# YELLOWTEC



WHITE
RED
REMOTE
GPIs
USB-HID
USB-MIDI
MIDI-EXT

hush

PWR/USB
MODE SELECT

▲ MIC IN
▼ MIC OUT

# *hush* & *hush+* Operations Manual

version 1

# Content

## hush and hush+ OnAir Controllers

This manual contains plenty of useful information and detailed instructions that will help you to get started with the control of your OnAir signaling with hush and hush+ and to operate it. Further info can be found at www.yellowtec.com/hush. Both software and firmware for your hush device are under continuous development. So please check www.yellowtec.com/hush/downloads from time to time. There you will always find the latest versions and information.

hush is by far the easiest way to control your OnAir signaling professionally. Its plug'n'play concept makes controlling the dual-color OnAir indicator of your m!ka Mic Arm effortlessly easy. In addition, hush can also be used to control the LED signal of Yellowtec's litt Signaling Device.

Two versions of hush are available: hush and hush+. hush offers you extensive features for controlling your OnAir signaling. hush+ comes with additional control functions over your mic signal like a mute function. With 12dB up to 75dB pre-amplification, hush+ ensures first-class sound!

Whenever we speak of hush(+) in this manual, both models hush and hush+ are being addressed.



## Safety instructions!

### Notes on proper use!
Read this manual carefully before using any hush device. Always observe the following instructions in order to use and operate hush, hush+, and the hush Remote safely. Improper use may result in the loss of warranty and guarantee claims.

The hush OnAir Controller is developed to control the OnAir indicator of any m!ka Mic Arm OnAir. hush+ on top includes a microphone preamplifier. The optional hush Remote can be used as a control unit on both devices. The units can be powered via your computer's USB port or by USB power supplies. It must be ensured that these also comply with the conformity regulations of your respective country.

### Safety Instructions!
- Don't open hush, hush+ and the hush Remote and don't perform any modifications. Work on the devices has to be carried out by qualified, authorized persons only!

- Don't bring hush, hush+ and the hush Remote into contact with liquids. Always position hush and hush+ in a way that ensures heat dissipation.

- Use hush, hush+ and the hush Remote only with certified USB interfaces and in connection with certified power supplies. Audio cables must be shielded. Failure to do so may result in interference with other devices as well as interference with hush. This may result in damage.

- Make sure that the pin assignment of the XLR-5 connector on your microphone arm is correct – especially if you install the connector yourself.
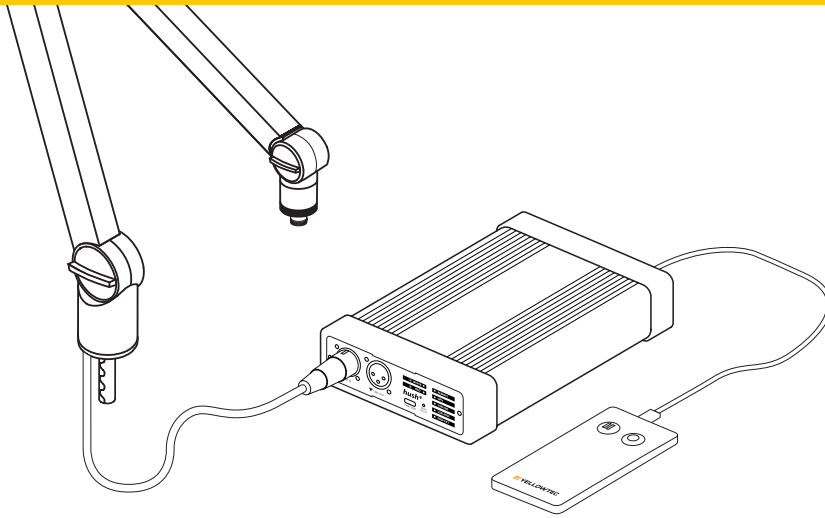
# First steps

## hush front panel

As soon as hush is powered, it is automatically turned on. For power supply, connect hush to your computer with the included USB-C cable. Optionally, you can use the provided USB-C to USB-A adapter. To use hush without your computer, use a certified 5V power supply.

When using hush for the first time, connect it to your PC or Mac via USB-C and open the hush App. It will prompt you to specify which type of m!ka OnAir Mic Arm you are using. Specify whether it is an older model with a red OnAir indicator or the current model with a dual-color OnAir indicator (red/white). Then set the mode to control hush and use the hush App to make other settings as desired. Whenever you activate hush, it will automatically load the last set settings including your choice of mode.

Connect the XLR-5 adapter of your m!ka OnAir Mic Arm to the mic input on the front of your hush device. Then attach your audio interface or mixing console to process your mic signal. Therefore, use its XLR-3 cable and connect it to hush (Mic Out) or hush+ (Line Out).

# Hardware

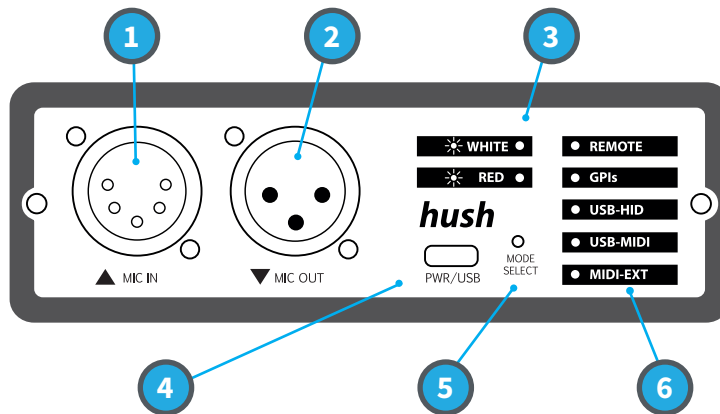## hush & hush+ front panel*

**Mic In (XLR-5)**

Attach the XLR-5 connector at the bottom end of your m!ka Mic Arm OnAir here. Find details about pin assignments at **page 6**.

**Mic Out (hush) / Line Out (hush+)**

Connect an audio device via XLR-3. Depending on the hush model you are using, a Mic Out (hush) or Line Out (hush+) is available.

**Color Indicator**

The white and red LEDs show you the currently active color of the dual-color OnAir indicator on your m!ka Mic Arm: White or Red!

**1** **2** **3**

WHITE • • REMOTE
RED • • GPIs
• USB-HID
*hush* • USB-MIDI
○ • MIDI-EXT
PWR/USB MODE SELECT
△ MIC IN ▽ MIC OUT

**4** **5** **6**

**Ext. Power Supply**

Connect hush to your PC/Mac via USB-C using this PWR/USB port. Alternatively, you can connect a 5V power supply here to use hush without a computer.

**Mode Select**

Use a pointed object to change the selected mode for controlling your hush device. Alternatively, you can use the hush App. **See page 10.**

**Mode Indicator**

The green LED shows you the mode that is currently selected to control hush. Change it directly on the device or in the hush App. **See page 10.**

*The fronts of the hush and hush+ models differ in the logo print. Another difference is that hush provides a Mic Out, while hush+ is equipped with a Line Out.

## Front panel details

**1**

### 5-pin XLR female

A m!ka OnAir Mic Arm, for example, can be connected to the 5-pin XLR. Its dual-color OnAir indicator (red, white) is controlled according to the operation status RED, WHITE. The current device status is displayed on the front panel (3) and in the hush App. See page 23.

**Note!:** Older m!ka models come with a single color OnAir indicator and only support RED.

Polarity is rotated between pin 4 and pin 5 to control the two colors, so only one color can be displayed at a time. RED always has the highest priority, if both colors are active at the same time (e.g. both GPIs on, RED is displayed).

In the hush App, the setting to select the OnAir indicator dual-color or single-color should be made to guarantee for best usability.

The 5pin XLR female connector has the following pinout:
1: Audio GND
2: Audio hot
3: Audio cold
4: m!ka LED
5: m!ka LED
Shield: Chassis
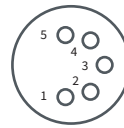
RED
4 (Yellow cable) = +12..24VDC
5 (Black cable)= GND
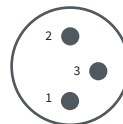
WHITE
4 (Yellow cable) = GND
5 (Black cable)= +12..24VDC

Find futher details in the m!ka Briefing Book available at www.yellowtec.com/mika/downloads.

## 2

## 3-pin XLR male

The 5pin XLR female connector has the following pinout:
1: Audio GND
2: Audio hot
3: Audio cold

With hush, the unchanged audio signal with microphone level is present here.

With hush[+], on the other hand, a pre-amplified line signal is available here, which can also be muted (MUTE function). With hush[+], the preamplification of +12..75dB, 48V phantom power and the high-pass filter can be set via the hush App.

## 4

## USB-C

The device is supplied with power via the USB-C port. The power can be supplied via a PC or MAC, e.g. to configure the device or to use it via USB-MIDI or USB-HID. For applications where no PC or MAC is needed, e.g. the use as a stand alone solution with remote control or control via GPIs or MIDI-EXT, a USB power supply is sufficient.

