Owner’s Manual
Cyncra™ and Hydra™
Espresso Machines
Safety Warnings

IMPORTANT Information for the Cyncra™ and Hydra™ Espresso Machine Manufactured by Synesso™, Inc.

- DISCONNECT FROM ALL POWER SOURCES BEFORE SERVICING
- Read the entire manual BEFORE operating this machine
- Steam and condensation from the steam wand discharge is HOT and may cause burns
- The steam wand tips and bases become HOT during use, do not touch them - Use Caution
- Always have the steam wand tip covered or inserted in the product to be steamed before opening the steam valve
- Never remove the steam wand from the product that is being heated when the valve is open
- Never remove the portafilter from the machine during the brewing process
- Keep water and moisture away from any electrical device or live power.
- Steam tank water is heated to 260°F (126°C), Use caution around this tank.
- The brew groups deliver water as hot as 210°F (99°C), Use Caution
- The hot water mix valve can be adjusted to deliver water as hot as 212°F (100°C), Use Caution
Label Locations

**WARNING:** Disconnect from power supply before servicing

**AVERTISSEMENT:** Couper l'alimentation avant l'entretien et le dépannage.

See this label on the electrical box

The conductors of the power supply cord are marked "L1","L2" for the ungrounded ("hot") supply conductors and "G" for an equipment grounding lead.

See this label on the end of the electrical cord.

This equipment is to be installed to comply with the applicable federal, state or local plumbing codes.

See this label on the inside edge of the frame under the drain tray on the front left side.

**NOTE:** For single line 220 vac use:

- White wire as supply
- Black wire as neutral
- Green wire as earth (ground)

Materials Information

- All stainless steel that comes into contact with the water supply, used to fabricate Synesso espresso machines is 300 series
- All brass fittings are low lead per the CA360 specifications or better
- All electronic devices are lead free
- All gaskets are made from a food contact safe material

Test Information

- Brew (coffee) tanks are hydrostatically tested to 375 psi
- Steam tanks are hydrostatically tested to 75 psi
- The electrical system is subject to an electrical withstand test of: 1.20 kvac, at 5.00 mA, for 1 (one) second
Congratulations on the purchase of your Cyncra™ or Hydra™ espresso machine.

Synesso™, Cyncra™, Hydra™, and DigiZone™ are all Trademark names of Synesso, Inc

Factory Information

SYNESSO, INC
309 S. Cloverdale, Suite C41
Seattle, WA 98108
Tel: 206-764-0600
Fax: 206-764-0601
Email: info@synesso.com
Web: www.synesso.com

Included in the Box

* Espresso Machine
* Owner’s Manual
* Pump/Motor Combination
* 8’ Flexible ¾” ID Flexible Drain Hose
* Hose Clamp
* 48” Stainless Steel Braided Hose
* 84” Stainless Steel Braided Hose, Qty 2
* Tamper, 58 mm
* Fitting, 3/8” Pipe x 3/8” Compression
* Accessory Package & Synesso 3oz Shot Glass
* A combination of portafilters based on the size of the machine: (not all items below are included)

<table>
<thead>
<tr>
<th>Model:</th>
<th>3 Group</th>
<th>2 Group</th>
<th>1 Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portafilters:</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Double Spout:</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Single Spout:</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Double Basket:</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Single Basket:</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Blind Basket:</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* 110 Volt, 1 Group machines come with an electrical plug on the power cord
* CSA Certified machines come with an electrical plug installed on the power cord
  - 1 Group, 110 V – NEMA L5-30P
  - 1 Group, 220 V – NEMA L6-20P
  - 2 Group, 220 V – NEMA L6-30P
  - 3 Group, 220 V – NEMA L6-50P

Please have your Serial Number available BEFORE calling for service or technical support. Thank you.

S/N: __________________

The offsets for this machine are:

Zone 1 _____ °F / Zone 2 _____ °F Zone 3 _____ °F
Zone 4 _____ °F / Zone 5 _____ °F (Steam Tank)
Installation Instructions

To maintain the warranty, an authorized or certified espresso service representative must perform the installation of the Cyncra™ or Hydra™ espresso machine.

