ADDAC System

Instruments for Sonic Expression

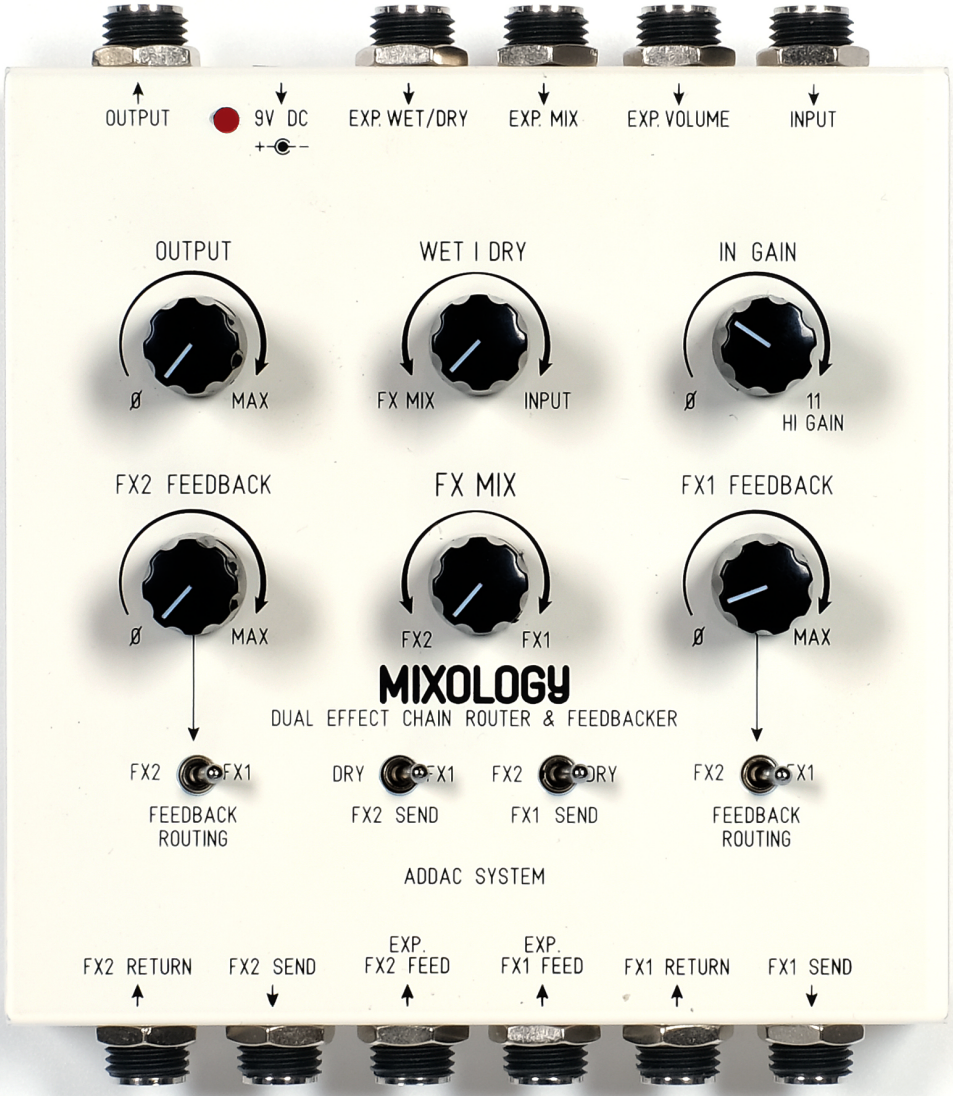
Est.2009

INTRODUCING

ADDAC MIXOLOGY PEDAL

USER'S GUIDE . REV1

October.2025

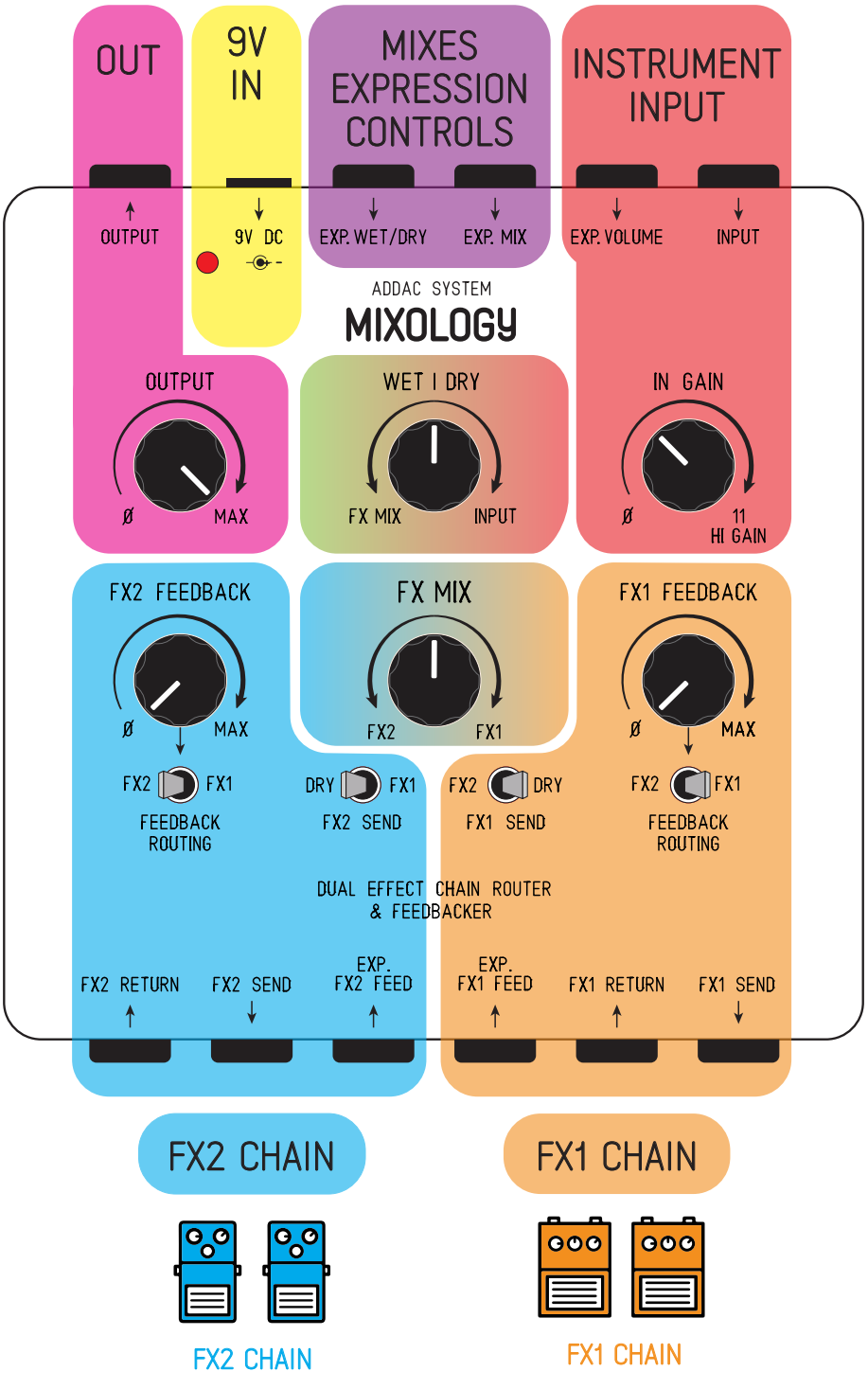


ADDAC System

From Portugal with Love!

Welcome to:
ADDAC MIXOLOGY PEDAL USER'S GUIDE

Revision.01 October.2025

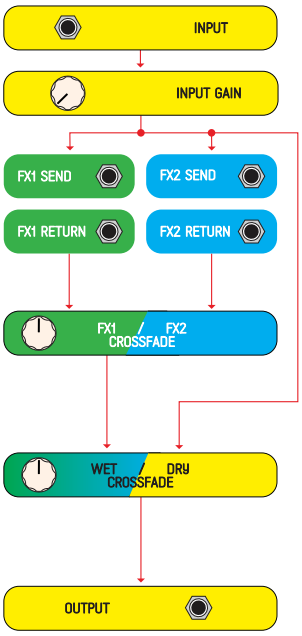


ADDAC MIXOLOGY PEDAL USER'S GUIDE

WELCOME

This pedal is a dual effect chain router and feedbacker, it opens a whole spectrum of mixing configurations. From series to parallel, A>B or B>A without needing to repatch the effects chain.

This is the basic module signal path.



