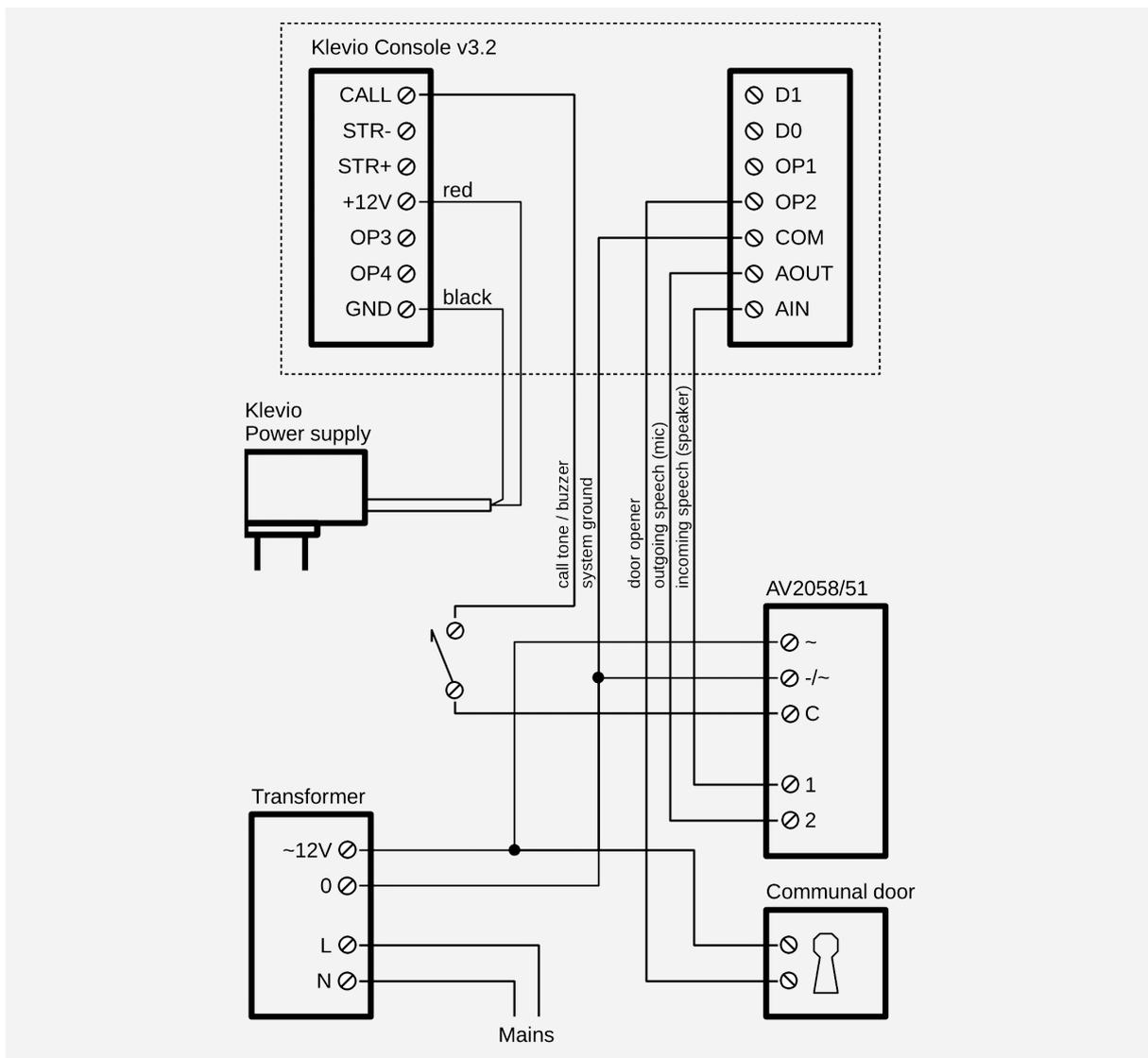
2-wire analog system (1+n)

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

Install jumpers: **P3, P8**

In your Klevio console settings, set call polarity to **negative**, AOUT load to **"on"**.*

*These settings can currently only be altered with support from the Klevio Development Team. Please contact a Klevio representative at support@klevio.com for more details.

Fig. 13: Wiring Klevio Console v3 to a 2-wire analog system (1+n)
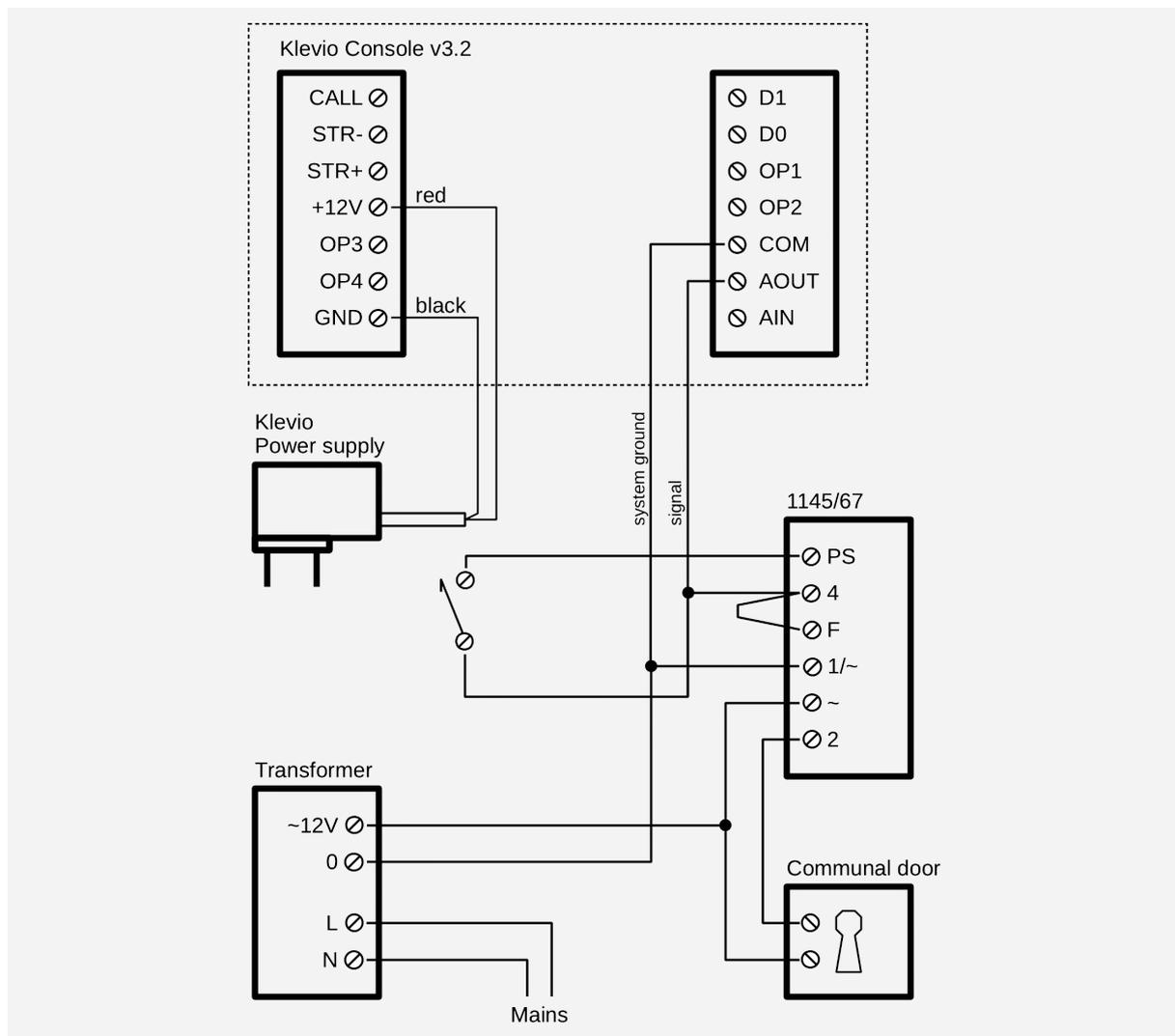
BPT X1

