

Getting started with **intellimix** Wizard

## Getting Started with Intellimix Wizard

Users will want to setup their personal preferences on how to use the various functions of Intellimix. User settings can be selected and determined on the Control Unit - assumed that an administrator has granted individual access.

However, you will need an application called Wizard in order to configure your Intellimix to match your specific systems requirements and in order to determine parameters for I/Os, signal routings, bus assignments, installing external modules, setting up AoIP and many other functions.

This document describes the first steps how to configure your Intellimix by using the Wizard application.

The full manual for all Wizard functions will be available from our website soon. Please refer to the Download Section of Intellimix2 for the relevant version.

The Wizard App itself is also available from our website. Please refer to "IMX2\_WIZARD.ZIP" within our Intellimix download section.

### First Steps

First, download the Wizard ZIP folder to any Windows PC (Windows7 or newer). Double click the ZIP folder for unpacking it. You will find two files: "Intellimix-8-xxx.exe" which contains the Wizard App and "IMX2\_Default.yim" which contains the default configuration. Intellimix will always be shipped with the default configuration installed.

Now connect your computer to the Base Unit by using a standard CAT cable. Please make sure you use the BU's "E1/AoIP" receptacle for this purpose.

You are now set to use the Wizard for changing the default configuration in order to adopt your Intellimix to your signal infrastructure.

# Table of Content

p. 4	<b>Intellimix Configuration Wizard</b> <ul style="list-style-type: none"><li>Communication Server</li><li>Network Settings</li><li>Configuration File</li><li>Load Configuration to Intellimix</li><li>Maintenance Window</li></ul>
p. 9	<b>NEW: Configuration Wizard 8.1.24 Changes</b> <ul style="list-style-type: none"><li>What has remained the same?</li><li>What has changed?</li><li>Default Configuration</li><li>USB 16Ch</li><li>4 Faders / 8 Faders</li><li>AES67 Module 52-7067</li><li>Extensions</li><li>b-line Control</li><li>Talkback Level</li></ul>
p. 16	<b>EXAMPLE 1: Adjusting your microphone source</b>
p. 20	<b>EXAMPLE 2: Adjusting a telephone source and MIX-MINUS</b> MIX-MINUS-Adjustments
p. 26	<b>EXAMPLE 3: Adjusting Speaker Outputs</b>
p. 27	<b>EXAMPLE 4: Assigning the Redlight GPO</b> Snapshots
p. 29	<b>Communication / Protocols</b> <ul style="list-style-type: none"><li>Ember+</li><li>DHD</li></ul>
p. 31	<b>Firmware Update</b> <ol style="list-style-type: none"><li>1. Without the Wizard</li><li>2. With the Help of the Wizard</li></ol>

## Intellimix Configuration-Wizard

Start the Windows program “Yellowtec Intellimix Wizard” “Intellimix-8-xxxx-exe”.

### Communication Server

As you start the Wizard for the first time, a utility program (communication server) will be installed. It is possible that this installation asks you for your firewall settings. If so, please confirm them. The communication server is necessary for the configuration tool (Wizard) to be able to connect with the hardware (Intellimix). As soon as the Wizard is started, the utility will automatically be opened in the background. Once the Wizard is closed, the utility will quit automatically.

### Network Settings

In order to make a communication between Wizard and Intellimix hardware possible, Wizard-PC and Intellimix hardware have to be on the same network (Local Area Network = LAN).

Therefore, a physical connection from the Intellimix’s RJ-45 **Socket** “E1/AoIP” to the Wizard-PC has to be established. Simply use a cross cable or a network switch.

In addition, the Intellimix’s and the Wizard-PC’s IP addresses have to belong to the same network. As standard, the Intellimix’s IP address is a Class A address. Each device has a unique address which can be identified by the MAC address situated on the device itself.

#### EXAMPLE:

The last three segments of the MAC address are ...05:1F:F9 (this is the hexadecimal notation, converted to the decimal notation = ... .5.31.249).

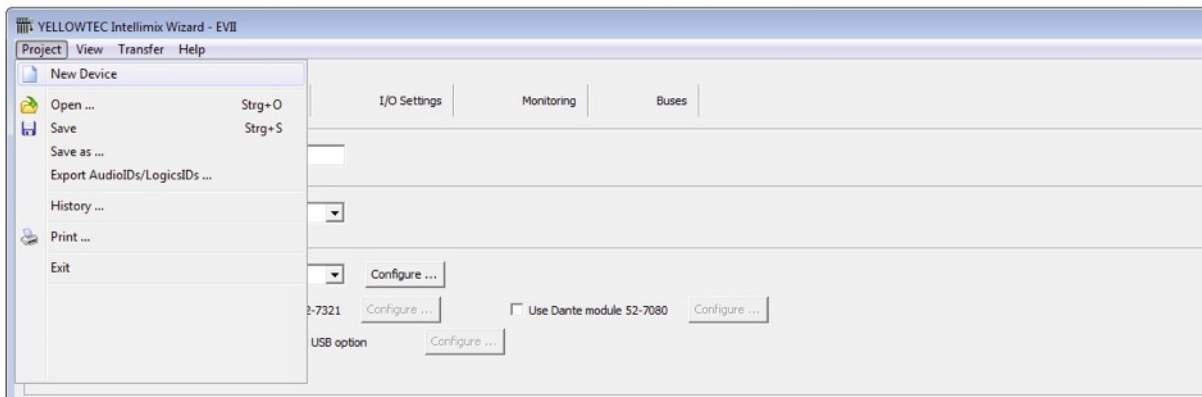
Since the address is a Class A address, a 10 is added as a prefix. Thus, the complete IP address adds up to: 10.5.31.249 / SubnetMask 255.0.0.0.

Remark: The IP address is adjustable. Please go to the section “Maintenance Window” for more information.

In this example the Wizard-PC’s IP address e.g. can be adjusted to 10.5.31.1 unless this IP address has already been allocated otherwise in your network.

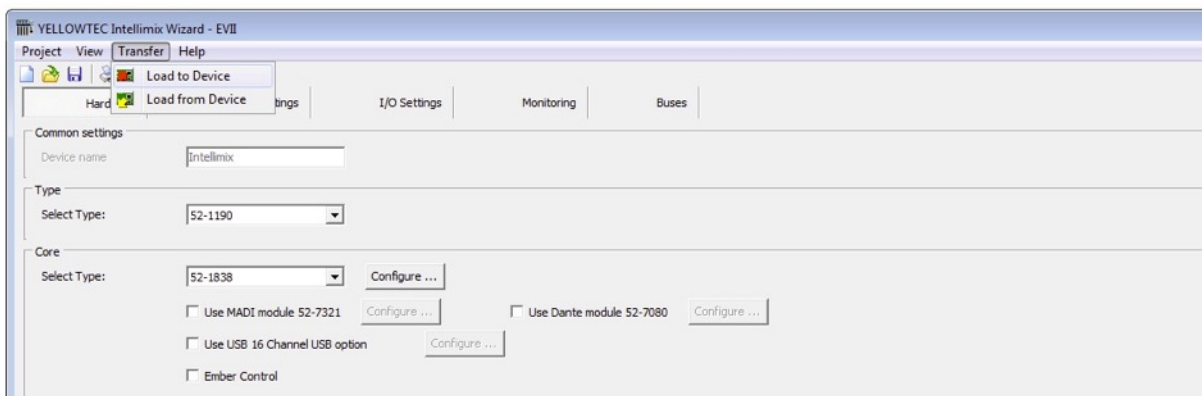
## Configuration File

Open the already existing configuration file (e.g. the file “IMX2\_Default.yim”) in the Wizard’s “Project / Open” Menu or create a new configuration. Therefore, please use the menu “Project / New Device”. The configuration file is never online, which means that every change will only be active after the file is transferred to the hardware. In this respect please read the following section.



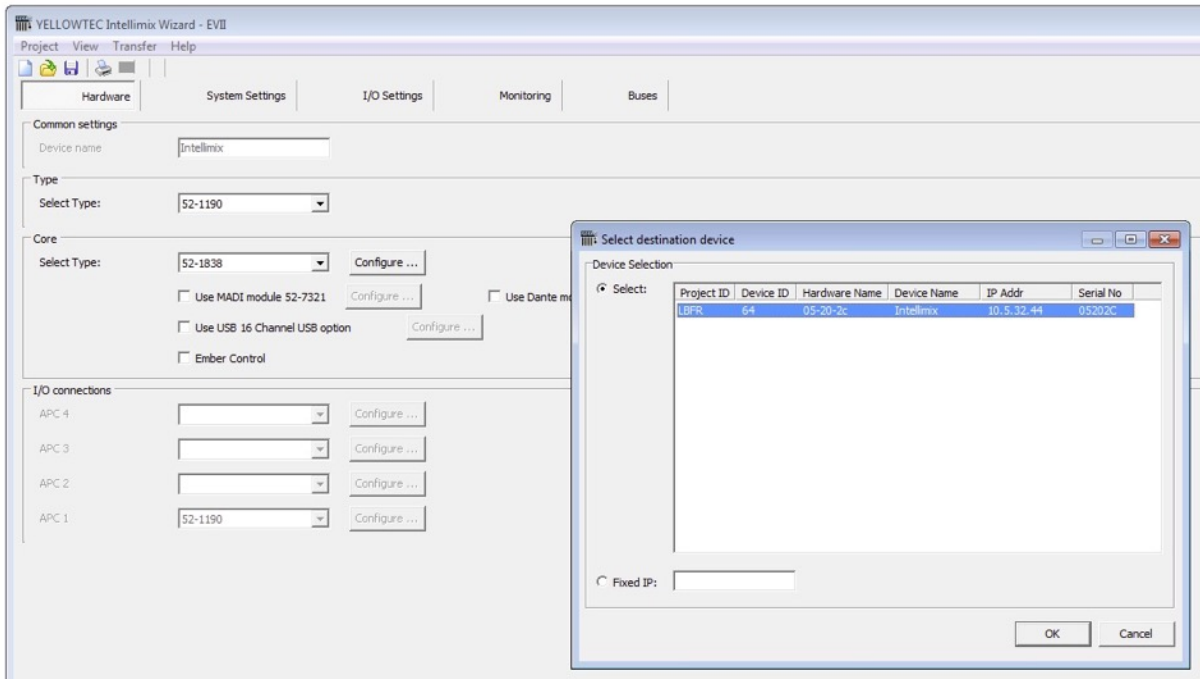
## Load Configuration to Intellimix

The configuration file you created and opened with the Intellimix Wizard is not active in the hardware by default. To activate it, it is necessary to load the file to the Intellimix. Therefore, select the menu “Transfer / Load to Device” or use the icon with the red arrow symbol (“Save Device Configuration to Device”).



