

# LYNGDORF AUDIO MP-40 2.1

# OWNER'S MANUAL

# **TABLE OF CONTENTS**

Compliance	6
WEEE	6
FCC	6
Introduction	7
Pre-installation	8
Unpacking the product	8
Inventory	8
Operating voltage	
Ventilation requirements	8
Home automation system integration	9
IP control	9
Preparing the MP-40 2.1 for mounting in a rack	9
Rear Panel	
Remote control	
How to pair remote control in RF mode	
Switching remote between RF and IR mode	
Setup procedure	
Installation via installer menu	
Installation via web interface	
HOME screen	
SETUP	
Source	
Add/edit Source	
Source name	15 15
Lipsync offset (ms)	15
Volume offset (dB)	15
Audio input	15
Default postprocessing	15
Default voicing	15
Video input	15
Trigger out	15
Preset vTuner or airable station	16
Arrange	16

Delete	16
Speakers and room	16
RoomPerfect™	19
Global filter	19
Focus position	19
Initial setup	19
How to measure distances to speakers and subwoofers	19
Adjust subwoofer	20
How to set up RoomPerfect™	20
RoomPerfect™ preparations	20
Placing the microphone in the focus position	20
Volume setting	21
Measuring the focus position	21
Measuring random room positions	21
Room measurements above 90% RoomKnowledge	23
Calculation of focus and global filters	23
Video Setup	
HDMI Output	
HDMI Output and eARC	
HDMI Input Settings	
Zone B setup	25
Audio Setup	
Audio Processing	
Voicing Setup	25
Exporting and Importing Voicings	25
Edit or delete voicing	
Add new voicing	
Replace all voicings from file	
Creating voicings	27
System configuration	29
General setup	
Power management	29
Default volume settings	29
HDMI CEC settings	29
Display timeout	29
Password protection	29
Show bypass	29

Enable front IR sensor	29
Trigger setup	30
Input Trigger	30
Output Trigger	30
Network setup	30
Streaming setup	30
Device name	30
Streaming player control	30
Streaming playback	30
UPnP	31
USB Audio	31
vTuner / Airable Radio	31
Tidal Connect	31
Spotify Connect	31
AirPlay 2	31
Roon Ready	32
Manage Software	
Software Information	32
Network Information	32
Backup	32
Restore	32
Factory Reset	32
Software Update	33
Update from remote files	33
Update from local files	33
Via web interface:	33
Update Via OSD Interface	33
Troubleshooting	33
RoomPerfect™	33
Error Messages	34
No microphone connected	34
Fault – No signal	34
Fault – Signal clipping	34
Fault – Low signal	34
Can't Turn On Via LAN or Control System	34
Retrieving and Sending an Error Log	35
3D Compatibility Not Detected	35
Remote Control Doesn't Work	35

Network Setup	35
Connecting to MP-40 2.1 with a network cable	35
Set Up a Fixed IP Address in Windows 7	37
Set Up a Fixed IP Address in Windows Vista or Windows 10	37
Trademarks	38
Service and Support information	39

# Compliance

#### **WEEE**

The European Parliament and the Council of the European Union have issued the Waste Electrical and Electronic Equipment Directive. The purpose of the Directive is to prevent waste of electrical and electronic equipment and to promote reuse, recycling, and other forms of waste recovery. Lyngdorf products and the accessories packed with them are subject to the WEEE Directive. Please dispose of any waste materials in accordance with your local recycling regulations. Products and equipment which must be collected for reuse, recycling, and other forms of recovery are marked with the icon of the crossed-out waste receptacle.





#### **FCC**

Lyngdorf products and accessories comply with parts 15 and 68 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference; and (2) this device must accept any interference received, including any interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Equipment marketed to a consumer must be capable of complying with the necessary regulations in the configuration in which the equipment is marketed.

# Introduction

The MP-40 2.1 is an advanced processor with full support of the latest Dolby® Atmos, DTS:X and Auro-3D® surround sound formats. The processor can decode 12 discrete channels from the source and features 16 balanced XLR outputs for the discrete channels, additional subwoofer outputs as well as channels designed as matrixed/mixed from the discrete channels. Whatever your setup is, the MP-40 2.1 will provide the optimal performance due to its bass-management and room correction system, RoomPerfect™.

Both Dolby, DTS and Auro provides modes for processing legacy formats or for upmixing the sound into all your speakers. This is referred to as POST PROCESSING, and it can be set on a Source or controlled from your remote control.

The MP-40 2.1 will support any setup from the simplest stereo setup to the most advanced 3D surround setup, and we have made great efforts for having a simple user interface, where all settings are displayed and arranged for easy installation.

Please read through this manual for understanding the functions available – or as later reference. The latest version of this manual is available for download from www.lyngdorf.com

Enjoy!

# **Pre-installation**

Please read all material carefully prior to installation. If you need additional assistance, contact your Lyngdorf Audio representative, or visit www.lyngdorf.com.

# Unpacking the product

Carefully remove the unit and accessory kit from the carton and check for shipping damage. Contact the shipper and your Lyngdorf Audio representative immediately, if the unit bears any sign of damage.

Note: Keep the shipping carton and all packing material for future use. If this unit is shipped for service without the original packing, damage could occur and void the warranty.

# Inventory

Check the list below to ensure that all necessary product components have been delivered. Report all discrepancies to your Lyngdorf Audio representative immediately.

Owner's manual

Power cord

Remote

Microphone

Microphone stand

Microphone cable

Rack ears

# Operating voltage

Lyngdorf Audio products must be connected to the mains power system only. The MP-40 2.1 will automatically detect voltage between 100-240v.

#### **Ventilation requirements**

The MP-40 2.1 does not have a built-in fan, nor does it require special measures to ensure proper heat dissipation. It should be placed according to these guidelines:

It should always have at least one inch / 25mm of free space on all sides.

