

# RP36/RP36POE

## ESCO SERIES AUDIO DECODER



## USER MANUAL



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## **IMPORTANT NOTICES**

- Before installing and using the device, please read this manual carefully and keep it for further use.
- This manual is an integral part of the product. It should be given to the new owner in order for them to know the installation, operation and safety instructions.
- Improper installation of the device removes the responsibility of the manufacturer.



## **WARNING**

- To avoid the risk of fire and electric shock, never expose this equipment to rain or moisture!



## **SAFETY PRECAUTIONS**

1. Please read the instructions carefully, as they contain important information.
2. The voltage of the power supply of this device has high values, which creates a risk of electric shock. For this reason, never install, connect or disconnect this product while the power supply is connected.
3. The metal parts of the product are grounded with an electric cable. If the electrical outlet that supplies electricity is not grounded, call a qualified electrician who will ground the product through the terminal.
4. To prevent damage to the cable, make sure the power supply cable is not crushed or broken.
5. To avoid the risk of electric shock, never open the product: there are no user fixable parts inside.
6. Make sure that foreign bodies or liquids do not come in contact with speakers, as this may cause short circuit.
7. Never try to perform repairs which are not mentioned in this manual. Contact the authorized service center or highly qualified personnel if;
  - a. The product is not operating (or abnormally operating),
  - b. Serious damage is done to the power supply cord,
  - c. Foreign bodies or liquids get into the product,
  - d. The product is exposed to heavy impact.
8. Turn off the product, if not used for a long time and disconnect the power supply cord.
9. If the product emits a strange odor or smoke, turn off immediately and disconnect the power supply cord.



## **PRECAUTIONS**

- Do not cover ventilation of the product.
- Do not allow amplifier to operate with an excessive load for a long time.
- Tighten the screws on the speakers firmly to guarantee safe contact.
- Do not use thinner, alcohol or other volatile substances when cleaning



## **CAUTIONS RELATED TO THE USE OF ELECTRICAL LINE**

- When plugging and unplugging the power cord, it should be held firmly to avoid risk.
- In case it won't be used for a long time, the plug of the unit should be unplugged to cut off the electricity.
- To avoid damaging the power cord, do not break, pull or harm the cord with sharp and pointy materials. Use a grounded socket.



## **POSITIONING**

- It should be placed with its sides and back 1 meter away from the wall and should not be placed in the following environments;
- Humid environment
- Under direct sunlight and other strong heat emitters
- Environments without ventilation



## **CONTROL OF THE UNIT**

- Make sure that the power supply is turned off, that the power supply and the other devices and lines connected with this unit are disconnected from the power supply.
- Do not remove this unit. Do not attempt to disassemble and fix this device yourself. Otherwise there may be a risk of electric shock or fire. If you can't solve the problems with the methods outlined later in this manual, you should call a qualified technician or consult our company. Enforcing the system could may electrical shock or fire.



## **CLEANING**

- When this unit needs to be cleaned, use a clean damp cloth etc. to dust. Do not use solvents such as benzene, thinner alcohol, strong volatile substances, bleach or other flammable liquids for cleaning the body of the unit.



## 2. DEVICE OVERVIEW

This user manual has been written for the users to understand the system architecture effectively and to use all the components of the system effectively.

ESCO/RP36 (or RP36POE) is a TCP/IP based audio decoder and has many hardware features. Since its main function is audio, there are two balanced audio outputs on its rear panel. With its digital and analog inputs, many features are programmable. The RP36 is part of an announcement system and can work as a system component on its own or in conjunction with other RP36 components. When it is used in the announcement system, it can give the announcements made over the ESCO/MA5 device from its output. More than one RP36 can be used in a system. MP3 files can be broadcasted via USB to its own outputs and/or to other RP36 units over the network.

The system works over the network. Stand-alone use is also possible depending on configurations. Any input from a music source can be routed to output. The RP36 is designed completely in a modular structure. The user can configure according to her wishes and use it by transforming it into different structures.

The system architecture has been developed to be used as TCP/IP-based over Ethernet. System configurations are made with the web interface. Login to the interface with user name and password. All settings related to the system can be made easily. There is a web server on each device. Interfaces can be configured independently of each other.

RP36 is very easy to set up as a system. Once included, it continuously works as a part of the system. Due to the widespread use of the IP network structure, no external audio cabling is necessary and the system becomes more traceable with extra features such as keeping track of the operations.

ESCO/RP36 can decode G.711/G.722/WAV/MP3. It can play stream data from network (other ESCO/RP36 devices or ESCO/MA5 device) by decoding them according to their data type. Stream from the network should be 48000Hz for inputs such as microphone input and line input.

On RP36, all sources in the system have priority options. Playback stops are performed according to the priority structure that you have created while installing the system.

One of the most important features of the ESCO/RP36 is that it evaluates every incoming data and plays the data from the highest priority source, while recording lower priority data from other sources. It plays the recorded audios as soon as the system is available. In case of accumulation of more than one record, the operation will be: first come first served. The memory stores up to 8 recordings, above that will not be recorded. This way, when the announcement is over, it continues to broadcast music in sync with other RP36s.

Please find detailed functions and specifications below.