First a dialog window will appear which has to be used to choose the target device.

**CAUTION:** If more than one Intellimix device is present in the network, please make sure to select the right Intellimix!



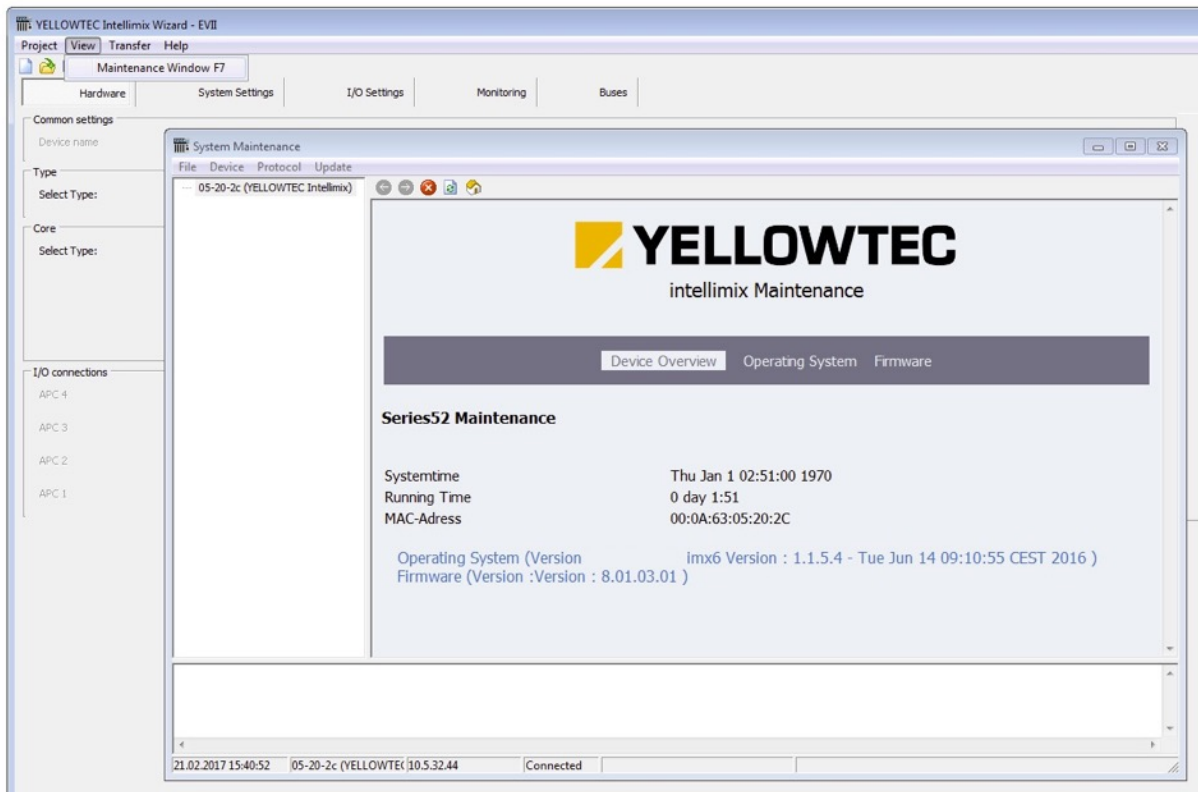
If you want to load a new or any other configuration file to your Intellimix, you will receive another remark. If you are sure that everything has been done correctly, please confirm with pressing “Yes”. Selecting “No” will cancel the process.

For a short time a progress bar is displayed and finally the configuration is online in your hardware.

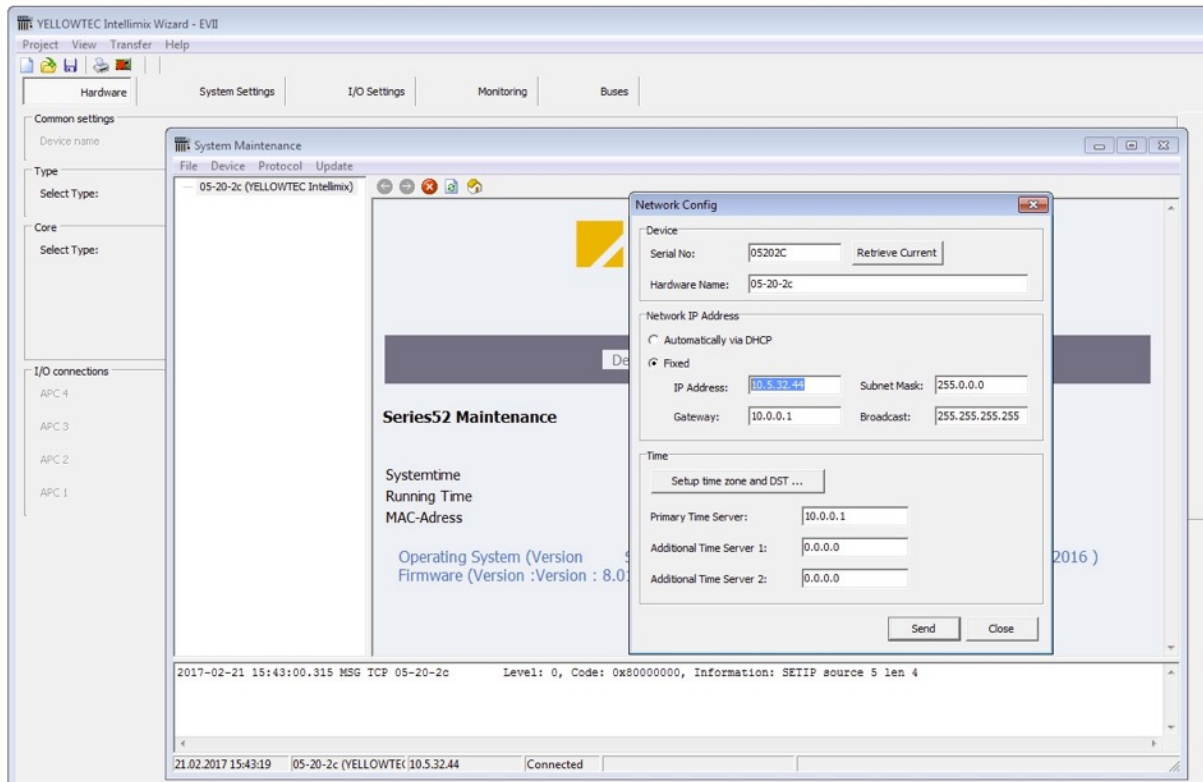
## Maintenance Window

The maintenance window plays an important role when it comes to access fundamental system functions, e.g. the adjustment of network addresses, firmware or kernel updates, system resets etc.

Open the maintenance window within the Wizard menu “View / Maintenance Window”. A window divided in two parts will pop up. Its left part consists of all Intellimix devices that are located on the network. Select the device you want to adjust. The right part of the window displays various system information.



To change the network settings, please choose the menu “Device / Network Config...”. In the corresponding dialog window you can find fields consisting of information which can be partly modified. Serial numbers for example cannot be modified while the hardware name can.



Moreover, you have the opportunity to manually adjust the IP address or to obtain it automatically if you use a DHCP server.

Furthermore, you can specify up to three time server to synchronize your Intellimix's internal clock with your system time. This has the advantage that written log files receive a precise time stamp.



## NEW Configuration Wizard 8.1.24: Changes

### What has remained the same?

The instructions given in our previous “Getting Started with Intellimix Wizard” are still valid. All the sections dealing with the setup of a configuration, the connection to hardware, the loading of a configuration to Intellimix remain valid as well as the instructions for firmware updates.

Already existing configurations (\*.yim) can be opened with the new Wizard. They should be renamed and saved again with a version designation mark.

**Attention: Configurations which are saved again can not be opened with the old Wizard (not backward compatible)!**

### What has changed?

When you first start your Wizard a communication server update will take place. Please make sure that at that time the old communication server is not in action. Otherwise, the automatic update is not possible. Usually, the communication server is closed when there no Wizard application in active.

After once updating the communication server the wizard will be opened as usual.

YELLOWTEC Intellimix Wizard - KMME

Project View Transfer Help

Hardware System Settings I/O Settings Monitoring Buses

Common settings

Device name: Intellimix

Type

Select Type: 52-1190 Number of Faders: 4 Faders

Core

Select Type: 52-1838

Use MADI module 52-7321  Use Dante module 52-7080

Use AES67 module 52-7067 Core 16 Channel USB

Ember Control

I/O connections

APC	Device	Action
APC 4	(None)	Configure ...
APC 3		Configure ...
APC 2		Configure ...
APC 1	52-1190	Configure ...

## Default Configuration

After starting the Wizard, the incorporated default configuration will start automatically based on the previous Wizard version's "ixm2\_Default.yim". Thus, it can be used as a direct configuration to start with.

## USB 16Ch

The USB interface is permanently activated. It does not have to be turned on.

