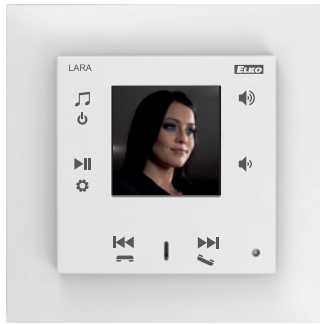**ELKO EP, s.r.o.**
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02-69/2017 Rev.: 8

LARA Intercom

Before you begin

Congratulations on purchasing your LARA Intercom device (Internet radio in a switch). The instruction manual provides information on installing and operating the device. The instruction manual is always a part of the supply. Only perform installation after becoming thoroughly familiar with this User Guide and device functions. Problem-free function of the device also depends on the way it was shipped, stored and handled. If you notice any signs of damage, deformation, malfunction or a missing part, do not install this product and return it to the point of sale. At the end of its service life, the product and its parts must be treated as electronic waste. Before starting the installation, make sure that all wires and connected parts are not under voltage. When assembling and performing maintenance, you must uphold safety regulations, standards, directives and special provisions for working with electrical equipment. For successful installation, you will need: LARA Intercom, a set of speakers, PoE power source, UTP cable with RJ45 connector, cable for speakers, PC with the application LARA Configurator. To protect yourself from electrical shock, connect only safety extra-low voltage (SELV) circuits. For example power supplies PoE (SELV) or LAN circuits (SELV circuits). Other power supplies (ELV) and WAN circuits (TNV circuits) should not be connected directly to product.
Warning: some LAN and WAN ports use the same connectors RJ-45 so be careful when connecting a product.

Characteristics

• LARA Intercom off ers users 5 different functions and expands even more options to Lara Radio - music players and internet radio stations within the range of LOGUS[90] switch designs.

• LARA Intercom provides an extra functionality and videophone intercom.

• Thanks to videophone function, now it is possible to have a voice communication between LARA and the sound of the door (IP Intercom), so with someone visiting and standing in front of the house, we can see that on LARA display as part of this function which increases the security feeling and safety besides of course, the comfort for the user.

• LARA Intercom is equipped with an OLED colored display with the size of 1.5", which is used to transfer images and sounds from the door camera properly. The display also shows basic information about playing music, which also serves the orientation in the menu settings, etc.

• The intercom function can also be used for communications between all the family members throughout the whole house, thanks to two way voice communications possibilities between differnt LARA units.

• LARA Intercom continues to offer three functions that are also supported by LARA Radio - when connected to the Internet, it can play streaming radio stations and you can store up to 40 of them. But you can also select from thousands of radio stations from across the globe, which provide data for correct connection.

• LARA Intercom can play content from an external music source, which can be an smart phone or e.g. an MP3 player. These devices are connected to a 3.5mm stereo jack audio input, located underneath the front panel.

• LARA Intercom can also play audio files from central data storage, onto which Logitech Media Server is installed. This LARA function can therefore be used within the complex iNELS system or as an entirely independent home automation device. When used within iNELS, control is a part of the complex application iHC.

• Touch control is performed on the device front panel (six capacity buttons available), or by using LARA DIO. The basic device settings (network connection, language, audio input) are performed via the display and a simple menu controlled from capacity buttons on the device front cover. Further settings (selection of stations, connection with the server, updating firmware, etc.) are configured via computer and the software LARA Configurator.

• LARA Intercom has an integrated amplifier with 2 x 10 W output, thus greatly facilitating device installation in places where such output suffices. LARA is used e.g. to provide premium sound to the kitchen, waiting rooms, offices, reception desks, entrance halls, operating rooms or wellness facilities.

• LARA is powered by PoE with maximum voltage level 27 V DC / 1000 mA. So connecting and communicating with just one cable (UTP) is a major advantage.

• For LARA, an entire series of accessories is ready for connection (PoE adapters, PoE switches), speakers (in a frame, walls or ceilings) and installation (cables, box, etc.).

• Complies with standards IEEE 802.3u (100BASE-Tx).

• Automatic cable crossing detection of Ethernet cable - MDIX.

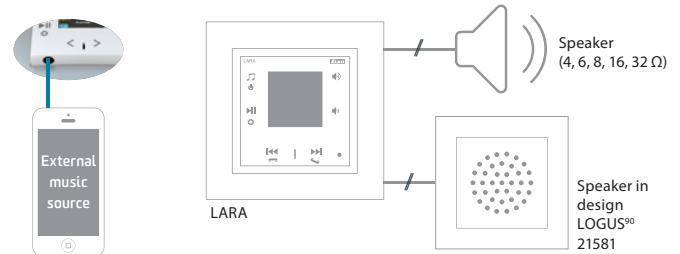## Options of design of the LARA player

	Radio	Music	Videophone	Intercom	Audio zone
LARA Radio					
LARA Intercom					

Easy installation in 3 steps

1. Connect LARA and switch

LARA — LAN — WiFi router with PoE

2. Connect speakers to LARA

External music source

LARA

Speaker (4, 6, 8, 16, 32 Ω)

Speaker in design LOGUS[90] 21581

3. Setting of LARA through LARA configurator

LARA

Notebook / PC

Connection

External amplifier

GND LINE OUT L GND LINE OUT R

LARA_IC

OUT L OUT R

left speaker   right speaker
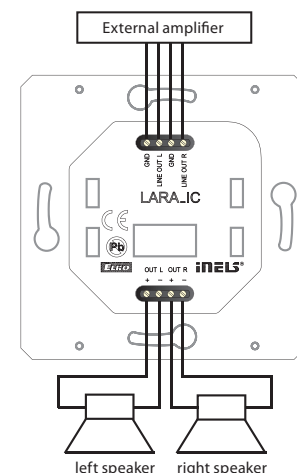
Technical parameters

LARA Intercom

Internet radio

Supported data transfer formats:	mp3, ogg, acc

Control / settings

Front panel:	touchscreen buttons
Communication Ethernet:	via PC setting up and communicating SW LARA Configurator
Button RESET:	restart product / reset product to factory settings

Interface ethernet

Communications interface:	10 / 100 Mbps
Connector:	RJ45
Max. cable length UTP with power:	50m

Display

Type:	color OLED
Resolution:	128x128 pixels
Visible surface:	26 x 26 mm

Power supply parameters

Supply:	PoE 24 V DC (max. 27 V DC) / 1.25 A
Min. input:	1.4 W
Max. input:	26W (peak at maximum playback performance)

Amplifier parameters

Amplifier:	stereophonic class D with digital output control
Max. amplifier output	2 x10 W/8 Ω

Inputs / outputs

Microphone:	yes
Audio input:	3.5 stereo jack
Audio output 1:	terminals LINE OUT (used for external amplifier)*
Audio output 2:	terminals OUT L/OUT R (speaker output from int. amplifier)

Connection

Terminal block:	0.5 - 1 mm^2 (audio outputs)

Other data

Working temperature:	0 .. + 55 °C
Protection:	IP20
Overvoltage category:	II.
Pollution degree:	2
Installation:	in an installation box
Dimensions: Frame - plastic: - metal, glass, wood, granite:	85 x 85 x 46 mm 94 x 94 x 46 mm
Weight - plastic:	87 g (plastic frame)

* The cable from the LINE OUT terminals must be shielded, max. length should not exceed 5 m.

