User Manual
Music - Multiroom

V 0.3

$C\epsilon$ The devices comply with the relevant guidelines and standards of the EU.

Table of Content

1. Audiomatrix

1.1 Electrical outlet

You may distribute analogue audio sources to a max. of 8 rooms with the myGEKKO Audiomatrix. The operation of the audio sources is carried out directly via the touch display, push-button or via smartphones or pads.

An MP3-player, which can be used as source, is integrated into the myGEKKO Touch (Mod. Touch and Slide). The MP3 files may be located on a USB flash drive or on a NAS network drive (see NFS data storage configurations manual). Furthermore, you may play MP3 streams such as internet radio.

Audiomatrix Mono

Used for mono music distribution in max. 8 zones for 8 sources. Two 4 channel matrices need to be cascaded for 8 zones.

Technical data

Input voltage range	12 VDC
Audio input connector	4xStereo Line IN RCA Cinch
Audio output connector	4xMono Line OUT RCA Cinch
Included	power adapter
Dimensions WxHxD	170 x 105 x 50 mm
Art. Nr.	ACC-AMR01 4-channel Audiomatrix ACC-AMR02 8-channel connecting cable

8 channel analogue Audiomatrix stereo BOSE® ControlSpace™ ESP-88

The BOSE ControlSpace ESP-88 Engineered Sound Processor is a flexible, extendable high-end audio signal processor for individually developed sound applications.

Technical data

Input voltage range	85-264 VAC 50/60 Hz
Audio input connector	8xStereo Line IN / microphone
Audio-output connector	8xStereo Line OUT / microphone
Dimensions WxHxD	482 x 88 x 332 mm
Art. Nr.	ACC-AMR10

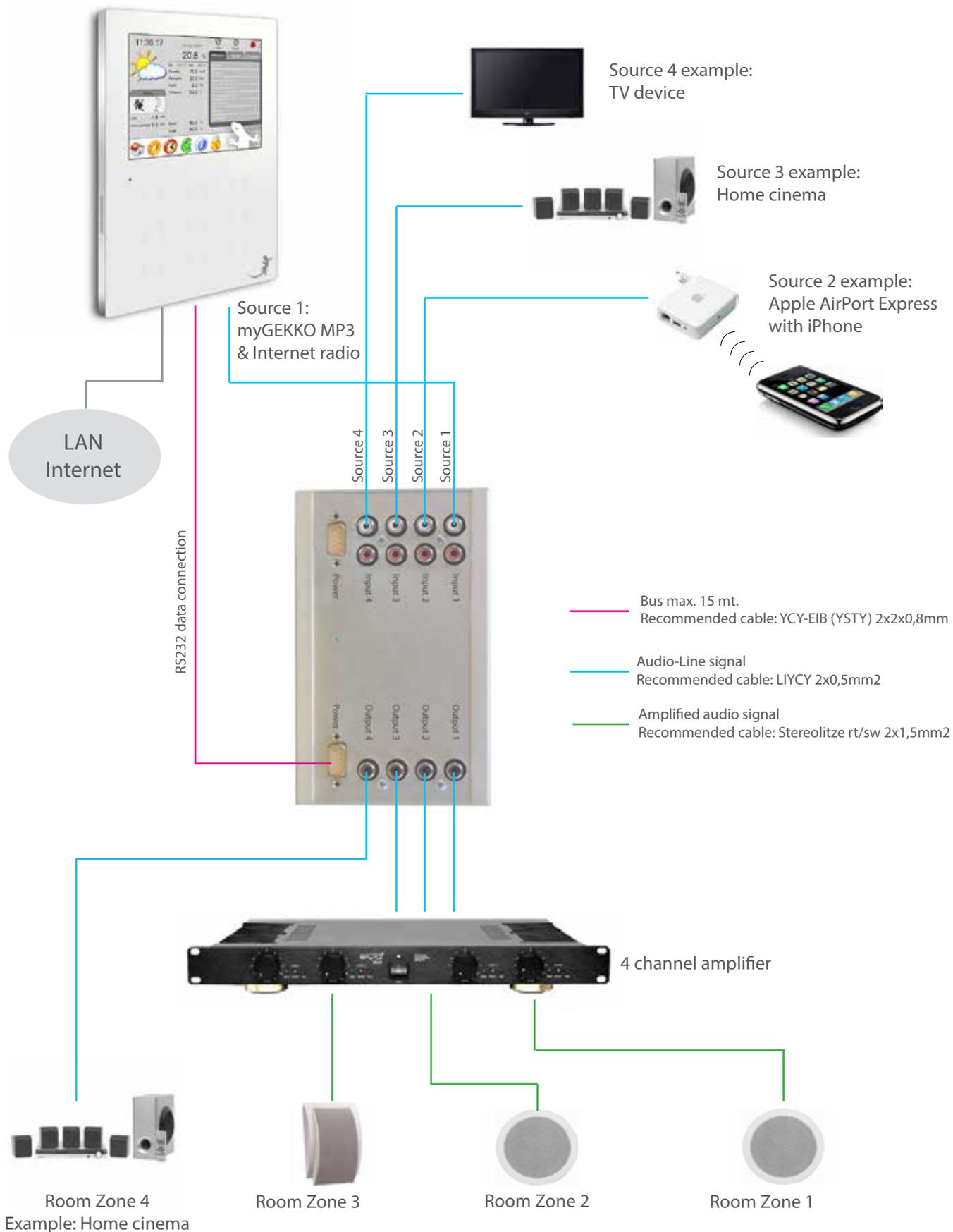# 4/8 channel analogue Audiomatrix RTI AD-4 / AD-8

