

# Sea Side Modular – Proteus

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- [Manual PDF](#)
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[Proteus Manual PDF](#)

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## Proteus Eurorack Cheat Sheet

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### Quick Start

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1. **Power On:** Connect power, shrouded header (-12V labeled), reverse polarity protected.
  2. **Patch Setup:**
  3. **Clock input** → GATE IN
  4. **GATE OUT** → Envelope/voice
  5. **V/OCT OUT** → Oscillator pitch input
  6. **Knob Suggestions** (for musical/generative patch):
  7. **SCALE:** Pick a scale
  8. **LENGTH:** 8 steps
  9. **DENSITY:** As desired
  10. **PATIENCE:** Noon
  11. **OCTAVE, MUTATE, SLEEP:** Fully CCW
  12. **COMPLEXITY:** Fully CW
  13. **LOCK TOGGLE:** Up (melody locked)
  14. **NEW button** = Generate new melody
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### Panel Controls

#### Knobs

- **LENGTH:** Sequence steps (2–32). (CV: -5V to +5V)

- **DENSITY**: % of active notes (rests vs notes). (CV: -5V to +5V)
- **SLEEP**: Beats to rest before repeating sequence. (CV: -5V to +5V)
- **PATIENCE**: How quickly randomizes, CCW=impatient, CW=infinite. (CV: -5V to +5V)
- **OCTAVE**: Octave transposition probability. (CV: -5V to +5V)
- **MUTATE**: Probability of single note mutation. (CV: -5V to +5V)
- **COMPLEXITY**: Affects new melody complexity (CCW=simple, CW=complex). (CV: -5V to +5V)
- **SCALE**: Selects scale (not voltage controlled)

## Toggles / Switches

- **LOCK TOGGLE** (Melody Lock):
  - Up: Melody locked, no changes/transpose/mutate
  - Down: Melody evolves according to settings
- **MODE SWITCH**:
  - Down: Regular operation
  - Up: Settings mode (silver labels apply)

## Buttons

- **NEW (center)**: Generate new melody
  - **Pattern Bank (1–4)**: Save/load/erase melodies
  - **Option buttons** (Settings Mode):
    - Vary Gates with Rests
    - Add Slew to notes
    - Preserve Melody Parameters
    - Quantize Notes (for TRANSPOSE input)
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## CV/IO Reference

### Inputs

- **GATE IN**: Clock input (advances sequence)
- **NEW (jack)**: Trigger = generate new melody
- **NEXT**: Trigger = load next pattern bank slot
- **TRANSPOSE**: v/oct input; added to melody (typically 1V/oct expected, -5V to +5V range for full sum), quantization optional.

- **CV Inputs:** All knobs except SCALE have CV in (-5V to +5V, summed with knob value).

## Outputs

- **V/OCT OUT:** Pitch CV output.
  - Default range: 1.0V–4.0V (base C3=2.0V, customizable), unipolar.
  - **GATE OUT:** Step gate output.
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## Sequence Memory / Pattern Bank

- **4 Pattern slots:** Save (press unlit), Load (press lit), Clear (long press lit)
  - **Autopersist:** Pattern saved to memory on clock stop, can change persistence in config
  - **Cycle Patterns:** Send trigger to NEXT
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## Tips/Notes

- **Knob Lock Behavior:** After mode switch or save/load, knobs “lock” until turned back to original value
  - **Settings Mode:** Access alternate knob functions (Gate length, Slew, LED brightness, Rotate, etc.)
  - **Custom Scales:** Up to 6 slots, set via `proteus_config.json` on USB drive ([customize here](#))
  - **Firmware Update:** Place `.bin` on USB, reboot; recalibrate (see manual) if prompted.
  - **Calibration:** Required if pitch is off or transpose is inaccurate (see manual page 22).
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## Color Legend

Color	Meaning
Off	Step not played (rest)
Blue	Active step
Green	First step of sequence
Orange	Sleeping (rest cycle)
Yellow	Octave transpose (first step)
Pink	Step muted
Teal	Slewed note
Purple	Locked parameters overlap (knob unlocking)

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## Useful Links

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- [Full Manual PDF](#)
  - [Proteus Configurator](#)
  - [Official Discord Support](#)
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