

REVOX

Re:system

M10

*Modular Audio Multiroom
System*

Dominating Entertainment.
Revox of Switzerland.

v2.00

M10 – Introduction	3
Safety	4-6
M10 Unit Views	7
Installation and Assembly	8
M10 in a 19" Cabinet	10
Overview: M10 Connection Panel	11
Connection Panel Description	12-15
Ethernet Interface	16-19
M10 Setup	20
Ethernet Setup	20-24
Source Setup	24
Remote Setup	25-29
Scene function	30-35
Version Control	36
Guarantee	37
Scope of delivery	37
Disposing of your old device	37
Technical Data	38

M10

Working quietly in the background, the modular M10 Audio Multiroom System in 19" format, can be relied on to supply a complete house with music. With the plug-in Multiroom module, up to 32 rooms can be included. This allows you to choose in the individual rooms between a high-quality stereo sound or an exciting Home Cinema experience.

The Multiroom system is operated either through a M208 remote control or a wall-mounted panel, which in many cases is available in a design to match existing switch programs. The GIRA and Feller (CH) companies offer particularly attractive solutions.

Which music sources can be heard in the individual rooms depends only on which modules are in use. The M10 offers 9 free plug-in slots that can be populated with modules. These modules cover a whole range of options from an analogue record deck right up to a future-safe network connection to the Worldwide Web. The modular approach, which Revox has followed for decades was also an essential element in the development of the M10.

Once new technologies establish themselves on the market, Revox can offer the corresponding module. As a Revox customer, you just have to buy the new module for your existing M10 and can start to enjoy the new technology immediately. No new operating concept remote controls or conversions needed.

In this way, we protect your resources and offer your option to integrated and use new media simply and uncomplicatedly.

The M10 offers a USB both on the front and back of the unit to help the installer make the basic settings safely and quickly. There is also the option for remote maintenance and/ or Multiroom control with the a LAN, using the integrated network socket.

Safety

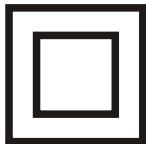
Take note of the label on the back of the unit.



In order to avoid the risk of an electric shock, do not remove any covers. Maintenance and repairs should only be carried out by qualified experts.



This symbol warns about "dangerous voltage" within the unit. Touching live parts can lead to an electric shock, depending on the level of the voltage.



This symbol indicates that the unit is only connected to the mains power socket through two contacts (phase and neutral) and has no ground. For this reason, the unit is particularly well isolated and must pass a strict insulation test. This guarantees that even if the neutral line is broken, no accessible part of the unit is under voltage. The M10 is equipped with this protection class in order to effectively eliminate sound-damaging ground-loops.



This symbol indicates important advice for operation and maintenance in the accompanying documentation.

Installation and operation

Please check the unit and accessories for any signs of transit damage after unpacking. Read the operation manual through carefully before starting to use the unit. Keep the manual for later reference.

A unit that shows signs of mechanical damage or which has had liquid in it may not be connected to the mains supply.

Use the supplied mains cable. The unit's power supply and connections values (mains voltage, frequency) must be checked before connecting it to the mains. Fuses used in the device must comply with the factory definitions in the "Technical Data" section.

Safety measures

Unusual operation

Unplug the unit from the mains immediately in the event of any unusual noises or odours. Have the unit checked by your dealer without delay.

Do not open the unit

The unit may not be opened as there is a risk of electrification.

Non-use of the unit

If the unit is not going to be used for a longer period of time, the power cable should be removed from the power socket for reasons of safety.

Foreign objects

Liquids, flammable or other objects should not be inserted in the unit's openings as this can lead to faults, fire or an electrical shock.

Power cable

Never pull on the cable when plugging the unit in or out. Always hold the plug.

Splash water

Do not expose the device to splash water or high levels of humidity. Do not stand containers filled with liquid, e.g. flower vases, on the device.

Further Safety measures

Do not stand any articles with open flames, e.g. lit candles on the device.

The M10 is only designed for operation in temperate, non-tropical climates.

Avoid locating the unit in a position which:

- is exposed to direct sunlight
- is directly next to a source of heat
- has poor ventilation
- has a dusty atmosphere
- is unstable
- has high humidity

You must ensure that neither the ventilation slots nor the fans on the back of the M10 are not covered and that there is sufficient ventilation. There should be a gap of at least 5 cm in all directions between the M10 and the built-in rack.

Regulations pertaining to the unit

In EU and EEC countries, Revox offers a guarantee on units bought in the EU, over and above the statutory rights of guarantee claims against the seller.

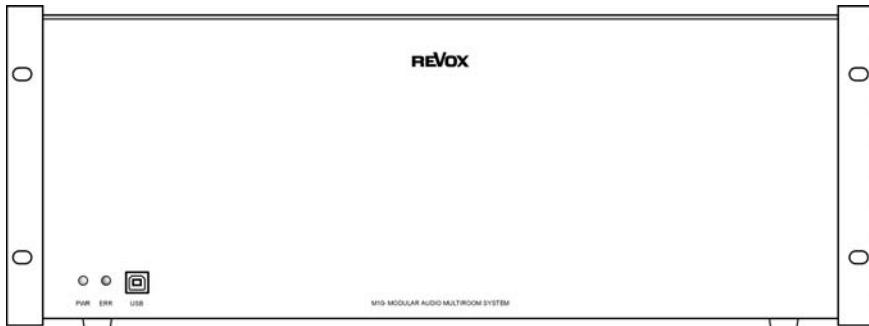
The guarantee covers material and labour during the period of the guarantee, which is defined by the Revox Sales Partners in the individual countries that make up the EU.

In all countries, the guarantee services offered by the Revox Sales Agent are over and above the statutory regulations. They are only valid in the country of purchase. Proof of purchase from an authorised Revox Partner must be produced to make a claim on the guarantee.

