

Release Notes

for

**OnAir Micro
Core Software**

V1.2 Build 2632

17.11.2017

V1.0

Date 17.11.2017
Authors G. Soos

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1 Introduction

The new OnAir Micro Core Software V1.2 Build 2632 comes with the new OnAir Micro Fader Controller firmware V6.

The USB update is possible from any previous official software release.

In addition to bug-fixes, following key features are now available:

- WiFi
- Graphic EQ for control room
- RTA (realtime spectrum analyser)
- Multicast Cloud Communication between OnAir Micro Core and Fader Controller

The production image and the .zip file for USB update can be downloaded from the official release server:

<\\Pezuw3fs02\ReleasedSoftware\OnAirMicro\V1.2.2632\OAM Core Software.>

After registration, customers and distributors can download oamupdate-1.2.2632-usb.zip for USB update from the Studer website.

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2 What's New

OnAir Micro software V1.2 release provides new features, changes and bug-fixes.

2.1 New Features

- **Wifi**

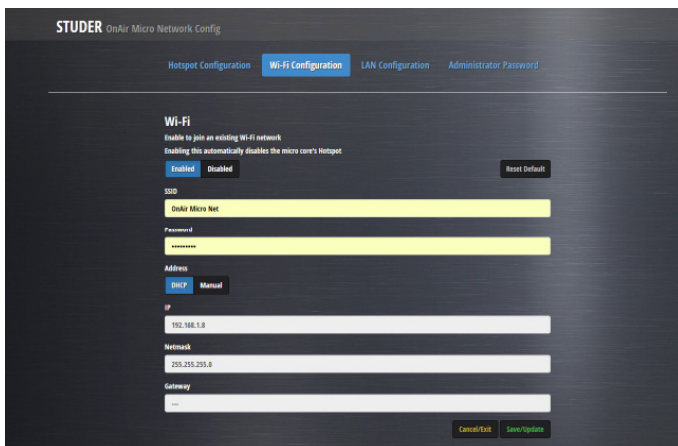
Wifi connectivity is now available. 2.4GHz and 5GHz band are supported.

The OnAir Micro Core is now able to connect to an existing Wifi infrastructure or to act as a hotspot, providing Wifi connectivity to laptops or tablets.

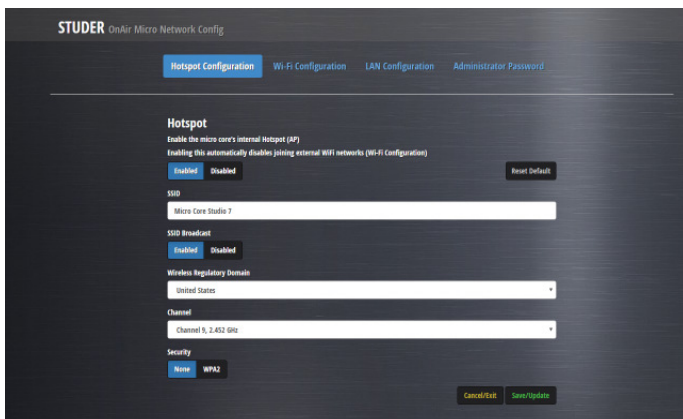
The WI-FI, and HOTSPOT settings are accesible when clicking to the CONFIG button in the Config Settings→Network page.

The default password is *admin*.

It's recommended to change the network configuration password.



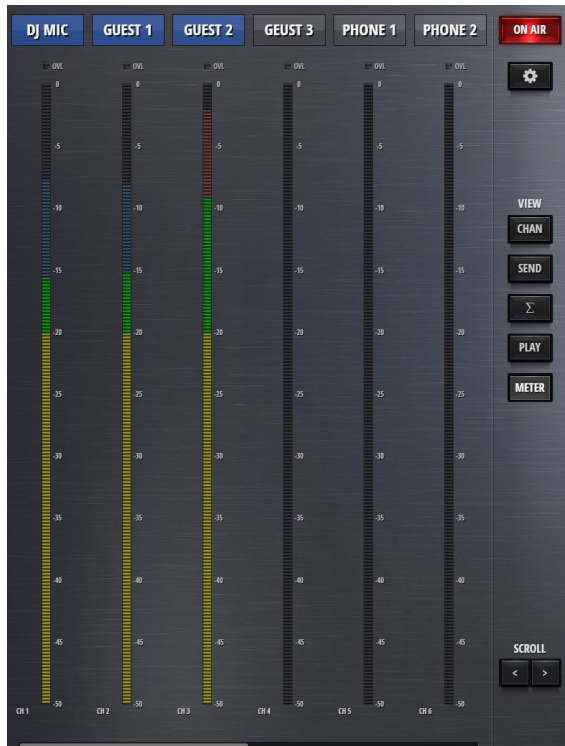
Wifi Configuration page



Hotspot Configuration page

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- **Pre-/Postfader Channel Meter in METER View**