It should be placed in an environment free of excessive heat.

In a rack system, the MP-40 2.1 should be placed at the bottom of the rack, still with at least one inch / 25mm free space on all sides.

# Home automation system integration

The MP-40 2.1 is compatible with home automation systems via the RS232 and network connector on the rear socket panel. The MP-40 2.1's IR and trigger connections can also be programmed for use in a home automation system.

# IP control

Access the MP-40 2.1 by going to <a href="http://mp40.local">http://mp40.local</a> in your browser.

Pressing the OK button on the remote and toggling through the information, you will see the IP address allocated to the MP-40 2.1.

Open a TCP connection on port 84 and use the same protocol as on the serial interface. Use Telnet, Putty, or a similar program to open the TCP connection.

If you do not know the IP address of the MP-40 2.1 on your local network, the MP-40 2.1 supports Apple's Bonjour Discovery service, which must be on the computer with which you wish to set up the MP-40 2.1. The software is built-in as part of the Apple OS X operating system (not iOS devices). For Windows operating systems, the software can be found at http://www.apple.com/support/bonjour/

# Preparing the MP-40 2.1 for mounting in a rack

The MP-40 2.1 processor is equipped from the factory with feet for free-standing placement.

To install the MP-40 2.1 in a rack:

Turn the MP-40 2.1 upside-down and place it on a stable, even surface.

The screws used to fasten the rack brackets to the bottom of the MP-40 2.1 are in the holes designated for the brackets when the product leaves the factory.

Fasten the brackets for rack mounting to the MP-40 2.1.

If so required, the feet can be removed

Mount the MP-40 2.1 in a rack.

# **Rear Panel**



On the back of the MP-40 2.1 you will find a range of inputs and outputs:

- 16 x Differential balanced audio outputs (configured for 11.1 plus 4 x Aux)
- 3 x HDMI 2.1 inputs
- 2 x HDMI 2.1 outputs (eARC on HDMI output 1)
- 2 x USB-A connectors, for music file playback, backup, software updating, etc.
- 1 x USB-B audio input, for external music players, Computers, etc.
- 1 x RJ45 Network connector (LAN)
- 1 x Microphone input for the RoomPerfect  $^{\text{TM}}$  room correction microphone
- 1 x SD card slot for storing backup data
- 3 x IR inputs
- 1 x Trigger input and 4 x trigger outputs
- 1 x RS-232 connector for serial control of the unit
- 4 x Optical digital audio inputs, 1 x AES/EBU digital audio input, 3 coaxial digital audio inputs
- 1 x Coaxial digital audio output (for Zone B)

The processor can decode maximum 12 speaker channels plus additional audio signals for 4 auxiliary channels, for example subwoofer outputs or Top Middles as a mix of Top Fronts and Top Rears.

Differential balanced output connection means that PIN 1 is Shield/Ground, PIN2 holds audio signal and PIN 3 holds an inverted audio signal. If your power amplifier requires a single ended (RCA) connection, you must ensure that PIN 3 is disconnected (lifted). PIN 3 in the connector may not be connected to ground.

# Remote control

The MP-40 2.1 comes with a dedicated remote control, which can operate both with radio frequencies (RF) and infrared control (IR).

**Setup** Access the installation menu.

**Standby** Turn the MP-40 2.1 on and into standby.

Audio Access the post-processing menu.

**Trim** Access to miscellaneous audio adjustments.

**Up/Down** Move up and down in menus.

Browse available settings in a menu.

Toggles between the available RoomPerfect™ filters.

**Left/Right** Move left and right in menus.

Toggle between neutral and the available voicings.

**OK** Activate the info screen, indicating the status of the unit, IP address,

select a menu and store a selected setting.

**Back** Return to the previous menu.

**Menu** Access the user menu.

**SRC** Access the source menu list.

**Source -/+** Toggle between active sources.

Volume +/- Turn volume up and down.

**Mute** Mute and restore the sound.

**Play/Pause** Play/pause the currently playing track in the media player.

**Skip Forward** / Skip in the current playlist in the media player.

**Skip Backwards** 



# How to pair remote control in RF mode

The MP-40 2.1 remote has both an IR and RF mode, and is by default set to IR.

To pair the RF remote control to the MP-40 2.1:

Turn on the MP-40 2.1.

Hold down Play/Pause and OK until the remote control's green LED flashes.

Release the buttons.

Point the remote control at the MP-40 2.1 and hold it within 30 cm / 1 foot of the front panel; when the green LED stops blinking, the remote is connected.

The remote is now RF paired to the MP-40 2.1.

To reset the pairing of the remote control, press Back and OK until the red LED flashes twice.

# Switching remote between RF and IR mode

To switch the remote from IR to RF mode, hold down OK and 2. The LED will flash green twice.

To switch the remote from RF to IR mode, hold down OK and 1. The LED will flash red twice.

If you press any button on the remote and the red LED turns on, it is in IR mode.

If you press any button on the remote and the green LED turns on, it is in RF mode.

# Setup procedure

Set up the MP-40 2.1 surround sound processor by following these steps:

Connect the speakers to the power amplifier(s).

Connect all external equipment (audio & video, home automation system, mains, etc.) to the MP-40 2.1.

Switch on the MP-40 2.1 and all connected equipment.

Access the setup menu via the web interface or the Installer Menu on the screen.

Go to "Speaker and Room" and set up the system.

Connect the amplifiers to the specified outputs.

Select and press "Verify speakers."

Adjust level(s) on your subwoofer(s) by the feature "Adjust Sub".

Run RoomPerfect™ Guided Setup.

Set up video sources, audio, Zone B etc.

Save and back up settings.

#### Installation via installer menu

Connect a screen to the MP-40 2.1 using any of the video output sockets on the back. Access the menu system by pressing the Setup button on the remote control. There may be differences between the installer menu and the web interface.