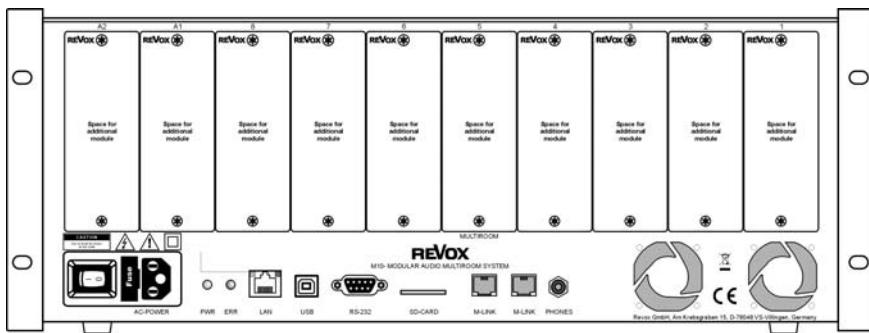
The guarantee is made null and void in the case of incorrect intervention measures or nonprofessionally executed repairs.

M10 Unit views

M10 Front view



M10 Rear view



Note:

Slots **A1** and **A2** may only be populated with second generation modules that have been developed since the start of 2008.

These can be identified by the following symbol on the back plane of the module:



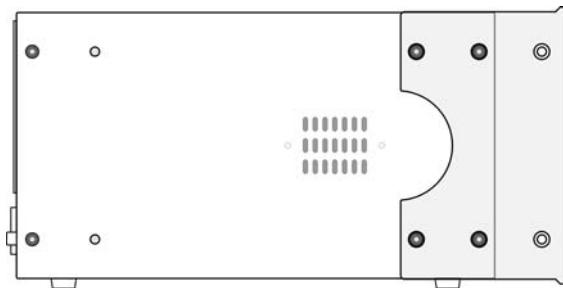
Installation and assembly

The M10 is an 19" build-in unit, which was principally conceived for insertion into a 19" cabinet. Thanks to the integrated unit feet, however, it is possible to position it outside of a 19" cabinet.

Installation in a 19" cabinet

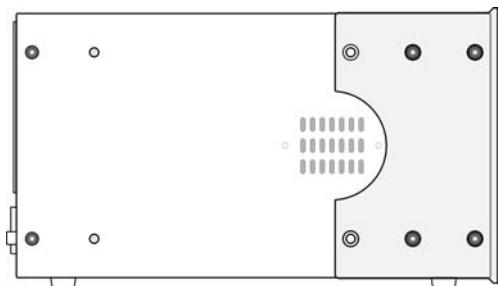
The M10 has variable side-elements that enable installation in the 19" cabinet. These can be assembled in 2 different positions on the M10 and enable the installer to assemble it in the 19" cabinet in the best possible way. See the figure below.

The M10 can be installed with the plug-in slots directed to the front or the back. See figure on Page 9. Depending on the cabling strategy, the plug-in module cables can be fed in at the front of the unit or concealed at the back. In both positions, it is possible to position the M10 4 cm towards the inside. This is a particular benefit in the case of 19" cabinets with a door as this allows you to plug the cable in at the front without it being unduly kinked.



Side view:

M10 with forward-spaced retaining bracket

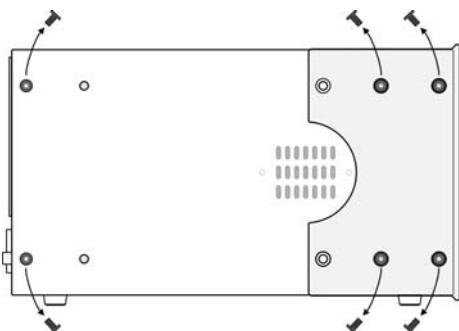


Side view:

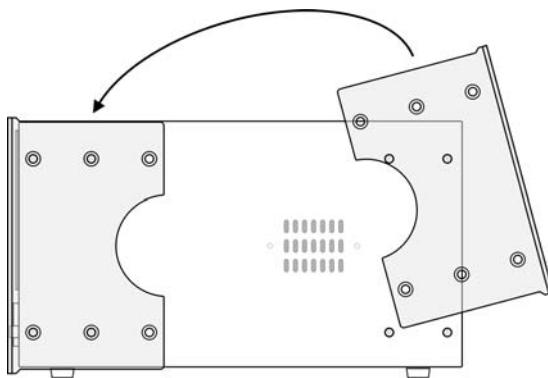
M10 with flush retaining bracket

Modifying the retaining bracket

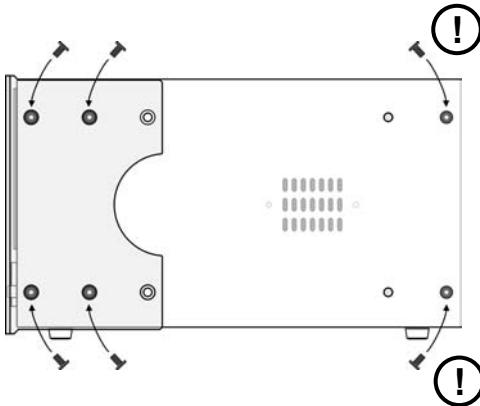
1. All 6 Allen screws (3 mm) are removed from both sides of the M10



2. Now, the retaining bracket is moved from the front to the back in the corresponding position.



3. All 6 screws are then screwed back in as shown in the figure.



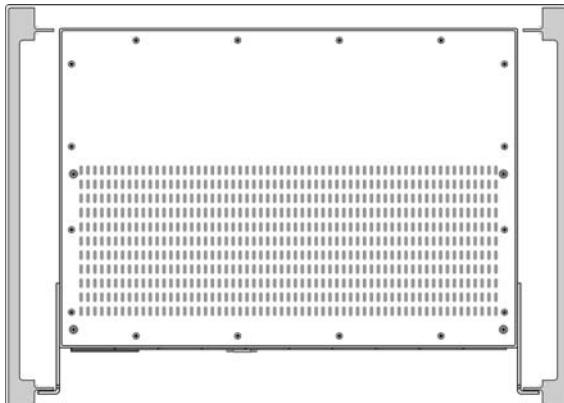
Please note

Also the two outside screws, which don't hold the retaining bracket to the M10, must be screwed back in.

