

# Expert Sleepers – ES-9

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- [Manual PDF](#)
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[ES-9 Firmware v1.3 User Manual \(PDF / source\)](#)

## Expert Sleepers ES-9: using it to build melodic parts in a Eurorack system

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The attached manual is for the **Expert Sleepers ES-9**, which is primarily a **USB/CV/audio interface and mixer/router** for Eurorack. By itself, it is **not a sound source, oscillator, sequencer, or quantizer**, so it does not directly generate melodies on its own. But in a modular music workflow, it is extremely powerful for **creating, controlling, recording, processing, and performing melodic material** when paired with a DAW, tablet, MIDI controller, or other Eurorack voice modules.

## What the ES-9 does musically

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From the manual, the ES-9 gives you:

- **14 analog inputs** on 3.5mm jacks
- **8 DC-coupled 3.5mm analog outputs**
- **Main balanced outputs**
- **Headphone output**
- **S/PDIF I/O**
- **USB audio interface** with 16 ins / 16 outs to a computer/tablet
- **Internal mixer**
- **Optional MIDI breakout support**
- **DC-coupled I/O**, which is crucial for **CV as well as audio**

That combination makes it ideal as the bridge between:

- **DAW sequencing** and **modular voices**
  - **Software quantizers/arpeggiators/LFOs/envelopes** and hardware
  - **Eurorack oscillators/filters/VCA**s and multitrack recording
  - **Live performance mixing** and headphone cueing
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## Best role of the ES-9 in melodic patching

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For melody-making, think of the ES-9 as four things:

1. **A CV output hub**

Send pitch CV, gates, envelopes, modulation, clocks, and automation from your DAW or software into the rack.

2. **An audio input hub**

Bring oscillators, full synth voices, filters, and final melodic lines back into the DAW for recording or effects.

3. **A monitor/mixer/router**

Build cue mixes, layered melodic stems, headphone mixes, or direct monitoring paths.

4. **A MIDI bridge**

Use MIDI controllers or a MIDI breakout to control mixer states or integrate external sequencing workflows.

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## Why it is useful for melodic music specifically

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The key feature here is that the ES-9's **3.5mm analog outputs are DC-coupled**, and the inputs are also DC-coupled. The manual explicitly says the outputs can be used for **audio or CVs**, and the inputs can also be used for **CVs as well as audio**.

That means you can use software to generate:

- **1V/oct pitch CV**
- **gates/triggers**

- **modulation curves**
- **stepped sequencer voltages**
- **envelopes**
- **random voltages**
- **automation lanes**
- **quantized melodic patterns**

and route them from the computer directly into Eurorack voice modules.

This is where melody comes from.

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## Core melodic use cases

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### 1. DAW-to-modular melodic sequencing

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This is probably the most important melodic application.

#### Patch concept

Use the ES-9 outputs to send: - **Pitch CV** to an oscillator's 1V/oct input - **Gate** to an envelope or function generator - **Envelope or modulation CV** to filter cutoff, wavefolder, FM amount, or VCA

#### Example

- **ES-9 output 1** → oscillator 1V/oct
- **ES-9 output 2** → envelope gate input
- **ES-9 output 3** → filter cutoff modulation
- Oscillator/filter/VCA audio output → **ES-9 input 1**

Now your DAW can act as: - piano-roll sequencer - CV recorder - automation source - quantizer - probabilistic melody generator

## Musical result

You can write precise basslines, leads, arpeggios, ostinatos, generative melodies, or harmonic lines in software and play them on real Eurorack voices.

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## 2. Polyphonic melodic control

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Because the ES-9 has **8 DC-coupled analog outputs**, you can drive multiple simultaneous control signals.

For example, each voice usually needs at least: - 1 pitch CV - 1 gate

So 8 outputs could become:

- **4-voice pitch/gate polyphony**, or
- **2 voices** with lots of additional modulation, or
- **1 rich melodic voice** with multiple expressive CV lanes

### Example 4-voice patch

- Out 1 → Voice 1 pitch
- Out 2 → Voice 1 gate
- Out 3 → Voice 2 pitch
- Out 4 → Voice 2 gate
- Out 5 → Voice 3 pitch
- Out 6 → Voice 3 gate
- Out 7 → Voice 4 pitch
- Out 8 → Voice 4 gate

Then return each voice or a submix into the ES-9 inputs.

## Musical result

- chords
- harmonized melodies
- counterpoint
- stacked unison riffs

- DAW-controlled modular polyphony
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### 3. Recording and layering melodic voices

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The ES-9 has **14 analog inputs**, so it can capture many melodic sources at once.