Site Preparation

The machine must be placed on a level horizontal surface that can be easily cleaned and is capable of sustaining a minimum of 300 lbs. of weight.

The surface depth should allow for a minimum clearance of 1” behind and 3” in front of the machine.

Make a 2 ½” round hole through the countertop, 4” from the back center of the machine. This should provide ample room for the hoses and electrical lines.

A 3/8” cold water supply line with a shut off valve is needed within 5’ of the machine, preferably located directly underneath the machine.

A proper water filtration or softening system must be installed on the incoming water supply. Types and sizes of the water treatment systems will vary. It is important to use a system designed to match the needs of your specific area. Most water filtration systems require periodic maintenance, cartridge or filter replacement. This is vital to the proper functioning of the machine and the quality of the espresso served. Follow the instructions provided by your water treatment system for proper installation.

Note: Improper water filtration can result in water damage inside the machine causing scale and corrosion. THIS WILL VOID YOUR WARRANTY.

There must be adequate room under the counter to locate the motor and pump. This should be within 5’ of the cold water supply line. The pump may need periodic adjustment, so easy access should be available. The pump and motor should have proper ventilation and a minimum of 3” clearance on all sides.

Dimensions of the pump and motor are:
6 ½” Height x 5 ½” Width x 9 ½” Depth

A floor drain or sink should be readily available. The best location is directly under the installation site of the machine.

An electrical receptacle and matching plug, rated at the proper voltage and amperage is required within 3’ of the location of the machine.
Proper water filtration and regular filter changes are a requirement to keep your factory warranty valid and your machine functioning properly. It is highly recommended that you contact a professional water filtration specialist in your area and have your water tested to determine the proper filtration system. It is important to note that many municipalities change their water sources throughout the year, so periodic water tests may be necessary.

**Water Requirements**

Proper water filtration and regular filter changes are a requirement to keep your factory warranty valid and your machine functioning properly. It is highly recommended that you contact a professional water filtration specialist in your area and have your water tested to determine the proper filtration system. It is important to note that many municipalities change their water sources throughout the year, so periodic water tests may be necessary.

**Water Standards to keep your warranty valid:**
- Total Dissolved Solids (TDS) 30 to 200 ppm (parts per million)
- Total Hardness - in ppm Less than 85 ppm
- Total Hardness - in grains 3 to 5 grains (divide ppm by 17.1 to get grains)
- pH 6 pH to 8 pH
- Chloride 0 ppm - any Chlorides can be corrosive and harmful
- Total Alkalinity Less than 100 ppm
- Chlorine 0 ppm
- Iron 0 ppm

**Electrical requirements:**
- 1 Group 110v: 110v, 60 hz, 20 amp
- 1 Group 220v: 220v, 50/60 hz, 16 amp
- 2 Group: 220v, 50/60 hz, 28 amp
- 3 Group: 220v, 50/60 hz, 36 amp
- Hydra Electrical Requirements:
  - 2 Group: 220v, 50/60 hz, 32 amp
  - 3 Group: 220v, 50/60 hz, 42 amp

**Legend:**
- **X:** 1 group: 39.5cm / 16"  
  2 group: 67cm / 26"  
  3 group: 94cm / 37"
- **Y:** 1 group: 21cm / 8"  
  2 group: 48 cm / 19"  
  3 group: 76cm / 30"

**Dimensions:** H 6.5" x W 5.5" x D 9.5"

**Counter requirements**
- * Easily cleanable
- * Sturdy, level and horizontal
- * Capable of sustaining weights up to 300 lbs.
- * 2.5" round hole drilled for hoses (see "Footprint" for hole location)
- * Clearance: 1" behind, 3" in front

**Water requirement**
- * 3/8" cold water supply line
- * Properly treated water required for warranty (see below for details)
- * Shut-off valve
- * Located within 5' of the machine
- * Braided stainless lines provided