For example: VA/01, VAS/100.30

Installed jumpers: **P8**

Programming Procedure

This procedure registers the Klevio console on the BPT X1 bus. It should be performed each time the interface is connected to a new BPT X1 bus or if the polarity of the bus wires changes.

1. Initiate the programming procedure from your Klevio device settings.*

2. Press the call button on the entry panel for the apartment where the interface has been installed.

3. The entry panel will emit a "ringing" tone and Klevio will ring. If Klevio has been installed in parallel to a handset, the handset will start ringing as well.

4. Check that the programming procedure was successful in your Klevio device settings.

*These settings can currently only be altered with support from the Klevio Development Team. Please contact a Klevio representative at support@klevio.com for more details.

Recommended Audio Settings

- 37% local volume

- 42% remote volume

- digital audio with AEC

Fig. 14: Wiring Klevio Console v3 to BPT X1 as a stand-alone installation

⚠ **Do not use double cores** - *instead use a single twisted pair, one for each connection between BPT X1 and the console.*
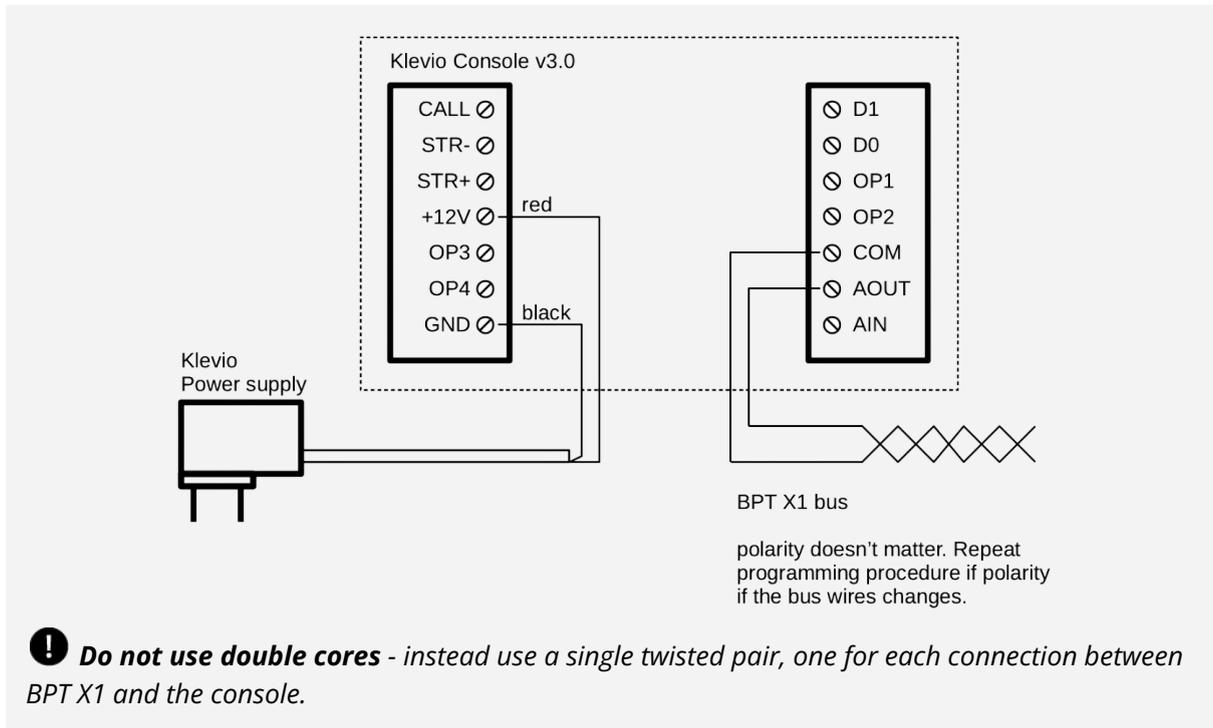
Fig. 15: Wiring Klevio Console v3 to BPT X1 as a parallel installation