#### Useful melodic workflow

Patch several melodic modules into separate ES-9 inputs: - bass voice - lead voice - pluck voice - drone voice - modulation CV for analysis or reuse

Because the ES-9 can directly route hardware inputs to USB inputs, you can record each melodic component as a separate track in your DAW.

#### Musical result

- multitrack modular composition
- separate processing of lead and bass parts
- easier arrangement
- tighter editing and layering

This is especially valuable if your rack has multiple oscillators or complete voices.

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### 4. Software quantizer + hardware voice

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The ES-9 does not quantize pitch internally, but it makes it easy to use a **software quantizer** to produce clean melodies.

#### Workflow

- Generate or record a rough CV sequence in software
- Quantize it to a scale in the DAW/plugin environment
- Send quantized pitch out through an ES-9 output
- Send to oscillator 1V/oct

## Musical result

- scale-locked melodies
- modal improvisation
- evolving generative phrases
- easy key changes

This is a strong hybrid approach if your rack does not contain a dedicated quantizer.

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## 5. Hybrid sequencing with modulation-rich melodic phrasing

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Melody in modular is often more than pitch and gate. The ES-9 is useful because it lets you add many simultaneous control streams.

### Example expressive melodic patch

- Out 1 → pitch
- Out 2 → gate
- Out 3 → velocity-style envelope depth
- Out 4 → filter accent
- Out 5 → FM depth
- Out 6 → wavefold amount
- Out 7 → vibrato depth
- Out 8 → clock/reset or an extra articulation signal

## Musical result

A single sequenced melody can become animated and expressive, more like a performed line than a static step sequence.

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## 6. Use the internal mixer for monitoring melodic work

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The manual describes an internal **8x8 crosspoint mixer** and optional second mixer instead of S/PDIF. This matters for composition and performance.

You can:

- monitor melodic voices without relying entirely on the DAW
- create separate **main out** and **headphone** mixes
- cue a melodic part in headphones
- blend DAW playback with live modular audio

### Default mixer behavior from the manual

By default: - main outputs carry USB 1/2 - headphones mix 1/2 with 3/4

That means you can create a performance workflow like: - DAW backing track on USB 1/2 - live melodic synth voice on USB 3/4 or routed mixer channels - monitor both in phones while sending only selected material to mains

### Musical result

This is excellent for: - live techno performance - rehearsing melodic improvisation - overdubbing new melodic lines over an existing arrangement

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## 7. Standalone melodic submixer in a rack

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The ES-9 stores **two configurations**: - hosted - standalone

This is very useful if your melodic workflow alternates between: - computer-connected composing - standalone rack performance

## Example

**Hosted config** - DAW outputs become pitch/gate/modulation sources - all voice audio returns to DAW

**Standalone config** - analog inputs become mixer inputs - second mixer enabled - direct monitor routing for live patching without computer dependence

## Musical result

You can rehearse or perform melodic patches even if the computer is disconnected, then reconnect later for composition/recording.

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# 8. CV recording and analysis of melodic behavior

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Since the inputs are DC-coupled, you can also record **CVs**, not only audio.

That means you can capture: - pitch sequences from an external sequencer - envelope shapes - modulation affecting melodic timbre - random voltage patterns driving note choice

## Why this matters

You can study and reuse melodic behavior: - record an analog sequencer's pitch CV - edit or scale it in software - send it back out through ES-9 outputs - turn one improvised phrase into a composed motif

## Musical result

A strong feedback loop between hardware improvisation and software arrangement.

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## 9. Building a complete hybrid melodic voice chain

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A practical “used together” interpretation for this module is the way its own sections work together:

- **USB audio block**
- **Mixer block**
- **S/PDIF or Mixer 2**
- **Routing matrix**
- **DC-coupled outputs**
- **Audio/CV inputs**

These can all be combined into one melodic ecosystem.

### Example full melodic workflow

#### Control side

- DAW sends:
- pitch CV
- gate
- accent
- filter automation

through ES-9 3.5mm outputs.

#### Synthesis side

- Eurorack oscillator + filter + VCA create the melodic line.

#### Return side

- dry oscillator output into one ES-9 input
- post-filter output into another
- final VCA output into another

## Monitoring side

- use internal mixer to hear a cue mix
- headphones carry layered melody + click/backing track
- main outs carry performance mix

## Composition side

- record each stage separately in DAW
- later re-sequence pitch or automation
- replay through the rack

This is one of the strongest hybrid melodic setups available in Eurorack.

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# Important technical points from the manual for melodic patching

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## 1. Input DC blocking must be off for CV

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The manual says input DC-blocking filters are recommended for audio, but **must be turned off for CV**.

So: - for recording audio from a melodic voice: DC blocking **on** is often appropriate - for recording pitch CV, envelopes, or gates: DC blocking **off**

This is crucial if you want to capture or process melodic CV accurately.

