



**NATIONAL  
VENTILATION**

..... a breath of fresh air

Thank you for choosing this product from National Ventilation.

Before installing and using the fan, read through this manual / these instructions for use. Then keep it safe so that you can use it for reference in future.

**Warning!**

This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or have been given instruction concerning use of the product by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the product.

## **CONTENTS**

<b>4</b>	<b>DESCRIPTION OF FUNCTIONS</b>
<b>5</b>	<b>INSTALLATION GUIDE</b> <ul style="list-style-type: none"><li>1. Contents</li><li>2. Installation</li><li>3. Wiring</li><li>4. Installation options</li><li>5. Connecting the pullcord switch</li><li>6. Factory settings</li><li>7. Setting functions</li></ul>
<b>10</b>	<b>ADVANCED FUNCTIONS</b> <ul style="list-style-type: none"><li>1. Setting humidity sensitivity mode</li><li>2. Pause function with momentary switch</li></ul>
<b>12</b>	<b>LED INDICATORS</b>
<b>13</b>	<b>MAINTENANCE</b>
<b>15</b>	<b>WARRANTY</b>
<b>15</b>	<b>RECYCLING</b>
<b>16</b>	<b>ACCESSORIES</b>
<b>17</b>	<b>TECHNICAL DATA</b>
<b>18</b>	<b>TROUBLESHOOTING GUIDE</b>

## DESCRIPTION OF FUNCTIONS

- Automatic moisture detection system  
Monsoon IntelliSense is equipped with fully automatic humidity control, which means the fan learns to run only when it can make a difference.
- Timer  
Selectable delay time – 5, 15 or 30 minutes.
- Speed control  
The integral speed control allows you to adjust the noise level and capacity to meet your needs.
- Continuous Trickle operation  
Leave the fan running continuously if you need basic ventilation in the home. This also eliminates the risk of draughts in case of wall mounting.
- Airing function  
If the fan has been inactive for 26 hours, an airing programme will run for 60 minutes.
- Pause function  
The fan can be paused for one hour using the power cord.
- Multi-pole switch  
The fan is fitted with a multi-pole switch, which means that an external switch is not required.
- LED indicators  
A light-emitting diode with three different colours indicates which mode the fan is in at any one time.
- 12-Volt motor  
The motor is a long-life motor, with a life span of approx. 60,000 hours. This type of motor also runs silently.

## INSTALLATION GUIDE

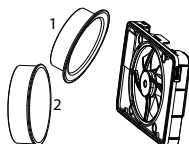
### 1. Contents

The packaging should contain the following:

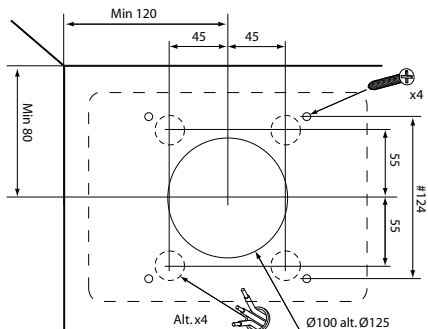
- Fan
- 2 adapters, 1 x Ø98 mm and 1 x Ø118 mm
- Manual
- Accessory bag with 4 screws and plugs, a pull cord with toggle, and insulation for the standard cable type (FK)

### 2. Installation

The fan can be installed on a wall or on a ceiling. See the diagram below for installation dimensions. The fan must not be installed in an environment where the temperature exceeds 50°C. Attach an appropriate adapter to the fan's chassis, Ø98 (1) for a Ø100 duct or Ø118 (2) for a Ø125 duct.



The fan can also be installed and used without an adapter, so that it is mounted completely on the surface, e.g. in the case of ducts less than Ø98. When installing the fan, check that there is a seal between the pipe/duct and wall/ceiling to prevent humid air from penetrating the wall or ceiling. Use the accompanying screw and plug, if necessary.