**Drainage requirements:**
- Located within 5' of the machine
- Drain hose should run as vertically away from the machine as possible

**Pump and Motor:**
- Located within 5' of the machine
- Dimensions: H 6.5" x W 5.5" x D 9.5"

**Machne footprint**
- **Legend:**
  - **X**
    - 1 group: 39.5cm / 16"
    - 2 group: 67cm / 26"
    - 3 group: 94cm / 37"
  - **Y**
    - 1 group: 21cm / 8"
    - 2 group: 48 cm / 19"
    - 3 group: 76cm / 30"

**Steam handle**
- Located within 3' of machine

**Hole for hoses**
- Located within 3' of machine

**Legend:**
- **X**
  - 1 group: 39.5cm / 16"
  - 2 group: 67cm / 26"
  - 3 group: 94cm / 37"
- **Y**
  - 1 group: 21cm / 8"
  - 2 group: 48 cm / 19"
  - 3 group: 76cm / 30"
Plumbing Instructions

This equipment is to be installed to comply with the applicable federal, state or local plumbing codes.

Connect the 3/8” compression fitting of the provided stainless steel braided hose to the connection from the filtered, cold water line.

Fittings on the hoses are 3/8” compression type fittings; thread sealant or Teflon tape is not necessary. Make connections snug, but do not over tighten. Turn water ON and check for leaks.

The ¾” inside diameter clear vinyl ribbed hose connects the outlet fitting of the drain box to the drain (located on the right hand rear corner). Run this hose to the floor drain or floor sink.

NOTE: Synesso machines require a minimum of 35 PSI (2.5 bar) of line pressure to have the auto fill system for the steam tank function properly.

Electrical Instructions

After you make sure your receptacle and circuit are properly rated (see specifications chart on page 12) for your model, install a matching plug on the power cord. See page 3 for plug specifications.

<table>
<thead>
<tr>
<th>North American Configuration</th>
<th>Outside of North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Green &amp; yellow</td>
</tr>
<tr>
<td>Ground</td>
<td>Ground</td>
</tr>
<tr>
<td>White</td>
<td>Brown</td>
</tr>
<tr>
<td>110 V</td>
<td>220 V</td>
</tr>
<tr>
<td>Black</td>
<td>Blue</td>
</tr>
<tr>
<td>110 V</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

Make sure that the On/Off electronics switch (red rocker) and the heating element breaker on the Cyncra are in the OFF (0) position, then plug the power cord into the receptacle.

IMPORTANT - If the voltage on the receptacle used is less than 210 Volts, Synesso recommends installing an In-Line Buck-Boost transformer to increase this voltage.

- 1 and 2 Group 220 Volt Machines require a 1.0 KVA transformer
- 3 Group 220 Volt Machines require a 1.5 KVA transformer.
Start-Up Instructions

1. To fill the coffee brew tanks, turn the water ON.
2. Switch the electronics On/Off switch to ON. This activates the machine’s water auto-fill feature for the steam tank and the electronics, but NOT the heating elements.
3. The water level sight glass for the steam tank is located on the right side of the machine. As the tank fills, the water level will rise in the sight glass and will automatically stop when the preset level is reached.
4. Turn the brew group to the BREW position, (see sketch on page 5) allow the air to escape and return the brew group to the OFF position.
5. Make sure the water level in the sight glass reads at least ½ full and then turn the heating element breaker to the ON or (1) position.
6. To adjust the pump pressure, activate the pump infusion by turning the brew group to the BREW position.
7. Locate and read the pump pressure / brew gauge.
8. Set the pump pressure to 9 Bar. To do this, locate the pump adjusting screw on the right side of the brass pump housing. Loosen the lock nut and turn screw with a screwdriver.
   - Clockwise to INCREASE pressure
   - Counterclockwise to DECREASE pressure
9. Please allow at least ½ hour of “warm up” time before using your Cyncra espresso machine to brew shots or steam milk. The steam gauge should read a minimum of 1.1 Bar.

