AUREN Decentralised Single-Room MVHR Ventilation Fan Unit (srMVHR)

The **AUREN 160** is a high-efficiency, ultra-quiet ventilation system designed for residential and public spaces. It provides continuous air exchange while recovering up to **93% of thermal energy**, reducing energy costs and improving indoor air quality. Ideal for living rooms, bedrooms, basements, and hallways, it combats humidity, pollutants, and condensation-related issues like mould.

How does it work?

The AUREN 160 uses **alternating flow heat recovery** to maintain air quality while conserving energy:

Heat Recovery Cycle:

- **Extract Phase (70 seconds)**: Stale, warm indoor air passes through the ceramic heat exchanger, transferring its thermal energy to the ceramic core.
- **Intake Phase (70 seconds)**: Cold fresh air from outside flows through the same exchanger, absorbing stored heat before entering the room.
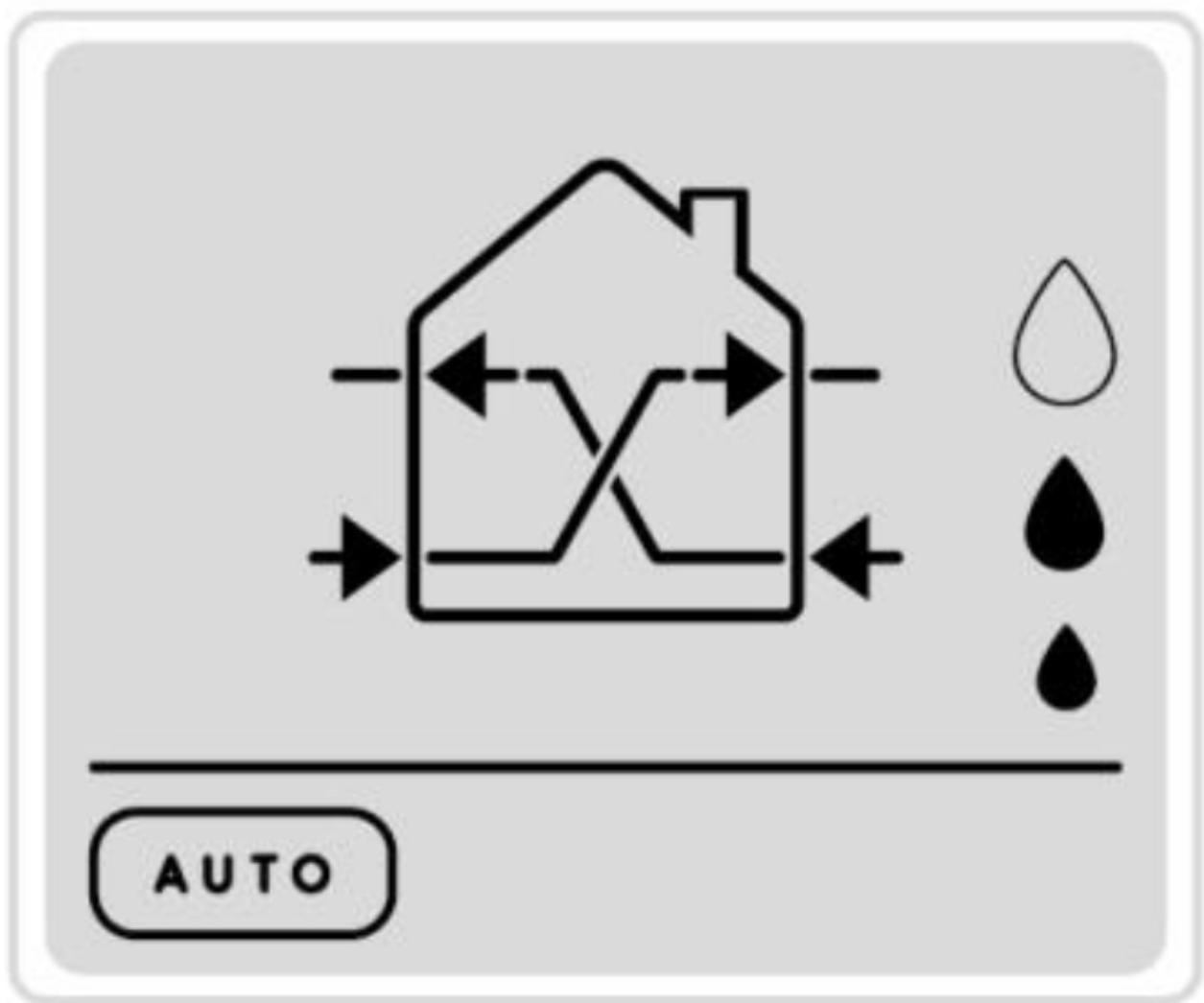- This cycle repeats continuously, recovering **93% of heat** and ensuring stable indoor temperatures.