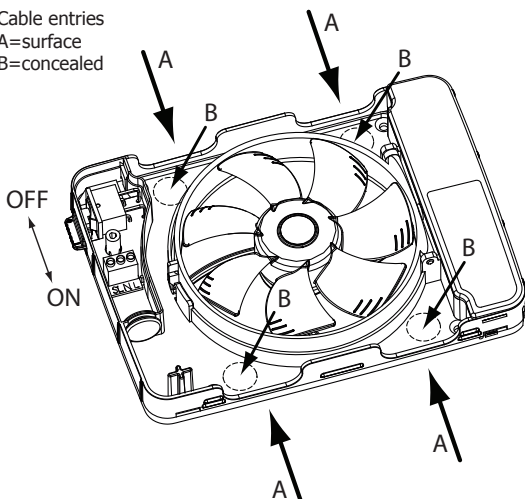


### 3. Wiring

- Installation work should be performed by a qualified electrician.
- The fan is double insulated and must not be earthed.
- The fan is fitted with a multi-pole switch and does not require a pre-wired external switch.

- 1 Push the multi-pole switch up to position 0 – OFF.
- 2 The cable can be installed either along the surface using entries A in the chassis or concealed using the B inlets in the chassis. Both options are shown below. Use the insulating sleeve supplied for the cable (FK).
- 3 If you use any of the B inlets, remove the concealed round plastic cover by tapping inside the break-off notch from the inside out to the back with a screwdriver, for example.

Cable entries  
A=surface  
B=concealed



## 4. Installation options

The fan can be installed in any of three ways depending on the desired function, as detailed below:

### 1 Humidity control only, see diagram 1

The fan is connected to constant phase (L) and neutral (N) for automatic humidity control.

The timer can be activated manually by installing a pull cord and pulling it (see page 8).

### 2 Humidity control + timer with light switch, see diagram 2

The fan is connected to constant phase (L) and neutral (N) for automatic humidity control.

Switched live (SL) is connected to activate the fan's timer, i.e. when the bathroom light is switched on, current is present at switched live. This option provides a 90-second start delay.

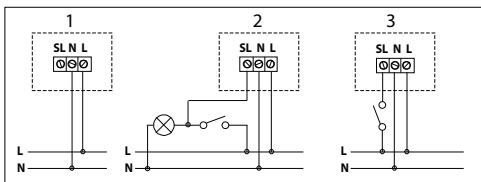
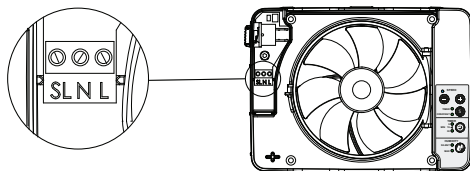
### 3 Humidity control + timer with retractive switch, see diagram 3

The fan is connected to constant phase (L) and neutral (N) for automatic humidity control.

Switched live (SL) is connected to activate the fan's timer using a retractive switch.

This option gives direct start-up of the fan.

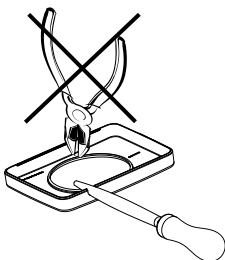
Wiring diagram



## **NB!**

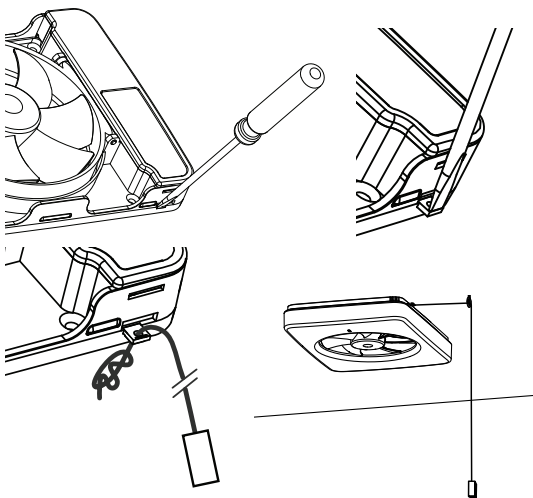
**Use an ordinary round file to create a smooth cut-out at a suitable place in the front cover.**

**Do NOT use pliers or similar tools, as these may cause the cover to crack.**



## **5. Connecting the pull cord switch**

A pull cord can be installed for activating the timer manually or for pausing the fan. Remove the mounting plate using a screwdriver, for example, and thread the accompanying pull cord through the hole.



- Once installation is complete, push the safety switch down to position I – ON, to make the fan active again.

