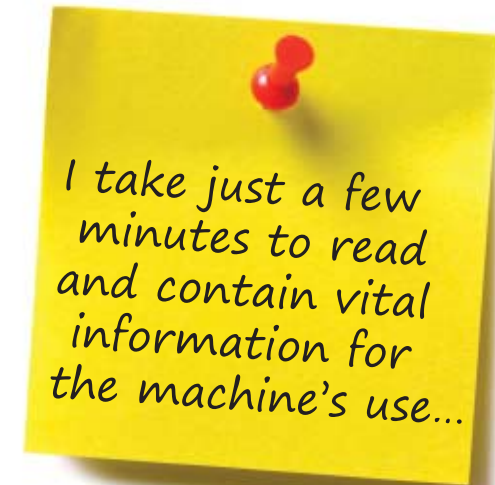
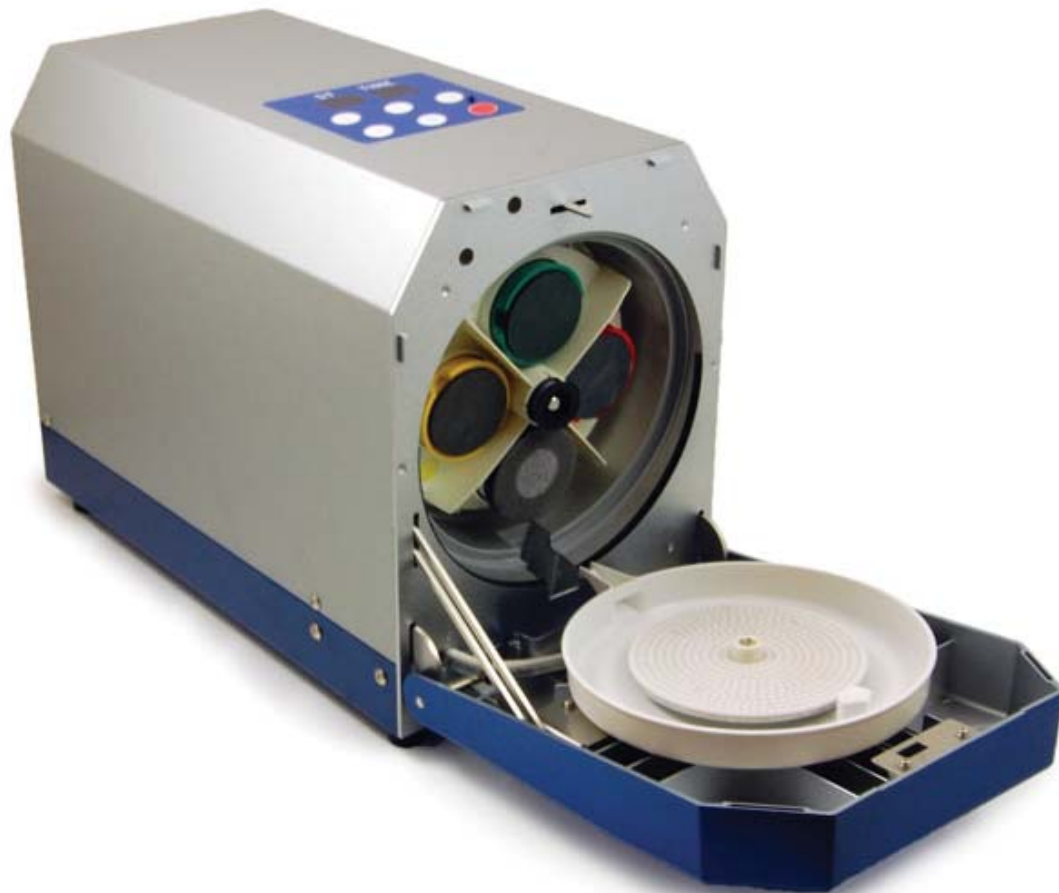


Eco Clever User Guide

The ultimate in desktop disc repair



I take just a few minutes to read and contain vital information for the machine's use...

What's In This User Guide?