Adaptive Operation Modes:

- **Automatic Mode**: Adjusts speed based on humidity/daylight sensors.
    - *Day*: Medium speed with heat recovery.
    - *Night*: Minimum speed with heat recovery.
    - *Humidity Alarm*: Switches to extraction mode if humidity exceeds set thresholds (40%/60%/90%).
- **Surveillance Mode**: Standby until high humidity triggers extraction.
- **Manual Modes**:
    - *Extraction/Intake Only*: For rapid air exchange during high occupancy.
    - *Master-Slave Airflow*: Directs continuous airflow between paired units (e.g., kitchen to living room).
- **Night Mode**: Ultra-quiet operation for minimal disturbance.

Efficiency Enhancements:

- **Free Cooling**: In summer, bypass heat recovery to intake cool air directly.

- **Filter Alerts**: Automatic reminders for filter replacement (every 2 years or 3,000 hours).
- **Zoned Systems**: Multiple units can be grouped by floor/area for optimized climate control.

To activate this mode, repeatedly press the **MODE (M)** button until the corresponding image appears on the display.
Each press of the **MODE** button will cycle through the following sequence: **AUTO → SURVEILLANCE → MANUAL → AUTO → SURVEILLANCE**, and so on.

In this mode, the **HUMIDITY (H)** button becomes active, allowing you to select the desired humidity threshold.

When in **Automatic Mode**, both the humidity and twilight sensors are operational. The units will function independently, without requiring manual commands. Below is an explanation of how the units operate in various conditions and modes:

- **Standard humidity conditions (Day):** The units run at medium speed with heat recovery.
- **Standard humidity conditions (Night):** The units run at minimum speed with heat recovery.
- **Humidity alarm (Day):** The units operate in extraction mode at medium speed.
- **Humidity alarm (Night):** The units operate in extraction mode at night speed.
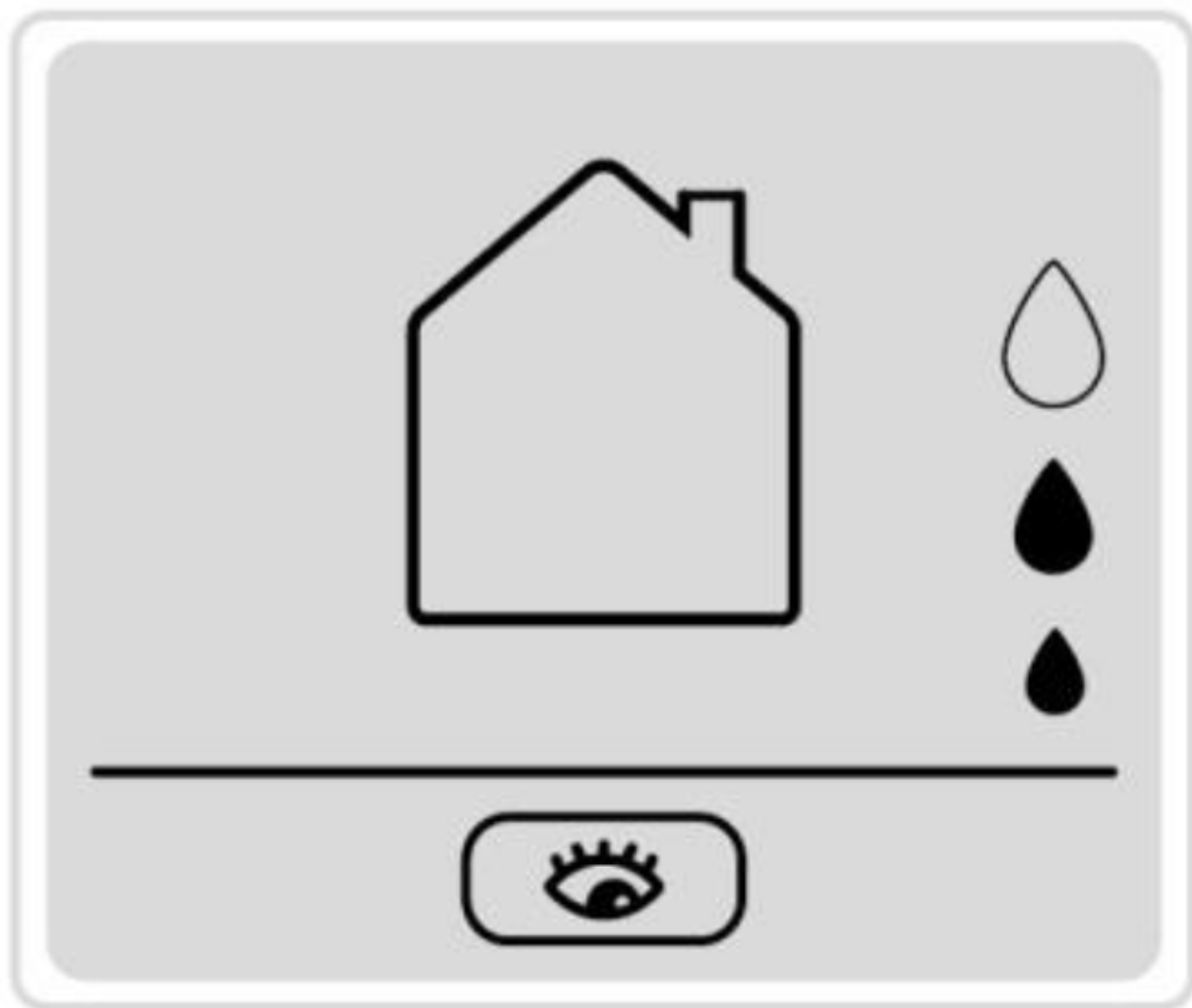
The system enters **Humidity Alarm Mode** when the **MASTER unit** detects a humidity level in the room that exceeds the selected threshold. Three threshold options are available: **40%, 60%, or 90%**.

