

AgVent User Guide

Revision History

Version	Date	Author(s)
v0.1	01/04/20	JH, RC, JJ, MO

Contact Details

Manawa Ora 385 State Highway 33 Mourea Rotorua 3074 New Zealand

Customer Care: manawaoraservice@aliente.ch

Warranty

There are no warranties expressed or implied.

Manawa Ora shall not be liable for loss of profits, loss of use, consequential damages, or any other claim based on breach of warranty. Manawa Ora liability for damages of any kind shall be limited to the purchase price of the defective unit.

Notices

The AgVent ventilator complies with XXX. It does however use and radiate radio frequency energy.

The function of this machine may be adversely affected by the operation of other nearby equipment, such as high frequency surgical diathermy equipment, short-wave therapy equipment, defibrillators, or MRI equipment.

The AgVent ventilator may emit and receive electromagnetic interference. Avoidance of this exposure is recommended whenever possible.

The AgVent ventilator is not suitable for use in shielded magnetic scanners.

**** Notice To Operators****

Unsafe Operation - Operating the AgVent ventilator without a complete and thorough understanding of its attributes is unsafe and may cause harm to the patient. It is important that this manual be read and understood in its entirety before operating the ventilator.

Warnings and Cautions Section - Read the section on Warnings and Cautions carefully before operating the AgVent ventilator. **Use and Maintenance** - Any questions regarding installing, operating,

or maintaining the AgVent ventilator, should be directed to a certified Manawa Ora service technician or Manawa Ora.

Contents

1 Introduction

This Operator's Manual contains detailed information and instructions which when adhered to ensure the safe and effective set up, use and simple maintenance of the AgVent ventilator.

This manual is designed for use by Respiratory Therapists or other qualified and trained personnel under the direction of a physician and in accordance with applicable state laws and regulations. It contains the following:

- Ventilator Overview
- Installation and Checkout
- Using the Controls and Indicators
- Monitored Data
- Ventilator Alarms
- Extended Features
- Ventilator Checkout tests
- Operating Procedure
- Troubleshooting
- Cleaning, Disinfecting and Sterilizing
- Set Up / Maintenance
- Power and Battery Operation

WARNINGS

Untrained Personnel Only properly trained personnel should operate the ventilator. The AgVent ventilator is a restricted medical device designed for use by Respiratory Therapists or other properly trained and qualified personnel under the direction of a physician and in accordance with applicable laws and regulations.

Leak Testing the Patient Breathing Circuit The patient circuit must be leak tested before connection to the patient. In addition, correct operation of the ventilator alarm, displays and controls should also be checked. Harm to the patient or ineffective ventilation may result from failure to leak test the patient breathing circuit before connection to a patient.

Adjustable and Critical Alarms For safety purposes, all adjustable alarms and all critical alarms must be checked to insure proper operation.

Alarms Function Verification All alarms must be verified as functioning properly on a daily basis. If any alarm malfunctions, immediately contact Manawa Ora.

Patient Monitoring Patients who are dependent on a ventilator should be constantly monitored by qualified personnel. Such personnel should be prepared to address equipment malfunctions and circumstances where equipment becomes inoperative. An alternative method of ventilation should be available for all patients dependent on the ventilator, and qualified personnel should be fully familiar with emergency ventilation procedures.

Alternative Ventilation It is recommended that an alternative means of ventilating the patient be available at all times and that all ventilator operators be fully familiar with emergency ventilation procedures.

Fire or Explosion Operation of the AgVent ventilator in the presence of flammable gases could cause a fire or explosion. Under no circumstances is the ventilator to be operated when explosive gases are present. The presence of nitrous oxide or flammable anesthetics presents a danger to the patient and operator.

Patient Breathing Circuit Disconnection Inadvertent disconnection of the patient from the patient breathing circuit can be dangerous.

Cautions

2 Ventilator Overview

The AgVent ventilator consists of:

- 1.

[!]

3 Breath Types

4 Ventilation Modes

5 Using the Controls and Indicators

6 Controls

7 Displays and Indicators

9 Ventilator Alarms

10 Extended Features

11 Ventilator Checkout Tests

12 Operating Procedure

13 Cleaning, Disinfecting and Sterilizing

14 Power and Battery Operation

Appendix A - Ventilator Specifications

Appendix B - Set Up / Maintenance

Appendix C - Installation and Checkout

Appendix D - Principles of Operation

Appendix E - Event Trace

Appendix F - Glossary

Appendix G - Index

breathe: Raspberry Pi Control App

When **breathe** is started the flow meter configuration can be optionally supplied using the `--flow-meters` option, e.g. if both inhalation and exhalation flow meters are installed use:

```
$ python3 breathe.py --flow-meters=IE
```

Write.md

Go ahead, delete all the content in this document to get started writing your own.

- To force save use CMD+S/CTRL+S
- To open preview use CMD+I/CTRL+I
- To share use <https://writemd.xyz/p/5e82a1ffa27cc4670>

Contents

[TOC]

Welcome

Welcome to Write.md, a place to write Markdown without any distractions. Your document is secured using AES 256 bit encryption and you can quickly share and collaborate using the URL in your address bar.

Sharing & Collaboration

You can share this doc using <https://writemd.xyz/d/5e82a1ffa27cc4670>. Anyone that has access to your document URL can make changes that save/overwrite the original content, so be careful who you share with.

Preview

You can enter preview of your document using <https://writemd.xyz/p/5e82a1ffa27cc4670> - replacing the D for document in the URL with P for preview.

Export & Print

You can export or print your document by firstly previewing the page (see Preview) and using your browsers default printing option which should allow you to export PDF, HTML or send to printer.

Variables (new)

```
-var family_name: Dursley
```

When Mr and Mrs {{family_name}} woke up on the dull, grey Tuesday our story starts, there was nothing about the cloudy sky outside to suggest that strange and mysterious things would soon be happening all over the country. Mr {{family_name}} hummed as he picked out his most boring tie for work and Mrs {{family_name}} gossiped away happily as she wrestled a screaming Dudley into his high chair.

Themes

You can set both the editor and preview pane theme by creating a new variable called `wmdEditorTheme` and `wmdPreviewTheme` and setting them anywhere in the page.

Heres an example of the default look, remove the space between `-` and `var` to set.

```
-- var wmdPreviewTheme: default
-- var wmdEditorTheme: dark
```

The available themes are as follows:

Editor Themes

- default
- 3024-day
- 3024-night
- ambiance
- ambiance-mobile
- base16-dark
- base16-light
- blackboard
- cobalt
- eclipse
- elegant
- erlang-dark
- lesser-dark
- mbo
- mdn-like
- midnight
- monokai
- neat
- neo
- night

- paraiso-dark
- paraiso-light
- pastel-on-dark
- rubyblue
- solarized
- the-matrix
- tomorrow-night-eighties
- twilight
- vibrant-ink
- xq-dark
- xq-light

Preview Themes

- default
- dark

Flow Charts

```
st=>start: Launch Write.md
op=>operation: Start Writing
cond=>condition: Success?
e=>end: Awesome
```

```
st->op->cond
cond(yes)->e
cond(no)->op
```

What is Markdown?

Markdown (MD) is a lightweight markup language with plain-text-formatting syntax. Its design allows it to be converted to many output formats, but the original tool by the same name only supports HTML. If you would like to see the cheatsheet for writing MD just click [here](#).

Love Write.md?

Why not leave us a review on product hunt to let others know how much you enjoy using Write.md <https://www.producthunt.com/posts/write-md>