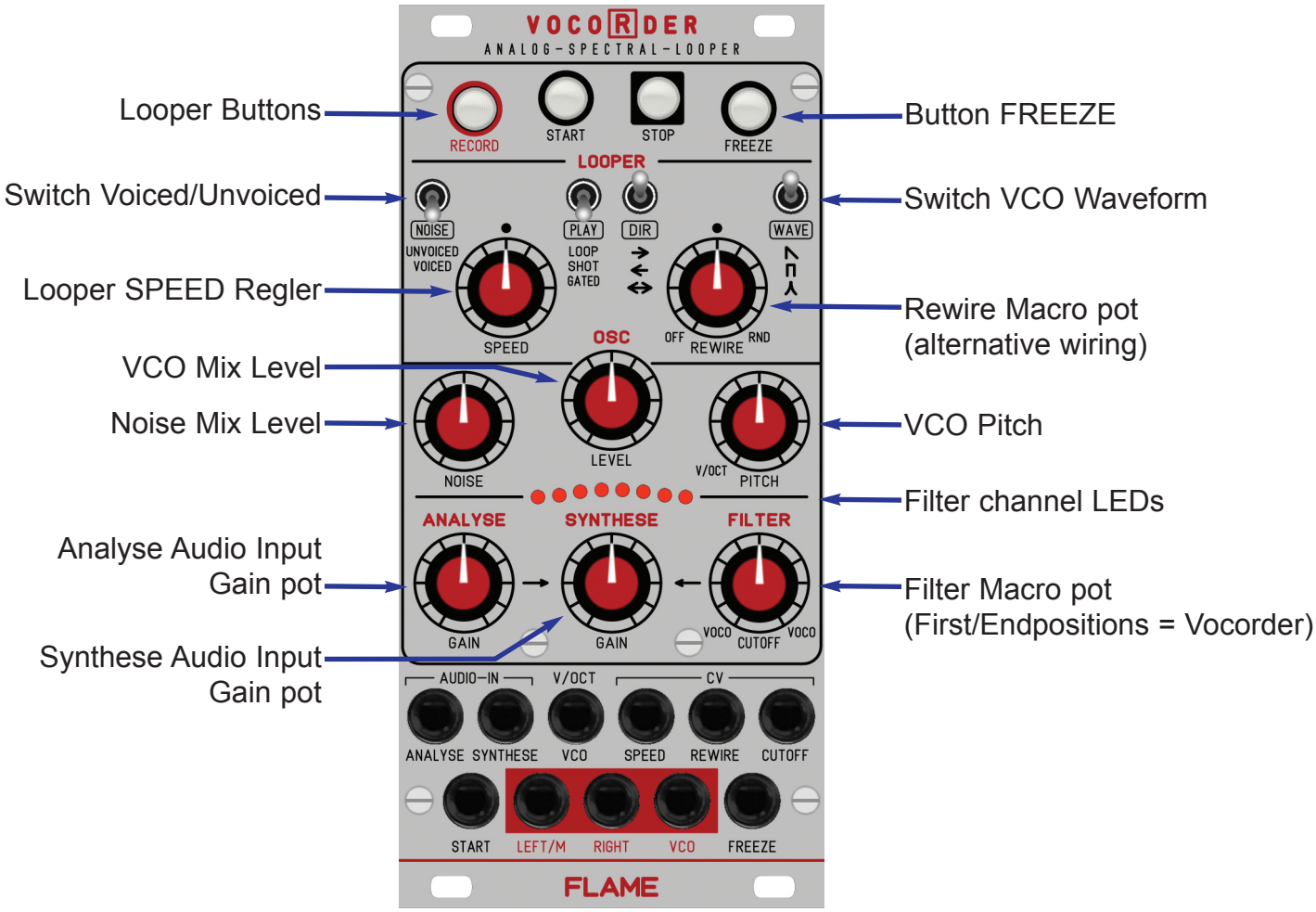