#### Installation via web interface

You will need a computer, and the MP-40 2.1 must be connected to an existing network, or you may use a crossover network cable for direct connection.

If you do not know the IP address of the MP-40 2.1 on your local network, the MP-40 2.1 supports Apple's Bonjour Discovery service, which must be on the computer with which you wish to set up the MP-40 2.1. The software is built-in as part of the Apple OS X operating system (not iOS devices). For Windows operating systems, the software can be found at <a href="http://www.apple.com/support/bonjour/">http://www.apple.com/support/bonjour/</a>

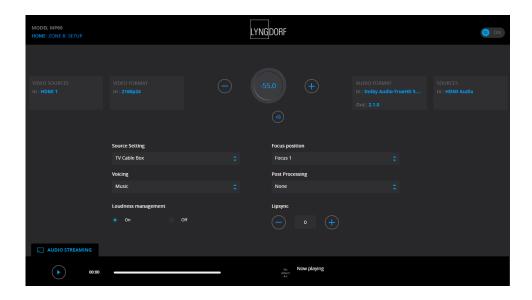
Access the web menu by typing http://mp40.local/ in your browser.

Or Press the OK button on the remote. Toggling through will display the IP address.

# **HOME** screen

The HOME screen refers to the daily operation as performed with the remote control and displays selected input and formats. This page shows information as to audio and video inputs and formats, and you can control the volume level or Mute the sound. These settings will be reset to default values when the MP-40 2.1 is turned into stand-by mode.

You can switch between Sources, change Voicings, RoomPerfect<sup>™</sup> focus points, Post Processing as well as activating Loudness function and adjusting Lip-sync.



Post Processing allows you to choose between following:

Dolby Upmixer / Up-mixes all type of signals to use all existing speakers using Dolby's techniques.

- Neural:X / Up-mixes all type of signals to use all existing speakers using DTS' techniques.
- Auro-3D / Decodes Auro 3D signals and up-mix all type of signals to use all existing speakers using Auro's techniques.
- Auro-2D / Up-mixes stereo signals to use surround sound speakers using Auro's techniques.
- Auro-Stereo / Downmix of multi-channel signals to stereo using Auro's techniques.
- Auro-Native / Decoding of 2D Auro formats other signals are passed through
- Legacy / Decodes object-based formats as in legacy Dolby or DTS original formats without the height channels.
- Stereo / Downmix of multi-channel signals to stereo.
- Party / Distributes a full-range signal to all left and right channels

Loudness management turns on a traditional loudness function for low playback levels as well as functions dedicated to the specific formats being decoded. These functions are managed in the setup menu: Audio Setup / Audio Processing.

Lip-sync settings will delay the sound processing in order to have correct synchronization with the screen images. With a general audio offset, you should adjust the lip-sync on the specific Source settings in the Setup menu.

The interface for controlling the built-in media streamer is found in the bottom section of this page. For information as to the use of the interface see the "Streaming Setup" section.

# **SETUP**

The SETUP screen refers to all basic settings and option in the installation of the processor.

# Source

In the Source menu, you will find a list related to the input connectors. This register is though very flexible as a Source can be specified to use individual inputs for audio and video. This means that several sources can relate to the same input connectors and vary in relation to the content, such as "Action Movie" and "Music Video" being identical in connections, but different in Post Processing, Voicings and trigger actions.

#### Add/edit Source

Source name

Input the name for the source.

Lipsync offset (ms)

Set delay time in milliseconds to ensure that the video and audio signals are played back simultaneously.

Volume offset (dB)

Enables you to match input levels from different sources.

Audio input

Select the audio input, for example HDMI Audio, coax or optical digital, USB, TIDAL, web radio presets.

Default postprocessing

Select the default postprocessing mode.

Default voicing

Select the default voicing.

Video input

Select the video input connector.

Trigger out

Choose which trigger output to activate when using this source. (The interface for controlling the triggers is found in the Trigger Setup under System Configuration)

Preset vTuner or airable station

Selects stored presets of the internet radio station. (The interface for controlling the built-in media streamer with is found in the bottom section of the HOME page.)

To save changes, you must press "Accept" after making changes to a single input. Do not go to the next input before saving changes.

# **Arrange**

Change the order of a source by:
Highlighting it
Moving it out of the stack by pressing right on the remote
Moving the source by pressing up/down
Reinserting it by pressing left.

#### **Delete**

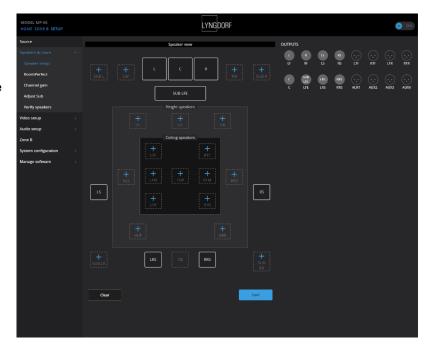
Delete an enabled source by highlighting it and pressing right on the remote.

# Speakers and room

The purpose of the speaker setup is to tell the system which speakers and subwoofers are available and how big they are, which in turn reveals how much bass they are capable of reproducing.

References to "speakers" in this document are specific to satellite or full-range speakers and do not include subwoofers. The setup page is an overview of the possible speaker outputs, which you can activate.

As factory default the MP-40 2.1 is displaying a 7.1 speaker configuration as shown here:



Channel Channel
Designations Description

# Low level speakers:

L Left
R Right
C Center

LS Left surround
RS Right surround
LRS Left rear surround
RRS Right rear surround

CB Center back

Speakers designated according to Dolby ATMOS and DTS:X specifications:

LW Left wide RW Right wide LTF Left top front **RTF** Right top front LTM Left top middle RTM Right top middle Left top rear **LTR RTR** Right top rear

Speakers designated according to AURO 3D specifications:

HL Height left HR Height right

HLS Height left surround HRS Height right surround

HC Height center

TOP Top ceiling / Voice of God

You need to configure the MP-40 2.1 according to your speaker setup, setting the sizes of the speakers so that the Bass Management function can optimize the performance. In the setup page the connectors will be highlighted with information as to signal type.