Note:
The thresholds mentioned are based on tests conducted in a controlled climate chamber at a constant temperature of **20°C**. The actual intervention threshold of the humidity sensor may vary between products and can be influenced by environmental and atmospheric factors.

Key Features:

- **Alternating Flow Technology**: Switches between supply (fresh air intake) and extract (stale air removal) modes.
- **Ceramic Heat Exchanger**: Recovers heat from extracted air to warm incoming fresh air, minimizing energy loss.
- **Low Noise & Energy Use**: Operates at just **3.9-6.7 W** (depending on speed), with noise levels as low as **21 dB(A)** at 3 meters.
- **Multi-Room Compatibility**: Units can be paired in a **master-slave system** for synchronized airflow across rooms.
- **Smart Sensors**: Built-in humidity and twilight sensors adjust operation automatically.
- **IPX4 Rating**: Suitable for indoor installations in temperatures from **-30°C to +50°C**.

To activate Surveillance Mode, press the **MODE (M)** button repeatedly until the corresponding display image appears. The mode cycles through the following sequence: **AUTO**, **SURVEILLANCE**, **MANUAL**, then repeats (**AUTO**, **SURVEILLANCE**, etc.).

In this mode, the **HUMIDITY (H)** button becomes active, allowing you to select the desired humidity threshold.
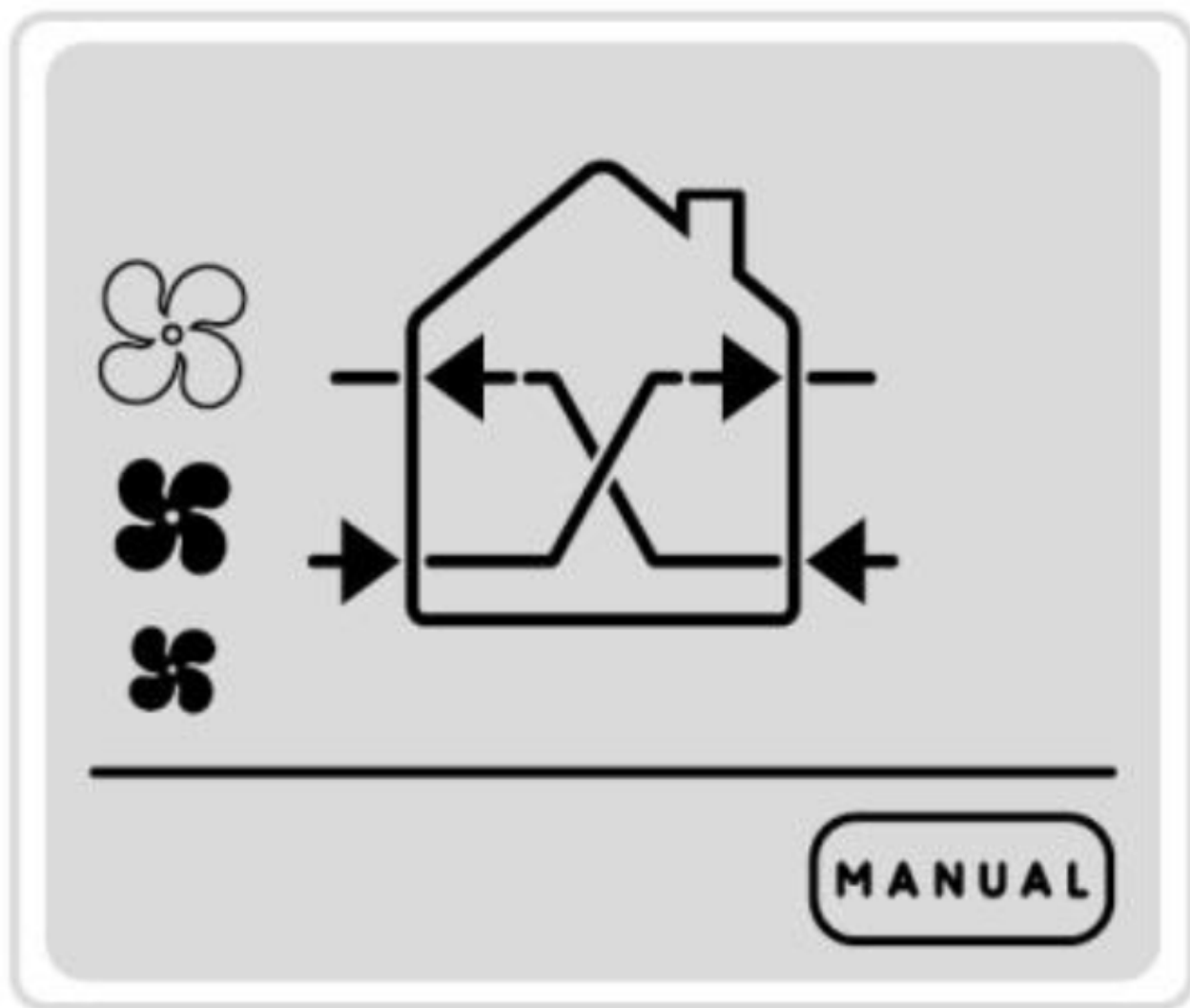
When in Surveillance Mode, both the humidity and twilight sensors are operational. The units remain in stand-by with the front panel closed until the humidity level in the room exceeds the set threshold, at which point the units initiate extraction. Below is an explanation of how the units operate in different scenarios:

- **Standard Humidity Conditions**: The units remain in stand-by with the front panel closed while the sensors remain active.
- **Humidity Alarm Conditions (Daytime)**: When humidity exceeds the set threshold during the day, the units operate at medium extraction speed.
- **Humidity Alarm Conditions (Nighttime)**: When humidity exceeds the set threshold during the night, the units operate at night-speed extraction.

The units enter a humidity alarm state when the **MASTER unit** detects a humidity level in the room exceeding the selected threshold (40%, 60%, or 90%).

Note: The specified thresholds are based on tests conducted in a climate chamber at a constant

temperature of 20°C. Actual sensor performance may vary depending on environmental and atmospheric factors.

To activate this mode, repeatedly press the **MODE (M)** button on the remote control until the display shows the image above.
When the **MODE** button is pressed, the mode will cycle through the following sequence: **AUTO**, **SURVEILLANCE**, **MANUAL**, and then repeat (**AUTO**, **SURVEILLANCE**, …).
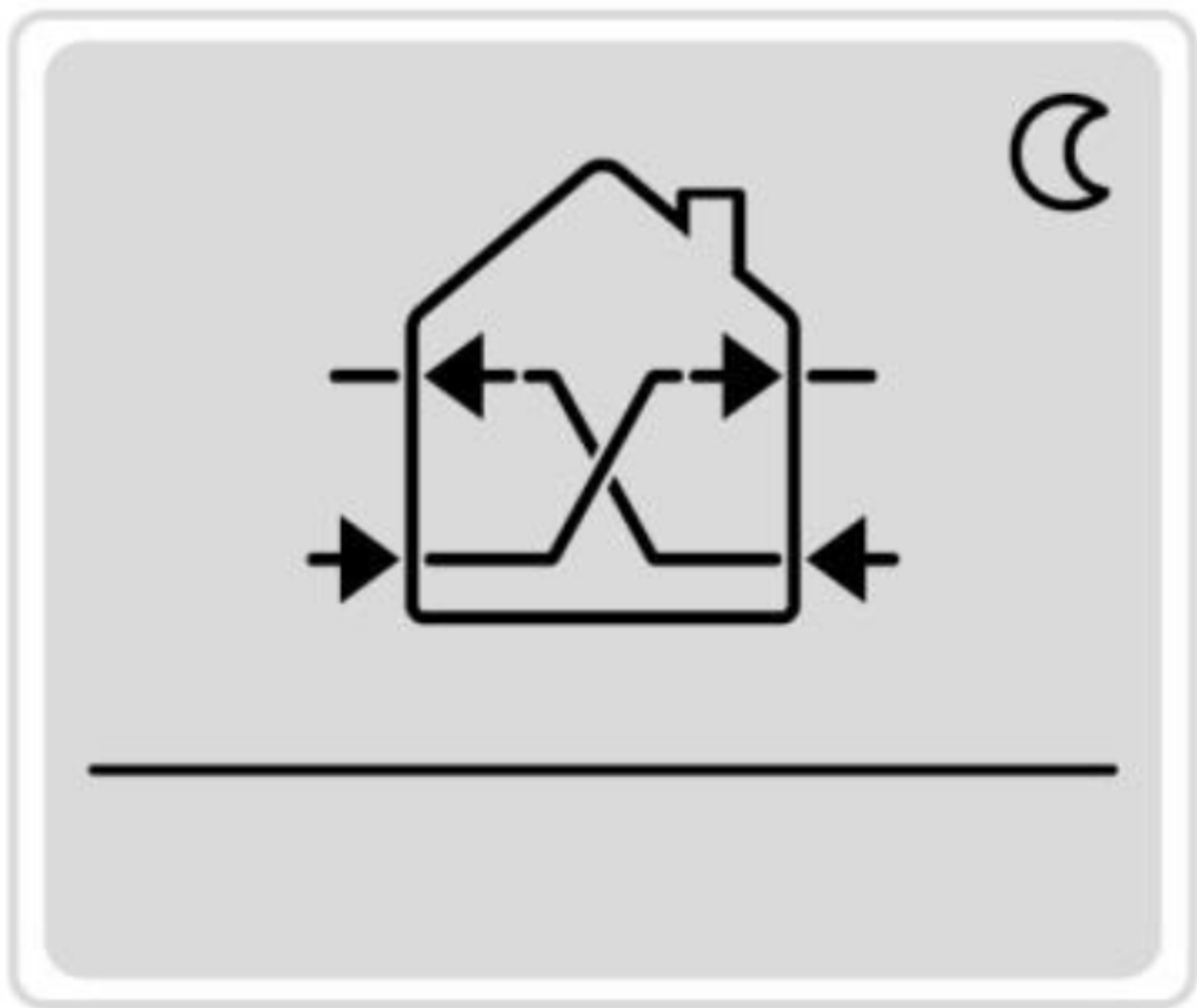
In this mode, the **IMPELLER (V)** button becomes active, allowing you to select the desired speed.