The AD-4 (AD-8) Audio Distribution System developed by RTI is equipped with 4 (8) analogue audio inputs and outputs and, thanks to the integrated 8-channel-amplifier, it offers enough power for your music.

Technical data

Input voltage range	115VAC, 120W
Audio input connector	4(8)x Stereo Line IN
Audio-output connector	4(8)x Stereo Line OUT
Dimensions WxHxD (AD-4)	482 x 53 x 340mm (without front cover and rack shelves: 430x53x340)
Dimensions WxHxD (AD-8)	432 x 133 x 375mm
Art. Nr.	ACC-AMR20 RTI AD-4 ACC-AMR21 RTI AD-8

Anschlussübersicht Audiomatrix

Source 4 example:
TV device

Source 3 example:
Home cinema

Source 2 example:
Apple AirPort Express
with iPhone

Source 1:
myGEKKO MP3
& Internet radio

LAN
Internet

RS232 data connection

Source 4
Source 3
Source 2
Source 1

Power

Input 4
Input 3
Input 2
Input 1

Power

Output 4
Output 3
Output 2
Output 1

Bus max. 15 mt.
Recommended cable: YCY-EIB (YSTY) 2x2x0,8mm

Audio-Line signal
Recommended cable: LIYCY 2x0,5mm2

Amplified audio signal
Recommended cable: Stereolitze rt/sw 2x1,5mm2

4 channel amplifier

Room Zone 4
Example: Home cinema

Room Zone 3

Room Zone 2

Room Zone 1

Connection details Audiomatrix Mono

The Audiomatrix is connected to an RS232 interface. It may be connected to the RIO 29 (Aux 2 RS485/RS232), to a free interface directly on the myGEKKO Touch (COM 1 by default, poss. also to COM2 if no Wago or RIO IO station are connected and the RS485 is currently not assigned) or to the interface distributor USB/quadruple RS232 (USB. COM 1-4) (Art. Nr. ACC-RS201).

Connection via	Interface
RS232	RIO-29
	COM 1
	USB-COM 1-4 with USB interface distributor

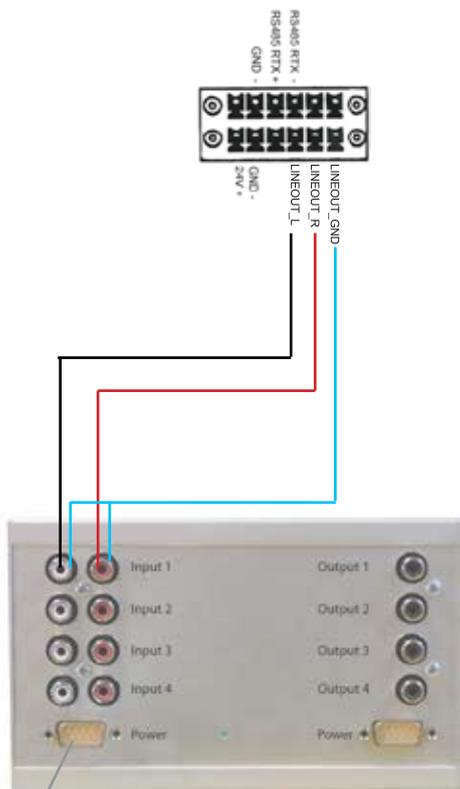
Stereo-Line Out
(8,4" Touch displays)