- Getting started - repair a disc right now
- Getting to know your machine and how it works
- Advanced features you will want to know
- Maintenance and other useful information

Getting Started

Initial setup

With the machine you will find a blue case, the instructions inside include a list of contents and explain the setup of the machine.

Basic operation

Choose a disc for repair. For this first disc we will run a light (average) repair cycle.



Place shiny side up on the turntable

1. Press 'mode/stop' to open the front door.
2. Place the disc shiny side up on the turntable.
3. Gently close the door.
4. Press the '3' button (light repair).

AL 12 - if this shows on the display please check that the pad holders are positioned correctly. For any other alarm codes or issues please consult the **Maintenance and Information** sheet or contact Technical Support.

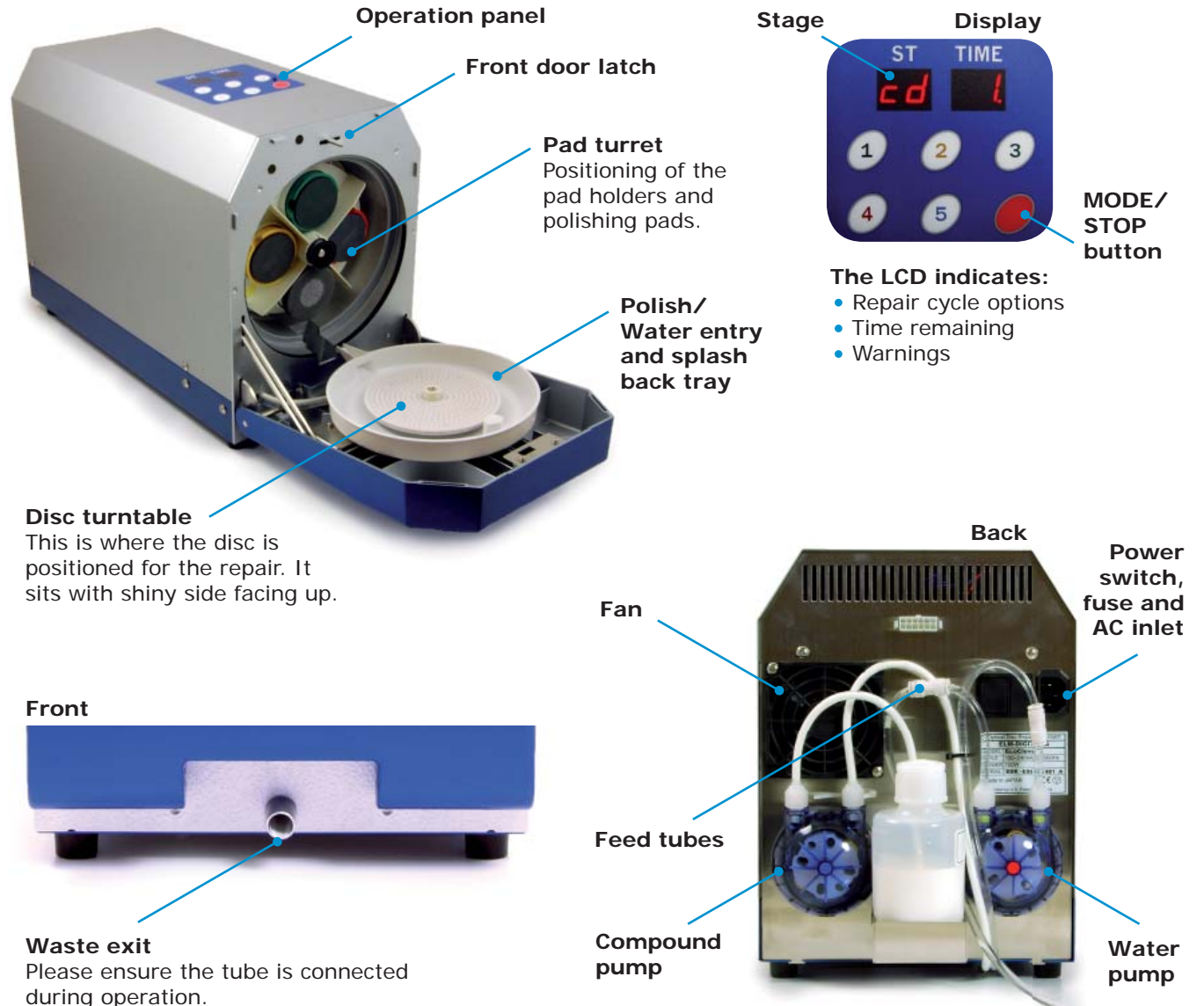
Inspecting a repaired disc

The disc should come out of the machine clean and dry. Have a look at the repaired side, the light repair should have made a visible improvement.

If a more heavily damaged disc was chosen the disc may need an additional repair. Now, using the cycles 1-4, try different levels of damage to get a better understanding of what the machine can do.

For Blu-ray and heavily damaged discs (Level 5) please refer to the **Advanced Features** section.

Parts of the machine




Getting To Know The Machine

Understanding the repair cycle

The Eco Clever is a multi stage disc repair machine. In other words, during the repair cycle the machine uses different grade pads in stages to repair the disc. Sound complicated? Don't worry the Eco Clever does all of these stages automatically.

Inside the machine there are four colour coded abrasive pads from coarse to fine.

Button	Repair Mode	Description
4	Medium	Raised scratches
3	Light	Narrow scratches
2	Very Light	Light scuffs
1	Clean/Polish	Dirt/fingerprints

 Refer to Advanced operation for deep gouges. (level 5)



The machine automatically engages each pad in sequence. The coarsest pad will remove the most of the scratch whereas the finest pad produces the high quality finish.

Setting up consumables

The basic setup for the machine uses pads with red, green, yellow, and black coloured velcro and these will have been pre-installed.

Each pad is attached using Velcro to a matching coloured pad holder. The pad holder is then held in the machine by a magnet.

