ADSRjr & Expander

User Manual

Circuit Abbey

ADSRjr Description

The ADSRjr is an envelope generator with many features. Standard gate input jack is normalled to the Doepfer bus gate signal. Three time ranges cover times from tiny to huge. Linear or expo curves are jumper selectable. A cycle button creates continuous waves.

The expansion module brings out a metric boatload of features: CV control of each segment, trigger button and jack, buttons replace the linear/expo jumpers, end of attach, decay and release outputs, and an inverted output.

ADSRjr Features:

- Gate jack normalled to Doepfer bus gate signal

- Time range selections: short, medium, long

- Linear or exponential curve jumper selectable for each segment

- Cycle button for continuous operation

- Convenient output jack

- 4HP, depth=53mm

Expansion Features:

- CV control of each segment

- Buttons for selecting linear or exponential curves

- Trigger button and input

- End of attack, decay, and release outputs

- Inverted output jack

- 4HP, depth = 26mm

Both modules are 4HP. The ADSRjr module has a maximum 20mA current draw.

Front Panel Interface:

ADSRjr

Gate: Standard gate input. Normalled to the Doepfer gate signal with a jumper to defeat.

Time: Button to set the time range. Green=fast, orange=medium, red=slow.

A: Attack time.

D: Decay time.

S: Sustain level.

R: Release time.

Cycl: Cycle mode button. Puts module in continuous cycling.

Out: Convenient output jack.

Front Panel Interface:

Expander

A: Attack time CV input.

D: Decay time CV input.

S: Sustain level CV input.

R: Release time CV input.

A Curve: Sets the curve for the attack segment. Out=linear, in=exponential.

D Curve: Sets the curve for the decay segment. Out=linear, in=exponential.

R Curve: Sets the curve for the release segment. Out=linear, in=exponential.

Trig Button: Manual trigger button. Fires off one full ADSR cycle.

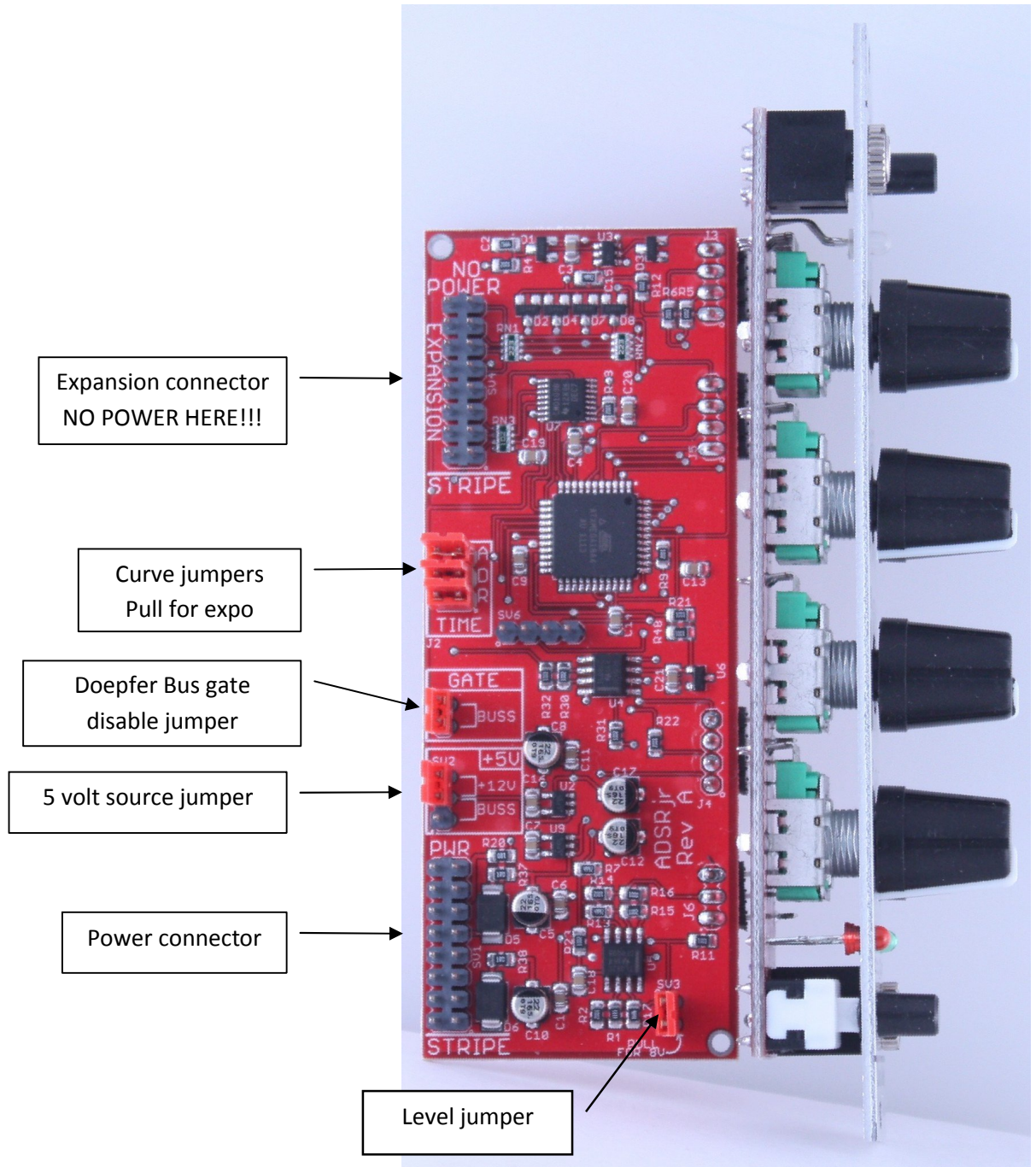**Trig Jack:** Manual trigger button. Fires off one full ADSR cycle for every trigger.