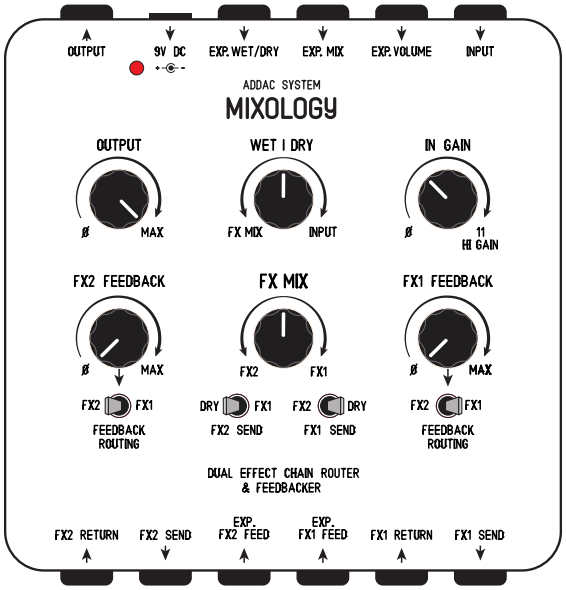
The input signal gain is controlled by the [INPUT GAIN] knob or using an external Expression Pedal.

The input signal is then sent into FX1, FX2 and DRY.

The Return signal of both FX can be balanced using the [FX1 | FX2] control knob or by using an external Expression Pedal.

The Return Mix and Dry signals can be balanced using the [WET | DRY] control knob or by using an external Expression Pedal.

This final signal is then sent to the Output



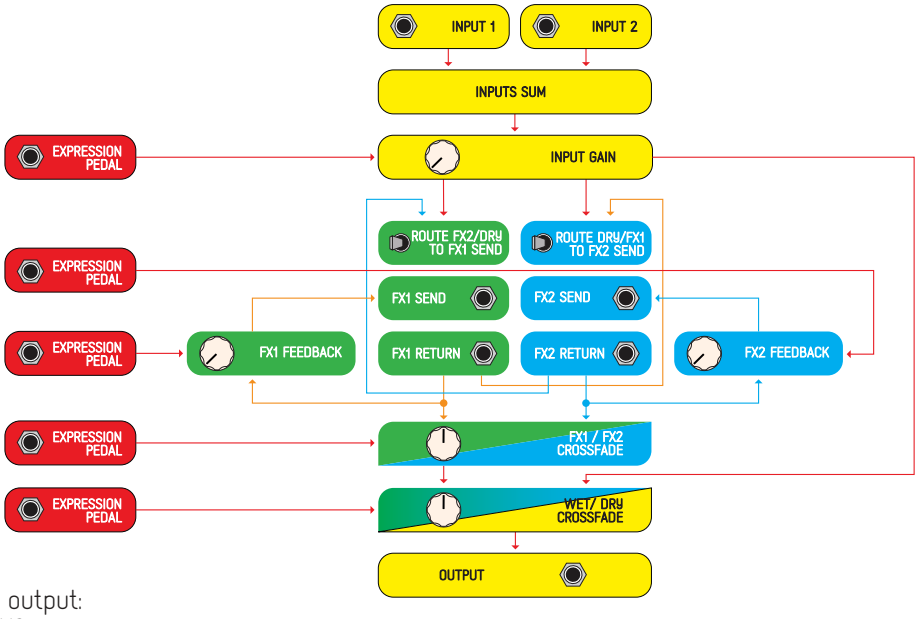
CONTROLS DESCRIPTION

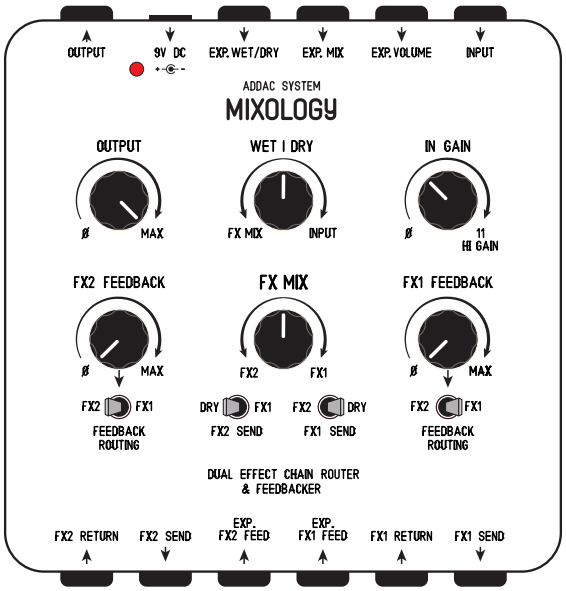
The signal path is actually slighly more complex than shown in the previous page.

