

Service manual

2020



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Glen Dimplex

The Dimplex brand is part of Glen Dimplex Consumer Appliances Europe. They manufacture electric fires. Our company is part of the Irish Glen Dimplex Group. Worldwide, the Glen Dimplex Group is the largest manufacturer of electric fires and stoves and currently it is one of the largest suppliers of small domestic appliances. The Glen Dimplex Consumer Appliances Europe site is located in Heerenveen in the Netherlands.

Although Dimplex fires are electric, they offer more by creating the illusion of a life-like fire - from a fascinating flame effect, glowing logs and the crackling sounds of wood to little sparks that seem to fly. A fire adds to the atmosphere and brings calm and cosiness.

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Dimplex is a leading manufacturer of attractive electric fires, and has many unique designs to its name, such as the **Opti-V**, the **Optiflame** and the **Optimyst** technology.

This service manual

This service manual provides you with information about the Dimplex electric fires in general, about troubleshooting and locating defective parts. It is a supplement to the installation manual that comes with the individual products. Read the installation manuals of the supplied product carefully.

TARGET AUDIENCE

The service manual is intended for installers who assemble, carry out maintenance and resolve faults on electric products.

REQUIREMENTS

- ✓ Completed Glen Dimplex training
- ✓ Knowledge of the products
- ✓ Knowledge of installation
- ✓ Knowledge of the applicable standards and guidelines
- ✓ Certified electrician
- ✓ Have the right tools
- ✓ Disconnect from 230V before opening the product

Note: Glen Dimplex cannot be responsible for any damage caused by the repair

CUSTOMER SERVICE

If this service manual did not provide satisfactory assistance, Dimplex is pleased to help you resolve malfunctions and handle complaints. You can also contact us for technical support.

service@glendimplex.eu
Phone: +31 (0)513 656 500

Success with this service manual
Glen Dimplex Support team

**IMPORTANT:**

For all repairs, the products have to be disconnected from 230V before they are opened. The products can only be serviced by adequately trained electro technical personnel.

REMOTE CONTROLS ARE INFRARED OR BLUETOOTH

Infrared: Remotes need to point in the direction of the fire and will work at a distance of 10 metres.

HOW TO CHECK IF YOUR REMOTE CONTROL WORKS.**Use the camera method**

Most remote controls use infrared light to transmit the signal. The human eye is not able to see this light, but a camera can easily spot it.

So, 4 easy steps to see whether your remote is transmitting signals or not

1. Turn your phone or digital camera on
2. Point the remote control at the camera and press any button on the remote
3. If you see a blueish light come from the remote when viewed through your phone or display, then the remote seems to be working fine
4. If you do not see a flickering blueish light or very dim... most likely it is time to replace the batteries in the remote control with the new ones

Note:

- On some of the latest iPhones and Android phones, you'll have to use the front camera to do this test. Most of the rear-side cameras have IR filters that don't sense the infrared rays anymore.
- Aware: this can only be used for infrared remotes.

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Bluetooth: Remotes need to be within a 5 metres radius without the signal being blocked by concrete walls.

Replace batteries annually to guaranty a trouble-free performance.

All products carry the IP20 certificate (only covers dust).

Do not install products in Chlorine environment.

Note: Chlorine will irreparably damage plastic materials and electronics.

FIRE SURFACE CLEANING

Use only a soft cloth to clean glass and painted surfaces of the fire.

Note: Do not use abrasive cleaners.

Installing an electric fire

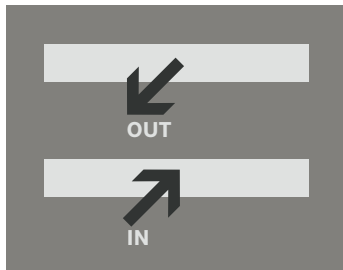
INSTALLATION LOCATION

- ✓ Stable and clean surface
- ✓ Dust-free environment (Construction site)
- ✓ Provide an accessible earthed 230 Volt power outlet
- ✓ All products can be built in flammable materials
- ✓ Observe the required ventilation requirements
- ✓ Optimyst products must be installed spirit level (flat)

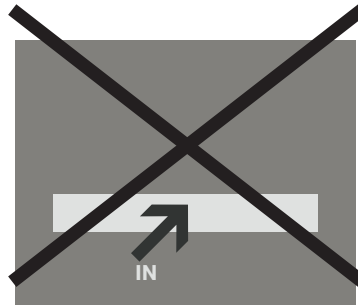
VENTILATION

All built-in appliances require ventilation for proper operation.

To create draught you always need two openings with a difference in height, only then will there be a natural draught of fresh air.