Unplugging EMC Compliant Machines
(C-Tick for Australia and NZ, CE for Europe)

To comply with EMC (Electromagnetic Compatibility) regulations, Synesso is required to install a capacitor in the electronics box across the main power IN. To avoid an electric shock from the charge held in the capacitor, leave the electronics ON/OFF red rocker switch in the ON position when unplugging the machine. When the electronics “go dark” or OFF, the charge has dissipated.

The Brew Group has 3 positions:

OFF – The handle is pointed to the right
PRE – Pre-Infusion or pre-saturation is the middle position
BREW – (ON) The handle is pointed to the left
DigiZone™ Controls
A custom PID Electronics System

The 5 Zone Control System for 2 & 3 Group Models

Temperature readout for selected Zone

1st Group (Brew Tank) ➔
2nd or Center Group ➔
3rd Group ➔ (3 group models only)
Steam Tank 4 ➔ (Controls 1st Element)
Steam Tank 5 ➔ (Controls 2nd Element)

The 2 Zone Control System for 1 Group Models:
#1 LED is the brew tank; #4 LED is the steam tank

The Electronics Box, located Under the Machine
- CAUTION: Disconnect from Power Source before opening this box
- Unauthorized work in this box may void the warranty
  Turn On/Off Electronics Only (Red Rocker) ➔ Pump Reset Switch

On/Off (1/0) Heating Elements Breaker ➔ Manual Water Fill Switch

Setting the DigiZone™ Temperatures
1. Select the desired zone by pressing the ZONE button. Press and hold the SET button to check the current set point.
2. To adjust a zone temperature, use the ZONE button to cycle to the zone you want to adjust.
3. Press and hold the SET button while using the ARROW keys to adjust up or down to the desired temperature.
4. On all models except the 110v 1 group, the heating element has 2 separate coils. Zone 4 is the primary coil and it is recommended that you set the temperature to read about 1.2 to 1.4 Bar (approximately 250°F – 255°F) on the steam gauge. Zone 5 can be set 5°F to 8°F lower which allows the 2nd coil to be active only when needed.
Toggle Display Between C and °F

Press and hold the Down Arrow and the Zone Button until you hear a beep. It is encouraged to set and adjust your temperatures in °F as it is the more accurate scale. (* for s/n 0303 forward)

Steam Tank Pressure & the Relationship to Temperature

- Pressure = Bar or PSI (pounds per square inch)
- 1 Bar = 1 Atmosphere = 14.7 PSI at sea level

Temperature as it Relates to Pressure in the Steam Tank:

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Bar</th>
<th>PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>230°</td>
<td>.40 to .50</td>
<td>6 to 8</td>
</tr>
<tr>
<td>240°</td>
<td>.75 to .85</td>
<td>10 to 12</td>
</tr>
<tr>
<td>250°</td>
<td>1.10 to 1.20</td>
<td>15 to 17</td>
</tr>
<tr>
<td>260°</td>
<td>1.40 to 1.60</td>
<td>23 to 25</td>
</tr>
<tr>
<td>270°</td>
<td>1.80 to 2.00</td>
<td>30 to 32</td>
</tr>
</tbody>
</table>

Accessing the Interior of the Machine via Side Panels

CAUTION: This should ONLY be done by Qualified Personnel

Use a 5/8” wrench, remove the 4 nuts & O-rings; the steam lever will stay attached to the panel

1. Adjust the expansion valve – locate valve, use 12mm wrench, loosen or tighten to relieve pressure at 12 Bar.
2. Turn off the steam valve – locate the inline ball valve, turn stem clockwise with an adjustable wrench.
3. Rebuild the steam valve – purchase the kit from Synesso and install it.
4. Adjust hot water mix valve – turn handle clockwise to close valve completely, giving you steam tank water only, turn handle counterclockwise ¼ turn (this adds cold water), measure water temperature at the hot water spout, continue with ¼ turn increments until desired temperature is achieved.
5. Locate the drain box, remove and clean.
Bean Grinding