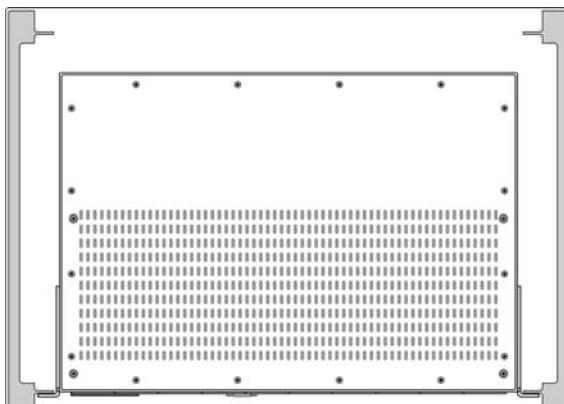
M10 Installation in a 19“ cabinet

Sectional view of a 19" cabinet with installed M10

A) M10 retaining bracket forward-spaced.

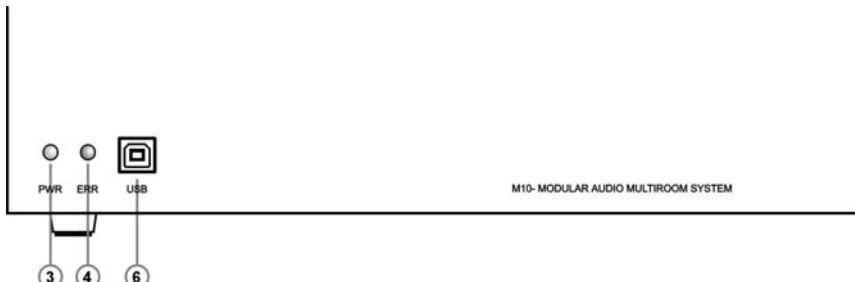


B) M10 retaining bracket inserted.

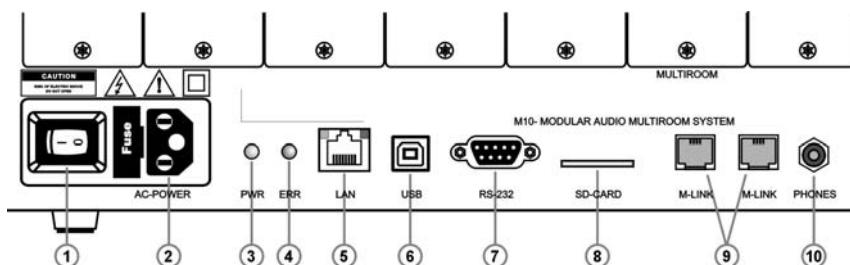


Overview: M10 Connection panel

M10 – Front side (Partial view)



M10 – Rear (Partial view)



- ① On/ Off switch
- ② Mains connection with fuse
- ③ Operational display LED, green/blue
- ④ Error display LED, red
- ⑤ LAN Ethernet connection
- ⑥ USB-B connection for PC
- ⑦ RS232, only for firmware updates
- ⑧ SD card slot, software update
- ⑨ M-Link for Revox interfaces
- ⑩ 3.5 mm stereo headphone socket

Description: M10 Connection panel

① On/Off switch

The M10 can be completely separated from the mains supply with the on/off switch. This is recommended if the Revox Multiroom System is not going to be used for a few weeks during a vacation, for example.

The M10 must remain switched on during normal operation so that access to the Multiroom System from the connected rooms is available at all times.

② Mains connection with fuse

The M10 power connection is adapted to the corresponding voltage of the country of purchase when it is delivered. Nevertheless, we recommend that you compare the operating voltage shown on the rating plate with the local supply before starting the unit up.

Fuse:

A faulty fuse may only be replaced with one with the following values:
1.6 A, slow-acting at 100 - 120 V~
0.8 A, slow-acting at 200 - 240 V~

Note:

The M10 mains supply is fitted with a non-grounded rubber connector. For this reason, only the supplied mains cable may be used.

③ Power LED

There is an operational display LED both on the front and the back of the M10 and gives an indication of the operational state of the M10.

The following states are shown:

LED blue

The M10 is connected to the mains through the on/off switch ① and is in standby mode.
There are no faults present.

LED green

One or more Multiroom rooms are active.
There are no faults in the software or hardware present.

④ Error LED red

There is an error display LED both on the front and the back of the M10 and gives an indication of any operational faults at the M10.

The following states are shown:

LED red - off

There are no faults in the software or hardware present.

LED red – flashing slowly

A first generation module has been installed in slot A1 or A2. Only second generation modules  are allowed in these slots.

LED red – flashing **quickly**

A) Temperature is too high

There is overheating in the M10 housing. The maximum permitted temperature value has been exceeded even though the fan is active.

Countermeasure(s):

- Check the installation environment
- Check the ventilation slots
- Check the fan

B) Power levels are too high

The permitted power value has been exceeded at one or more of the internal M10 power units.

Countermeasure(s):

Check the connected cables (M-Link, USB, etc.) for short circuits. Are all modules inserted correctly in the M10?

C) Software problem

There is a fault in the data traffic.

Countermeasure(s):

- Carry out a firmware update
- Check the modules. Is the module type and its software correct for each slot?

⑤ LAN Ethernet connection

A connection to an Ethernet LAN can be established through the RJ45 socket. The Ethernet interface is configured manually during the M10 setup. DHCP functionality is not supported.

The two LEDs integrated in the RJ45 socket indicate the status of the data connection.

The Revox Multiroom System can be controlled through the Ethernet interface. Either through the Revox Service programs, e.g. M230 or the primary domestic control system, e.g. GIRA Home Server.

There is a very flexible UDP protocol available for domestic control system programmers. Further information about this clear-text protocol can be found under www.revox.de

A maximum of 10 Clients can have parallel access to the M10. The MAC address is noted on the bottom of the M10.

You will find further documentation about the Ethernet interface starting from Page 16.

⑥ USB-B connection for PC

There is an USB-B interface both on the front and the back of the M10 that can be operated from a PC.

