2 CHANNELS FM MPX DETECTOR

The detector is designed to monitor 2 MPX signals and switch to the output. The input that is active, so connected to the output, is also displayed on the display and the audio signal is audible on the headset.

If the "main" input (MPX input 1) is lost, MPX input 2 will be switched to the output. This is visible on the display of the detector by the text BACKUP: MPX2. This text also blinks so it is clear that the main input has failed.

Switching the mpx signal (from one of the inputs to the output) is done by a relay so that the signal is not affected.

The detector also checks the 19Khz signal. Its status can be seen in the web interface.

The detector has a network interface for displaying status, configuring configuration and sending alerts. Status notifications occur by means of Emails. The settings for this can be done in the web interface. This interface can be operated via a web browser (Firefox, Google Chrome, etc.).

SWITCHING ON / OPERATING

At the front there is a large display of 40 × 2 characters; On the right there is also a button for menu operation, the so-called rotary encoder and finally a headset jack.

Upon switching on, the circuit will start up. This is visible because the display shows the text:

After about 8 seconds, the system is started and the status of the detector will be visible on the display.

This shows a DIN PPM meter and the status of the MPX input. MAIN: MPX1

This means that the stereo signal is visible from MPX input 1 and is available as the main signal on the output.

In order to check the connected sources, the rotary encoder can be turned to the right. The display now shows the text: LEVEL MPX1.

The signal from mpx input 1 can be seen on the meter and the corresponding audio is heard on the headset. By turning right again right now, input 2 can be checked (LEVEL MPX2). Rotate counterclockwise returns to the main menu step by step. Thus, all 2 inputs can be checked for the presence of signal.

If the circuit is not in alarm, after 3 minutes, the backlight of the display will go out to save energy. Pressing the rotary encoder once again will turn backlight back on. The backlight also turns on when the backup is activated.

There is a menu available through the display where some settings can be made. All other settings go through the web browser

The settings via the display are: Level Phones, Input Level, Channel Separation, Ip Address and Display Settings

Level phones is to set the volume of the headphone output in steps of 1dB.

Input level sets the input level. This means that the input signal is not too soft. The detection can only work properly if the meter has sufficient output. Set this controller to cause the meter to reach 0dB.

Channel separation to listen with stereo headphones, there is a stereo encoder in the detector. With this controller, the channel separation can be adjusted if necessary.

Ip address has 2 possibilities. Setting a fixed ip address: 192.168.0.5 or the option for dhcp. The latter means that, if this dhcp supports, the router of the network automatically assigns an ip address to the detector.
With a network scan, the ip address can then be found. The detector is named MPXLCD2 or MPXLCD2.lan.

Finally, the **display settings**. Here you can adjust the contrast and intensity of the backlight.

WEB-INTERFACE

The other settings can be viewed or configured via a web browser.

There are 3 web pages in the detector for this:

1. **Status.** Here you can read the status of the inputs and make the settings for the detector.
2. **Email.** The settings for sending an email in case of signal failure
3. **Network.** Here you can make the settings for the network.

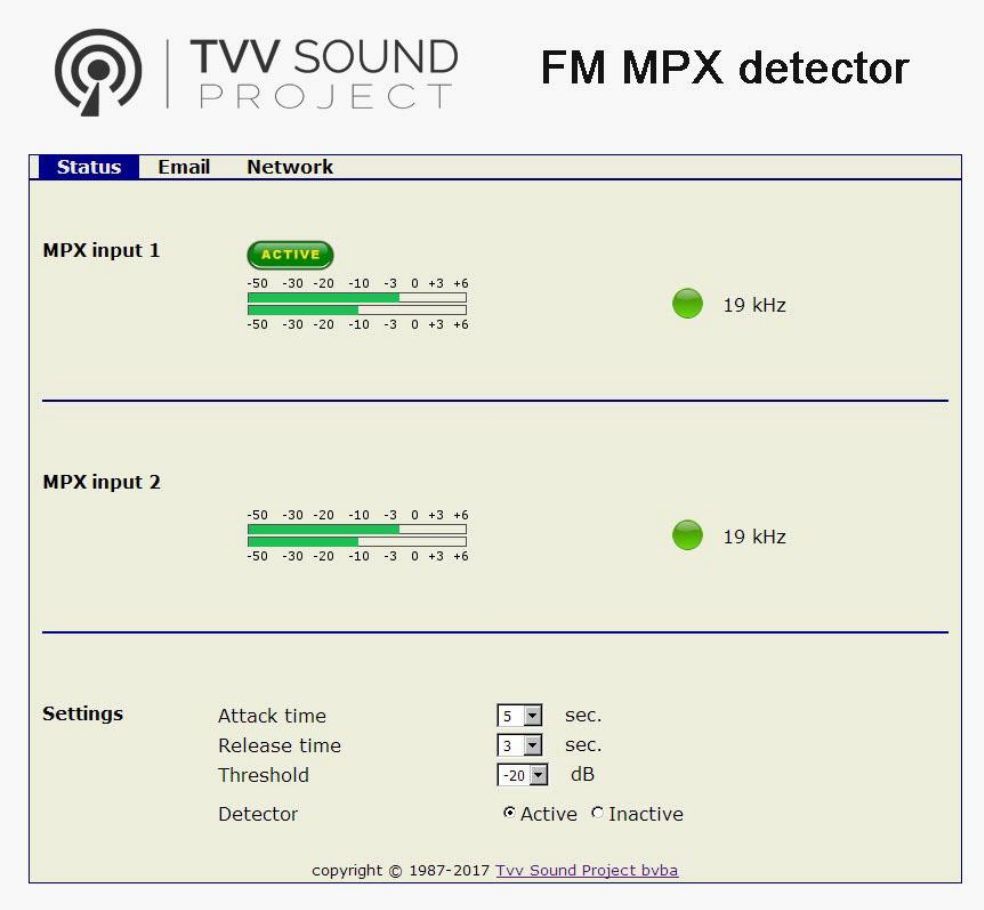
When you search for the detector's web interface, you will be asked for a username and password ("User name" and "Password").