EOA: End of attack output trigger.

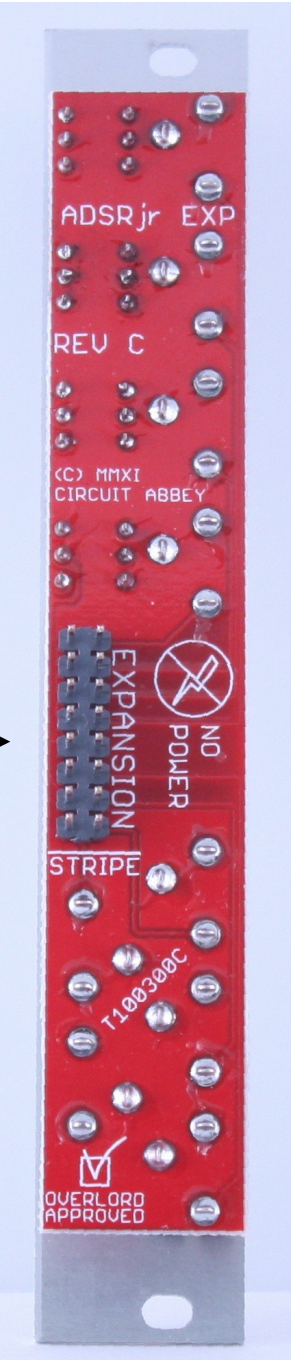**EOD:** End of decay output trigger.

EOR: End of release output trigger.

Inv Out: Inverted output jack.

Connector locations -- ADSRjr

Expansion connector
NO POWER HERE!!!

Curve jumpers
Pull for expo

Doepfer Bus gate
disable jumper

5 volt source jumper

Power connector

Level jumper

Connector locations -- Expander

Expansion connector
NO POWER HERE!!!

Setup & Installation

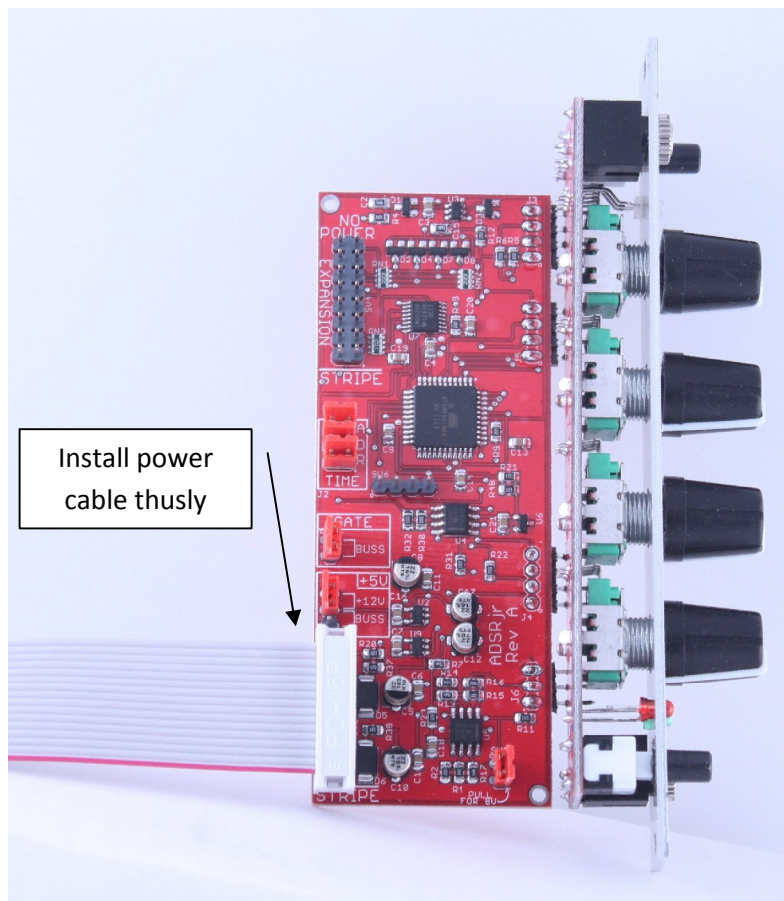To install you ADSRjr, first set up the jumpers.