Each FX channel allows to route its input to either the Dry Input signal or the opposite FX return signal. This allows for parallel or series configuration as well as FX order inversion e.g. FX1 into FX2 or FX2 into FX1.

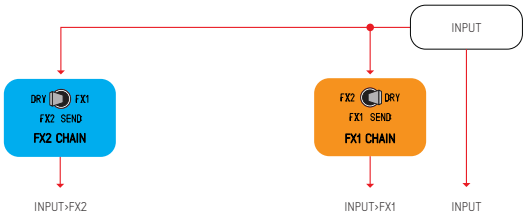
Finally there's two feedback loops i.e. the return of each FX chain can be feedbacked into it's own or to the opposite FX send, allowing for individual feedback or series feedback loops e.g. FX1 into FX2 and FX2 feedbacked into FX1.

There are two crossover mixes prior to the output:
[FX1 | FX2] crossfades between FX1 and FX2
[WET | DRY] crossfades between the FX1|FX2 input and the Dry signal



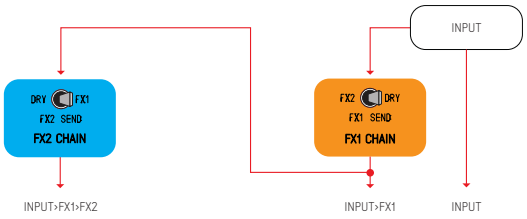


PROCESSING CONFIGURATIONS



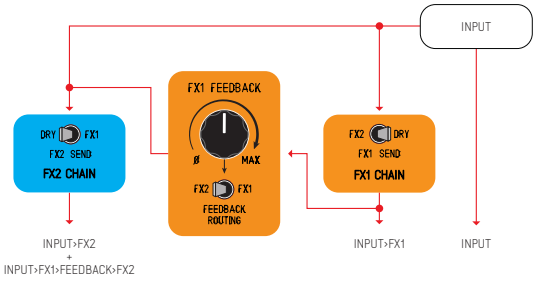
INPUT PARALLEL PROCESSING

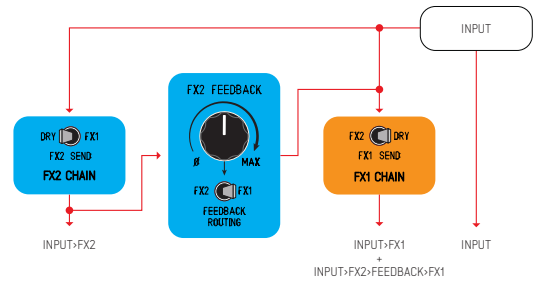
Here's the simplest example of how the FX Send switches can be used to configure a Parallel chain where the INPUT goes through both FX1 and FX2 Chains.



INPUT SERIES PROCESSING

Here's an example of how the FX Send switches can be used to configure a SERIES chain where the INPUT goes through FX1 Chain and is then routed into the FX2 Chain (as defined by the [FX2 SEND] switch when set to FX1)





PARALLEL & SERIES (FEEDBACK) PROCESSING

Here's an example of how using the FX Send switches can be used to configure an Input Parallel processing chain where the Input goes through both FX1 and FX2 Chains while, at the same time, the FX1 Feedback is used to sum the FX1 Chain into FX2 Chain.

This results in a Parallel processing of the Input signal through both FX Chains.
However FX2 Chain is processing 2 signals:

1. the Input signal (as defined by the [FX2 SEND] switch when set to DRY)

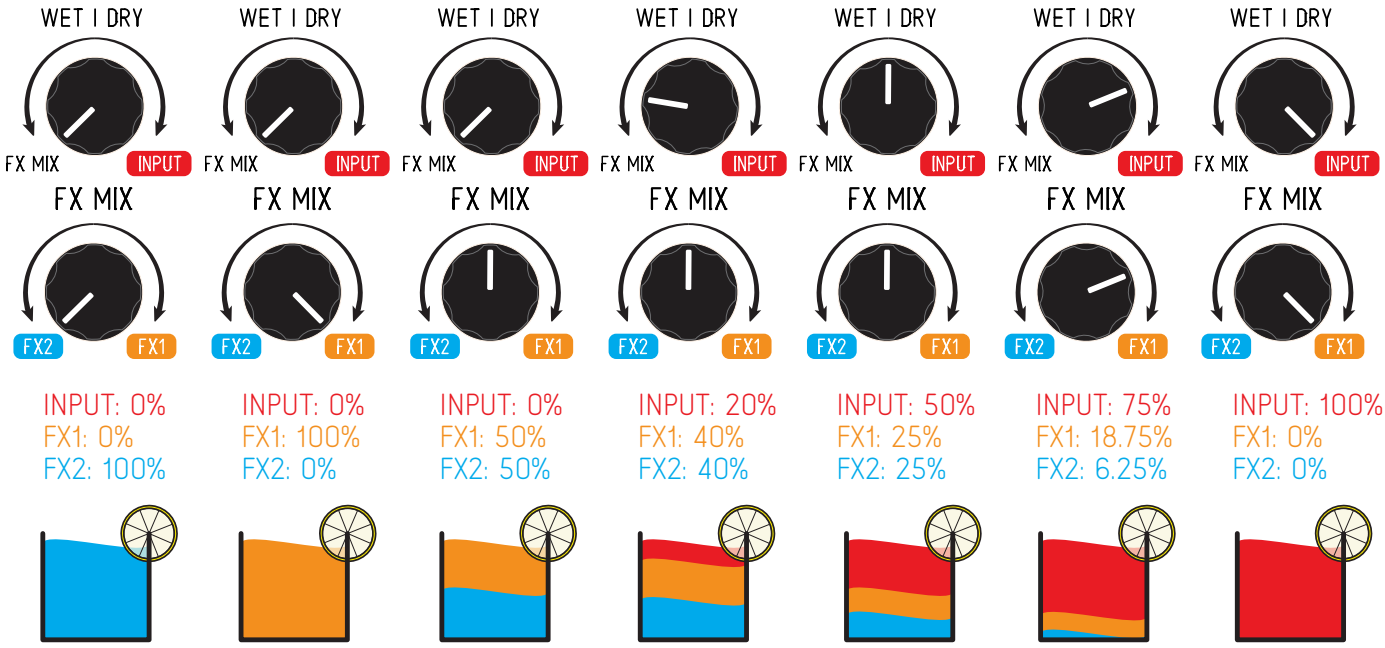
2. the FX1 Chain output as defined by the [FEEDBACK ROUTING] switch when set to FX2 and the [FX1 FEEDBACK] knob which sets the volume sent to the FX2 Chain