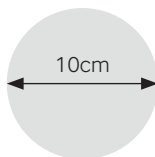


Correct way to ventilate



Incorrect way to ventilate

Calculate the correct ventilation opening

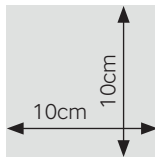


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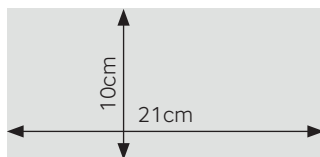
The diameter is 10cm
 Divide the diameter by two = $10 : 2 = 5\text{cm}$
 Radius x radius x PI = $5 \times 5 \times 3.14 = 78.50\text{cm}^2$

When request 210cm you need 3x opening of $\varnothing 10\text{cm} = 235.5\text{cm}^2$

When request 420cm you need 6x opening of $\varnothing 10\text{cm} = 471\text{cm}^2$



length x width $10 \times 10 = 100\text{cm}^2$



length x width $21 \times 10 = 210\text{cm}^2$

Note:

Optimyst products without ventilation will become damaged irreparably after a short period of time. This will never be covered by the Dimplex warranty.

REQUIRED VENTILATION PER PRODUCT		
Opti-V	Single	100cm ²
Opti-V	Double	200cm ²
Optiflame		100cm ²
Revolution		100cm ²
Optimyst	Cassette 250	100cm ²
Optimyst	Cassette 400	200cm ²
Optimyst	Cassette 600	200cm ²
Optimyst	Cassette 500	(Retail and Commercial) 210cm ²
Optimyst	Cassette 1000	(Retail and Commercial) 420cm ²
Optimyst	Cassette L Pebbles	220cm ²
Optimyst	Juneau	210cm ²
Optimyst	Juneau XL	220cm ²
Optimyst	Engine 56-400	200cm ²
Optimyst	Engine 68-400	200cm ²
Optimyst	Engine 56-600 MB	200cm ²
Optimyst	Engine 56-400 B	200cm ²

Opti-V

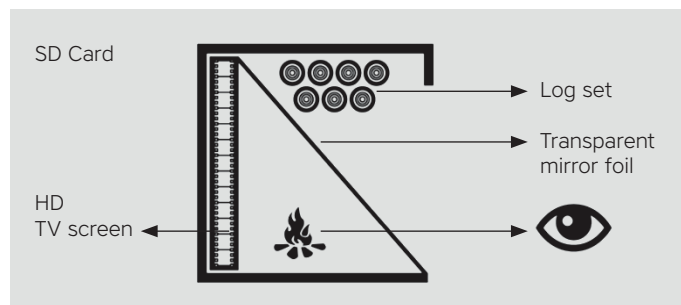
Every fire with Dimplex Opti-Virtual® technology uses the latest HDTV technologies to produce its fire effect. The flame effect is on an SD card and shown on an HD TV screen. With a remote control you can regulate the fire On/Off flame effect and sound.

HOW TO IDENTIFY OPTI-V TECHNOLOGY



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HOW IT WORKS



Remote control with infrared technology and basic functions

The remote control may be operated once the appliance is switched to 'I'.
A red light will indicate when the appliance is in standby mode. Point the remote control at the screen (at the infrared sensor). The audio volume may be adjusted up or down by pressing the volume control buttons (+ and -).

REMOTE CONTROL:



Built-in



Freestanding

BASIC CHECKS FOR OPTI-V TECHNOLOGIES

- Remote will only work when the On/Off switch of the appliance is in the "I" position
- Has the SD card been fitted correctly and check the latest version number of the SD card
- Check 230V connection – check socket if needed and measure 230V
- Check the fuse of the power supply in that room
- Check the battery of the remote

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MANUAL CONTROL OPERATION, FOR THE BUILT-IN PRODUCT

- The manual controls for the screen and sound are located at the inner top left side of the appliance above the glass
- There is a power switch, a stand-by button and light adjustment buttons

MANUAL CONTROL OPERATION FOR THE SCREEN AND SOUND, FOR THE FREESTANDING PRODUCT

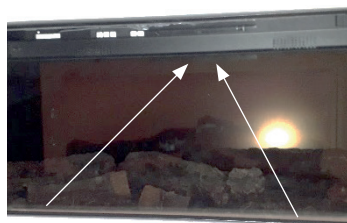
- Opti-V 360: On/off is on the back
- Sunningdale: Behind the door

RATING LABEL

The series number of the product can be found on the label on the right hand side of the product above the glass.

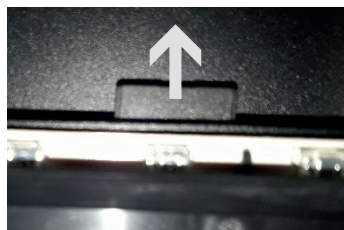
SD CARD POSITION

- Single and Double cassette
See figure



SD Card

Rating Label



Pull SD card out

- Sunningdale:
Access at the back of the appliance
- Opti-V 360°
The SD card is behind the front panel of the 360. You have to remove the screws on the sides to take off the front panel.