⚠ **Do not use double cores** - *instead use a single twisted pair, one for each connection between BPT X1 and the console.*
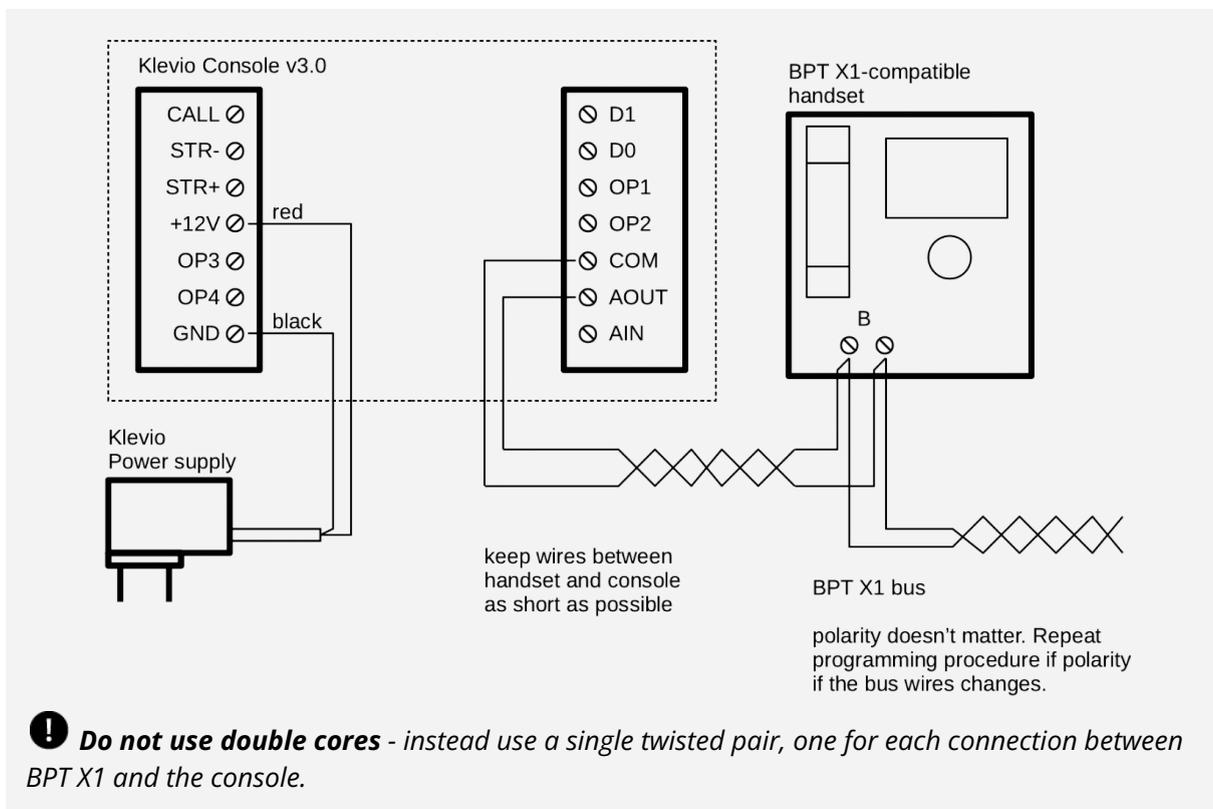
Comelit SimpleBus2

For example: 4888C (power supply), 6701W, 2708 (handsets)

Installed jumpers: **P8**

For this integration, a "user code" needs to be entered into your Klevio device settings.* The code can be read from the dip switches on the Comelit SimpleBus receiver (for example, [see this table in the 6701W manual](#)).

In case of a parallel installation, the Klevio device needs to be set to **"secondary mode"**.

*These settings can currently only be altered with support from the Klevio Development Team. Please contact a Klevio representative at support@klevio.com for more details.

Recommended audio settings

- 38% local volume

- 38% remote volume

- digital audio with AEC

❗ Important notes

If possible, turn off the power from the communal unit before performing the installation.

If working on a live system, take care not to short bus wires on the Comelit handset ("L" terminals). ***A short might disable the intercom system for the entire building.*** *If performing a parallel installation, first connect the wires on the Klevio end, then connect them to the terminals on the existing handset.*

With a Comelit SimpleBus you cannot pick up the audio line using the button on the Klevio device unless a call has been made from the entry panel (i.e. Klevio is ringing).

The hook relay clicks when the Klevio device is communicating with the entry panel. When unlocking the communal door, the relay can click several times in quick succession even if the unlock button on Klevio has only been pressed once.

Fig. 16: Wiring Klevio Console v3 to Comelit SimpleBus as a stand-alone installation

❗ Do not use double cores - *instead use a single twisted pair, one for each connection between Comelit SimpleBus and the console.*
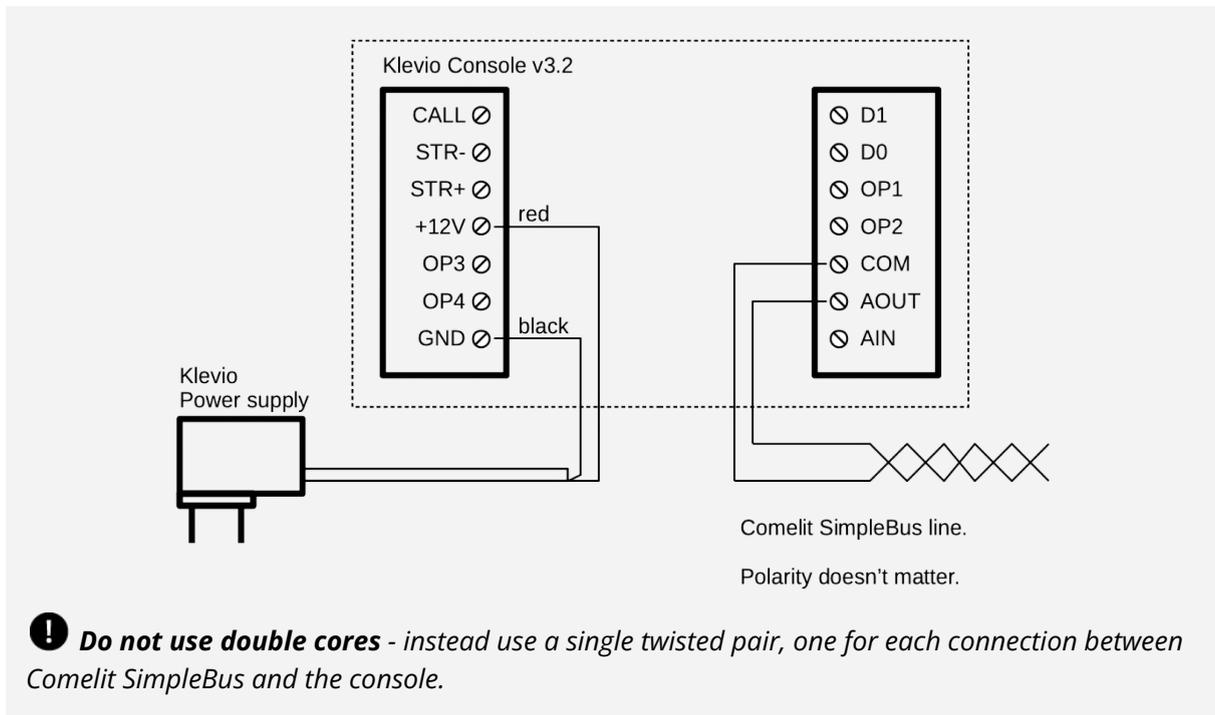
Fig. 17: Wiring Klevio Console v3 to Comelit SimpleBus as a parallel installation