## 2.a. Characteristics

- Supports 9-24VC or POE power supply
- 10/100 MB Ethernet over RJ45
- CAT6 connection
- Supports TCP, UDP, RTP, IGMP, HTTP, FTP, DHCP and NTP protocols
- Accepts 44100 Hz MP3 and 48000 Hz analog audio
- 2 digital input and 2 analog output
- Access control relay
- Configuration over web interface
- System log recording

## 2.b Functions

- 2 balanced line output
- 2 digital input
- 1 line input
- 1 microphone input
- 2 contact (relay) output
- 1 RS232 or RS485 (opt/only one)
- 1 mini jack headphone output
- 1 Ethernet interface (POE supported)
- 1 USB input
- Power LED
- Status LED
- 9-24V power supply
- Reset button

### 3. CONTROLS, CONNECTORS & INDICATORS

#### 3.a. Front Panel

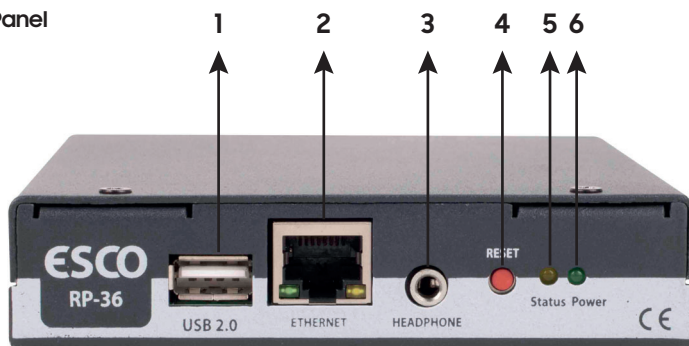


Figure 1 RP36/POE Front Panel

**1. USB:** USB 2.0 input used for music streaming.

**2. ETHERNET:** 10/100MB RJ45 socket used for audio data transfer, device configurations and power supply over Ethernet (POE/optional). It is recommended to use with CAT6 cable.

**3. HEADPHONE:** 3.5mm mini-jack used as headphone input.

**4. RESET:** Button used for returning device to factory settings. To return to factory settings press the button for 5 seconds.

**5. STATUS:** LED for monitoring device status. Flashing LED means RP36 is working properly.

**6. POWER:** LED for monitoring power supply. Constantly lighting LED means RP36 is supplied with power and working.

3.b. Rear Panel

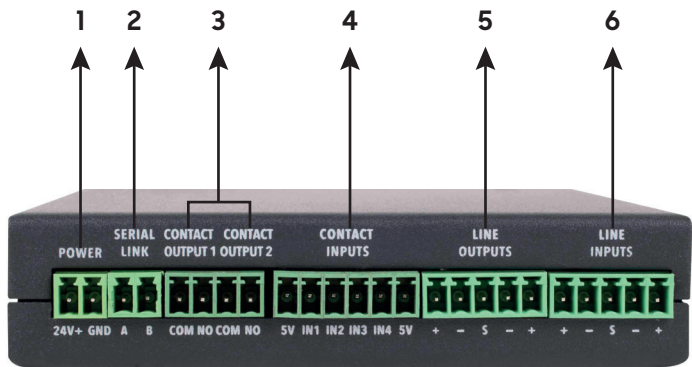


Figure 2 RP36/POE Rear Panel

- 1. **POWER:** 9-24VDC power supply socket.
- 2. **SERIAL LINK:** RS232 or RS485 (optional) socket to interface with external devices.
- 3. **CONTACT OUTPUT:** Programmable contact relay outputs. Configuration generally done via ESCO/MA5. For markings please see Table 1.

NO	Normally Open
COM	Common

Table 1 Analogue Contact Markings

- 4. **CONTACT INPUTS:** Digital inputs operating by logic 1 and 0. IN1 and IN2 contacts perform the programmed tasks, IN3 and IN4 contacts activate the "Line Input" part. Digital inputs are isolated.
- 5. **LINE OUTPUTS:** Balanced audio line outputs. It is recommended to use shielded cable. For markings please see Table 2.

S	Shield
+	Hot Audio Signal
-	Cold Audio Signal

Table 2 Line Input/Output Markings

- 6. **LINE INPUTS:** Balanced audio line input. It is recommended to use shielded cable. For markings please see Table 2

**NOT:** Depending on the configuration, one of the Line Inputs can also be used as a microphone input. This requires a hardware change. For more information, you can contact our company via: [info@mikafon.com.tr](mailto:info@mikafon.com.tr)



## 4. SYSTEM FUNCTIONS

### 4.1 Web Interface

#### 4.1.1 Introduction

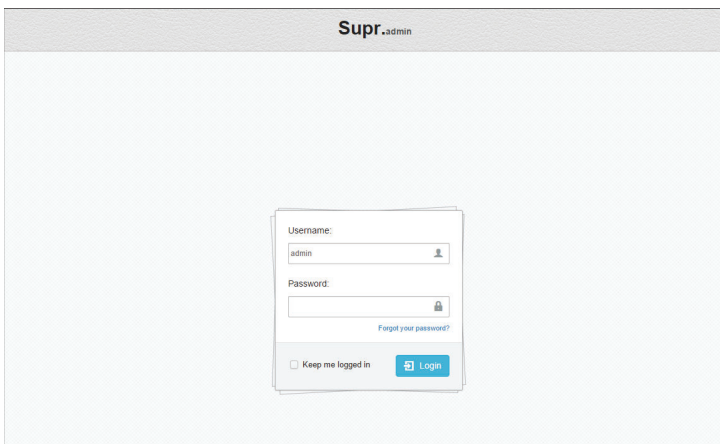
ESCO/RP36 device has an easy and convenient web interface. All settings and configurations on the device can be accessed via the web. To access the web interface, computer and RP36 should be; directly connected over Ethernet or connected to the same switch via ethernet. Once the connection is made, type 192.168.1.33/html in the preferred web browser and press "enter" button. It is recommended to use the Firefox browser.

#### 4.1.2 Ip Adress

You need to know the IP address for the configuration settings of ESCO/RP36. If the IP address has never been changed before, the default is 192.168.1.33. To access the device, adjust your computer's IP address in the range of 192.168.1.2 - 254. To find the IP address of the ESCO/RP36 device, use Mikafon IP Scanner software. If the IP range you want to scan is entered to this software, IP addresses of the devices connected to the system will be listed.

- Make sure not to give the same IP address to more than one device in the system.
- Programming devices one by one allows you to avoid IP confusion. If possible, make one-to-one connection by connecting the device directly to the computer with an Ethernet cable.

#### 4.1.3 Login



Supr.admin

Username:  
admin

Password:  
[password icon]

[Forgot your password?](#)

☐ Keep me logged in

The system asks for a username and a password when you connect to ESCO/RP36 device via the web interface for the first time. Default username: "admin", password: "123456". You can then change your user password from the user actions menu later..