ACCESS TO THE ELECTRONICS

1. Access to components from the front
2. Remove glass by unscrewing the metal lid
3. Gently slide the glass out and place it safely and protect it against falling over
4. Remove the log bed
5. Remove the screws to take the TV screen out
6. Open the back to have access to the electronics

Front view of Opti-V single cassette with suction cup to slide out the front panel



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Remove the log bed



✗ Position of the screws

REQUIRED VENTILATION OPENINGS

100cm² Single
200cm² Double

Opti-v diagnostics and repair

More extensive technical information in the Opti-V diagnosis manual
Available on request: **40011924 OPTI-V DIAGNOSTICS AND REPAIR**

Optiflame

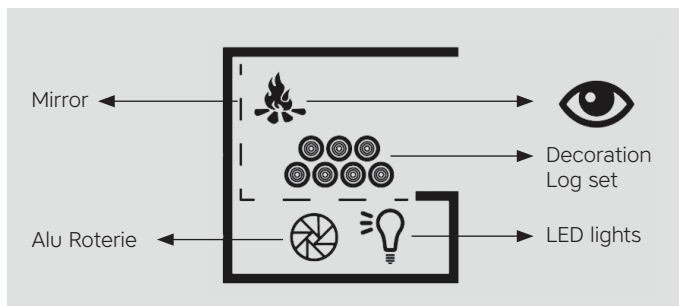
Flame projection on glass, based on light reflection from LEDs
 Rotisserie shaft and rotisserie motor 10 or 15 rpm
 Infrared remote control with on/off function
 Some products have a dimmer function and LED lights in the log set

HOW TO IDENTIFY OPTIFLAME TECHNOLOGY

All products have a front panel



HOW IT WORKS



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REMOTE WITH INFRARED TECHNOLOGY AND BASIC FUNCTIONS

The fire is supplied with an infrared multifunction remote control.

NOTE: To operate correctly, the remote control must be pointed at the display.

BASIC CHECKS FOR OPTIFLAME TECHNOLOGY

- Remote will only work when the On/Off switch of the appliance is in the "I" position
- Check 230V connection – check socket if needed and measure 230V
- Check the fuse of the power supply in that room
- Check the battery of the remote

MANUAL CONTROL OPERATION

The manual controls for the flame effect are located behind the door at the front



RATING LABEL

Model and serial numbers can be found on the back of the product

TROUBLESHOOTING

Most common,

- Heating element – replacement
- Motor – replacement
- Rotisserie noise – position and greasing

Revillusion

Flame projection on glass, based on light reflection from LEDs

Rotisserie shaft and rotisserie motor 10 or 15 rpm

Infrared remote control with on/off function

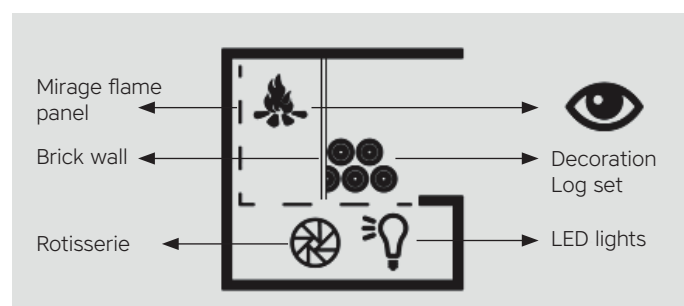
Some products have a dimmer function and LED lights in the log set.

HOW TO IDENTIFY REVILLUSION TECHNOLOGY

There is no front panel on the Revillusion



HOW IT WORKS



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REMOTE WITH INFRARED TECHNOLOGY AND BASIC FUNCTIONS

The fire is supplied with an infrared multifunction remote control.

NOTE: To operate correctly, the remote control must be pointed at the display.

BASIC CHECKS FOR REVILLUSION TECHNOLOGY

- Remote will only work when the On/Off switch of the appliance is in the "I" position
- Check 230V connection – check socket if needed and measure 230V
- Check the fuse of the power supply in that room
- Check the battery of the remote

MANUAL CONTROL OPERATION

- The manual control touch panel is located at the front
- The heating can be switched off with software

REMOTE CONTROL



Revillusion fire box



Log set basket

Please note: Heating function only by remote for both products

RATING LABEL

Model and serial numbers can be found on the back of the product

TROUBLESHOOTING

Most common,

- Heating element – replacement
- Motor – replacement
- Rotisserie noise – position and greasing
- Dust on the back of the Mirage panel

Optimyst

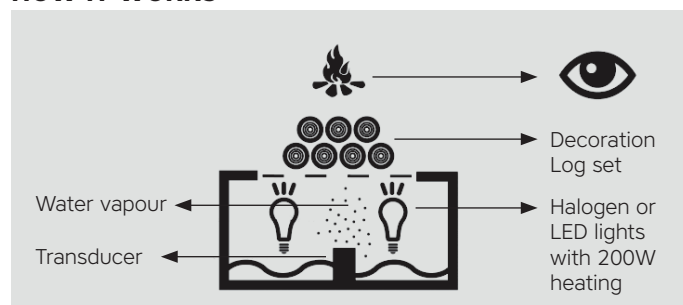
(Fire from water)

Optimyst is a combination of light and water mist that can be enough to see "flames".
With the Optimyst you have full access to the cold flame.