Hardware installation

Requirements for installation environment:
- The product cannot be placed where it is exposed to moisture or excessive heat.
- Place the product at a spot where it can be connected to the Ethernet network. The Ethernet cable with PoE supply should have a short a distance as possible between the player and PoE source due to voltage drop occurring as the distance grows. Also use quality cables and connectors of a renowned brand for installation.
- Never install the player without its installation box, and it is prohibited to mount it directly into the wall, e.g. into drywall partitions, where the device chassis would be directly wrapped in insulation material.
- Distributing individual elements of the installation must be defined prior to actual installation, prior to interference (cutting) into walls or installation of boxes.

PoE (Power over Ethernet) is fed along a data network cable, without the need to provide power to the machine by another separate cable.
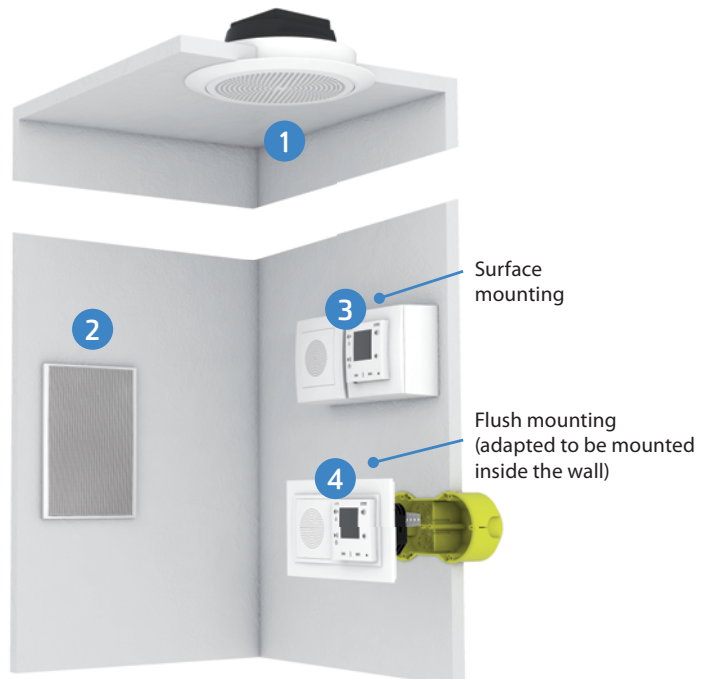
Description of installation:
Install the bottom part of the LARA player into the box KU, we recommend a box that enables mounting devices with greater depth.Connect the speaker cables into the terminals OUT L +/- OUT R +/-. You can connect the input to an external amplifier into the terminals LINE OUT L, LINE OUT R, GND. Snap the Ethernet cable into the RJ45 connector. Secure the device using the installation box screws. Snap the upper part of the player into the design frame LOGUS⁹⁰. Snap the upper part of the player with the frame to the lower part of the player.
Connection of these two parts must be performed with care to avoid damaging the connectors. Connect the other end of the Ethernet cable to the PoE switch or via the PoE adapter to the Wi-Fi router, switch. After providing power, the display shows the system information, then after around five seconds the main display of the player.

Output of speakers, audio cables

speaker	output (W)
2 x 4 Ω	2x 16W
2x 6 Ω	2x 13W
2 x 8 Ω	2 x 10W
2 x 16 Ω	2 x 5W
2 x 32 Ω	2 x 2.5W

When installing the speakers, use quality audio cables with minimum diameter 0.5 mm, with maximum length of 30 m. It is best to have the same cable length for the right and left channels.

- LARA - can be mounted inside your wall (installation box) or offers a surface mounting option.

Surface mounting

Flush mounting (adapted to be mounted inside the wall)

|			
1	Ceiling speaker	3	Box for surface mounting
2	In-wall speaker	4	Installation box

Description of display in basic display

1. Date
2. Display of actual station name
3. Display of station name as it is listed on the Internet
4. Bit Rate*
5. Time
6. Volume
7. Performed action

* Displaying the transmission quality (transmission speed tells what volume of information is being transferred per unit of time. The basic unit of the displayed transmission speed is a kilobit per second).

Description and control of player
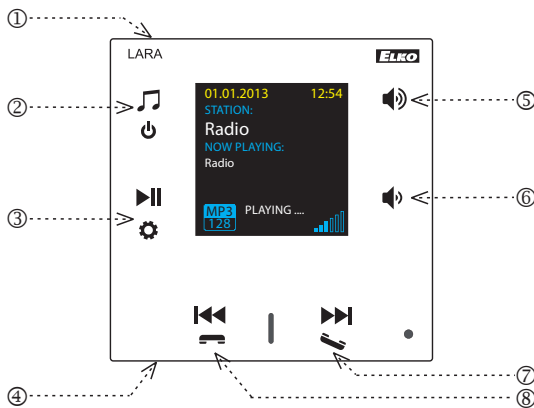
1. Hidden button RESTART - In the opening (in the upper part of the cover), for pressing use a thin object, i.e. a paper clip

2. Short press - switching between the Radio, AUX Input and Audio Zone
   Long press - switches off the device

3. Short press - PLAY / PAUSE
   Long press - input to settings

4. Connector for audio input of external music source for AUX IN

5. Short press
   - volume up
   - move up between rows

6. Short press
   - volume down
   - move down between rows

7. Short press (during a call) - opening the electric door lock
   Long press - calling
   - switching on / off the Intercom

7. / 8. Short press
   - navigating in the list of assigned Radios
   - switching songs in the Audio Zone
   - navigating in the Intercom list

LARA Dio Application Controls

LARA Radio (Intercom) can be controlled via applications:

LARA Dio iOS:
https://itunes.apple.com/us/app/lara-dio/id1173795972?l=cs&ls=1&mt=8

LARA Dio Android:
https://play.google.com/store/apps/details?id=cz.elkoep.laradio
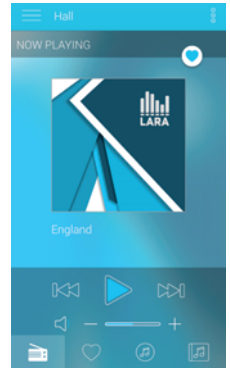
Control

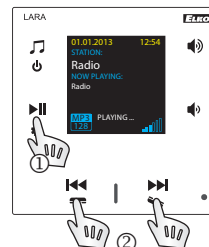Long press

Short press

Repeated pressing

Playback

Switching between the Radio, AUX Input and Audio Zone:
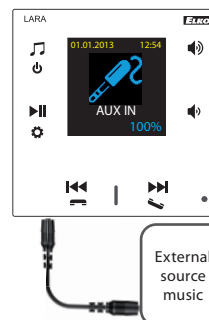

Switching between modes is performed by a short touch.

