



## OPERATING INSTRUCTIONS

Edition 1.1

### **IMPORTANT!**

Read this manual in full before using this machine.  
To qualify for extended warranty, you must register within 30  
days of purchase. See inside for details.

## Congratulations & Thank You

Congratulations on your purchase! Founded in regional Australia in 1979, **Weldclass** has grown to become a leading welding equipment brand across Australasia and beyond. From all of us here at Weldclass, thank you for your support!

## Register Your Warranty Now

Standard warranty without registration is 12 months.

To qualify for an extended conditional 7-year warranty on your purchase you must register within 30 days of purchase.

Please register your warranty now by going to:



<http://www.weldclass.com.au/WarrantyRegistration>

You will need:

- a) A copy of your purchase invoice / receipt.
- b) Your machine serial number which can be found on the back of the machine

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## 1. SPECIFICATIONS

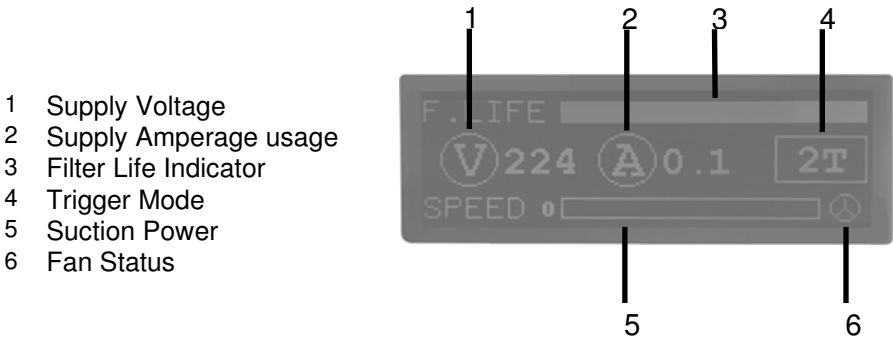
<b>Power Supply</b>	~220V +/- 10% 50hz Single Phase
<b>Motor Power</b>	1.2kw
<b>Weight</b>	24kg
<b>Dimensions</b>	W290 x D610 x H520mm
<b>Noise</b>	<73dBA

## 2. KNOW YOUR MACHINE

- 1 LCD Display
- 2 Airflow control
- 3 Remote Control Connection
- 4 Hose Connection Inlet
- 5 Filter Cover
- 6 Filter Cover Latch
- 7 Current Sensing Cont



## 3. CONTROLS



- 1 Supply Voltage
- 2 Supply Amperage usage
- 3 Filter Life Indicator
- 4 Trigger Mode
- 5 Suction Power
- 6 Fan Status

### 3.1 Suction Power Selection

Suction power is a critical setting to get right as this directly impacts to amount of welding fume captured and the quality of the weld. The optimal suction power is as high as possible without drawing away shielding gas and creating porosity.

1. Press the Up arrow to increase the suction power.
2. Press the Down arrow to decrease suction power.

When the extractor is powered off, your suction power setting will be stored ready for when you power your extractor on again.

### 3.2 Trigger Mode Selection

When used in conjunction with the Weldclass ALLCLEAR FT36E and the control cable connected, (See section 4.1) you need to ensure your extractor is working in the same trigger mode as your machine.

1. Press and hold the Down arrow to switch from 2T to 4T and vice versa.

### 3.3 Filter Life Monitoring

To use the gauge to monitor filter life, observe the filter life indicator. Once the filter life bar has decreased to 0 (far left), it is time to replace the filter.

Resetting the Filter Life Monitor:

1. Press and hold the Up and Down buttons for 3-5 seconds until the filter life bar returns to full (far right).
2. Verify that the filter life monitor is functioning correctly by observing the filter life bar.

## 4. BASIC OPERATION

### 4.1 Torch Extraction (Weldclass ALLCLEAR FT36E)

1. Connect the Mig Torch to your welding machine as per the welding machine instruction manual.
2. Connect the Vacuum hose to the Hose Connection Inlet (4). Note: Ensure that the connection is secure and sealed. Any loose or unsealed connection will decrease the effectiveness of the system.
3. Connect the torch control cable to the Remote Control Connection (3)
4. Test before welding, by pressing the torch trigger. The Fume extractor will start with a short delay and run for a few second after you release the trigger

### 4.2 Torch Extraction (Other Brands)

1. Connect the Mig Torch to your welding machine as per the welding machine instruction manual.
2. Connect the Vacuum hose to the Hose Connection Inlet (4). Note: Ensure that the connection is secure and sealed. Any loose or unsealed connection will decrease the effectiveness of the system.
3. Connect the Current Sensing Control Cable to the Remote Control Connection (3)
4. Clamp the Current Sensing Clamp over one of the main current welding cables.
5. The Fume extractor will start with a short delay after it detects main welding current and run a few seconds after welding stops.