Both USB interfaces are switched in parallel and for this reason should **never** be used at the same time. Use **either** the front **or** the rear USB interface.

The M10 setup and the module installation can be done using the Revox M230 or M-Scope PC programs.

Working with these programs and the M10 configuration are described in a later chapter.

Firts operation

The M10 is connected to a Notebook or PC using the supplied USB cable.

After connecting, a Windows message appears on the screen that a new device has been recognised with the name **Revox M10-USB Link**. The corresponding driver must be installed to set the unit up. See next chapter: **Installing the USB driver**

Installing the USB driver

As the Revox USB driver is not yet present on the Windows operating system, you will be asked to make the corresponding driver available. Revox recommends **not** taking the Windows option to “search for Driver” but to tell Windows which folder the driver is in manually. Following the installation of M-Scope, you will find the correct driver for the M10 in the folder **C:\Programme\Revox\ M-Scope\ USB Driver** under the name **M51usb.sys**

Follow the Windows installation instructions and remove the USB cable from the M10 after successfully completing the driver installation.

When you then reconnect the M10 to the Notebook/PC, the M10 should now be recognised automatically.

Note:

Each USB chip in the M10 has an individual code that is stored by Windows. For this reason, the driver installation must be carried out again for each new M10.

⑦ RS232 interface

The serial interface is used exclusively for configuring the M10 and for installing new firmware, if the USB or Ethernet interface is blocked. It is not possible to operate third-party devices with it, nor is it possible to connect external RS232 interfaces, e.g. EIB data interface.

You can only get access to the M10 via its serial interfaces through the Revox service programmes M-Scope or M230.

⑧ Card slot for SD cards

A firmware update can be carried out using an SD (**Secure Digital** card). SDHC cards > 2 GB are not supported.

⑨ M-Link for Revox interfaces

The M-Link is a Revox interface, which various Revox interfaces can be connected to, e.g. M200 Domotic interface, M201 IR interface, etc.

Both the RJ11 sockets are electrically parallel switched. You should only use a **non-crossed**, 4-core telephone cable with a RJ11 plug for this connection (6P4C modular).

⑩ Headphone socket

The audio signal from the plug-in modules in the M10 can be listened to over the headphone socket during installation. The signal is also reproduced through the M10's integrated speaker as a mono signal. In the case of intrusive environmental noises, a secure check of the audio signal is possible using the headphone output.

The output is made in stereo. The source selection (plug-in module) and the volume setting are done through the Revox service programs, e.g. M230.

- Socket for 3.5 mm jack plug
- Output rating: Max. 1 watt
- Impedance: > 16 Ω

Ethernet interface

The Ethernet interface enables the M10 to be integrated into a LAN. In this way, each computer that is also integrated in the LAN can access the Revox system, using the corresponding Revox control software.

*PDA*s or *Tablet PCs* are also suitable as control devices, which enable a wireless connection with feedback. For this purpose, you need an additional *Access Point* or *WLAN Router* for the radio transmission, as shown in the Figure *Function Plan* on Page 19.

The corresponding **M230** or **M231** control softwares can be found on the Revox Homepage.

As well as operation through the Revox service programs, the M10 also offers the option to influence the Revox Multiroom System and/or to let feedback messages be directed specifically into a visualisation, through the use of a primary (domestic) control system.

The programmer can get a simple access to the Revox system through a UDP protocol (Revox M-text protocol).

A further tool that is supported by the M10 Ethernet interface is the M233 Display for Display panels in visualised domestic controllers.

The following page gives you an initial overview of the M-Text protocol and the M233 Display panel.

Please visit the **Download** area on the Revox Homepage for further information.

M-Text Protocol (UDP)

As well as understanding the Revox internal **M-Link** protocol, the M10 Ethernet interface with the software version 1.10 or higher also understands the clear text commands (**M-Text** protocol) in ASCII format.

This makes it possible to integrate the Revox system in a domestic control system, e.g. with the GIRA Home Server.

As the name M-Text implies, it is a very understandable protocol, which simplifies the programming, as commands are not in an encrypted form but in English.

The following is an example of a Revox M-Text command where the function is instantly recognisable. In this case it concerns setting the volume to 15 (of 40 steps):

xx:SET:VOLUME:15

M233 Display panel

The M233 software is a General User Interface GUI or also known as OSD for the Revox Multiroom System, which can be installed on a Windows XP platform as part of a Touchscreen display.

This makes it possible to control each room in the Revox Multiroom system through the visualisation.

The data traffic runs over the Ethernet interface integrated in the M10. Each Re:system slave integrated in the Multiroom needs its own M202 Ethernet interface.

The size, colour and position of the M233 display within the visualisation on the Touchscreen display is defined one-time in the corresponding ini file.

Connection

Point-to-Point

A **Crossover cable** is used if the M10 is connected directly to a PC.