When using the detector, the User Name and Password are:

admin admin

It is recommended to customize the user name / password in the Network page.

THE STATUS PAGE



The top half of the page shows the status of the 2 connected sources: MPX input1 and MPX input2. Input 1 is the main source and will always be connected to the output if this signal is on. This is visible by the text ACTIVE. The meter (s) can see if there is a signal. With each input there is also a signal for the 19Khz. If present, the signal is green, in the absence of red.
In the bottom half, Settings have a number of settings.

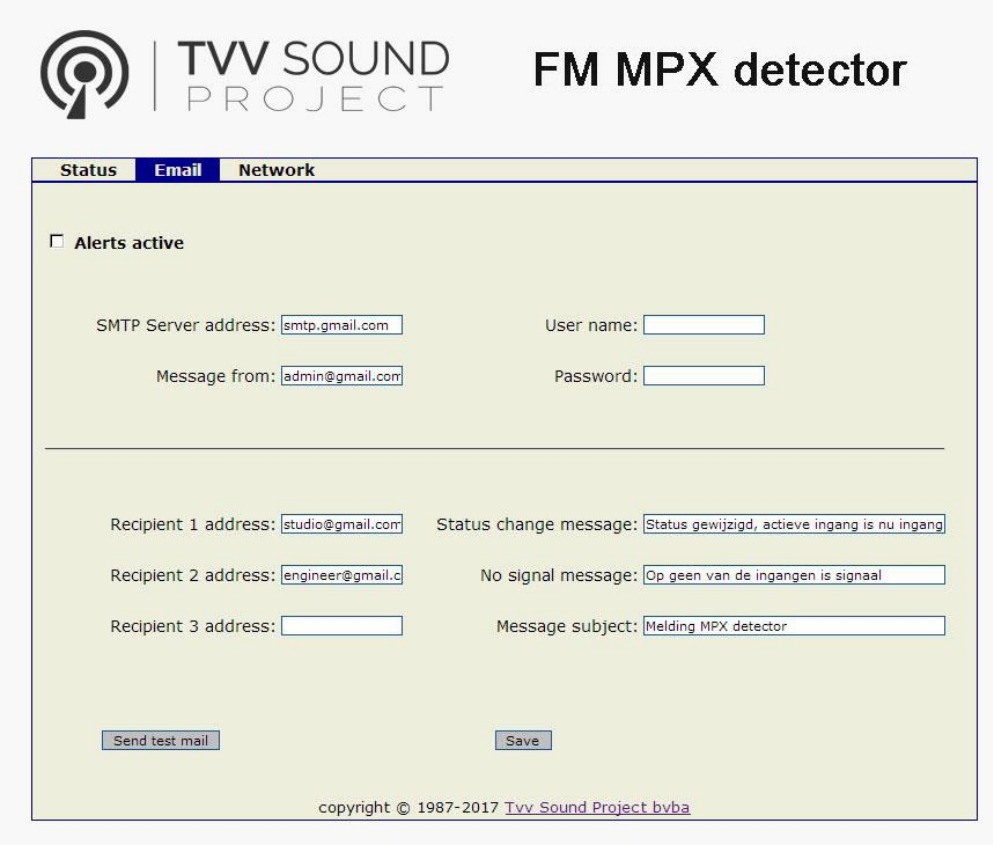
1. **Attack time.** Adjustable between 1 and 60 seconds. This reduces the time between the drop-in of the input signal and the switch to the backup input.