### 4.1.4 Web Interface Menus

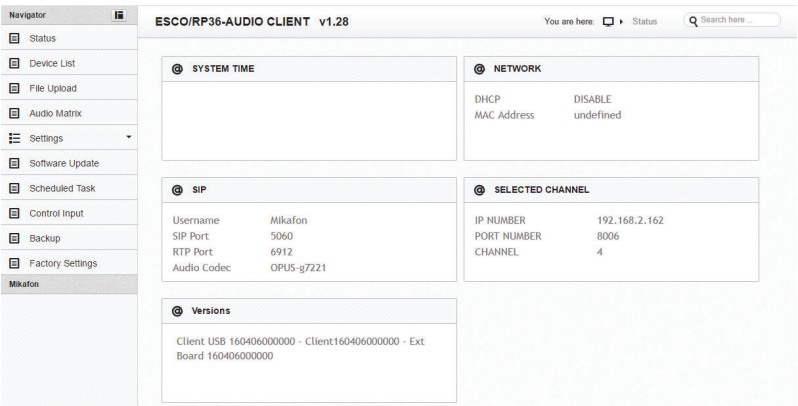


Figure 3 Web Interface Status

After logging in to the ESCO/RP36 web interface, the status menu opens. On the left is the menu navigator. All settings of the device can be accessed from this section. The contents and explanations in the Status window are as follows:

- System Time: Specifies the device time.
- Network: Indicates the connection type and MAC address of the device as DHCP or Static.
- SIP: Indicates the network settings.
- Selected Channel: Shows the music server information configured for the device, which port the music server is connected to and the information of the channel you are listening to.
- Version: Shows the version numbers of the software on the device.

### 4.1.5 Device List

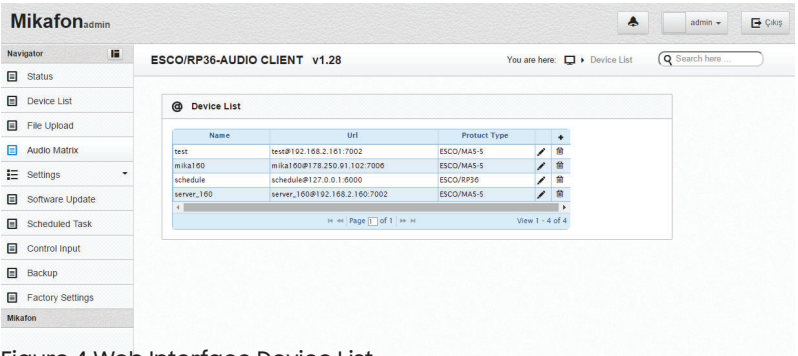
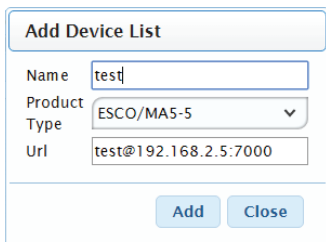


Figure 4 Web Interface Device List

The "Device List" contains information about other components of the system. This part is used when adding any new device to the system.

A dialog box titled "Add Device List" with a light blue header. It contains three input fields: "Name" with the text "test", "Product Type" with a dropdown menu showing "ESCO/MA5-5", and "Url" with the text "test@192.168.2.5:7000". At the bottom, there are two buttons: "Add" and "Close".

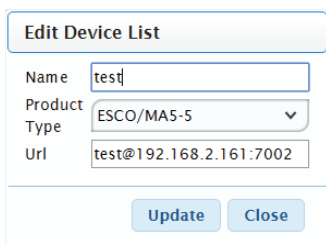
Add Device List	
Name	test
Product Type	ESCO/MA5-5
Url	test@192.168.2.5:7000
<div>Add Close</div>	

Figure 5 Device List / Add

- i. Name: The name of the device you want to add.
- ii. Product Type: The type of product that will communicate with the ESCO/RP36 device from Mikafon products is specified. eg; ESCO/RP36, ESCO/MA5, ESCO/MS-40.
- iii. Url: The name of the device, IP and port information is entered in the field. Its format should be as follows:

**deviceName@IP:PORT**

- For devices that do not conform to this format, the corresponding UDP port will not be opened from the ESCO/RP36 device. Therefore, be sure to pay attention to the conformity of the format.
- Devices added to the device list must have different port numbers and at least two differences. For example, if the 6000 port is opened for this device, another device cannot be 6001. It must be at least 6002.

A dialog box titled "Edit Device List" with a light blue header. It contains three input fields: "Name" with the text "test", "Product Type" with a dropdown menu showing "ESCO/MA5-5", and "Url" with the text "test@192.168.2.161:7002". At the bottom, there are two buttons: "Update" and "Close".

Edit Device List	
Name	test
Product Type	ESCO/MA5-5
Url	test@192.168.2.161:7002
<div>Update Close</div>	

Figure 6 Device List / Edit

With "Edit" option menu in Figure 6, the settings of the registered device can be changed. Changes made in "Edit" device list window is saved with "Update" button.

"Delete" option is used for deleting a device from the device list.

## c. File Upload

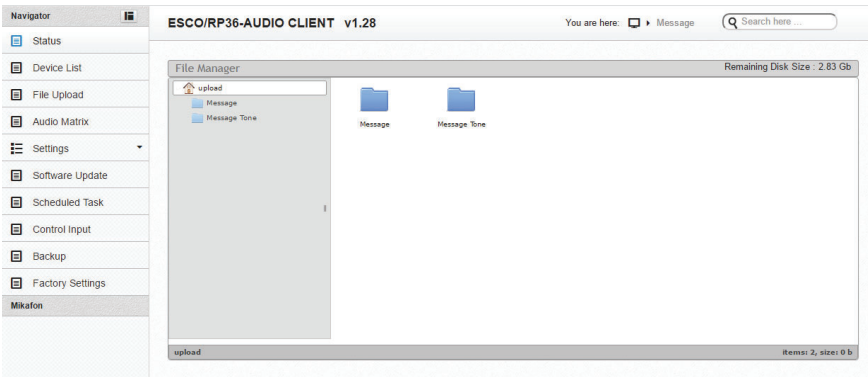
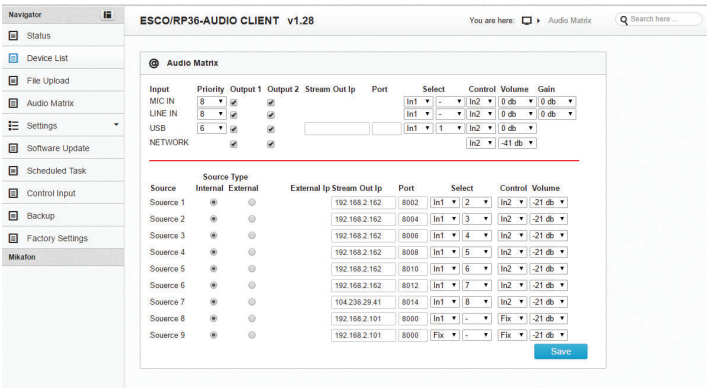