In addition to the post fader signal (Yellow/Green/Red), the METER view now indicates the pre-fader signal for each channel in blue colour.

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- **Stereo 31-Band Graphic EQ for Control Room**

The GEQ for the control room comes with the following features:

- EQ On/Off
- Reset EQ
- Left and right channels can either be linked or controlled individually
- Create, load, save, rename and delete Presets
- Real time spectrum analyzer with selectable source channel



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- RTA



The real time spectrum can be indicated in the channel EQ graph,



the DeEsser graph



as well as in the GEQ graph of the control room monitor.

The source for the control room RTA can be any of the 12 channels.

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- **Emergency Factory Reset of Network Settings**

Connecting a USB keyboard to the OnAir Micro Core and press DEL during start-up, resets all network settings to their factory default values.

- **Emergency Full Factory Reset**

Connecting a USB keyboard to the OnAir Micro Core and press F12 during start-up, initiates a full factory reset including

- Factory Software Version
- All Settings including network settings

This may be useful when a software upgrade fails for any reason.

Note that the factory software version may not support the current Fader Controller firmware version. For compatibility overview, refer to chapter 3.2 Compatibility.

- **USB Format**

A FORMAT USB button was added to the Configuration Settings→USB RECORD page to format the USB media for the Player/Recorder.

- **New GP Output Function PFL Active**

The GPOutput is active, if at least one Channel's, Send- or Master's PFL function is on. Same as the RESET PFL button.

- **New GP Input Function Reset PFL**

The GPInput function turns all Channel's, Send- or Master's PFL function off. Same as the RESET PFL button.

- **Softkeyboard for Touchscreens connected via HDMI and USB**

A software keyboard appears on the HDMI monitor when needed for text input.

- **PFL Bus to be patched to an Output**

Allows the PFL bus to be patched (L/R/M) to an Output in the Bus Target- and Monitoring and the Talkback Target Configuration page on Configuration Level 3.

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2.2 Changes

STOANIRM-1762

Multicast Cloud Communication to Fader Controller

Cloud communication to the Fader Controller is now based on UDP multicast messages rather than broadcast messages.

Note, that the OnAir Micro running V1.2 is no longer able to connect to Fader Controllers running firmware older than V6.

Therefore, Fader Controllers must be updated as well.

Refer chapter 3.3 OnAir Micro Core USB Update Procedure for compatibility and firmware update.

The default Multicastgroup is 239.255.10.1 and the TTL Hop Limit is 10. Both can be changed in the Config Settings→DESK MODULES page:



CLOUD SETTINGS					
MulticastGroup	239.255.10.1				
Cloud Id	5				
Node Name	Core				
Port	5000				
Multicast TTL Hop Limit	10				

DESK MODULES					
NAME	CLOUD ID	NODE ID	PAIRING	STATE	VERSION
FC60	5	24c5001e	CH 7-12	OK	6
FC31	5	24c50008	CH 1-6	OK	6
FC34	1	2445000b	NONE	N/A	n.a.

NAME	CLOUD ID	NODE ID	PAIRING	LOCATE	UPDATE FW
FC60	5	24c5001e	CH 7-12	LOCATE	UPDATE FW

DISCONNECT ALL

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If you have changed the Multicastgroup or Port on the OnAir Micro Core, make sure to do the same changes on the Fader Controller's WebGUI as well:

Welcome to STUDER MicroFader controller!

Settings

SETTING	CURRENT VALUE	EDIT ?
HW Version	1	
FW Version	6	
MAC Address	0:17:24:c5:0:1e	
DHCP*	OFF	☐ OFF ☐ ON
IP Address*	10.64.87.60	
Subnet Mask*	255.255.255.128	
Gateway*	10.64.87.1	
Multicast Group*	239.255.10.1	
Cloud ID	5	
Node name*	FC60	
Port*	5000	
		Clear all fields Update Settings

* : Changes are effective after reboot of fader controller.