❗ Do not use double cores - *instead use a single twisted pair, one for each connection between Comelit SimpleBus and the console.*
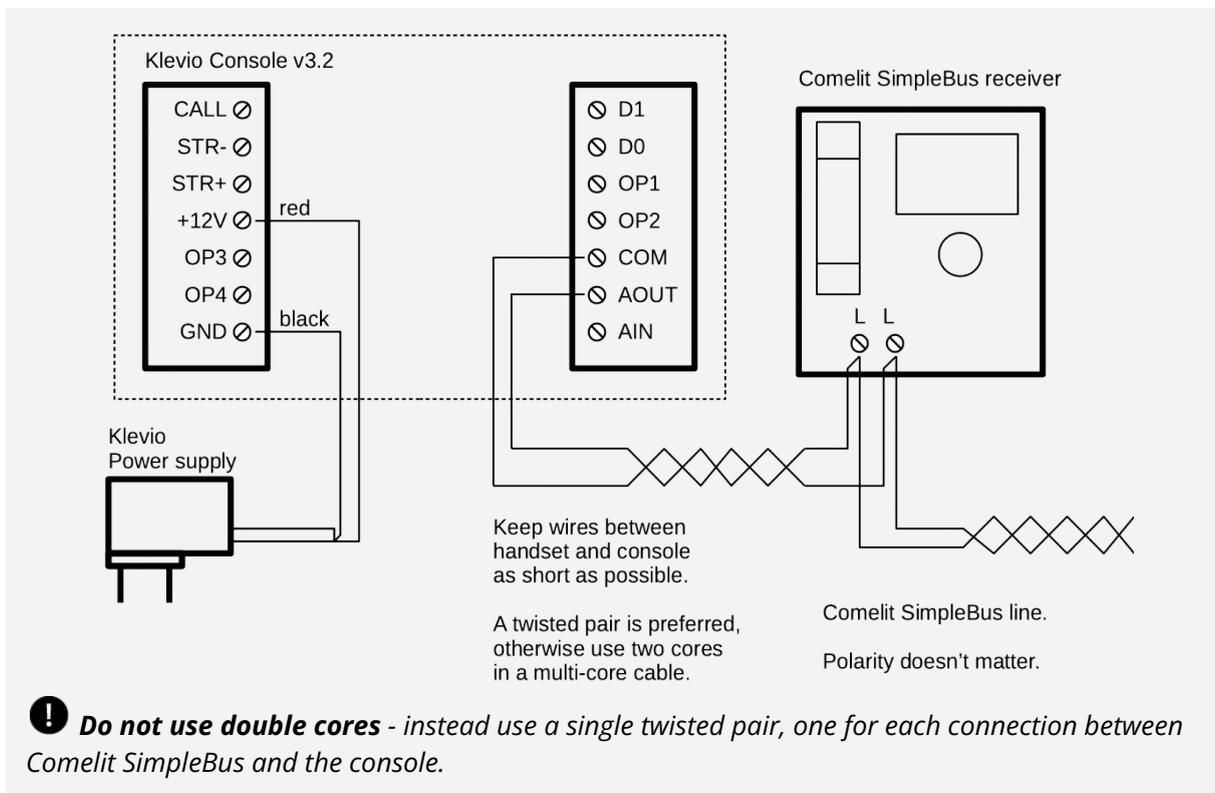
Connecting Other Hardware

The diagrams on the following pages show only a few common examples of integrating Klevio Omni with other hardware such as electric strikes, external keypads, Klevio Extenders etc. 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

See the 'Technical data' section for strike rating.

Fig. 18: Wiring Klevio Console v3 to an electric strike
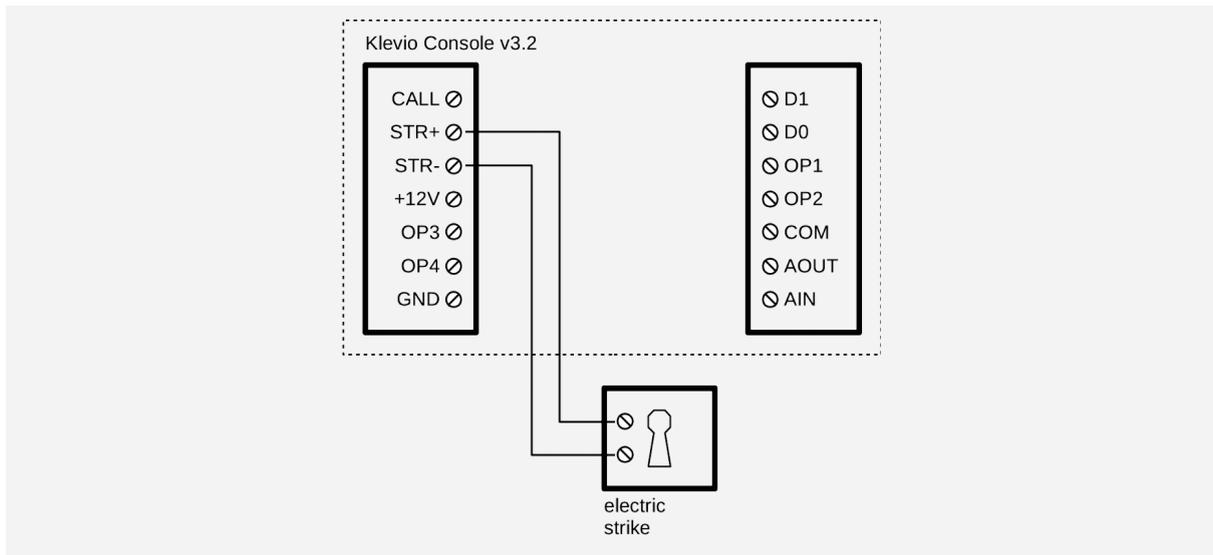
Door sensor