HOW TO IDENTIFY OPTIMYST TECHNOLOGY



HOW IT WORKS



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An ultrasonic mist generator creates vapour in a water sump, and when this is combined with light it produces a flame effect.

MOST IMPORTANT PREREQUISITES

- Ventilation
- Water quality

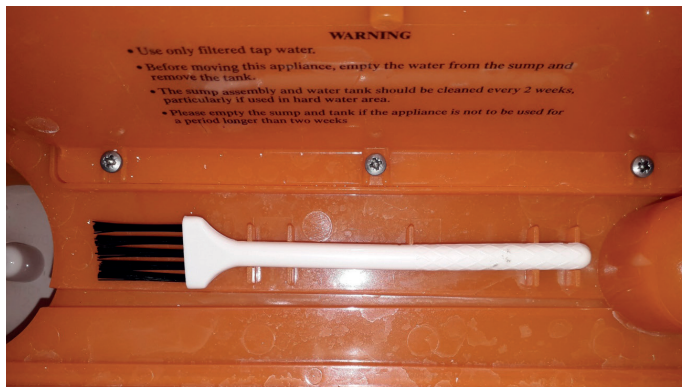
Use only clean and decalcified water

- Normal tap water will have scale
- Scale will damage the performance of the product after a very short period of time
- Maintenance

THE FOLLOWING PARTS MUST BE CLEANED EVERY 2 WEEKS, PARTICULARLY IN AREAS WITH HARD WATER.

Water tank, sump, nozzle, tank cap with seal and air filter.

Please use the supplied brush for cleaning!



FIRE SURFACE CLEANING

Use only a soft cloth to clean glass and painted surfaces of the fire.

Note: Do not use abrasive cleaners.

THERE ARE THREE GENERATIONS OF OPTIMYST PRODUCTS

1. First generation Optimyst (introduced in 2009)
2. Second generation Optimyst 2012
3. Third generation Optimyst 2015

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BASIC CHECKS FOR ALL OPTIMYST TECHNOLOGY

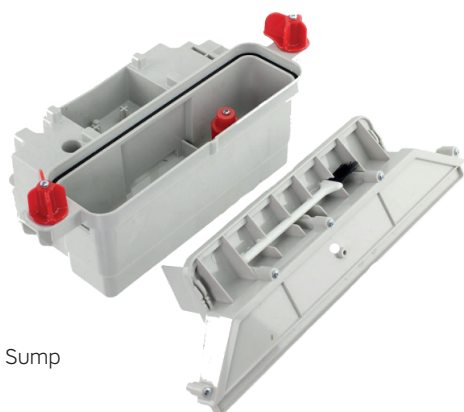
- The required ventilation opening
- Remote will only work when the On/Off switch of the appliance is in the "I" position
- Check 230V connection – check socket if needed and measure 230V
- Check the fuse of the power supply in that room
- Check the battery of the remote
- Check if the transducer is working
- Do not use any oil to create an aroma effect in any Optimyst product

First Generation Optimyst (introduced in 2009)

Equipped with a sump, which holds the transducer, and 45 Watt halogen lamps, access through a drawer with the sump and lamps.

Infrared remote control with on/off function.

Heating option in selected models.



Sump

Flame height can be adjusted by adjusting the speed of the fan.



REMOTE WITH INFRARED TECHNOLOGY AND BASIC FUNCTIONS

The fire is supplied with an infrared multifunction remote control.

NOTE: To operate correctly, the remote control must be pointed at the appliance display.



Without heat for cassette products



Eco remote for built-in products

RATING LABEL

Model and serial numbers can be found behind the drawer or on the back of the product.

COMMON FAILURES

- Transducer needs to be replaced regularly (Replace the sump)
- Fan is not running (check the correct size of the ventilation opening)
 - Insufficient ventilation due to incorrect installation see page.....
- Broken wiring caused by the drawer
- Defective lamps are not replaced by the end user, produce less upward draft and condensation
- Water tank leakage.
 - Closure of the water tank. Result: No water!



Second Generation Optimyst (introduced in 2012)

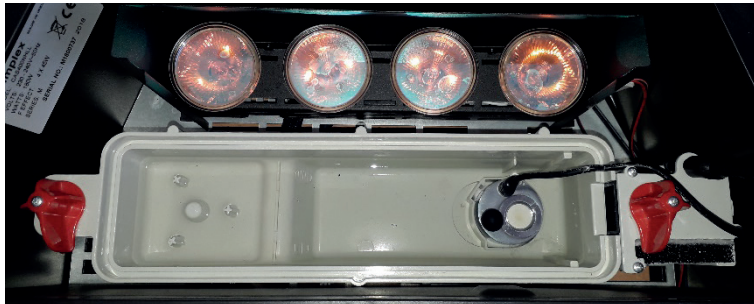
CHANGES

The most important change is the separately replaceable transducer.