In this mode:

- The sensors are disabled.
- The units operate with heat recovery.
- The end user can manually select the desired speed, which will remain active until a new command is entered.

Advice for Use

This mode is recommended when heat recovery is required regardless of humidity levels or when a fixed speed needs to be set for all units.
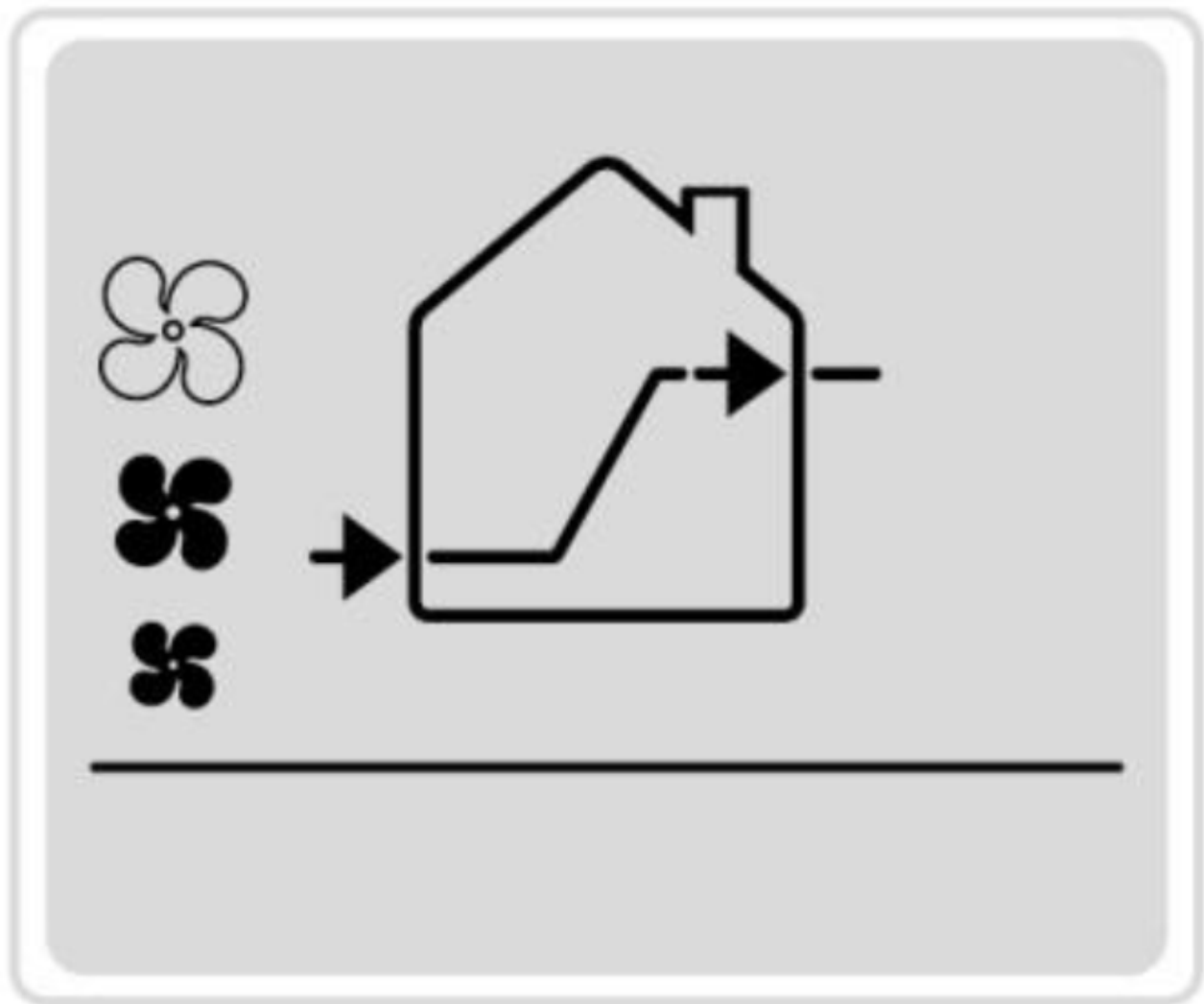
To activate this mode, press the **NIGHT (N)** button on the remote control. The display will show the image above.