It is important to ensure a sufficient voltage and current supply. If the USB port does not provide enough power, an externally powered USB hub can do the job. hush and hush[+] are designed for 5V, 450mA.

**5**

## Mode Select

7

The Mode Select is used to set the operating mode. The Mode Select Switch on the front panel can be operated with a paper clip or similar to adjust your selected mode to control hush directly on the device. Alternatively, you can set the mode in the hush App available at:
www.yellowtec.com/hush/downloads.

Choose between five modes to control hush: Remote, GPIs, USB-HID, USB-MIDI and MIDI-EXT. Check the chapter "Modes" for further information.

Besides that, the mode select switch has two additional special functions:

    1) Pressing and holding it when switching on puts the device into bootloader mode. This can be used to force the update functionality in case of an error. See hush App.

    2) Press for approx. 5 seconds during operation to restore the factory settings of the device.

# hush & hush+ rear panel

**EXT-MIDI In (DIN)**

Connect hardware for MIDI control via the external MIDI input and use hush in MIDI-EXT mode. Manage your MIDI settings in the hush App. See page 18.

**litt Control**

A slot for the connection of an external litt allows you to control a LED color segment of Yellowtec's litt Signaling Device. Find more info about litt at www.yellowtec.com/litt.
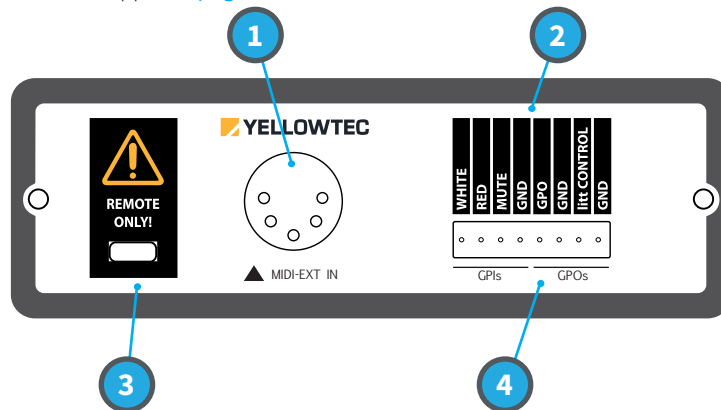
**Connector for hush Remote**

Connect a hush Remote to this USB-C slot to control your hush via remote when using remote mode. To do so, use the supplied cable and this connecting slot only! Never connect any other USB-devices here! See page 10.

**GPI/Os**

Use the GPI connectors to control hush in GPI-Mode. The red light status is available at the GPO output in all modes. By default the red signal is always given priority over the white signal if both are selected. See page 9.

# Rear panel details

**1**

## 5-pin MIDI-IN
Connect a device compatible with MIDI here, e.g. a MIDI keyboard.

**2**

## litt CONTROL
The litt CONTROL output is suitable for controlling a Yellowtec litt Signaling Device. For details check www.yellowtec.com/litt.

When the function RED is active, no matter if triggered by GPI, MIDI event, hush App or hush Remote, the CONTROL output switches to +12V. The current carrying capacity is limited to 60mA maximum.

**3**

## Remote Control Connector

Connect the hush Remote here. Do not connect any other USB-C device or port to this port.
This is only suitable for Yellowtec's hush Remote!

**4**

## Control Ports

The control ports are divided into the groups inputs (GPIs) and outputs (GPOs).

### GPIs

RED: A connection to the GND pin switches the RED function active.
WHITE: A connection to the GND pin switches the function WHITE active.

If WHITE and RED are connected to GND at the same time, RED gets priority and the RED function becomes active.

MUTE : A connection to the GND pin mutes the audio signal of hush+. This input has no function on the hush

### GPOs

If the function RED is active, no matter if triggered by GPI, MIDI event, test button or remote control, the GPO switches through to GND. This allows e.g. to use a relay to switch a lamp. The GPO is only switched by the function RED.

# Modes

To control hush you have a choice of five modes. They allow you to easily integrate hush into completely different environments and cover many application areas. At any time you can change the selected mode either directly on your hush device or in the hush App.

Choose from the five Modes Remote, GPIs, USB-HID, USB-MIDI and MIDI-EXT.

## hush Remote

As a standalone solution, the hush Remote provides extremely convenient control over hush. It perfectly suits all users whose existing equipment does not support red light control.  Optionally, a wired remote control can be connected to the USB-C on the back of the hush($^+$). Then this mode has to be set and the functions of the two buttons of the remote control are:

### OnAir Button

In idle mode, the button is lit white and the audio of the hush+ is muted (MUTE).
For a hush (without preamp), the microphone signal is not muted.

In the active state, the button lights red and turns the m!ka OnAir indicator RED as well.
If the mute button is also pressed while in the active state, the OnAir button will flash red.
The button is latching and each press of the button changes from silent to active state.

Press the OnAir button on your hush Remote to indicate on your m!ka Mic Arm that you are OnAir. As soon as you do so, the LED signal of your m!ka Mic Arm will light up red without any delay. If you are using the hush$^+$ version, this step will also activate your microphone signal. Press the OnAir button again while the LED signal of your m!ka Mic Arm is red, to turn off the red shining OnAir indicator. Using hush$^+$, this also deactivates your mic signal.

### Mute Button

In idle mode, the button lights up white. The button lights up yellow in active mode and the dual-color m!ka OnAir LED indicator turns white. Only on the hush$^+$, this mutes the audio. This button has no effect on the mic signal on the hush (without preamp).

The mute button of the hush Remote is designed as a cough button. Since only the hush$^+$ model with its preamp processes your audio signal, the mute function is only available with hush$^+$. Press and hold the mute button to mute your microphone signal. A white shining OnAir indicator on your m!ka Mic Arm as well as a yellow Mute button and a red flashing OnAir button on the hush Remote unmistakably indicate muting. Release the mute button to reactivate your microphone signal. Doing so, the OnAir LED will light up red again and you are back OnAir.

## GPIs

Using the GPI input of hush you can connect your hush unit to any standard open collector output of your hardware. For example, control hush via a mixing console with the respective outputs.

GPIs:
RED: A connection to the GND pin switches the RED function active.
WHITE: A connection to the GND pin switches the function WHITE active.

If WHITE and RED are connected to GND at the same time, RED gets priority and the RED function becomes active.

MUTE: A connection to the GND pin mutes the audio signal of the hush+. This input has no function on the hush

GPOs: If the function RED is active, no matter if triggered by GPI, MIDI event, test button or remote control, the GPO switches through to GND. This allows e.g. to use a relay to switch a lamp. The GPO is only switched by the function RED.

## USB-HID

The USB-HID mode allows to integrate the functionalities of your hush and hush$^+$ into your own macOS or Windows scripts and software. Therefore, we provide libraries and additional documentation for Windows and Mac at www.yellowtec.com/hush/downloads.

In this mode, the RED / WHITE and (with the hush+) the MUTE function can be triggered via the hush App for test purposes. This can be helpful to test the correct cabling of the m!ka OnAir Mic Arm or to switch the functions from the PC or Mac.

## USB-MIDI

Select USB-MIDI to control your hush via DAW software. This way, the OnAir indicator on your m!ka Mic Arm is switched on whenever you start recording in your DAW interface. The hush($^+$) will then appear in the PC or Mac as a MIDI Out device.

A MIDI preset can be selected via the hush App, this preset will remain in the device even after power off. The MIDI preset contains a predefined set of MIDI events which are assigned to the functions RED / WHITE / MUTE (ON / OFF). If a corresponding MIDI event is sent to the hush($^+$) in the DAW software, the corresponding function is triggered.

The MIDI Notes preset is stored in the device by default, other presets are HUI and Mackie Control. Additional predefined presets can be loaded via the hush App. With the hush App you can also create your own presets. More about this in the description of the hush App.

## MIDI-EXT

Connect MIDI hardware to control your hush via external MIDI. The hush App offers extensive possibilities to configure your MIDI setup.

External MIDI controllers or keyboards can be connected via the 5-pin MIDI socket on the rear of the hush(+). To be able to use these to control the functions RED / WHITE / MUTE, this mode must be set.

In the factory setting the MIDI preset MIDI notes is preset: C3 = WHITE, D3 = RED, E3 = MUTE , MIDI channel 1, NOTE ON/OFF, no velocity. If a different or own preset is needed, this can be set via hush App. More about this in the description of the hush App.

## Firmware

The hush Firmware is the software that is installed in the device and runs there as soon as the hush($^+$) is supplied with voltage. The firmware provides the basic functions of the device, as described in the Hardware chapters. By updating the firmware, the range of functions can be extended and possible errors can be corrected. The current firmware is offered for download on the page www.yellowtec.com/hush/downloads.