When the fan is connected to the power supply, it performs a self-test where electronics, LEDs and operation of the motor are all tested. The fan is now ready for use.

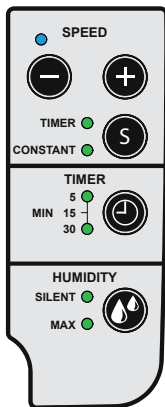


## 6. Factory setting

- timer – 5 minutes
- humidity speed – silent (70% of max.)
- timer speed – 70% of max.
- constant operation – off

Restore factory settings

Hold the S-button in for a minimum of 5 seconds.



## 7. Setting functions

Possible adaptation to meet your needs:

1. Setting fan speed for timer operation.  
Press the S-button until the timer light comes on.  
Use the SPEED buttons to set the speed.  
Restore the factory default timer speed by pressing both the SPEED buttons simultaneously.
2. Delay time  
Set the timer to 5, 15 or 30 minutes.
3. Humidity mode / humidity  
Set to silent or max. capacity – small or large bathroom.
4. Continuous Trickle operation  
Press the S-button until the "CONSTANT" light comes on. Select the fan speed using the SPEED buttons.

To turn off continuous trickle operation: press the S-button until the "CONSTANT" light goes off.

## ADVANCED FUNCTIONS

### 1. Selecting humidity sensitivity mode

Bathroom climates may vary depending on a number of factors: room size, the presence of any natural draught ventilation, temperature, etc. These factors may have a bearing on fan humidity response, causing it to start too quickly or too slowly.

The factory setting is position 2: normal humidity response, which works best in most cases. There is also the option of completely switching off the humidity function.

1) Press the Speed + and Humidity mode buttons simultaneously (the blue and yellow LEDs flash quickly).

Press the Humidity Mode button until the desired humidity sensitivity mode is selected.

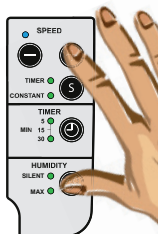
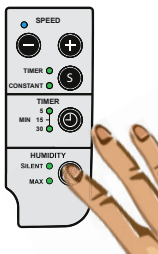
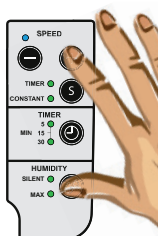
Position 1: the Silent LED comes on – fast humidity response.

Position 2: the Max LED comes on – normal humidity response.

Position 3: The Silent and Max LEDs come on together – slow humidity response.

Position 4: Both the Silent and Max LEDs stay off – humidity control is deactivated.

2) Press the Speed + and Humidity Mode buttons at the same time (The blue and yellow LEDs stop flashing).



## 2. Pause function using momentary switch

You can pause the fan for one hour by engaging an external momentary switch. This can be connected as shown in diagram 3 on page 7.

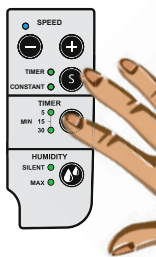
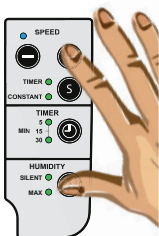
With this function selected, you will be unable to use the delayed start via switched live (lighting) function connected to SL

### Activation

- 1 Press the Speed + and Humidity Mode buttons simultaneously (blue and yellow LEDs flash quickly).
- 2 Press the timer button and hold it in for 5 seconds until the 5 min LED comes on.
- 3 Press the Speed + and Humidity Mode buttons at the same time (blue and yellow LEDs stop flashing).

### Deactivation

- 1 Press the Speed + and Humidity Mode buttons simultaneously (blue and yellow LEDs flash quickly).
- 2 Press the timer button and hold it in for 5 seconds until no timer run-on LEDs are illuminated.
- 3 Press the Speed + and Humidity Mode buttons simultaneously (blue and yellow LEDs flash quickly).



## LED INDICATORS

### What is the fan doing?

Monsoon IntelliSense is equipped with a three-colour LED indicator: yellow, blue and purple.

These three colours tell the user what the fan is doing and which function is currently controlling the motor.

