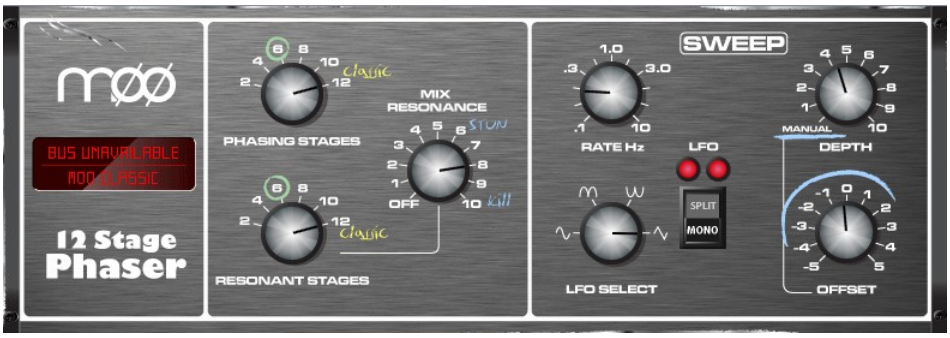
iLive Rack FX

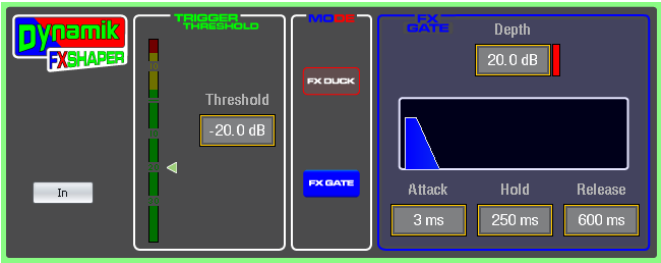
iLive FX are top quality emulations and developments of popular industry standard effects modelled by our engineers right into the heart of the DSP mix engine, with the expertise and creativity to capture and recreate *that* sonic performance. This gives you very low latency and instant access to all 8 FX at all times. No need for licences, dongles or complex configuration.

8 stereo 'RackExtra' FX engines - all iLive MixRacks, even the smallest, feature 8 built-in FX and enough processing power to deal with 64 input channels and 32 outputs processing. Fixed architecture system ensures optimised coherent signal summing. 8 dedicated 'short' FX returns channels with 4-band PEQ are available in addition to the 64 input channels.

Un-cluttered front panel controls and interface - simple analogue feel of the effects devices they emulate. Parameters are easy adjusted using the TouchScreen buttons and rotary control.



Back panel patching - flip to the back panel view to configure how you want to use each FX. Choose its mode, source and destination. Now with **Extended I/O!**

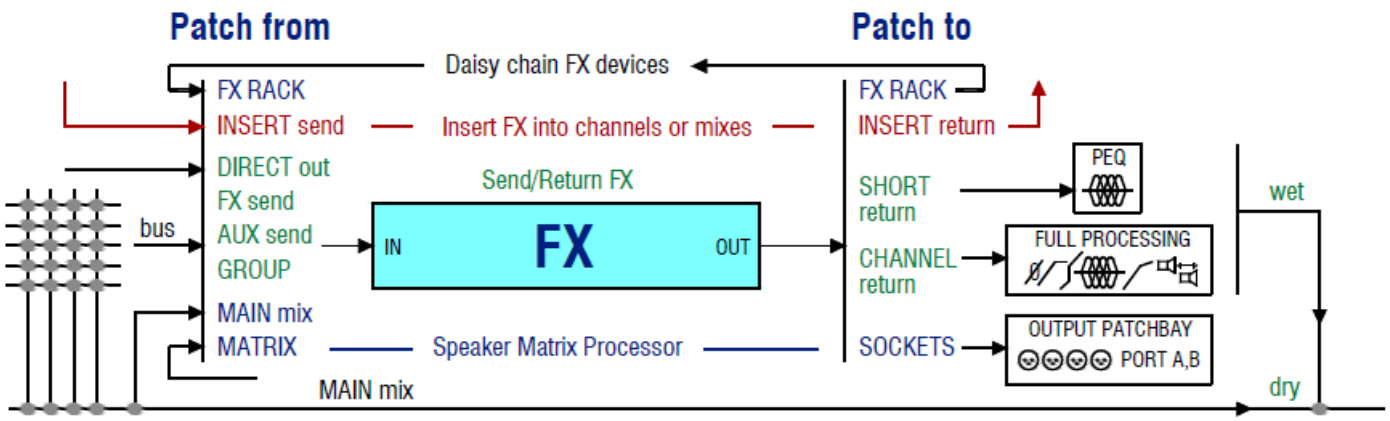


Unique 'Dynamik FX Shaper' on all units - use the program level passing through an effect as a side-chain source to the DFX gate or duck. Make reverb tails to appear more prominent in the mix at the end of vocal lines, or prevent echo 'swamping' on instruments during loud, busy passages.