Radio:

1. PLAY / PAUSE
2. Navigating in the list of assigned Radios

Input AUX:

The input AUX IN is used to connect external audio devices such as a mobile phone, mp3 player and others.

A 3.5 mm jack provides connection. In this mode, the player functions as an audio amplifier.

When activating the input, the volume on the player is set (fixed) at 100%.

You can control only on a connected external audio device.

External source music

Audio zone:
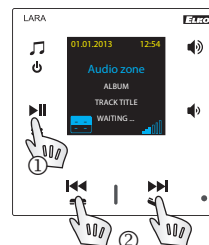
1. PLAY / PAUSE
2. Switching between songs

Intercom

1. Calling LARA - door intercom with / without video camera

① Switching on the Intercom
② Switching between contacts
③ Calling
④ Display when the video camera to the door intercom is connected
⑤ Display when no video camera is connected
⑥ Opening the electric door lock (only during call)
⑦ Ending the call
⑧ Display after ending the call

2. Calling LARA - LARA

① Switching on the Intercom
② Switching between contacts
③ Calling
④ Display on the calling LARA device
⑤ Display on the called LARA device
⑥ Accept the call
⑦ Refuse / end the call

Configuration, putting into operation

1. Alarm setting

Display of alarm clock settings

The alarm stops ringing by touching any button.

① Opening change.
② Setting the value hours / minutes.
③ Switching hours / minutes.
④ Saving set time.
⑤ Move down one row.
⑥ Selection alarm clock / radio station.
⑤ / ⑦ Increasing/decreasing volume.
⑤ / ⑧ On 1x / Repeat (every day) / Off.
⑨ One press - one level up, multiple presses - return to basic display

2. Selecting a language

3. Audio output settings
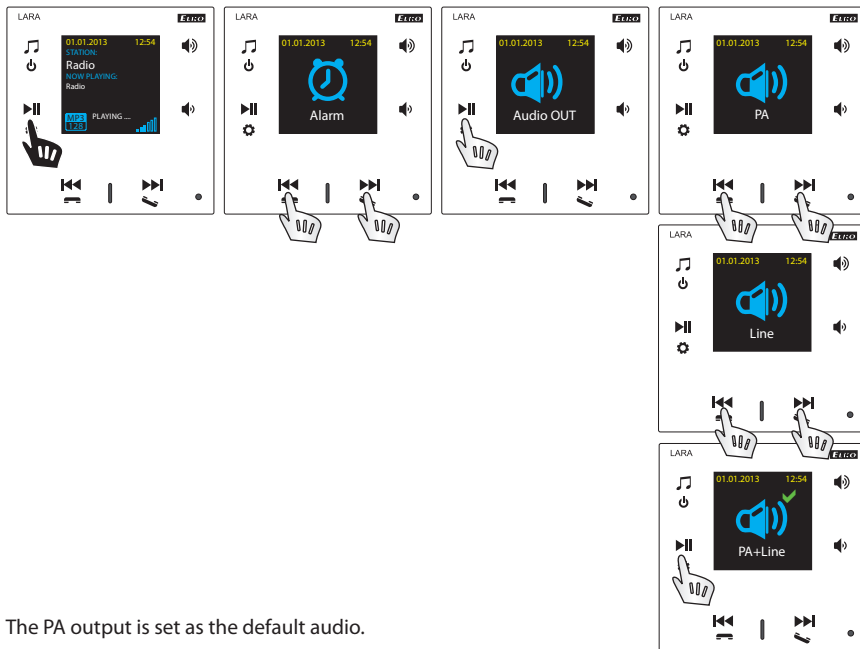
- Selection of the PA
output to speakers connected to terminals OUT L, OUT R

- Selection Output link
to terminals Line OUT L, Line OUT R designed for an external amplifier

- Selection PA+Link
output to
both terminals
simultaneously

The PA output is set as the default audio.

---

4. Setting up a network

LARA comes equipped with DHCP, meaning that it assigns the IP address itself automatically from the network range of your DHCP server.
If you select „Static IP", LARA Intercom automatically restarts and displays the start screen.* Then in LAN you can manually set in the relevant positions:
- IP address - Enter a new address in decimal format separated by periods (default setting: 192.168.1.10).
- Subnet mask - Determines the size of the network: The value 255.255.255.0 is commonly used for the network mask.
- Gateway - Setting the default gate of the local network.
After setting, LARA Intercom automatically restarts and displays the start screen.
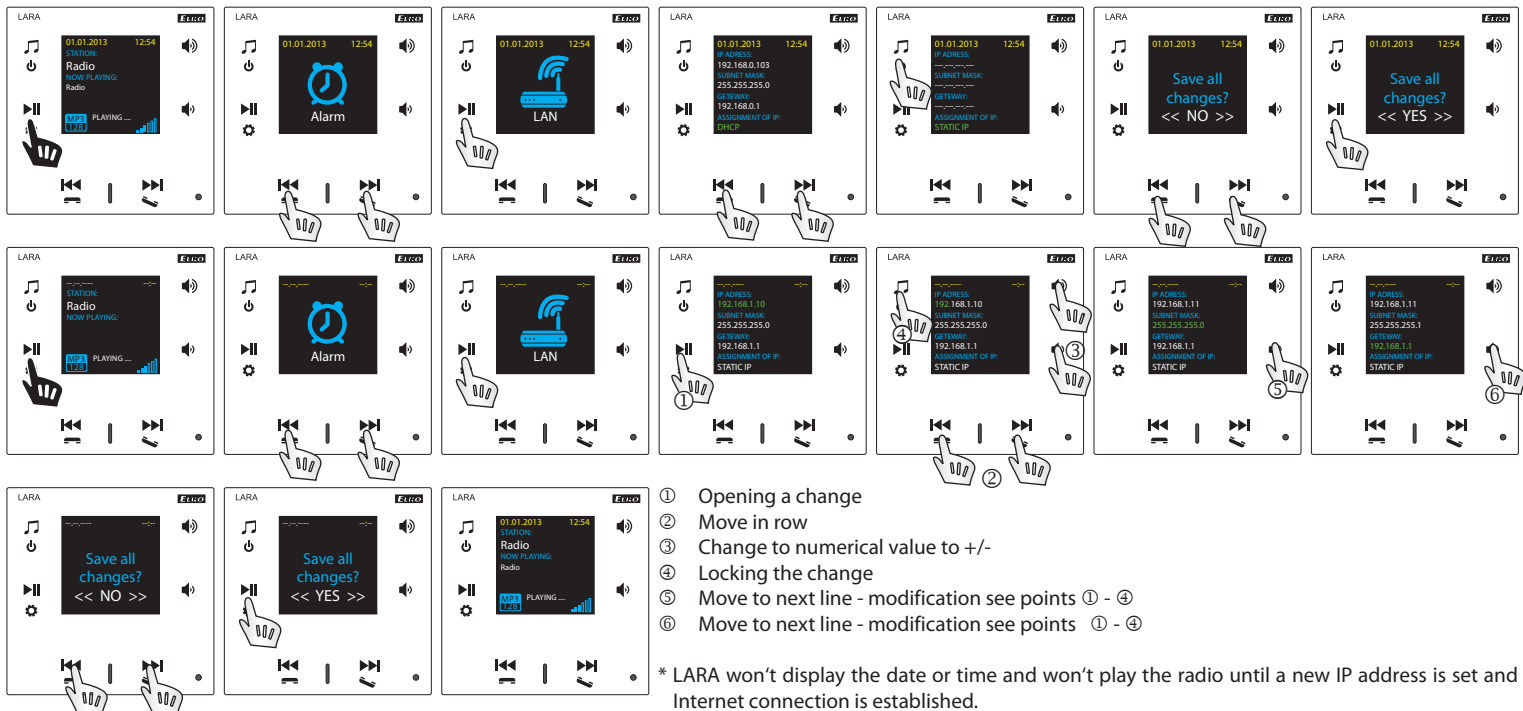
① Opening a change
② Move in row
③ Change to numerical value to +/-
④ Locking the change
⑤ Move to next line - modification see points ① - ④
⑥ Move to next line - modification see points ① - ④