In a separate document, called **Speakers and Bass Management**, you will find detailed descriptions as to the options available, but we want to emphasize a few basic issues:

A single subwoofer must be set as LFE subwoofer – no matter where you position it in the room

Sub Right and Sub Left is used in combination only, as it is used for a stereo setup – but you can activate both the LFE subwoofer and the Sub Right/Sub Left.

The MP-40 2.1 can decode up to 12 channels (including the LFE, Low Frequencies Effects) and output these 12 native channels plus up to 4 derived channels, such as:

LW and RW (Wide front speakers – being a mix of front and surround speakers).

RTM and LTM (Top Middle speakers – being a mix of front and rear top speakers)

Sub Right and Sub Left – Stereo Subwoofer channels handling low frequencies only.

The system will inform you if you activate try to activate more speakers than the MP-40 2.1 can process.

In the web interface the designation of the output can be grey text instead of white to indicate that these outputs are matrix generated.

Activating top or height speakers requires that the lower level features side surrounds for optimal integration (LS, HS speakers). If you only have side or rear surround speakers, and these are mounted in the ceiling, they must be designated as lower level speakers, as you are not creating a 3-dimensional sound field.

If you set the Center speaker to "None", the MP-40 2.1 will automatically route the dialogue from the center channel into the Left and Right speakers.

#### **RoomPerfect™**

RoomPerfect™ is designed to analyze and correct for the negative effects that the listening room has on the speaker sound. See our website <a href="https://www.lyngdorf.com">www.lyngdorf.com</a> for more detailed information.

#### Global filter

The global filter improves sound quality across the whole room. When you are moving around a room, the global filter gives the best result.

#### Focus position

The focus filter improves the sound quality at a specific listening position. This makes the focus filter the best solution for optimal sound quality at a single listening position.

It is possible to add multiple focus positions. This must be done after RoomPerfect™ has been set up completely.

#### Initial setup

Be sure to select the unit of measure, then enter the distances to the speakers and subwoofers.

How to measure distances to speakers and subwoofers

The best results are obtained by using a laser-equipped measuring device. Before starting, place the RoomPerfect™ microphone at listening height in the main listening position. For each channel, measure the straight-line distance through the air from the tip of the RoomPerfect™ microphone to the center of the tweeter unit in the loudspeaker in question. Do not measure distances at floor level, as these measurements will not give acoustically accurate results.

When measuring distances to in-room subwoofers:

If the subwoofer(s) is in the corner of the room, measure the distance to the corner of the room.

If the subwoofer(s) is up against the wall, measure the distance from the listening position to the back edge of the subwoofer.

If you have a stack of subwoofers taller than the listening position, measure the distance from the listening position to the back edge of the middle of the stack.

When measuring distances to in-wall subwoofers:

If the stack of subwoofers is taller than the listening position, measure the distance from the listening position to the dust cap of the middle of the stack of subwoofers.

If the subwoofers are lower than the listening position, measure the distance from the listening position to the top dust cap of the top subwoofer.

# Adjust subwoofer

With one or more active subwoofer connected to the MP-40 2.1, this menu will guide you into setting the volume level on the subwoofer controls. Follow the instructions on the display to go through two steps:

1. Find the correct system volume for the subwoofer adjustment.

(Adjustment sound will play from the left front speaker.)

2. Find the optimal volume setting on your subwoofer.

(Adjustment sound will play from the subwoofer.)

You can choose to use a volume setting other than the one requested by the system. The calibration will not be inferior in quality, but the time required for an exact measurement will be longer. If the volume setting is too high, the system will display "Error – Clipping". Reduce the volume and try again.

# How to set up RoomPerfect™

The RoomPerfect™ microphone is a very sensitive and finely calibrated device which must be treated with utmost care. If the microphone has been dropped on the floor, it may be damaged. If this is the case, obtain a new microphone from your Lyngdorf Audio representative before performing the system calibration.

# RoomPerfect™ preparations

Place the RoomPerfect™ calibration microphone on the stand. Be sure to fasten the screws properly so the microphone does not move during a measurement.

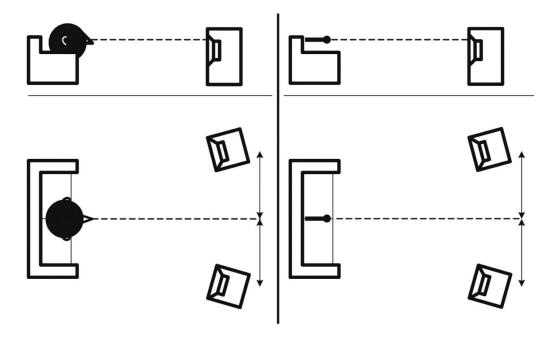
Plug the supplied microphone cable into the microphone.

Connect the microphone cable to the microphone terminal on the rear panel of your processor.

Each RoomPerfect™ microphone is calibrated within very small parameters and using a new microphone does not require adding any calibration file. The microphone does not work with traditional power supply, and it cannot be replaced by any other microphone design.

# Placing the microphone in the focus position

When you are prompted to place the microphone in the focus position, place the microphone, using the microphone stand, in your primary listening position. The height and the orientation of the microphone should correspond to your head's height and direction.



# Volume setting

Press Enter and a test signal will start from the left speaker. The system will give an estimated optimal volume for calibrating the system or will accept the current volume. Adjust the volume if required by the system and retry the measurement.

The calibration volume should not be so loud that it is inconvenient to you, or that it causes damage to your loudspeakers. If this is the case, set it to a lower and more appropriate level. A low volume can result in a longer calibration time or a measurement time-out. A low volume and long measurement will not affect the quality of the result.