In this mode, all units will operate at night speed with heat recovery until a new command is entered.

Advice for Use

This mode is recommended when the external environment is very quiet, and even the unit's minimum speed is noticeable.

To activate this mode, press the FLOW (F) button on the remote control until the above image appears on the display. Each press of the **FLOW** button will cycle through the modes in the following sequence: **MASTER-SLAVE AIR FLOW → SLAVE-MASTER AIR FLOW → EXTRACTION → INTAKE → MASTER-SLAVE AIR FLOW.**
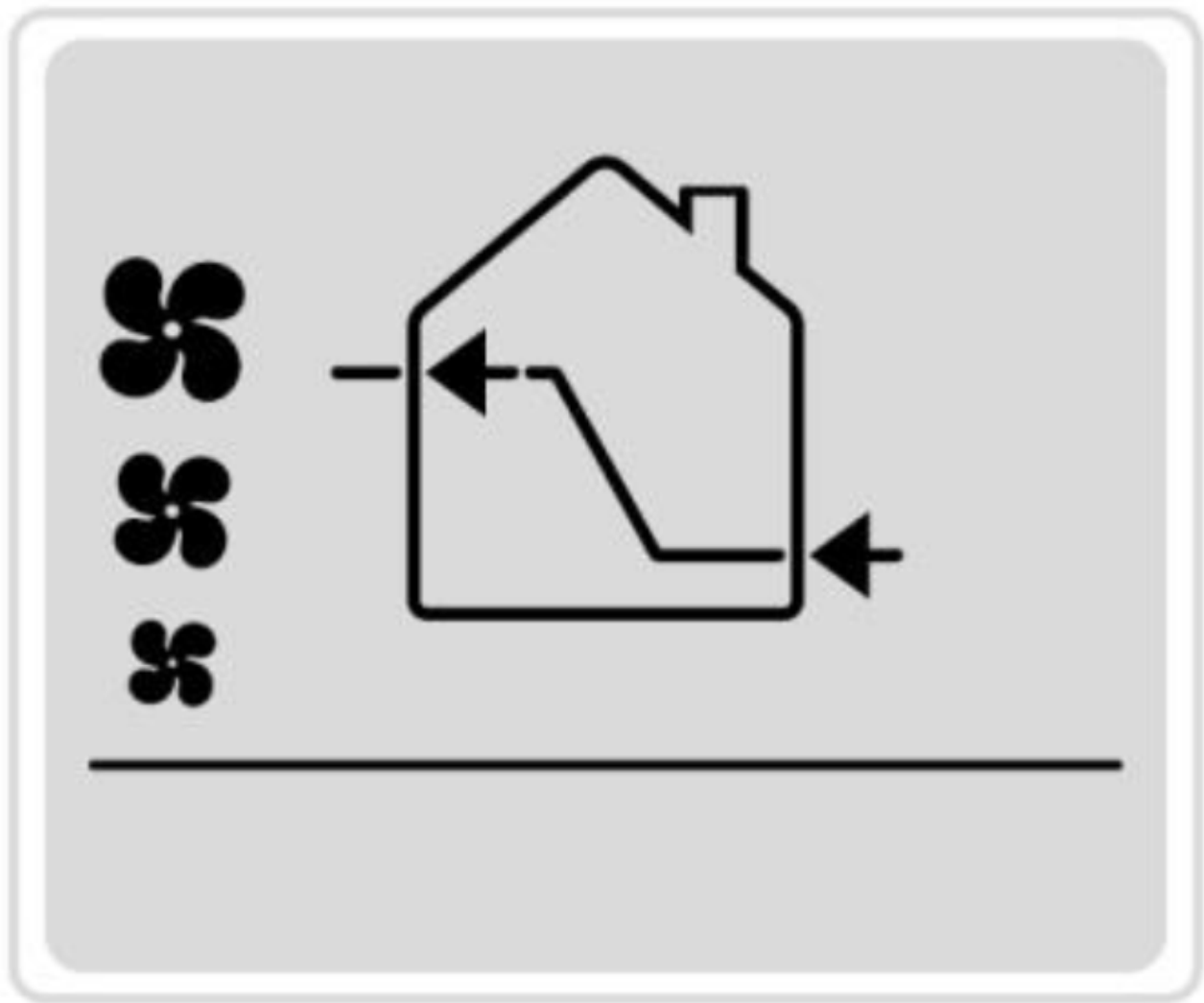
In this mode, the IMPELLER (V) button is enabled, allowing you to select the desired speed.

How It Works

In this mode, the units generate a continuous air flow from the MASTER or SLAVE (SAME AS MASTER) units to the SLAVE (OPPOSITE TO MASTER) units, excluding heat recovery.

Advice for Use

This mode is recommended for isolating odours in a room, such as a kitchen, by generating a continuous air flow towards it. It is also suitable for free-cooling during the summer season. When the external temperature is lower than the internal temperature, there is no need for heat recovery; instead, fresh air can be blown into the house. By pressing the specific function button, all units will consistently operate in the desired direction, with the option to adjust the speed as needed.