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Electronics technology is accessible through a removable log set, which means there is no drawer anymore and the flame height can be adjusted by adjusting the speed of the fan.



CONTROL PANEL AND REMOTE



Flame height

Standby flame

Mains on/off

REMOTE CONTROL



Freestanding



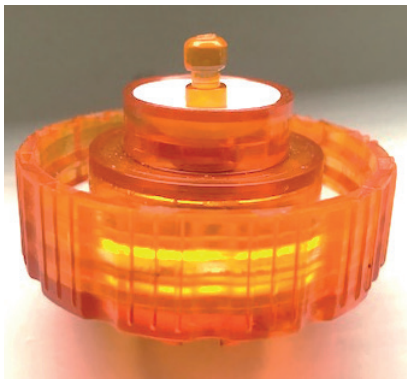
Without heat cassette



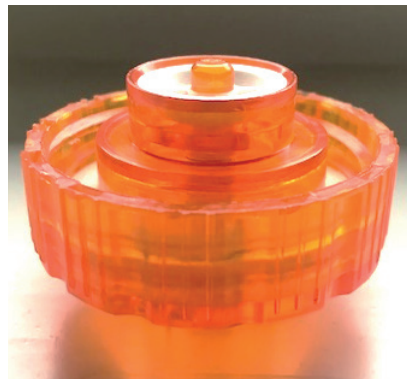
Eco remote with heat for built-in products

COMMON FAILURES

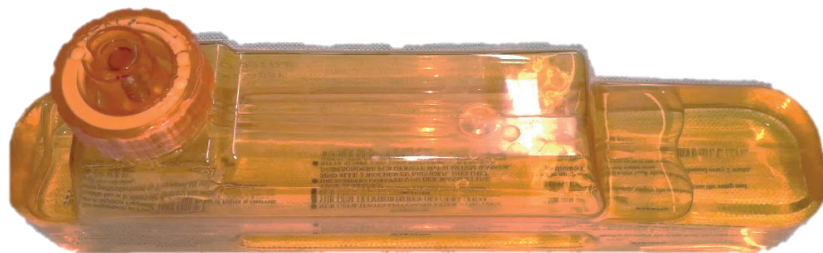
- Transducer needs to be replaced regularly
- Fan is not running (check the correct size of the ventilation opening)
 - Insufficient ventilation due to incorrect installation see page.....
- Defective lamps are not replaced by the end user, produce less upward draft and condensation
- Water tank leakage.
 - Close off the water tank. Result: No water!



Seal ring not in the right place



Seal ring positioned correctly place

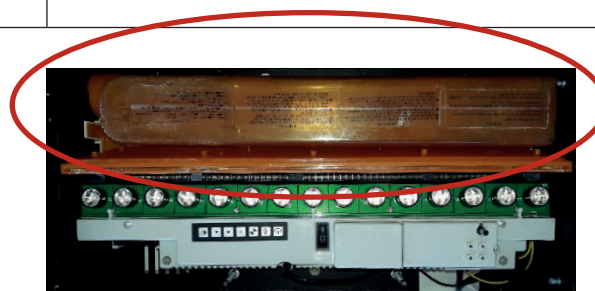
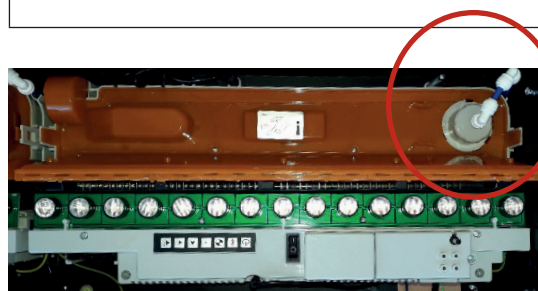


Check the water tank for leakage

Third Generation Optimyst (introduced in 2015)

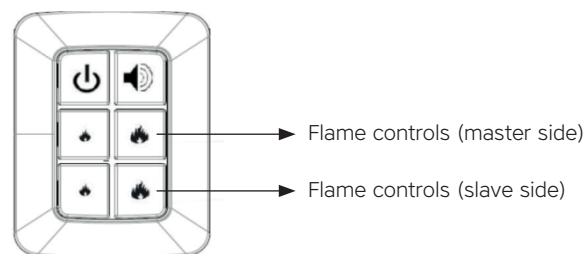
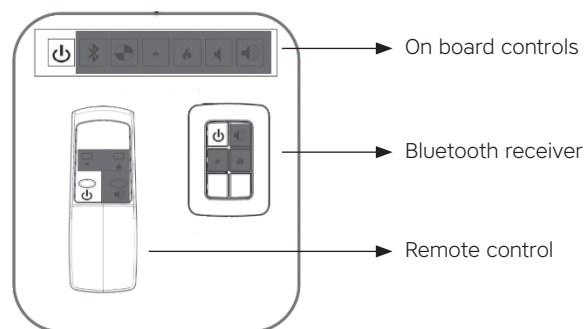
THE MOST IMPORTANT CHANGES:

COMMERCIAL VERSION (PROJECTS)	RETAIL VERSION
<ul style="list-style-type: none"> ✓ Fixed connection to the water supply ✓ Error codes ✓ Double transducer pro motor ✓ Connect one remote for multiple appliances ✓ LED lights ✓ An added heating element provides upward air ✓ Adjustable flame height in 6 steps ✓ Remote control via Bluetooth ✓ Crisper wood fire sound ✓ Detachable wood set with LED lights (accessory) 	<ul style="list-style-type: none"> ✓ Water bottle operation ✓ Connect one remote for multiple appliances ✓ LED lights ✓ An added heating element provides upward air ✓ Adjustable flame height in 6 steps ✓ Remote control via Bluetooth ✓ Crisper wood fire sound ✓ Detachable wood set with LED lights (accessory)



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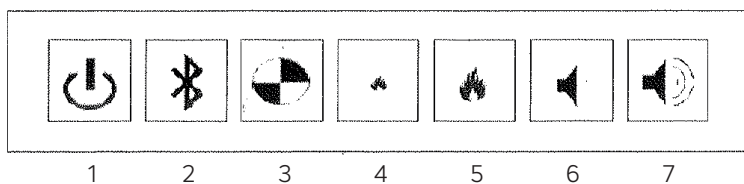
CONTROL PANEL AND REMOTE:



CONNECT REMOTE TO MULTIPLE APPLIANCES

1. Pair the first product
2. Second product, press the rocker switch to the on (I) position; a single beep will be heard
3. Press the standby button on the Button Panel; the product will switch on
4. Press the Bluetooth button on the Button Panel, the LEDs will start to blink slowly
5. Press the sound button on the remote control; the LEDs will flash quickly three times and the product will then automatically switch off. The remote control is now paired to the two products
6. Repeat the above steps to pair the next product

TEST PROGRAM



Main switches in the on position (product is in standby).
Push test mode button 3 to activate test mode.

TEST NO.	TEST MODE	FUNCTION
1	Button 7	Turns on the main leds
2	Button 6	Turns on the sound
3	Button 5	Turns on the transducer
4	Button 4	Turns on the fan
5	Button 3	Turns on the solenoids (magnetic valve)
6	Button 2	Turns on the element. (Click sound should be heard and the reading on the clare test box is between 1.7A – 2a)
7	Button 1	Turns on power to the fuel bed

Note: Product will leave test mode after 10 seconds without pushing a button.

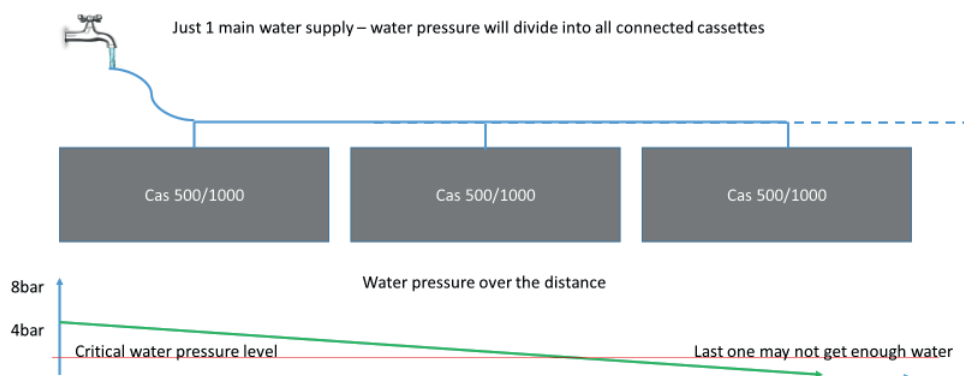
Main water connection: Commercial only

Minimum water pressure is 0.5 bar
Maximum water pressure is 8 bar

Cas500/1000

Multiple installation on 1 mains water supply

Issues with water pressure and flow rate, when multiple cassettes are installed at 1 mains water supply, but „the last one“ does not receive any water



COMMON FAILURES

- Insufficient ventilation due to incorrect installation
- Conduction or water leak (Aqua stop blocks water supply, pill must be replaced) (commercial only)
- Maintenance
- Transducer needs to be replaced regularly
- Fan is not running (check the correct size of the ventilation opening)
 - Insufficient ventilation due to incorrect installation see page.....
- Water tank leakage
 - Close off the water tank. Result: No water!



- Aqua stop open will switch off the appliance
- Pill grown 4 times in volume due to moisture

RECOGNISE THE CORRECT WATER LEVEL



- Water level must be between these two marks in the sump.

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THIRD GENERATION, HOW WE MANAGE THE WATER LEVEL

The water level is regulated by a reed contact.

(A reed contact or reed switch is an electrical switch contact in a glass tube that is operated by a magnetic field.)

