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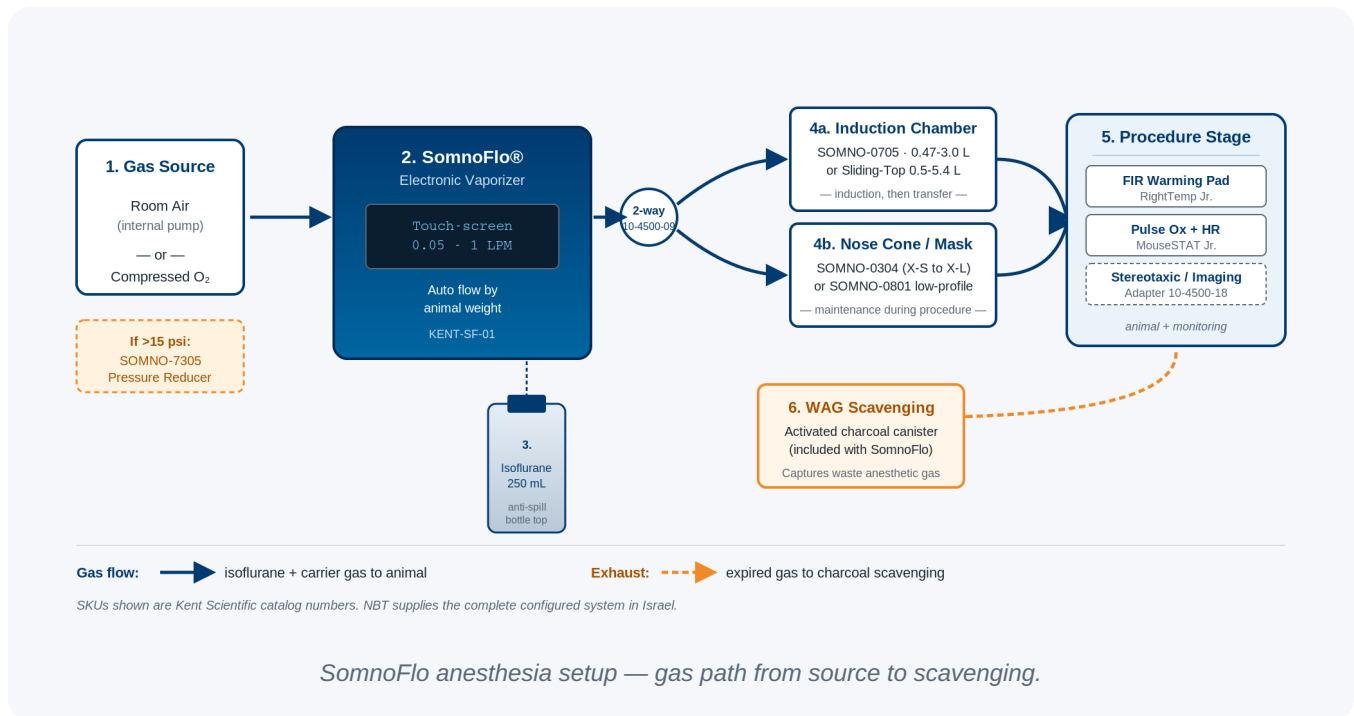
# **SomnoFlo® Anesthesia Setup Guide**

A complete configuration reference for low-flow isoflurane workflows  
in mouse and rat research.

**Catalog:** KENT-SF-01 · Kent Scientific  
Exclusive distributor in Israel — NBT Ltd  
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# Building Your SomnoFlo® Anesthesia Setup

The SomnoFlo® is the core of a complete low-flow isoflurane anesthesia workflow for mice and rats. Every setup follows the same gas path — from gas source, through the vaporizer, to the animal, and out through scavenging — but the accessories you bolt on depend on the procedure.