1. For best results, use fresh coffee.
2. Understand the properties of the coffee roasts you have chosen.
   - Generally, light roasts brew at hotter temperatures than dark roasts
3. Synesso recommends that ground coffee should be brewed within a few minutes of grinding.
4. Fill the portafilter basket just above level and wipe off the excess.
5. Press straight down evenly on top of the grounds with the tamper.
6. Use firm pressure and twist slightly to insure a level top.
7. Common causes if the shot is pouring too slowly:
   - Grind is too fine
   - Too much coffee in the basket
   - Tamp pressure was too firm
   - Diffusion screens are clogged – clean or replace
   - Pump pressure is too low (should be set to between 8 to 9.5 Bar)
8. Common causes if the shot is pouring too quickly:
   - Grind is too coarse
   - Not enough coffee in the basket
   - Tamp pressure is too light
   - Portafilter baskets are worn – replace immediately
   - Water temperature is too cold

Espresso Brewing

1. Single, double and bottomless portafilters are available through Synesso. The single portafilter can only be used to brew a single shot of espresso. The double or bottomless can be used to brew 1 double or 2 single shots of espresso. These portafilters should be kept warm by keeping them engaged in the brew group before using.
2. Filter basket size: a single is 7 grams, a double is 14 grams, triples are 18 and 21 grams.
3. In order to brew a satisfactory shot of espresso, the grind, the dose and tamp of the beans must be correct. This is critical to the quality of the shot.
4. Fill the portafilter basket with ground espresso roast beans. Using the supplied tamper, press ground coffee firmly, packing it into the portafilter basket. Make sure the top of the coffee is level for even brewing.
5. Engage the portafilter into the brew group that has the correct temperature setting for this espresso roast and pull firmly to the right to set the seal.
6. Turn the brew group clockwise to the PRE or center position allowing line pressure to pre-infuse the coffee until a drip shows at the spout. Then turn again to BREW, thus engaging the pump to create pressure to brew.
7. If the coffee is ground, dosed and tamped to the proper consistency, it should take about 20 to 25 seconds to brew a 2 oz double shot.
Milk Steaming

1. The steam wands are used to both heat and expand the milk into tight-bubbled foam.
2. Pour fresh cold milk into a steaming pitcher. Fill to ½ full – do not overfill.
3. Insert the tip of the steam wand deep into the milk pitcher. This will prevent milk from overflowing once the steam is turned on.
4. Open the steam valve fully by pulling the handle towards you. Total travel is only a few inches.
5. Place one hand on the side of the steam pitcher to feel the rising temperature of the milk.
6. As the milk agitates and heats, lower the pitcher to keep the tip of the steam wand closer to the surface, but still beneath the surface. If an adequate amount of foam has been attained prior to reaching the desired temperature, raise the pitcher to lower the tip of the wand deeper into the milk. This will continue the heating process and minimize further foaming. Do not touch the steam wand to the bottom of the milk pitcher; this can create an inaccurate temperature measurement.
7. Heat milk to approximately 150°F to 170°F (65°C to 76°C). If you are using your hand to help determine the temperature, it will feel about as hot as you can stand without burning yourself. Steam thermometers are also an excellent way to determine the temperature of the milk.
   Caution: Do not over heat the milk and scald it.
8. Wipe off and purge the steam wand immediately after each use.
9. Synesso steam wands are made with a proprietary double walled process that helps to keep the outer wall cooler. The tip and the base of the wand can heat to very high temperatures and caution must be used. The double wall process also makes wiping and cleaning the steam wand much easier.

Note: Whole Milk, 2%, 1%, Non-Fat, Soy Milk, Rice Milk and other milk type products may require a different technique to foam properly. In general, the higher the fat content, the easier it is to achieve consistent foam.

Cleaning and Maintenance

Proper and regularly scheduled cleaning and maintenance procedures are CRITICAL for trouble free and optimum quality performance from your espresso machine.