Depending on the Klevio device settings, the door sensor can be connected to D1 or D0 (Fig. 19).

Fig. 19: Wiring Klevio Console v3 to a door sensor
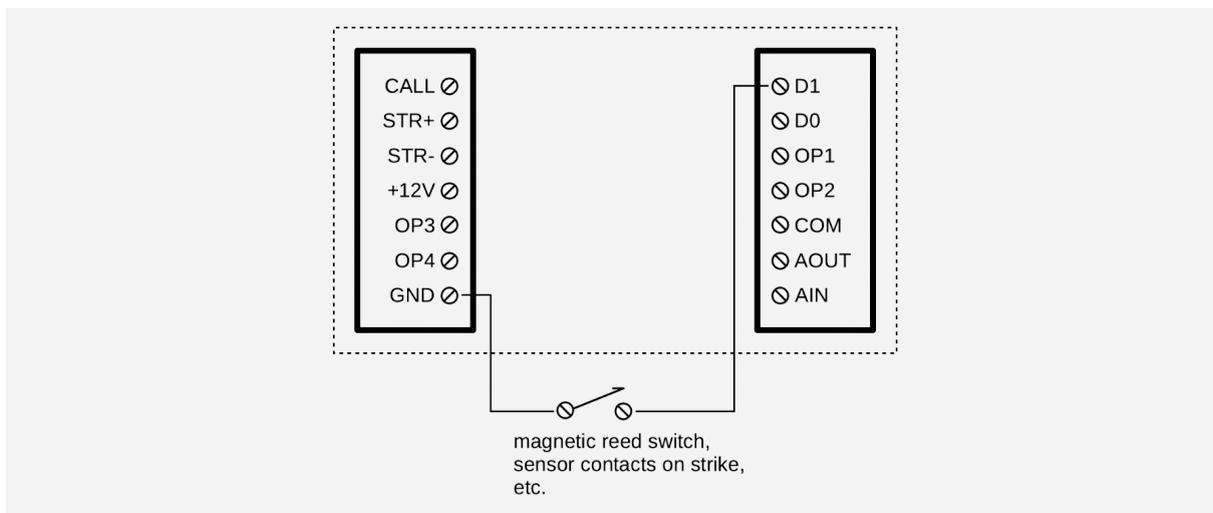
Landing doorbell

Depending on the device settings the doorbell can be connected to D1 or D0 (Fig. 20).

Fig. 20: Wiring Klevio Console v3 to a door sensor


```
CALL ⊘          ⊘ D1
STR+ ⊘          ⊘ D0
STR- ⊘          ⊘ OP1
+12V ⊘          ⊘ OP2
OP3 ⊘           ⊘ COM
OP4 ⊘           ⊘ AOUT
GND ⊘           ⊘ AIN
```
doorbell switch
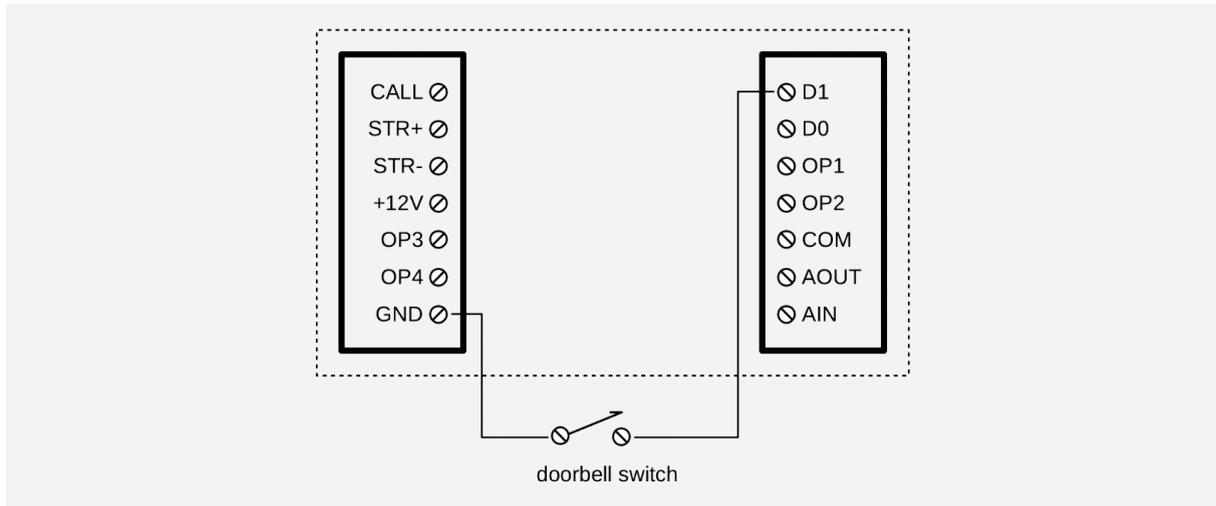
Request To Exit (RTE) button

Depending on the Klevio device settings, the RTE button can be connected to D1 or D0 (Fig. 21).

