

30-channel Hint Controller with web interface

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Connecting the controller

The controller may function autonomously, but it requires local network connection for initializing and monitoring.

Initial connection must be done via the Ethernet cable. Connect the network cable and power up the device. After it boots, go to your router's settings page (most likely, http://192.168.1.1 or http://192.168.0.1) and find out the IP address that was assigned to the controller (under the name of *controller1*).

Navigate your browser to that address, e.g., <u>http://192.168.1.234</u>.



Configuring Wi-Fi connection

It is possible to continue working with network controller, but you also may connect the scales via Wi-Fi. Using Wi-Fi is not recommended.

Navigate to the page *Service / Wi-Fi settings*, and enter the network name and its password. Reboot the device at the page *Service / Reboot*. After that, the controller will be able to work fully via wireless connection.

•• <>			192.168.1.2	34/service/wifi	Ċ	₫ o
Controller	Hints	Sounds	Service			
IP address	Wi-Fi setti	ings R	eboot	Shutdown	Remote	
Network settin	gs updated					
Wi-Fi settin	ngs					
Below, current	credentials are	displays.				
SSID: NetworkNa	ame					
Password:	••••					
When you upda according to the controller will lo cable and enter your router. Save Wi-Fi setting	ate the data, th e new settings. ose internet cor r the web interf s	e controller will If you acciden anection. In tha ace using the l	I try to reconn tally entered i t case, conne _AN IP you wi	ect to Wi-Fi ncorrect data, ct it with an Et Il be able to fir	the hernet nd in	
Reboot the con	troller after the	changes.				

Turning the controller off

It is recommended to use web interface to turn the device off. Navigate to Service / Shutdown and press the button there. The controller can be powered off within half-aminute.

It if is not possible to use the web interface, you can power off the device by unplugging it, but that method is not recommended, as it may corrupt the data.

			192.168.1.234	/service/shutdown	C	
Controller	Hints	Sounds	Service			
IP address	Wi-Fi sett	ings R	eboot	Shutdown	Remote	
Turn off the	controller					
To finish workin You may power	g with the con the device of	troller, turn it of f in about half-a	f by pressing I-minute.	the button below	V.	
Shurtdown						

Connecting the magnets

On the back side of the controller, there is a row of 30 two-contact connectors.

Each vertical pair is an output for connecting a magnet. The numbering sequence goes from left to right. On the picture below, a connection of the magnet 8 is shown.

If the magnets require definite polarity, make sure you connect them with correct polarity (as shown below). The output voltage is 12 V, maximum current is 2 A.



N.B. Each magnet must be connected with two wires, it is not possible to use a common "ground" wire.

Shunt diodes

The controller has built-in shunt diodes, so you can connect the magnets directly. Although, if the wires connecting the magnets are longer than 3-5 meters, it is recommended to install additional shunt diodes as close to the magnets as possible. This will reduce electromagnetic noise at the moment magnets are turned off.



The controller is shipped with 30 diodes 1N4007. The correct polarity is shown on the picture above. The cathode is marked with a stripe, and it should be connected to the top row of contacts ("+12V").

Connecting sound amplifier

On the front side of the device, there are two "tulip" sockets. You connect your sound amplifier directly to it. The output level is set to maximum and can be controlled by an external mixer or amplifier.

Web interface front page elements

On the front page of the web interface, there are two areas:

- 1. Buttons to control the hint magnets,
- 2. Buttons to send sound hints.

1. Hint magnets

To activate a hint magnet, click the corresponding button. You will get a prompt to confirm the action.

		192.	168.1.234	C	
Controller	Hints Sound	ls Service			
One	Two	Three	Four	Five	
Six	Seven	Eight	Nine	Ten	
Eleven	Twelve	Thirteen	Fourteen	Fifteen	
Sixteen	Seve Activate	the hint "Twenty-thr	ee"?		
Twenty-one	Twer		Са	ncel OK e	
Twenty-six	Twenty-seven	Twenty-eight	Twenty-nine	Thirty	
Sound A So	ound B				
Sound C So	ound D				

Initially, all the buttons are green, which means the hints are not activated. As soon as you activate the hint, the button becomes red, and you cannot activate that hint again.