The second diagram shows the exact same configuration but with FX1 and FX2 order reversed.

Ultimatelly the end result is a complex combination of the FX1 and FX2 chains configuration together with the [FX1 FX2 MIX] and [WET DRY MIX] knobs.

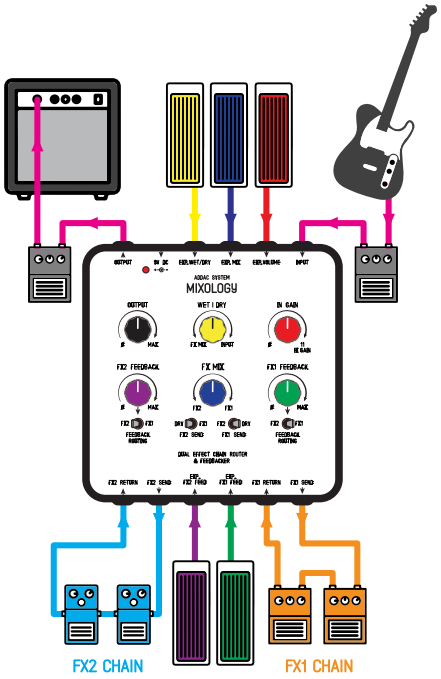
MIXOLOGY BASIC CHART

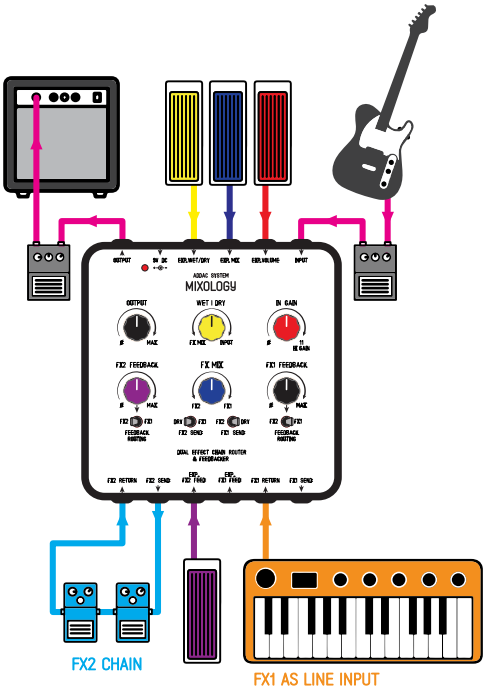
Here's a chart of multiple mixing options using only the [WET|DRY] and [FX MIX] controls.