- **No LED on**  
The fan is off or is running on continuous trickle.
- **Blue LED on**  
The fan is running – the humidity sensor has detected increased humidity in the room.
- **Blue flashing LED**  
The fan is running – the fan sensor has detected that it can reduce its reference values for humidity in the room.
- **Yellow LED on**  
The fan is running – timer control has been activated.
- **Yellow flashing LED**  
Timer control with delayed start has been activated by the light switch. The LED flashes for 1.5 min. before the fan starts.
- **Purple LED on**  
The fan is running – the airing function has been activated.
- **Yellow and blue LEDs slowly flash alternately**  
Pause function has been activated.
- **Yellow and blue LEDs quickly flash alternately**  
Programming mode has been activated.

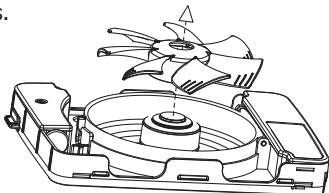
## MAINTENANCE

Monsoon IntelliSense is designed to work efficiently for many years. The fan needs to be cleaned at regular intervals if it is to function properly. These intervals are determined by duration of fan operation and air quality.

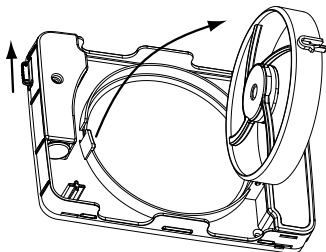
Clean the fan at least twice a year, or as required.

Disconnect the power supply to the fan by pushing the multi-pole switch up to position O - OFF.

The fan is fitted with a removable impeller. Press in the centre using your thumb, grip the fan wings and pull off the impeller. The fan's "swing out" function is also useful, as it provides easy access to the duct. Press the motor mount ring's snap-in catch and swing out the motor/ blades.



OFF



Clean the duct/pipe if there is any dirt present inside. Failure to do this may result in a risk of impaired capacity.

When cleaning the fan, pay particular attention to the blades if these are dirty. Otherwise, there is a risk of imbalance and hence increased noise and a reduced life span for the motor bearings.

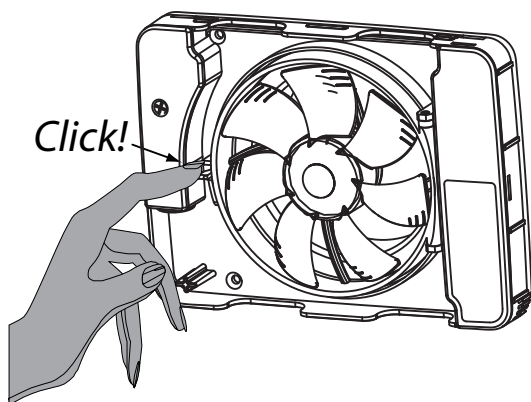
Clean the fan's blades with a brush or paintbrush. Clean the fan cover with a polishing cloth moistened with water and possibly a mild detergent.

**NB!** Never use solvents or similar products on any part of the fan, as there is a risk of them damaging the fan's plastic components!

Never submerge the fan in water, as there is a risk that this could damage the fan's motor.

After cleaning, swing the motor mount ring back into position and lock it by securing the snap-in catch. Switch the multi-pole switch back on by moving the switch down to position 1 – ON.

**If maintenance of the fan is not performed as specified above, the product warranty will be null and void.**



## WARRANTY

We provide a 5 year warranty against manufacturing defects.



For the warranty to be valid, proof of purchase is required and the fan:

- must be assembled and installed in accordance with the installation guide in this manual
- must have been maintained according to the maintenance instructions in this manual
- must be installed in a normal residential environment
- must be connected to a voltage of 100-240 V AC
- must not have been exposed to lightning or abnormal power surges
- must not have been subjected to tampering
- must have been installed in a zone rated as IP44
- must not have been installed in an environment where the temperature exceeded 50° Celsius.

Complaints concerning the product are to be made to the point of purchase.

## RECYCLING

This product must not be disposed of with household waste, but must be recycled at a suitable recycling location in the local municipality.



## ACCESSORIES

There are a number of accessories available for Monsoon IntelliSense to help you as user install the product as smoothly as possible.

For optimum ventilation, you must ensure that sufficient air can enter the bathroom. This is done either by creating an opening at the bottom of the door or by installing an air vent in the door or wall.

It is also important to draw fresh air into the house that is then expelled through the bathroom or laundry room, for instance. In this case, it is a good idea to install fresh air vents in bedrooms and in the living room.