## 4 Faders / 8 Faders

The new Wizard version offers the opportunity to mix 4 or 8 channels simultaneously. In this matter the term fader refers to the number of the software faders to be controlled. The number of the Control Unit's physical faders will remain 4 G-Touch© faders. Additional 4 inputs are achieved by using Layer, respectively SWIPE of the display.

This function requires Intellimix firmware from 8.1.11.

## AES67 Module 52-7067

Optionally, the AES67 module 52-7067 can be upgraded and then offers 64 mono AoIP inputs and outputs.

## Extensions

With respect to I/O connections there is a choice of 3 out of 5 input-output-units available to be configured. These modules are to be connected to the APC ports.

### 52-1335 Multi I/O Box

2 Mic/Line inputs, 2 headphones out

8 analog line inputs, el. bal., 24dBu

8 analog line outputs, el. bal., 24dBu

3 AES3/EBU inputs, 1 SPDIF input

2 AES3/EBU outputs, 1 SPDIF output

2 USB Audio IF, 10 GPI, 10 GPO, 2 ACI

### 52-7112 Digital I/O Box

- 4 AES3/EBU/SPDIF inputs, 24 bit, input sample rate converters
- 4 AES3/EBU/SPDIF outputs, 24 bit, output sample rate converters
- 4 general purpose inputs, isolated
- 4 general purpose outputs, isolated

### 52-722 Analog I/O Box

- 4 analog line inputs, 18 or 24dBu, electronically balanced, 24 bit
- 4 analog line outputs, 18 or 24dBu, electronically balanced, 24 bit
- 4 GPI, isolated, 4 GPO isolated 4

### 52-7235 MIC-Headphone I/O Box

- 4 mic/line inputs with remote preamp 0...63dB, 18dBu max. input level  
phantom power 48V indiv. switchable
- 4 stereo headphone amp outputs
- 4 general purpose inputs, isolated
- 8 general purpose outputs, isolated
- 4 analog control inputs

### 52-7172 3G/HD/SD SDI De-Embedder, HD/SD SDI Embedder

- 2 x 3G/HD/SD SDI De-embedders and 2 x HD/SD SDI Embedders, each: – In, 2x loop through, Out BNC connectors – for 2 audio groups, 8 ch., SRCs – Selectable audio groups 1/2 or 3/4
- 4 GPI, isolated, 4 GPO, isolated

## SFP Modules

52-7321 MADI port, multimode SFP

56 or 64 AES10 MADI input channels and

56 or 64 AES10 MADI output channels

fibre-optic receiver/transmitter – multimode, 50um or 62.5um, 1300nm – LC duplex connector

52-7325 MADI port, singlemode SFP

56 or 64 AES10 MADI input channels and

56 or 64 AES10 MADI output channels

fibre-optic receiver/transmitter – single-mode, 1300nm – LC duplex connector

## b-line Control

In respect to I/O settings the following logic ports have been added to enable the control over two b-line Telephone Hybrids:

From b-line to Intellimix:

Intellimix CU.Connection Status Incoming Call L1	┌	External Logics.Key 28: Incoming Call L1
Intellimix CU.Connection Status Incoming Call L2	┌	External Logics.Key 29: Incoming Call L2
Intellimix CU.Connection Status Connected L1	┌	External Logics.Key 30: Connected L1
Intellimix CU.Connection Status Connected L2	┌	External Logics.Key 31: Connected L2
Intellimix CU.Connection Status Calling L1	┌	External Logics.Key 32: Calling L1
Intellimix CU.Connection Status Calling L2	┌	External Logics.Key 33: Calling L2
Intellimix CU.Connection Status Disconnect L1	┌	External Logics.Key 34: Disconnect L1
Intellimix CU.Connection Status Disconnect L2	┌	External Logics.Key 35: Disconnect L2
Intellimix CU.Audio Status PreTalk L1	┌	External Logics.Key 36: PreTalk L1
Intellimix CU.Audio Status PreTalk L2	┌	External Logics.Key 37: PreTalk L2
Intellimix CU.Audio Status Hold L1	┌	External Logics.Key 38: Hold L1
Intellimix CU.Audio Status Hold L2	┌	External Logics.Key 39: Hold L2
Intellimix CU.Audio Status OnAir L1	┌	External Logics.Key 40: OnAir L1
Intellimix CU.Audio Status OnAir L2	┌	External Logics.Key 41: OnAir L2
Intellimix CU.Status OnAir Any	┌	External Logics.Key 42: OnAir Any
Intellimix CU.Status PreTalk Any	┌	External Logics.Key 43: PreTalk Any
Intellimix CU.Status Ringing Any	┌	External Logics.Key 44: Ringing Any

Name	ID
Connection_Status_Incomming_Call_L1	1111
Connection_Status_Incomming_Call_L2	1112
Connection_Status_Connected_L1	1113
Connection_Status_Connected_L2	1114
Connection_Status_Calling_L1	1115
Connection_Status_Calling_L2	1116
Connection_Status_Disconnect_L1	1117
Connection_Status_Disconnect_L2	1118
Audio_Status_PreTalk_L1	1119
Audio_Status_PreTalk_L2	1120
Audio_Status_Hold_L1	1121
Audio_Status_Hold_L2	1122
Audio_Status_OnAir_L1	1123
Audio_Status_OnAir_L2	1124
Status_OnAir_any	1125
Status_PreTalk_any	1126
Status_Ringing_any	1127

From Intellimix to b-line:

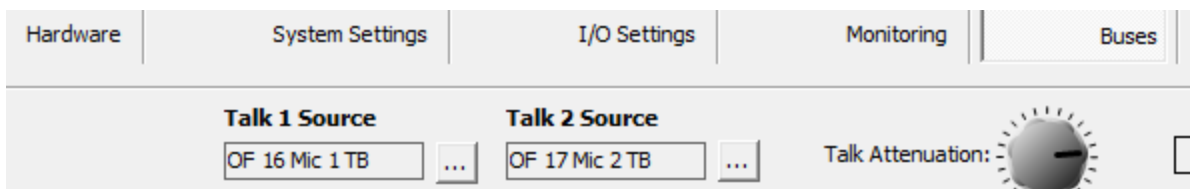
Intellimix CU.Accept Drop Call L1  
Intellimix CU.Accept Drop Call L2  
Intellimix CU.Set Audio Line PreTalk L1  
Intellimix CU.Set Audio Line PreTalk L2  
Intellimix CU.Set Audio Line Hold L1  
Intellimix CU.Set Audio Line Hold L2  
Intellimix CU.Set Audio Line OnAir L1  
Intellimix CU.Set Audio Line OnAir L2

Name	ID
Accept_Drop_Call_L1	35
Accept_Drop_Call_L2	36
Set_Audio_Line_PreTalk_L1	47
Set_Audio_Line_PreTalk_L2	59
Set_Audio_Line_Hold_L1	60
Set_Audio_Line_Hold_L2	91
Set_Audio_Line_OnAir_L1	92
Set_Audio_Line_OnAir_L2	93

All the logic ports are preconfigured. In most instances they can be used without any adjustments. Within b-line the respective logic ports have to be configured to use them. Therefore you need numeric IDs. How to use the IDs within b-line is described in your b-line manual.

## Talkback Level

On the page in respect to buses two entries have been changed. When using previous configurations it might be necessary to adjust them. These are the sources that have been added:



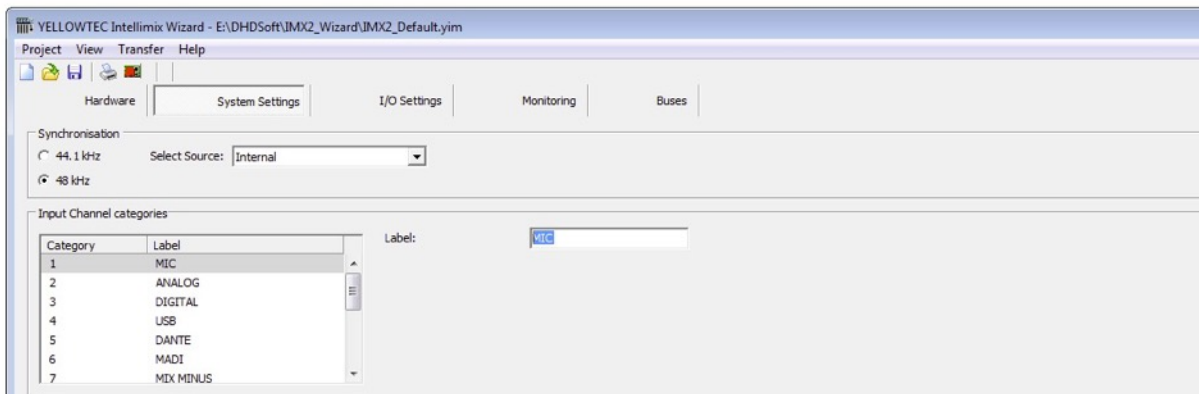
- ☰ Output Functions
- OF 1 MON1 L
  - OF 2 MON1 R
  - OF 3 MON1 SPK Cue L
  - OF 4 MON1 SPK Cue R
  - OF 5 MON1 SPK Vol L
  - OF 6 MON1 SPK Vol R
  - OF 7 MON1 HP Cue L
  - OF 8 MON1 HP Cue R
  - OF 9 MON1 HP Vol L
  - OF 10 MON1 HP Vol R
  - OF 11 RECORD L
  - OF 12 RECORD R
  - OF 13 SILENCE
  - OF 14 MON/CUE L
  - OF 15 MON/CUE R
  - OF 16 Mic 1 TB
  - OF 17 Mic 2 TB
- 

These are two microphone sources controlled via two internal potentiometers. MIC1 and MIC2 are to be handled as usual. The analog signal after the mic preamp is now also available with a controllable potentiometer. Both pots can be operated from the user interface (Main Menu - T/B Level). The values set are saved as snapshots.