A firmware file has the extension .yfi and an update can be done with the corresponding function of the hush App. The current firmware version is displayed in the hush App > Maintenance > Info. Depending on how the settings are made in the hush App, the hush App informs about available firmware updates.

## hush App

The hush App is a desktop application for Windows and macOS for setting, testing and updating a hush($^+$) device. In the hush App you can choose your desired mode to control your hush or hush$^+$ device. To determine the currently active Mode, please select the tab STATUS in the hush App.

### Installation

The app is installed using the hush App Installer, which can be downloaded here: www.yellowtec.com/hush/downloads.

The downloaded file is .zip packed and can be unpacked using the functions provided by the operating system. For proper functioning of the installer, the file should be unzipped to a directory on the hard disk to which the user has read-write access, e.g. /downloads. Do not start the installer from the .zip folder, this may cause errors.

Double-click to open the installer, and you will be guided through the GUI-based installation. Finally, an operating system restart under Windows is necessary, since all necessary drivers for the device are installed in addition to the app.

### First start

The first time the hush App is started, the Settings dialog is called:
The Settings dialog is only called up once automatically when the app is started for the first time. You can access the dialog at any time via Maintenance > Settings to make changes.

## hush App – Main Window

The main window shows some general information and the tabs STATUS, MIDI SETUP and MAINTENANCE. With the hush$^+$ additionally PREAMP.

In the upper right corner there is a dark / light mode switch to change the display to day / night mode. The last selected setting is saved when the hush App is closed and recalled when it is opened again.

For as long as the hush App holds a connection to a device, 'connected' and a green dot is displayed under the app's title. If more than one device is plugged into the PC or MAC, a selection box will appear to select the device to which the app will establish a connection then. As soon as the connection establishment is completed the current settings such as names, parameters and the MIDI presets will be loaded from the device into the software automatically.

The hush App can only be connected to one hush($^+$) device at a time. To manage multiple devices at the same time, the hush App must be opened multiple times.
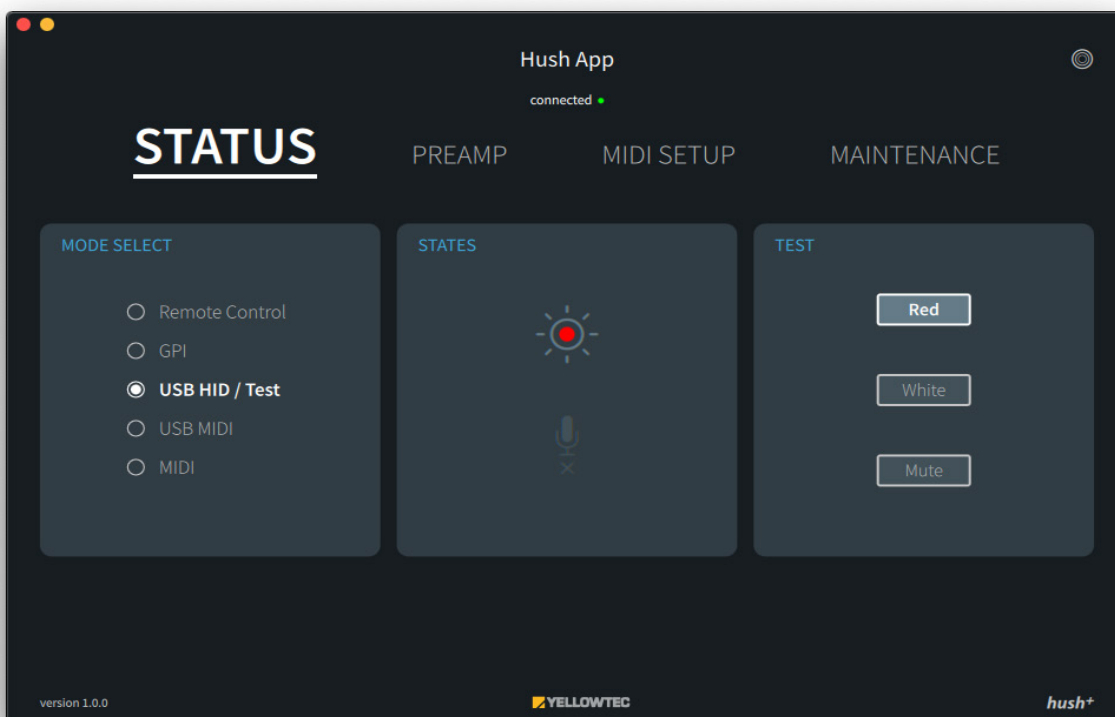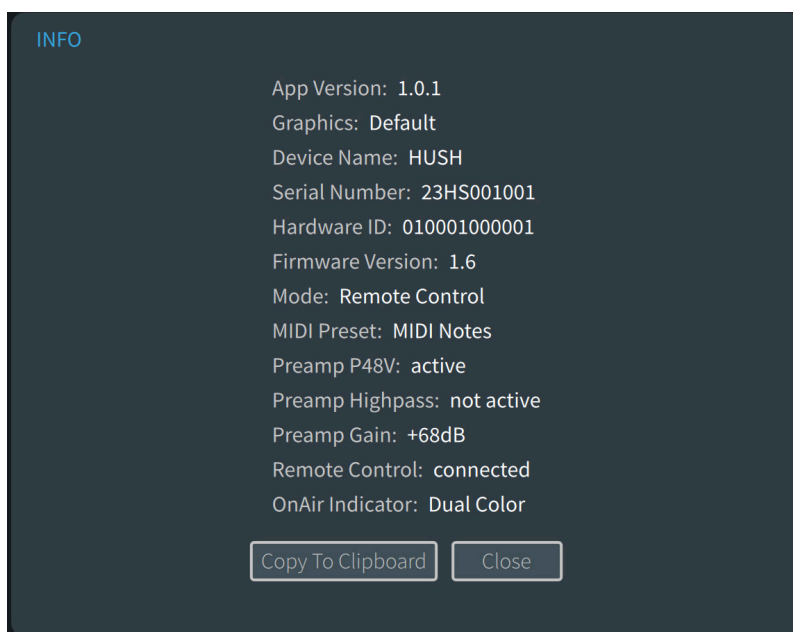
## Footer Menu: left side

The version of the hush App is displayed at the bottom left. If an update is available and the info is enabled in the settings, an update info icon is displayed next to the version.

Update info icon :

Click on the update info icon and the info dialog is displayed. Here you can see for which software (app, firmware) there is an update available. The Info dialog can also be displayed at any time via Maintenance > Info.

If an update is available, the download page can be accessed via the „update now" link.

INFO

App Version:  1.0.1
Graphics:  Default
Device Name:  HUSH
Serial Number:  23HS001001
Hardware ID:  010001000001
Firmware Version:  1.6
Mode:  Remote Control
MIDI Preset:  MIDI Notes
Preamp P48V:  active
Preamp Highpass:  not active
Preamp Gain:  +68dB
Remote Control:  connected
OnAir Indicator:  Dual Color

Copy To Clipboard        Close

## Footer Menu: right side

By clicking on the hush($^+$) symbol you get to the About page.
Here the most important information is summarized when it comes to contact details and licenses.

## STATUS

The STATUS tab also gives you access to a quick check if your hush is wired correctly. Therefore, please choose the mode „USB HID/Test" on the left and have a look at the "Test" section. Select the desired signals on the right side and compare the status displayed in the app with the current status that your m!ka Mic Arm's OnAir indicator is currently showing. If both signals match, the wiring is done correctly.

The status tab is divided into three parts:

### Mode Select
Here the operating mode of the hush($+$) is set. These are the 5 operating modes described under Hardware / Mode Select, which can be set both here in the software and via the Mode Select button.

### States
Here the active LED color is displayed. Red has priority over white if both colors are activated at the same time. In addition, an active microphone mute symbol is displayed for hush$^{+,}$ if the mute function is active.