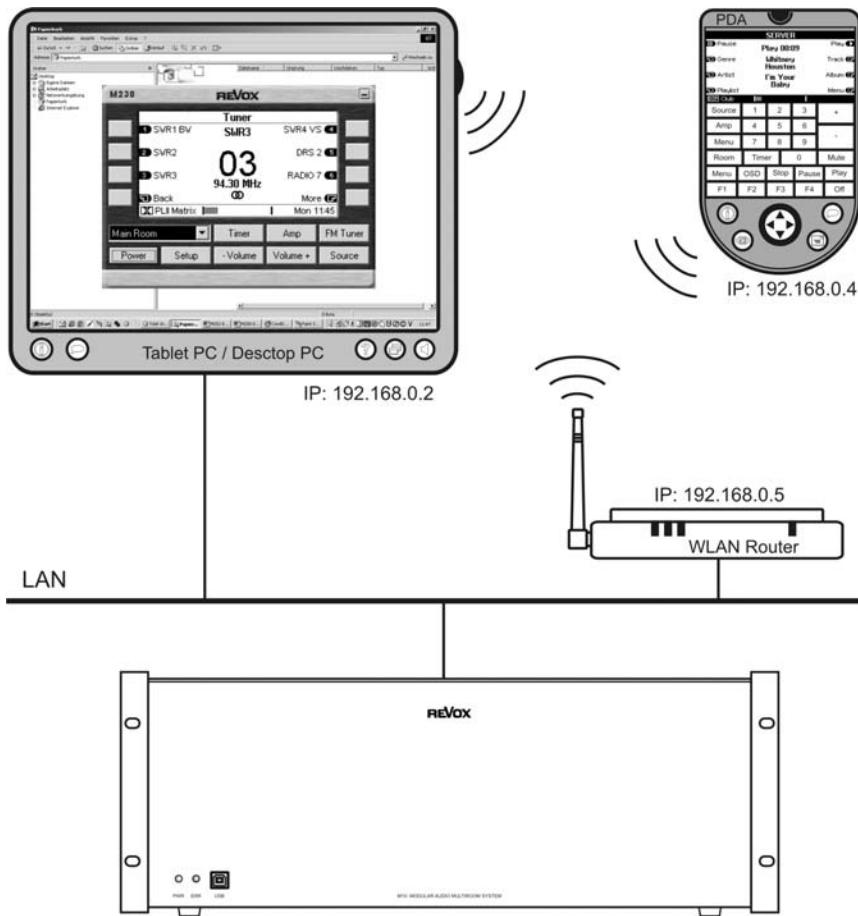
Distribution with Router

A **Patch cable** (1:1) is used if the two devices are connected over a router.

You will find an overview of a possible Ethernet network on the next page. The defined IP addresses are only examples and must be modified to meet the needs of the particular installation.

DHCP is not supported by the M10. This means that all the necessary settings for a fault-free integration of the M10 in an Ethernet system must be made manually. You will find details about this in the Chapter *M10 Setup*.

Functional plan



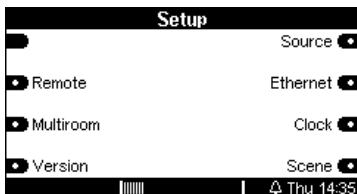
The IP addresses shown above are only examples and must be modified to meet the needs of the particular installation.

M10 Setup

A PC or a Notebook is always needed for the initial configuration of the M10, which is connected to the M10 using the RS232 interface ⑦ or the USB socket ⑥.

Using the M230 Revox program of M-Scope (Display view), the main menu shown below for the M10 setup can be called with the setup key.

The Setup menu appears as follows, if the Multiroom module is installed:



Ethernet Setup

The Ethernet setup is reached through the Ethernet softkey. All the settings that are needed for the integration of the M10 in a LAN are done on 2 configuration pages. The first menu page shows you a Client List of all devices that are currently accessing the M10.

CLIENT LIST

The CLIENT LIST shows all devices that are currently accessing the M10. Up to 10 clients can have parallel access.

If no client is logged on, four zeros appear in the corresponding line.

CLIENT LIST		
	0.0.0	
	0.0.0	
	0.0.0	
	0.0.0	
	0.0.0	
	0.0.0	
	0.0.0	
	0.0.0	
	0.0.0	
Pure Analog		Menu [IP]
		Wed 11:29

In the example below, three clients are accessing the M10. The IP address of each client is shown.

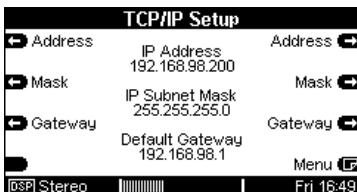
CLIENT LIST		
	192.168.0.9	
	192.168.0.2	
	192.168.0.8	
	0.0.0	
	0.0.0	
	0.0.0	
	0.0.0	
	0.0.0	
PLI Matrix		Menu [IP]
		Tue 17:04

Using the **menu** softkey, you can toggle between the **CLIENT LIST** menu page and the two **TCP/IP** pages.

The Access Point required for the radio transmission does not appear with its IP address in the CLIENT LIST.

Page ① TCP/IP

The base settings for the Ethernet access are set through the two TCP/IP pages.



The setting is made by selecting the corresponding address block with the softkeys, which is then shown in square brackets
192.[168].0.6

Now the required setting can be made using the two display keys
Jog [+ / -].

The new settings are confirmed with the **Apply** softkey. Otherwise the previous setting is retained.

Note

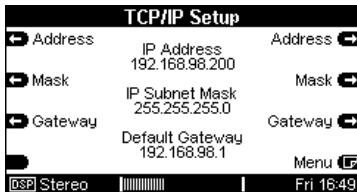
All settings in the M10 setup are made using the Jog [+/-] keys. The following symbol additionally draws your attention to it in the manual: []

IP Address

◊ []

➡ Address ➡

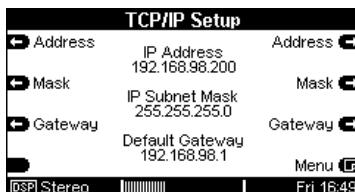
The 4 blocks of the IP address that the M10 should have are set using the two **Address** softkeys.

**IP Subnet Mask**

◊ []

➡ Mask ➡

The 4 blocks of the IP Subnet that the M10 should have are set using the two **Mask** softkeys.



In a network of DHCP-enabled LAN Clients, you must always ensure that these are not given the M10's IP.

Default Gateway

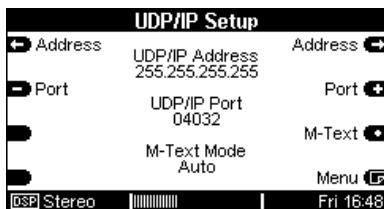
◊ []

➡ Gateway ➡

The 4 blocks of the **Default Gateway** that defines the external access in the Internet are set using the two **Gateway** softkeys. If such a data exchange is required outside the LAN, the Default Gateway must be configured in compliance with the local requirements.

Page ② TCP/IP

The second page in the UDP/IP setup is responsible for all the UDP settings. Here, all the relevant settings for the UDP address and port are made, as well as the selection of the M-Text modes.



The new settings are confirmed with the **Apply** softkey. Otherwise the previous setting is retained.

UDP/IP Address

◊ []

Address

UDP/IP address:

Here you can enter the target address, if the UDP packet should only be sent to one specific recipient.

