



ORIGINAL INSTRUCTIONS

CAUTION – READ THESE INSTRUCTIONS BEFORE USING THE MACHINE

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**ICE ECO DISC**

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**OB45200/ICE/GREY, OB45400/ICE/GREY,  
OBL452/400/ICE/GREY**

USER MANUAL

EN



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Issue 1 02-17

**IMPORTANT**  
**BEFORE USE READ THESE INSTRUCTIONS AND RETAIN FOR FUTURE REFERENCE**

**Introduction**

The following instructions contain important information about the machine and safety advice for the operator. Equipment must be operated, serviced and maintained in accordance with the manufacturer's instructions. If in doubt contact the supplier of your machine.



**Read all instructions before using the machine**

**Product information**

These commercial floor treatment machines are designed for the scrubbing and polishing of hard floors and/or shampooing of carpets in indoor areas. This machine is for indoor use only. The machine is intended for commercial use, for example in hotels, schools, hospitals, factories, shops, offices, rental businesses and other than normal housekeeping purposes.

**Technical Specifications**

Model		Orbis Eco Disc 200 (43cm)	Orbis Eco Disc 400 (43cm)	Orbis Eco Disc Duo (43cm)
Voltage AC (~)/ Frequency	V/ Hz	230/50	230/50	230/50
Motor Power	W	1100	1100	1100
Productivity rate	m <sup>2</sup> /h	475	475	475
Pad / brush speed	rpm	190	380	190
Pad / brush pressure	g/cm <sup>2</sup>	22	22	27
Pad / brush diameter	cm	43	43	43
Sound pressure level	dB(A)	53	53	53
Sound pressure level with vacuum	dB(A)	69	69	69
Dimensions (L x W x H) with handle	cm	65 x 47 x 121	65 x 47 x 121	65 x 47 x 121
Weight	kg	32	32	40
Cable length	m	15	15	15
Warranty		2 Years subject to conditions		
<ul style="list-style-type: none"> <li>Noise levels measured at a distance of 0.25 meter from machine and 1.5 metres above floor, when washing a hard floor. Measurements recorded using a hand held meter.</li> <li>Handle vibration does not exceed 2.5 m/s<sup>2</sup>, when operating on a smooth hard surface.</li> </ul>				
<p style="text-align: center;">Above dimensions are approx. Since the company's policy is to continuously improve the product, there could be changes without prior notice.</p>				

**EC DECLARATION OF CONFORMITY**

Machine Type: Floor Cleaning Machine  
 Model: OB45200/ICE/GREY..., OB45400/ICE/GREY..., OBLP452/400/ICE/GREY...  
 This machine is in conformity with the following EU directives:  
 • Machinery Directive: 2006/42/EC  
 • The EMC Directive: 2014/30/EU

Applied harmonised standards:  
 EN60335-1, EN60335-2-67, EN55014-1, EN55014-2, EN61000-3-2, EN61000-3-3, EN62233

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**Waste Electrical & Electronic Equipment (WEEE)**



Do not dispose of this device with unsorted waste. Improper disposal may be harmful to the environment and human health. Please refer to your local waste authority for information on return and collection systems in your area.

**IMPORTANT SAFETY ADVICE**

The safety information described in this manual provides basic precautions and supplements standards in force in the country where the machine is used.



This symbol warns the operator of hazards and unsafe practices which could result in severe personal injury or death.