# Measuring the focus position

When the calibration volume has been set, RoomPerfect™ will send a range of tones to measure the focus position. If there is noise in the room, the measurement may take longer. This will not affect the quality of the result. See RoomPerfect™ troubleshooting if the measurement stops prematurely, and then retry the measurement.

# Measuring random room positions

When the focus position has been measured, the next step is to measure the acoustical properties of the room. It is important to perform well spaced measurements to get a comprehensive image of the acoustical properties of the room. See RoomPerfect™ troubleshooting if the measurement stops prematurely.

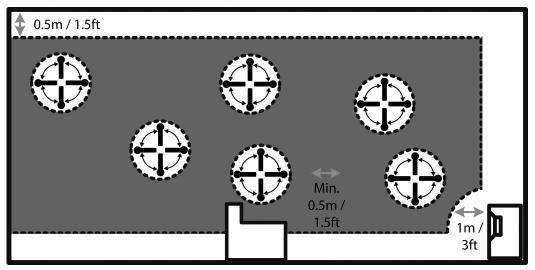
Keep taking measurements until RoomKnowledge reaches minimum 90%.

These are the rules of thumb when measuring the room:

The microphone should be in random and varying positions, heights, and orientations. Point it up/down/sideways, the more random positions the better.

The measurements should cover the entire room, not only your listening area.

Do not take measurements behind plants, furniture, etc.



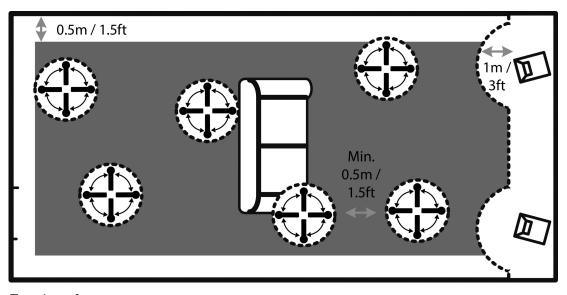
Side view of room

The microphone should not be closer than 0.5m/1.5ft from the floor, ceiling, and walls.

The microphone should be at least 1m/3ft from the front of the loudspeakers.

There should be at least 50 cm/1.5ft between each measurement.

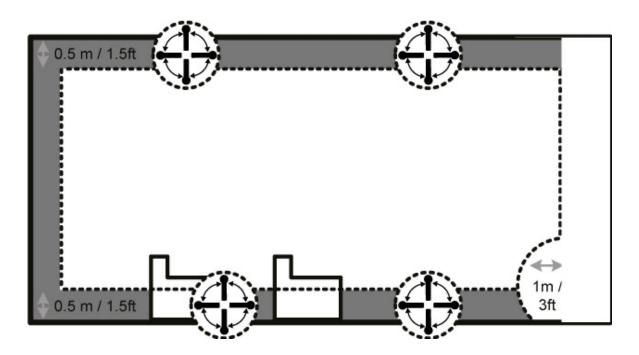
Do not take symmetrical measurements in the room.



Top view of room

# Room measurements above 90% RoomKnowledge

When RoomKnowledge has reached 90%, you can decide to add room measurements or do it later.



To fully optimize RoomPerfect™'s understanding of the room's acoustical properties, we recommend you keep doing measurements until the RoomKnowledge is above 95%. The higher the RoomKnowledge, the more accurate the room correction filters will be.

Hot Tip: if the bass level is too high, you can add a few measurements within 50 cm/1.5ft of the walls and ceiling. In this area there is relatively high bass level, and the added measurements will result in the system bringing the overall level down.

# Calculation of focus and global filters

When room measurements are complete, the system will calculate the focus and global filters automatically.

We recommend that you ALWAYS make a backup of the MP-40 2.1 settings and calibration data after having performed a RoomPerfect<sup>™</sup> calibration (see Manage Software in the Setup section).

# **Video Setup**

The Video Setup menu allows you to register the video system settings for the MP-40 2.1's video inputs and outputs, which in turn dictates which video formats can be shown on the screen when these inputs and outputs are activated.

#### Important notes:

HDMI 2.1 has a higher bandwidth and requires HDMI 2.1 8K compliant cables. Please check that all cables are HDMI certified with a "HDMI 2.1 Ultra High Speed" label. Using optical HDMI cables will require a USB connection for external power supply, as the HDMI connector provides max. 5V/50mA.

# **HDMI Output**

Select which HDMI output connector is used:

**HDMI Output 1** 

**HDMI Output 2** 

Both Outputs (same signal on HDMI Output 1 and 2)

# **HDMI Output and eARC**

The MP-40 2.1 features eARC (Enhanced Audio Return Channel), which will allow the video device to send audio data (for example Dolby Atmos) through the MP-40 2.1. eARC will only function on the HDMI Output 1.

#### **HDMI Input Settings**

Manage which EDID (Extended Digital Identification Data) from the connected video display (HDMI Output) is advertised to the connected video sources (HDMI Input):

Standard EDID

EDID from HDMI Output 1

EDID from HDMI Output 2

Combined EDID from HDMI Output 1 and 2

EDID (Extended Display Identification Data) is an embedded data file sent from the video display(s) to the sources. The display is the "master" of this communication, informing all sources what signal types it can receive. The MP-40 2.1 acts as an HDMI repeater and will correct the EDID information sent to the sources, if you have changed any of the settings.

# Zone B setup

Zone B refers to an adjacent space, which is linked to the main setup. An example could be a bar area outside the listening area, where you want to play the stereo soundtrack of cinema or select any of the other sources connected to the MP-40 2.1. In this menu you can adjust the default settings.

The Zone B audio output can be controlled by a control system, the web interface or the remote application – not the handheld remote. This output can output a digital, stereo audio signal, which you can use as input for a system in adjacent rooms. The MP-40 2.1 can decode one HDMI source only and selecting "Follow Main" will output a stereo downmix of the movie in the main room. The output does not hold any RoomPerfect™ filters.