Figure 7 Web Interface File Upload

MP3 files can be added from the File Upload menu to be used in the system. RP36 can play and/or stream messages such as emergency messages according to planned scenarios on the interface. The messages uploaded here, can be assigned to any desired contact output from the Control Input menu or can be used for other operations.

## d. Audio Matrix



Resim 9 Arayüz Audio Matrix

The volume level of each source can also be adjusted from the audio matrix menu. The output volume can be adjusted according to whether the sources are activated or not.

As an example, if we examine the structure in the Audio Matrix menu above, "network" has the highest priority in the system. So that the priorities of datas, such as music and announcements received from the "network" is higher than other sources. Audio from the network is transmitted to both outputs.

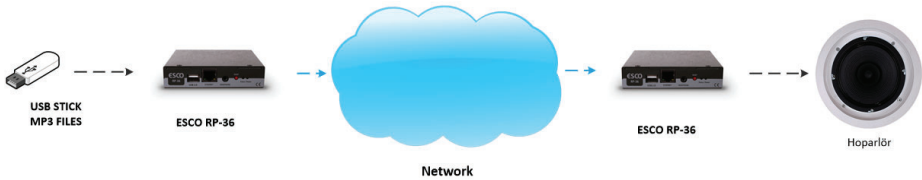


Figure 9 RP36 Network Structure

The USB port of the ESCO/RP36 device becomes active when a USB containing MP3 data is inserted. Create a folder named "music" for the MP3 files in the USB and put them in this folder. The device plays the MP3 data by looking at the priority level of the USB in the system and at the same time broadcasts to the Stream Out IP and other RP36 devices connected to the same system. The priority of the data is set to level 5 when transmitted to other ESCO/RP36 device (it's network option is activated (Figure 8) on the Audio Matrix section from the interface).

## e. Settings

### 1. System

The screenshot shows the web interface for the ESCO/RP36-AUDIO CLIENT v1.28. The left sidebar contains a 'Navigator' menu with options: Status, Device List, File Upload, Audio Matrix, Settings (selected), Software Update, Scheduled Task, Control Input, Backup, and Factory Settings. The main content area is titled 'You are here: >' and displays four settings panels: 1. Network: DHCP is set to 'Disable' (radio button), and Static IP is '192.168.2.29'. A 'Save' button is at the bottom right. 2. System Time: A date/time input field is present. A 'Save' button is at the bottom right. 3. Serial: Speed (baud) is '9600', Data bits is '8', Stop bits is '1', and Parity is 'Odd'. A 'Save' button is at the bottom right. 4. Stream Buffer: A dropdown menu for 'Streaming Buffering Time' is set to '1s'. A 'Save' button is at the bottom right. 5. Reboot: A 'Reboot Now' button is centered.

Figure 10 Web Interface System

Other settings related to ESCO/RP36 device are made from this menu. Each menu tab has many different features. Detailed descriptions of the menus are available below.

### Network

The screenshot shows the 'Network' settings panel. It includes the following fields and controls: DHCP (radio buttons for 'Enable' and 'Disable', with 'Disable' selected), IP Address (text box with '192.168.2.29'), Subnet Mask (text box with '255.255.255.0'), Gateway (text box with '192.168.2.1'), and DNS (text box with '0' and a checkbox). A 'Save' button is located at the bottom right.

Figure 11 System / Network Settings

Each ESCO/RP36 device has an IP address in the system. Devices communicate over set IPs and ports. Make sure that no more than one device have the same IP address. During the first setup, default IP address is 192.168.1.33. To access the interface from the web browser, enter the address 192.168.1.33/html in the search bar. The new IP address of the device can be identified in the Settings > System > Network menu from the interface. If the IP address is defined as static, it must be entered manually, along with Subnetmask and Gateway information. As soon as the "Save" button is pressed, device will start working with the new IP address. After that, if you want to reach the device again, you will need to reach it from the new IP address. If you select the DHCP enable specification, the device will try to get an IP address from the modem and will work with this IP. If this device is wanted to be found later, Mikafon IP Scanner software can be used.



## b. System Time

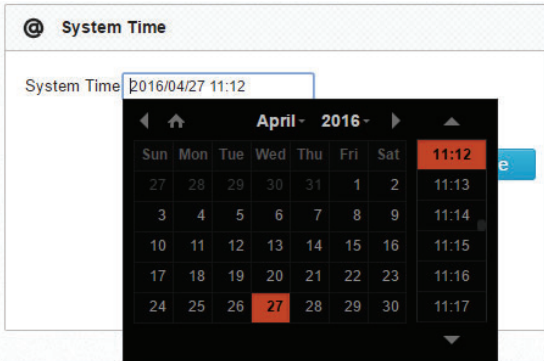


Figure 12 System / Time

Clock setting of RP36 is manually adjusted, once. Clock setting must be done manually for closed circuit use. After registration new time and date values are valid. If the device is in DHCP enable mode, it sets the clock itself at the startup.