**WARNING** – to reduce the risk of injury, electric shock or fire.

1. This machine must only be used for the manufacturer's approved application as described in this manual.

2. The machine must be unpacked and assembled in accordance with these instructions before connecting to the electrical supply.
3. Operators must be fully trained in the use of the machine in accordance with these instructions, able to perform regular user maintenance and the correct selection of accessories.
4. Operators should be physically capable to manoeuvre, transport and operate the machines.
5. Operators should be able to recognise unusual operation of the machine and report any problems.
6. Only genuine accessories and spare parts provided with the machine or those approved by the manufacturer should be used. All repairs must be performed by a qualified service agent.
7. Do not use without filters in place.
8. Do not modify the machine from its original design.
9. Only use the machine on firm level surfaces. **DO NOT** use on a gradient or more than 2% slopes.
10. **DO NOT** use on rough uneven surfaces e.g. industrial or coarse concrete surfaces.
11. **DO NOT** use outdoors e.g. on patios, decks or rough surface.
12. **DO NOT** use diesel/petrol or corrosive detergents to wash floors, even if diluted.
13. This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the machine by a person responsible for their safety.
14. Keep children and unauthorised persons away from the machine when in use. Do not use as a toy.
15. The machine must be kept clean and in good condition with regular inspections of the power cord lead and plug for signs of any damage. If any parts are damaged they shall only be replaced by an approved part by the manufacturer, its service agent or a similar qualified person in order to avoid a hazard.
26. Keep hair, loose clothing, hands, feet and all other parts of the body away from openings and moving parts.
27. **DO NOT** use if it has been damaged, left outdoors or dropped in water.
28. Do not operate the machine with a damaged supply lead or plug, or after the machine malfunctions or is damaged in any way. Contact an authorised Service Agent for repair or adjustment.
29. Only replace the supply cord with the type specified in the instruction manual.
30. This machine should always be connected to a fully earthed power supply of the right voltage and frequency.
31. **DO NOT** leave machine running unattended.
32. Do not leave the machine connected to the electricity supply when not in use, always remove the plug from the socket-outlet.
33. Switch off the machine before removing the plug.
34. When unplugging, pull the plug, not the supply cord.
35. The machine shall be disconnected from its power source when not in use and before commencing cleaning of the machine or maintenance and when replacing parts or accessories, by removing the plug from the socket-outlet.
36. **DO NOT** pull or carry by the supply cord. **DO NOT** use cord as a handle, close door on cord or pull cord around sharp edges or corners.
37. **WARNING:** Keep the supply cord clear of moving parts.
38. **DO NOT** kink or twist the supply cord and keep cord away from heated surfaces.
39. **DO NOT** operate switches or touch the mains plug with wet hands as this may cause electric shock.
40. The power supply cord plus any extension leads should not exceed 30 metres in total. The cross section of an extension cable wiring must be at least 2.5mm<sup>2</sup>.



#### ELECTRICAL HAZARD

16. **CAUTION** - This machine is for dry indoor use only and should not be used or stored outdoors in wet conditions.
17. **DO NOT** use where hazardous dust is present.
18. **DO NOT** use in an explosive atmosphere.
19. **DO NOT** pick up or use near flammable or combustible fluids, hazardous dusts or vapours.
20. Do not use to pick up moisture or any liquids
21. **CAUTION** - If it is suspected that there is hazardous dust or flammable materials stop cleaning the area immediately and consult your superior.
22. **DO NOT** use to clean up any burning or lighted materials such as cigarettes, matches, ashes or other combustible objects.
23. Take care when using a machine near the top of stairs to avoid overbalancing.
24. **DO NOT** put any object into openings. **DO NOT** use with any opening blocked; keep free of dust, debris and anything that may reduce airflow.
25. **DO NOT** cover the machine when in use.

#### Preparing for use Fitting the handle

1. Carefully remove the machine base and handle from their respective packaging.
2. Check that the following items are present with the base:-
  - M8 x 70 Bolt (3)
  - Nyloc Hex. nut (3)
  - Plain washer (6)
  - 13mm A/F Spanner (2)
3. Take handle and check that 'O' rings on either side of the knuckle pivot are seated in their grooves, and that the datum mark on the pivot gear is aligned with the handle tube. If this is not the case, raise the handle adjustment lever and rotate the pivot gear until the datum mark is in line with the handle tube, and release the adjustment lever.
4. With the handle held vertically and cable winder to the rear, lower pivot between the raised flanges on the machine base.
5. Align holes in pivot with those on base and fit the three M8 bolts, washers and nuts, and tighten using the spanners supplied (Fig.1).

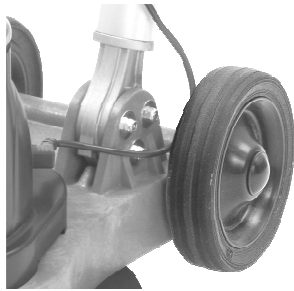


FIG 1

- Connect supply lead from handle to socket on motor housing.

### Controls

The operating controls for all models are located on the handle (Fig 2).



FIG 2

#### 1 - Switch trigger, left hand

Used to switch motor ON and OFF. Can only be operated with handle in working position, and if left hand interlock button (2) has previously been depressed

#### 2 - Interlock button, left hand

This must be depressed initially to enable left hand switch trigger to switch motor on.

#### 3 - Switch trigger, right hand

Used to switch motor ON and OFF. Can only be operated with handle in working position, and if right hand interlock button (4) has previously been depressed.

#### 4 - Interlock button, right hand

This must be depressed initially to enable right hand switch trigger to switch motor on.

#### 5 - Handle adjustment lever

Used to adjust handle to comfortable working height. **Note:** For safety reasons the machine cannot be operated unless the handle is moved to a working height.