Using the setting 255.255.255.255 the data packet is sent in Broadcast mode to all who have opened the UDP/IP port defined below, e.g. 04032.

UDP/IP Port

Port

Port

In order to ensure data security, not all ports are available but only those listed below. These have been defined by Revox

Open ports:

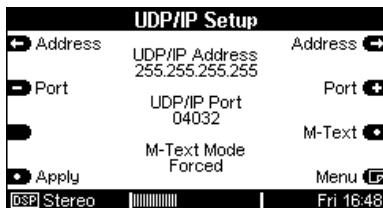
- TCP/IP via Telnet Port 23
(for testing purposes)
- TCP/IP via Port 5524
- UDP/IP via Ports 4032, 5524, 6536, 7728, 8728, 10308, 18042, 24022, 27944, 31286

M-Text Mode

M-Text 

The selection of the M-Text mode is only relevant if an UDP port is used as a port.

If, on the other hand, the TCP/IP port 5524 is used, the M-Text mode setting is irrelevant.



M-Text Mode: Forced

The M10 status message is only sent in M-Text format. Only M-text commands are expected. The **Forced** setting may not be used if M-Link protocols are used as well.

M-Text Mode: Auto

The Ethernet interface identifies automatically which protocol is present and automatically switches the mode and retains this until the next packet is received in a different mode.

The **Auto** setting should be selected if both the M-Text and M-Link protocols are used. The mode check that is made in the Auto setting however, makes the data exchange slower.

Source - Menu

Using the **Source** softkey, you can access the setup menu for the plug-in module that is currently playing in Zone 1 and there you can make the required settings for this module. The audio signal from this source can also be heard through the integrated speaker or the headphone socket.

Example:

To modify the base settings for the tuner, first select the Tuner source in the Source menu (Source key).

Now, using the **Source** softkey in the setup menu, you make the settings for the tuner.

If, on the other hand, you want to modify the basic settings of the Multiroom module installed in the M10, select the **Multiroom** softkey in the setup menu.

You will find the options for the various basic settings in the Operating instructions for the corresponding module.

Remote Function

The modularity of the M10 requires a flexible usage of operating units, as the M10 can be equipped with a wide range of modules. An operating unit can, for example, be the M218 Wall-mounted keypad or the M208 Remote control.

The **Remote** function offers the option of always being able to modify the source selection for the installed modules to the operating unit.

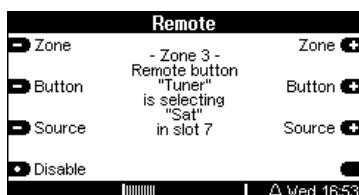
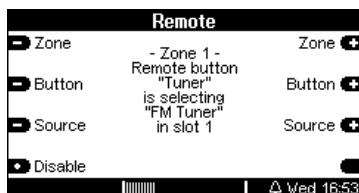
This means that the *Tuner* key on the M218 operating unit always sends the same signal over the Multiroom module to the M10. Only once the M10 has been assigned through in the **Remote** menu, will the decision be made as to which source the *Tuner* key calls and/or controls. So, for example, with one installation, the *Tuner* key calls the FM Tuner on the tuner module while with another, it calls the SAT tuner from the satellite module.

In general, you can say that variables defined through the Remote menu (Tuner, AUX1, etc.) are assigned to actual sources, (FM tuner, SAT tuner, etc.).

Zone-dependant Remote menu

The Revox Multiroom system has 4 Multiroom zones where different music can be heard independently of each other.

Now, for example, the M10 enables you to install 4 FM Tuners that can all be programmed independently of each other. Through the zone-dependent Remote menu, it is now possible that the *Tuner* key can control a different FM tuner in each zone.



This means that the M10 recognises which zone the variable *Tuner* was sent from and knows from the assignment made through the Remote menu which source should be addressed.

The Remote menu settings are explained in the following chapter.

Calling Remote



Select the **Remote** softkey in the Main menu.

As shown in the following graphic, the Remote menu is divided into the areas:

- Zone
- Button
- Source



We also recommend that the settings are made in this order, i.e. starting with the Zone. Then you select the key variable (Remote button) from an operating unit. Once this is set, this is assigned to a specific source.

Select zone



To start with, you select the (Multiroom) zone with the **Zone** softkeys.

We recommend starting with Zone 1 as then all further zones take the Zone 1 settings as default values.

The same Remote buttons are available in each zone.

You can toggle backwards and forwards through a loop of the four Multiroom zones with **Zone+** and **Zone-**.

Select button variable

■ Button Button 

Using the **Button** softkeys, you select the button variable that you want to assign to a specific audio source at the M10. You can toggle backwards and forwards through a loop of the four button variables with **Button+** and **Button-**.

The remote button *Tuner* symbolises, for example, the *Tuner* button on the M218 Wall-mounted keypad.

Note

One special option is to select **TV-Hold** instead of **TV/Video**. With this button variable, you activate the **TV/Video** source with a longer press on the button. A shorter press has no effect. In this way, conflicts between the M10 and the remote controls from some televisions can be effectively avoided.

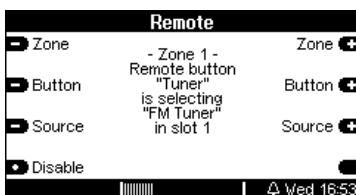
The **TV** button must be disabled if using **TV-Hold**, otherwise **TV-Hold** is ineffective.

The **TV** button is only available with remote controls, but not with wall-mounted keypads.

Select source

■ Source Source 

Using the two **Source** softkeys, an audio source is assigned to the previously selected button variable, e.g. *Tuner*, which will be activated through the selection with the operating unit at the M10. You can toggle backwards and forwards through a loop of the audio sources that the M10 currently offers, with **Source+** and **Source-**.



If the same audio source in the other zones should also be activated with the same, previously selected Remote button, this completes the required setting. You can check whether the same setting is actually present in the other zones with the **Zone** softkey. This is shown through the setting:

- Zone x -
 Remote button
 xxx
 is selecting
the same as
Zone 1

If, on the other hand, the Remote button should activate a different source in one or more zones, you switch zones with the **Zone** button. In the newly selected zone, another audio source can now be assigned to the same Remote button.