## c. Serial

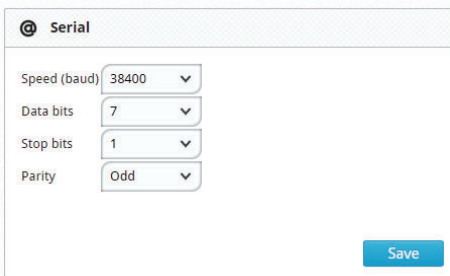


Figure 13 System / Communication Settings

There is one serial port on ESCO/RP36. Communication with external devices can be made through the serial port. You can set the communication speed, data length, stop bit and parity value from the above menu in Figure 13.

#### d. Stream Buffer

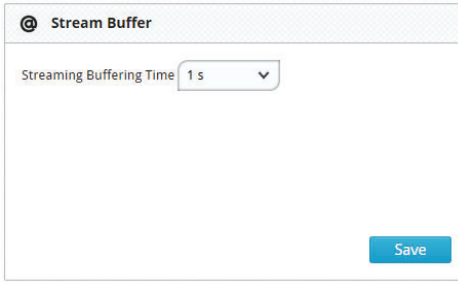
The image shows a web interface for 'Stream Buffer' settings. At the top, there is a header with a gear icon and the text 'Stream Buffer'. Below this, there is a label 'Streaming Buffering Time' followed by a dropdown menu showing '1 s'. At the bottom right of the interface, there is a blue button labeled 'Save'.

Figure 14 System / Buffering Settings

Audio datas received from external sources, are buffered by RP36 before transmitting. There may be delays due to other data and communications on the network. Therefore, it is necessary to buffer the audio data before playing it. You can use buffering options from 0.5s to 3s with 0.5s intervals. This value should be adjusted according to the network traffic

#### e. Reboot

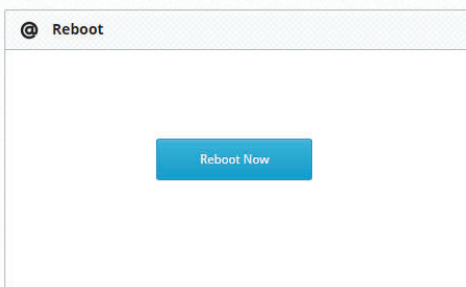
The image shows a web interface for 'Reboot' settings. At the top, there is a header with a gear icon and the text 'Reboot'. Below this, there is a large blue button labeled 'Reboot Now' centered on the page.

Figure 15 System / Reboot

After making the settings of the ESCO/RP36 device, you need to restart the device for it to be active. You can reboot the device using the reboot button from the Settings menu.



## 2. Channel

Navigator

ESCO/RP36-AUDIO CLIENT v1.28

You are here: Channel Setting

Search here

ADC INPUT

Adc Input 1 / Set Channel

Adc Input 2 / Set Volume

Save

Calibrate

Channel Select 1

Volume Min/Max Max

Calibrate

Channel Set

Selected Channel 4

Save

Figure 16 Web Interface Analogue Input Settings

The utilization of analogue inputs on RP36 is determined from the menu above in Figure 16. It is determined which channel will adjust the volume and which one will change the channel, from this menu. Calibration is required afterwards. Min/max values need to be calibrated for audio and each channel need to be calibrated for the rotary switch.

### a. Calibrate

RP36 has two analogue inputs. These inputs can be defined from the Control Input (g) menu. RS232 connection can be made to the channel defined in the Control Input menu via the Serial Link port on the RP36 rear panel. Mikafon/SV8 Volume Control Module is tailored to this need. Music source selection and volume adjustments can be made with SV8. Mikafon/MS40 Music Server can be used as music source input to SV8. The calibration feature with the SV8 serves to limit audio levels in desired zones. Please follow the steps below.

1. Select channel one from MS40.
2. Select first position from SV8.
3. Select "Channel Select 1" from RP36 interface to calibrate.
4. Keeping the same configuration, maximize the volume through the SV8.
5. Select "Volume Min/Max" from RP36 interface to calibrate.
6. The same procedure is applied for other channels.

Thus, the maximum volume level in the zones is limited from the RP36

## f. Software Update

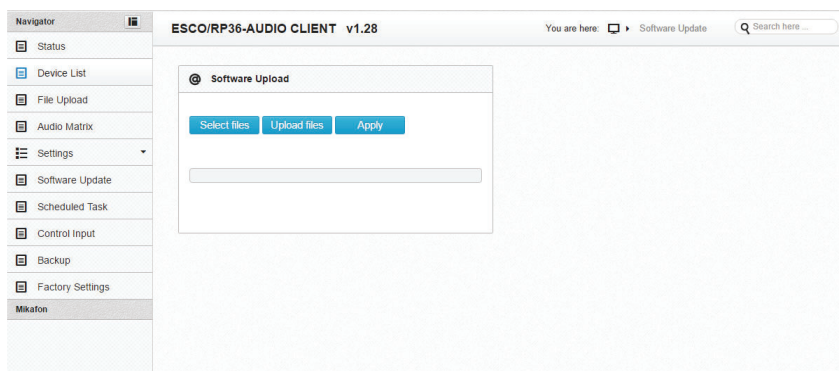


Figure 17 Web Interface Update

This menu is used for installing the software updates published by Mikafon. After uploading the file, the new version is activated with the "Apply" button.

## g. Scheduled Tasks

The screenshot shows the 'Scheduled Task' web interface. It includes a header 'Scheduled Task' with a refresh icon. Below are several input fields and buttons: 'Task Name' (task1), 'Message Name' (fire.mp3), 'Clients' (cli2,marsboard), 'Note' (empty), 'Time' (09:00 to 13:00), 'Start Task' (2015-07-23), 'End Task' (radio buttons for Never, On), 'Repeat' (radio buttons for Once, Daily, Weekly, Monthly), and 'Priority' (dropdown menu set to 2). At the bottom are 'New Record', 'Save', and 'Update' buttons. Below these is a table with columns: Task Name, State Again, Music Name, Task Date, and an action column. The table contains one row for 'task1' with state 'Once', music 'fire.mp3', and date '2015-07-23'. At the bottom of the table are pagination controls: 'Page 1 of 1' and 'View 1 - 1 of 1'.

