

TLC-30 Advance *Intensive Care Unit / Brooder*

Operating Manual

Brinsea
Incubation Specialists





Read the instructions before use!



Do not cover!

This appliance is only to be used with the mains power supply unit provided with the appliance. Use of another mains power supply unit may cause a hazard. To allow transportation of animals, the appliance may also temporarily be used while attended in a vehicle if connected to a 12 volt accessory socket.

Damaged appliances must not be used.

The appliance, its power supply unit and its supply cord must be placed in an indoor area not subject to splashes of water or wet conditions and protected from or out of reach of animals.

Repairs must be carried out only by a suitably qualified person.

This appliance must not be used, cleaned or maintained by children or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge without supervision. Children must not play with the appliance.

Disconnect the appliance from the mains power supply during cleaning. Ensure that all electrical parts are kept dry. Avoid alcohol based solutions and make sure that all disinfectant is thoroughly rinsed off plastic parts with clean water. Disinfectant solutions may cause severe cracking of plastic if not correctly rinsed off.

Brinsea Products Inc. and its agents or distributors will not be responsible for loss of animals in the event of failure however caused and the user is advised to arrange his own insurance cover where loss of power or mechanical or electrical failure might result in unacceptable losses.

Please read these instructions carefully before setting up your TLC-30 Intensive Care Unit to achieve best results and keep these instructions safe for future reference.

Your TLC-30 is designed to allow the user to vary the incubation conditions to suit a wide range of species in different ambient conditions and the specific set-up for every species is beyond the scope of these instructions. There are a range of books and veterinarian texts available covering animal and avian hand rearing and recovery techniques.

To register your new Brinsea product please visit www.brinsea.com within 30 days of purchase and follow the link on the home page to qualify for your free, extended 3-year guarantee. Sign up for the Brinsea Newsletter to receive the latest news and information.

Record your appliance serial number here _____

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1 UNPACKING

Your TLC-30 Intensive Care Unit has been supplied in protective packaging. Please remove all tape, strapping and packing from the incubator and parts. Retain the carton and packing materials to enable the unit to be repacked.

Check that your electrical supply matches that marked on the Power Supply Unit.

The diagram shows all the parts that have been supplied to you. If there are any parts damaged or missing please contact your retailer or Brinsea Products (at the address at the end of the document). **Damaged appliances must not be used.**

1: TLC-30 Intensive Care Unit

2: Power Supply Unit (PSU)

3: Mains power cable

1.



2.



4

3.



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2 LOCATION AND INSTALLATION

Only use the mains Power Supply Unit supplied with the product. Use of a different mains power supply may cause a safety hazard and will invalidate any guarantee.

Plug the TLC-30 power cable connector into the PSU cable connector.

Plug the mains power cable into the socket on the PSU. Ensure it is pushed fully home in its socket.

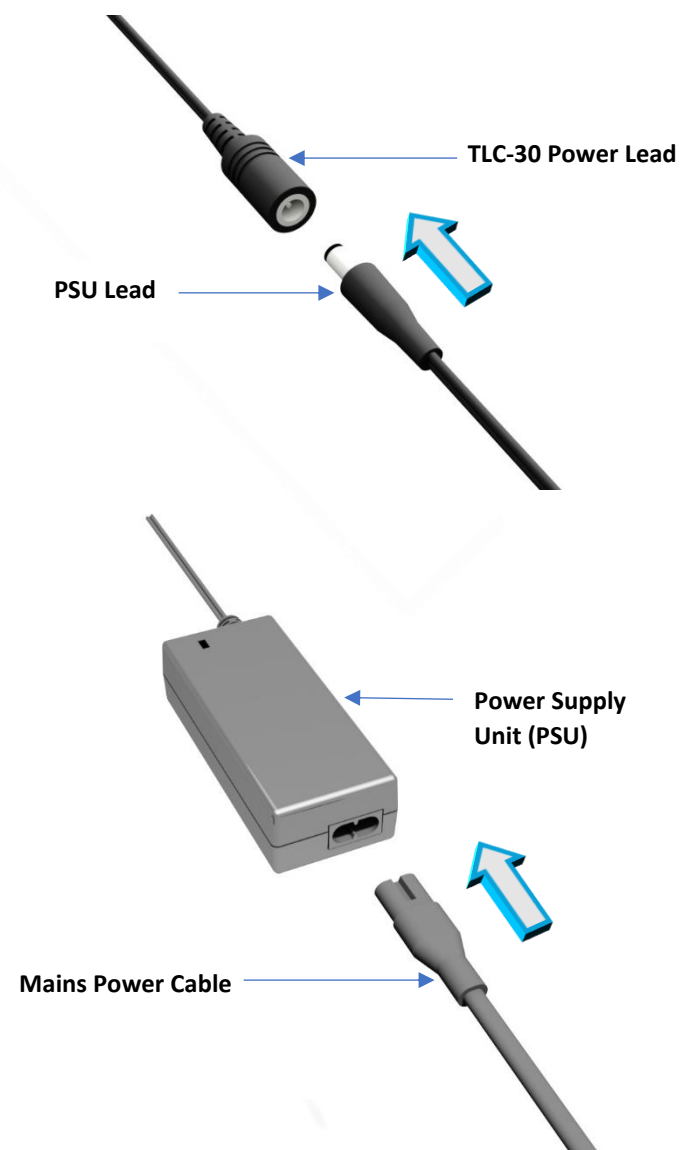
Place the PSU and mains cable in a convenient, dry location off the floor and away from animals.