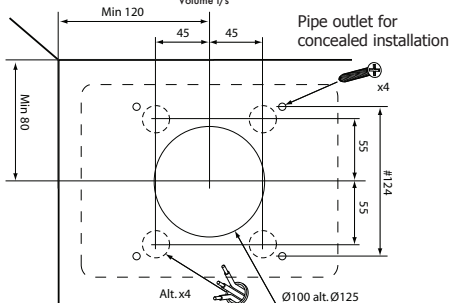
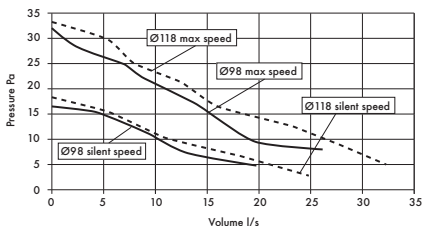


## TECHNICAL DATA

Maximum capacity	37 l/s
Sound pressure level 3 m (Silent mode)	21 dB(A)
Power consumption	2.1 - 5.5 W
Mounting dimensions in wall	0 - 30 mm
Holes	105 -130 mm
Material	ABS plastic
Protection rating	IP44
Insulation class	□
Voltage	100-240 V
Frequency	50-60 Hz
Certificates	CE

Duct dimensions	Max/ Silent	Capacity FID	Sound pressure level 3 m
Ø 98	Max	30 l/s	28 dB(A)
Ø 98	Silent	20 l/s	21 dB(A)
Ø 98	Trickle	12 l/s	12 dB(A)
Ø 118	Max	37 l/s	29 dB(A)
Ø 118	Silent	24 l/s	21 dB(A)
Ø 118	Trickle	15 l/s	13 dB(A)

### Capacity



## TROUBLESHOOTING GUIDE

### The fan does not start

**The fan is newly installed and has never been started:** Check that the fan impeller runs freely.

Check the position of the safety switch. It must be in position I – ON.

Disconnect the power supply to the fan – move the safety switch to position 0 – OFF and then back to position I – ON.

Check that there is voltage at terminal block L (to be done by electricians only).

Check that neutral is properly connected by measuring the voltage across L-N (to be done by electricians only).

**The fan has been in use for some time:**

Check that the fan impeller runs freely.

Disconnect the power supply to the fan – move the safety switch to position 0 – OFF and then back to position I – ON.

Leave the fan switched off for about 3 seconds before switching it back on.

**The fan has been cleaned**

Check that the fan impeller runs freely

Check the position of the safety switch.  
It must be in position I – ON.

### The fan runs non-stop

**The blue LED is on constantly**

(If the fan has been running non-stop for at least 24 hours)

Check that it is working by opening the bathroom door and leaving it open for at least half an hour to equalise humidity levels.

Disconnect the power supply to the fan – move the safety switch to position 0 – OFF and then back to position I – ON.

### **The yellow LED is constantly on**

If the fan is connected to an external switch for timer control, switch this off and wait at least 30 minutes.

Disconnect the power supply to the fan – move the safety switch to position 0 – OFF and then back to position I – ON.

### **No LEDs on**

This is entirely normal if the fan has been set to continuous trickle operation. No LEDs are on in this mode.

If the fan has not been set to continuous trickle operation, disconnect the power supply to the fan – move the safety switch to position 0 – OFF and then back to position I – ON.

### **Other faults**

The fan stops when the light is switched off.

The fan has been installed incorrectly. Terminal L on the terminal block should always have direct phase.

Contact your electrician.

The fan stops when the light is switched on.

The fan has probably been programmed to pause on a momentary switch. See page 11 to deactivate this function

The fan does not work as described remove the cover and disconnect the power supply to the fan by moving the safety switch to 0. Then return the switch to I (On).

If the fan still does not work as described in this guide, contact the retailer or National Ventilation by sending an e-mail to: [info@nvagroup.co.uk](mailto:info@nvagroup.co.uk)



**NATIONAL  
VENTILATION**

Stathe Road, Burrowbridge,  
Somerset TA7 0RY

Tel: 01823 690 290

Web: [www.nationalventilation.co.uk](http://www.nationalventilation.co.uk)

Email: [info@nvagroup.co.uk](mailto:info@nvagroup.co.uk)

..... a breath of fresh air