#### 6 - Solution feed lever

Operates flow valve in solution tank (if fitted).

- Pull lever to release solution.
- Release lever to stop flow.

#### 7 - Socket connector (Optional)

Connection point for vacuum unit lead.

### Drive plate

Attachment point for brush or drive disc and pad.

### Cable winder

Used to hold supply cord in place on handle when machine is not in use. Can be turned to enable quick release of cord.

### Motor overload cut-out

Protects motor from overload and possible damage. The cut-out will reset automatically when cooled sufficiently, enabling the motor to restart.

### Neon indicator (on handle)

Lights when the machine is connected to the power supply

### Fitting a brush or drive disc and pads



**WARNING - This appliance has been designed for use with the pads specified by the manufacturer. The fitting of other pads may affect its performance and safety.**

Always ensure machine is unplugged before fitting or removing parts.

- Adjust handle to the fully upright position.
- Pull handle down until it rests on the floor and the brush guard is raised.
- Fit the brush/drive disc onto the drive plate and rotate it anti-clockwise until secure.
- Return machine to upright position.
- **IMPORTANT - Never allow the cleaning head to rest on the brush or drive disc and pad when not in use.**

### Adjusting the handle height

Select the most comfortable handle height using the adjustment lever as previously described (see **Controls**) and lock in position.

### Operation

The normal movement of a machine in use is from side to side across the floor. This is achieved automatically by raising or lowering the handle whilst it is engaged in the normal working position.

Lowering the handle thereby increasing the pressure at the rear of the brush/drive disc, moves the machine to the left. Raising the handle increasing the pressure on the front of the brush/drive disc moves the machine to the right.

Effective cleaning and polishing is achieved by moving the machine in a **backwards** direction.

**Do not** leave the machine standing on a brush or drive disc and pad when not in use.

### Starting the machine

- Fully unwind the supply cord from the handle and plug into a convenient socket outlet. The neon indicator on the handle should light showing that power is available.
- With the handle set at a convenient working height and with both left and right hands on the handle, depress both interlock buttons with the thumbs and

squeeze both switch triggers to start the machine (Fig.3).



FIG. 3



**WARNING - Never start the machine without pads fitted.**

- Once the machine has started the interlock buttons should be released.
- To stop the machine release both switch triggers.

#### **Orbis 452/400 dual speed**

The speed selector switch on the dual speed model is located on the motor housing. Ensure machine is switched off before changing the speed setting.

#### **Polishing**

- Fit polishing brush or drive disc and pad suitable for the speed of the machine and the surface to be polished. (see **Accessories**).
- Apply polish to the floor in accordance with the manufacturers instructions.
- **Do not** keep the machine rotating on one spot for more than 3 seconds, as this could cause overheating and damage the floor surface.

#### **Scrubbing and Shampooing**

- For scrubbing or shampooing the solution tank must be fitted as described in the Solution Tank user manual.
- Fit a brush or drive disc and pad suitable for the surface to be cleaned. (see **Accessories**).
- **WARNING - This appliance has been designed for use with the brushes specified by the manufacturer. The fitting of other brushes may affect its safety.**
- Fill the solution tank with water and an appropriate measure of detergent.
- **IMPORTANT** - Use only cleaning agents suitable for automatic machines i.e. low foaming, and follow the chemical manufacturers' directions regarding use, handling, disposal and health and safety provisions.
- Before starting the machine release a liberal amount of cleaning solution from the tank to the floor. The flow of solution from the tank is controlled by moving the left hand lever. Releasing the lever stops the flow.
- Proceed to operate the machine in the normal manner, releasing more cleaning solution from time to time as required.

- **Do not** keep the machine rotating on one spot for more than 3 seconds, as this could cause overheating and damage the floor surface.
- Dirty water should not be allowed to accumulate on the floor, it should be removed to prevent dirt from settling. We suggest using a suction dryer for this purpose.
- When scrubbing/shampooing is complete, unplug the machine from the power supply, empty the solution tank and clean and dry the machine.
- **IMPORTANT** - Dispose of unused cleaning solution in accordance with the manufacturer's directions.

#### **Transporting the machine**

Incorrect lifting techniques may result in personal injury. We advise that the manual handling regulations are followed. Carefully wrap the supply cord and store in dry indoor location. Do not expose the machine to rain or moisture.

When transporting the machine ensure that all components, tanks and removable parts are securely fastened, and that the supply cord and plug are not trailing.

When transporting the machine the handle should be locked in the upright position.