### Test
In the USB HID / Test mode the soft keys Red, White and (with hush$^{+}$) Mute are enabled. With the help of the buttons, the corresponding function can be triggered for test purposes, e.g. to check the correct cabling of the device. The buttons are latching when pressed briefly, and momentary when pressed for longer.
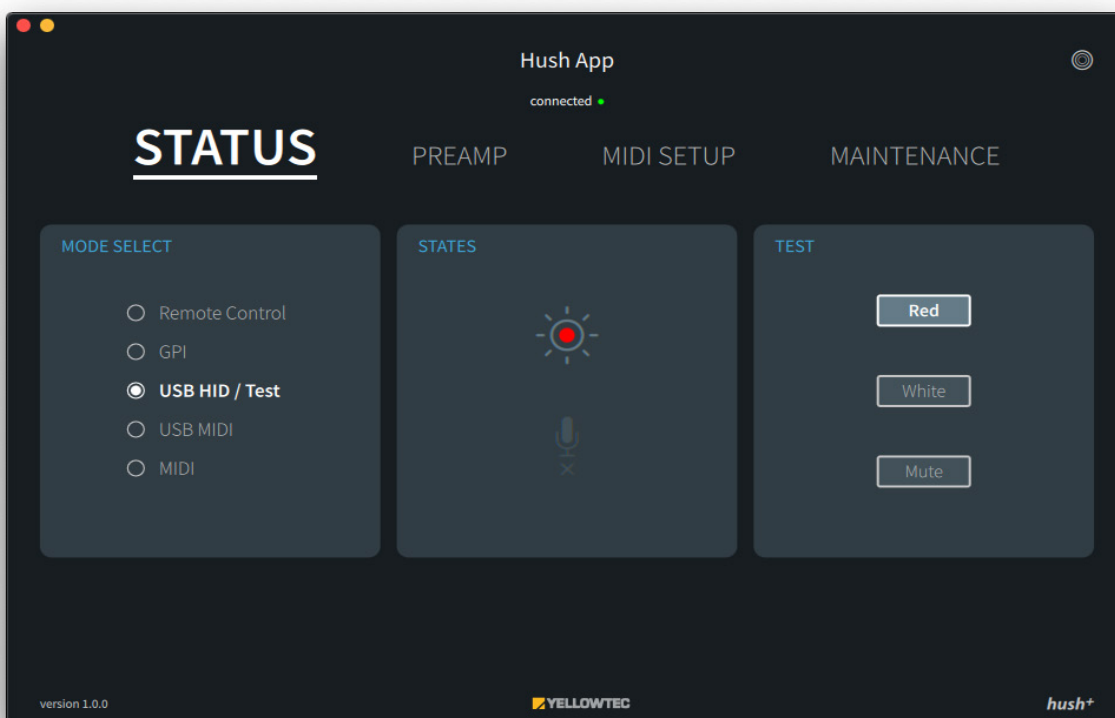
## PREAMP (hush+ only!)

In addition to red light control, the hush+ model also allows you to control your microphone signal. Using hush+, you will find several settings in the PREAMP tab of the hush App. Make use of them to optimize your mic signal.

hush+ serves as a first-class preamp for your microphone. Adjust the gain of your microphone signal with the hush App. Select your desired gain within the extensive range from 12dB up to 75dB.

Depending on the needs of your mic, you can also switch the phantom power of your microphone on or off in the app. Activate or deactivate the high-pass filter at the touch of a button to remove unwanted rumble. This is how hush+ helps you to further optimize your microphone signal to deliver high-quality sound!
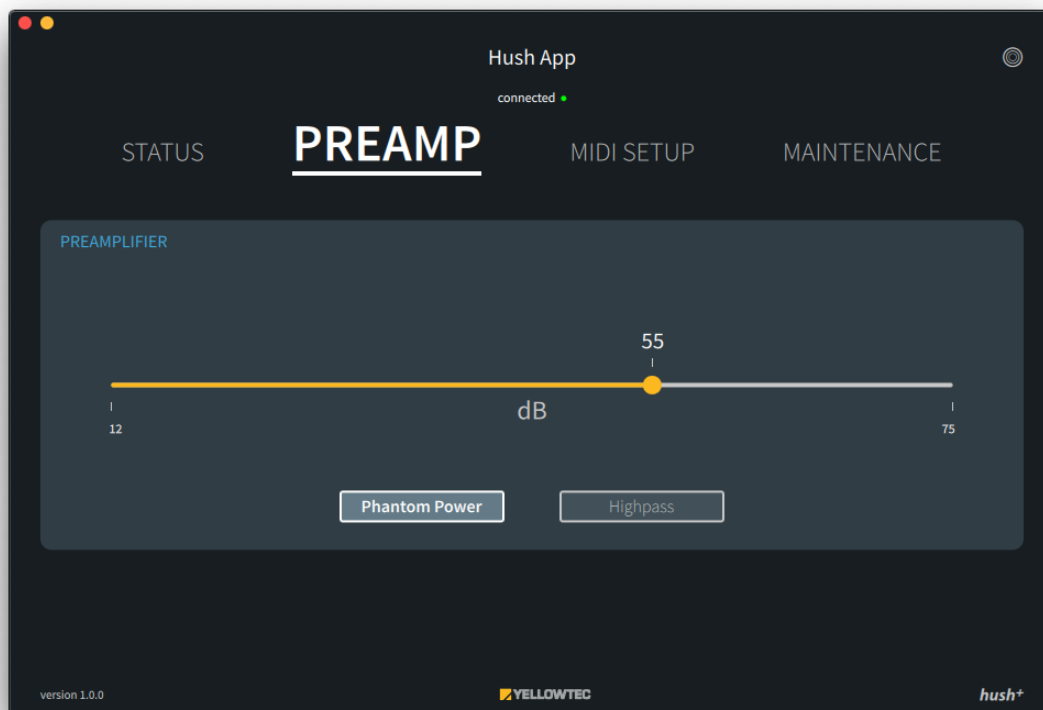
## MIDI SETUP

If you want to control hush via USB-MIDI or EXT-MIDI, you will find various configuration options in the hush App. To access them, select the tab MIDI SETUP. There you can add your own profiles or select one of the stored MIDI profiles, e.g. the HUI protocol.
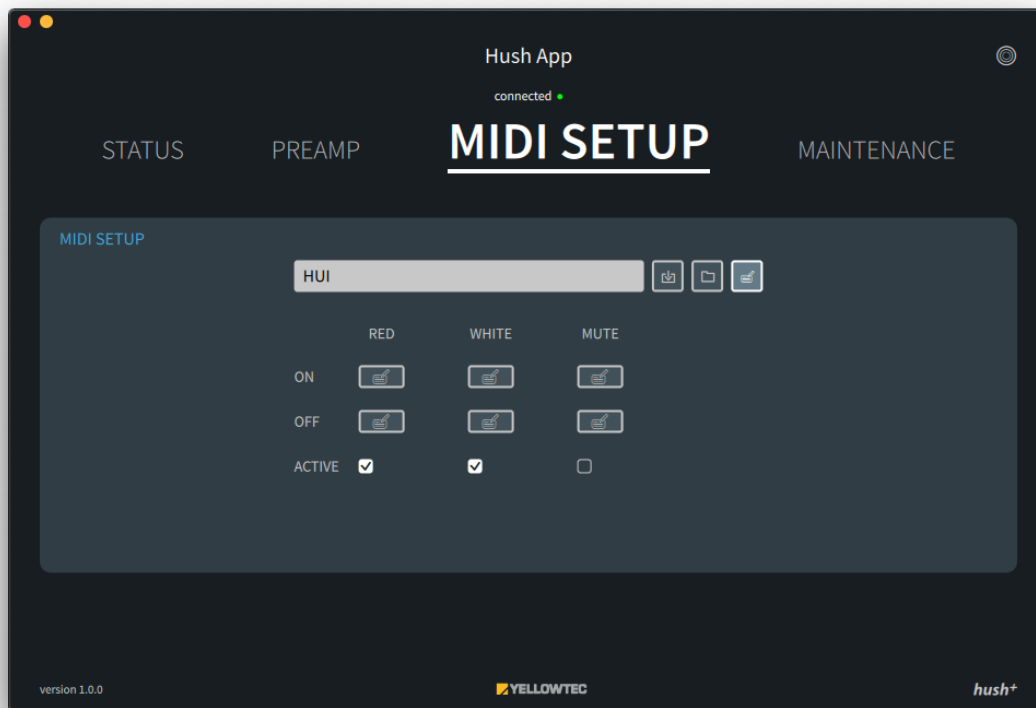


A hush App MIDI preset is a file with the extension .ymp.
In a MIDI setup, the 6 states Red(On/Off) , White(On/Off), Mute(On/Off) are assigned individual MIDI events. Three predefined MIDI presets are included, the presets can be copied and edited as needed to customize the control of the hush(+).
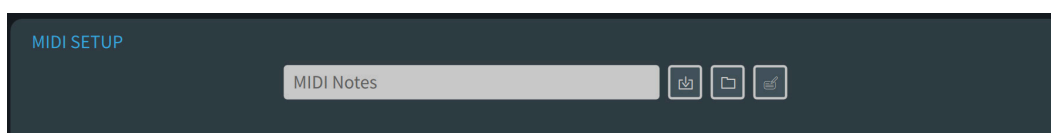
The predefined presets are
• MIDI Notes
• HUI
• Mackie Control

The factory default is the MIDI Notes preset.

The usage of the MIDI presets varies, a possible assignment is:
• External MIDI device: MODE = MIDI, PRESET = MIDI Notes
• DAW software with HUI support: MODE = USB MIDI, PRESET = HUI
• DAW software with MCU support: MODE = USB MIDI, PRESET = Mackie Control

The MIDI tab hast the following functions:

- SAVE:
- LOAD:
- EDIT:

The active MIDI setup is displayed in the display name field. The display name can be assigned independently of the file name.