Example of a zone-dependant Remote assignment with the *Tuner* Remote button:



Fig. Zone 1



Fig. Zone 2



Fig. Zone 3

Explanation:

In Zone 1 and 2, the audio source **FM Tuner** is selected with the *Tuner* Remote button. In Zone 3, on the other hand, the SAT input of the **SAT** module is activated with the button variable *Tuner*.

Note:

If several modules of the same type, e.g. Tuner are installed in the M10 these can no longer be differentiated through their names as, for example, all Tuner modules register with FM-Tuner.

In such a case, differentiation is done through the definition of the M10 plug-in **slot** they are installed in.

Every modification has to be confirmed with the **Store** key. Press **Store** if you want to save your changes. Otherwise the original setting is retained. \Rightarrow

Disable variable



This function allows you to **Disable** the remote button. This makes the audio source no longer addressable through the operating unit or remote control.



To do this, select the required Remote button through the **Zone/** **Button** combination and press the **Disable** softkey. The **Store** softkey then appears that you need to press to confirm your change. If you don't press **Store**, the original setting is retained.

The display shown above indicates that the button variable *DVD* is disabled in Zone 1. The *DVD* Remote button can however be assigned to one or more audio sources in Zones 2, 3 and 4.

Scene function

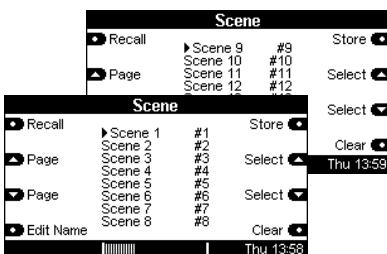
The **Scene** function has been integrated with the introduction of version 2.00 of the software. This enables music to be started in different zones and rooms at the press of a button. The choice of which source and which volumes should be selected for the individual rooms is defined once when you save a scene.

An audio scene can be called either through a primary building management system or through the M230 / M-Scope service program.

Within the Revox world, a scene only covers the audio side.

Linking the Revox scene with, for example a light or window-blind scene, is done through the building control software.

Select the **Scene** softkey in the Setup main menu.



A total of 16 scenes are available.

There are four functions for managing scenes:

- a. **Saving a scene**
- b. **Calling a scene**
- c. **Deleting a scene**
- d. **Renaming a scene**

Scene example

Scene **Morning**

Zone 1

Source: Tuner Station 4

Room	Status	Volume
Kitchen	On	10
Diner	On	8
Lounge	Off	-

Zone 2

Source: CD Title 1

Room	Status	Volume
Bathroom	On	12
Dressing	On	5

Zone 3

Source: Tuner Station 2

Room	Status	Volume
Nursery	Undefined	
Hallway	Off	-

Zone 4

Source: Tuner Station 4

Room	Status	Volume
Cinema	Off	-
Sauna	Off	-

ⓘ Status: Undefined
The room retains its current status.

a. Saving a scene

Store 

A scene must have been defined in a two-step process before it can be stored.

Step 1

To start with, you define through **Setup – Scene**, which rooms are involved and which are not.

Essentially, there are three room statuses when defining the scene:

1. The room is actively switched on when the scene is called if it was switched off at the time or it remains switched on.

The room is an active element of the scene

⇒ **Room included: YES**

2. The room is actively switched off when the scene is called if it was switched on at the time or it remains switched off.

The room is an active element of the scene

⇒ **Room included: YES**

3. The room retains its status (on or off) when the scene is called.

The room is not an active element of the scene, i.e. it remains passive.

⇒ **Room included: NO**

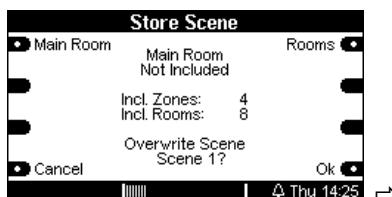
This is an advantage, if it should be guaranteed that the person in the corresponding room can decide independently whether music should be played or not.

Scene example:

Coming home

If only the rooms *Hallway* and *Lounge* were selected for a scene **Coming home** and all others were switched off, it could happen that music being played by persons who were already in the house is switched off.

With the **Store** softkey, you reach the level where the classification of **Included YES** or **Included NO** is made.



Defining the main room

Main Room

With the **Main Room** softkey, you switch the state of the main room (M51 or M10*) between:

Included (On)

Included (Off)

Not Included

Included (On)

The main room is actively switched on when the scene is called. Source and volume are defined in two steps.

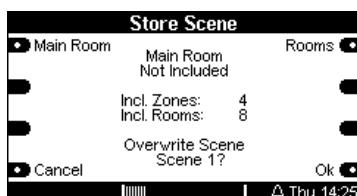
Included (Off)

The main room is actively switched off when the scene is called.

Not Included

The room is not an active element of the scene. It retains its current status.

The number of active zones and rooms is shown in the centre of the display.



* In the case of an M10 installation, the speaker integrated in the M10 is defined as the main room.

Defining additional rooms

Rooms

You change the status of the additional room between **Yes** and **No** with the **Rooms** softkey. The assignment is done by zone. You select the required zone or room through the **Zone** and **Select** softkeys.



Yes: The additional room is actively switched ON or OFF when calling the scene. The individual setting for the corresponding room is done in Step 2.

No: The additional room is not an active element of the scene. It retains its current status.

- : This additional room is not present in the Multiroom system and therefore cannot be defined.

Once all additional rooms have been defined, this fact can be confirmed with the **OK** softkey.

Step 2

In the second step, all additional rooms that are included as an element of the scene and have been defined with **Included / Yes**, can be setup.

Rooms that are not included as elements of the scene and have been defined in the first step with **Not included** (main room) or with **No** (additional room), are not taken into account when a scene is saved.

The *volume* and the ON or OFF *status* can be defined individually for each *additional room*.

The *music source* can be defined individually for each *zone*.