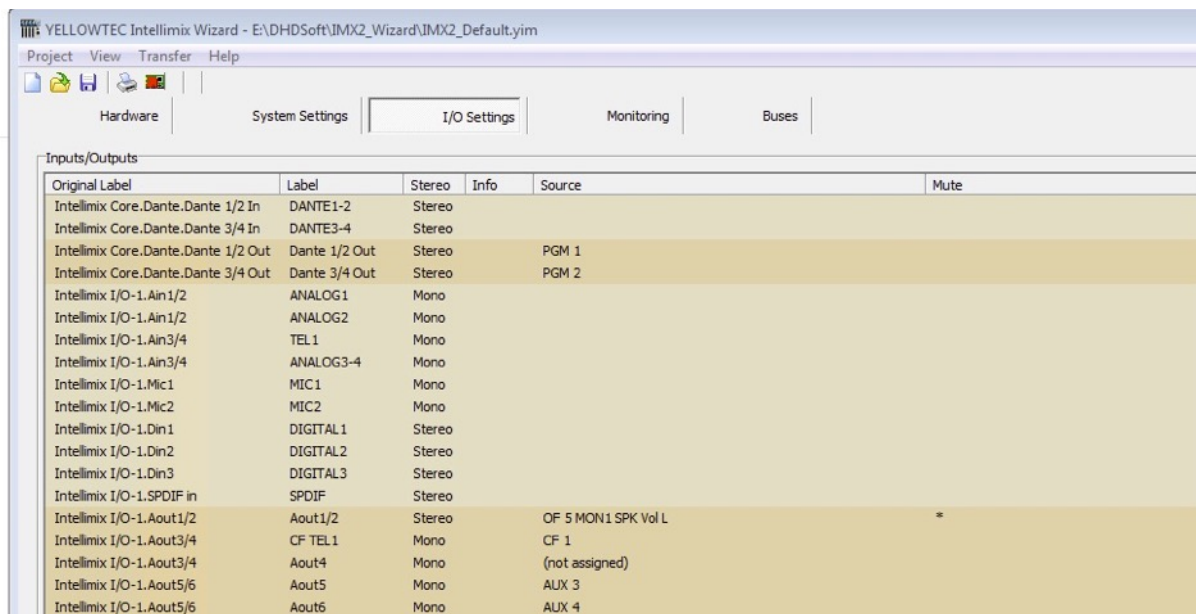
## EXAMPLE 1: Adjusting your microphone source

In this example you can skip the Tab “Hardware” adjustments. Please choose the Tab “System Settings”.

Create the category “MIC” within the list “Input Channel categories”. Therefore, choose a free category inside the list and type a name into the input field to the right of the text “Label:”, in this example the name would be “MIC”. If the category “MIC” already exists, you can rename or maintain it. In general, 16 categories are available which can be named freely.

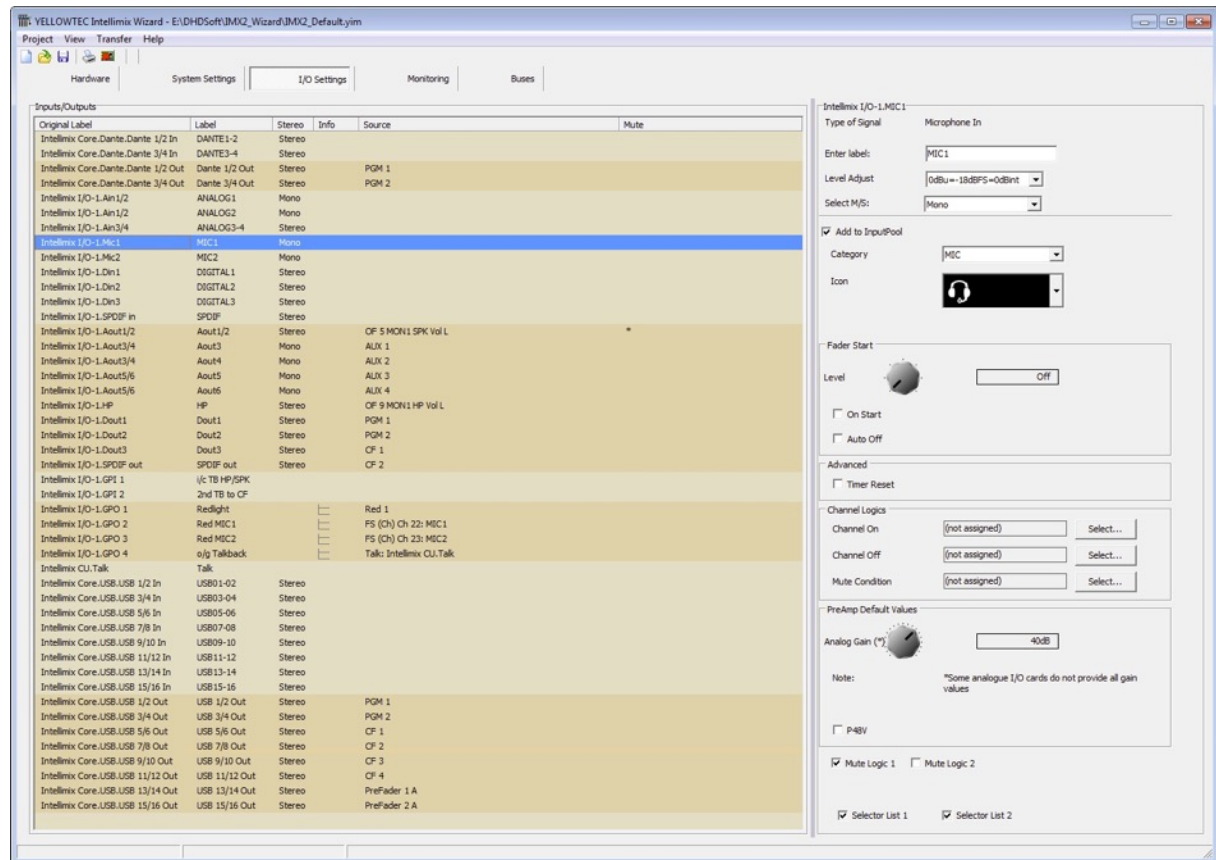


Now please switch to the tab “I/O Settings”. The central list shows all general purpose audio and control inputs and outputs (GPIO’s) available in the Intellimix. You recognize outputs by the entries inside the “Source” column. For inputs there are no entries to be found in the “Source” column.





Choose the list entry with the original label “Intellimix I/O-1.MIC1”. In the right part of the screen adjustable options will pop up.




First give the source an individually chosen name using the “Enter Label” field, e.g. “MIC1”.

The field “Level Adjust” leaves room to choose an individual reference level. In this example we hold on to the default value 6dBu=-12dBFS=0dBint.

Because the microphone is a mono source please select ”Mono” inside the field “SELECT M/S”.

The check mark “Add to Input Pool” should be set to make the source “MIC1” appear on the Intellimix interface as a channel source later on.

Select the previously created category “MIC” within the drop-down-menu “Category”. This results in the display of this source in the sorted view of the Intellimix interface.

Under menu item “Icon” pick the microphone Symbol  . It will appear on your Intellimix interface and facilitates the search for a specific source on the Intellimix.

The next step is to adjust the analog gain in the section “PreAmp Default Values” to a value of 35dB. In addition, please set a check mark for P48V to set a phantom power of 48 volt for this source.

Also set a check mark for “Mute Logic 1”. This serves to prepare your microphone source to mute any desired output as soon as the fader is moved over the faderstart level.

Especially in connection to speaker outputs this is very useful to avoid feedback (see also “Example 3: Speaker Outputs”).

The last two check marks you have to set are to be placed at “Selector List 1” and “Selector List 2”.

Remark: “Selector List 1” is the interception list for monitoring while “Selector List 2” serves as the recording list.

Save your entries by saving an existing configuration under “Project/Save” or select “Project/Save as..” to assign a new name to a configuration.

For all changes to become effective it is necessary that the configuration is loaded to the Intellimix hardware. For more information go to the section “Loading a configuration to Intellimix”.

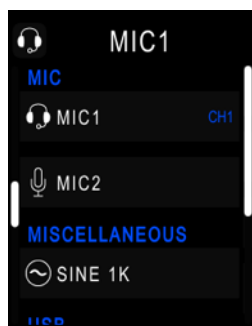
Afterwards select the set up source “MIC1” on the Intellimix’s interface by opening the SourceSelector or by tapping on it.

A list consisting of all categories and their assigned icons will be displayed. Under the category “MIC” you can find your source “MIC1”.

If the source already has been added to a channel, Intellimix will display this with the use of the annotation like “CH1”. This source cannot be added to a second channel simultaneously.

If the source is free (no “CHn” annotation), the source can be added to a channel by tapping and is ready to be used immediately.

Close the SourceSelector by once more tapping on the source name in the channel section’s upper part.



When you press the ON button (ON illuminates red) and move the fader above the lowest possible position, the red LED's below the Intellimix Control Unit glow red (applies only for microphone inputs) to signalizes that a microphone is open.