## SAVE:

SAVE opens the dialog for saving the hush App MIDI preset in YMP format. Any storage location and file name can be assigned. The name of the preset in the display field is independent see below.
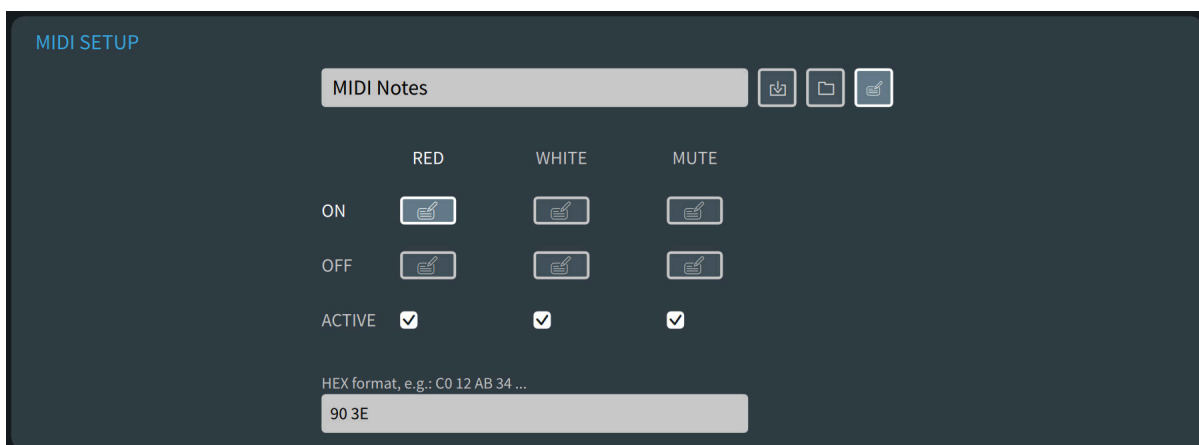
## LOAD:

LOAD opens the dialog for loading a hush App MIDI preset in YMP format.
The three presets mentioned on page 18 are predefined and included in the installation.

## EDIT:

To change the display name and other fields, the MIDI setup must be edited. To do this, switch on the EDIT mode ( ✍ ).

In EDIT mode the display name can be changed. The name must be at least one character long and may contain Unicode.

MIDI SETUP

| | | MIDI Notes | | | ⬇ | ▢ | ✍ |

| | RED | WHITE | MUTE |
| --- | --- | --- | --- |
| ON | ✍ | ✍ | ✍ |
| OFF | ✍ | ✍ | ✍ |
| ACTIVE | ☑ | ☑ | ☑ |

HEX format, e.g.: C0 12 AB 34 ...

90 3E

## RED, WHITE, MUTE

For the functions RED ON | OFF, WHITE ON | OFF, (and hush+) MUTE ON | OFF there are additional EDIT buttons, which open an extra input field.  In this input field you will find the current MIDI event for the corresponding function.

EXAMPLE:
RED ON is the triggering MIDI event = 90 (Note ON, channel1) 3E (Note)
No velocity is used, therefore 2 values are sufficient.

The input field can be filled with up to 15 arbitrary values in hexadecimal notation. However, since this function is linked to MIDI external and USB MIDI modes, only valid events from the MIDI protocol should be used:

- 8n Note OFF
- 9n Note ON
- An Polyphonic Aftertouch
- Bn Control Change
- Cn Program Change
- Dn Monophonic Aftertouch
- En Pitch Bending
- F0..7 System Exclusive

For more information see MIDI Specification

## ACTIVE
The ACTIVE checkmark allows a MIDI event to switch the function in principle. Some MIDI setups (HUI, MACKIE CONTROL) have only the RED and WHITE functions activated, because it does not need a MUTE function to use them. Thus the ACTIVE check mark is not set there and it does not matter what is entered in the MUTE ON | OFF fields. The MUTE column is ignored accordingly.

NOTE!: In the special case, if ACTIVE is switched on and at the same time nothing is entered in the OFF MIDI event, the function is switched ON, but never switched off again via OFF.

## MAINTENANCE

In the tab MAINTENANCE of your hush App, you will find information about management and maintenance details for your hush or hush+ unit. For example, select "Info" to check your unit's serial number and your active firmware version. Restore your hush unit to factory defaults via "Restore Defaults". Select "OnAir Indicator Settings" to state whether you are using an older m!ka Mic Arm with a single-color OnAir Indicator (red) or a current model with dual-color OnAir Indicator (red/white). You will automatically be prompted to make this selection the first time you connect hush to your computer and open the app.
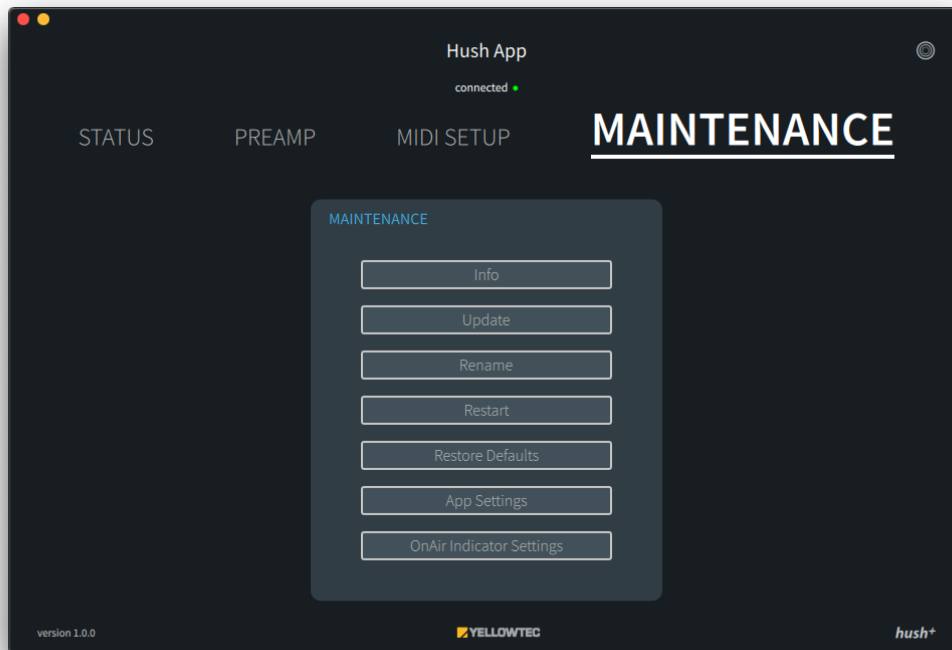


The Maintenance tab contains service functions. If several devices are connected, a selection field is displayed for selecting which hush($^+$) the hush App should connect to. All further functions then refer to the selected device.

### Info

Info opens an overview window with information about the versions of the app and firmware, names and settings. With Copy To Clipboard the info is copied to the clipboard and could be sent to support in case of an error. If app / firmware updates are available and the update info request is activated in the settings, a link update now is displayed. The link leads to the download page of the app / firmware.

### Update

The firmware of the hush($^+$) hardware can be updated via the update dialog. If only one device is connected, the file selection dialog opens directly. Here the hush.yfi, i.e. the firmware file must be selected. Updates are offered in irregular intervals on the download page. These updates contain bug fixes or function enhancements. If you have activated the update info in the settings, you will be informed about available updates in the app.

As soon as the hush.yfi file is selected, it is checked and written to the device. This usually takes only a few seconds. After that the device restarts and is ready for use.

If the USB plug is pulled out during the update process, an error occurs or the mode selector button is pressed when the device is switched on, the hush(+) reports in the so-called bootloader mode. No LEDs on the front panel will light up.

If a connected hush is in bootloader mode, the hush app recognizes this, displays the device as HUSH_recovery and requests a firmware update.

If multiple connected devices are in bootloader mode, all HUSH_recovery devices can be updated „simultaneously".

## Rename
When the Rename dialog is opened, you have the possibility to give the connected / selected device an individual device name. This can be at least 1 and at most 20 characters long and contain Unicode. After renaming, a restart of the hardware is required.

## Restart
If it should be necessary to restart the hush($^+$) by software there is a button for it. Normally it should not be necessary to restart the device via software.

## Restore Defaults
To reset a device to factory defaults the Restore Defaults dialog is called. In the dialog there are the options Device (default) and Midi Preset file. At least one option must be selected. The option Device resets the hush($^+$) to factory defaults. Thereby all settings e.g. device name, preamp preamplification etc. are lost. The Midi Preset file option restores the default files of the hush App.