To activate this mode, repeatedly press the **FLOW (F)** button on the remote control until the display shows the image below.

When pressing the **FLOW** button, the mode will cycle through the following sequence:

MASTER-SLAVE AIR FLOW → SLAVE-MASTER AIR FLOW → EXTRACTION → INTAKE → MASTER-SLAVE AIR FLOW.

In this mode, the **IMPELLER (V)** button becomes active, allowing you to select the desired speed.

How It Works

In this mode, the units create a continuous airflow that moves:

- **From SLAVE (opposite to MASTER) to MASTER**, or
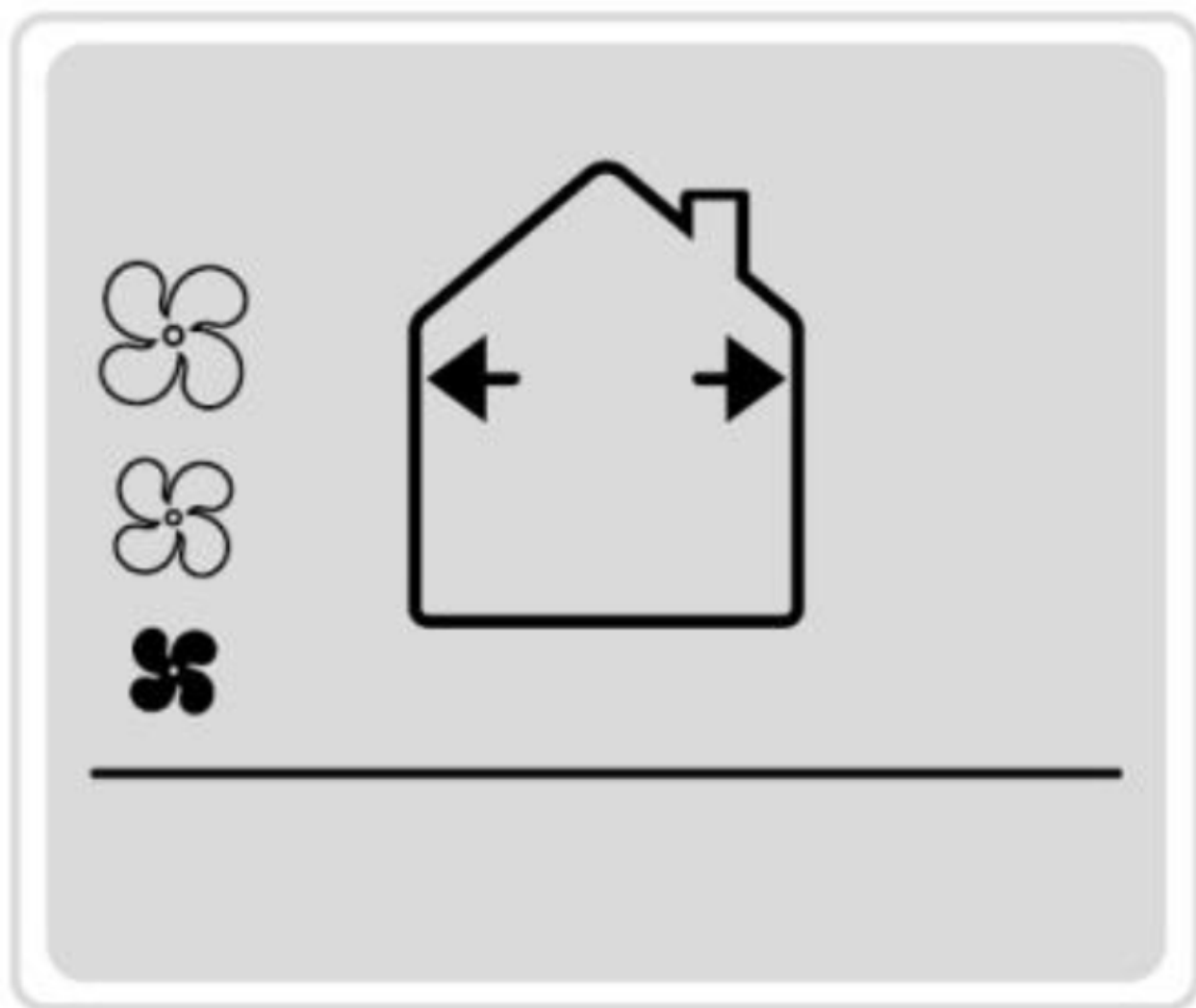- **From SLAVE (same as MASTER) to MASTER**, with heat recovery excluded.

Advice for Use

This mode is ideal for isolating odours in specific rooms, such as kitchens, by directing continuous airflow towards them.

It is also suitable for free cooling during the summer. When the external temperature is lower than the internal temperature, there is no need for heat recovery. Instead, fresh air is drawn into the house.