Fig. 21: Wiring Klevio Console v3 to a "Request to Exit" button


```
CALL ⊘          ⊘ D1
STR+ ⊘          ⊘ D0
STR- ⊘          ⊘ OP1
+12V ⊘          ⊘ OP2
OP3 ⊘           ⊘ COM
OP4 ⊘           ⊘ AOUT
GND ⊘           ⊘ AIN
```
Request To Exit button
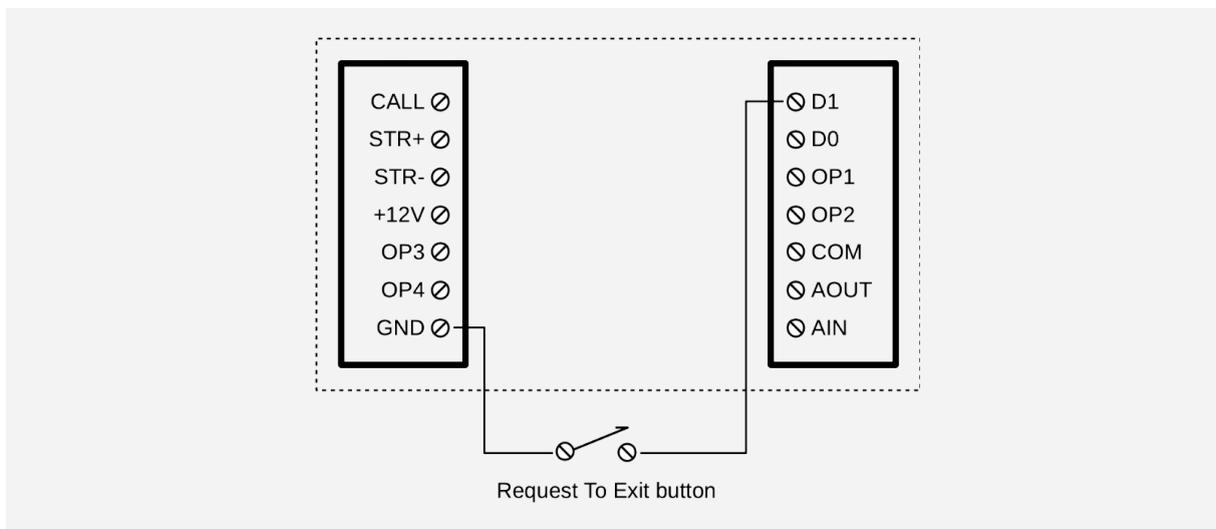
External keypad

Support

A Klevio Omni with a Console v3.0 supports keypads and fob/card readers with Wiegand output.

RS-485 and "clock-and-data" connections are *not supported*.

Keypad Wire Connections

If the keypad integration doesn't work, check the keypad manual or labels on the keypad itself for wire connections - the wire color scheme shown in Fig. 22 is most common.

Other known wire color schemes are:

- green - D1, white - D0 (opposite to the one shown in Fig. 22)

- blue - D1, yellow - D0

Restrictions

The keypad can't be connected at the same time as a door sensor or landing doorbell.
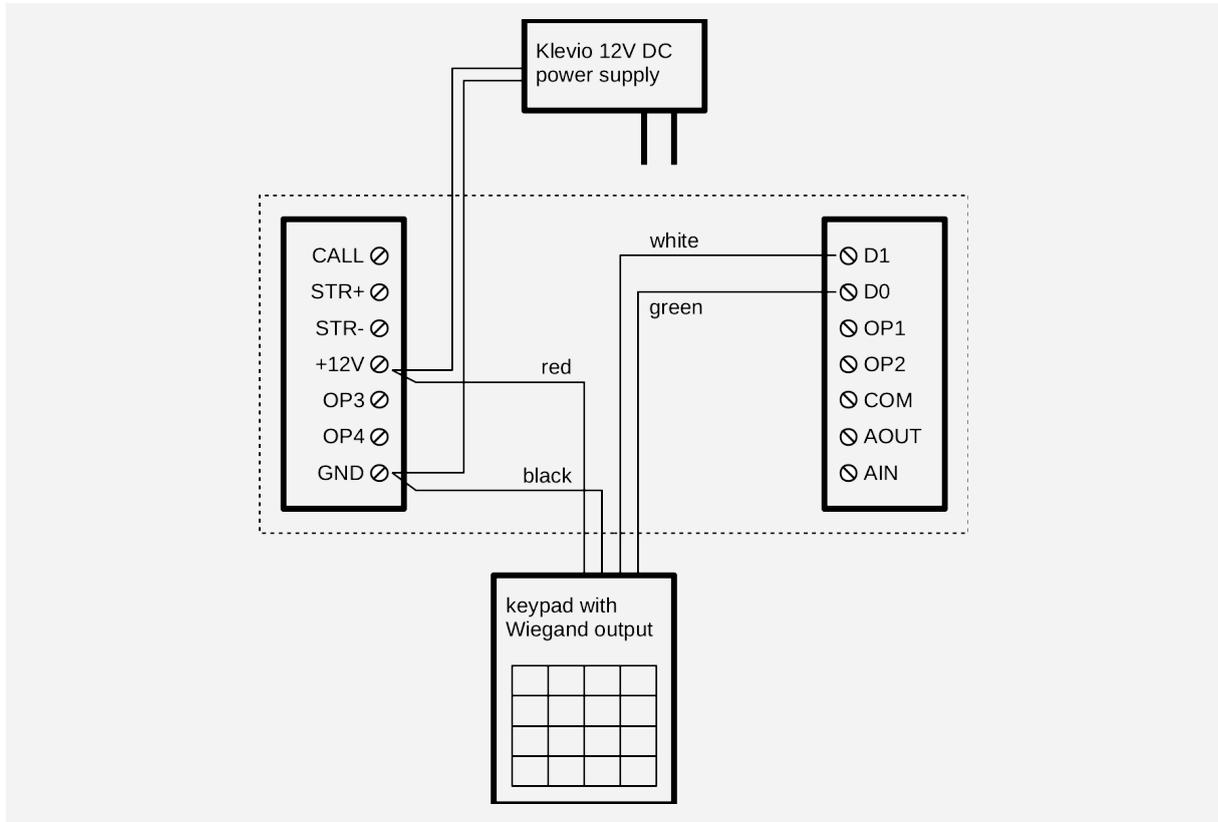
Connecting to a third-party controller

This integration enables Klevio Omni to detect whether a third-party lock controller wants to unlock the door. The way we connect Klevio Omni depends on the kind of output the controller has. Check the third-party controller's documentation for details.