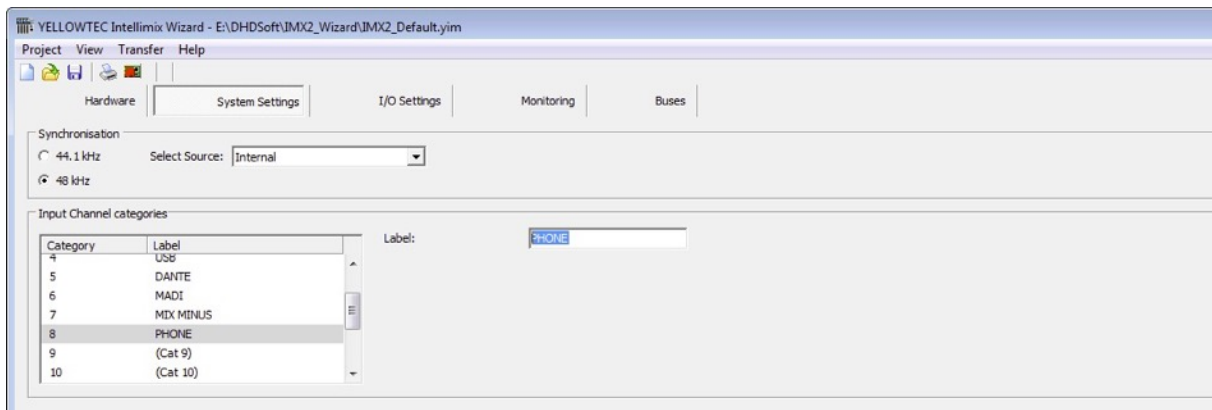
To optionally modify the redlight via GPO please read "Example 4: Assign Redlight GPO".

In case that the speakers are not muted, it is essential to read "Example 3: Speaker Outputs".

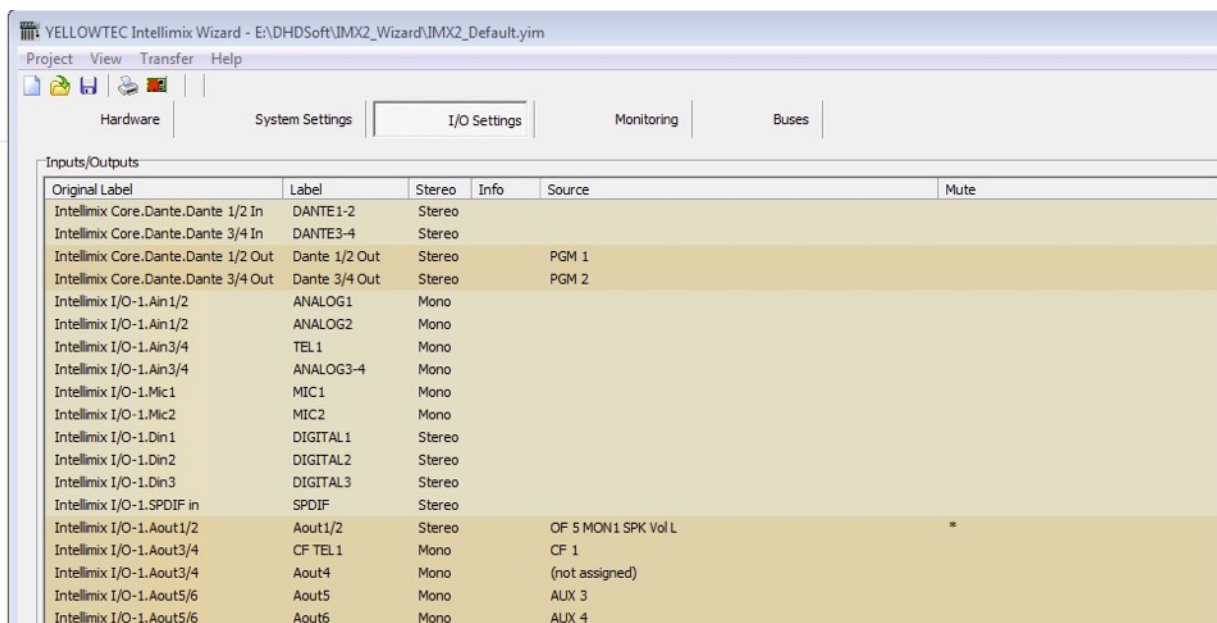
## EXAMPLE 2: Adjusting a telephone source and MIX-MINUS

In this example you can skip the tab “Hardware” adjustments. Please select the tab “System Settings”.

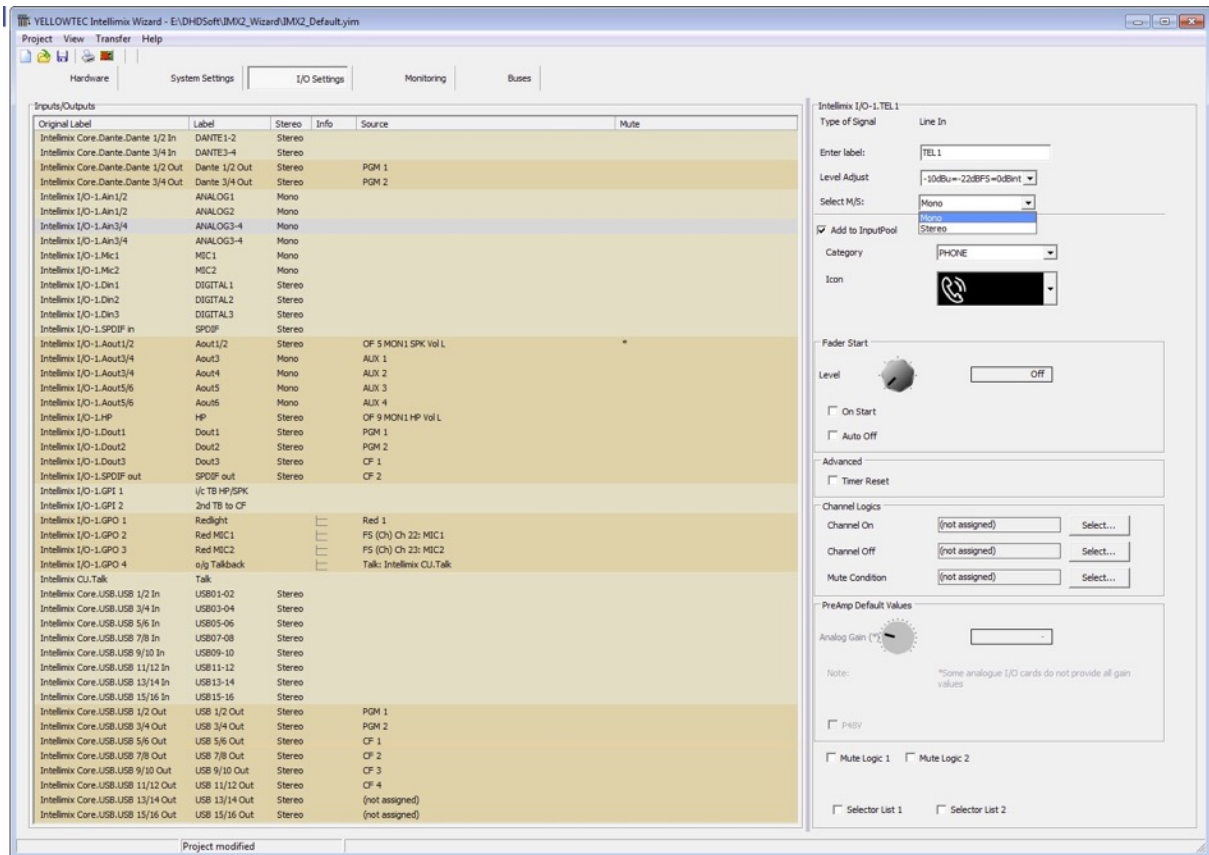
Create the category “PHONE” within the list “Input Channel categories”. Therefore, choose a free category inside the list and type a name into the input field to the right of the text “Label:”, in this example the name would be “PHONE”. If the category “PHONE” already exists, you can rename or maintain it. In general, 16 categories are available which can be named freely.



Now please switch to the tab “I/O Settings”. The central list shows all general purpose audio and control inputs and outputs (GPIO’s) available in the Intellimix. You recognize outputs by the entries inside the “Source” column. For inputs there are no entries to be found in the “Source” column.



Choose the list entry with the original label “Intellimix I/O-1.Ain3/4”. These are the cinch inputs 3 (left) and 4 (right). In the right part of the screen adjustable options will pop up.



First give the source an individually chosen name using the “Enter Label” field, e.g. “TEL1”.

The field “Level Adjust” leaves room to choose an individual reference level. In this example you should change the value to -10dBu=-22dBFS= 0dBint as we use the analog cinch line input. Of course you could also use any other input. It doesn’t matter if it is a digital or analog one as long as the connected device has the matching remote station.

Because the telephone is a mono source please select “Mono” inside the field “SELECT M/S”. You will see that there will be two mono sources named “TEL1” in the central list. Because you only need one mono input (the left one) for the telephone, rename the second mono input (the right one) to “free”. Later this input can completely independently be used for another mono source.

The check mark “Add to Input Pool” should be set to make the source “TEL1” appear on the Intellimix interface as a channel source later on.

Select the previously created category “PHONE” within the drop-down-menu “Category”. This results in the display of this source in the sorted view of the Intellimix interface.

Under menu item “Icon” pick the headphone symbol. It will appear on your Intellimix interface and facilitates the search for a specific source on the Intellimix.

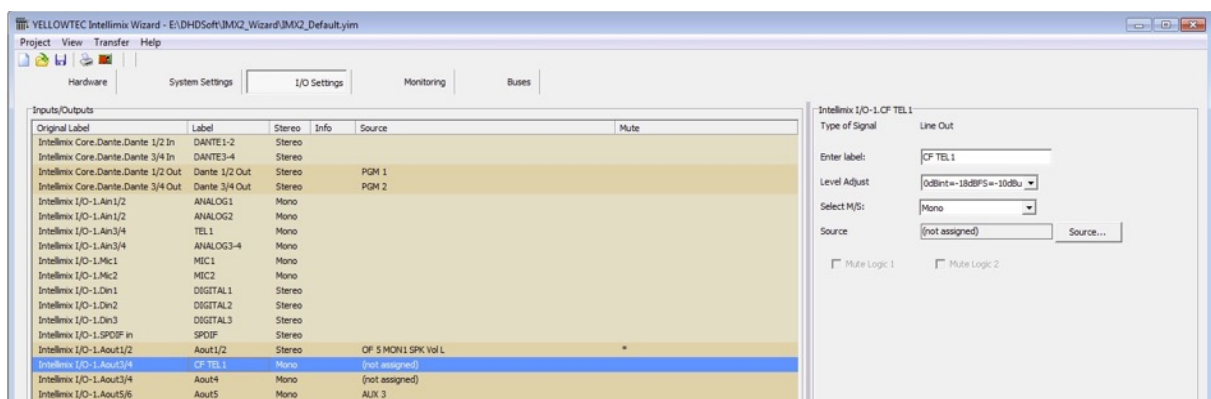
In a final step, put a check at the options “Selector List 1” and “Selector List 2”.