* LARA won't display the date or time and won't play the radio until a new IP address is set and Internet connection is established.

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5. Settings of the active illumination time of the display

This concerns how long the display stays lit (10s, 20s, 30s, 1min, 2min, 5min). After this time expires the display goes out. It is activated by touching any button.
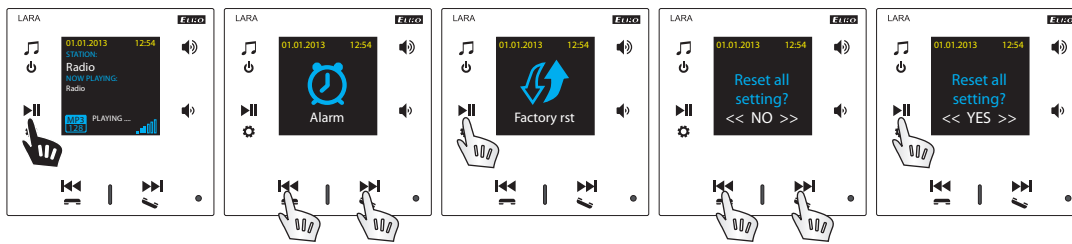
6. Setting the Intercom
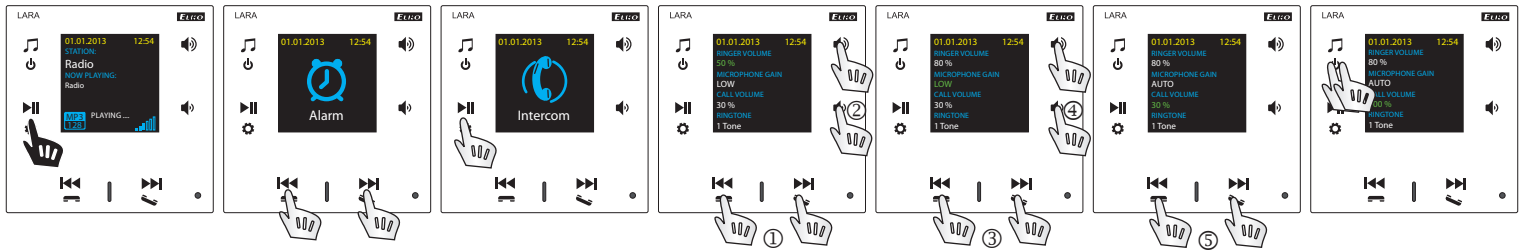
① Change to numerical value to +/-
② Move to next row
③ Change in settings
④ Move to next row
⑤ Change of numerical value to +/-

---

7. Adjust Music Mode - Equalizer

① Select Music Mode - Normal, Rock, Bass, and Perfect

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8. Device reset

Through the settings menu, select „Factory rst" - the IP address from the DHCP range will be set and the factory settings will be restored.

Configuring the device LARA Intercom

Configuring the LARA network music player is performed using the software („SW")
LARA Configurator via Ethernet connection.

SW enables setting the basic network parameters, a change in login data, update of
firmware („FW") of the device, and editing the list of web radios.

Configuring the device LARA Intercom using SW LARA Configurator:

The configuration SW can be freely downloaded from the website
https://www.elkoep.com/-lara-intercom-

Using the configuration SW (LARA Configurator), you can:
- set the login data
- set the network connection parameters
- set the parameters for automatic synchronization of time
- edit the Internet radios list
- Enable DLNA and AUX input functions
- update FW of the LARA Intercom device
- remotely control the LARA Intercom device
- set the intercom
- set the equalizer

The configuration SW communicates with the LARA Intercom device by means of
the Ethernet network. This SW can be run simply without installation in operating
systems Microsoft Windows XP, Windows 7, Windows 8 and Windows 10. A condition
to running the application is support of Microsoft .NET Framework 4 or its possible
installation. An alternative to the configuration, SW is the web interface, which is a
copy of the configurator.

Start the LARA Configurator on the PC, which is signed in to the same network as
LARA Intercom.

Then click on:

① Administrator login: In the login window dialog box, enter the set administrator
login data. The factory settings of this data are the user: „admin" and the password:
„elkoep". If the entered data is invalid, it will not possible to continue in reading the
LARA Intercom device settings.

② LAN parameters: The IP address of the connected LARA Intercom device must be
entered in the dialog window. IP address of the connected device can also be ob-
tained by using the function „Search device".

③ Function„Search device": In a few seconds, the function „Search device" searches
for all connected LARA devices in the network. In the dialog window „Searching for
device in the LAN network", a list of all discovered devices is displayed. By marking
the required device and consequent pressing of the button „Select", the configura-
tor is ready to read the settings of the device with the selected IP address.

