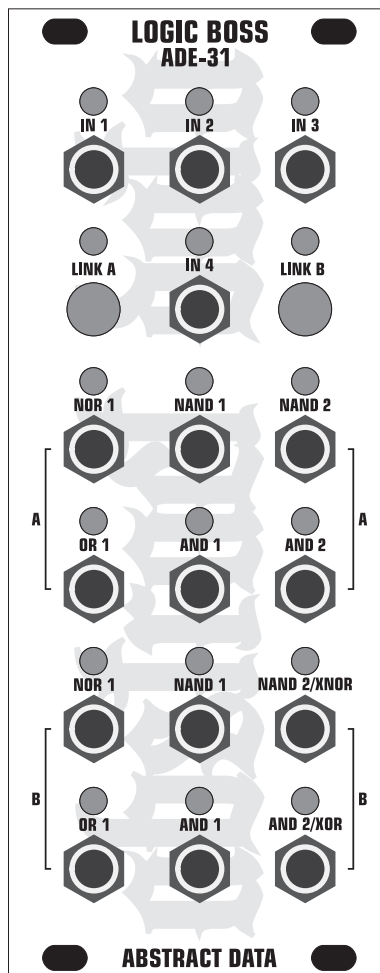


# abstract data

INSTRUMENTS  EFFECTS

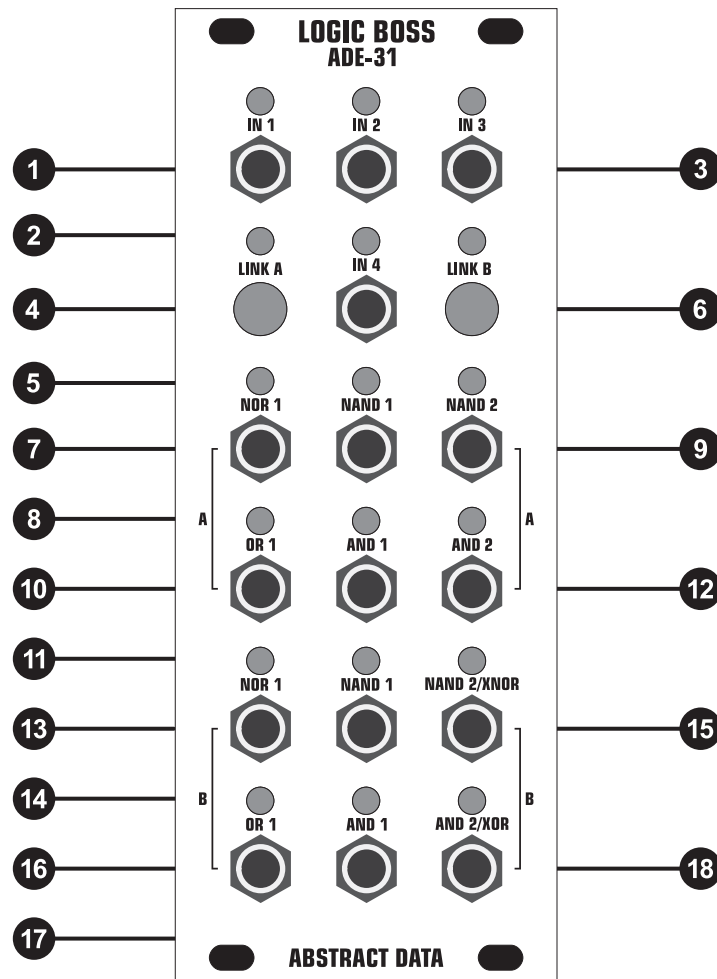
## ADE-31 LOGIC BOSS

