

# Robaux — DCSN-3

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• [Manual PDF](#)

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[Robaux Decision Tree \(DCSN3\) Manual PDF](#)

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## Robaux Decision Tree (DCSN3) Eurorack Module Cheat Sheet

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**Type:** Randomized Gate/Trigger Router & Clock Divider

**Power:**  $\pm 12\text{V}$  (30mA on +12V)

**Width:** (Check official specs)

**Depth:** (Check official specs)

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### Panel Reference

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```
      b   c   d
    / \ / \ / \
  e f g h i j k l m
           n (Knob)
           o (Button)
```

### Inputs

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| Jack | Function                         | Voltage Range           |
|------|----------------------------------|-------------------------|
| a    | Main gate/trigger or clock input | 0-5V or 0-10V (typical) |

| Jack | Function                              | Voltage Range           |
|------|---------------------------------------|-------------------------|
| m    | Hidden Reset input (in certain modes) | 0-5V or 0-10V (typical) |

*Note: The specified voltage range isn't detailed in the manual. Generally, 0-5V triggers/gates are expected for this type of module.*

## Outputs

| Jack    | Function (depends on mode)                          | Output Voltage |
|---------|---|----------------|
| b, c, d | Main gate/trigger outputs (random or divided clock) | 0-5V (typical) |
| e, f, g | Sub-outputs for main output b                       | 0-5V (typical) |
| h, i, j | Sub-outputs for main output c                       | 0-5V (typical) |
| k, l, m | Sub-outputs for main output d                       | 0-5V (typical) |

- **Random/Pattern Mode:** Trigger signals routed randomly or via patterns to these outputs.
- **Clock Divider Modes:** Each output carries clock divisions as per chosen divider mode.

## Controls

| Control | Type        | Description  |
|---------|-------------|--|
| n       | Rotary knob | Interpolates between fully random and 16-step repeating patterns. Used with o to select modes. |

| Control | Type   | Description   |
|---------|--------|---|
| o       | Button | Tap for new random sequence. Hold + Turn n to select mode; hold on power up for debug mode. |

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## Operation & Modes

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### Basic Gate/Trigger Routing

- **Send a trigger/gate to input a.**
- The module randomly routes to one (or more, in poly modes) of b, c, or d, then randomly to one of their 3 sub-outputs.

### Mode Selection (while power is on)

1. **Hold o (Freeze button)**
2. **Turn rotary knob n**  
Visual pattern (via LEDs) shows selected mode:
3. **Mono/Mono:** Random single path
4. **Poly/Mono:** Randomly to one or more main outs, each to one sub
5. **Poly/Poly:** Random polyphonic through all outs
6. **Latch** modes: As above, but output is held until new input/clock

### Randomness vs. Pattern

- **Turn n:** Left = fully random, Right = repeating 16-step pattern
  - **Tap o:** Generate a new random sequence.
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## Clock Divider Modes (selected by turning o knob in main mode)

| Position of o | Mode            | Output Assignments  |
|---------------|-----------------|---|
| Fully left    | Classic Divider | b: /2, e: /4, f: /8, g: /16. c-h-m: 8-step sequencer.         |
| Center        | 2/3/5 Divider   | b-e-f-g: /2,4,8,16; c-h-i-j: /3,6,12,24; d-k-l-m: /5,10,20,40 |
| Fully right   | Spread          | Successive integer divisions: /2, /3, /4, /5, /6, /7, ...     |

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## Reset & Debug

- **Auto-reset:** If input pauses, resets to first step.
- **Hidden Reset Input:** m jack can act as a reset in loop mode; enable in debug mode.
- **Debug Mode:** Hold o on power-up; outputs & LEDs will cycle for testing.

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## Quick Mode/Modes Reference

- **Mono/Mono:** Random single path b/c/d → e-g/h-j/k-m
- **Poly/Mono:** Randomly to several b/c/d, each picks one sub-out
- **Poly/Poly:** Poly trigger through all main + sub-outs
- **Latch variants:** Out is held till next gate/trigger
- **Clock Divider:** See divider modes above

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**General Tips:** - Modes are visually indicated via LEDs for intuitive feedback. - Combines random logic, clock dividing, and switch routing in one compact module. - Excellent for generative rhythms, randomized sequence distribution, or complex clocking.