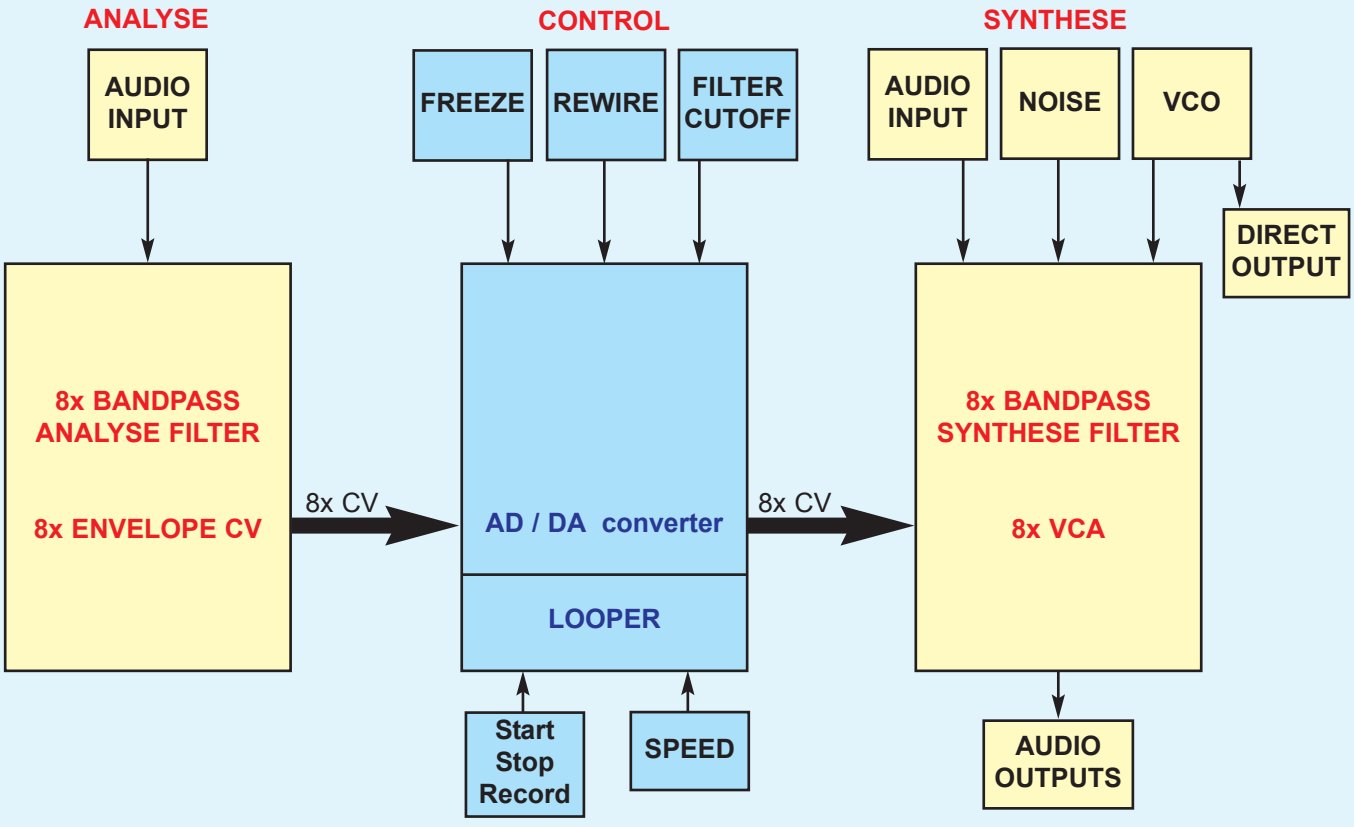
QUICKSTART FLAME VOCORDER MODULE