Back-Flushing

1. Replace the filter basket with the provided blind filter basket (a single solid basket without holes) in one of the portafilters.
2. Engage the portafilter in one of the brew groups, turn the head to the BREW position and leave it there for 3-5 seconds. Repeat several times. This procedure should be preformed on EACH brew group daily.
3. This process forces water through the inlet tube and drain system.
4. When using an approved espresso industry detergent during back flushing, follow the manufacturer’s instructions. It is extremely important to thoroughly rinse the blind filter basket and repeat back flushing several times with clean water to clear the system of any detergent residue.
Cleaning
1. Clean the surface of the machine using a soft damp cloth. Avoid using abrasive cleaners or cleansing pads. Take extra care on the mirror finish stainless steel surfaces.
2. Make sure the steam wands and tips are free of milk built-up. It is always best to clean the steam wand and tip after each use. Approved espresso industry cleaners can be used to help dissolve milk built-up.
3. The drip tray, drip tray grates, cup tray grates and portafilters should be removed and cleaned every day. If you clean the portafilters in the dishwasher, first remove the filter baskets and insert springs before placing all items in the dishwasher.

Maintenance Schedule

Daily
1. Back-flush each brew group a few times without detergent, and at least once with an espresso industry approved detergent (usually the final cleaning of the night, or after a busy period).
2. Wipe down the entire machine
3. Remove portafilters, baskets and springs, drip tray and grates, cup tray grates and clean thoroughly. These items are all dishwasher safe.
4. Slowly pour a pitcher of hot water down the drain.

Weekly
1. Back-flush each brew group using an espresso industry approved detergent (this is in addition to the daily back flushing).
2. Soak portafilters and the removed filter baskets in an approved espresso industry detergent and water solution overnight.
3. Rinse thoroughly before reassembling and using your portafilters.
4. Carefully remove screens from each brew group using a short handled screwdriver and soak overnight in a similar solution as the portafilters.
5. Rinse screens thoroughly before installing and using. Make sure you install the screens before brewing any shots of espresso. Failure to do so may plug the drain lines with coffee grounds.

Monthly
1. Check your water filtration system and make sure the cartridges and filters are changed as needed. In areas of high mineral content, hard water, high particulate count or in very busy locations – the filtration systems will need to be checked more often.

Quarterly
1. Change portafilter gaskets, closely inspect diffuser screens and filter baskets – change if showing wear. Call an authorized repair representative to perform routine maintenance.
2. Please disconnect machine from the power supply; Check inside the electronics box and gently remove any build up of dust or debris by using a soft brush and vacuum. It is also important to keep dust and debris off of your pump motor – this will extend the life of the motor.
Important: Machine service and repair procedures must be performed by authorized service personnel.

Cyncra™ and Hydra™ Machine Specifications

Specifications for the Cyncra and Hydra Semi Automatic Espresso Machines

<table>
<thead>
<tr>
<th>Model</th>
<th>1 Group</th>
<th>1 Group</th>
<th>2 Group</th>
<th>3 Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>110</td>
<td>220</td>
<td>220</td>
<td>220</td>
</tr>
<tr>
<td>Hertz</td>
<td>60</td>
<td>50 / 60</td>
<td>50 / 60</td>
<td>50 / 60</td>
</tr>
<tr>
<td>Amps - max draw</td>
<td>20</td>
<td>16</td>
<td>28 Cyncra</td>
<td>36 Cyncra</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32 Hydra</td>
<td>40 Hydra</td>
</tr>
</tbody>
</table>

Brew and Steam Specifications:

<table>
<thead>
<tr>
<th>Watts per Element, Steam Tank</th>
<th>1000</th>
<th>1000 x 2</th>
<th>2000 x 2</th>
<th>2500 x 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Steam Element Wattage</td>
<td>1000</td>
<td>2000</td>
<td>4000</td>
<td>5000</td>
</tr>
<tr>
<td>Steam Tank Capacity (Liters)</td>
<td>3.2</td>
<td>3.2</td>
<td>7.7</td>
<td>12.3</td>
</tr>
<tr>
<td>Watts per Element, Brew Tank</td>
<td>700</td>
<td>700</td>
<td>700 x 2</td>
<td>700 x 3</td>
</tr>
<tr>
<td>Brew Tank Capacities (Liters)</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9 x 2</td>
<td>1.9 x 3</td>
</tr>
</tbody>
</table>