Your TLC-30 will give best results in a heated room free from wide temperature variations and with generous ventilation particularly if several incubators are running at the same time. Ideally thermostatically control the room at between 68 and 77°F (20-25°C). For best results don't allow the room temperature to drop below 59°F (15°C).

TLC-30 Intensive Care Units may be stacked (maximum 2 units high). Ensure the feet of the top unit lock over the 'stacking posts' on the top of the other unit.

TRANSPORT OF ANIMALS

The TLC-30 may also be used while attended to allow transport of animals in a vehicle. Connect to a 12 volt accessory socket (or cigarette lighter) using adaptor lead part number 15.45 available from Brinsea Products. **It is safest to transport the unit firmly secured in the luggage compartment or firmly secured on the vehicle floor ensuring it cannot interfere with the operation of any vehicle controls. The driver must not be distracted by the animals or TLC-30.**



TLC-30 Advance

3 FUNCTIONAL FEATURES

1: Removable Chassis

2: Digital Temperature Display

3: Control Buttons

4: Adjustable Air Vent

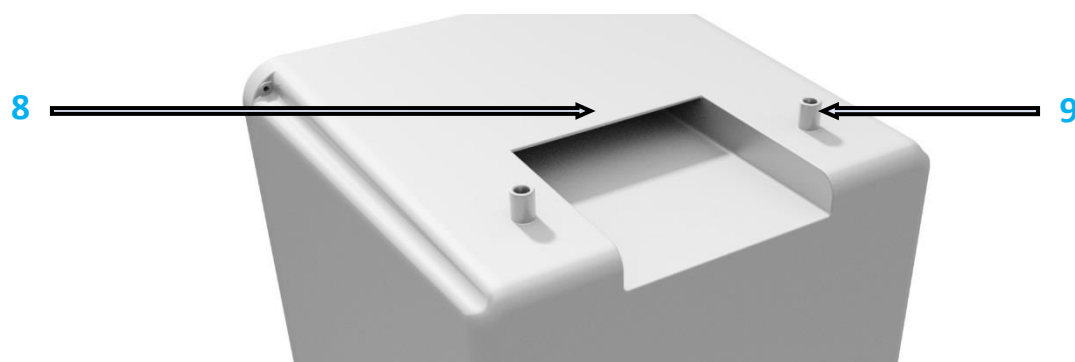
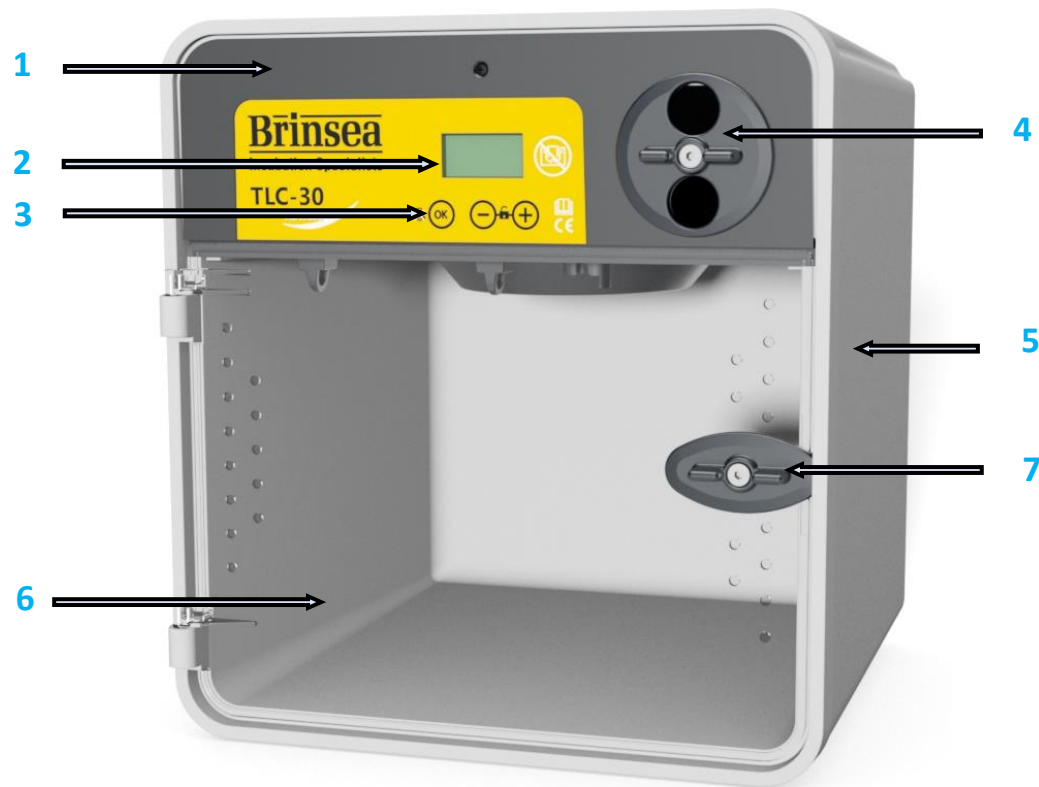
5: Double-walled Cabinet

6: Door

7: Door Latch

8: Integral Carrying Handle

9: Stacking Posts



TLC-30 Advance

4 CONTROL MENU

The diagram on the right illustrates how to navigate through the control menu. Look at the key below to understand what each button does when pressed.



Press both buttons to unlock the menu.



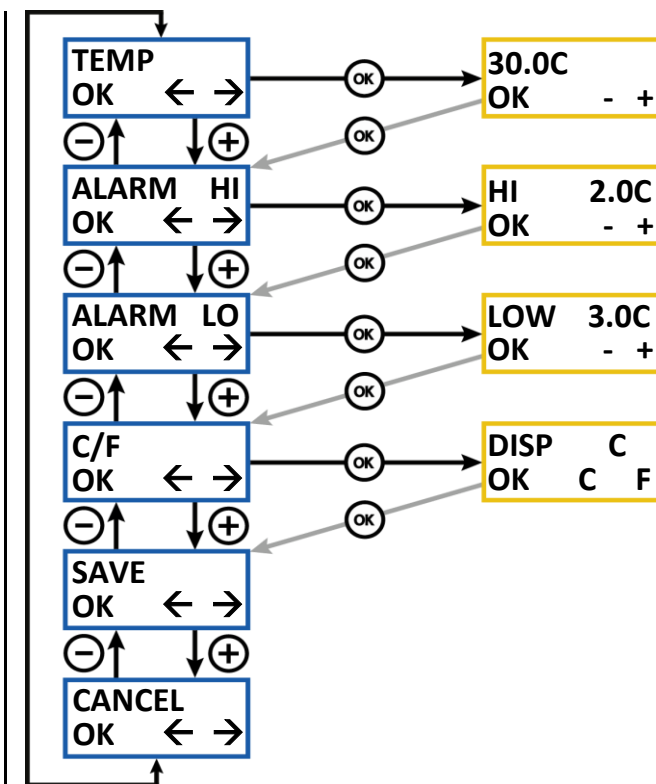
Select the option / return to the menu.



Go forward one screen / increase the value / display in Celsius.



Go back one screen / decrease the value / display in Fahrenheit.



INCUBATION TEMPERATURE

Range 68.0 – 100.4°F (20.0 – 38.0°C).
Default 86.0°F (30.0°C). See section 5.