Remark: “Selector List 1” is the interception list for monitoring while “Selector List 2” serves as the recording list.

## MIX-MINUS Adjustments

Because a telephone also requires a mix-minus output, we create one. Later on you will come back to this step to assign the (not yet) available “source” to the mix-minus output.

Select the central list “Intellimix I/O.Aout3/4” and change its format from stereo to mono within the field “Select M/S”. Rename the output to “CF TEL1”. Set a reference level of 0dBint= -18dBFS= -10dBu.



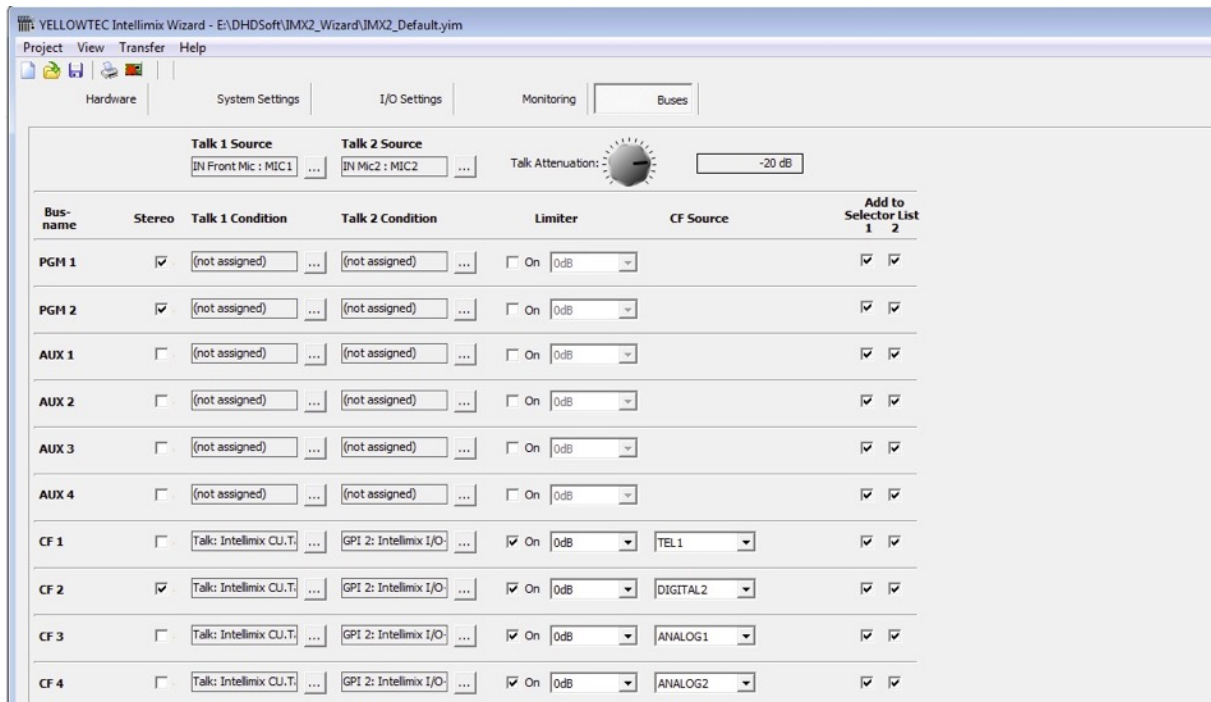
**REMARK:** “CF” is the abbreviation for “Clean Feed” which is another name for mix-minus.

Now go to the tab “Buses” and you will see that the Intellimix has 2 program, 4 AUX and 4 clean feed busses.

In this example we set up a clean feed (mix-minus) bus which will automatically be created by the Intellimix. Alternatively, you could also use an AUX bus for this mix-minus return line.

As we use a mono return line, un-mark the corresponding check-mark under line “CF1” in the “Stereo” column. This makes the generated bus be a mono bus.

Select the entry “Intellimix CU.Talk” (= Intellimix Control Unit Talk Button  ) within the knot “GPIs” in the column “Talk 1 Condition’s” selection window.



In the column “CF Source” choose “TEL1”. If this item does not appear in the list, the source is already assigned to another CF. In this case delete “TEL1’s” assignment to another CF and reassign “TEL1” to “CF1”.

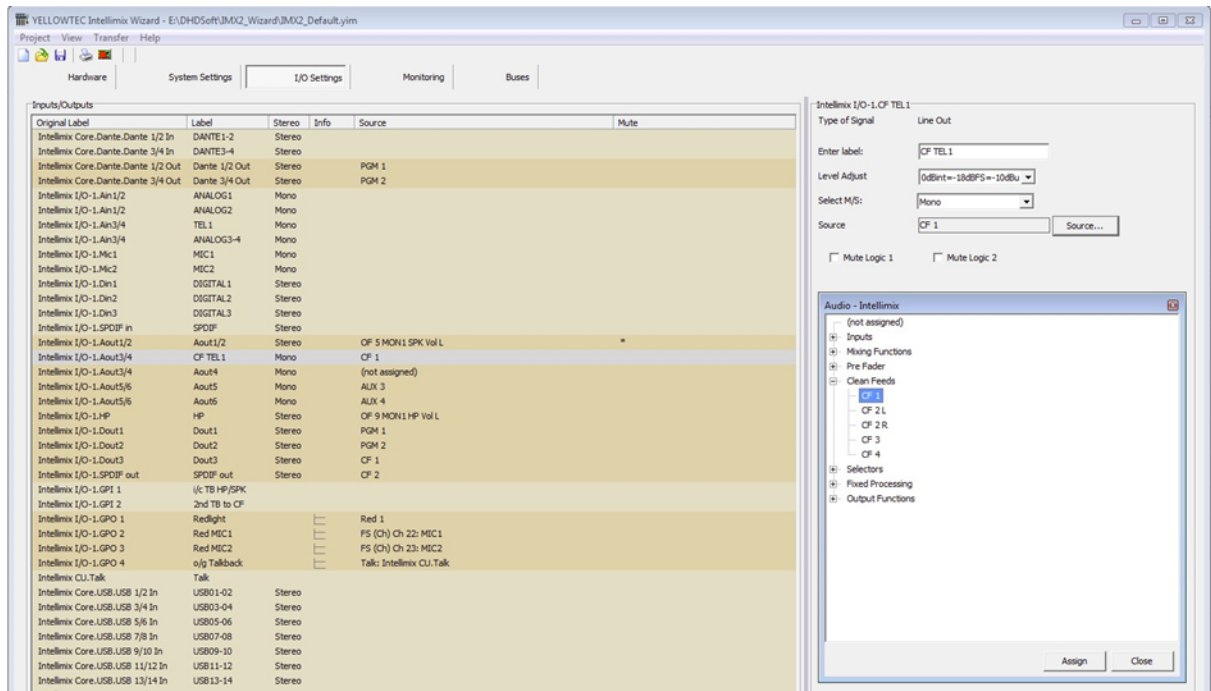
The check marks “Add to Selector List 1 and 2” perform as described above.

Within the column “Talk 1 Source” you specify the source which is used to return calls whenever the “Talk Button” is pushed. Choose “Microphone 1”. Therefore, push the button and choose the knot “Inputs/Intellimix I/O-1 MIC1” within the selection window.

The button “Talk Attenuation” is used to set up the damping of the signal when the “Talk Button” is used to speak into the bus. This serves to increase the command’s clarity in relation to the useful signal.

Return to the tab “I/O Settings” and the central list’s output “CF TEL1”.

Select the field “Source” by clicking on the button “Source” inside the selection window and choose the know “Clean Feeds”. Afterwards select the “CF1” bus by double click or drag and drop.



**REMARK:** Clean Feed Busses are automatically calculated by the Intellimix:

If the source is routed on the “PGM1 Bus”, the Clean Feed contains the “PGM1 Bus” without the source itself.

If the source is routed on the “PGM2 Bus”, the Clean Feed contains the “PGM2 Bus” without the source itself.

If the source is routed on the “PGM1 Bus” and “PGM1 Bus ” at the same time, the Clean Feed contains the “PGM1 Bus” without the source itself.

Save your adjustments by saving an existing configuration via “Project/Save” or by naming a new configuration under “Project/Save as..”.

For the changes to become effective the configuration has to be loaded to the Intellimix hardware. Therefore, please read the section “Loading a configuration to Intellimix”.

Afterwards you can access the source “TEL1” on your Intellimix’s interface by opening the SourceSelector and clicking on it.

What you see is a list consisting of categories (and icons). Your source “TEL1” is listed under the category “PHONE”.

If the source already has been added to a channel, Intellimix will display this with the use of the annotation like “CH1”. This source cannot be added to a second channel simultaneously.