## App Settings

Here you can define whether the hush App should check for software updates and inform you if there are any. You can choose between no info (default), app, firmware and app + firmware. If at least one update info is selected, the privacy information must be confirmed. This appears as soon as an option is selected.
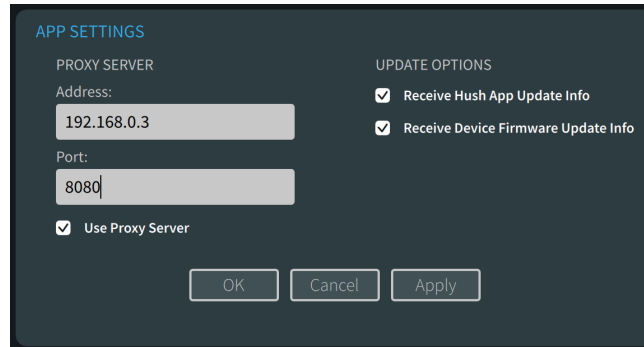
If an update is available, the update info icon is displayed in the lower left corner of the main window next to „version".

Update info icon:

If update info is required, the hush App must be able to reach the update server over the network. For this it may be necessary to specify a proxy server. Ask your administrator or IT support, if you do not know the data. The checkbox „Use Proxy Server" must always be set if the set proxy server is to be used. For example, on a laptop it can be used in the office, but not in the home network. The entered values are retained.

## OnAir Indicator Settings

This setting determines whether the RED and WHITE LEDs of the dual-color OnAir indicator of the current m!ka Mic Arms or only the RED LED of the single-color OnAir indicator are controlled.
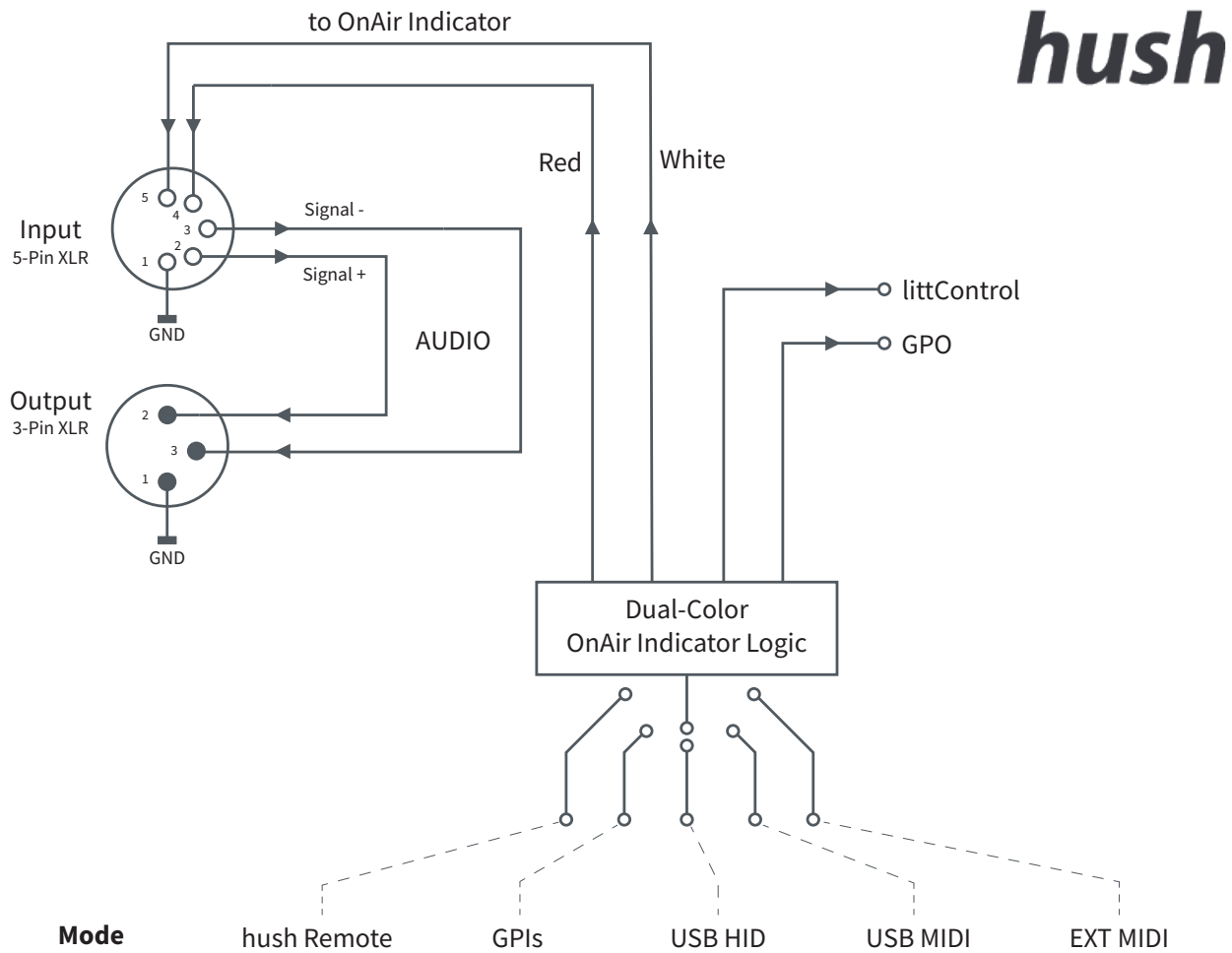Single-color: old version of the m!ka OnAir Indicator, only RED
Dual-color: current version of the m!ka OnAir Indicator, RED and WHITE
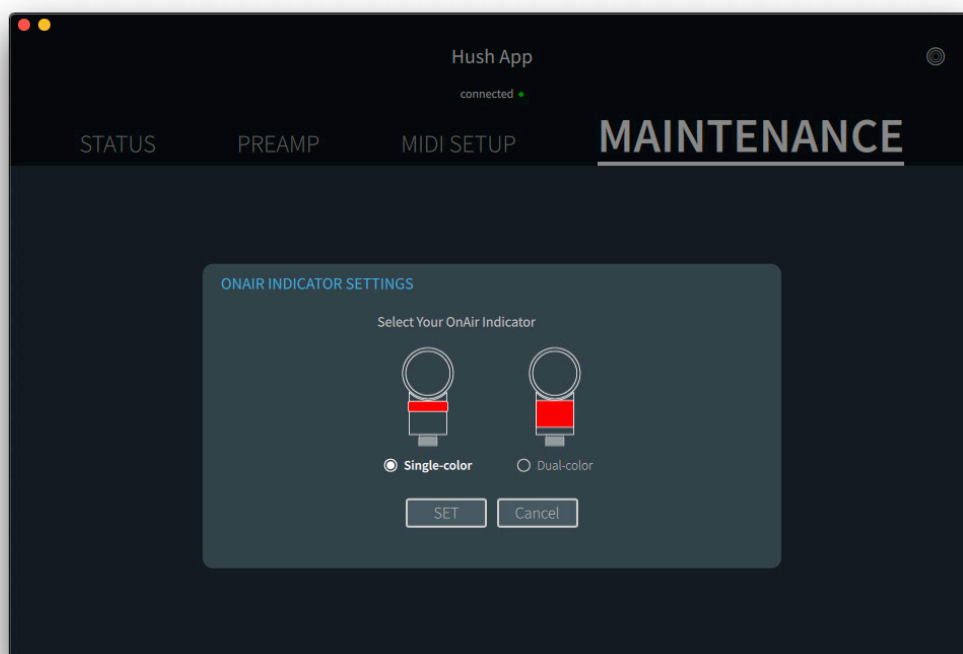
## Block Diagram hush

The block diagram below shows you the functional structure of the model hush. Please note that your microphone signal is passed through completely unaffected when using hush. A mute function, for example, is not provided in this variant.