*2 stage, Switched, Cascading, Logic Module*



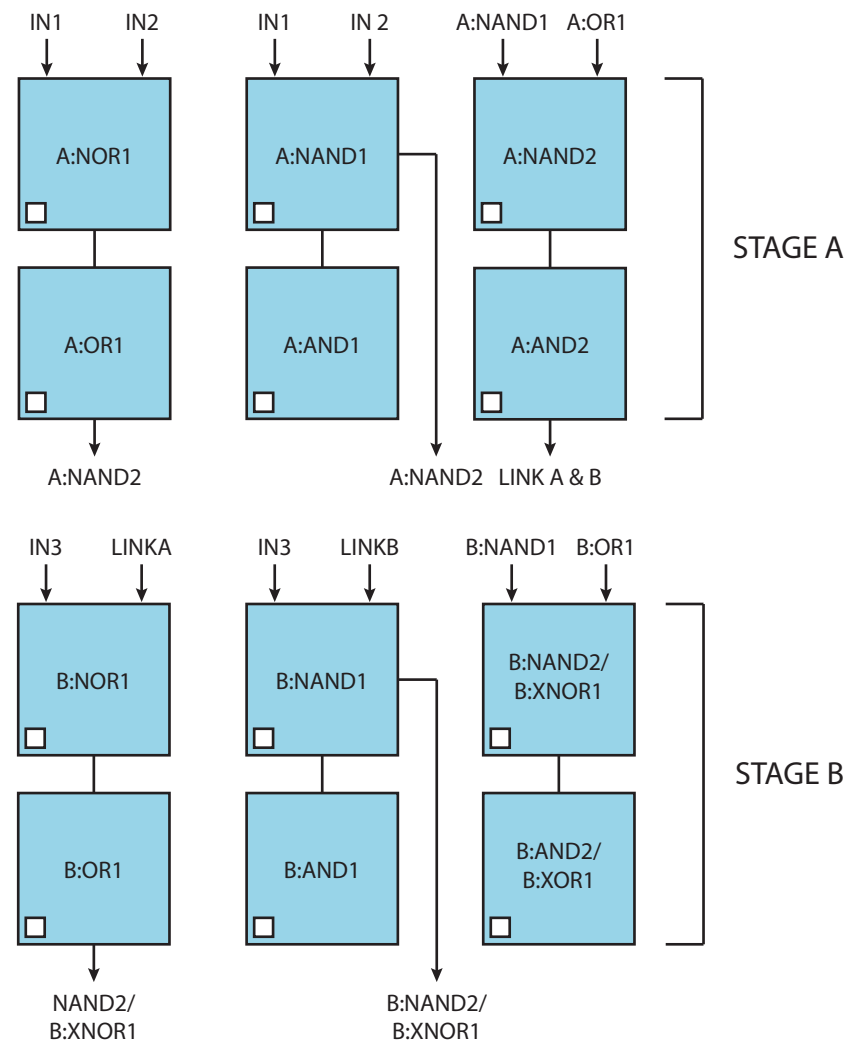
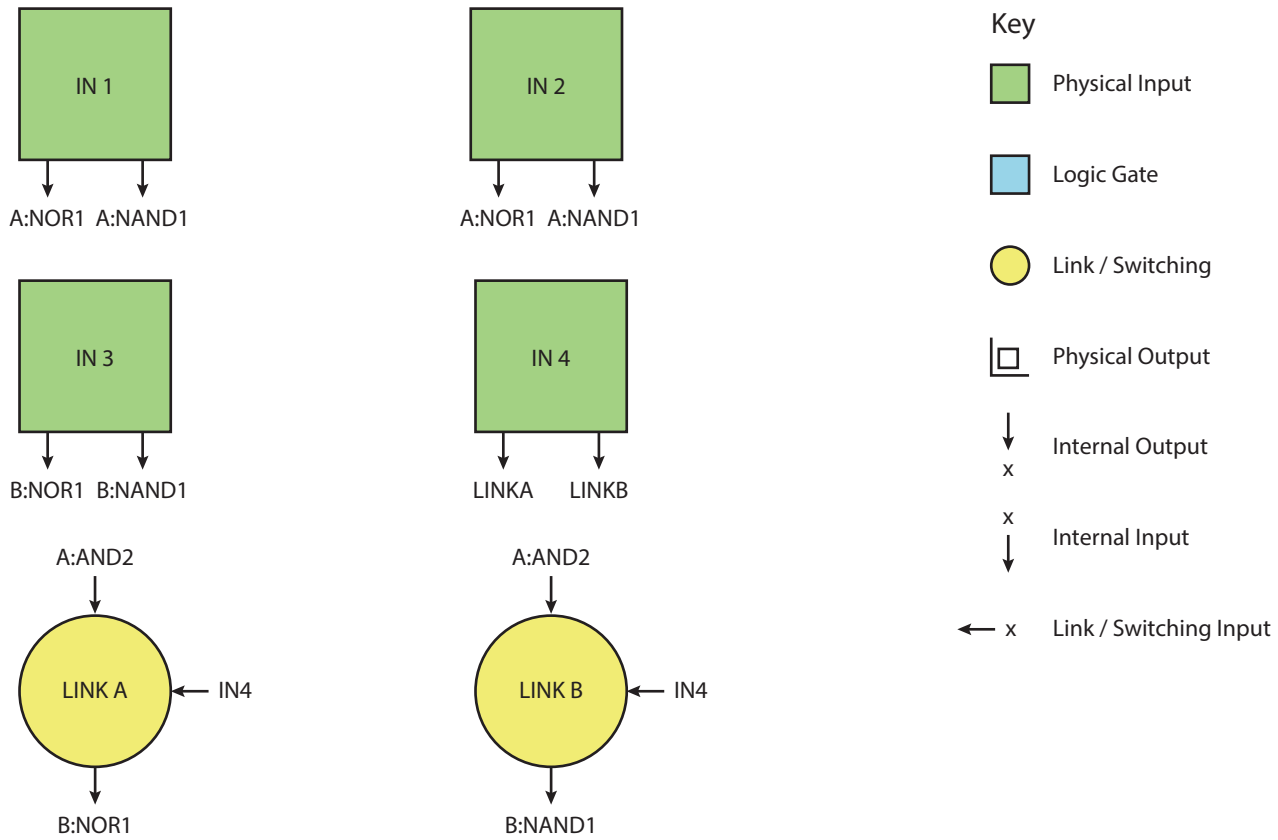
## USER GUIDE