HIGH TEMPERATURE ALARM

Range 1.8 – 9.0°F (1.0 – 5.0°C) above set incubation temperature.
Default 3.6°F (2.0°C). See section 5.

LOW TEMPERATURE ALARM

Range 1.8 – 9.0°F (1.0 – 5.0°C) below set incubation temperature.
Default 5.4°F (3.0°C). See section 5.

CELSIUS / FAHRENHEIT DISPLAY

Switches all temperature figures between °C and °F.
Default °C. See section 5.

SAVE

All changes are saved. Return to normal operation screen.

CANCEL

All changes are ignored. Return to normal operation screen.

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5 DIGITAL CONTROL SYSTEM

The TLC-30 Advance control system utilises a highly accurate, individually calibrated sensor for temperature. Be cautious of low cost analogue or digital thermometers when comparing them with the display reading.

The TLC-30 will achieve the ideal temperature faster if the Adjustable Air Vent is turned to its closed position (pictured). Afterwards, the vent can be turned to the required setting to give increased ventilation. This may be necessary to maintain low temperature settings in warm environments or if a larger animal is being cared for.

Note that: The TLC-30 can only control temperature down to within approximately 5.5°F (3°C) of room temperature. It cannot cool the air.

Once the correct temperature has been established and the air vent adjusted, the TLC-30 is ready for use.



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5 DIGITAL CONTROL SYSTEM

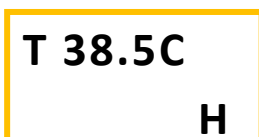


Press both buttons to unlock the menu.

(FIG 1)



(FIG 2)



(FIG 3)



Normal Operation – Temperature is continuously displayed.

- The asterisk “*” adjacent to the temperature reading shows when the heater power is on. When warming the asterisk will be continuously on, once warmed up the asterisk will slowly flash as the heater is pulsed to maintain the correct temperature. When reducing the temperature setting the asterisk may go off, this is normal.

Changing Settings – The Control Menu allows the various settings to be modified and saved. All settings are retained in the event of a power cut.

- To access the Control Menu press the + and – buttons simultaneously to unlock the display.

Power Loss Display (FIG 1) -- If power has been interrupted due to a power cut (or when first switching on) a “P” is shown flashing in the corner of the display. Press OK for 2 or more seconds to clear the indicator. If the reason for the power loss is not known check the power cable connections are secure.

High Incubation Temperature Alarm Display (FIG 2) – If the measured temperature inside the TLC-30 goes up by more than the figure in the ALARM HI screen, the alarm will sound immediately and “H” will be displayed. Press OK to silence the alarm for 30 minutes.

- If the high temperature problem rectifies itself the “H” remains on the display to show this has happened. Press OK to clear the indicator. Check the TLC-30 is not (and has not been) in direct sunlight or too near a heat source such as a room heater.

Low Incubation Temperature Alarm Display (FIG 3) – If the measured temperature inside the TLC-30 goes down by more than the figure in the ALARM LO screen, after 60 minutes “L” will be displayed and the alarm will sound. Press OK to silence the alarm for 30 minutes.

- If the low temperature problem rectifies itself the “L” remains on the display to show this has happened. Press OK to clear the indicator. Check the TLC-30 is not (and has not been) in a cold draught and that the room temperature has not dropped significantly.

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5 DIGITAL CONTROL SYSTEM

(FIG 4)



T* 30.0C
-RM

(FIG 5)



T 30.0C
+RM

Setting the Temperature:



1. Press the - and + buttons simultaneously to unlock the Main Menu.



2. Press OK to select the temperature screen and adjust as necessary using the + and – buttons.



3. Press OK to return to the Main Menu and then scroll down to SAVE. Press OK to save the changes.

When reducing temperature the asterisk may go out while the incubator cools – this is normal

Low Room Temperature Alarm (FIG 4) – If the calculated room temperature remains too low for optimum results for more than 1 hour a warning is displayed “-RM” and an alarm will sound. Press OK to silence the alarm for 30 minutes.

- If the low temperature problem rectifies itself the “-RM” remains on the display to show this has happened. Press OK to clear the indicator.
- Check the TLC-30 is not (and has not been) in a cold draught and that the room temperature has not dropped significantly.