④ About the device: The window „About the device" indicates the connection sta-
tus, login and version of SW and HW in the LARA Intercom device. The connection
status is not dependent on successful login. The „Connected!" status occurs under
the condition of a correct network connection, login„Successful!" occurs after login
data is correctly entered.
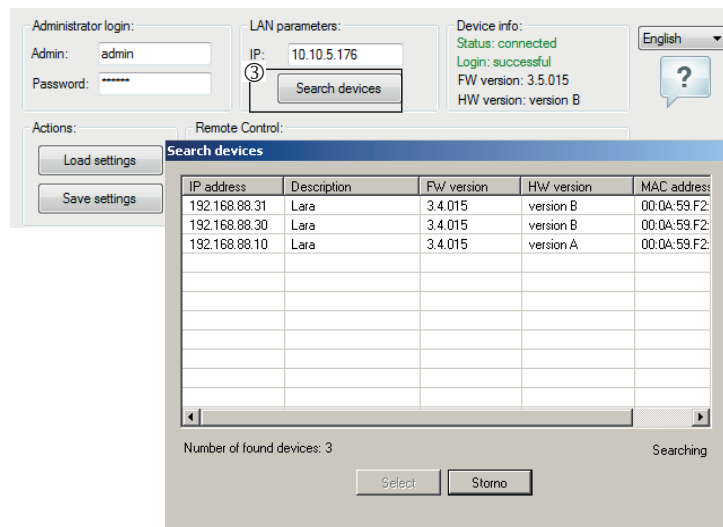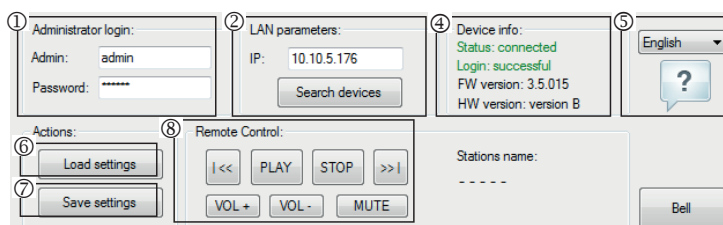
⑤ About the device: Information about the device and program including hypertext
links to the product manual and catalog list.

⑥ Read settings: The button „Read settings" serves to read all settings stored in the
device LARA Intercom. Reading occurs only in the event of successful connection
and login.

⑦ Save settings: The button „Save settings" is used to save the complete settings
stored to the LARA Intercom device.

⑧ Remote control: By using the remote control in the LARA Configurator program,
you can simply and quickly check the function of your configured device.

Device settings / Network settings
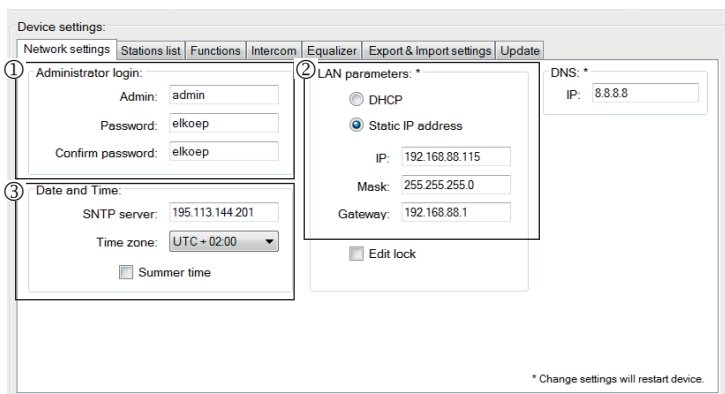
① Administrator login: To change the login data, enter the new login name and pass-
word into the text fields. You must confirm the password.

② LAN parameters: To change network connection parameters, select the option
„DHCP" (automatic assignment of an IP address by the DHCP server) or „Static IP
address". If you want to use the device Intercom, you have to have a static IP ad-
dress set.

- To change the network connection parameters of the LARA device, enter in the
text fields the new IP address, subnet mask and Epsnet port.

- IP address - Enter a new device IP address in decimal format separated by periods
(default setting: 192.168.1.10).

- Subnet mask: Default value 255.255.255.0.

- Gateway: Local network firewall settings.

③ Date and time: The IP address of the time server is factory preset.

- SNTP server: If needed, enter the IP address of another time server supporting the
SNTP protocol. (addresses of SNTP servers can be copied from http://www.timetools.
co.uk/2013/07/25/ntp-server-uk/)

- Time zone: Select the time zone in the place of installation of the LARA Intercom
device for correct display of time.

- You can switch from winter to summer time using the control element „Summer
time"

Device settings / List of stations

The tab „List of stations" is used for complete management of the list of Internet radio stations stored in the LARA Intercom device. In LARA Intercom, several stations are preset, which you can change or modify in any way.

① Edit stations*: In the section Edit stations, you can use the buttons to add new or modify existing stations in the list.

② List of stations: It is possible to store up to 40 presets into the list for music network streams. LARA Intercom in its current version supports streams in the formats SHOUTcast and Icecast with audio formats MP3, AAC and OGG, which are used in most cases of Internet broadcasting.

③Control elements: After successful reading of stations along with overall device settings, you can browse the list of streams and change their order. For sorting and removing items from the list, use the relevant control elements on the right side of the list.

* To add a new station, you must know its source address, which is usually given in a variety of forms:
- http://www.servername.com:portnumber/filename
- http://135.111.258.333:8000/filename
- http://www.servername.com:8000/filename
- http://www.servername.com:8000
- http://135.111.258.333:8000
- http://www.servername.com/filename

Adding new radio stations: after pressing the „add" button, you begin entering the stream parameters into the relevant fields.

Manual completion:
- Name of station: name of preselection displayed on the OLED display.
- IP address: Server address where the stream is being broadcast. The server address must be entered in decimal format separated by periods. If it is an address with a domain name (www.servername.com), use the automatic completion option, see below.
- Port number: This is entered as a number in decimal format. (example 1: www.servername.com:8000/hudba.mp3 - port number = 8000) If this port number is not listed in the address, enter port number 80 (example 2: www.servername.com/hudba.mp3 - port no. = 80).
- File name: Not always used and not a required parameter for storing the station. (example 3: www.servername.com:8000/hudba.mp3 - file name = hudba.mp3) (example 4: www.servername.com:8000 - do not enter file name).
- After entering all necessary data, store the station in the list by pressing „Save".

Note: If the file name has the extension *.m3u, it is not the music stream address , but a playlist address containing the address (or multiple addresses) in the music stream. In this case, use the option of automatic completion.
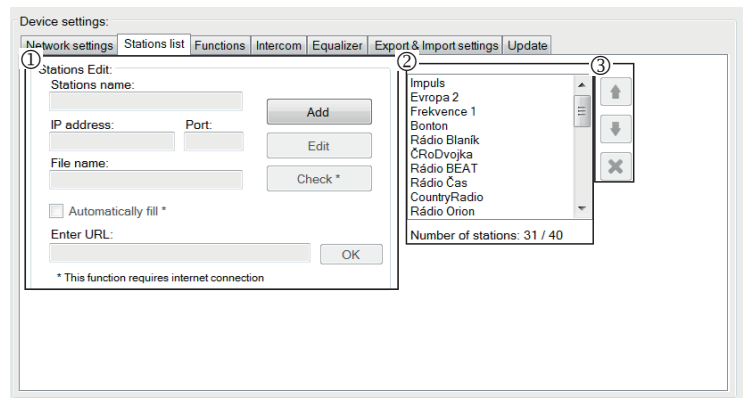
Automatic completion:
For most addresses, it is possible to use the function of automatic completion by the following steps:
- Enter any name of a station.
- Click the option „Automatic completion" and after entering the address, confirm by pressing „OK".
- An information message will inform you of the result of the automatic processing of the link.
- Enter the station in the list by pressing „Save".