# 1: Front



- 1 IN 1: Input 1 for stage A, NOR 1 and NAND 1
- 2 IN 2: Input 2 for stage A, NOR 1 and NAND 1
- 3 IN 3: Input 1 for stage B, NOR 1 and NAND 1
- 4 LINK A: Manual link switching for input 2 stage B, NOR 1
- 5 IN 4: Input for voltage-controlled switching of link A and B
- 6 LINK B: Manual link switching for input 2 stage B, NAND 1
- 7 NOR 1: Output for NOR gate 1, Stage A
- 8 NAND 1: Output for NAND gate 1, Stage A
- 9 NAND 2: Output for NAND gate 2, Stage A
- 10 OR 1: Output for OR gate 1, Stage A
- 11 AND 1: Output for AND gate 1, Stage A
- 12 AND 2: Output for AND gate 2, Stage A
- 13 NOR 1: Output for NOR gate 1, Stage B
- 14 NAND 1: Output for NAND gate 1, Stage B
- 15 NAND 2/XNOR: Output for NAND gate 2 OR XNOR gate 1, Stage B
- 16 OR 1: Output for OR gate 1, Stage B
- 17 AND 1: Output for AND gate 1, Stage B
- 18 AND 2/XOR: Output for AND gate 2 or XOR gate 1, Stage B

# 2: Signal Flow



**OVERVIEW:** 2 stage, switched, cascading, logic module;  
Up to 4 inputs & 12 outputs – simultaneously;  
Unlinking gives 2 independent 6 part stages;  
Link stages by CV & on-board switching;  
RTL works on all input types – not just logic;  
LED indicators for all inputs & outputs;  
Power supply reverse-voltage protection;  
Low-profile build mounts in any depth rack;

**STAGE A:**

- 1: **NOR 1:**  
2x input (IN 1 / IN 2)
- 2: **NAND 1:**  
2x input (IN 1 / IN 2)
- 3: **NAND 2:**  
2x input (OR 1[A] / NAND 1[A])
- 4: **OR 1:**  
1x input (NOT(NOR 1[A]))
- 5: **AND 1:**  
1x input (NOT(NAND 1[A]))
- 6: **AND 2:**  
1x input (NOT(NAND 2[A]))

**STAGE B:**

- 7: **NOR 1:**  
2x input (IN 3 / Link A state (AND2[A] or Low))
- 8: **NAND 1:**  
2x input (IN 3 / Link B state (AND2[A] or Low))
- 9: **NAND 2 (Unlinked):**  
2x input (OR 1[B] / NAND 1[B])  
**XNOR (Linked):**  
3x input (OR 1[B] / NAND 1[B] / IN 3)
- 10: **OR 1:**  
1x input (NOT(NOR 1[B]))
- 11: **AND 1:**  
1x input (NOT(NAND 1[B]))
- 12: **AND 2: (Unlinked)**  
1x input (NOT(NAND 2[B]))  
**XOR: (Linked)**  
1x input (NOT(XNOR))

**PRECAUTIONS:** The ADE-31 uses the Doepfer standard for power connection and cable orientation. The RED stripe on the supplied power cable connects to the NEGATIVE (-12V) rail on the ADE-31 with the RED stripe facing DOWN. This is marked on the back of the ADE-31 PCB as “-12 RED”.

The ADE-31 has diode and polyfuse protection built in but an incorrectly connected cable may still cause damage to the module or the power supply.

The rear panel of the ADE-31 has exposed parts and connections. Please ensure when handling the ADE-31 that the unit is held by the sides of the front panel or the sides of the PCB.

**CREDITS:** Rory Dow  
Dave White