Try removing and replacing the pad holders.

On the turret there is a coloured label showing where the corresponding coloured pad should go.

Match each coloured pad holder to the corresponding colour tab:



You will have also received blue and violet pads and a violet pad holder with the machine. Please put these aside as they will be used in **Advanced Features** later.

Replacing the pads

When a pad needs changing the machine displays an alarm code. These codes are:

ST LED	Time LED	Description
AI	01	Exchange Pad #1
	02	Exchange Pad #2
	03	Exchange Pad #3
	04	Exchange Pad #4
	05	Change Compound

Press any button to cancel the alarm. Then change the relevant pad. Once the pad has been changed you need to reset the counter on the machine.

Pad changing sequence:



1. Lift off pad holder

2. Remove used pad



3. Attach new pad

4. Re-attach pad holder

With the door open, press the corresponding cycle button to display the counter reading.

To reset the counter press the button again and hold it down until the counter changes to zero.

Getting To Know The Machine

Topping up polish and water

Polish supply

On the back of the machine is a small bottle which contains a thick white polish. Ensure that this bottle is at least 1/3 full before operation.



Make sure that the tube inside the bottle reaches the bottom of the bottle. The bottle feeds polish to the pump marked with a blue dot.

Water supply

In each cycle the machine uses water as a coolant and to remove the waste product. Added to the water is a small amount of additive which helps with the process.



Using the syringe supplied add 5ml of additive for every 1 litre of water in the container. (if you are filling the bottle from empty add 20ml of additive and fill the bottle to the 4 litre line).

For best results use mineral or deionised water.

Coming from the pump with the red dot will be a long tube with a stone filter on the end. Feed the tube in to the top of the water bottle ensuring that the stone filter reaches the bottom of the bottle.

Waste collection

Ensure that the tube coming from the front of the machine has a clear run to the waste bottle otherwise the waste could back up. You should cut down the waste tube so that it does not sag or kink.

Empty the waste bottle every time you fill the water bottle.

Priming the pumps

Your machine will have already arrived with the polish and water pumps primed and ready to go. However it is important to understand how to do this yourself.