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## 2. Balanced main outputs are not DC-coupled

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The **balanced 1/4" main outputs are not DC-coupled**, so they are for: - speakers - mixer - audio monitoring

Not for CV.

For melodic CV duties, use the **8 analog 3.5mm outputs**.

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### 3. Headphone output is DC-coupled

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The manual notes the headphone output is DC-coupled, but in practice for melodic patching, the main intended CV outputs are still the dedicated 3.5mm outs. The headphone path is more naturally used for monitoring.

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### 4. Approximate voltage ranges

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The manual states: - input voltage of approx  $\pm 10V$  gives 0 dBFS in the DAW  
- 3.5mm outputs have max output of approx  $\pm 10V$

That is important for Eurorack compatibility and means the ES-9 can interface well with typical pitch CV and modulation ranges.

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### 5. Internal routing can be confusing

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The manual warns that routing can easily end up with audio “going nowhere.” For melodic use, start simple:

- route DAW/CV outputs directly to selected analog outputs
- route melodic voice outputs directly to USB inputs
- only then add mixer and monitor complexity

That will save a lot of troubleshooting.

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## Good melodic patch ideas using ES-9

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### Patch 1: DAW-controlled mono lead

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- Out 1: pitch CV to oscillator
- Out 2: gate to envelope
- Out 3: filter cutoff modulation
- Voice audio back to In 1
- Monitor via main outs/headphones

**Result:** tight, repeatable lead melodies with analog tone.

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## Patch 2: Bass + lead dual voice

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- Out 1/2: bass pitch/gate
- Out 3/4: lead pitch/gate
- Out 5: bass accent
- Out 6: lead filter envelope amount
- Bass audio → In 1
- Lead audio → In 2

**Result:** two independent melodic parts recorded separately.

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## Patch 3: Generative melody rig

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- Software random sequencer generates voltages
- Quantizer plugin constrains to scale
- ES-9 sends pitch + trigger to modular voice
- Audio returns on inputs
- Additional DAW automation morphs timbre

**Result:** evolving melodic phrases with hardware sound and software intelligence.

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## Patch 4: Polyphonic chord stabs

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- Use 8 outputs as 4 pitch/gate pairs
- Send to four oscillators or four complete voices
- Return summed or individual audio to ES-9 inputs

**Result:** modular chord progressions, harmonized hooks, lush layered motifs.

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## Patch 5: Record-and-replay analog melody

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- External hardware sequencer sends pitch CV to oscillator and split to ES-9 input
- ES-9 records the pitch CV
- DAW edits timing/quantization
- Edited CV sent back out through ES-9 output

**Result:** improvised analog melody turned into an editable composition.

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## Patch 6: Live melodic performance mixer

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- DAW backing tracks on USB 1/2
- Live modular lead on analog input
- Headphone mix includes cue material
- Main outs carry performance blend

**Result:** perform melodic lines live over arranged material.

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## Limitations to be aware of

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The ES-9 does **not** itself provide: - oscillator tones - pitch quantization - step sequencing - envelopes - gates - note generation - internal melodic pattern generation

So to create actual melodic content, it needs to be used with: - a DAW or CV-generating software - external Eurorack oscillators/voices - or external sequencers/quantizers/controllers

In other words, the ES-9 is the **infrastructure** for melody, not the melody engine itself.

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# Best pairings for melodic creation

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The ES-9 works especially well with:

- **Oscillators / complete synth voices**  
for the actual sound source
- **VCAs and envelopes**  
for note articulation
- **Filters / wavefolders / LPGs**  
for shaping melodic timbre
- **DAW CV tools or plugins**  
for pitch, gates, quantization, randomization, automation
- **MIDI keyboard or controller**  
to perform or automate melodies through the computer
- **ES-5 expansion**  
if you need expanded gate/clock/control capabilities

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## Practical summary

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### What this module contributes to melodic music

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The Expert Sleepers ES-9 is best understood as a **hybrid composition and performance hub** for melodic Eurorack work. It allows you to:

- send pitch/gate/modulation from software to modular
- bring melodic audio back into the DAW
- record multiple melodic voices at once
- monitor and mix parts internally
- store different hosted/standalone configurations
- integrate MIDI and optional expansion modules

## What it is best at

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It excels at: - DAW-driven melodic sequencing - hybrid modular/software composition - multitrack recording of melodic patches - live performance monitoring and routing - CV generation and capture

## What you need alongside it

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To actually produce notes and melodies, pair it with: - one or more oscillators or voices - an envelope/VCA chain - a sequencer or DAW CV software - optionally a quantizer or MIDI keyboard

So in a musical system, the ES-9 is the **bridge that lets your melodic ideas move freely between software and Eurorack hardware.**

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