Task Name	State Again	Music Name	Task Date	
task1	Once	fire.mp3	2015-07-23	

Figure 18 Web Interface Scheduled Tasks

It is utilized to play an uploaded message by creating a task at specified times and in specified periods. Detailed explanation is below

**1. Task Name:** The name of the task to be created is given here.

**2. Message Name:** Message for that specific task is selected. When clicked on Add button, the message files that are previously uploaded to File Upload will be listed here. The desired message is selected by the plus sign right next to it. See the picture below.

The 'Message List' dialog box shows a list of message files: 'test.MP3' and 'fire.mp3'. Each file has a red plus sign next to it. At the bottom right is a 'Close' button.

Figure 19 Scheduled Tasks / Message Name Transfer

**3. Clients:** It is determined to which devices the created task will be broadcasted to. When clicked on Add button, the following dialog box will appear in Figure 20. In the dialog box, all devices are listed on left and the devices selected for the task are listed on right.

**Channel List**

Selected Task

filter ... 🔍 ⓘ

filter ... 🔍 ⓘ

cli2  
marsboard

> >⏎  
< <⏎

esa

Add Close

Figure 20 Scheduled Tasks / Clients Channel List

- 4. Note:** If you want to enter a note for the task, it is entered in this field.
- 5. Time:** Enter the hours at which the task will be performed.
- 6. Start Task:** The start date of the task is entered.
- 7. End Task:** The last date of the task can be entered optionally. If it is desired to be used, the On option is clicked and the date on which the repetition is to end is entered. The task is saved.
- 8. Repeat:** The repetition period of the task is set.
  - a. Once: The mission will only run once at the times selected on the start date.
  - b. Daily: The quest is repeated daily.
  - c. Weekly: The task is repeated on selected days of the week.
  - d. Monthly: The task is repeated on the specified days of the month.
- 9. Priority:** Priority is selected for the task.
- 10.** Recording and correction operations are performed on the records.
  - a. New Record: Clears the form for the new record.
  - b. Save: The newly created task is saved.
  - c. Update: Updates the existing record.
- 11.** Fills the form selected from the table to make corrections.
- 12.** Deletes the selected record from the table

## h. Control Input

The screenshot shows the 'Control Input' settings page for the 'ESCO/RP36-AUDIO CLIENT v1.28'. The left sidebar contains a 'Navigator' menu with options: Status, Device List, File Upload, Audio Matrix, Settings (selected), Software Update, Scheduled Task, Control Input, Backup, and Factory Settings. Below the menu is a 'Mikafon' section. The main content area is titled 'Control Input' and shows settings for 'Control input 1'. It includes checkboxes for 'Output 1' and 'Output 2', both of which are checked. Below these are input fields for 'Local Message' (containing 'fire.mp3'), 'Remote Message', and 'Remote Target', each with an 'Add' button. There is a 'Trigger Type' dropdown menu and a 'Priority' dropdown menu set to '1'. At the bottom right of the settings area are 'Reset' and 'Save' buttons.

Figure 21 Web Interface Digital Input Settings

ESCO/RP36 has three digital inputs. Each of the digital inputs can be programmed separately. The digital inputs operate via a trigger signal coming from an external device. The task programmed becomes active according to the signal received from the digital input. The components of the Control Input menu are as follows:

- **Output:** Which of the ESCO/RP36 outputs or over which the message will be played is selected.
- **Local Message:** It is the message that will be played on the ESCO/RP36 when an emergency occurs.
- **Remote Message:** Message to be broadcast to an external RP36 (client) in an emergency.
- **Remote Target:** External ESCO/RP36 devices to broadcast. It is selected among the RP36s added to the Device List.
- **Trigger Type:** The part where the contact is open (NO) or closed (NC).
- **Priority:** It is the priority value of the message to be played.

## i. Backup

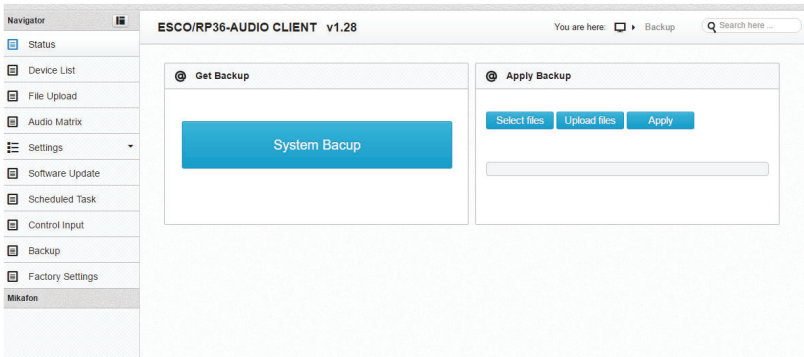


Figure 22 Web Interface Backup

With the ESCO/RP36 backup system, you can back up all the settings you have made on your device. You can upload the backup to another ESCO/RP36 device. Thus, most of the settings will be already done for the other RP36 and will be easier to use. After uploading the backup to other devices, do not forget to change the IP address of the device and the port information.

## j. Factory Settings

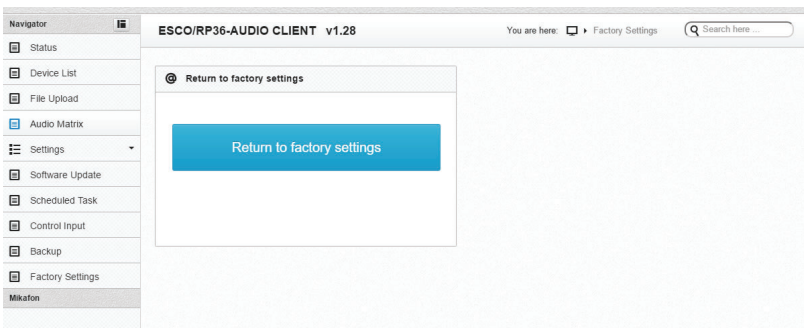


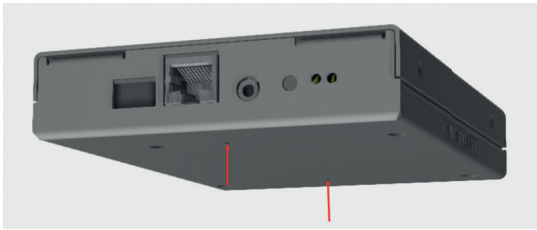
Figure 23 Web Interface Factory Settings

All of the RP36 configuration settings are deleted and returned to the default IP address of 192.168.100.1. After that you need to access your device from the new address. Be careful, all the information will be lost when returned to factory settings.