2. **Release time.** Adjustable between 1 and 60 seconds. This time is counted off when returning the program signal and switching back from a backup input

3. **Threshold.** The threshold at which the detector operates. Adjustable between -10, -20 and -30 dB (values of the meter)

4. **Detector active.** When inactive, no backup input is switched on silently.

THE EMAIL PAGE



The email page provides the ability to send emails of a status change.

1. **Alerts active**. Whether or not messages should be sent if silence has been detected. Changing this setting will be automatically saved.

2. **SMTP server address**. The address of the mail server where the mail should be sent. Here, if desired, a dot can be left behind and then a port number.

3. **Message from**. Email address of the sender.

4. **User name and Password**. Fill in only if needed on the used network.

5. **Recipient1 - 3 address**. Here you can enter up to 3 addresses where the emails are sent to you.

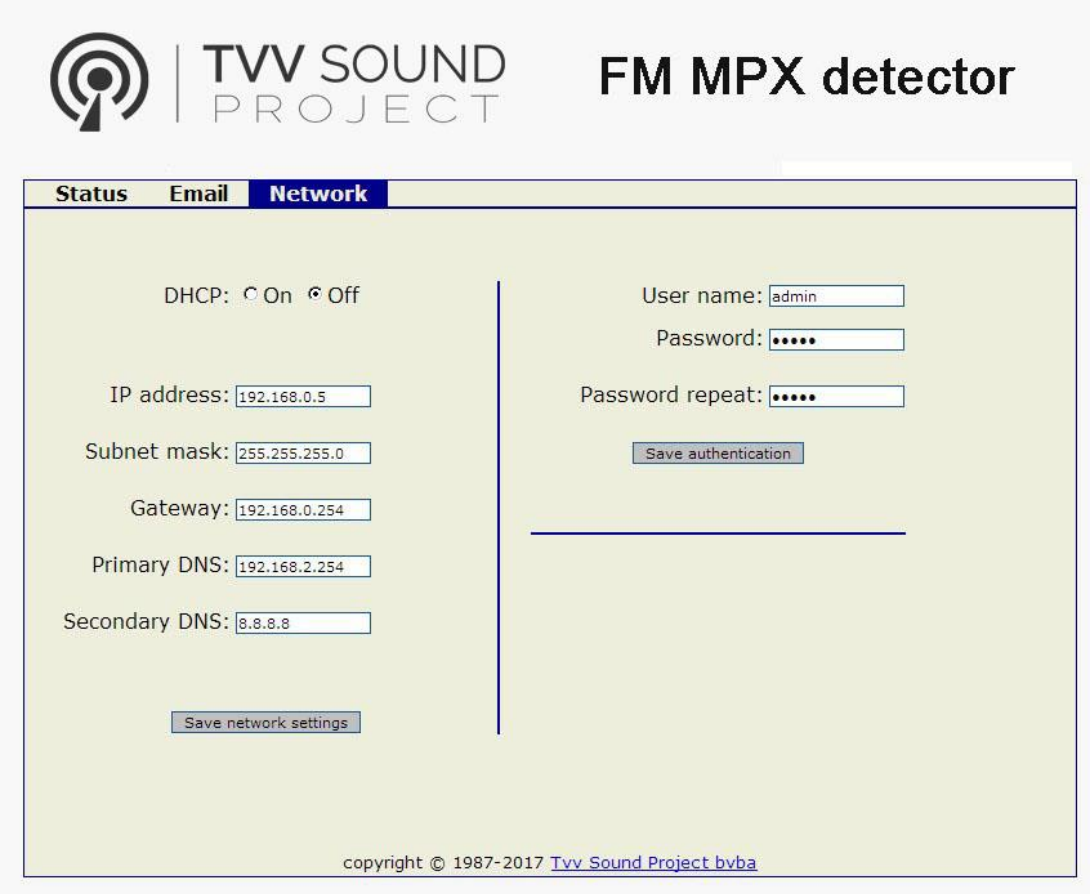
6. **Status change message**. The message that is sent when silence is detected or a status change is.

7. **No signal message**. The message sent if no signal is present on all inputs.

8. **Message Subject**. Here you can enter the name of the detector location

At the bottom left of a button to send a test mail. If this button is activated, a test mail will be sent to the indicated addresses. A box appears on the screen that contains all information about this mail. This allows you to see immediately why an email may not being sent.

THE NETWORK PAGE



The 3rd page is for the settings of the IP address and password when logging in.

On the left hand side, as shown in the example, the data for the IP address and the like can be entered. You can also choose DHCP (automatic IP address) or a manually entered IP address.

If this is entered, click the button: Save Network Settings

In the right hand side, enter the username and password required to log in via the web browser. Then press Save authentication to save the data.