Store FX settings in **scenes**, recall per song, band, act, show, edit the factory settings to create your own **Library** presets for instant recall, store and transfer FX libraries between systems using your USB key.

Inserted FX - can be inserted into mono or stereo Input or Mix channels. 'Dual Mono' lets you insert a stereo effect across two mono channels.

Mix > Return FX - the familiar mix send / stereo channel return mode. Dedicated FX buses, Aux sends, Groups, Matrix buses, Main channels, Direct Outs and FX outputs can all be patched to an FX input. Save on buses for more in-ear stereo mixes!



Spatial Modelling Reverberation Based around 4 complex spatial modes - Classic, Hall, Room, EMT. Each of these models employ different reflection and decay algorithms to provide natural sound spaces. Important parameters are always visible. 'Expert' pages add many more parameters as found on top end pro touring units.

Gated Verb The traditional gated reverb effect with 'panned' and 'powerbox' presets and the addition of many controls to shape the envelope, adjust diffusion and width, and filter the sound. It brings the 80's effect right up to date with a visual representation of the gate time domain envelope.

2Tap Delay Generate separate left and right delay from a mono source, each with its own tempo. These can be linked for mono output. Tap the screen, dial the value or assign tap tempo to soft keys for delay from 5ms to 1.36s. Controls let you adjust delay, feedback, filters and width to create a wide range of effects.

ADT Create classic automate double tracking effects, voice thickening, vintage slap back tape delay loop emulation and more. Generate double or quad tracked voices from a mono source with stereo width enhancement and auto panning control.

Chorus Re-create the classic analogue chorus effects from the 80's using 3 stereo field emulations which can be combined to create even more variation. Features a built-in sine or rectified LFO modulator and auto panner.

Flange 3 emulations - subtle airy 'Ambient', classic silky tape based 'Vintage', and an untameable 'Wild' effect. Classic pedal flangers were researched and their many LFO modulation, regeneration and stereo splitting effects implemented here. For classic deep flange set stereo split and stereo spread off, pick triangular mod, vintage and tweak depth and regenerate.

Hypabass A sub-harmonic synthesizer classically used in the live environment to generate infra (lower than 35Hz) and sub bass (35-70Hz) from weaker bass programme. It features very low distortion and separate control of these two frequency spectrums.
BEWARE: extreme care is needed. Driving high infra bass levels into insufficient speakers can lead to speaker equipment damage.

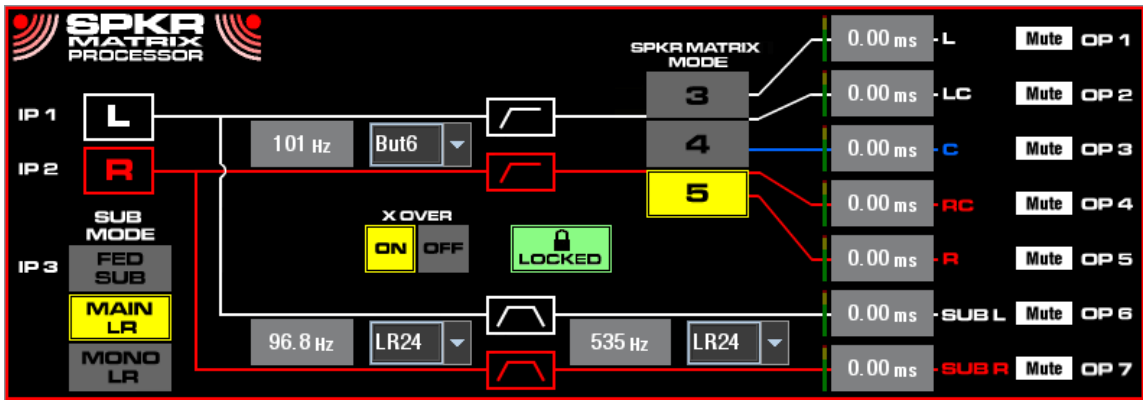
Symphonic A faithful emulation of this simple to use, frequently requested classic 80's chorus. Using just two controls it produces a rich and lively chorus sound with suggestion of mild phasing. Two presets satisfy the popular live sound application - SymphonicVox and SymphonicStrings.