Note: The automatic completion function requires an active Internet connection.

Important note: Store the prepared list of stations into the device along with settings by pressing „Save". Until you do so, the list is elaborated and stored only in the SW memory!

## Device settings / Function
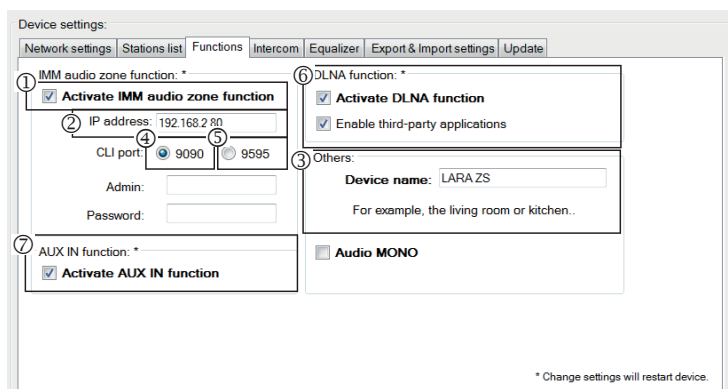
Function iMM Audio Zones: used for already installed iNELS system, where the LARA payer is a fully functional Audio Zone.

Note: the iMM Server is designed to connect nearly all technologies in the home with the intelligent electrical installation iNELS BUS System.

① Function of the iMM Audio Zone The iMM Audio Zone function can be activated and deactivated by control unit.
② IP address: Enter the IP address of the iMM server in decimal format separated by periods.
③ Name of equipment: This is displayed in the iMM environment and when searching for the device in the network.
④ For: IMM SERVER, NAS SYNLOGY
⑤ For: NAS ZYXEL
⑥ DLNA features - primarily used for playback functions using the LARA DIO mobile application
   - Allowing third-party applications to use DLNA playback even with other applications
⑦ AUX IN function - allows input via AUX

Restart the device after each change in settings of the Intercom function.

Device Settings / Intercom - P2P
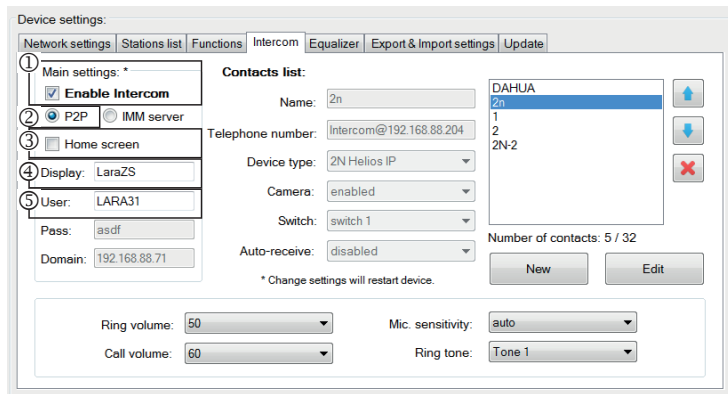
P2P - The Intercom function is used to make direct calls between devices using VOIP (Voice Over Internet Protocol) technology.

The LARA Intercom allows you to set 32 Calling contacts (Preset List).

You can make a call between two LARA Intercoms or between LARA Intercom and a video door phone, as well as between a LARA Intercom and a VOIP phone that supports P2P calling.
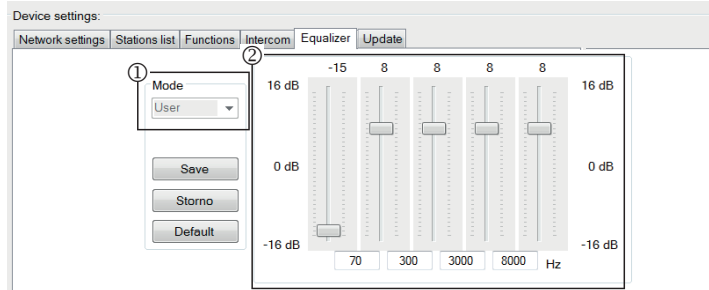
P2P Call Settings LARA - LARA:

① General Settings: Allow Intercom.

② Set the type of P2P call.

③ Main screen: Set the Intercom screen to the home screen (optional).

④ Name displayed is the name that appears on an incoming call on a device that supports the feature.

⑤ LARA user name for P2P calls.
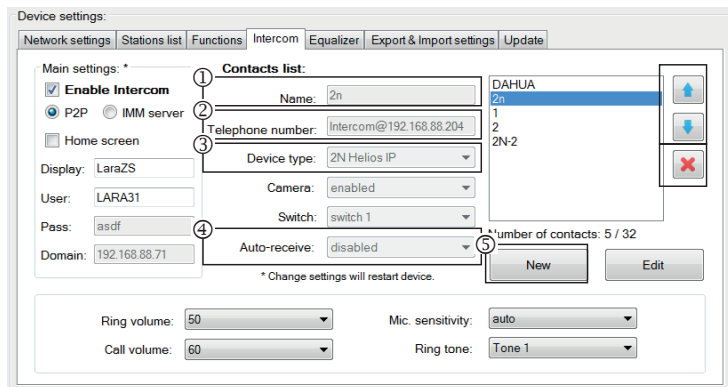
P2P LARA - LARA Contact Settings:

① Name: Enter the name of the contact

② Phone Number: Enter the phone number in the @ IpAddress user format

③ Device Type: Select Unknown (SIP)

④ Auto-receive: disabled (optional with LARA intercom can be received automatically after 3s)

⑤ Save: Save a contact to the list

▤: Change contact position in the list
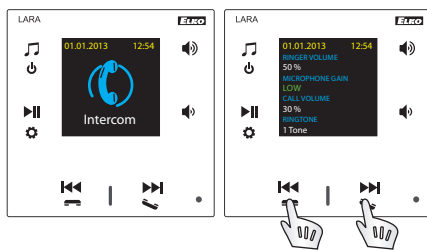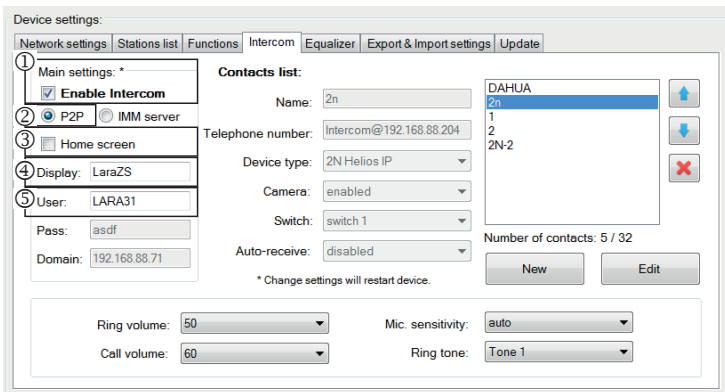
▥: Delete the contact from the list

Recommendation:

To improve the sound for LARA-LARA calls, set up the Equalizer menu for both LARA devices:

① Mode: User

② Adjust the equalizer values as shown.