High Room Temperature Alarm (FIG 5) – If the calculated room temperature remains too high for optimum results for more than 1 hour a warning is displayed “+RM” and an alarm will sound. Press OK to silence the alarm for 30 minutes.

- If the high temperature problem rectifies itself the “+RM” remains on the display to show this has happened. Press OK to clear the indicator.
- Check the TLC-30 is not (and has not been) in direct sunlight or too near a heat source such as a room heater. Animals create significant metabolic heat and may contribute to this if room temperature is high.

Changing the Display to Fahrenheit:



1. Press the - and + buttons simultaneously to unlock the Main Menu.



2. Scroll to the C/F option and press OK to select the C/F display screen.



3. Press the + button to select °F or the – button to select °C.



4. Press OK to return to the Main Menu. Press OK again to save the changes.

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6 SMALL ANIMAL CARE

Your TLC-30 has been specifically designed for the care of injured or sick small animals. Animals should always be cared for following the instructions and advice given by your veterinary surgeon.

The first stage of treating a cold animal (hypothermia) is to prevent further heat loss, by wrapping the casualty in insulating materials such as blankets, bubble wrap or silver foil. It is recommended to pre-heat the TLC-30 and allow the temperature to stabilise before adding young birds or small animals. If you are aware of an incoming animal patient, the TLC-30 may be switched on so that it is ready for immediate use when the patient arrives.

Once the TLC-30 is warmed to the correct temperature the animal can be transferred. The amount of bedding should be reduced at this stage to allow warming from the environment in the TLC-30. All animals will benefit from some bedding in the bottom of the cabinet such as an absorbent pad to help reduce soiling. Small animals such as fox or badger cubs can benefit from having a soft toy for company while single ducklings or pheasant chicks can be provided with a safe mirror. Wild animals may become very distressed when handled by humans. Place the TLC-30 where there is minimal disturbance.

All small mammals and birds will benefit from being kept in an environmental temperature within their 'thermoneutral range'. This is the range of temperatures in which an animal expends no energy to maintain its body temperature. The thermoneutral temperatures for typical adult mammals and birds are given in table 1. For birds, the thermoneutral range depends upon size, with smaller birds requiring higher temperatures. Reptiles and amphibians should be kept within an 'activity temperature range' (ATR) in which it can control its body temperature. ATR values for typical reptiles and amphibians are also given in table 1.

Hypothermic adult animals should be warmed in the TLC-30 set to their thermoneutral range. The temperature of both the TLC-30 and the animal should be recorded at regular intervals. Careful monitoring and observation of the animal should be undertaken to ensure that it is not showing signs of distress. i.e. panting or shivering. These animals are also likely to be dehydrated and/or 'shocked' (hypovolaemic) so warming alone will not correct these things and may make them worse. All adult animals must therefore be provided with adequate fluid therapy at the same time as warming and veterinary care (in person, over the telephone or in written Standard

Operating Procedures). Injured animals also require pain relief (analgesia) which can be prescribed by a veterinary surgeon.

If the animal will drink, then an oral rehydration fluid can be provided in a shallow bowl. If the animal will not, or cannot drink, then fluid must be given in other ways. In birds, rehydration fluids can most easily be provided by crop tubing, provided the bird can lift its head and swallow. In mammals, intravenous or intraosseous fluids are usually required to rehydrate patients. These must only be administered by a veterinary surgeon or veterinary nurse.

Only feed a poorly animal once it is warm and always start with liquids only. Do not place moist, solid food in the intensive care unit as it will rapidly go bad due to the warm environment.

Dependent animals (those that would naturally be in a nest) should be kept in the TLC-30 set at 82-90°F (28-32°C) until they are of an age where they can maintain their own body temperature when the heat can be reduced to the thermoneutral range for that species. Carefully observe their behaviour for signs of panting or shivering to help determine the best temperature for them at that stage. Very small baby animals may require an artificial fabric 'nest' to be created in the TLC-30, lined with paper towel.

Like adult animals, baby animals are frequently dehydrated upon arrival and should be fed with an oral electrolyte solution. They also frequently have a low blood glucose level (hypoglycaemia) and should be fed appropriately soon after the initial electrolyte feed. If the animal is unable to lift its head, and/or swallow, then it will need to be given fluids and glucose by injection – this should be under veterinary direction.