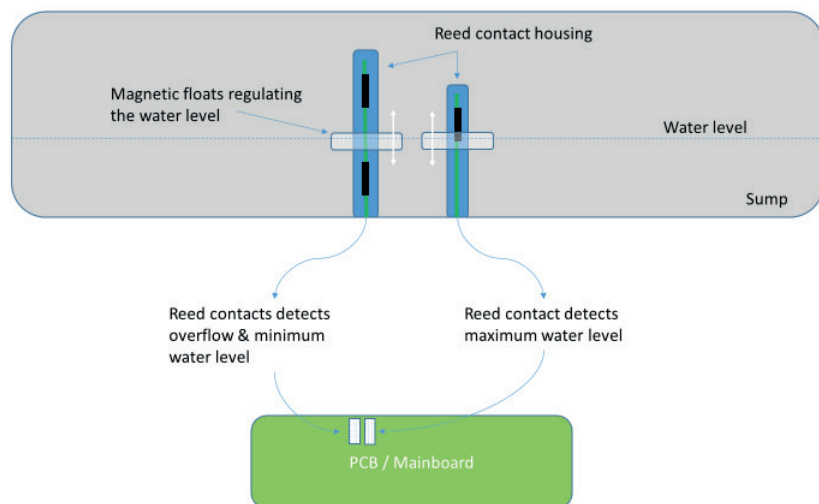
How does it work in an Optimyst:

Magnets float in the sump and follow the water level and thus operate a switch contact.

The taller left moulding contains the min and overflow reed switches. The smaller right moulding contains the max reed switch.

Overflow is the highest (top left), then max (top right), then min (bottom left).

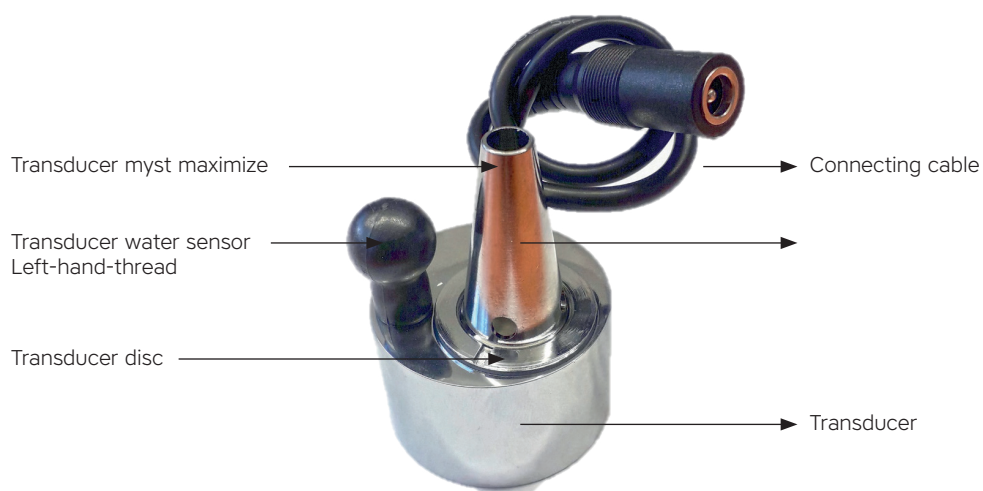
Note: The left switch has a 2-way connector, while the right switch only has a 1-way.
See figure



TRANSDUCER

Note:

- There will be a tolerance between the amount of myst a transducer can produce
- When the myst is getting lower, clean or replace the transducer



Myst maximize is only used on the products below:

1. Cassette 500, 1000 (retail & commercial)
2. Cassette 400 LED



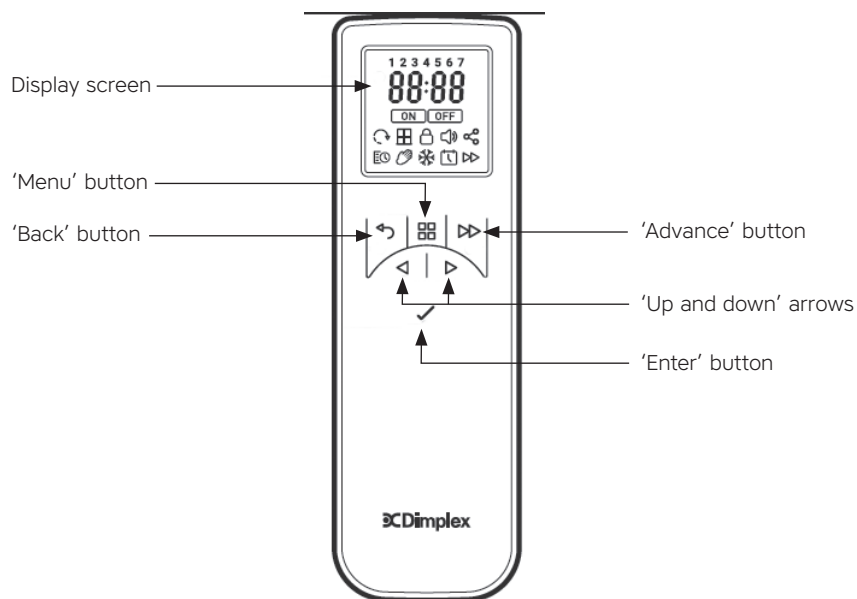
Third Generation and error codes; Commercial only