RS232 interface
at the Touch COM Port 1

Pin 2: RXD
Pin 3: TXD
Pin 5: GND

RS232 interface
Aux 2 at the RIO 29
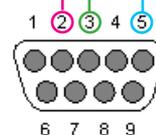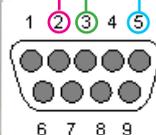
18: GND
19: RXD
20: TXD
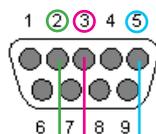
RS232 interface
at the Audiomatrix
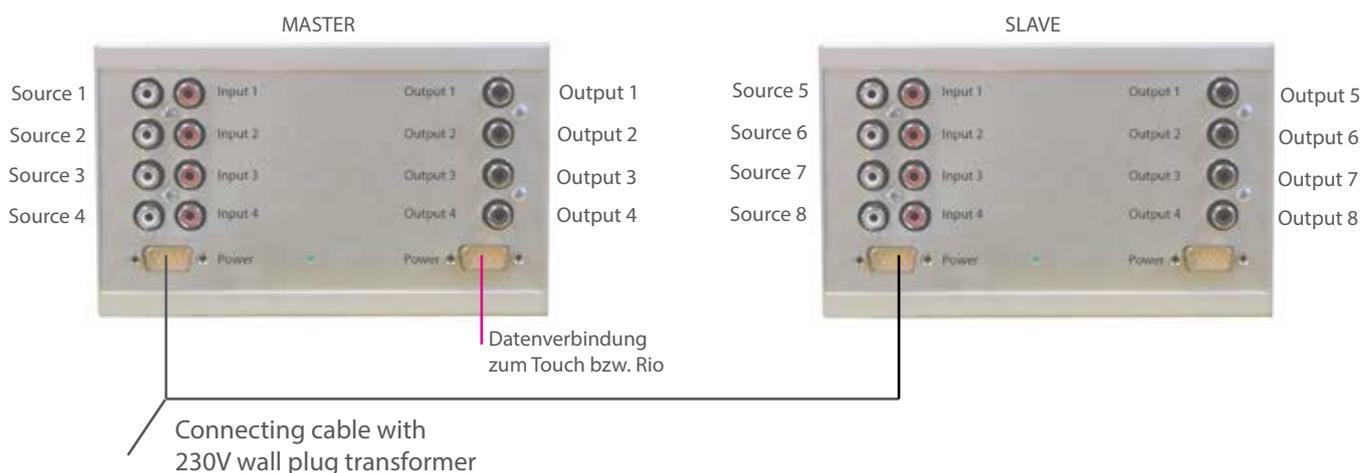
Pin 2: RXD
Pin 3: TXD
Pin 5: GND

Power supply over provided
230VAC wall plug transformer.

CAUTION!
The myGEKKO Touch 'Classic' (5,7" display) has NO line output. You need to use the USB sound adaptor (Art. Nr. ACC-SAD01) for these models.

Cascading of audio matrices

To setup 8 zones you need to use 2 audio matrices of the type ACC-AMR01. They are connected via a custom made cable of the type ACC-AMR02. This cable contains the supply for both matrices. You may now distribute 8 sources to 8 zones. Matrices are delivered as Master and Slave devices. The data connection to the myGEKKO Touch is established via the Master.

MASTER | SLAVE

Source 1 — Input 1 / Output 1 — Output 1
Source 2 — Input 2 / Output 2 — Output 2
Source 3 — Input 3 / Output 3 — Output 3
Source 4 — Input 4 / Output 4 — Output 4

Source 5 — Input 1 / Output 1 — Output 5
Source 6 — Input 2 / Output 2 — Output 6
Source 7 — Input 3 / Output 3 — Output 7
Source 8 — Input 4 / Output 4 — Output 8

Datenverbindung zum Touch bzw. Rio

Connecting cable with 230V wall plug transformer

Bose (BOSE ControlSpace ESP-88 Engineered Sound Processor) as well as RTI (AD-8) offer audio matrices already equipped with 8 zones.