In general, the D0 & D1 terminals on the Klevio console **only detect the connection to ground**. They are tolerant of voltages up to 48V. However, if any voltage is present on the terminal, the console behaves the same as if the terminal is left open/unconnected.

Volt-free contact

A third-party controller with a volt-free contact can be connected to Klevio Omni directly between D0 or D1 and ground (see Fig. 23).

Fig. 23: Wiring Klevio Console v3 to a third-party controller with a volt-free contact
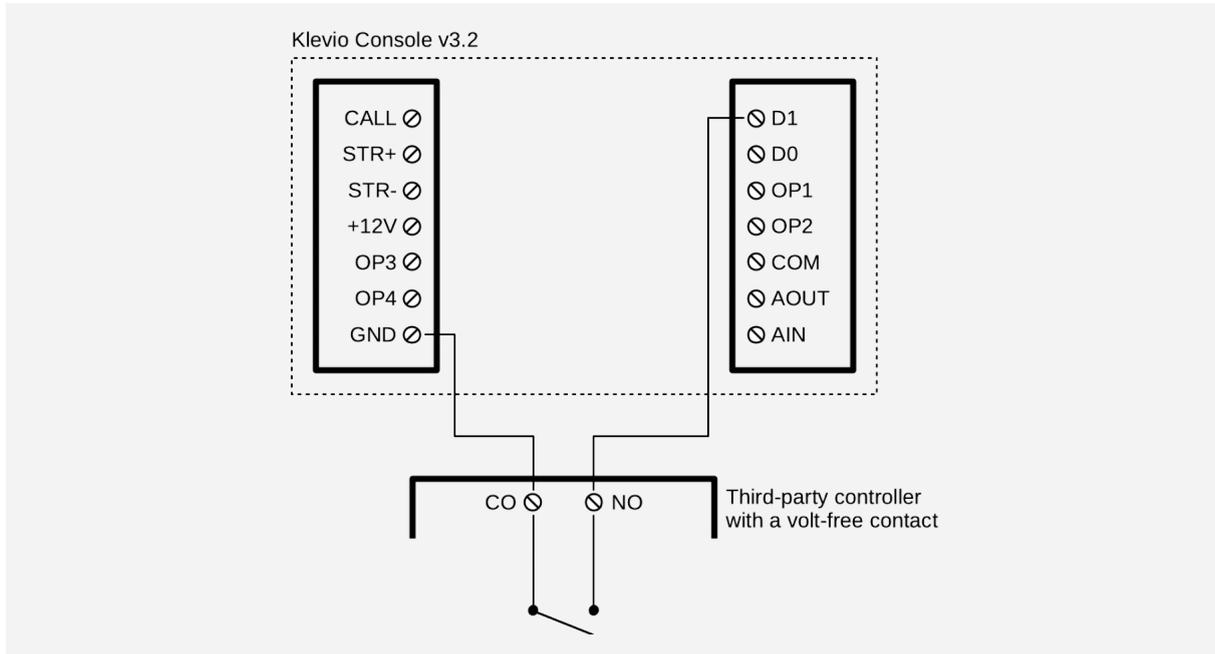
Powered output

If the third-party controller has a powered output, a relay between the output and D0 or D1 should be used (see Fig. 24).

If the third-party controller outputs 12V DC, then a **Klevio external relay board with a NO or a NC relay** can be used. For any other voltage output (AC, or other than 12V) a different type of relay is required.
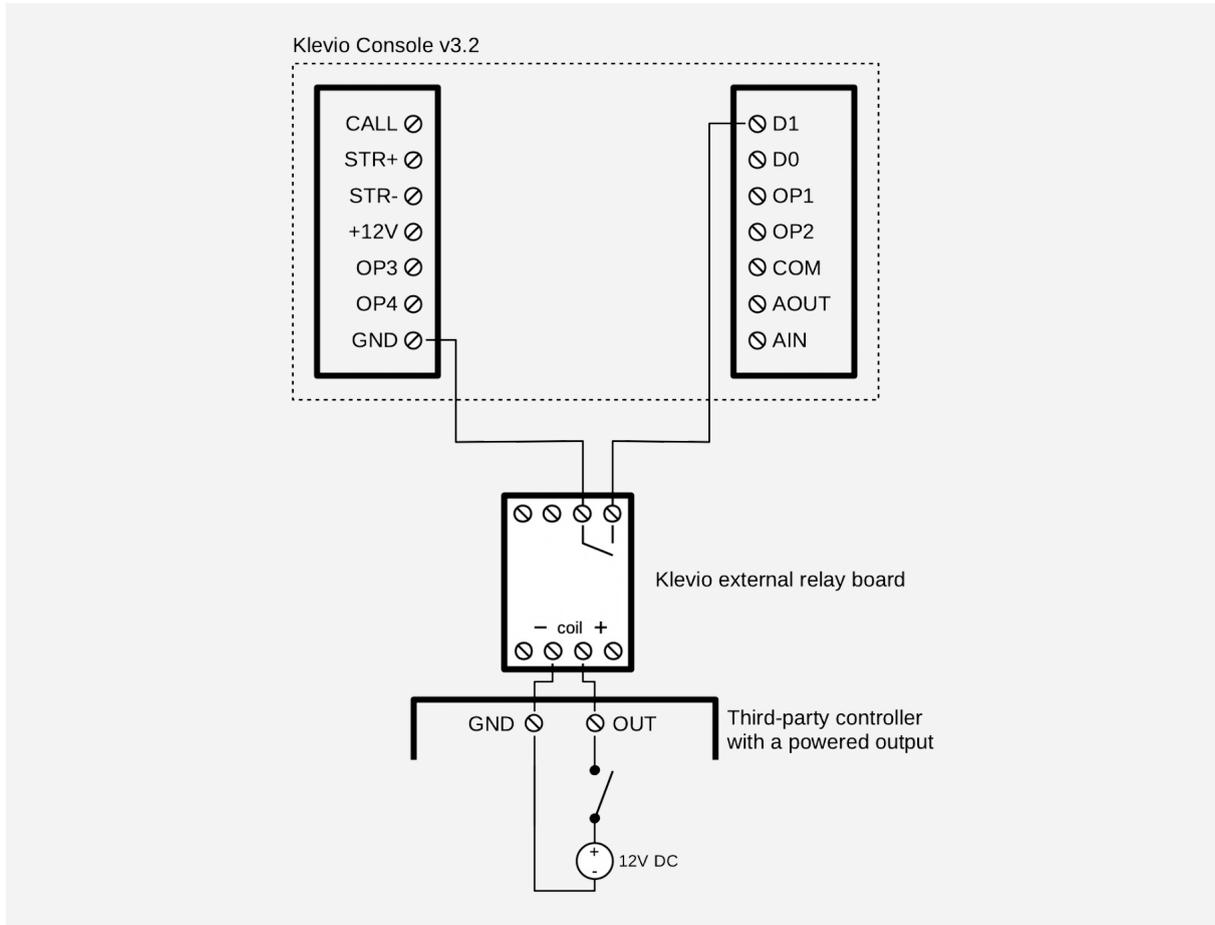
Klevio Extender