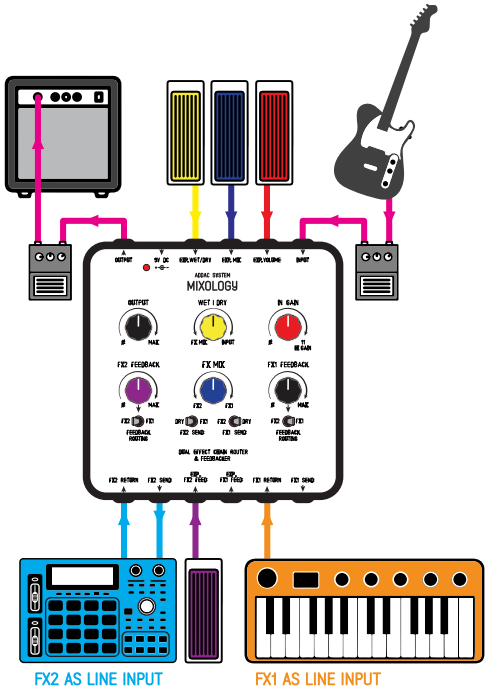


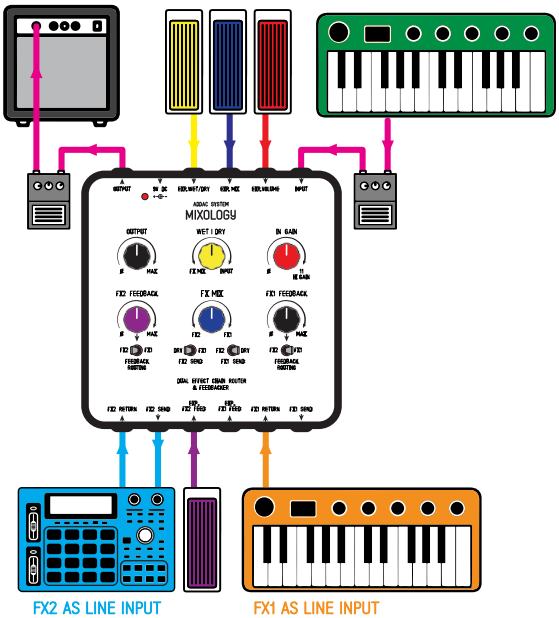
SETUP CONFIGURATIONS

Here's a few examples of diferent setup configurations

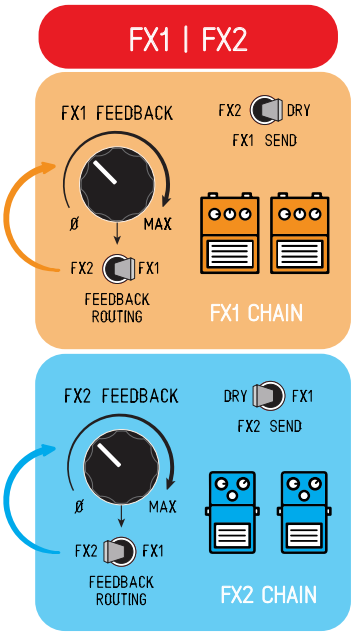








FEEDBACK LOOPS



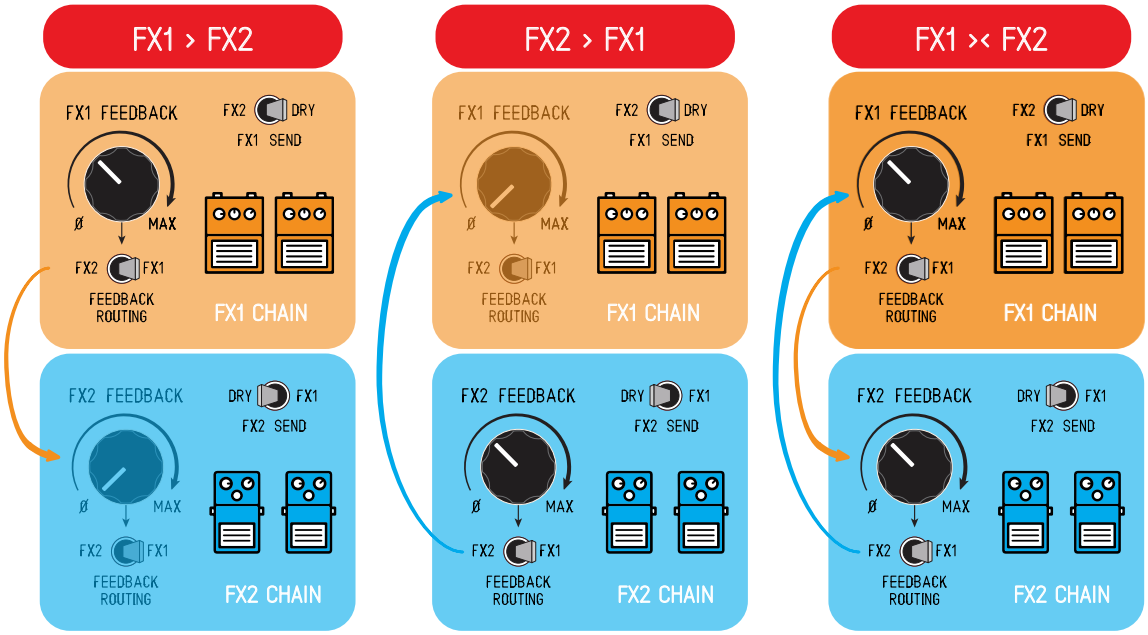
There are 2 feedback loops, one for each FX Channel, they route the return of the FX chain back into its send, forcing whatever effects connected to feedback.
The intensity of the feedback is controlled by the FEEDBACK knob or Expression Pedal input.
Every effect will react diferently to this forced feedback, when used at low volumes it can create very interesting effects in a controlled manner.
At higher volumes it will overpower any device and eventually distort and self oscilate.

These Feedback chains can be used independently or routed to the opposite FX channel using the [FEEDBACK ROUTING] switch.

When the [FEEDBACK ROUTING] switch is set to itself the user can generate a feed within each FX chain.

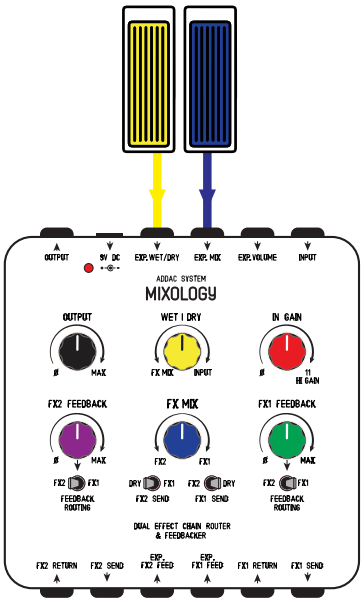
When the [FEEDBACK ROUTING] switch is set to the opposite FX channel it will not feedback but instead route and mix the FX A into FX B

If both FX Feedbacks are routed to the opposite one it will make both FX feedback in a big loop FX1>FX2>FX1, this setting is mostly unused unless unruly chaos is desired.



EXPRESSION PEDAL RANGES

The Expression Pedals work in 2 different ways

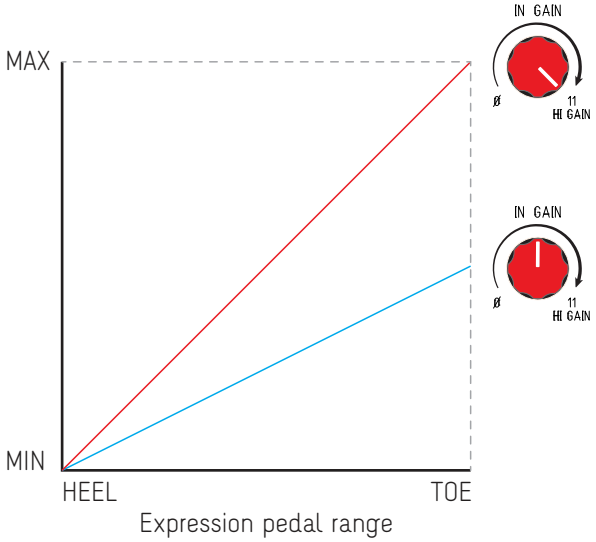


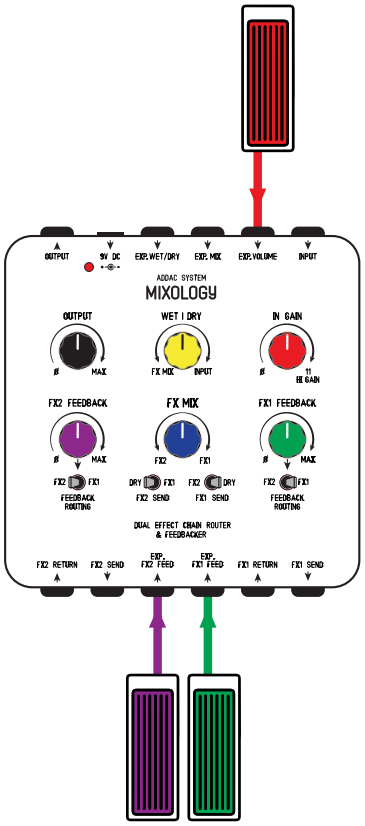
Controlling [WET | DRY] and [FX MIX]

When using these two inputs the Expression pedal simply replaces the knob, the knob position will then have no effect.