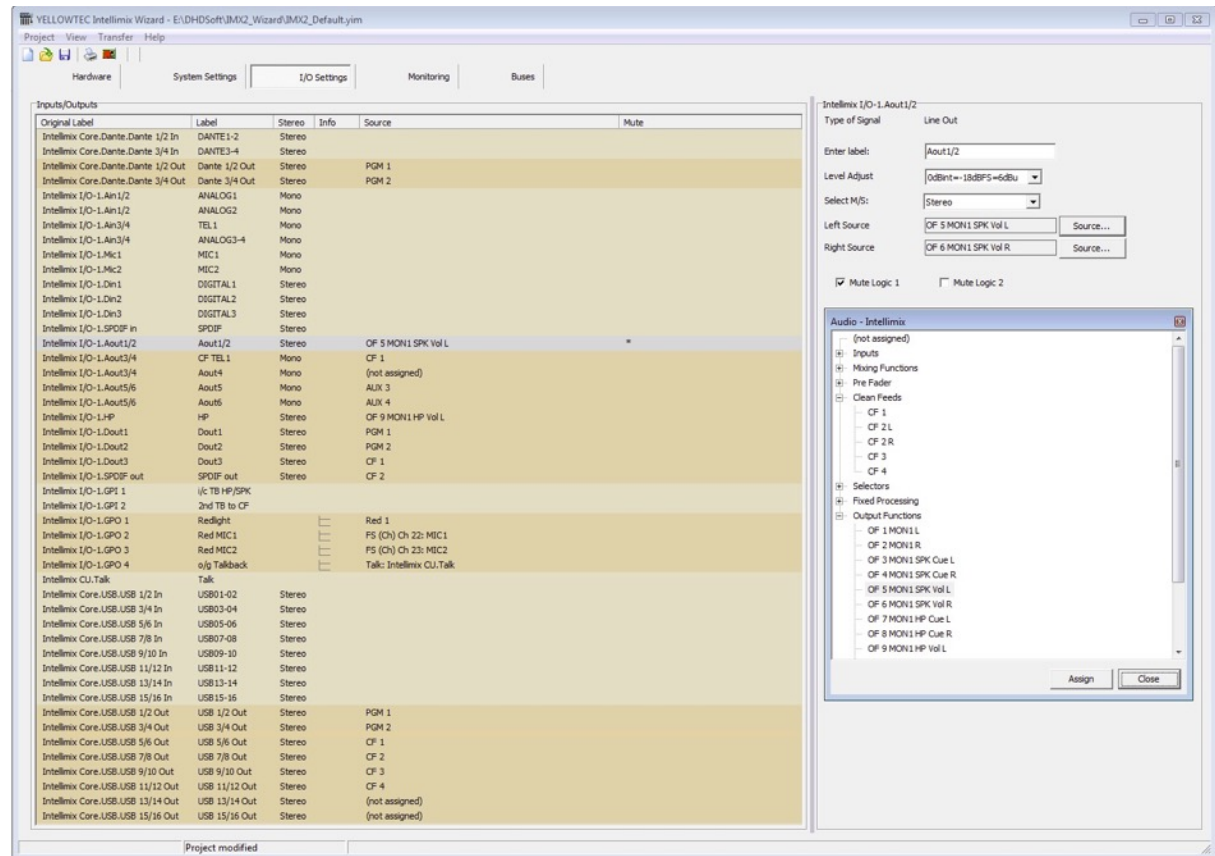


If the source is free (no “CHn” annotation), the source can be added to a channel by tapping and is ready to be used immediately.

Close the SourceSelector by once more tapping on the source name in the channel section’s upper part.

## EXAMPLE 3: Adjusting Speaker Outputs

Go to the tab “I/O Settings” within the Wizard. Select the output “Intellimix I/O-1.Aout1/2” listed in the central list. The right part of the window provides you with different options to make adjustments.



First change the output label to “MAIN LSP”.

Leave the reference level set to 0dBint = -18dBFS = 6dBu.

Change the format to “Stereo”.

Afterwards, you can assign the monitor selector for the speaker under “Left Source” and “Right Source”.

Push the “Source” Buttons and choose the selection windows knot “Output Functions”. Select the entry “OF 5 MON1 SPK VOL L” for the “Left Source” and “OF 6 MON1 SPK VOL R” for the “Right Source”.

CAUTION: Both monitor selector and volume potentiometer are already installed as “Output Functions”. If you decide to assign another signal to the speaker outputs, there is no way of adjusting volume changes from the user interface!

Both check marks for “Mute Logic 1” and “Mute Logic 2” have already been discussed above.

Check the respective field for the speaker outputs. This ensures that the output is immediately muted as soon as one of the sources (in this example “MIC1”) is activated and its respective fader is being opened. Thus, in this example an acoustic feedback between the speakers and the opened microphone is prevented.

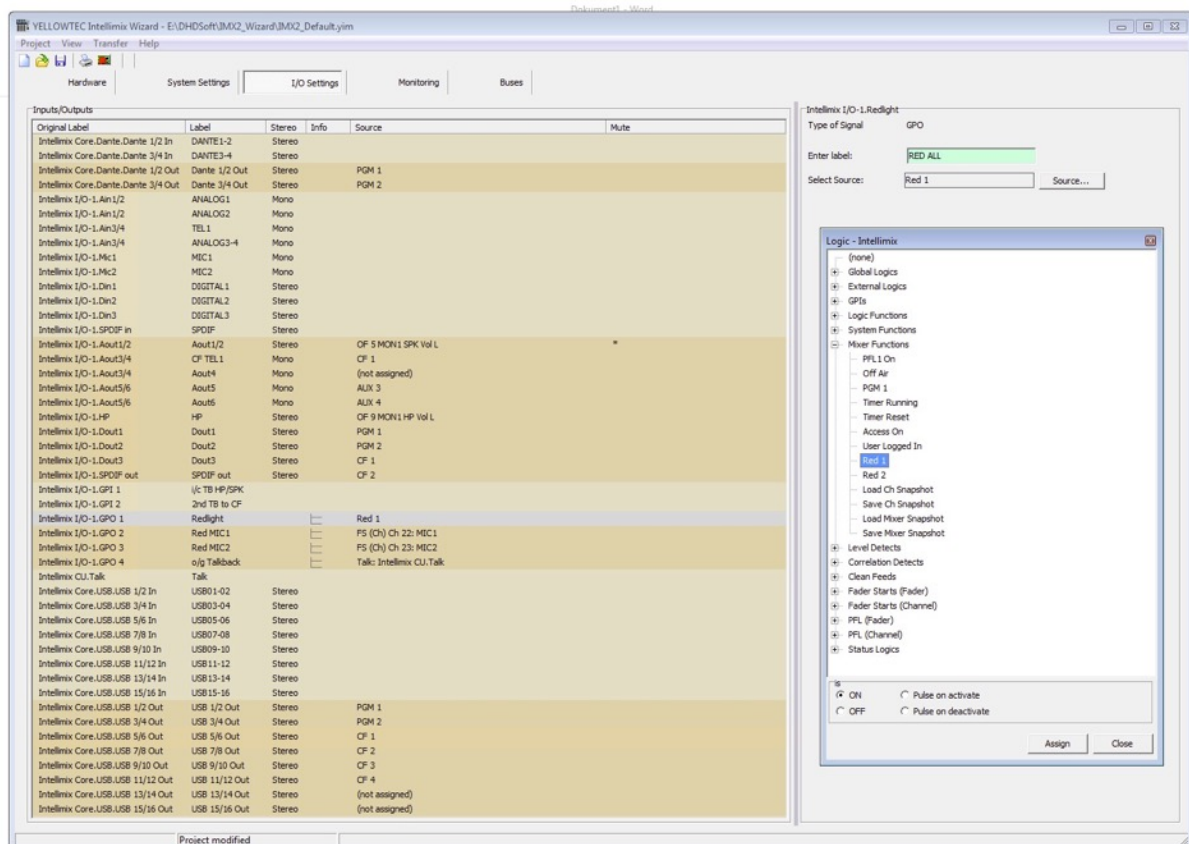
## EXAMPLE 4: Assigning the redlight GPO

Let's say you already configured "Example 1: Adjusting your microphone source" and now you want to add a redlight control for your microphone MIC1.

Therefore, open the existing configuration file (".yim") with the help of the Wizard and go to the tab "I/O Settings".

Then choose the central list's entry "Intellimix I/O-1.GPO 1".

In the right part of the screen the options available for this control output (GPO) are being displayed. Now it is time to name the output with the use of the label field, e.g. name it "RED ALL".



The GPO is to be active whenever the fader assigned to "MIC1" (and/or "MIC2") is open.

In general, this GPO is called "Redlight" and it can also serve the control of Yellowtec's litt Signaling Device.

Push the "Source" button to open the selection window. What you will see are the Intellimix's available logic triggers. Select the knot "Mixer Functions" and the item "Red 1".

The general redlight configuration is thereby completed. In addition, you have the option to create an individual redlight which is only activated when your source "MIC1" is being activated. This individual redlight can for example be used to control Yellowtec's m!ka On Air Microphone Arms' signaling.