to OnAir Indicator

*hush*

Red     White

**Input**
5-Pin XLR

5
4   3       Signal -
1   2
Signal +

GND

AUDIO

littControl

GPO

**Output**
3-Pin XLR

2
3
1

GND

Dual-Color
OnAir Indicator Logic

**Mode**     hush Remote     GPIs     USB HID     USB MIDI     EXT MIDI

# Block diagram hush⁺

The block diagram below shows the functional structure of the hush+ device. In contrast to hush, hush+ offers you control options for your microphone signal. hush+ comes with a high-quality microphone preamp. It offers you various options optimizing and controlling your mic signal, e.g. a mute function.
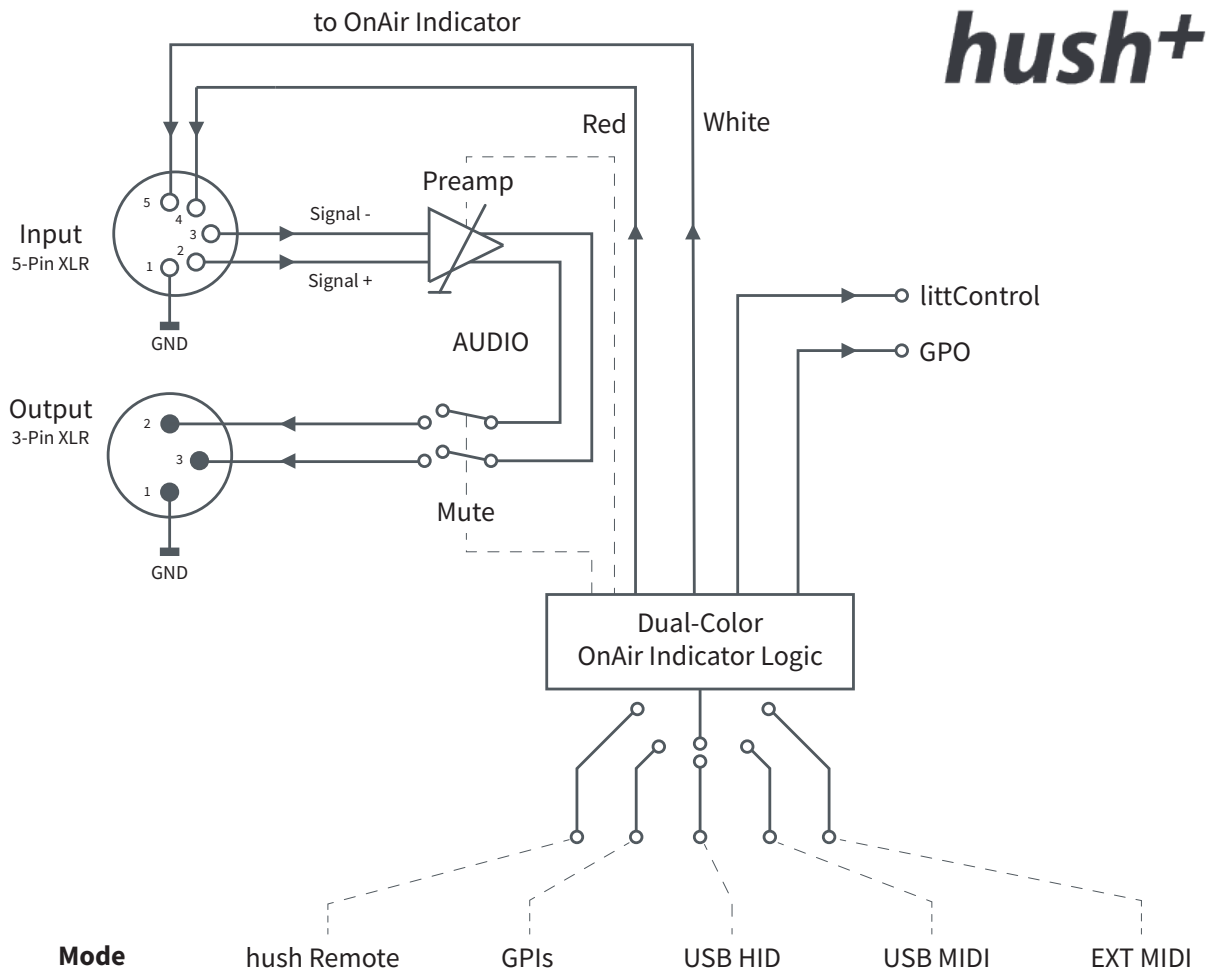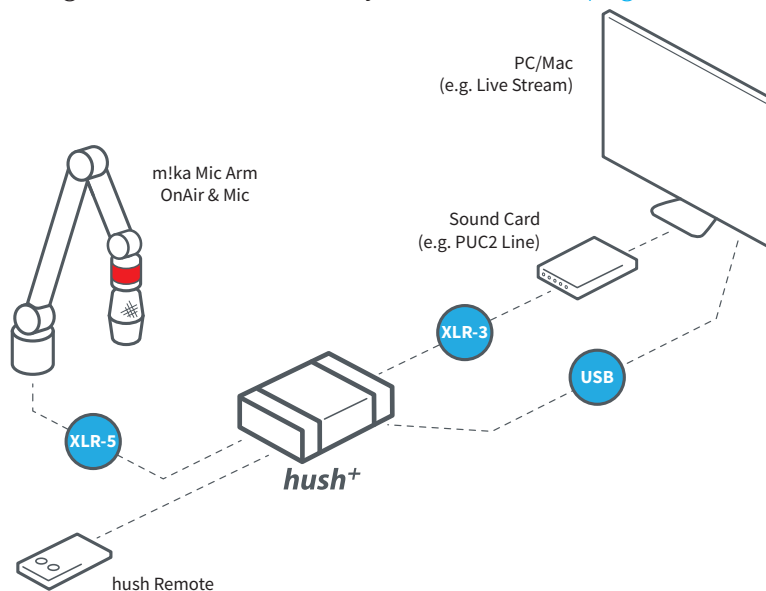
## Examples of Use

As versatile OnAir Controllers, hush and hush+ give you control over your OnAir signaling. To show you common configurations, we have illustrated some application examples on the following pages.

## hush in Streaming Setup

Many streamers do not use hardware that supports red light control. hush in Remote mode is the ideal plug'n'play solution. Connect your hush Remote to your hush device using the included USB-C cable. With the push of a button you can now activate the red light on your m!ka Mic Arm with OnAir indicator. See page 29. To connect the audio signal of your mic to your computer, you need a sound card. Use it, as well as your video recordings, to start a (live) stream or call via your computer. When using the hush+ version, its high-quality preamp takes care of the optimal amplification of your mic signal. You get first-class sound for your stream. See page 17.

PC/Mac
(e.g. Live Stream)

m!ka Mic Arm
OnAir & Mic

Sound Card
(e.g. PUC2 Line)

XLR-3

USB

XLR-5

hush+

hush Remote

## hush in Audio Production Setup

hush can be excellently integrated into a PC workstation for red light control. Use the mode "USB-MIDI" and connect hush via USB to your PC or Mac. This setup allows you to control the OnAir indicator of your m!ka Mic Arm directly from your PC. As soon as you start a recording in your DAW software, the OnAir indicator on your mic arm will be activated simultaneously. Besides controlling the OnAir signal at your m!ka Mic Arm, hush optionally also allows you to control the LED signal of Yellowtec's litt Signaling Device. For example, install litt from the outside next to your studio door to show everyone around that you are currently OnAir and do not want to be disturbed.Find more info about litt at www.yellowtec.com/litt.

m!ka Mic Arm
OnAir & Mic

litt Signaling
Device

Mixer

XLR-3

XLR-5

*hush*

USB
MIDI

PC/Mac with
DAW Software
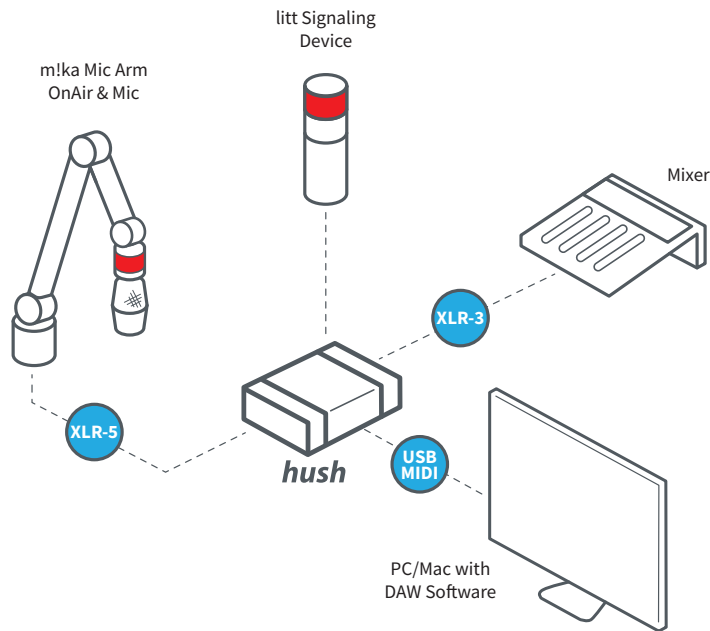
## hush in external MIDI Setup

Comfortably integrate your hush or hush+ device into your MIDI infrastructure via plug'n'play to control it via MIDI hardware. You can use any MIDI device for this purpose. hush gets you maximum flexibility for integrating the OnAir signaling into your individual MIDI environment. If you need to make adjustments to your hush's default MIDI preset, use the hush App. It offers you extensive configuration options in the tab MIDI SETUP.