When the hint is activated, the device plays a sound (see section *Sound hints settings* about how to modify it).

2. Sound hints

By clicking a button in the second area of the front page, you activate a sound hint. Initially, all buttons are green. They become red after the hint has been sent. Although, you can activate any hint again by clicking the red button. To send a sound hint, you will be prompted to confirm it.

Resetting the state of the hints

At the bottom of the front page, there is a button "Reset all", which will reset all hints (both magnet and sound) to their initial state. The buttons will be green again. This action requires a confirmation.

	192	2.168.1.234	Ċ	1 O
Twenty-six Twenty-s	even Twenty-eight	Twenty-nine	Thirty	
Sound A Sound B				
Sound C Sound D				
Sound E Sound F				
Sound G Sound H				
Sound I Sound J				
Reset all				
_				_

Hint settings

You can change the labels on the hint magnets buttons at the *Hints* page.

		192.168.1.234/hints	Ç	t o -
Cor	ntroller Hints Sounds	Service		
Η	lint settings			
	U			
Ма	gnet delay in seconds: 10 (va	alid values: 150).		
Bu	itton names			
In th	he fields below you can set names to t	he buttons on the main screen		
in u	ne heids below, you can set hames to t			
1	One			
2	Τωο			
3	Three			
4	Four			
4	ruui			
5	Five			
6	Six			

On this page, you can also change the delay in seconds, during which the magnets are activated. The default value is 10 seconds, but you may change it to any value between 1 and 50 seconds.

During this time, it is not possible to activate any other hint magnet. The buttons in the web interface will be gray and inactive until the end of activation time.

		192.1	168.1.234	0	60
Controller	Hints Soun	ds Service			
One	Two	Three	Four	Five	
Six	Seven	Eight	Nine	Ten	
Eleven	Twelve	Thirteen	Fourteen	Fifteen	
Sixteen	Seventeen	Eighteen	Nineteen	Twenty	
Twenty-one	Twenty-two	Twenty-three	Twenty-four	Twenty-five	
Twenty-six	Twenty-seven	Twenty-eight	Twenty-nine	Thirty	
Sound A So	ound B				
Sound C So	und D				

Sound hints settings

To change the sounds, navigate to the *Sounds* page.

			192.168.1.234/sounds	Ç	(†
Con	troller Hints	Sounds	Service		
Hin	it sound				
A so	ound that is played when a l	nint is activate	d.		
►	Choose File no file selected				
Oth	ner sounds				
Unic	ad the sounds and/or chan	ide the names	on the hint buttons		
Opic		ige the numes	on the nine battons.		
1	Sound A			► Choose File	no file selected
2	Sound B			► Choose File	no file selected
3	Sound C			Choose File	no file selected
4	Sound D			Choose File	no file selected
_					
5	Sound E			Choose File	no file selected

Here, you can play current sounds (by pressing the Play button) and upload a new audio file. Accepted formats are wav and mp3. After selecting the files, press the *Upload and save* button at the bottom of the page.

Also, on this page you can rename the buttons corresponding to the sound hints. The changes will be reflected on the front page.

Rebooting the controller

After updating Wi-Fi settings, reboot the controller at the *Service / Reboot* page. Normally, you should not reboot the device in other situations.

Remote session

For debugging session or reprogramming the controller, you may contact the manufacturer and open a remote session so that we can connect to the device to make changes. The session control is located at the *Service / Remote* page.

By default, the remote session is not activated, and we do not have access to your device; neither we receive any data from it.

Replacing the SD card

In the box, you will find a spare micro SD card, which contains the whole contents of the internal computer. Use it to restore the device if it hangs heavily after the data on the original SD card is corrupted.

To replace the card, unscrew the four screws on the bottom of the device and take off the top.

The position of the SD card is shown below.



Contact information

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