## The gas path in six steps

- 1. Gas source.** Use ambient room air via the internal compressor, or connect a regulated compressed-gas line. Sources above 15 psi require the *SOMNO-7305 preset pressure reducer* (100 → 15 psi).
- 2. SomnoFlo electronic vaporizer (KENT-SF-01).** Touch-screen control. Auto-calculates flow rate from animal weight. Delivers 0.05–1 LPM with typical isoflurane consumption under 1 mL/hour. No annual calibration required.
- 3. Isoflurane bottle (250 mL).** Connects directly via the integrated anti-spill, anti-vapor bottle-top adapter — no syringe pump, no manual fill.
- 4. 2-accessory adapter (10-4500-09).** Splits the vaporizer output to two destinations — typically an induction chamber and a maintenance nose cone — so you can induce and transfer without disconnecting tubing.
- 5. Animal interface — chamber and/or mask.** Induction chamber sized to species (mouse: 0.47–1 L; rat: 2–5.4 L). Maintenance mask sized to body weight (X-Small weanling mice through X-Large for rats >350 g). Mask variants are available MRI compatible.

6. **Waste anesthetic gas (WAG) scavenging.** Expired gas is captured by the activated-charcoal canister supplied with the SomnoFlo. Replace per Kent's gravimetric guidance to meet institutional ACGIH limits.

**Why low-flow?** Compared with traditional precision vaporizers running at 0.5–1 L/min, the SomnoFlo cuts isoflurane consumption by up to 90 %, reduces waste-gas exposure for the operator, and removes the annual calibration certificate from the facility-inspection checklist.

# Configure Your Setup by Application

The SomnoFlo platform supports three common workflow families. Each starts from the same base (vaporizer + bottle + WAG scavenging) and adds the accessories the procedure needs.

## Surgery & Survival Procedures

Induction → maintenance → recovery

### Core build:

- SomnoFlo vaporizer KENT-SF-01
- Induction chamber sized to species SOMNO-0705 (0.47, 1.0, 2.0 or 3.0 L)
- Anesthesia mask sized to body weight SOMNO-0304 (X-Small to X-Large)
- 2-accessory adapter (chamber + mask) 10-4500-09
- WAG charcoal canister included with SomnoFlo

### Recommended add-ons:

- Far-infrared warming pad RightTemp Jr.
- Pulse oximetry + heart-rate monitor MouseSTAT Jr.

## Imaging (MRI / CT / Optical)

Vaporizer outside the bore, animal inside

### Core build:

- SomnoFlo vaporizer KENT-SF-01 (kept in the control room)
- Induction chamber outside the scanner SOMNO-0705
- Low-profile MRI-compatible mask SOMNO-0801
- Extended tubing specify length when ordering – custom for MRI
- WAG charcoal canister included with SomnoFlo

### Recommended add-ons:

- MRI-compatible warming (per scanner site)
- Compressed-gas line + pressure reducer SOMNO-7305

*Note: the SomnoFlo unit itself is not MRI-safe — it stays in the control room. Only the mask and tubing enter the bore.*

## Stereotaxic & Electrophysiology

Anesthesia under a head-fixed frame

### Core build:

- SomnoFlo vaporizer KENT-SF-01
- Induction chamber SOMNO-0705
- Stereotaxic adapter kit 10-4500-18
- Low-profile mask for ear-bar clearance SOMNO-0801
- WAG charcoal canister included with SomnoFlo

### Recommended add-ons:

- Far-infrared warming pad RightTemp Jr.
- Pulse ox + HR MouseSTAT Jr.
- Multi-animal output for parallel rigs 3-accessory connector 10-1000-185

## Choosing chamber and mask sizes

Animal	Induction chamber	Mask (SOMNO-0304)	Low-profile mask (SOMNO-0801)
Weanling mouse	0.47 L	X-Small	Small (<100 g)
Adult mouse (20–40 g)	0.47 – 1.0 L	Small (≤150 g)	Small (<100 g)
Small rat (150–200 g)	1.0 – 2.0 L	Medium	Medium (up to 100 g)
Adult rat (200–350 g)	2.0 – 3.0 L	Large	Large (up to 300 g)
Large rat (>350 g)	3.0 – 5.4 L (sliding-top)	X-Large	Extra Large (>300 g)

**Specifying your build:** NBT's clinical specialists confirm chamber volume, mask size, scavenging capacity and ancillary equipment against your protocol before quoting. Use the Request Quote form on the product page with your animal model, procedure type, and any imaging or rig integration requirements.

### NBT Ltd — New Biotechnology Ltd

Exclusive distributor of Kent Scientific anesthesia systems in Israel. Our team of scientific specialists provides full local support including installation, application training, and ongoing technical assistance.

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All SKUs shown are Kent Scientific catalog numbers. Specifications verified against Kent Scientific product documentation.