Connection of the BOSE Audiomatrix ESP88

The connection of the BOSE Audiomatrix of the type ESP88 is equivalent to the principle of connecting the Mono Audiomatrix.

Further information and the configuration file of the ESP88 are available on request.

Connection via	Interface
	RIO-29
RS232	COM 1
	USB-COM 1-4 with USB interface distributor

Connection details Audiomatrix RTI AD-4

The RTI AD-4 as well as the RTI AD-8 are connected to a RS232 interface. For this purpose, the interface may be connected to the Rio 29, directly to the myGEKKO Touch/Slide (to COM 1 by default, eventually also to COM 2, if the RS485 connection is currently not assigned) or to the interface distributor USB/quadruple RS232 (USB.COM 1-4) (Art. Nr. ACC-RS201).

Anschluss über	Schnittstelle
RS232	RIO-29
	COM 1
	USB-COM 1-4 with USB interface distributor

Stereo-Line Out
(8,4" Touch displays)
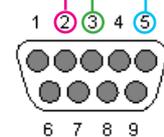
RS232 interface
at the Touch COM Port 1

Pin 2: RXD
Pin 3: TXD
Pin 5: GND

RS232 interface
Aux 2 at the RIO 29

18: GND
19: RXD
20: TXD
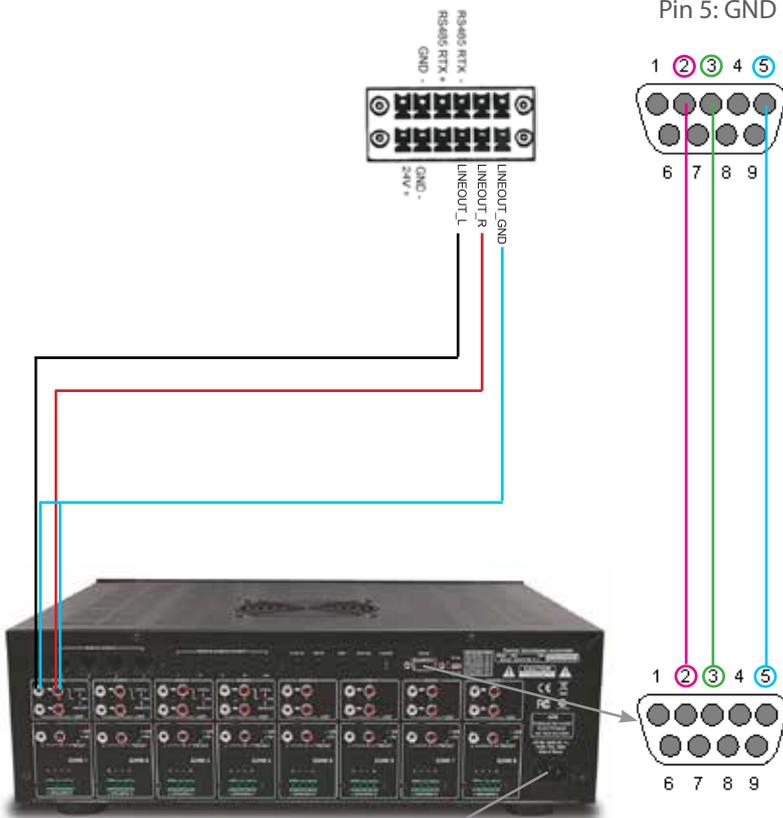
RS232 interface
at the Audiomatrix

Pin 2: RXD
Pin 3: TXD
Pin 5: GND

Power supply over provided
230VAC wall plug transformer.

CAUTION!
The myGEKKO Touch 'Classic' (5,7" display) has NO line output. You need to use the USB sound adaptor (Art. Nr. ACC-SAD01) for these models.

1.2 Software activation

Activate the Audiomatrix

1. Log in as configurator.
2. Change to system menu 🏠 -> Music -> Music Mixer 🎵
3. Select the port to which the Audiomatrix is connected (e.g. directly to the Touch COM port 1) and select 'Standard' for the Mono Audiomatrix or 'Bose' for the BOSE ESP88 Audiomatrix.

Assigning sources

1. Change to system menu 🏠 -> Music -> Music Mixer 🎵
2. Define the sources you have connected. You can choose between 'Player' and 'External source' in this section. 'Player' means that the integrated MP3 player of the myGEKKO Touch is connected to this input. As shown in the previous connection scheme, the myGEKKO player is usually connected to the first input. Set all other inputs to 'External source' and define a name.
3. Use a 4 channel matrix so you can leave 'player' as source for the inputs 5-8.