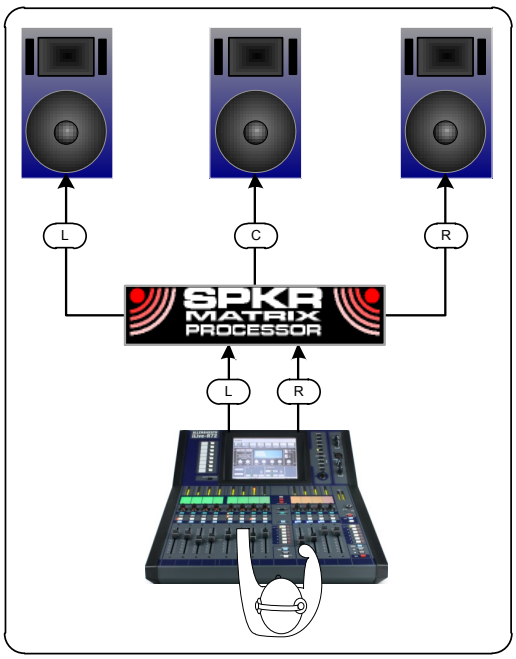
MØØ 12 Stage Phaser Classic 12 stage circuitry creating rich textured phasing with control of feedforward, feedback stages and 'zero' depth manual mode. The characteristic sound is produced by careful emulation of the phase chain and operating frequency range around the offset control. The split/mono LFO switch toggles between in-phase intense phasing and split-phase mode for spatial rotary effects.

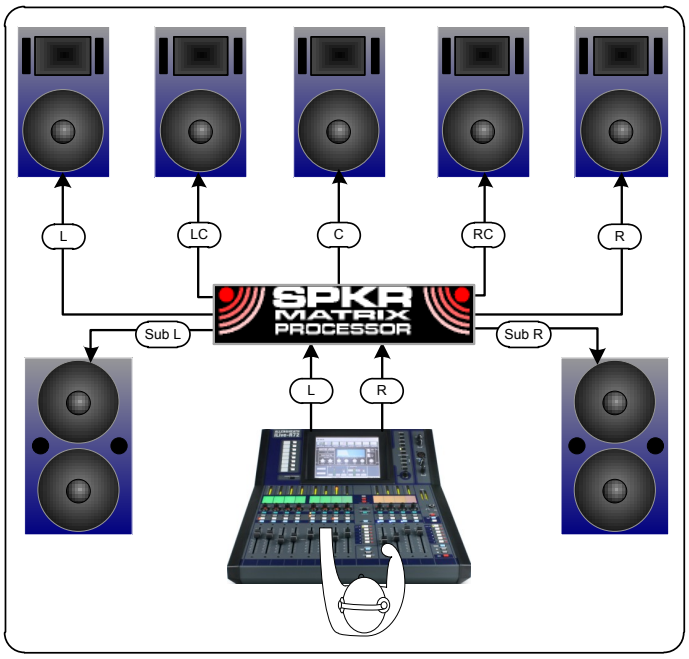
Speaker Matrix Processor Produces 3, 4 and 5 speaker stack outputs from stereo LR programme. This enables LR Mixes to be distributed to FOH across different stages widths, without changing channel panning or matrix feeds. The algorithm exploits a phased cross matrix to provide smooth LR panning across 5 speakers and also distributes far left and right to both sides, improving audibility at far left right positions of the entire mix. The rack also includes delay-lines on all outputs for precise alignment, and sub management: source your subs from Stereo LR, LR Mono Sum or dedicated Sub send, add delays and set your favourite stereo cross-over filter.

Speaker Matrix Processor - bored with LCR PAN changes and Matrix feeds?

Use 3 stacks across a stage one night, 5 stacks across a wider stage plus subs another night!