In both LARA devices, set the MICROPHONES SENSITIVITY in the Intercom Menu to: LOW or MEDIUM sensitivity.

P2P LARA Call Settings – Intercom / Videophone:

① General Settings: Allow Intercom.

② Set the type of P2P call.

③ Main screen: Set the Intercom screen to the home screen.

④ Name displayed is the name that will appear on an incoming call on a device supporting the function (Display name VOIP phones P2P).

⑤ LARA user name for P2P calls.
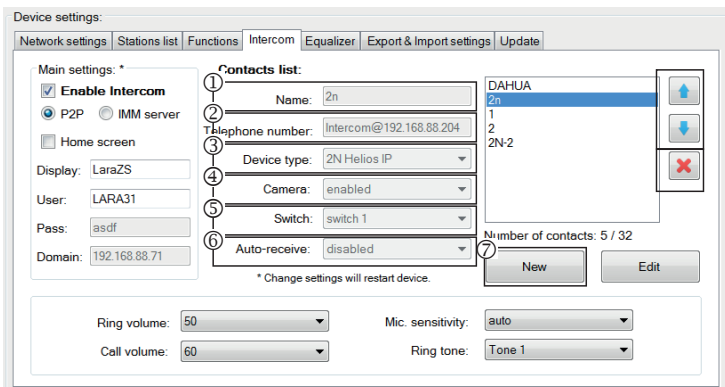
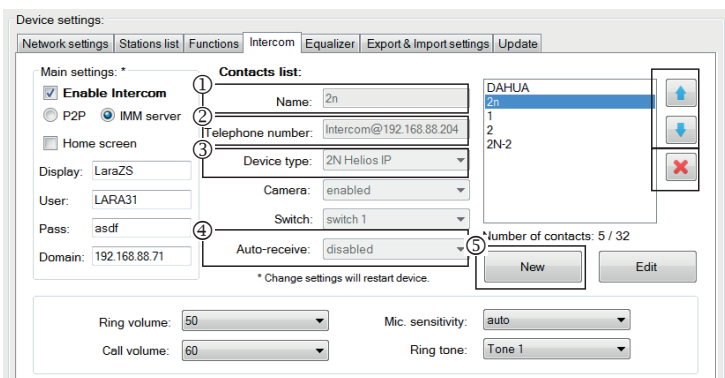**P2P LARA Contact Settings – Intercom / Videophone:**

① Name: Enter the name of the videophone contact

② Phone Number: Enter the phone number in the @ IpAddress user format

③ Type of device: select 2N Helios IP

④ Camera: Enable camera (if intercom allows)

⑤ Switch: switch 1

⑥ Auto-receive: disabled (optional with LARA intercom can be received automatically after 3s)

⑦ Save: Save a contact to the list

⬆: Change contact position in the list

▣: Delete the contact from the list
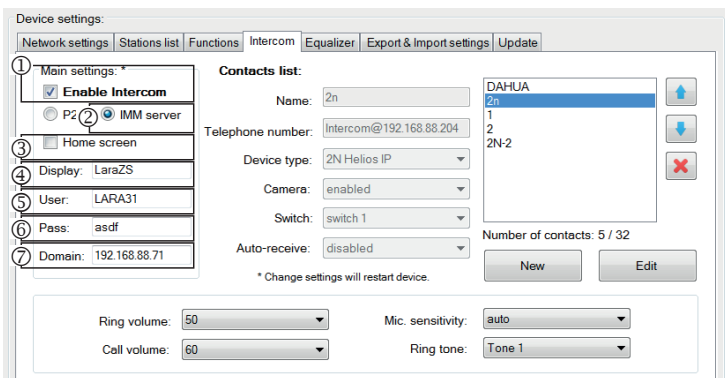
**LARA Intercom Settings** - SIP Server (iMM Server / Connection Server)

IMM Server - The Intercom function is used to make calls between devices via VOIP over a PBX software PBX with VOIP support via SIP.

① General Settings: Allow Intercom.

② Set the call type to the iMM server

③ Main screen: Set the Intercom screen to the home screen (optional).

④ Display: The name that appears on an incoming call on a VOIP-enabled device.

⑤ User: user name created on iMM Server or Connection Server

⑥ Password: Enter the user password.

⑦ Domain: IP address of the SIP server

- -


LARA Contact Settings:

① Name: Enter the name of the contact

② Phone number: Enter the user name registered on the SIP server in the format of @ IpAddressSipServer

③ Device type: select unknown (single name for SIP, LARA)

④ Auto-receive: disabled (optional with LARA intercom can be received automatically after 3s)

⑤ Save: Save a contact to the list

⬆: Change contact position in the list

▣: Delete the contact from the list
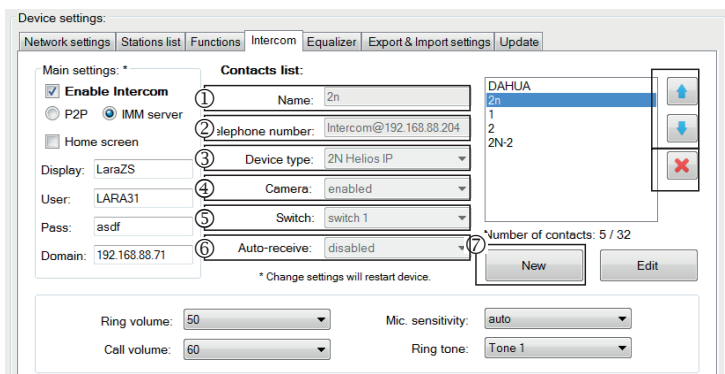
SIP Server Contact Settings – Child monitor, Videophone:

① Name: Enter the name of the videophone contact

② Phone number: Enter the phone number in the format of the user @ IpAddress-Videophone

③ Type of device: select 2N Helios IP

④ Camera: Enable camera (if intercom allows)

⑤ Switch: Activate the selected relay to open the el. Door lock

⑥ Auto-receive: disabled (optional with LARA intercom can be received automatically after 3s)