Controlling [IN GAIN], [FX1 FEEDBACK] and [FX2 FEEDBACK]

On these inputs the control knob sets the expression pedal maximum range allowing to define how much influence the expression pedal will have.

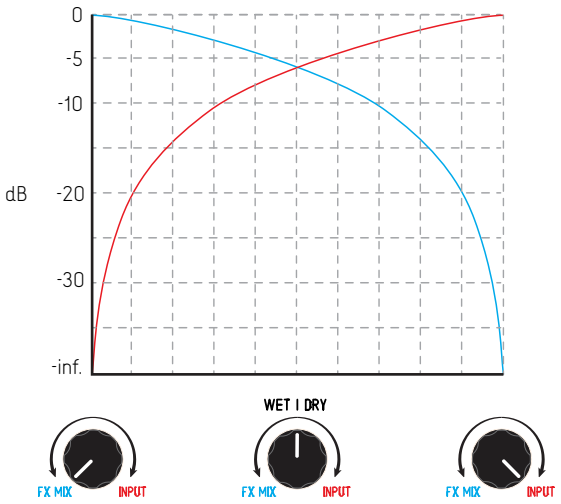




CROSSFADES

[WET | DRY] and [FX1 | FX2] knob behaviour

We use linear 10k potentiometers for crossfading between the two sources, the signal response is shown in the graphic below. At 12 o'clock both signals are attenuated by aprox. -6db.

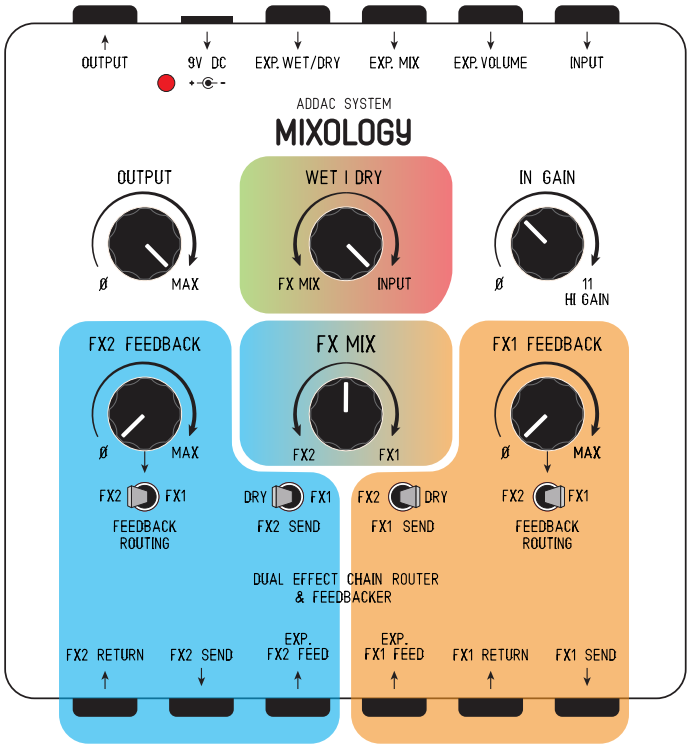


HEADROOM

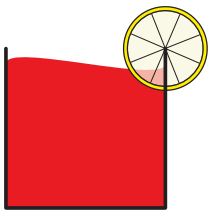
±12v Bipolar Signal Path

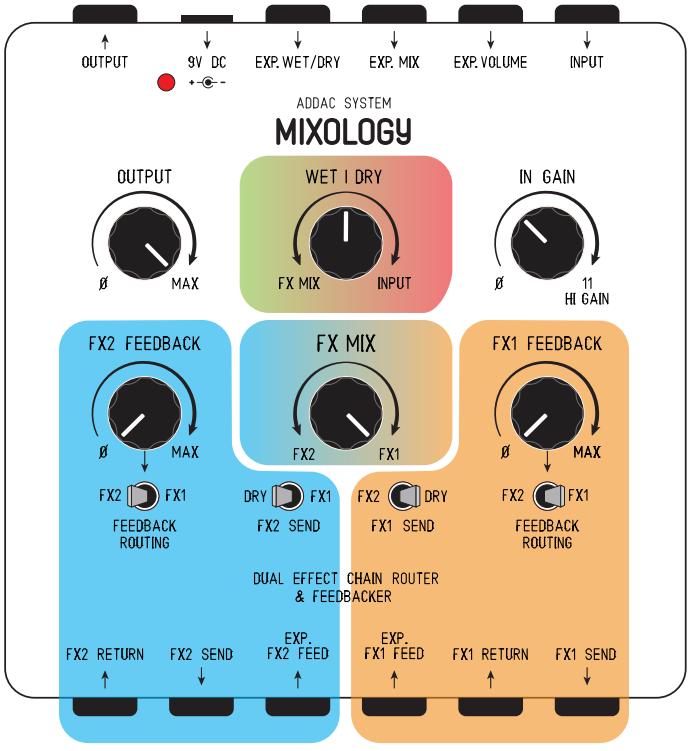
Although the DC input is +9v, internally we added a ±12v bipolar power supply allowing more headroom throughout the signal path.