"Time" jumpers: A bit misnamed, as they are used to set the desired curves. An installed jumper sets that segment for exponential, removing the jumper sets the segment for linear. Each segment has its own jumper, and can be set independently from the others. For example, a linear attack and expo decay and release. Ships with all three jumpers installed.

Gate jumper: Routes the Doepfer bus gate signal to the gate jack. Remove to disable. Ships with Doepfer bus enabled.

+5V jumper: Sets the source of the 5 volts used internally in the module. Ships in the +12V position to derive 5 volts from the +12 volt supply. If your case has the 5 volt rail powered you can move the jumper to the "Buss" position to offload the +12 volt supply.

"Pull for 8V": Another misnomer. Module ships with 0-5V output range. For 0-10V range, remove this jumper.

Now you can attach the power cable as shown, making sure the red stripe is in the correct position, and install the module in your case.

Install power cable thusly

Expander Installation

To install you ADSRjr expander, first attach the expander cable as shown. Be sure to remove the three "Time" jumpers as they are replaced by buttons on the expander.

Attach

Remove
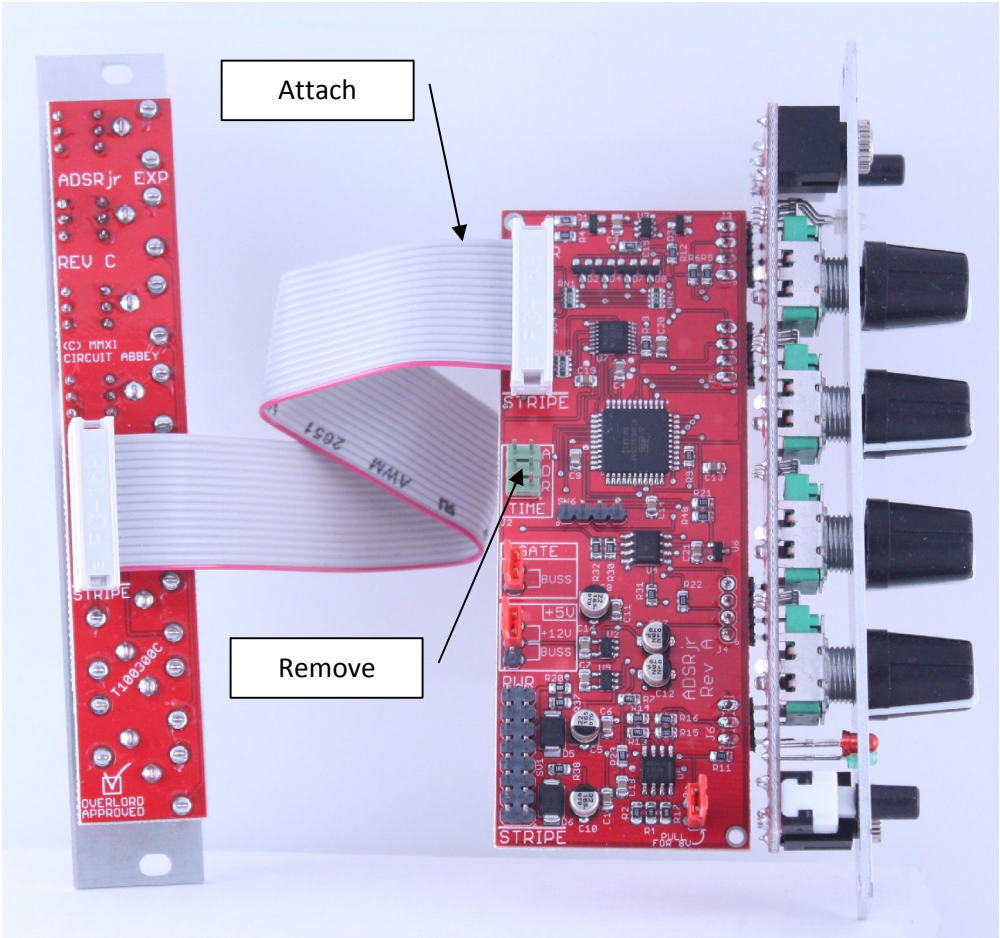
Module Width	4HP (20mm)
Module Depth	53mm
Power Connector	Standard Doepfer 16 pin
Power Requirements	± 12 Volts at 20mA Max
Input Impedance	20K Ohms
Output	Short circuit protected