Step 1 - Preparation

1. When priming pumps place a tissue under the drip feeds as shown to stop the turntable getting wet.

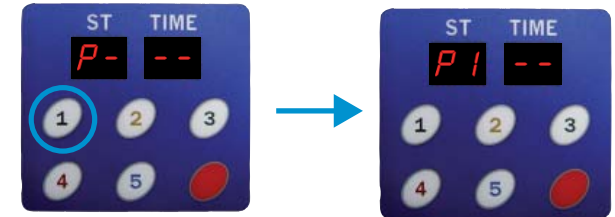


Step 2 – Pump operation mode



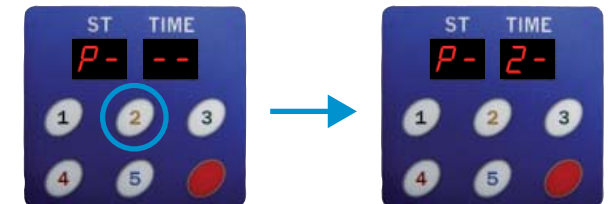
2. Press and hold MODE/STOP and '5' at the same time. A 'P' will appear in the 'ST' display.
3. To exit this mode press MODE/STOP.
4. Once you are in Pump Operation Mode it is simple to prime each pump.

Step 3 – Priming the water (Press 1)



5. Press '1' again to stop the pump when you see water coming out of the drip feed.

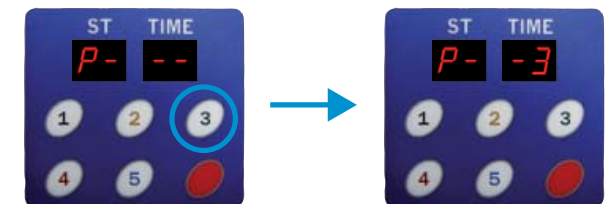
Step 4 – Priming the polish (Press 2)



6. Press '2' again to stop the pump when you see polish coming out of the drip feed.

Clearing the polish tube

If you are not going to use the machine for a while it is important to clear the polish tube of polish so that it doesn't dry in the tube.



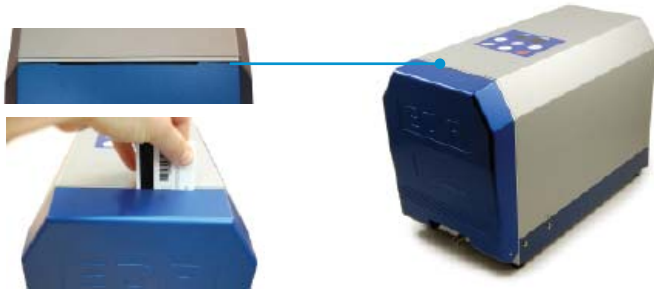
Press '3' to start this process. It will return all of the polish in the tube back to the bottle. Press '3' again to stop the pump.

Maintenance And Information

Troubleshooting

If the door won't open

It can be opened manually by inserting a card into the slot on top of the machine and moving the card to the left to open the catch.



Understanding the display codes

ST	TIME	Comment
CD	01-05	Normal 1-5 operation mode
BD	01-04	Blu-Ray repair cycle selected
AL	11	Front door open
AL	12	Check Pad Holder
P1	--	Pump operation mode (prime water)
P-	2-	Pump operation mode (prime polish)
P-	-3	Pump operation mode (reverse polish)
88	88	Initiation/setup leave for a few seconds
E 1-5	21-90	Note error code and contact Tech Support 0800 412 5424

Daily checks

Pad holders

When changing pads check the pad holder to make sure that the Velcro has not deteriorated.

Check the rear plate on the pad holder to ensure it is clean and contains no rust. Occasionally apply a little spray lubricant to the plate to deter rusting. After time the pad holder will need replacing.

Centre seal

Ensure that the rubber has not deteriorated and the part is still creating an effective seal. Operating with a poor seal could damage the machine.



It is advised to replace this regularly.

Pad fixing plate

Ensure this is kept clean, remove any rust left from rusty pad holders.



Drain exit

Wipe clean regularly to avoid blockages.