MIXOLOGY EXAMPLES

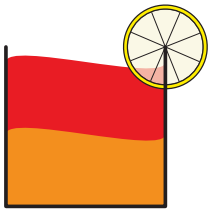


INPUT: 100%
FX1: 0%
FX2: 0%

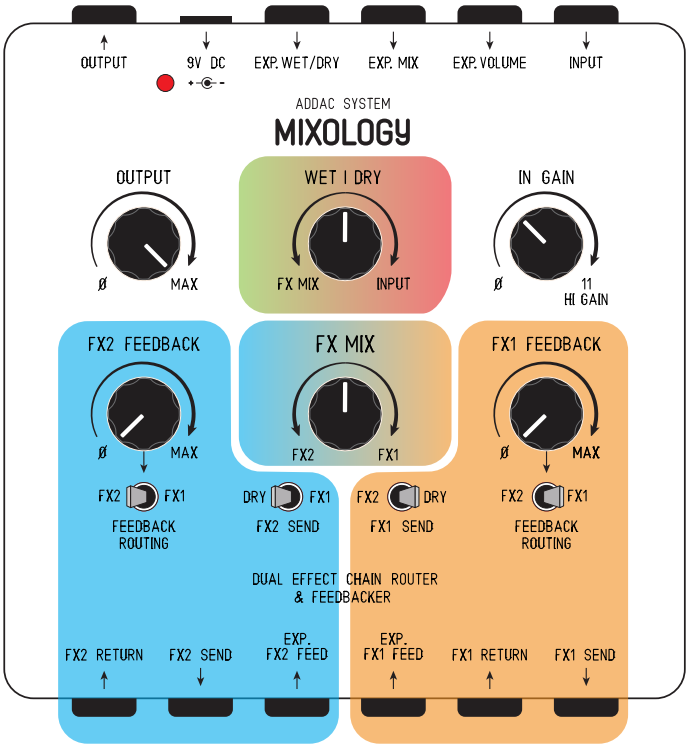




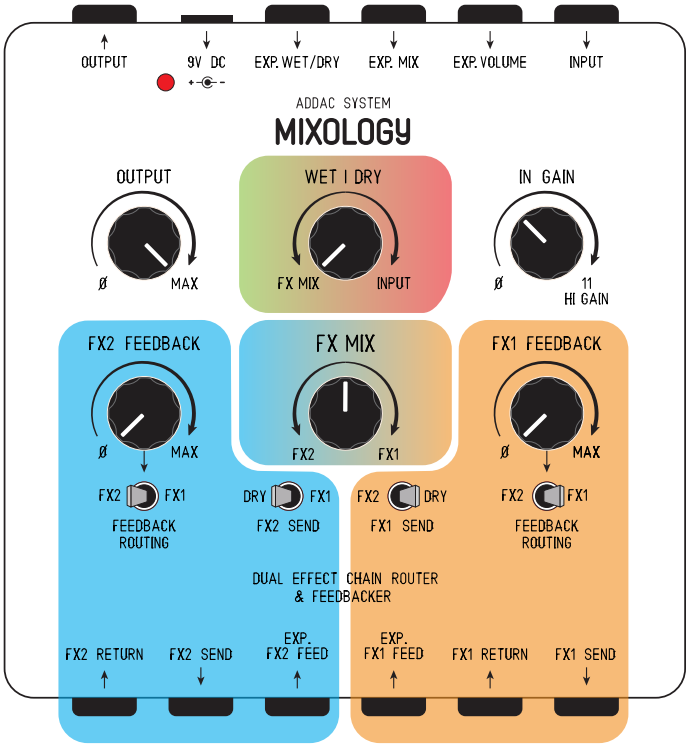
INPUT: 50%
FX1: 50%
FX2: 0%



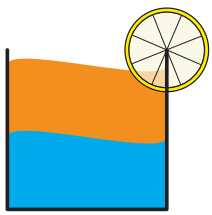
MIXOLOGY EXAMPLES



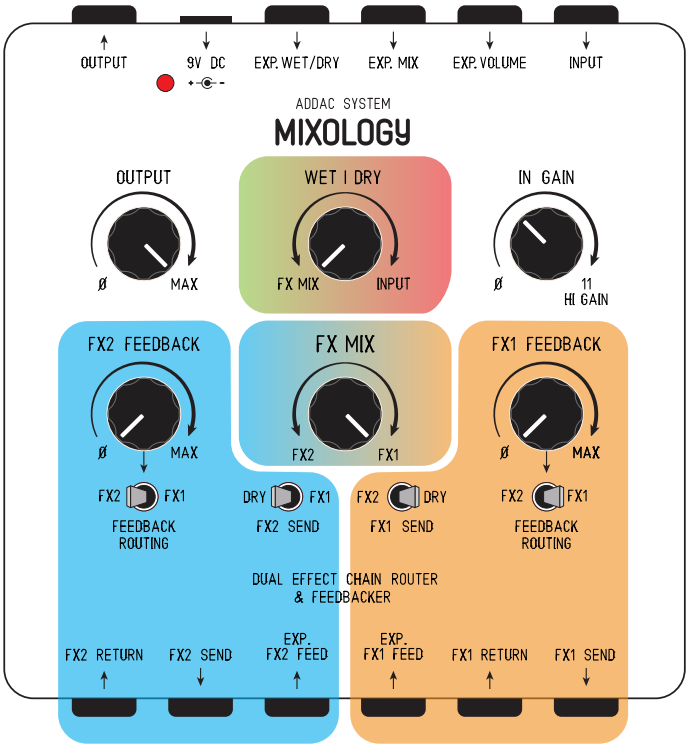
INPUT: 50%
FX1: 25%
FX2: 25%



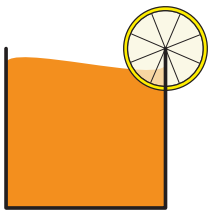
INPUT: 0%
FX1: 50%
FX2: 50%

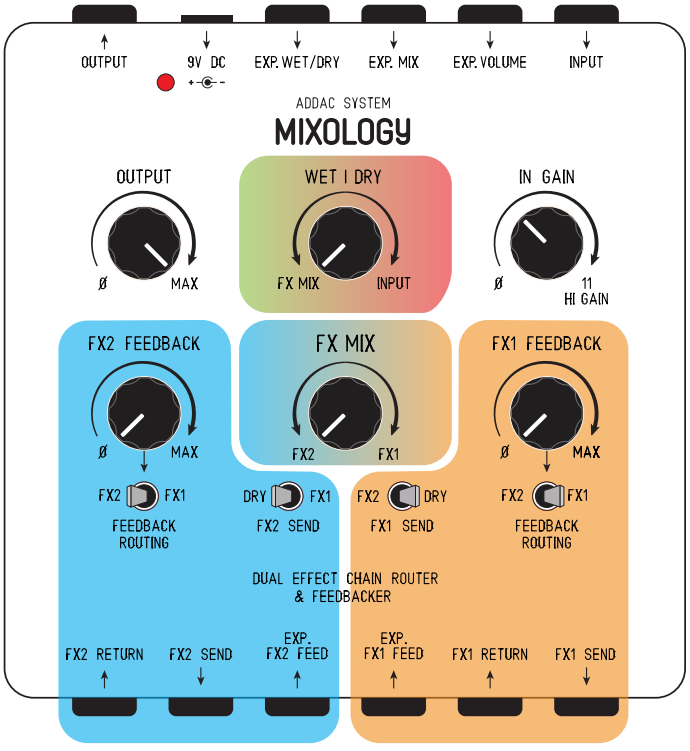