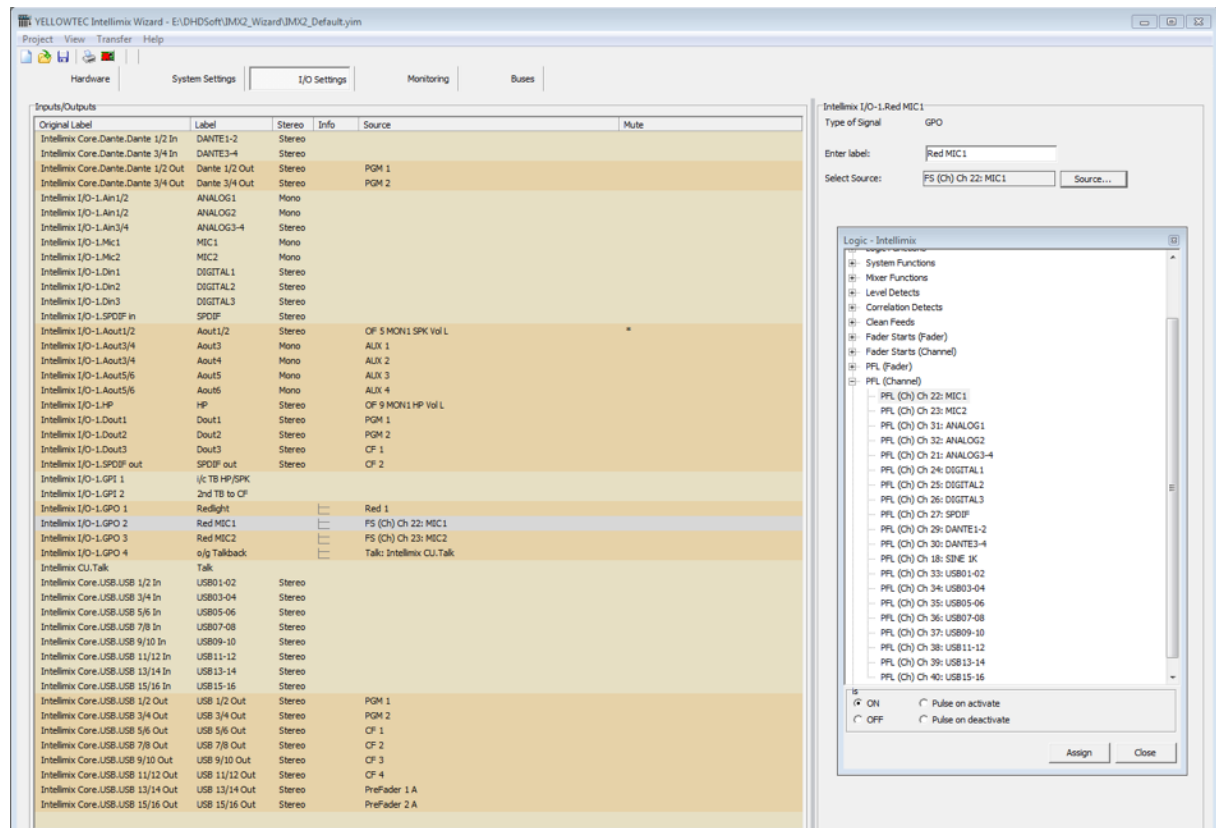
In the central list choose the entry “Intellimix I/O-1.GPO 2”.

Name the output with the use of the label field, e.g. “RED MIC1”.

As a logic source select the “Fader Starts (Channel)” knot’s entry “FS(Ch)..: MIC1”.

The GPO is now configured to be triggered by the opening of your fader “MIC1”.

Save the configuration and load it to Intellimix as described in the section “Load Configuration to Intellimix”.



## Communication / Protocols



### Ember+

As you start the Wizard, the Ember+ protocol is available in the Intellimix. The implementation was realized as controlled device – the so-called Ember+ provider.

The following functions are currently featured:

- Receiving 50 Ember+ GPIs
- Sending 50 Ember+ GPOs
- Receiving and sending labels of fader channels
- Controlling fader levels
- Reading fader levels
- Audio routing

**ATTENTION!** The data transmission is realized via TCP/IP. Intellimix has to be connected by suitable network technology with the controlling system – the Ember+ -consumer – in order to allow this TCP/IP data transmission.

**Note:** An Ember+ consumer (e.g. VSM or the like) is necessary. It is not possible for Intellimix devices to exchange data directly without the consumer.

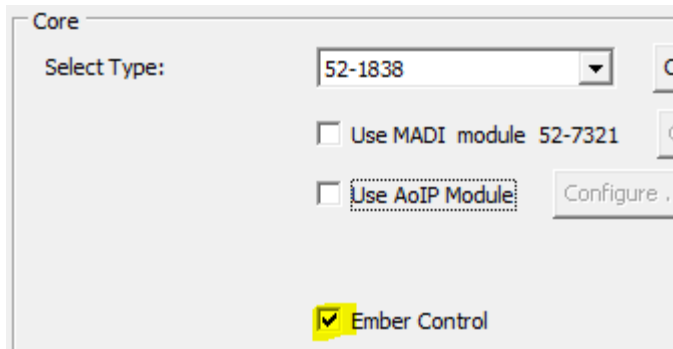
The Ember+ implementation has been tested with the Ember+ Viewer and with VSM (Virtual Studio Manager).

### TCP/IP Connections to the Ember+ Protocol Interface

This TCP/IP port must be open: Port 9000

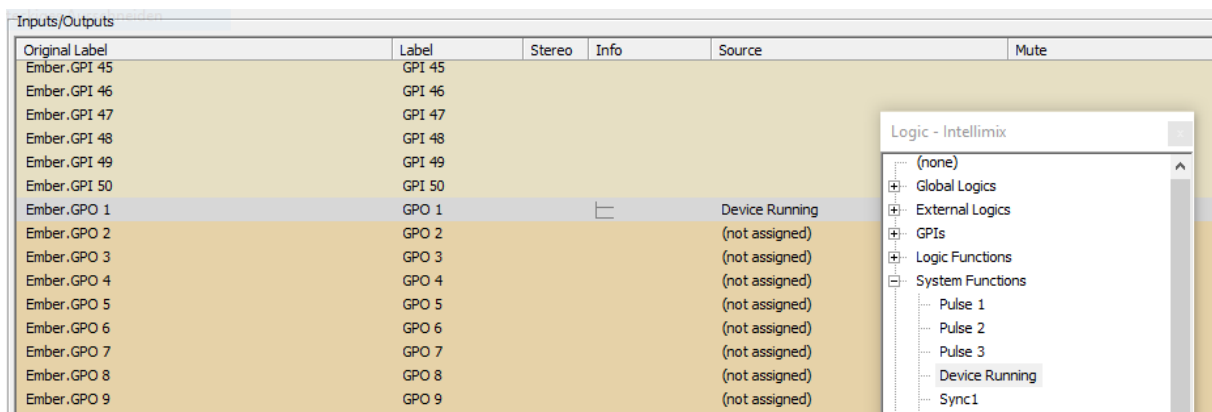
## Wizard / Hardware Page

Set the “Ember Control” checkbox to use Ember+.



## Wizard / I/O Settings

The Ember+ GPIOs appear in the list of logic sources. There they can be assigned with other logic source and destinations.



## DHD Protocol

Besides Ember+, there is also a DHD protocol available for Intellimix. More information about it is available on request.

# Firmware Update

## System Update

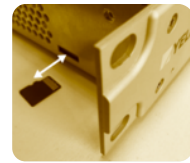
Download the current version of Intellimix firmware here:

[www.yellowtec.com/intellimix/downloads.html](http://www.yellowtec.com/intellimix/downloads.html)

There are two methods to update your Intellimix's firmware:

### 1. Without the "Wizard"

Disconnect your Intellimix from the electric power supply by pulling the mains plug. On the Base Unit's left side you find a MicroSD-Card slot. Eventually, it is covered with a sticker for safety reasons. Remove this sticker and take out the SD-Card by pushing it inwards (e.g. with your fingernails) until the card pops out. Put the Micro-SD-Card inside a suitable card-reader and connect it to your PC.

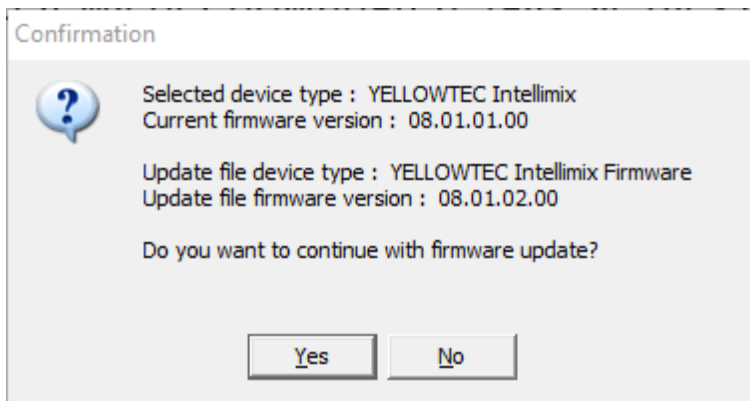


Rename your current firmware file ("intelli-8.1-x.x.fw8") to "fw.fw6" and duplicate it to the SD-Card ("Replace file" -> "Yes"). Disconnect the card from your PC ("Safely remove hardware") and put it back inside your Base Unit's card slot with the contacts pointing upwards. If you turn on your Intellimix, the rest of the update is executed automatically. This will take around 2 minutes.

### 2. With the help of the "Wizard" ([www.yellowtec.com/intellimix/downloads.html](http://www.yellowtec.com/intellimix/downloads.html))

If your Intellimix is already connected with a Windows computer, start the Wizard and open the "Maintenance Window" as described in the Wizard Manual (page 6).

In the left column you have to choose your Intellimix. Open the menu "Update -> Update Firmware" and navigate to the firmware file (intelli-8-1..fw8) you want to update to. It is possible to downgrade the firmware whenever you wish to do so.



Confirm with a “Yes” if you wish to carry out the update. Afterwards, a loading bar is being displayed before you are prompted to restart your Intellimix.

In both cases the update is nearly completed at this point. As soon as all the Intellimix’s internal systems have got access to the new firmware, the display of your Desktop Unit will show the following message. Please turn off your intellimix and start it again to complete the updating process. Now you can use the new version.



*Remark:* Please restart the Intellimix system by turning Intellimix off and on if the display stays black for a certain period of time while the faders are already fully functioning again.

*Remark:* In individual cases older setting might have become invalid because of new functions and bug fixes. If so, please check the respective settings and save them within the snapshots again.

*Recommendation:* After updating the firmware and restarting the system, you should restore the factory settings. Therefore, use the menu “Admin/System/Factory Defaults”.

**ATTENTION!** Doing so, all the previously saved users and their settings will be lost.