Restore default settings

Fader Calibration

0 dB	Calibrate	Needs Calibration
Fader Start Point	Calibrate	Needs Calibration

Reboot Device

Note, that the TTL Hop Limit cannot be changed on the Fader Controller. It defaults to 255.

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2.3 Bug Fixes

STOANIRM-1715

Currently playing audio file disappears when selecting a new file from the list even though it continues to play in the background

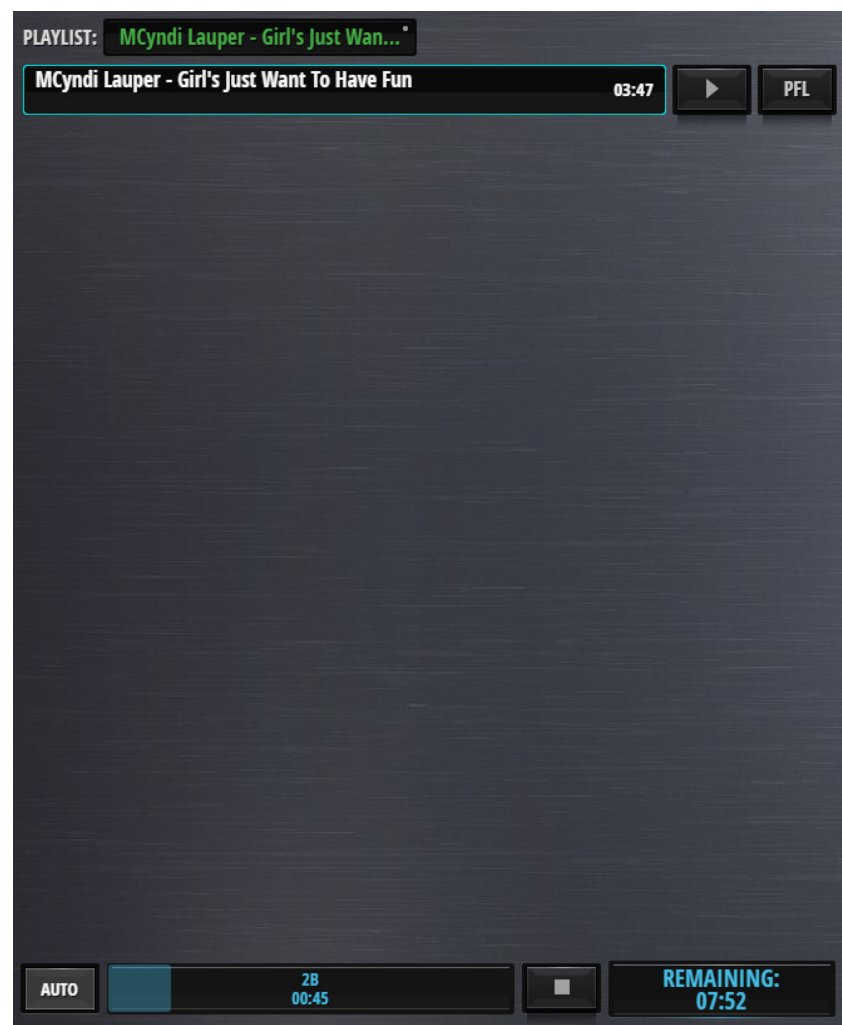
STOANIRM-1724

Wrong indication of remaining time in PLAY page, when another audio file is selected during playback

When selecting another title or playlist for the track player within the PAY view, while the current title is still playing, the currently playing files was no longer indicated though it was still playing to its end.

The total REMAINING time was not indicated correctly.

Now, the PLAY view always indicates the progress of the currently playing title (2B) on the bottom and the REMAINING time is correct.



Play view, where 2B is the currently playing title and MCyndi Lauper was selected to be the next title.

The REMAINING time consists of the remaining part of currently playing title plus the duration of the next title.