The most practical solution for the setup of the additional rooms is simply to go to each of the rooms individually and configure them according to your own discretion. In this way, the optimum volume can quickly be defined by listening.

Of course, it is also possible to configure each room from your PC, using the M230, M233 or M-Scope service programs.

Once all additional rooms have been defined, the scene can be saved using the **Store** softkey.

With the **Cancel** softkey, you quit the scene setup **without** saving the scene and/or the original scene remains unchanged.



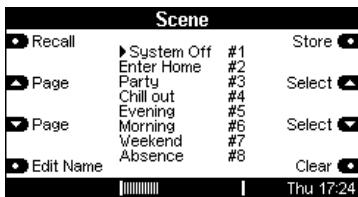
Important advice:

The parameters for the various scenes are stored in the M219 by room. This offers significant speed advantages when activating a scene. At the same time however, this also means that a scene loses part of its contents if an M219 has to be exchanged, for whatever reason. In this case, the scene has to be reconfigured.

Calling a scene

■ Recall

Once a scene has been defined and saved, it can be called up using the **Recall** softkey. At the M10, this is done through the M230 or M-Scope service program. The procedure is to select the required scene using the **Page** softkeys (to switch between pages 1 and 2) and the **Select** softkeys (to scroll up and down) and then press **Recall**. The scene is carried out immediately.



Executing a different scene overwrites the previous scene.

The M-Text protocol for building control offers a further option for calling a scene.

You will find an exact description of this in the M-Text protocol description on the Revox homepage, www.revox.de or www.revox.ch.

Deleting a scene

Clear ■

A scene can be completely reset with the **Clear** softkey. This is recommended if a scene should be deactivated or if the changes that need to be made with a scene definition are so extensive, that it would be too much effort to modify an existing scene.

Select the scene that is to be deleted using the **Page** and **Select** softkeys and then press the **Clear** softkey. All rooms, including the main room, are now reset to the status *Not included*.

Renaming a scene

Edit Name

Each scene can be given an individual name in order to be able to assign it uniquely.

Select the scene whose name is to be changed using the **Page** and **Select** softkeys. The following menu appears:



Cursor

These softkeys are used to position the cursor left/right in the text field.

Delete

Pressing this softkey deletes the characters at the current cursor position.

Insert

Pressing this softkey inserts a character at the current cursor position.

Cancel

Pressing this softkey quits the editing menu without saving any changes. The previous scene name is retained.

Store

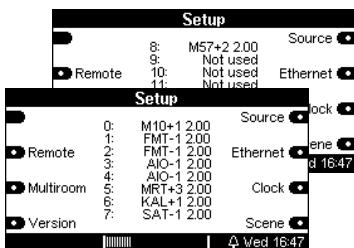
Pressing this softkey saves the new scene name and takes you back to the scene Main menu.

Software version

Version

The **Version** function displays the current version number for each module along with the plug-in slot that it occupies.

Select the **Version** softkey in the Setup main menu.



You can toggle between the two **Version** pages with the **Version** softkey.

The lefthand column shows the module plug-in slot with the numbers **1 – 7** and **8 – 10**. The plug-in slots **11 – 15** are reserved for internal and external M10 modules.

The middle column defines each module, the development generation of this module and whether it is bootloader enabled.

- : bootloader enabled
- : not bootloader enabled

The righthand column shows the software version of the corresponding module.

Non-occupied plug-in slots are identified by **Not used**.

Example:

5 MRT+3 2.00

This line defines that the 3rd generation Multiroom module with the software version 2.00 is located in slot 5.

This module can receive a software update using the bootloader ⇨ +.

You will find more information on the *Bootloader* topic in the M-Scope operating manual.

Disposing of your old devices

Your product has been manufactured from high-quality materials and components that can be recycled. If this symbol of a crossed-out, wheeled rubbish container is on the product, this means that it is covered by the EU Directive 2002/96/EG.



Please find the location of your nearest recycling point for electrical and electronic devices.

Please follow local regulations and do not dispose of the device with your domestic refuse. The correct disposal of your old device helps to avoid negative impacts on the environment and on personal health.

Scope of delivery

- Re:system M10
- Operating manual
- Power cable
- USB cable
- TORX screwdriver
- Installation CD

Note: Fixing screws

The scope of delivery does not include fixing screws for the rack-mounting of the M10 as there are too many different fixing systems available on the market.

Guarantee

The guarantee period is 24 months.

Your dealer should be your first contact if you need service. If he can't give you the help you need, send the M10 carriage free and without any accessories to your national Sales Office.

Please supply a complete description of the fault together with your address.

Technical data

Serial data transfer:

RS232 SUB D 9-pin 1:1 cabling (socket)

Audio connections

Headphone output: max. 1 W / min. 16 Ω

Dimensions

Width x Depth: 443 x 310 mm (without retaining bracket/ unit feet)
17.44 x 12.2 inch

Height : 171 mm (corresponds to 4 RU)
6,73 inch

Weight

11.0 kg / 24.25 lb (without packaging and accessory box)

Permitted ambient temperature

0° - 50°C / 32° - 122 °F

Power consumption

Standby: 2 W

Operation: 4-160 W*

* Dependant on module population and/or the number of connected interfaces

Fuse

Primary fuse (at power switch):

1.6 A, slow-acting at 100 – 120 V~

0.8 A, slow-acting at 200 – 240 V~

Secondary fuse (on the circuit boards / internal):

5.0 A, slow-acting

E&OE

Description: Version 2.00

REVOX

GERMANY

Revox GmbH, Am Krebsgraben 15, D-78048 VS-Villingen, Germany
Phone +49 7721 8704 0, Fax +49 7721 8704 29
info@revox.de, www.revox.de

SWITZERLAND

Revox Schweiz AG,
Wehntalerstrasse 190, CH-8105 Regensdorf, Switzerland
Phone +41 44 871 66 11, Fax +41 44 871 66 19
info@revox.ch, www.revox.ch

Central Service

Revox GmbH, Am Krebsgraben 15, D-78048 VS-Villingen, Germany
Phone +49 7721 8704 43, Fax +49 7721 8704 49
info@revox.de