# **Audio Setup**

# **Audio Processing**

This menu allows you to manage the audio processing presets for DTS, AURO and Dolby. These settings are required by DTS, AURO and Dolby and cannot be managed by us.

**DTS and Dolby Dynamic Range Control** raises the level of quiet sounds and lowers the level of loud sounds. This is also known as Night Mode, but it works differently in the various formats.

DTS Enable fade in enables automatic PCM audio fade-in after bitstream re-synchronisation.

DTS Enable remapping allows DTS-HD 5.1 audio to be played over the surround back channels

Auro Strength sets the amount of generated signal in the postprocessing / up-mixing.

Auro Presets lets you select a channel configuration that best suits your speaker setup.

# Voicing Setup

A Voicing is an equalizer filter that can be activated to amplify or attenuate certain frequencies according to your personal sound preferences. For each Source you can dedicate a Voicing, meaning that you can emphasize bass on one input without sacrificing neutrality on others.

#### **Exporting and Importing Voicings**

It is now possible to download single voicings to a file and to add new voicings by uploading those files as well. This will make it possible to copy a voicing from one device to another. The file format is identical for all

enabled Lyngdorf products, so if you have a voicing you like on your TDAI-3400 amplifier, it is possible to add that to your Lyngdorf multichannel processor, or vice versa.

Single voicing files have the extension: single\_voicing.xml and this may not be changed.

You can also download and upload an entire set of voicings. Again, these files will work throughout the devices which support this feature.

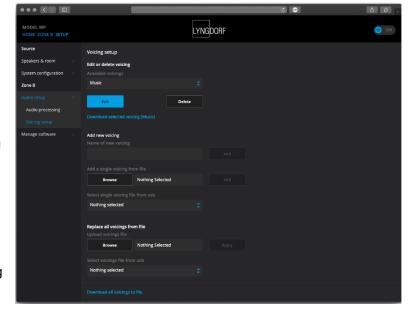
Uploading a set of voicings with this feature will replace ALL voicings in the amplifier. Files with an entire set of voicings have the extension: voicings.xml and this may not be changed.

# Edit or delete voicing

This dropdown list contains the voicings currently in the amplifier. Selecting a voicing in the list will allow you to delete or edit the selected voicing (this will open the voicing editor)

# Add new voicing

To create a new voicing using the voicing editor, enter the name of your new voicing and press add.



To add a voicing from a .single voicing.xml file, browse for the file and then press add.

## Replace all voicings from file

This is the functionality to replace all voicings in the amplifier with a new set from a .voicings.xml file. Remember that this will overwrite all voicings currently in the amplifier. Click browse to find the .voicings.xml file you wish to upload and then press Apply to use it.

On the bottom of the page is a link to download the current set of voicings in the amplifier to a .voicings.xml file.

Through selecting any of the stored Voicings, you can see the details by selecting EDIT. You can also delete the stored Voicings and add new designs here.

# **Creating voicings**

A Voicing can combine up to eight filter sections. For each section, you can choose between certain filter designs, which then in combination will give you the total correction of the Voicing.

For each Voicing you will see a green line showing the total correction as well a blue line showing the correction caused by the selected filter section. If there is only one active filter section, only the blue line is shown.

You can select between the following filter designs:

Low Pass: Functions as a crossover filter reducing the signal above the frequency.

High Pass: Functions as a crossover filter reducing the signal below the frequency.

Low Shelf: Attenuates the lower frequencies to a specified level.

High Shelf: Attenuates the higher frequencies to a specified level.

Parametric: Attenuates specific frequency.

All these filters can be with positive or negative gain – effectively reversing the effect of the filter.

You can adjust the Overall gain for each voicing in order to be able to switch between voicings without experience any change in perceived level.

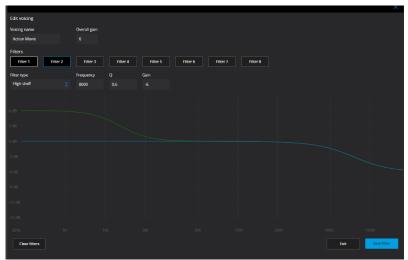
In this example (Action Movie Voicing) you will see the combined effect of two filter sections:

Negative High Shelf from 120 Hz – creating a boost in the bass region.

Negative High Shelf from 8,000 Hz reducing the highest frequencies.

Overall gain set to +6 dB as compensation for the reduction in overall level experienced with the two filters.

Try experimenting by creating your own Voicings and test the functionality of the different filter sections



# System configuration

## **General setup**

# Power management

Choose the standby mode:

Deep sleep: The MP-40 2.1 can only be turned on via the front on/off switch (Default)

Network Stand-By: The MP-40 2.1 can also be turned on via web interface, Remote App or a control system.

Choose the delay before auto off (minutes). Setting it to 0 will disable the feature.

# Default volume settings

Set a max volume for the device (dB). This setting is a safety precaution.

Set startup volume.

Use last volume: Sets the volume to be the same as when the MP-40 2.1 was turned off.

Use fixed volume: Sets the default volume at startup.

#### HDMI CEC settings

Set "Enable CEC" and "Use ARC channel as audio input" to Off or On.

# Display timeout

Set the time (in seconds) before turning off the display.

#### Password protection

Set a required password to enter the web setup section.

# Show bypass

Set the RoomPerfect™ bypass mode for your device to Off or On.

# Enable front IR sensor

Turn the MP-40 2.1's IR sensor Off or On. This function is useful if you are using a home automation system and other remotes are using the same IR codes as the MP-40 2.1 remote.

# **Trigger setup**

#### Input Trigger

Allows you to set up the system so that it can be switched on via an external device in the system.

#### Output Trigger

Allows you to set up the system so that the MP-40 2.1 can control other devices in the system.