Machine Dimensions:

<table>
<thead>
<tr>
<th>Height (Steam Wand 21&quot;, Handle 20.5&quot;)</th>
<th>18&quot; / 457</th>
<th>18&quot; / 457</th>
<th>18&quot; / 457</th>
<th>18&quot; / 457</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (Steam Handle to Handle add 3&quot;)</td>
<td>18&quot; / 457</td>
<td>18&quot; / 457</td>
<td>29&quot; / 736</td>
<td>40&quot; / 1016</td>
</tr>
<tr>
<td>Depth</td>
<td>23&quot; / 584</td>
<td>23&quot; / 584</td>
<td>23&quot; / 584</td>
<td>23&quot; / 584</td>
</tr>
</tbody>
</table>

Weights & Dimensions:

| Machine Weight, Empty              | 106 / 48 | 106 / 48 | 154 / 70 | 190 / 86 |
| Machine Weight, Full of Water      | 115 / 52 | 115 / 52 | 173 / 77 | 215 / 98 |
| Shipping Weight (approximate)      | 175 / 80 | 175 / 80 | 240 / 108 Cyncra | 284 / 122 Cyncra |
|                                     |          |          | 260 / 118 Hydra | 324 / 147 Hydra |
| Boxed Dimensions: L" x W" x H"     | 20" x 30"x31" | 20" x 30"x31" | 41" x 32"x31" | 49" x 32"x31" |
| Boxed Dimensions: L x W x H m/m    | 508x762x787 | 508x762x787 | 1042x762x787 | 1245x813x787 |

Plumbing (Compression):

<table>
<thead>
<tr>
<th>3/8&quot; OD</th>
<th>3/8&quot; OD</th>
<th>3/8&quot; OD</th>
</tr>
</thead>
</table>

- Certified by ETL for Sanitation to NSF / ANSI Standard 4
- Certified by ETL for Electrical Safety to ANSI / UL Standard 197
- Certified by ETL for Electrical Safety to CSA Standard C22.2 No. 109
- CE Compliant (By request)
- C-Tick Compliant (By request)

IMPORTANT - If the voltage on the receptacle used is less than 210 Volts, it may be necessary to install an In-Line Buck-Boost transformer to increase this voltage.

- 1 and 2 Group 220 Volt Machines require a 1.0 KVA transformer
- 3 Group 220 Volt Machines require a 1.5 KVA transformer.
Warranty

Limited One-Year Non Wearing Parts Warranty

Synesso, Inc and/or your Distributor warrants to the original purchaser that Synesso espresso machines are free from defects in materials and workmanship under normal use and service for the period commencing upon the date of shipping and continuing for 12 months from the original date of shipment. Synesso will make a good faith effort for prompt correction or other adjustment with respect to any non wearing part that proves to be defective within the limited warranty period. This Limited Warranty is conditional upon proper use of the machine by the purchaser.

This Limited Warranty does not cover defects or damage resulting from: accident, misuse, abuse, shipping damage, neglect, unusual physical, electrical or electromechanical stress, unauthorized customer modifications or improper water filtration.

Proper water filtration and regular filter changes are a requirement to keep your factory warranty valid and your machine functioning properly. It is highly recommended that you contact a professional water filtration specialist in your area and have your water tested to determine the proper filtration system. It is important to note that many municipalities change their water sources throughout the year, so additional water tests may become necessary.