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STOANIRM-1720	AUTO CAL function does not apply the gain to the right Input of stereo channels The right input of a stereo channel, using analog HQ MIC inputs, is now also calibrated.
STOANIRM-1728	Player stops working after disconnecting the OnAir Micro Core from the network After a network interrupt on the LAN port, e.g. disconnect and reconnect of the network cable on port 1, the track player may also interrupt playback.
STOANIRM-1726	Unable to connect to the Core after disconnecting the OnAir Micro Core from the network for more than 10-15 sec
STOANIRM-1769	Micro Core software blocked when network is disconnected from port 1 After a network interrupt on the LAN port, e.g. disconnect and reconnect of the network cable on port 1, the browser may not be able to reconnect anymore to the OnAir Micro Core.
STOANIRM-1789	Fader Controller: Fader gain does not match printed fader scale The actual audio gain differed from the printed fader scale, where the physical fader was positioned. The maximum deviation was ~6dB @ -60 dB.

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3 OnAir Micro Core USB Software Update

3.1 Requirements

- Zip file for the OAM update: oamupdate-1.2.2632-usb.zip
- FAT32 formatted USB Stick
- Web Browser connected to the OnAir Micro Core, showing the OnAir Micro GUI

3.2 Compatibility

The following table shows compatibility of OnAir Micro Core and Fader Controller and possible upgrade paths.

	V3	V6
OnAir Micro V1.0.2226	Upgrade OnAir Micro Core to V1.1.2292 ▼	Upgrade OnAir Micro Core to V1.1.2632 ▼▼
OnAir Micro V1.1.2292	😊	Upgrade OnAir Micro Core to V1.1.2632 ▼
OnAir Micro V1.2.2632	Upgrade Fader Controller to V6 ►	😊

The OnAir Micro Core is upgraded using the USB update procedure described below.

Note, that the Fader Controller firmware cannot be downgraded from V6 to V3 using the UPDATE FW function on the Config Settings→DESK MODULES page of the OnAir Micro Core.

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3.3 OnAir Micro Core USB Update Procedure

The USB upgrade procedure consists of the following steps:

- 1) Copy the zip file, e.g. oamupdate-1.2.2632-usb.zip to a FAT32 formatted USB media device.
Note: The files can reside in any directory.
- 2) Connect the USB media to the PLAY/REC USB port of the OnAir Micro Core.
- 3) After scanning the USB media and verifying the zip file, which may take up to a minute, the GUI will ask the user to confirm or cancel the upgrade.
If the upgrade is cancelled, the OnAir Micro Core continues running.
- 4) After confirmation, the OnAir Micro Core will perform the upgrade and indicates "Updating firmware..." followed by further status messages.
- 5) After the update is completed, the GUI will present the following message: "Update succeeded. Please turn the unit off for 10 seconds, power back on and reload this page."
- 6) Power off the OnAir Micro Core
- 7) Remove the USB media
- 8) Clear the cache of the browser
- 9) Power on the OnAir Micro Core
- 10) Reload the page in the browser
- 11) Verify new versions/revisions in the Config Settings→SYSTEM page within the Settings section.
Firmware version shall be V1.2.2632.



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3.4 OnAir Micro Fader Controller Firmware Update Procedure

The OnAir Micro Fader Controller update consists of the following steps.
For the need of a firmware update, refer to chapter 3.2 Compatibility.

- 1) Make sure all Fader Controllers, which are paired to the OnAir Micro are connected
- 2) Open the Config Settings→DESK MODULES page



NAME	CLOUD ID	NODE ID	PAIRING	STATE	VERSION
FC60	5	24c5001e	CH 7-12	✓	3
FC31	5	24c50008	CH 1-6	✓	6
FC34	1	2445000b	NONE	✗	n.a.

- 3) Select the Fader Controller and touch the UPDATE FW button

With OnAir Micro V1.2.2632 and Fader Controller V6, the communication is now based on UPD multicast messages rather than broadcast messages.

The default Multicastgroup is 239.255.10.1 and the default Port is 3000.
Please check with your local IT administrator whether those settings are acceptable.

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- 4) If you need to change the Multicastgroup or Port, make sure to do the same changes on the Fader Controller's WebGUI as well:

Welcome to STUDER MicroFader controller!

Settings

SETTING	CURRENT VALUE	EDIT ?
HW Version	1	
FW Version	6	
MAC Address	0:17:24:c5:0:8	
DHCP*	ON	☐ OFF ☒ ON
IP Address*	10.64.87.31	
Subnet Mask*	255.255.255.128	
Gateway*	10.64.87.1	
Multicast Group*	239.255.10.4	
Cloud ID	5	
Node name*	FC31	
Port*	5000	
		Clear all fields Update Settings

* : Changes are effective after reboot of fader controller.