Please see the [Klevio Extender Instruction Manual](#) for details or contact your Klevio representative at support@klevio.com to send you a copy.

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. 25: Left terminal block connections on Klevio Console v3

Pin	Name	Comment
1	CALL	Ring/call detector.
		Shorted to AOUT when **P8** is installed.
2	STRIKE-	MOSFET switch to GND. STRIKE- will sink up to 0.5 A to GND. Maximum voltage to GND is 20 V.
3	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.
4	+12V	+12V DC power supply input. Maximum input current 2 A.
		This input is protected by a 2 A surface-mount fuse. The fuse will blow if negative voltage is applied to +12V input or if a fault occurs on the device and +12V supply delivers more than 2A. The fuse is not replaceable in the field
5	OP3	Relay switch to OP4.
		Maximum switching current is 2 A. Maximum voltage to GND is 50 V DC. Not fused.
6	OP4	See OP3. Isolated from the rest of the circuit (volt-free contact).
7	GND	Power supply ground. Internally connected to COM.

Right terminal block

Fig. 26: Right terminal block connections on Klevio Console v3

Pin	Name	Comment
14	D1	Digital input or output, depending on settings. Can be used to connect an additional call button, door sensor or keypad.
13	D0	Digital input or output, depending on settings. Can be used to connect an additional call button, door sensor or keypad.
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 50 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 or bi-directional transceiver. Input/output for digital systems.
8	AIN	Audio input.

Jumpers

No jumpers are installed by default.

Fig. 27: Jumpers for Klevio Console v3

	Installed	Not installed	Comment
P3	OP1 is shorted to COM. Communal door relay connects OP2 to COM.	Communal door relay connects OP2 to OP1. OP1 and OP2 are isolated from COM and GND.	Usually needed for driving a communal lock in analog systems.
P8	CALL is shorted to AOUT.	CALL is isolated from AOUT.	Needs to be installed for digital intercom systems. Needs to be installed for 2-wire analog systems.

Console LED Indicator

A green LED indicator on the console shows power and intercom status. It is usually hidden from view as it is obscured by the controller that's mounted on the console to complete the Klevio device. The indicator can be used when diagnosing problems with the intercom integration.

Fig. 28: A list of different LED indicator blinking patterns and what they mean

	Pattern	Meaning
Idle (heartbeat)	one flash-1s pause one flash-1s pause …	Power on and working normally. If on a digital system, the Interface has been successfully programmed.
Ringing	many quick flashes-1s pause many quick flashes-1s pause …	This Klevio device is currently receiving a ring. A call was detected either through the intercom system or a landing call button.
Active	continuously on	The Klevio device is currently off-hook and an audio line is opened, or the console has been put into programming mode and is waiting for a call signal.
Factory reset / programming needed	evenly blinking on-off-on-off	Console has been configured for a digital intercom system, but programming procedure has not yet been performed. Intercom functions might not work in this state (receiving a call, communal door unlock, etc.)
Off / error	continuously off	No power on the 12V input. Console not working correctly. Can also be caused by problems with the digital intercom bus.

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.

Bad audio quality on analog systems

Try different AIN and AOUT load settings.

Try enabling or disabling echo cancellation.

Klevio does not respond to a call on an analog system

Try a different call polarity setting.

Klevio does not respond to a call on a digital system

Check that the P8 jumper is installed.

On a SimpleBus system, check that the "user code" (bus ID) has been correctly set in the software.

Issues with external keypad integration

It's sometimes possible to have faulty cables / terminals on the keyboard side, which is why the voltage between the wiegand input wires and GND on the console should be measured if there are issues in the setup. The DC voltage should measure 5V, but should be measured between the wire and GND **while said wire is disconnected from the console** (D0 and D1 will always show 5V).

Wire Lengths & Cross-sections

Values calculated for copper wires.

Power supply

1 V max. voltage drop

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

Fig. 29: Klevio Omni 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. 30: 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	2 m	6 m	13 m	25 m

Safety & Regulations

—

Device Handling & Legal Documentation

Klevio Omni 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 Omni:

- 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

Technical Data

Power supply

Fig. 31: Klevio Omni 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. 32: Klevio Omni intercom compatibility details

Supported intercom types	Analog 2-wire / 1+N line Analog 5-wire / 4+N line Digital
Audio input / output	Analog
Audio level	1 V nominal
Audio frequency range	300 - 4000 Hz
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. 33: Klevio Omni strike rating

Voltage	12V DC
Current	max. 500 mA

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

Fig. 34: Klevio Omni 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

Digital inputs (D0 / D1)

Fig. 35: Klevio Omni digital input details

Maximum input voltage	48 V
Logic threshold	approx. 1 V

Digital outputs (D0 / D1)

Fig. 36: Klevio Omni digital output details

Type	open collector with pull-up
Maximum current sink	50 mA
Output voltage	approx. 4.3 V into high impedance

Wire terminals

Fig. 37: Klevio Omni 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. 38: Klevio Omni 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. 39: Klevio Omni 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

2021-Nov-23   This is the first version of this manual.

2022-May-10   Revisions, additional installation instructions.

2023-Jan-10   Small addition to installation instructions.

Other

Visit our website at www.klevio.com

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