### 4.3 Hooded Extraction (Hood and Hose sold separately)

1. Connect the Vacuum hose to the Hose Connection Inlet (4). Note: Ensure that the connection is secure and sealed. Any loose or unsealed connection will decrease the effectiveness of the system.
2. Connect the hood to the end of the hose
3. If using the auto sensing clamp, follow steps 3-5 of section 4.2

## 5. SAFETY INSTRUCTIONS

The filter unit Weldclass ALLCLEAR MT31 is used for extracting welding fumes at the generation source using a fume extraction torch or small armless hood.



**Improper use of the unit can lead to malfunction, damage, and/or bodily harm.**

**NOT Suitable For / Should NOT Be Used For:**

Extraction of any fumes containing oil mist, aluminium dust (including aluminium grinding dust), gases, water vapor\*.

Applications not related to welding of metal, such as but not limited to; timber/wood, soldering, silica, asbestos, etc.

The polluted air is drawn through the torch or hood into the filter unit, where particles are trapped on the filter cartridge. The clean air then passes through the fan and is released back into the room through the exhaust grid.

\*Aluminium dust, including grinding dust, can be explosive when airborne, and for this reason, fume extractors and downdraft tables should not be used for extraction of aluminium grinding dust (this does not apply to aluminium welding fumes, which can be safely extracted). Oil mist and gases can also cause explosion. Water vapour will damage the filter.

The following basic safety measures must be always observed. Failure to adhere may result in electric shocks, injury, fire, and other hazards:

- Read and follow the instructions listed below before using the filter systems.
- Store the operating and service instructions in a secure and readily accessible space.
- Do not employ the unit for the extraction of combustible or explosive gases.
- Do not employ the unit for setting it in explosive zones, e.g. zone 0, zone 1, zone 2, zone 20, zone 21, zone 22.
- Do not employ the unit for extracting burning or glowing materials, e.g. cigarettes, matches, metallic types of dust and/or splinters, paper, cleaning cloths, etc.
- Do not employ the unit for extracting burning and/or inflammatory materials, e.g. oils and/or oil mist, fats, parting agent (e.g. silicone spray), cleaning agent, etc.

- Do not employ the unit for the extraction of liquids of any kind.
- Do not employ the unit for extraction of any organic matters without the written permission of the manufacturer.
- Protect the connecting lead from heat, liquids, oils and sharp edges.
- Confirm the correct voltage. (Refer to the unit data plate)
- Use only original Weldclass ALLCLEAR spare parts.
- Do not operate the unit without a filter cartridge installed.
- Remove the mains plug before opening the unit.
- The exhaust grid must not be obstructed or blocked in any way.
- Always take care that the unit stands secured and that the caster brakes are set.
- Remove the mains plug when cleaning or servicing the unit, when exchanging any parts or when changing machine settings for a different function.
- Filter cartridges must be disposed of according to relevant legislation and directives.
- At regular intervals inspect the supply lead for signs of damage.
- The unit must not be used when there is any damage to the supply lead, a danger tag must be fitted and locked out.
- Unit must be always powered on during use, to provide fume extraction
- Do not use the filter unit when any one or more components of the system are defective, missing or damaged.
- Failure to adhere to the regular daily, weekly, and annual maintenance schedule outlined in this manual may result in malfunction, safety hazard including fire hazard, and/or reduced performance.

## 6. MAINTENANCE

The accumulation of extracted particles on the filter cartridge will lead to a gradual reduction of the suction / extraction performance.

Operator should monitor airflow at work surface, it is recommended that if performance drops off that the operator should remove the filter cake as instructed below.

The accumulated dust particles are blown off the filter by applying compressed air from the clean side. The released filter cake will drop into the dust collecting tray. (Refer to chapter 7.3: “Emptying the dust collection tray”)

The useful service life of the filter cartridge greatly depends on the operational environment. If the original extraction performance of the filter unit could not be achieved after cleaning the filter cartridge, the cartridge should be replaced. (Refer to chapter 7.4: “Cartridge filter replacement”)

**Caution:**

When cleaning or changing filter, unit must be disconnected from power, must be conducted only in well-ventilated environments and when using appropriate respiratory protection conforming to AS/NZS 1716 class P2 or P3, and conducted by trained personnel only. When disposing of dust and/or filters, follow local regulations for disposal of contaminated materials.

### 6.1 Manual Filter Cleaning

If suction / airflow at the torch or hood is visibly reduced, this indicates that the filter needs to be cleaned or replaced.