## 5. INSTALLATION INSTRUCTIONS

The Audio Client RP36 is suitable for desktop or 19-inch rack installation. The device is designed such that 4 units fit in a 19" rack cabinet side by side. When placing the device in the rack cabinet, the ventilation gaps should not be blocked and it should be fixed to the rack cabinet in order for it to work smoothly. For screw holes, see Figure 24. For this, make sure that there is enough space around the side walls of the device when placing it on the tabletop on in a rack cabinet.



To fix the RP36s to the rack, fix them with a philips head screwdriver through the holes using M3x6mm YSB screws.



If the devices are to be placed in a rack cabinet, it is necessary to use the tray specially produced in our company for RP36s.

To initialize the system, connections are made in accordance with the above-mentioned explanations. After the IP settings and necessary configurations are made through the interface, the device is powered from the rear panel via the 24VDC input. In the RP36POE model, the supply is provided via Ethernet. If the Power LED on the front panel of the device is on continuously lighting and the Status LED is flashing, the RP36 is ready to use.

6. TECHNICAL SPECIFICATIONS

CONTROL & INDICATION

Front Panel
· Power LED
· Status LED
· Reset Button

CONNECTIONS

RP36/POE
Front
1x USB Input
1x Ethernet Input
1x Headphone Input
Rear
1x 24V Supply Terminal
2x Analog Contact Output
4x Digital Contact Input
2x Line Output
2x Line Input

CONTENTS

Unit	Components
1	12VDC Power Adapter (Terminal Connected)
1	CAT6 cable (1 mt)
1	2P 3.81 Female Terminal
1	4P 3.81 Female Terminal
2	5P 3.81 Female Terminal
1	6P 3.81 Female Terminal

Accessories	
Included	12V adapter, CAT6 cable, connectors
Product Family	RP10, RP30IP, RP10W
Interoperable Devices	MA7, DOC8, DOC16, MS40
User Interface	RP36 Web Interface
Language	English
Warranty	2 years

TECHNICAL FEATURES

Audio Specifications	
Frequency Response	20Hz-20kHz (+1dBu)
Digital Signal Processing	Built-in and pre configured
SNR	>80dB
THD	<0.09%, (@gain 0 dBu)
EIN	-83 dBRA, (@gain 0 dBu)
V(esd)	· HBM: ±2000V · CDM: ±1500V

Performance	
CPU	1GHz dual core
RAM	1GB DRR2
Flash	8GB NAND Flash

<i>User Software</i>	
Web Interface:	<p>The user can;</p> <ul style="list-style-type: none"><li>- Manage contents of music and pre-recorded announcements</li><li>- Schedule tasks to play specific content in a desired time and zone</li><li>- Prioritize devices from desktop microphone to ensure urgent messages interrupt the schedule</li><li>- Manage zones by identifying which devices to communicate with</li><li>- Program digital inputs with desired content and prioritize</li><li>- Monitor status by examining past log records</li></ul>

Audio Receiving/Transmission	
Audio Encoding:	G.726 ADPCM 48kHz MP3 in mono/stereo from 64 kbps to 320 kbps, 48kHz
Audio Streaming:	One-way/two-way <sup>1</sup> , mono

<sup>1</sup>This product supports two-way audio, audio in and audio out. The product does not support two-way communication for conversations.

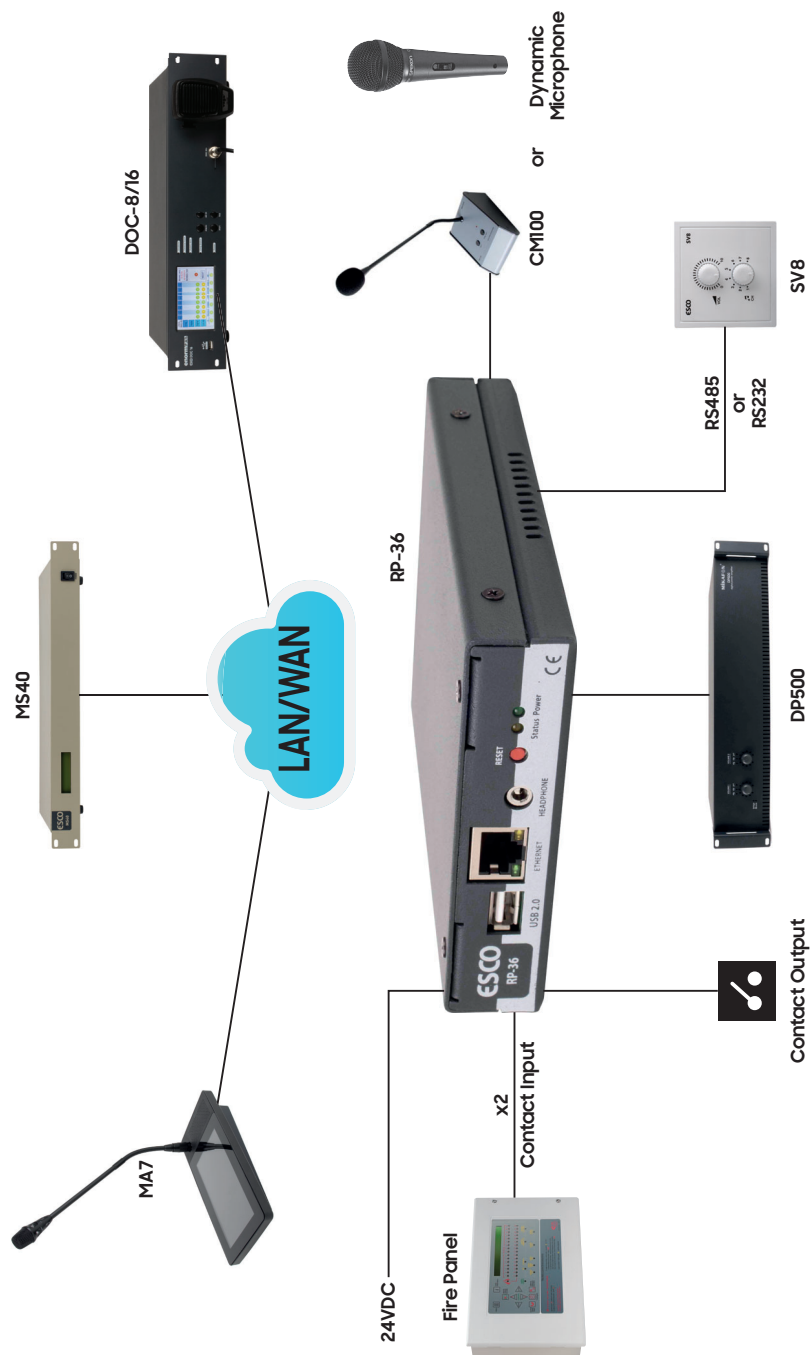
Network	
Network Protocols:	DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCP, ARP, SOCKS, SSH