Off: No action.

**Source:** When the preset source for any zone is selected, it will trigger. Use source setup menu to associate the trigger with a source.

Source A: When the preset source for Zone A/Main zone is selected, it will trigger.

**Source B:** When the preset source for Zone B is selected, it will trigger.

Power A: When Zone A/Main Zone is On, it will trigger.

Power B: When Zone B is On, it will trigger.

Power any: When any Zone is On, it will trigger.

# **Network setup**

View the network configuration and change to manual or automatic registration.

# Streaming setup

The MP-40 2.1 can stream music from external players, e.g. Spotify Connect, Tidal Connect, AirPlay.

Device name

Set a custom name under which the MP-40 2.1 can easily be found in the network or streaming player.

Streaming player control

Streaming players can control volume. Set to Off or On.

Streaming players can change input source. Set to Off or On.

Streaming players can power on the device from standby mode. Set to Off or On.

Streaming players can use the media control buttons from the MP-40 2.1 remote control. Set to Off or On.

# Streaming playback

Playback from the streaming player is done with the AUDIO STREAMING interface positioned in the HOME section. The following playback options are available:

#### **UPnP**

This function allows you to select and play music files in UPnP enabled libraries on your local network. The button ".." brings you up in the menu structure of your library.

You might have problems in accessing files as UPnP a set of protocols and not a defined standard. The implementation of UPnP is therefore not always fully functional for media playback.

#### **USB Audio**

This function allows you to select and play music files from a USB memory device (FAT32 format) attached to the USB-A inputs 1 and 2. The button ".." brings you up in the menu structure of your library. It opens when a USB memory device is detected. Note: External devices connected to the USB-B input are not controlled from this streaming playback function.

#### vTuner / Airable Radio

This function allows you to access radio stations and podcasts around the world. You can search stations and podcasts through references to genre or geographical relation.

When a station or podcast is playing, you can assign it to one of the 4 "select save-position". The saved stations can be assigned to a SOURCE for direct selection (see menu: SETUP/SOURCE).

#### **Tidal Connect**

When the MP-40 2.1 is connected to your local network, it will automatically be available from your Tidal Connect enabled devices in the Tidal app. (Requires a Tidal account)

# **Spotify Connect**

Use your phone, tablet or computer as a remote control for Spotify. Go to *spotify.com/connect* to learn how.

The Spotify Software is subject to third party licenses found here: www.spotify.com/connect/third-party-licenses.

# AirPlay 2

When the MP-40 2.1 is connected to your local network, it will automatically be available from your AirPlay 2 enabled devices.

# **Roon Ready**

When the MP-40 2.1 is connected to your local network, it will automatically be available from Roon enabled devices (requires a Roon server account).

# **Manage Software**

From this main menu, you can access MP-40 2.1 software information, backup, restore, etc.

#### **Software Information**

Show reference information about the current software in the MP-40 2.1.

#### **Network Information**

Show reference information about the network status of the MP-40 2.1.

# **Backup**

Make a complete system backup, including speaker setup and RoomPerfect™ measurements. When the backup is complete, the MP-40 2.1 will go into standby mode.

#### Restore

Restore the system from a backup.

# **Factory Reset**

Restore the system to the default factory settings.

Warning: All user preference settings, system data, and RoomPerfect™ data are lost when the MP-40 2.1 is restored to the default factory settings.

# **Software Update**

Update from remote files

When connected to the Internet, the MP-40 2.1 can automatically download and update the software.

Update from local files

Via web interface:

Click "Browse" to find a file stored on your computer.

Press "Upload" to upload it to the MP-40 2.1.

Click "Process" to initialize the update.

Or:

Upload the update to a FAT 32 formatted USB pen drive.

Make sure you "eject" the pen drive correctly before removing it from your PC/Mac.

Insert the pen drive into the MP-40 2.1.

Select the file in the menu and click "Process".

Update Via OSD Interface

Upload the update to a FAT 32 formatted pen drive.

Insert the pen drive into the MP-40 2.1.

Select the file in the menu and press OK on the remote control.

System settings and RoomPerfect  $^{\text{TM}}$  data remain intact during software updates.

# **Troubleshooting**

#### RoomPerfect™

The calibration microphone is very sensitive and may pick up unwanted noise, including subsonic signals and background noise, which disturbs the measurements. If the signal is disturbed, it will take longer for the system to make a correct measurement.

A measurement that has been disturbed by noise but completed will always be correct; it is not necessary to redo it. If the measurement has stopped due to an error, one of the error messages below will be shown.

# **Error Messages**

#### No microphone connected

No microphone or cable is registered, why the microphone connection is not working. Check that the microphone cable is connected to the microphone socket on the back panel. If the problem continues, test the microphone cable by connecting the microphone directly into the microphone socket and select Retry.

If the microphone is detected, replace the microphone cable and retry the measurement.

#### Fault - No signal

This error message can arise due to a signal classification of no sound. This happens if the sound volume has been muted or a cable is disconnected.

Check the sound volume.

Check all cable connections, including interconnects, speakers, amplifiers, etc.

Check the measuring signal volume.

If none of these measures solve the error, request a replacement microphone from Lyngdorf Audio.

# Fault - Signal clipping

Either the incoming signal has been classified as too loud, resulting in clipping or distortion, or a loud noise in the immediate environment has corrupted the measurement results. If a loud noise has in fact occurred, such as the sound of a closing door, reduce noise levels inside and in the immediate vicinity of the room and repeat the measurement. If no loud noise has occurred, reduce the volume of the signal and repeat the measurement.

#### Fault - Low signal

This error message is displayed when the measurement has lasted more than 5 minutes for the low-frequency signal or more than 2 minutes for the high-frequency signal. This happens most often when using a low-level measuring signal compared to the background noise in the listening environment, which results in prolonged measuring times. Raise the measuring signal volume or reduce the noise in the environment before continuing with the measurement.