1 flash – 8 seconds pause – 1 flash	Too much water
<ul style="list-style-type: none"> • Water bottle: check closure of water bottle is fitted correctly; check for leaks or holes in water bottle. • Permanent water filling: check water connection to the product; does water flow into the product in the off position; if so, flush magnetic valves • Empty the sump. Restart the product 	
2 flashes – 8 seconds pause – 2 flashes	Not enough water
<ul style="list-style-type: none"> • Water bottle: refill water bottle • Permanent water filling: check water flow; eventually raise water pressure (max 8bar / ~2,5l/min); water level be over min limit within 20 seconds from start • Restart product 	
3 flashes – 8 seconds pause – 3 flashes	Signal cannot be interpreted
<ul style="list-style-type: none"> • Check floats for correct fit; has to have same level; check that floats are not trapped/jammed • Restart product 	
4 flashes – 8 seconds pause – 4 flashes	Water does not fill quickly enough
<ul style="list-style-type: none"> • After 90 seconds floats have to reach max limit • Water bottle: check closure of water bottle is fitted correctly ; check for leaks or holes in water bottle • Permanent water filling: check water flow; eventually raise water pressure (max 8bar); water level must be over minimum limit within 20 seconds from start • Eventually pre-fill the sump. Restart product 	

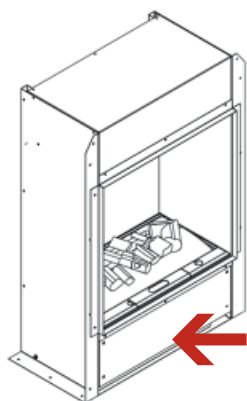
Pairing the Bluetooth Eco Remote

- Bluetooth (RC) connection (not infrared)
- Works within a range of 5 meter
- While in pairing mode, the transmitting power is reduced in order not to connect with any other device
- In pairing mode, the remote has to be very close to the product to pair (centimetres)

REMOTE CONTROL

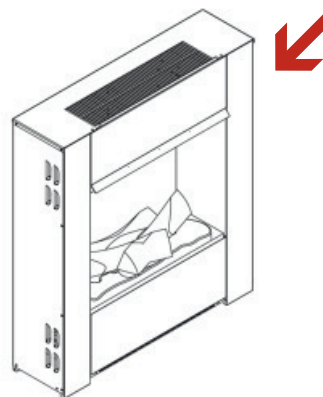


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Engines, 3step, Albany

Points of pairing
 Hold the remote control here if new pairing is necessary
 Hold it close to the electronics!
 Wait a few seconds



Wall fire engine

PAIRING WHEN CONNECTION WITH EXISTING REMOTE CONTROL OR NEW REMOTE CONTROL IS LOST (REPLACEMENT)

1. Switch OFF the appliance with O/I switch
2. Activate the remote control with "Enter" button ✓
3. Remote searches for the appliance 
4. Hold "Back" and "Advance" button for 5 – 8 seconds 
5. "PAIR" appears on the remote control (do not hold too long, otherwise test & eolt mode will be activated)
6. Switch on appliance and hold remote close to the appliance (see point of pairing/wait a few seconds)
7. Remote connects, light flashes, confirm with "Enter" button ✓

Repeat if this failed

*Please check that you are holding the remote close enough to the appliance

OPTIMYST DIAGNOSTIC AND REPAIR

More extensive technical information in the Optimyst diagnosis manual








Available on request:

40011923

SERVICE INSTR. MANUAL CASS. 500/1000

Focused on Commercial

Remote control overview

Optiflame		Optimyst		Opti-virtual	
Viotta and MiniMozart models		Suites		Sunningdale stover, same shape for 360° with fewer buttons	
Toluca de Luxe		Cassette remotes differ in functionality		Cassettes – single, double, Aquarium	
Firebox remotes differ according specifications of the products		Silverton			
Revillusion and Ignite models		Engines			

HOW TO CHECK IF YOUR REMOTE CONTROL WORKS

Use the camera method

Most remote controls use infrared light to transmit the signal. The human eye is not able to see this light, but a camera can easily spot it.

So, 4 easy steps to see whether your remote is transmitting signals or not

1. Turn your phone or digital camera on
2. Point the remote control at the camera and press any button on the remote
3. If you see a blueish light come from the remote when viewed through your phone or display, then the remote seems to be working fine
4. If you do not see a flickering blueish light or very dim... most likely it is time to replace the batteries in the remote control with the new ones

Note:

- On some of the latest iPhones and Android phones, you'll have to use the front camera to do this test. Most of the rear-side cameras have IR filters that don't sense the infrared rays anymore.
- Aware: this can only be used for infrared remotes.



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