Ordering consumables

Regular consumables

Items you will regularly need to buy:



Consumables refill pack: 5055378113000
(Around 500 medium repairs)



Red pad: 5055378101816
(Heavy)



Blue pad: 5055378101793
(Very Heavy)



Violet pad: 5055378101823
(Blu-ray)

Spare consumables

These come in the refill pack, but spares can be bought where required:



Black pad: 5055378101786
(Buff)



Yellow pad: 5055378101830
(Light)



Green pad: 5055378101809
(Medium)



Polish (125ml): 5055378101847
(MSDS found at: totaldiscrepair.com/CleverSupport)



Water additive (200ml): 5055378101845
(MSDS found at: totaldiscrepair.com/CleverSupport)

Advanced Features

Deep scratch cycle

In the starter pack you will find a blue pad. This is the deep scratch 'heavy' pad. This is if you have a disc that you feel needs a longer repair than the standard '4' cycle will repair.

The machine can only hold four pads at a time and so to run the fifth, heavy cycle you need to exchange the blue pad with the red pad for the 5th stage.

Please follow the sequence below for using the '5, heavy' cycle:

1. Remove the red pad holder from the machine and remove the red pad from the holder.
2. Attach the blue pad on to the red pad holder and replace the pad holder on to the machine.
3. Place the heavy damaged disc on to the platen as normal, close the lid and press '5'.
4. The display will count down the '5' cycle.
5. When it moves on to cycle 4 press any button. This will pause the repair and open the drawer.
6. Now exchange the blue pad with the red pad, close the door and press '4'.
7. The machine will now finish stages 4 to 1 as normal.



Using the Blu-ray cycle

Your Eco Clever disc repair machine has already been installed with the Blu-ray software required to repair Blu-ray discs. See the 'Disc Types' data sheet for more information on the differences with Blu-ray discs.

Follow the procedure below to change your machine to Blu-ray repairs:

1. Open the front door.
2. Remove yellow pad and holder from the turret.
3. Fit violet pad and holder in its place.
4. With the door open, press and hold MODE/STOP button until **cd** changes to **bd**
5. Place disc on turntable, close door and select a cycle based on level of damage - there is no level 5 in Blu-ray repair mode.
6. When you've finished, press and hold MODE/STOP again to return to **cd** mode and replace the yellow pad.

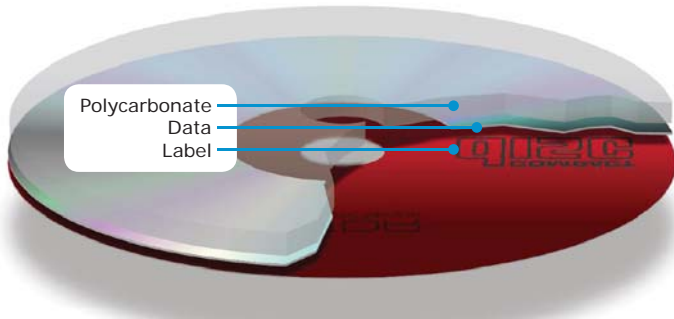


Your notes...

Disc Types

CDs

When discs were invented the process of construction was quite simple. These are what we call CD discs. To produce the disc, a solid polycarbonate disc was made. Then the data layer was applied to the top surface of the disc. To protect this data layer, a lacquer, or label, was then applied over the top of the data layer.



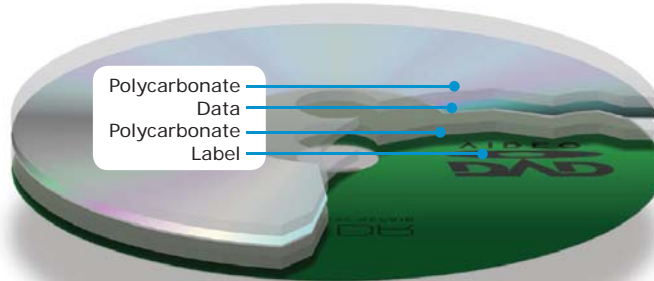
This made the data layer quite vulnerable because any scratch to the label could damage the data layer beneath. If a scratch has reached the data layer it is not repairable. Disc repair can only repair the polycarbonate on the underside of the disc.