PC/Mac with
Sound Card

m!ka Mic Arm
OnAir & Mic

*hush⁺*

XLR-3

XLR-5

EXT
MIDI

Power Supply
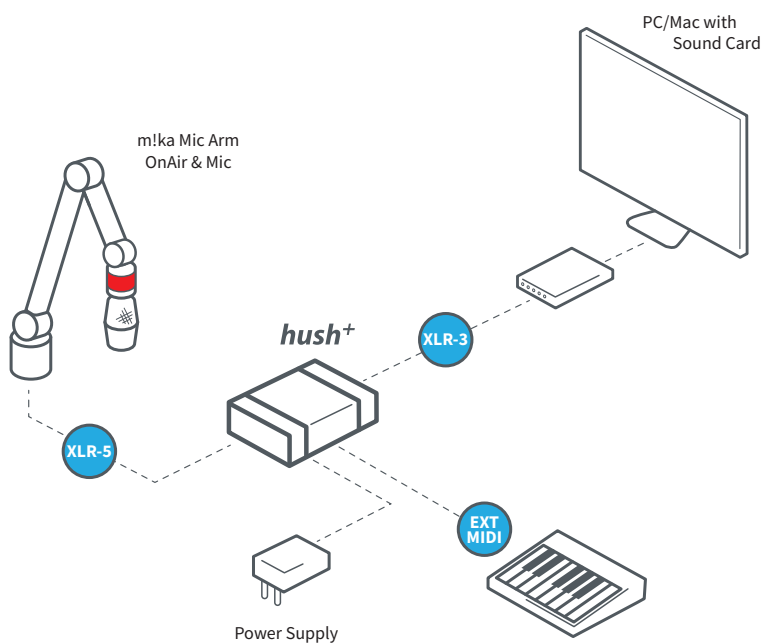
## hush in Broadcaster Setup

The control via GPIs fulfills all wishes for the integration of hush and hush+ into a professional broadcast infrastructure. Select the GPIs to integrate hush into the already existing red light logic of your system (red / white / mute). Besides controlling the OnAir signal at your m!ka Mic Arm, hush optionally also allows you to control the LED signal of Yellowtec's litt Signaling Device. For example, install litt from the outside next to your studio door to show everyone around that you are currently OnAir and do not want to be disturbed.Find more info about litt at www.yellowtec.com/litt.

litt Signaling
Device

m!ka Mic Arm
OnAir & Mic

Mixer

GPO

GPO
3x

GPI

XLR-3

XLR-5

**hush**

Power Supply
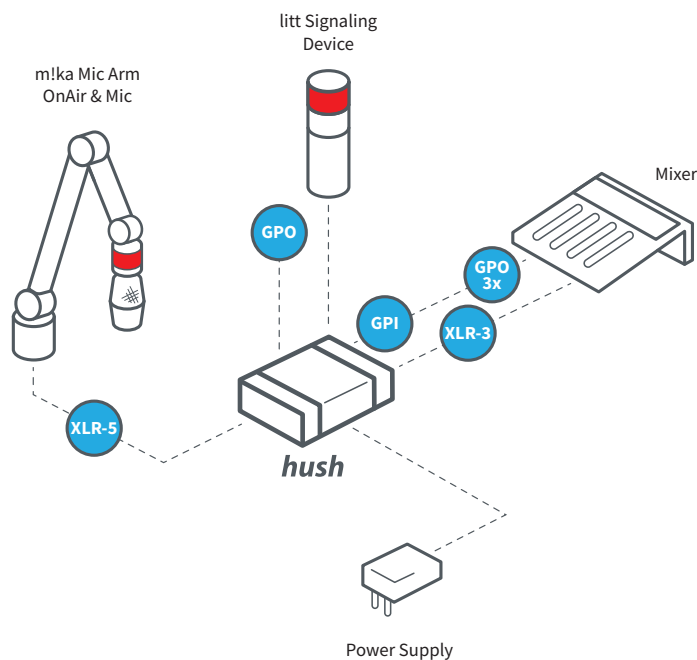
## hush in Library Setup

The USB-HID mode allows to integrate the functionalities of your hush and hush$^+$ into your own macOS or Windows scripts and software. Therefore, select the USB-HID mode in the hush App or directly on your hush or hush$^+$ unit. We provide libraries and additional documentation for Windows and Mac at www.yellowtec.com/hush/downloads.

m!ka Mic Arm
OnAir & Mic

Mixer

XLR-3

XLR-5

**hush**

USB
HID

Library
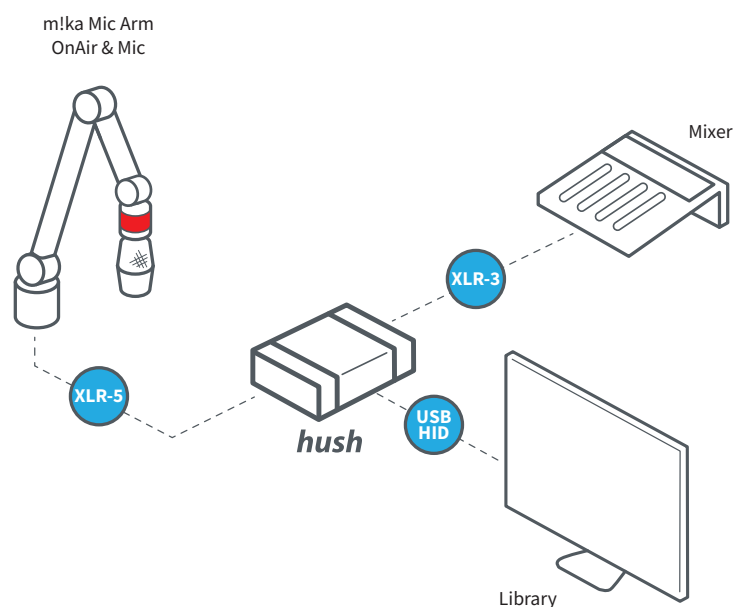
## EU Declaration of Conformity
### According EC Directive 2014/30/EU (EMC - Directive)

We, Yellowtec GmbH, Heinrich-Hertz-Str. 3, 40789 Monheim, Germany
herewith declare in sole responsibility that the products

**hush⁺** OnAir Controller  (Product Code: YT3902)
**hush** OnAir Controller  (Product Code: YT3903)
**hush Remote** (Product Code: YT3904)

observe the essential protection and safety related requirements determined in the
European council directive for the adoptions of the legal regulations
of the Member States about the electromagnetic compatibility (2014/30/EU).

The judgement of the products as to electromagnetic compatibility
was effected on the basis of the following EC harmonized standards:

EN 55032:2015 + AC:2016 + A11:2020 + A1:2020
EN 55035:2017/A11:2020
EN61000-4-2:2009
EN61000-4-3:2006 + A1:2008 + A2:2010
EN61000-4-4:2012
EN61000-4-6:2009

The declaration applies to all specimen manufactured according to the sample tested.
The last two digit of the year of affixing the CE marking is "23"

Address of EC responsible:
Hanno Mahr, Heinrich-Hertz Str. 3, 40789 Monheim, Germany

10-04-2023, Hanno Mahr, CEO
Date and Countersign of EC representative

## UK Declaration of Conformity
## According to Electromagnetic Compatibility Regulations 2016

We, Yellowtec GmbH, Heinrich-Hertz-Str. 3, 40789 Monheim, Germany
herewith declare in sole responsibility that the products

**hush⁺** OnAir Controller  (Product Code: YT3902)
**hush** OnAir Controller  (Product Code: YT3903)
**hush Remote** (Product Code: YT3904)

to which this declaration refers, complies with the
following regulations, enactments and standards.

The judgement of the products as to electromagnetic compatibility
was effected on the basis of the following EC harmonized standards:

EN 55032:2015 + AC:2016 + A11:2020 + A1:2020
EN 55035:2017/A11:2020
EN61000-4-2:2009
EN61000-4-3:2006 + A1:2008 + A2:2010
EN61000-4-4:2012
EN61000-4-6:2009

The declaration applies to all specimen manufactured according to the sample tested.

Name and Address of the person authorized to compile the technical file:
Hanno Mahr, Heinrich-Hertz Str. 3, 40789 Monheim, Germany

Details of the signatory:
Name: Mahr
First Name: Hanno
Position: CEO

Monheim, 10-04-2023

## FCC Declaration of Conformity

These devices comply with Part 15 Subpart B of the FCC rules.
ANSI C63.4-2003 in execution to the FCC regulations, rules and limits of FCC 47
CFR §15.101 and §15.109. Operation is subject to the following two conditions:

1. These devices may not cause harmful interference.
2. These devices must accept any interference received,
including interference that may cause undesired operation.

Manufacturer:
Yellowtec GmbH, Heinrich Herz Str. 3, 40789 Monheim, Germany

Contact Person:
Reinhard Gallos, Product Manager
Phone: +49 2173 967 423
Fax: +49 2173 967 403
Email: rgallos@yellowtec.com

Model Names:
**hush⁺** OnAir Controller  (Product Code: YT3902)
**hush** OnAir Controller  (Product Code: YT3903)
**hush Remote** (Product Code: YT3904)

Type of Equipment:  Multimedia Device
Classification: Class B Equipment

We hereby declare that the equipment bearing the model names specified
above was tested conforming to the applicable FCC rules under the most accurate
measurement standards possible, and that the necessary steps have been taken
and are in force to ensure that production units of the same equipment will continue
to comply with the Commission's requirements.

Manufacturer's Signature: April 2023, Reinhard Gallos, Product Manager

Responsible Party's Signature: April 2023, Hanno Mahr, CEO Yellowtec GmbH

www.yellowtec.com/hush

shop.yellowtec.com