Water Standards to keep your warranty valid:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids (TDS)</td>
<td>30 to 200 ppm (parts per million)</td>
</tr>
<tr>
<td>Total Hardness - in ppm</td>
<td>Less than 85 ppm</td>
</tr>
<tr>
<td>Total Hardness – in grains</td>
<td>3 to 5 grains (divide ppm by 17.1 to get grains)</td>
</tr>
<tr>
<td>pH</td>
<td>6 pH to 8 pH</td>
</tr>
<tr>
<td>Chloride</td>
<td>0 ppm – any Chlorides can be corrosive and harmful</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>Less than 100 ppm</td>
</tr>
<tr>
<td>Chlorine</td>
<td>0 ppm</td>
</tr>
<tr>
<td>Iron</td>
<td>0 ppm</td>
</tr>
</tbody>
</table>

Any part which is determined to be defective in materials or workmanship should be returned to Synesso or to an authorized service location, shipping costs prepaid, as Synesso designates. Synesso may repair or replace the product or part with new or factory refurbished equipment at Synesso’s sole discretion. If the product or part is determined to be defective and in compliance with the Limited Warranty conditions, the replacement part or product will be returned to the purchaser with shipping prepaid **.

Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from area to area. While Synesso attempts to assure that its products comply with such codes, it cannot guarantee compliance and cannot be responsible for how the product is used or installed.

Synesso’s liability is limited to the purchase price of the product and shall not be held liable for damages that extend beyond the product itself. Synesso’s liability of consequential, incidental damages, indirect or direct damages for personal injury, inability to properly use this product, loss of business profits or interruption to business is expressly disclaimed.

** Equipment sold or residing outside the United States, purchaser maybe required to pay for the shipping and associated costs for warranty parts, repairs and services.
DigiZone™ Control Reset & Reboot Guide

If your electronics are out of the parameters you set and you are unable to make any adjustments, follow these steps to reset the electronics.

Section A – Reset DigiZone™ Electronics
1. Turn the red on/off power switch OFF, then back ON
2. Scroll the zones and press set to check the set points, reset if required
3. Press and hold the up arrow, then press and hold the zone button, hold both buttons together for 5 seconds to enter the common parameter adjusting mode.
   - 1st parameter is the high alarm, set to 275° F – holding the set button and using the up and down arrow keys. Press zone to go to the next parameter
   - 2nd parameter is the low alarm, set to 125° F
   - 3rd parameter is the auto fill probe delay, factory setting is 5 seconds
   - 4th - 8th parameters are the temperature offset for Zone 1, 2, 3, 4 & 5 respectively.
     The factory offsets for this machine are located on page 2 under the serial number
4. Press zone button to return to the operational mode

If the electronics do not respond to the above procedure, then a total system reboot is required

Section B – Total System Reboot
1. Turn red on/off power switch OFF and then turn the element breaker OFF
2. This can be difficult and may require assistance, press and hold zone, up arrow, down arrow and set buttons simultaneously, and turn the power switch ON. Continue to hold all buttons during the start up process and wait until the electronics turn on momentary, then off and then on again BEFORE you release the buttons. If 2 ON cycles are not achieved, please try again.
3. Release all 4 buttons
4. This is a total system reboot and all of your parameters and your temperature set points will need to be reentered. The electronics will show the factory temperature set points. Follow steps 1 through 4 in section A to program your set points.
5. Turn the element breaker ON

Section C – Fill in your Temperature Set Points for Reference

<table>
<thead>
<tr>
<th>Temperature</th>
<th>1 Group</th>
<th>Factory</th>
<th>2 Group</th>
<th>3 Group</th>
<th>Factory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td></td>
<td>203°</td>
<td></td>
<td></td>
<td>203°</td>
</tr>
<tr>
<td>Zone 2</td>
<td></td>
<td>250°</td>
<td></td>
<td></td>
<td>203°</td>
</tr>
<tr>
<td>Zone 3</td>
<td>N/A</td>
<td>N/A</td>
<td>* OFF</td>
<td></td>
<td>203°</td>
</tr>
<tr>
<td>Zone 4</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td>250°</td>
</tr>
<tr>
<td>Zone 5</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td>250°</td>
</tr>
</tbody>
</table>

- On a 2 group machine, lower the temperature setting for zone 3 until it reads OFF

Section C - Scroll Mode
- Turn ON by pressing up & down arrows together until scrolling starts
- Turn OFF scroll mode by pressing either the set or zone button