Take extreme care when moving the machine up or down steps or stairs.

#### **Storage**

- Always switch off the machine after use.
- Wrap the supply cord around the handlebar and cable winder ensuring that the plug is not trailing on the floor.
- Never store the machine with a pad fitted as this causes distortion, and results in instability during operation.
- Store the machine in a dry indoor area only.

#### **Maintenance**



**WARNING - Before undertaking maintenance operations or adjustments switch off machine and unplug from the electricity supply. IMPORTANT** – All other servicing and repairs should only be performed by an ICE engineer or Authorised Service Agent. **IMPORTANT** – Should the machine fail to operate please refer to the fault diagnosis section in the back of this instruction manual. If the problem / remedy is not listed please contact ICE Customer Service Department for rapid attention.

The machine requires minimum maintenance apart from the following checks by the operator prior to use:

- **Supply cord** - Regularly inspect sheath, plug and cord anchorage for damage or loose connection. Only replace the supply cord with the type specified in these instructions.

#### **After sales service**

ICE machines are high quality machines that have been tested for safety by authorised technicians. It is always apparent that after longer working periods, electrical and mechanical components will show signs

of wear and tear or ageing. To maintain operational safety and reliability the following service interval has been defined: Every year or after 250 hours. Under extreme or specialised conditions and/or insufficient maintenance, shorter maintenance intervals are necessary. Use only original manufacturer's spare parts. Use of other spare parts will invalidate all warranty and liability claims. Should you require after sales service please contact the supplier from whom you purchased the machine, who will arrange service. Repairs and servicing of ICE products should only be performed by trained staff. Improper repairs can cause considerable danger to the user.

### **Guarantee**

Your product is guaranteed for 2 years from the date of original purchase, or hire purchase, against defects in materials or workmanship during manufacture. Within the guarantee period we undertake at our discretion, to repair or replace free of charge to the purchaser, any part found to be defective, subject to the following conditions:

### **CONDITIONS**

1. Claims made under the terms of the guarantee must be supported by the original invoice/bill of sale issued at the time of sale, or the machine Serial No.

2. For claims under this guarantee contact the supplier from whom you purchased the product who will arrange the appropriate action. Do not initially return the product as this could result in transit damage.
3. Neither ICE nor its distributor shall be liable for any incidental or consequential loss.
4. This guarantee is governed by the laws of England.
5. This guarantee does not cover any of the following:
  - Periodic maintenance, and repair or replacement of parts due to normal wear and tear.
  - Damage caused by accident, misuse or neglect, or the fitting of other than genuine manufacturer parts.
  - Defects in other than genuine manufacturer parts, or repairs, modifications or adjustments performed by other than an ICE service engineer or authorised service agent.
  - Costs and risks of transport relating directly or indirectly to the guarantee of this product.
  - Consumable items such as, brushes, drive discs, filters and vacuum skirts.
- This guarantee does not affect your statutory rights, or your rights against the supplier arising from their sales or purchase contract. ICE's policy is one of continual product development and we reserve the right to alter specifications without prior notice.

## Accessories

	ICE Eco Disc 200 (43cm)	ICE Eco Disc 400 (43cm)	ICE Eco Disc Duo (43cm)
Standard drive disc	05-3436-0500		
Flexi drive disc		05-3437-0500	00-3437-0000
Polypropylene scrubbing brush	05-3431-0500	05-3469-0500	05-3469-0500
Palmyra floor brush	05-3435-0500	05-3435-0500	05-3435-0500
Carpet shampoo brush	05-3433-0000		05-3433-0000
Bassine polishing brush	05-3434-0500	05-3434-0500	
Solution tank		05-3468-0500	
Spray system kit		05-4156-0000	
Vacuum unit		05-3771-0000	
Anti-splash skirt	05-3151-0000	05-3151-0000	

### Fault diagnosis



**WARNING - Before undertaking maintenance operations or adjustments switch off machine and unplug from the electricity supply.**

The following simple checks may be performed by the operator:

Trouble	Reason	Remedy
Machine not working	- Lack of voltage/electrical supply.	- Check fuse *, supply cord, plug and socket outlet.
Machine not working	- Switch interlock incorrectly operated. - Loose connection to motor.	- Check operating procedure in instructions. - Check motor lead connector is fully inserted into motor socket.
Machine wobbles or vibrates excessively.	- Pad worn or damaged. - Pad dirty. - Pad loose.	- Renew pad. - Clean the pad. - Tighten pad lock.

\* If the fuse blows several times, the machine should be checked by an authorised Service Agent