> **CAUTION!**
> The bar on top of the screen 'Multiroom' must be GREEN. A RED bar means that a communication error on the data connection has occurred. Check the wiring and the interface assignments.

Audiomatrix interface activation

Assigning sources

2. Barix Exstreamer

The operation of the Barix is carried out via the myGEKKO Touch through the touch display, push-button or via smartphones and pads. MP3s on a USB Stick or NAS hard drive (See manual NFS data storage) can be used as sources. You can play also MP3 streams like Internet radio.

The myGEKKO, the Barix player and possibly other devices (eg routers) must be in the same. It is important that in this network no DHCP server is running.

Technical data

supported audio format	MP3 up to 320 kBit with fixed or variable bit rate
Network connection	RJ45 LAN 10/100Mbit TCP/IP
Audio connector	- Stereo RCA, 3.5 mm jack plug (4Vpp max), - 2x25W (RMS@8OHM) speaker connector (short circuit overload protection) - S/PDIF out (optical)
Input voltage range	9 to 30VDC / 12 to 24VAC (power supply included)
Dimensions WxHxD	108 x 38 x 78,7 mm
Art. Nr.	ACC-LPL02

The 'Standard Exstreamer Firmware' has to be installed on the Barix Exstreamer. The following Barix configurations must be set:

| NETWORK | STREAMING | AUDIO | PLAYLIST | CONTROL | SERIAL | SECURITY |

UDP command port   12301

TCP command port   12302

Web server port   0

IR Source   ⦿ IR Serial Dongle   ○ IR IN

IR Gateway   0 . 0 . 0 . 0 : 0

[Apply] [Cancel]

Command passthrough   ⦿ Normal operation ○ Pass commands thru to server without executing them

To set the configurations open a web browser and type the IP address of the Barix player into the address line.

Log in the myGEKKO Touch as configurator.

1. Change to system menu ⚙ -> Netzwork 🖥 -> myGEKKO Player
2. Type the Mac address of the Barix player into the '1.Mac' entry field and a free IP into the 'IP' entry field.
3. Tap the 'None' button to activate the player and close the Barix player.
4. Select the green button next to IP and check the DHCP and Status values. They have to show the value 1.

If there is no green button displayed next to IP or if there are no values listed for status and/or DHCP you need to restart the player.

If one wants to configure 2 or more Barix players with the myGEKKO the steps from typing in of the Mac and IP addresses have to be repeated for any Barix Player.

3. Music menu on the myGEKKO Touch

3.1 Zones / Rooms setup

1. Change to system menu ⌂ -> Music 🎵
2. Tap the first of the 8 green bars on the list and change to the IO Configuration 🔧. The bars represent the 8 rooms / zones.
   Caution At the Audiomatrix zone number 1 corresponds to output number 1.
3. Tap the title bar and enter a name for the room, e.g. kitchen. 3.
4. As sources select 'Music Mixer' for the Audiomatrix, 'myPlayer' for the intergrated myGEKKO Touch MP3 player and 'NetPlayer' for the Barix Exstreamer.

3.2 Assign push-buttons

You may assign a maximum of 10 push-buttons to each zone / room.

With 4 separate push-buttons for the following function:

Push-button ON/+	Push shortly = Zone ON, Push shortly = Volume up
Push-button OFF/-	Push shortly = Zone volume down, Push & hold = OFF
Push-button Forwards	Push shortly = Next track, Push & hold = Next playlist
Push-button Backwards	Push shortly = Previous track, Push & hold = Previous

If the same push-button is used for push-button ON/+ and pushbutton OFF/-:
   Push shortly = ON, Push shortly = VOLUME UP,
   Push shortly then push & hold = Volume down, Push & hold = OFF.

The push-buttons 1-8 can be used to choose directly between playlists. The setup and selection of the playlist has to be made on the parameterisation level ⚙. The playlists must have been created already (see next section).

3.3 Switching of the power amplifier

1. Each zone / room has a digital output which can be used to switch a power amplifier. The output is switched ON if the zone is ON and is off if the zone is OFF.
2. HINT: If more zones are in use the outputs can be connected via a logic and the power amplifier switches off automatically when all zones are switched OFF.