If raising the volume does not eliminate the error message, the microphone or cable might be defective. Test the microphone cable by connecting the microphone directly into the microphone socket and select Retry.

# Can't Turn On Via LAN or Control System

The MP-40 2.1 needs to be set to Network mode to be able to turn on via a control system. It will not turn on when in Deep Sleep. This is set up in Device Management -> Power.

# Retrieving and Sending an Error Log

The processor generates a log file, which contains information of all detections and actions made by the software. To retrieve an error log holding, you need to access the MP-40 2.1 via your browser. Under "Manage Software" you can download a text file and email it to your Lyngdorf Audio representative.

# 3D Compatibility Not Detected

If the MP-40 2.1 isn't fully booted, a Blu-ray player will not be able to detect its 3D compatibility. Restart the player to fix the problem.

#### Remote Control Doesn't Work

The remote control is paired to the MP-40 2.1 at the factory; you need to pair it again only if you have a new MP-40 2.1 or remote. To pair the RF remote control to a MP-40 2.1:

Turn on the MP-40 2.1.

On the remote hold down Play and OK until the remote control's green LED flashes.

Point the remote control at the MP-40 2.1 and hold it within 30 cm / 1 foot of the front panel. When the green LED stops blinking, the remote is connected via Zigbee.

The remote will be paired to the MP-40 2.1.

To switch the remote from RF to IR mode, hold down OK and 1. The LED will flash red twice.

To switch the remote back to RF mode, hold down OK and 2. The LED will flash green twice.

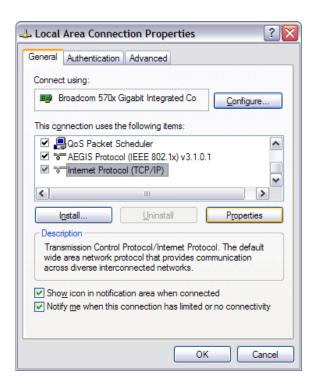
To reset the pairing of the remote control, press Back and OK until the red LED flashes twice.

# **Network Setup**

#### Connecting to MP-40 2.1 with a network cable

It is possible to get access to the MP-40 2.1's web interface via a direct cable connection between the MP-40 2.1 and a computer, or a connection via a hub or switch.

If you have a direct cable connection to a laptop (with no switch or router between the two) the network cable must be a crossover type. Furthermore, the Mode option in the Network Setup menu must be set to Manual IP. Finally, you must manually set an IP address on the computer you intend to use for setting up the MP-40 2.1.



# Set Up a Fixed IP Address in Windows 7

Click Start / Control Panel / Network Connections to find the network connection that represents your connection to the Internet. Most often, this is labeled simply Local Area Connection.

Right-click the connection and select "Properties".

Click "Internet Protocol (TCP/IP)" in the list (you may have to scroll down the list to find it).

Click "Properties".

Most default configurations will have both "Obtain an IP address" and "Obtain DNS server address" automatically selected by default.

Click "Use the following IP address" and enter the following:

IP address: 192.168.1.2 Subnet mask: 255.255.255.0 Default gateway: 192.168.1.1

Click "OK" to close the configuration windows. You should now be able to access the MP-40 2.1 via your Internet browser.



# Set Up a Fixed IP Address in Windows Vista or Windows 10

In Windows Vista, click Start / Control Panel / Select Network and Internet / Network and Sharing Center.

In Windows 10, right-click Start, then select "Control Panel".

Select "Network and Internet / Network and Sharing Center".

Click "Manage Network Connections" in the list of tasks.

Right-click your local area connection and click "Properties".

Select "Internet Protocol (TCP/IP)" from the list.

Click the "Properties" button.

Click "Use the Following IP address" and enter the following:

IP address: 192.168.1.2 Subnet mask: 255.255.255.0 Default gateway: 192.168.1.1

Click "OK" to close the configuration windows, and you should now be able to access the MP-40 2.1 via your Internet browser.

# **Trademarks**

For DTS patents, see <a href="http://patents.dts.com">http://patents.dts.com</a>. Manufactured under license from DTS Licensing Limited. DTS, the DTS Symbol, & DTS and the Symbol together are registered trademarks, and DTS:X and the DTSX logo are trademarks of DTS, Inc. © DTS, Inc. All Rights Reserved.

HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

This product incorporates technology that is protected by U.S. patents and other intellectual property rights. Use of this technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only, unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

# Service and Support information

In order to obtain warranty service, you must contact your original dealer or the Lyngdorf Audio distributor of the region or country where you are located.

FAQ about Lyngdorf MP-40 2.1:

If you have any questions regarding your Lyngdorf product, please contact your nearest Lyngdorf representative. To find the nearest Lyngdorf representative or for finding the latest version of this manual, please check the Lyngdorf website: <a href="https://www.lyngdorf.com">www.lyngdorf.com</a>

Pour toute question concernant votre produit Lyngdorf, veuillez contacter votre représentant Lyngdorf. Pour trouver votre représentant ou obtenir la version la plus récente du présent manuel, consultez le site Internet de Lyngdorf à l'adresse suivante: <a href="https://www.lyngdorf.com">www.lyngdorf.com</a>.

Falls Sie Fragen zu Ihrem Produkt von Lyngdorf haben, wenden Sie sich bitte an Ihre nächste Lyngdorf Vertretung. Vertretung und die aktuellste Version dieser Bedingungsanleitung finden Sie auf der Internetseite von Lyngdorf: <a href="https://www.lyngdorf.com">www.lyngdorf.com</a>

Hvis du har spørgsmål til dit Lyngdorf produkt, bedes du kontakte den nærmeste Lyngdorf forhandler. Den nærmeste Lyngdorf forhandler og den seneste version af denne vejledning, kan du finde på vores hjemmeside: <a href="https://www.lyngdorf.com">www.lyngdorf.com</a>