BLOCK DIAGRAM



FUNKTION OVERVIEW

CLASSIC VOCODER

To operate the module as a “classic vocoder”, the looper must be stopped.
The “FILTER CUTOFF” control must be set to “VOCO” (start or end position). This routes the analysis envelope CVs directly to the synthesis VCAs.
The REWIRE controller must be set to OFF so that the channel bands are assigned directly.
Apply an audio signal to be analyzed (e.g. spoken words) to the analysis input and control it with the GAIN control (the 8 channel LEDs indicate the level). Do not overdrive the level in order to maintain the dynamics of the audio signal.
In order to hear something at the output, a synthesis signal must be turned up. Three sources are available for this: internal noise generator NOISE, internal VCO, or an external audio source at the synthesis input. All three sources have a mix control.
The pitch of the internal VCO is adjusted with the PITCH control.
With FREEZE you can “freeze” the current filter status.

FILTERBANK

If the control CUTOFF is not set to “VOCO”, the analysis envelope CV (or the recorded CV) is not routed to the VCAs of the synthesis filter, but the filter channels are manually increased by an algorithm. This simulates up to 3 filter types: lowpass, highpass and bandpass. By turning up the regulator you can walk through these three types of filters. The LEDs of the filter channels indicate this. So you can use the synthesis filter as a simple, controllable filter bank.

REWIRE

This controller changes the assignment (cabling) of the filter channels. In the OFF position, the CVs of the channels are forwarded one-to-one, i.e. channel 1 to synthesis channel 1, two to two ... etc.
This means that the signal is not falsified. If you turn the controller up, the routing of the channels is changed. There are different changed channel assignments at 8 controller positions. At the end stop, a random cabling is generated, which remains active until the controller has been turned back.

LOOPER

With the LOOPER, the envelope CVs of the analysis filter bands can be recorded and played back. It is also possible to record the filter movements generated by the filter cutoff potentiometer. The recording can be up to 3,5 minutes long.
Before starting the recording, an audio signal to be analyzed (e.g. spoken words) should be applied to the analysis input. The level is set with the analysis GAIN control (the 8 channel LEDs indicate the level). Do not overdrive the level in order to maintain the dynamics of the audio signal.

RECORD

When the Looper is stopped, press the RECORD button once, the button flashes. The Looper is now in recording standby:

START RECORDING:

- either by pressing the START button,
- or by a trigger / gate pulse at the START input,
- or by an applied audio signal at the analysis input (threshold trigger).

Now the REC and START buttons both light up permanently.

ADVICE: If a audio signal is already present at the analysis input when recording standby is activated, recording starts immediately (threshold trigger).

If you do not want to start automatically with the threshold trigger, hold down the RECORD button and wait for a trigger pulse at the START input or press the START button to begin recording.

STOP RECORDING:

- either by pressing the START button (playback then starts immediately),
- or by a trigger / gate pulse at the START input (playback then starts immediately),
- or by pressing STOP
- or automatically when the memory is used up (after 3,5 min) (playback then starts immediately)

STOP RECORDING STANDBY:

- press the STOP button

PLAYBACK

ADVICE: The FILTER CUTOFF control must be set to “VOCO” (start or end position) so that the recording is routed to the synthesis filter during playback.

There are the following playback modes (adjustable with toggle switches PLAY and DIR):

LOOP

Start playback with the START button (or START Input) and stop playback with the STOP button. The recording is played endlessly. When the LOOP is running, the recording is reset with the START button or the START input.

SHOT

The recording will only play once and will automatically stop at the end. Start playback with the START button (or START Input) and stop playback with the STOP button before the end of the recording. When recording is in progress, reset is possible with the START button or the START input.

GATED

The recording is played as long as the START button is pressed (or the START input via GATE is on). When the button is released (or GATE off), playback ends. The recording is played back in a loop.

DIR (playback direction)

The playback direction of the recording can be set to forwards, backwards or ping-pong.

SPEED (playback speed)

The playback of the loop can be slowed down or accelerated with the SPEED control (up to a maximum of factor 8). In the middle position, the loop is played back at the original speed. The maximum sample time is approx. 3.5 minutes.

SET LOOP POINTS (Change loop length)

While the recording is being played back, the start and end points of the loop can be reset or undone.

Set a new LOOP start: while holding down the REC button, press the START button!
Set a new LOOP end: while holding down the REC button, press the STOP button!
The START button will now flash during playback to indicate that the LOOP length has been changed.

Undo the new LOOP length : while holding down the REC button, press the FREEZE button!
During playback, the START button lights up again to indicate that the original LOOP is being played again. You can switch back and forth between these two loop lengths. The loop points are saved automatically and are available again when you restart.

VCO (internal digital oscillator)

The digital VCO has three waveforms to choose from: Sawtooth, Square, DigiNoise. They have different octave moods. The PITCH control determines the pitch. It ranges from about 9 to 1050 Hertz. If the PITCH control is at “V / OCT” (zero position), the V / Octave input can be used for pitch control. The VCO also has a direct audio output.