Zone configuration and push-button assignment

3.4 Create playlists

1. Change to the 'Music' section on the start screen.
2. Tap '>>' (1) to go to the playlist overview section. You may create a maximum of 16 playlists.
3. Select the first free playlist (2).

Enter a name for the playlist in the 'Album' section. On the right-hand side you can choose where (4) the music for the playlist is to be taken from:

External source
Select your connected sources. Now, if a room / zone plays this playlist the myGEKKO changes automatically to this external source.

Playlist
Playlist is mainly used for MP3 streams, i.e. for internet radio. The MP3s are played by the MP3 player integrated in the myGEKKO Touch.

Auto Search
With Auto Search you can play MP3s directly from a data storage device (USB flash drive or NAS). Enter the path to where the music is stored. myGEKKO generates automatically a playlists on the basis of the files contained in the folder which gets updated automatically. The MP3s are played by the MP3 player integrated in the myGEKKO Touch.

Overview Music control

Menu Playlists
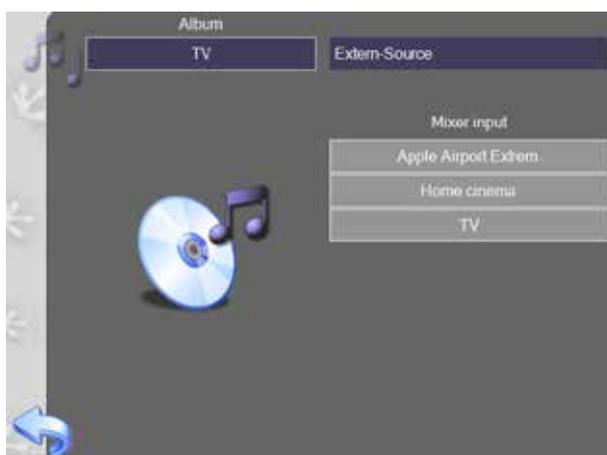
Playlist with external source

HINT!
Some internet radio stations are already predefined in the second playlist. Enter a name for this playlist in the 'Album' section and use the stations as template for the setup of your own desired stations.

Exemplary playlists

The following playlists were created in the example:

> Playlist USB = 'AUTO SEARCH' with source from 'MSTICK1' from the 'music' folder
> Playlist Internet radio = 'PLAYLIST' with a list of internet radio stations
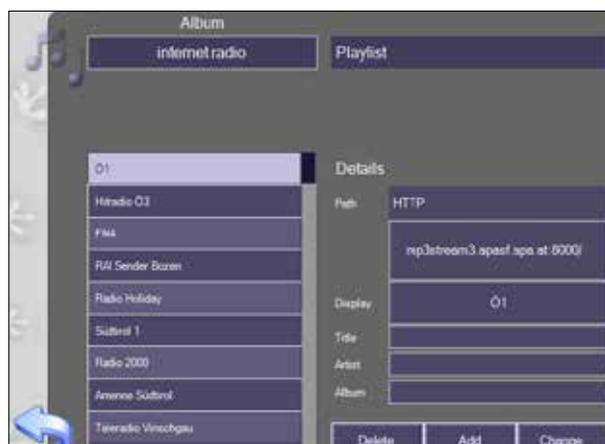> Playlist AirportExpress = 'EXTERNAL SOURCE' -> AirportExpress
> Playlist Home cinema = 'EXTERNAL SOURCE' -> Home cinema
> Playlist TV = 'EXTERNAL SOURCE' -> TV device

Overview playlists

Playlist Internet radio

3.5 Turn music on and off via display

1. Tap the desired playlist.
2. Choose the desired rooms via the clef. Adjust the volume with +/-
3. You can change between the playlists with the fast-select keys (1) 1,2,3, 4

ATTENTION!
It can be played only one playlist of the typ 'PLAYLIST' or 'AUTO SEARCH' (one more per player with the Barix Exstreamer) since the myGEKKO Touch possesses only one MP3 player. If one room switches to one of these playlist types all other rooms which are using this MP3 player will switch too.

The internet radio is turned on in th e kitchen

Party key
Tap the party key to interlink all rooms
Level 1 = Volume interlinked
Level 2 = Volume and source interlinked

For further information on how to operate the music please consult the Apps general users manual on *www.my-gekko.com*.

myGEKKO®

www.my-gekko.com