Restore default settings

Fader Calibration

0 dB	Calibrate	OK
Fader Start Point	Calibrate	OK

Reboot Device

After changing settings, click to Update Settings- and Reboot Device buttons to activate the new settings.

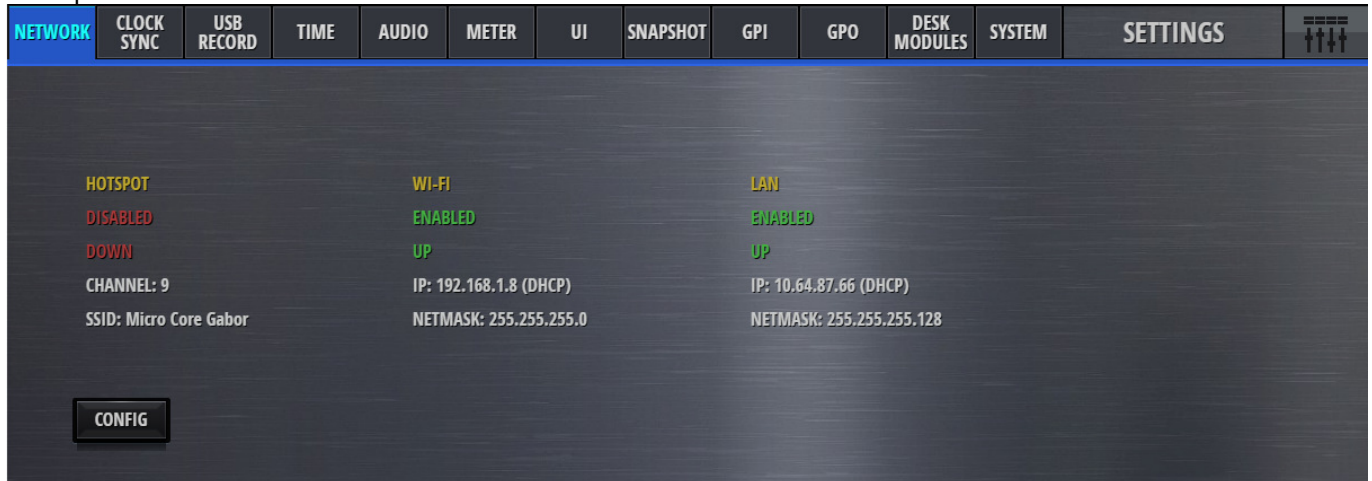
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4 Operation Notes

4.1 Using Wi-Fi and LAN

When using both, Wi-Fi and LAN at the same time, we recommend using different network ranges for them.

Example:

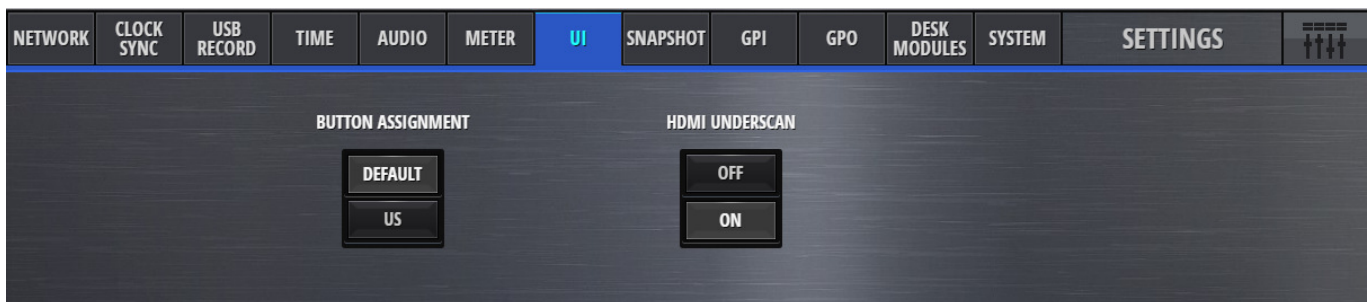


4.2 Using a HDMI Monitor

Overscan is a behavior in certain television sets, in which part of the input picture is shown outside of the visible bounds of the screen.

For some HDMI monitor, overscan cannot be deactivated and therefore, there is not the full GUI visible on the screen.

In order to solve this problem, the HDMI UNDERSCAN function of the OnAir Micro must be turned on in Config Settings→UI page.



Note, that HDMI UNDERSCAN only affects the HDMI output.

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