Formats:

- Audio Books
- Audio CDs
- CD-ROMS
- Playstation 1

DVDs

The early CDs were mainly used for audio and so often a small scratch was not enough to disrupt the data. However, as the data on discs became more complicated it became more important to protect the data layer. On DVD discs the data layer is sandwiched in the middle of the disc between two pieces of polycarbonate. This protects the data layer and makes the disc virtually indestructible. The only issue with this type of disc is that the two layers of disc can separate around the hole in the centre of the disc, although this is quite rare.



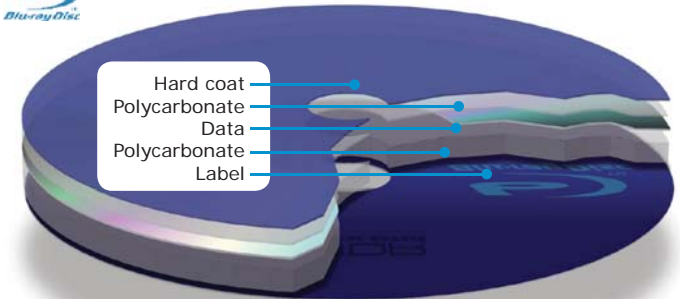
Because the data is so protected virtually all DVD discs can be repaired by the disc repair process.

Formats:

- DVDs
- Playstation 2
- Xbox / Xbox 360
- Wii
- DVD ROM

Blu-rays

With the invention of High Definition (HD) there was a need to carry more information on a disc and soon the data space on a DVD was not enough. Sony solved this with the invention of the Blu-ray disc.



It is essentially the same as a DVD with 2 main differences:

1. The polycarbonate on the bottom of the discs is much thinner than a DVD and so the number of times that the same disc can be repaired falls to around 10-15.
2. The polycarbonate on the bottom of the disc has a hard coated lacquer on top of it. This hard coat reduces the chance of the disc being scratched in the first place, but nonetheless scratches can still happen - just repair using the Blu-ray pad as normal.

Formats:

- Blu-ray film
- Playstation 3

Good machine use and safety...

Here are a few simple tips for you to get the most out of your disc repair machine.

We're here to help!

- ▶ Our Technical Support Team is on hand five days a week to help you. You can reach us by phone or email & there is also information on our website.
- ▶ Whenever you have a question, or if you suspect a problem, we'd love to hear from you – calls are free!
- ▶ Most things can be dealt with over the phone, though our turn-around time for repairs is pretty quick.

Staying safe whilst repairing...

- ▶ Locate and use the machine in a safe and suitable location.
- ▶ Never use a damaged power cable, or any other than the one supplied.
- ▶ Touching the machine or its plug with wet hands could cause injury.
- ▶ Seek medical attention if the polish comes in contact with your eyes or mouth.
- ▶ Please keep the machine out of the reach of children.

Prevent damage to your machine...

- ▶ Running a repair cycle on the machine without a disc on the tray may cause damage to the pads and tray surface.
- ▶ To clean the machine just use a damp cloth and a bit of CD spray can help. Please don't clean the machine by running it under a tap, electronics don't like water!
- ▶ Please contact us before disassembling the machine in any way.

Prevent voiding your warranty...

- ▶ Only use authentic TDR consumables in your machine, 'home brew' products invariably cause damage to the machine and of course void the warranty.
- ▶ Making unauthorised modifications to your machine is dangerous and will also void your warranty.
- ▶ Not using the machine in the way instructed by this user guide may also affect your warranty if faults occur.

Contacting Technical Support:

Freephone:

0800 412 5424

Lines are open Monday to Friday, 9am to 5pm (excluding Bank Holidays).

Email:

support@totaldiscrepair.co.uk

We aim to respond within an hour, though it could be up to one working day.

Thank you once again for buying with TDR and joining our extensive network of professional disc repairers, we recommend putting this sheet up near your machine for reference. If personal injury or damage to your machine or property occurs as a result of not following these instructions, TDR can not be held liable.