⑦ Save: Save a contact to the list

⬆: Change contact position in the list

▣: Delete the contact from the list

Device Settings / Equalizer
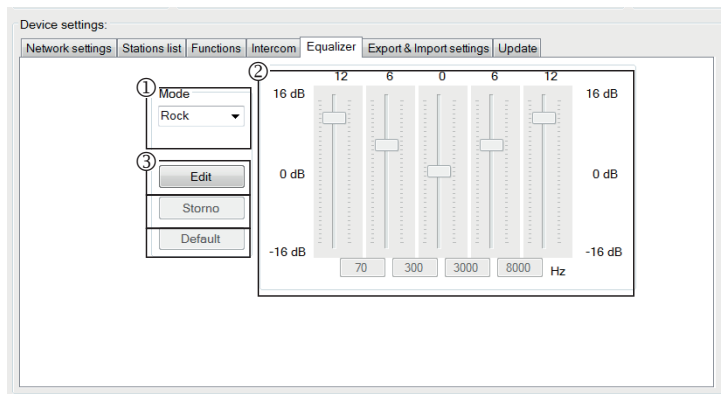
LARA Intercom features a 5-band equalizer with pre-set Normal, Rock, Bass and Perfect modes, with user preference „User" or editing pre-set modes.
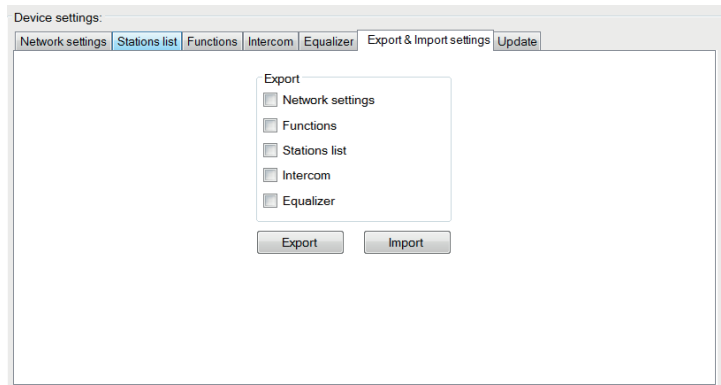
Editing Music Mode:

① Select the music mode

② Adjust the band within the range

③ Save settings

Cancel: Cancels the mode setting

Default: Returns to the default mode setting.

Device settings / Export & Import settings

Export & Import settings: With these functions, you can easily back up and restore selected items - network settings, features, station list, intercom and equalizer. Created backups are in the* .lcf format - backups of station lists from older firmware are not compatible with this system.

Device settings / Updating FW
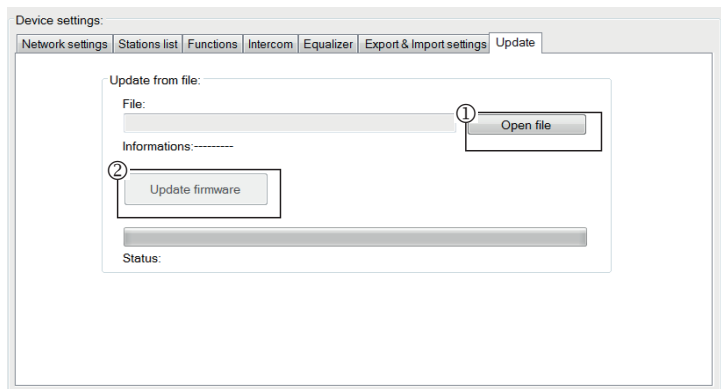
To update the FW in the LARA Intercom device, it is first necessary to download the update file with the extension „*.lfw" from the address
https://www.elkoep.com/-lara-intercom-

You need to download a file with the * .lweb extension from the same address to update the site.

① Select file: Pressing „Select file" brings up a dialog window for searching and selecting the update file. After opening the selected file, its contents are checked, and the user is then informed of the result. If the correct file has been selected, the FW version number is displayed.

② Updating FW: Pressing the button starts the update, the progress of which is illustrated graphically. Reading a damaged or invalid file prevents the following updating steps, and it is necessary to repeat the process with the correct update file.

Web interface access is available with the LARA IP address and port 61695 (ex: 10.10.10.10:61695)

Note: To set LARA device after FW update it is necessary to use the same version of LARA Configurator as the FW version.

Accessories

Power / network elements

Power supply PoE
(PoE injector, for powering by UTP
cable, connector 2x RJ45)
Order Code: 5225

Power supply PoE + WiFi
(complete for wireless connection of LARA
into hollow walls)
Order Code: 5227

Power supply of PoE + WiFi into an
installation box
(complete for wireless connection of LARA
into installation boxes)
Order Code: 5224

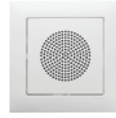PoE switch with5 ports
(to power 5x LARA)
Order Code: 6605

* The of shape of wireless transmitter Ubiquiti Gateway connector may not fit to external power supply. In this
case it is needed to interconnect both parts using e.g. tightening strip.

Speakers

Speaker 2" 32 Ω

- with mounting into
an installation box
Order Code: 21581

Cover colors:	Order Code:
White	90710 TBR
Ivory	90710 TMF
Ice	90710 TGE
Pearl	90710 TPE
Grey	90710 TIS
Alluminium	90710 TAL

Speaker 5" 32 Ω

Speaker 5" 16 Ω

Speaker 5" 8 Ω

- with ceiling mounted

White	75023 CBR
Ivory	75023 CMF
White	75022 CBR
Ivory	75022 CMF
White	75021 CBR
Ivory	75021 CMF

2 way speaker 32 Ω
2 way speaker 16 Ω
2 way speaker 8 Ω
- mounting on a wall or ceiling
- dimension (mm): 270 x 183 x 37

White	75106 CBR
White	75105 CBR
White	75104 CBR

Square 2-way speaker 32 Ω

Square 2-way speaker16 Ω

Square 2-way speaker 8 Ω

- with ceiling mounting
- dimension (mm): 204 x 204 x 92

White	75083 CBR
Ivory	75083 CMF
White	75082 CBR
Ivory	75082 CMF
White	75081 CBR
Ivory	75081 CMF

IP Intercoms

Producer: 2N
Type: Verso

3-buttons module
Video door-phone
Card reader
Dialpad
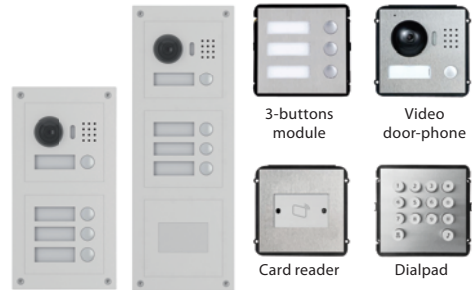
Producer: DAHUA
Type: VTO2000a

Troubleshooting

• The product is not communicating, the display is not illuminated
  Solution: Check the power supply. Check to see if the product is connected to the power supply and if the RJ45 connector is connected to the product. Check if the power source PoE is connected to the network.
• The product is illuminated but the radio does not play.
  Solution: Check the IP address of the radio server, or its new settings.
        Check the Ethernet network connection. Disconnect and reconnect the RJ45 Ethernet connector. After repeated connection, the product displays system information; if within five seconds the player display does not appear,there must be some network connection issues, check the network settings.
• Interrupted playing, frequent reading of the radio.
  Probably insufficient Internet connection speed.
• Restart the product.
  Device restart is used to restart without deleting the set data. Do this by a short press (+/- 1 sec) of the RESET button located on the device cover in the state where the product is connected to the power supply, or by disconnecting and reconnecting the LAN cable or PoE adapter.

Maintaining the device

The device front panel and frame can be cleaned using a dry or slightly moistened rag. Avoid use of other cleaning agents.