MIXOLOGY EXAMPLES

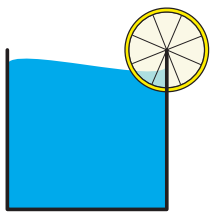


INPUT: 0%
FX1: 100%
FX2: 0%





INPUT: 0%
FX1: 0%
FX2: 100%



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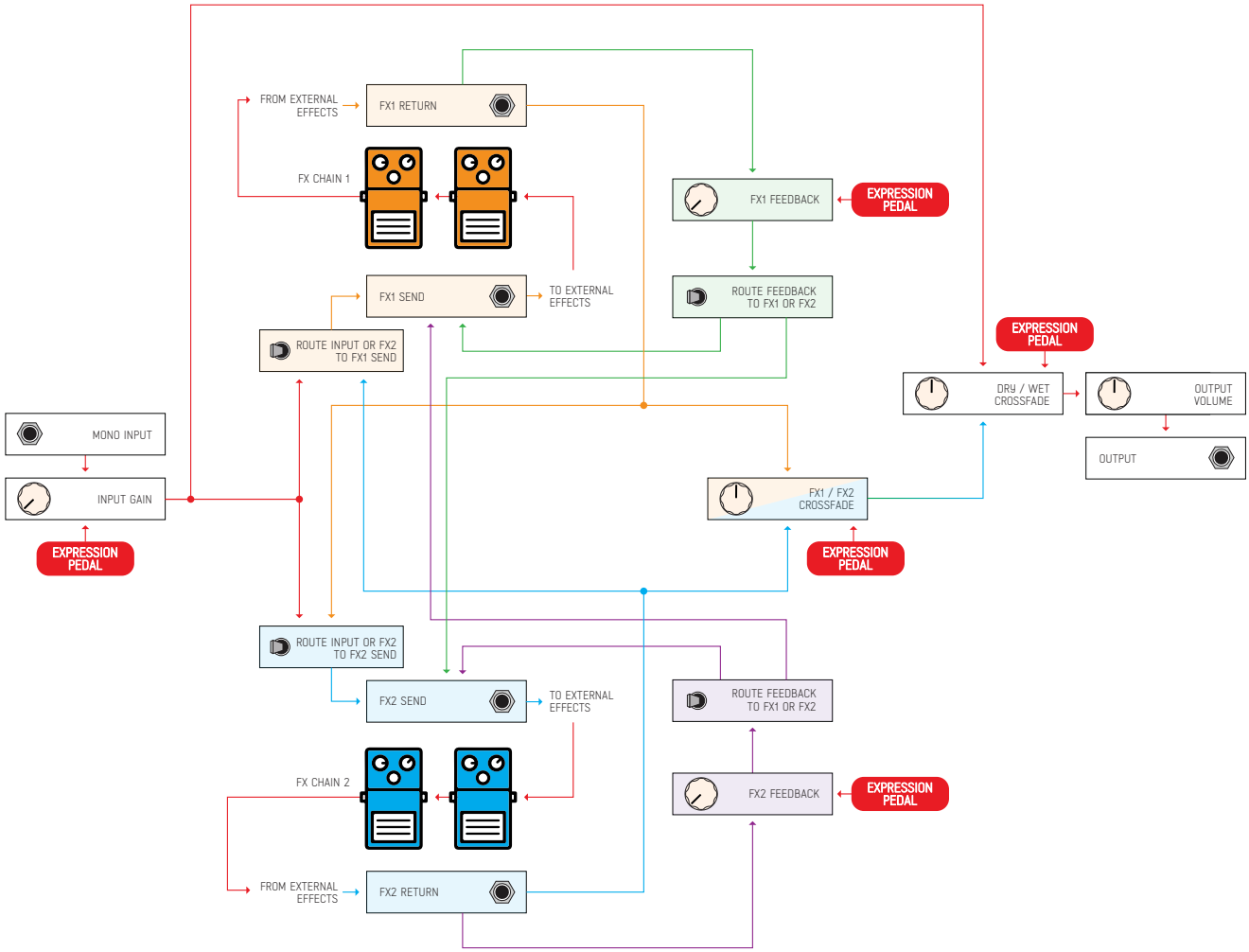
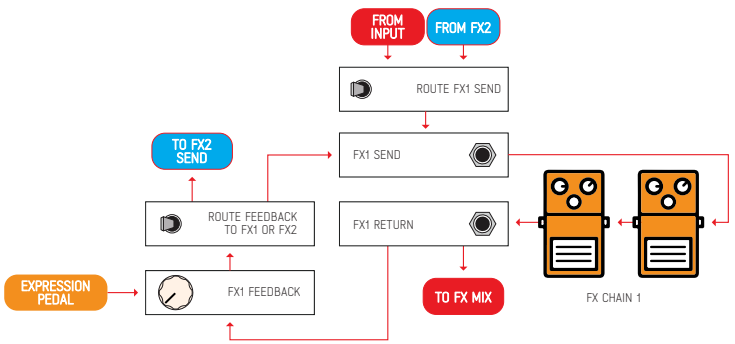
MIXOLOGY PEDAL SIGNAL FLOW DIAGRAM



EFFECTS SIGNAL FLOW DIAGRAM



For feedback, comments or problems please contact us at:
addac@addacsystem.com

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