By pressing the corresponding function button, all units will operate continuously in the chosen direction. You can adjust the speed as needed.
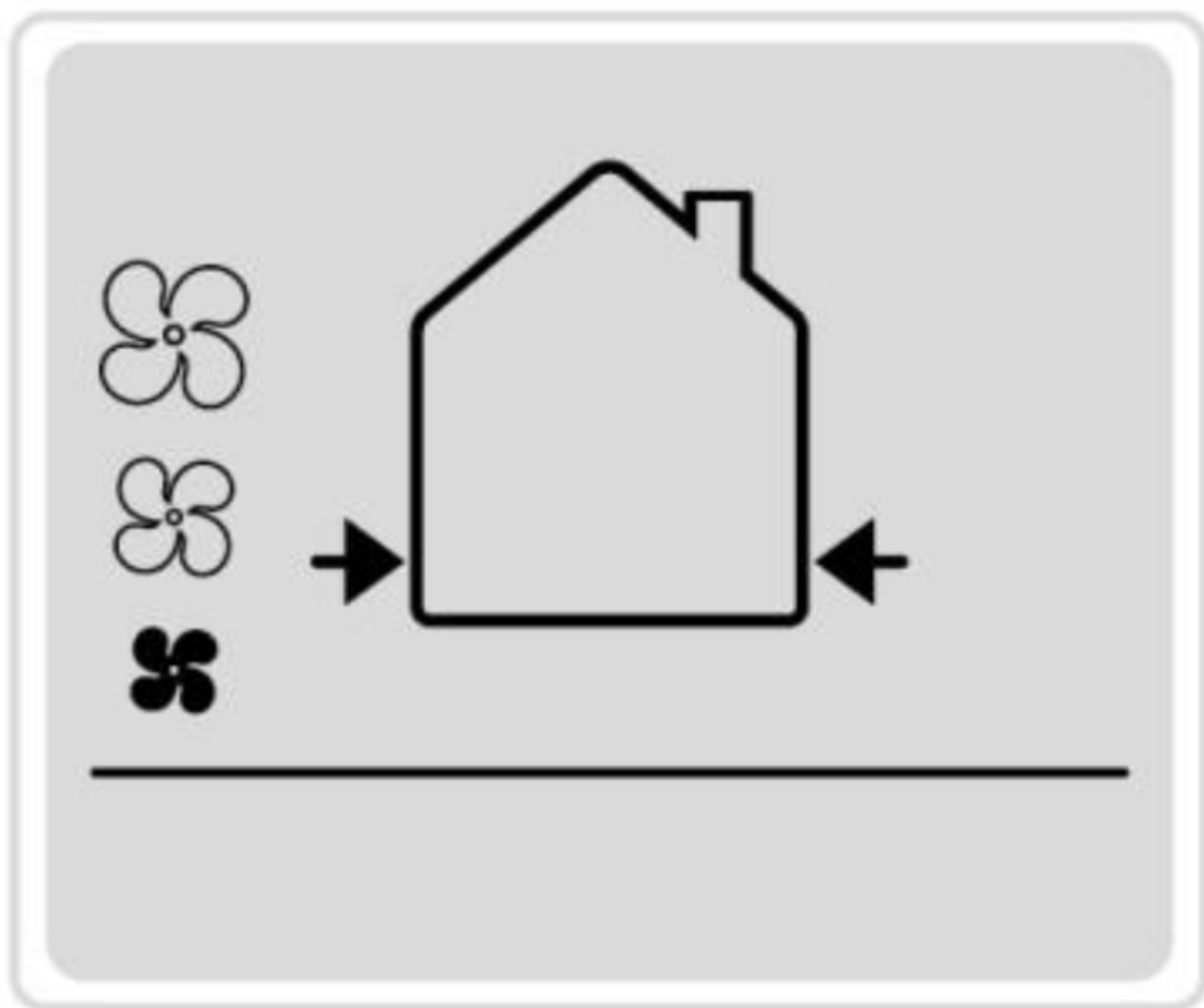

To activate this mode, repeatedly press the **FLOW (F)** button on the remote control until the display shows the image below.
When pressing the **FLOW** button, the mode will cycle through the following sequence: **MASTER-SLAVE AIRFLOW → SLAVE-MASTER AIRFLOW → EXTRACTION → INTAKE → MASTER-SLAVE AIRFLOW**.

In this mode, the **IMPELLER (V)** button becomes active, allowing you to select the desired speed.

Advice for Use

This mode is recommended for extracting large amounts of stale air, at the expense of heat recovery. It is particularly suitable for situations where rooms are heavily occupied, such as during parties or anniversaries.

To activate this mode, repeatedly press the **FLOW (F)** button on the remote control until the display shows the image below.

When you press the **FLOW** button, the mode will cycle through the following sequence: **MASTER-SLAVE AIR FLOW → SLAVE-MASTER AIR FLOW → EXTRACTION → INTAKE → MASTER-SLAVE AIR FLOW**.

In this mode, the **IMPELLER (V)** button becomes active, allowing you to select the desired speed.

Advice for Use:

This mode is recommended for situations where a large amount of fresh air intake is required, such as when rooms are crowded during events like parties or anniversaries. Please note that this comes at the expense of heat recovery efficiency.