See section 5 'Bird Brooding' for more specific advice on care of young birds.

Species:	Temperature range:
Mammals	59 – 68°F (15 – 20°C)
Medium and Large Birds	59 – 77°F (15 – 25°C)
Small Birds	68 – 86°F (20 – 30°C)
Very Small Birds	77 – 95°F (25 – 35°C)
Reptiles	68 – 86°F (20 – 30°C)
Amphibians	59 – 86°F (15 – 30°C)

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7 BIRD BROODING

For newly hatched chicks, use small plastic tubs such as ice-cream or butter / spread containers lined with paper towel.

Young birds of similar age and size can be placed together to benefit from the warmth and comfort. If disparity in size is too great, the smaller animal is at risk of being crushed or smothered.

For larger chicks and adult birds line the base of the TLC-30 with paper towelling and place the bird(s) directly on this.

Change the paper towel at each feed or at least four times a day. Follow feeding regimes recommended for the species ensuring the highest standards of hygiene at all times.

Please Note: It is recommended to pre-heat the TLC-30 and allow the temperature to stabilise before adding young birds or small animals.

Follow the approximate guide in this section to achieve desired temperature settings. Always allow half an hour between adjustments for the temperature to stabilise and refer to the glass thermometer to confirm that the desired temperature has been reached.

Recommended staged temperature settings for most parrots and falcons:

Days 1 to 5	Days 6 to 10	Days 11 to 15	Days 16 to 25
97°F (36°C)	91°F (33°C)	85°F (29.5°C)	80°F (27°C)

These temperatures have been found to promote optimal health and growth from newly hatched chicks and are a little higher than may be found in nests. Where birds are taken from a nest after more than a few days, the temperature setting will usually need to be a few degrees lower to prevent heat stress. The recommendations above are for guidance only, always observe the chick's behaviour (see below) to verify setting.

Temperatures too high can cause heat stress, dehydration, deformities or haemorrhaging under the skin. Low temperature may reduce appetite and retard growth. Observation of the bird is the best guide to its comfort. Chicks try to huddle together if cold and move about seeking parental warmth. Chicks too warm separate and pant. In either case they will complain vocally. Comfortable birds will lie quietly sleeping with wings loosely folded at the sides, usually in contact with one another.

Developing chicks are fairly tolerant of short-term temperature drops but care should be taken about cooling that occurs during feeding or inspection. Keep the room warm, hold the bird in a cloth to prevent chilling from cold hands and use warmed feeding utensils.

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8 CLEANING

Disconnect the Power Supply Unit from the mains supply.

Do not immerse the cabinet. It may be cleaned further by separating the inner and outer parts. Do not over-tighten the fixing screws.

Never wash the cabinet parts in liquids over 120°F (50°C). Do not use a dishwasher to clean any parts.

Always rinse thoroughly as cleaning agents / disinfectant may damage plastic after prolonged contact. Avoid alcohol based solutions.

Following each use of your TLC-30 remove all debris from the floor. Wipe all internal surfaces clean with a damp cloth soaked in 100:1 Brinsea Incubation Disinfectant solution. Rinse surfaces thoroughly with a cloth made damp with clean water.

The exterior of the TLC-30 may also be cleaned with a damp cloth with disinfectant solution and then rinsed off thoroughly.

To disassemble:

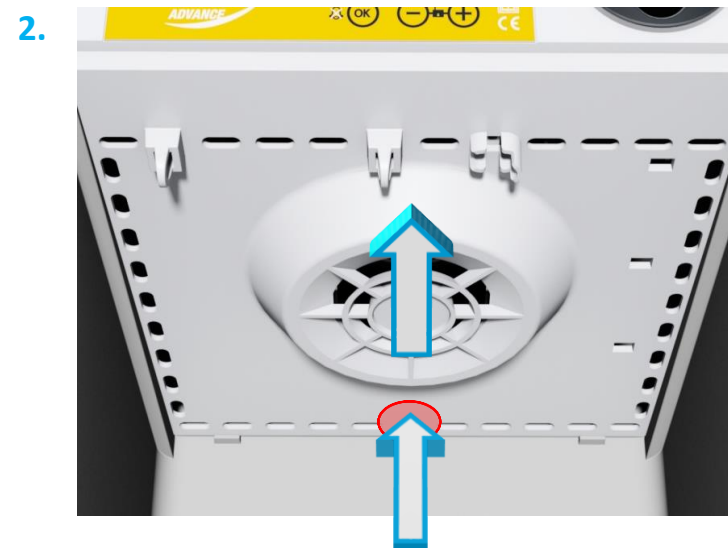
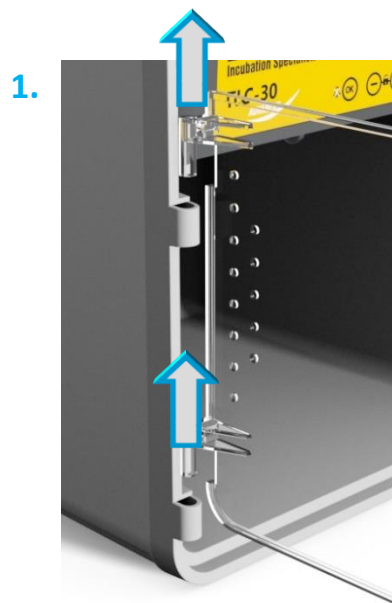
1: Open the door to at least 90 degrees. Lift the door up (as pictured) to remove it from the cabinet hinge loops.

2: Remove the chassis by pressing at the location shown in an upwards direction whilst sliding the tray out towards you. The power lead can be pulled through the cable hole.

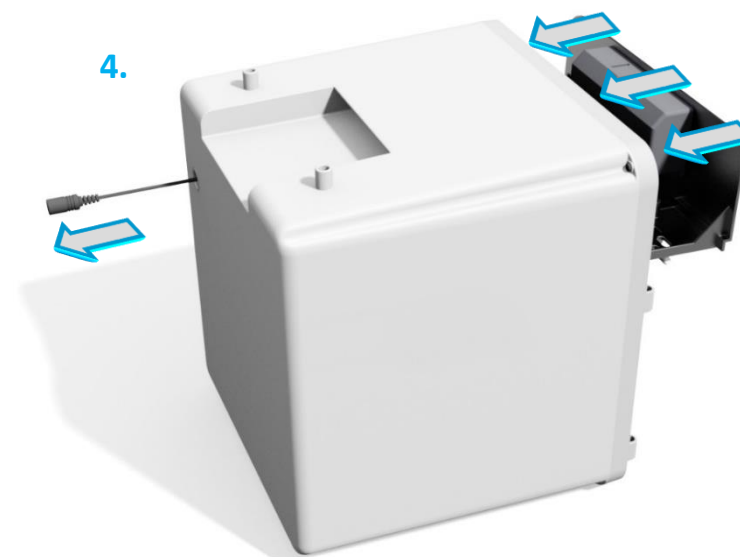
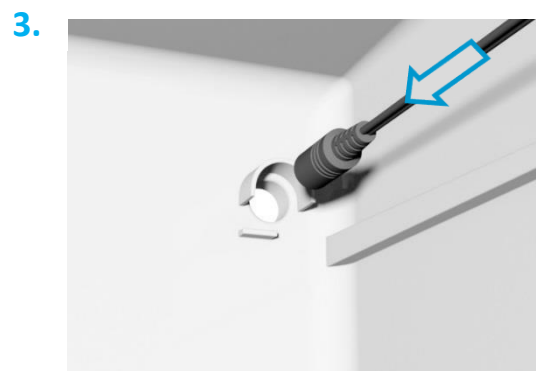
3: To re-assemble; fit the TLC-30 power lead through the hole in the back of cabinet and gently pull through.

4: Slide the chassis back into position and 'click' back into place. **Ensure that the power lead is taut while sliding the chassis into place to prevent the lead being damaged / trapped.**

5: Re-fit the door by sliding the doors hinges down into the cabinet's hinge loops.



PRESS HERE AND SLIDE FORWARD



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9 SPECIFICATION

Overall Height: 11 ¾ inches (297mm)
Overall Width: 10 ½ inches (270mm)
Overall Depth: 10 ¾ inches (275mm)

Floor Area: 9 ½ x 9 ½ inches (240mm x 240mm)
Effective volume: 2.5 gallons (9.5 litres)
Weight: 4.6 lbs (2.1 Kg)

Power Consumption:

Maximum 36 Watts
Typical average 18 Watts

Electrical Supply: 115V, 50/60Hz.

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