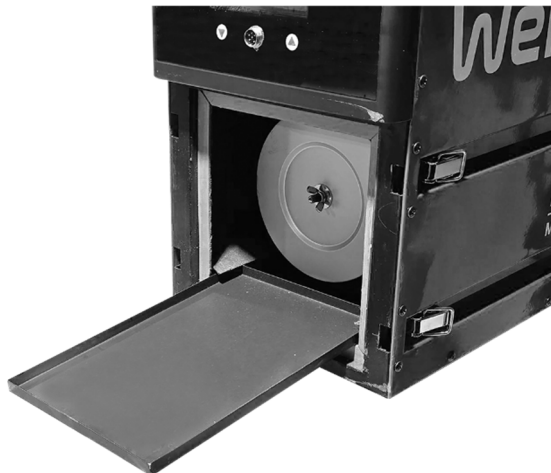
To clean the filter manually, you need to make sure you are wearing the correct PPE and no dust escaping from the filter medium during cleaning is reaching other workers. It is generally best to clean the filter outside.

The filter medium must NOT come in contact with water, oil or any moisture.

## 6.2 Emptying The Dust Collection Tray

The dust collection tray should be emptied at regular intervals, at least once per week or more frequently depending on volume of dust collected. The dust tray should be emptied before exceeding 25% capacity.

- Only authorised/trained personnel should empty the dust collection tray.
- Use protective equipment (including respirator, face, and hand protection) and ensure that other personnel stand well away from and do not contact with the unit, filter, and extracted matter. Ensure the environment is well shielded from airflow, so that dust is not disturbed.
- Disconnect the unit from the mains power supply
- Remove the dust collection tray (6)
- Remove contents of the tray according to local regulations. Use a heavy-duty disposable bag or similar to contain and dispose of dust.
- Refit the dust collection tray to the machine.
- Connect the filter unit to the mains power supply.



## 6.3 Cartridge Filter Replacement

Replace the filter if it is damaged or when it becomes clogged, and cleaning is no longer effective (this is also indicated by shorter or continuous warning alarm intervals even after automatic and manual cleaning).

- Ensure the old filter is thoroughly cleaned before installing the new cartridge filter, as per manual cleaning process above
- Only authorised / trained personnel should replace the filter
- Use protective equipment (including respirator, face, and hand protection) and ensure that other personnel stand well away from and do not contact with the unit, filter, and extracted matter. Ensure the environment is well shielded from airflow, so that dust is not disturbed.
- Disconnect the unit from mains power supply.
- Before replacing the cartridge filter, prepare the appropriate container (such as heavy-duty PE-bag or plastic bag) for disposal.
- Open the filter cover (5)
- Unscrew the cartridge retaining nut.
- Pass the disposal bag over the cartridge filter before removing the cartridge from inside the compartment. Seal the mouth of the bag with a cable tie or similar.
- Reinsert the new cartridge filter. Ensure that the cartridge filter, and gasket are properly seated.
- Insert the cartridge retaining nut.
- Close and lock the filter cover (5).
- Connect the filter unit to the mains power supply.

## 6.4 Maintenance Schedule

Recommended maintenance schedule for this unit:

<b>DAILY</b>	
Visual Inspection	Check all external components for any visible damage or wear. Ensure all components and surfaces are free from obstruction & debris.
Function Test	Turn unit on and check for normal operation and airflow at work surface and exhaust outlet.
Filter Inspection	Inspect filter. To safely access the filter, follow process as per 6.3. Replace if damaged. If visibly clogged, follow manual cleaning process 6.1 and/or replace filter as per 6.1.
Check Dust Collection Tray Level	Following process as per 6.2, open dust collection tray, empty if tray is filled to >25% of capacity
<b>WEEKLY</b>	
Power Supply	Check power supply cable and connections for signs of wear or damage. Ensure plugs and connections are secure & tight.
Clean Exterior	Thoroughly clean all external components and surfaces with suitable brush and/or cloth/rag.
Empty Dust Collection Tray	Empty tray, following process as per 6.2
<b>ANNUAL</b>	
Replace Filter	Replace filter as per 6.3, if this has not occurred within the last 12 months.
Power Supply	Follow WorkSafe and employers' guidelines for applicable test and tag of input cable and plug.
Maintenance Records	Ensure all maintenance tasks are / have been logged. Review records to ensure compliance with this schedule.

## 7. TROUBLESHOOTING

Fault	Reason	SOLUTION
Reduced or no suction.	Clogged suction holes	Rectify
	Damaged power cable	Rectify
	Air outlet obstructed	Rectify
	Cartridge filter is full	Change the filter as per instructions (Section 6.3)
	Filter cover is not closed correctly.	Rectify
System does not power up	There is no supply power.	Make sure the mains connection is correct. Check the power connections and circuit fuses.
Loud noise from the fan	Imbalance in the fan	Turn it off now. Contact Weldclass
	Problem with fan holder	Contact Weldclass

## 8. DISMANTLING AND DISPOSAL

- The electronic system and the electrical connection of the unit may only be removed by authorised personnel.
- Always unplug the unit from the mains plug before disassembling.
- You must wear relevant PPE.
- Contaminated materials and filter elements must be disposed of properly according to local regulations.



Weldclass PAPR Helmets



Weldclass Downdraft Tables



Weldclass LEVs



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