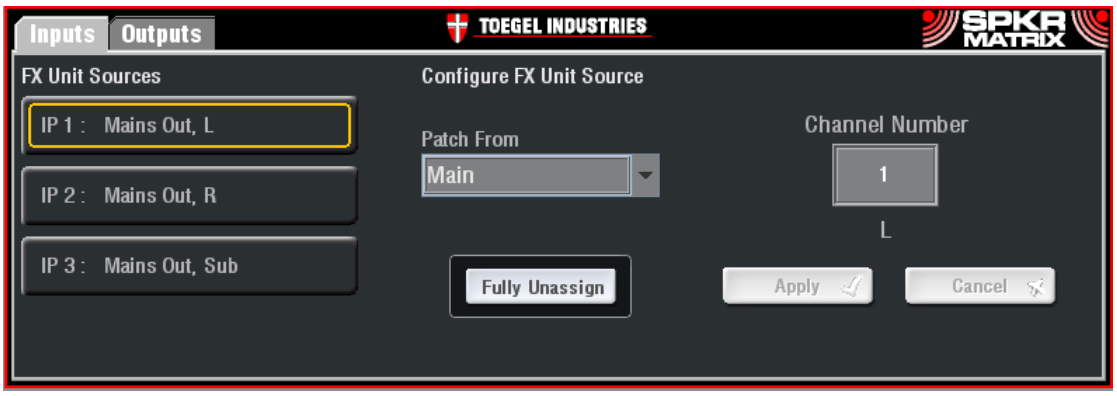


EXTENDED I/O

iLive V1.8 and higher support a new FX architecture known as 'Extended I/O', developed to accommodate new Rack FX modules with up to four inputs and eight outputs. It also allows greater flexibility of FX audio signal routing:

* Rack FX modules can be routed to other Rack FX Modules (daisy chain)
* Rack FX module outputs can be routed to physical analogue / digital outputs

A screenshot of the Back Panel of an Extended I/O Rack FX module is shown below.



The **Inputs** screen configures the FX unit source for each selected input. A drop down menu offers a selection of FX Sends, Mono/Stereo Groups, Mono/Stereo Aux, Main channels, Mono/Stereo Matrix buses, Direct Output and Rack FX outputs.

The **Outputs** screen displays the current outputs of the module. These can now be patched to MixRack XLR outputs or to the Port B expansion card: open the iLive Outputs menu, select an output, select 'Rack FX' from the drop down menu and then choose the FX Unit and desired output (OP 1-8). A **Fully Unassign** button is provided to clear the current inputs and outputs of the FX Module.

Rack FX FAQ

Q: After upgrading to firmware V1.8, I can't see my 'Patch To' options in the back panel of FX modules.
A: 'Patch To' drop down menu is now replaced by the View Outputs and Unassign buttons. Relevant patching is done via the iLive Outputs menu or selecting the Rack FX option in the Preamp processing block of an Input Channel.

Q: Why I get a 'Feedback!' message in my back panel?
A: If you choose Rack FX as the input source for an effect unit, and select the same unit's outputs, the message appears and the 'Apply' button is deactivated to prevent looping back of the FX signal.

Q: How can I cascade effects?
A: Choose Rack FX as the input source for each of the daisy-chained effects, and select the previous unit's outputs. The first unit in the chain can be fed from any of the available options including FX bus, Aux sends etc. The last unit in the chain can be left feeding the default short FX returns, patched via the iLive Outputs menu or selected as a source in the Preamp processing block of an Input Channel.

Q: How can the Speaker Matrix feed several outputs?
A: Although most of the FX units rely on a stereo engine, new Extended I/O Rack FX modules can manage up to four inputs and eight discrete outputs.

Q: How can I use the Speaker Matrix to drive my three-way PA system and/or replace my standalone cross-over unit?
A: The Speaker Matrix is not a general purpose speaker processor. Although it can be used to provide basic Sub speaker processing, it is intended to spread a standard LR mix across a multiple speaker array, ideal for a wide stage.

Q: What happens when I press the Unassign button?
A: Input and output patching is cleared in new Extended I/O FX modules. In a non Extended I/O FX module such as a SMR reverb, inputs and outputs are re-patched to the system defaults (FX bus > short FX return, according to its slot number).

Q: What happens if I select the Insert mode by mistake?
A: Insert mode doesn't take any advantage from Extended I/O, and it's not allowed within the Speaker Matrix. With non-Extended I/O modules, when reverting to Mix > Return mode, the previous routing settings are recalled so no patching is lost.

Q: Why can't I see my short FX returns on the surface any more?
A: When a Rack FX module output is patched to Input Channels, physical outputs or other FX modules, it is at the same time automatically unassigned from the relevant short FX return. The FX return stereo channel is hidden from the surface to avoid confusion.

Q: Why isn't there any compressor in the Rack FX?
A: Comprehensive compressor types are available within Input and Mix Channels processing blocks. These include the same careful modelling of industry standard analogue units and high quality algorithms found in Rack FX modules.
Firmware V1.8 comes with several new compressor models including iLive Peak, iLive RMS, Vocal, Punch Bag, Music AGC, Speech, 16T and Opto Slow, all with Parallel Path capability (New York compression). Check the firmware release notes and the new Reference Guide on our website.