<b>System Management</b>	
Contact Inputs:	4 Digital Contact Inputs; - IN1 & IN2: Programmed through software, plays desired content - IN3 & IN4: Activates line inputs, plays the signal input
Contact Outputs:	With NO/NC output contacts users can; - Play an audio clip - Open automatic doors - Turn on lights - Trigger alarms - Start up machines - Activate power supplies

Hardware Specifications	
Power	Power over Ethernet (PoE) 36V DC - 45V DC DC 12V DC - 24V DC
Connectors	PoE: RJ45 10BASE-T/100BASE-TX DC Supply: 2-pin 3.81 mm I/O: 5-pin 3.81 mm for two line inputs/outputs, 6-pin 3.81 mm for four digital inputs and 4-pin 3.81 mm for two NO/NC outputs
Reliability	Designed for 24/7 operation
Measurements	32 x 150 x 104 mm
Weight	400 gr (0.88 lbs)
Color	RAL 7016
Casing	Çelik metal
Operating Conditions	0°C~50°C (32°F~122°F)
Storage Conditions	- 20 °C to 50 °C (-4 °F to 122 °F)
Humidity	0% - %75 (non-condensing)



# RP36 BLOCK DIAGRAM



**EC DECLARATION OF CONFORMITY**

Type of Product	Reference	Brand:	Model Name	Description
Audio Client	15950200	EnormPA	ESCO/RP36	Audio Client TCP IP
Audio Client	15950250	EnormPA	ESCO/RP36 POE	Audio Client TCP IP

is in conformity with Directives:

2014/35/EU - Low Voltage Directive (LVD)

2014/30/EU - Electromagnetic compatibility (EMC)

2011/65/EU - Restriction of the use of certain hazardous substances (RoHS 2)

according to the provisions for compliance:

**This declaration of conformity is issued under the sole responsibility of the manufacturer:**

**Name Of Manufacturer:** MIKAFON ELEKTRONİK İNŞ.SAN.LTD.ŞTİ.

Şair Ziya Paşa Cad No: 8 34420 Karaköy - İSTANBUL / TURKEY

**Signed for and on behalf of the manufacturer by:**

Name: Ercan Polat

Position: General Manager

Istanbul, January 01 2021

**MIKAFON ELEKTRONİK**  
**İNŞAAT SAN. VE TİC. LTD. ŞTİ.**  
Şair Ziyapaşa Cd. No:8 Karaköy-İST.  
Yenikapı V.D. 621 014 6443

# WARRANTY GARANTİ BELGESİ

Bu belgenin kullanılmasına; 4077 sayılı Tüketicinin Korunması Hakkında Kanun ve bu Kanun'a dayanılarak yürürlüğe konulan Garanti Belgesi Uygulama Esaslarına Dair Yönetmelik uyarınca, T.C. Sanayi ve Ticaret Bakanlığı İl Müdürlüğü tarafından izin verilmiştir.

## İMALATÇI FİRMANIN

ÜNVANİ: MİKAFON ELEKTRONİK İNŞ.SAN.LTD.ŞTİ.  
MERKEZ ADRESİ: Şair Ziya Paşa Cad. No: 8/A 34420 Karaköy / İSTANBUL  
TELEFON: 0 212 244 5177  
FAKS: 0 212 244 5175



## MALIN

CİNSİ: AUDIO DECODER  
MARKASI: **enorm** 

MODELİ:  
SERİ NO:



GARANTİ SÜRESİ: 2 (İKİ) YIL ————— WARRANTY: 2 (TWO) YEARS VALIDITY  
AZAMİ TAMİR SÜRESİ: 30 (OTUZ) İŞ GÜNÜ ————— MEAN TIME TO REPAIR: 30 (THIRTY) WORK DAYS

## SATICI FİRMANIN

ÜNVANİ: \_\_\_\_\_  
ADRESİ: \_\_\_\_\_

TELEFONU: \_\_\_\_\_

FAKSI: \_\_\_\_\_

FATURA TARİH VE NO: \_\_\_\_\_ / \_\_\_\_\_

TARİH-İMZA-KAŞE:



**enormPA** 

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**MİKAFON ELEKTRONİK İNŞ. SAN. LTD. ŞTİ.**

**Showroom:** Şair Ziya Paşa Cad. No: 8/A 34420 Karaköy / İSTANBUL

**Intermediate Warehouse:** Çatma Mescit Mah. Mektep Sok. No:8 Şişhane-Beyoğlu / İSTANBUL

**Factory / Warehouse:** Cumhuriyet Mah. Keten Sok. Şekerpinar-Çayırova / KOCAELİ

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