



**Manual for Installation & Operation
of the Limitless Swimming Pool Unit**

EPU-00

Contents

Instruction

Main Features

Spot-orientation Swimming Function	01
Light Guidance Function	01

Cautions

Waterproof Requirement	01
Safety	01
Weather Conditions	02

The Installation Instructions of the Limitless Swimming Pool Unit

Construction Drawings	03
Electrical Installation	06

The Usage of the Limitless Swimming Pool Unit

Instructions of the Control Panel	06
Instructions of the Laminar Flow Thruster	08

Product Configuration of the Limitless Swimming Pool Unit

EPU-00 Limitless Swimming Pool Unit

After-sales Service

- (1) Our company offer lifetime service to our products. However, customers need to pay for the basic service fee (including materials expenses, labor charges and traveling allowance), when products need to be maintained or repaired exceed the warranty period.
- (2) Our company will NOT be responsible for those loss programs and components, unless there are defects in the manufacture;
- (3) Our company reserve the right to decide the maintenance method and the range of application;
- (4) All components are changed in the warranty belong to our company's property.

Service Commitment

Solutions will be provided within 2 working days after valid complaints are accepted. Visit customers at regular intervals to make sure and improve the customer satisfaction.

Warranty Content

Number	Warranty Item	Warranty Period	Warranty Content	Warranty Method	Remarks
1	Housing Construction	2 years	Cracking on Product's Shell; Failure on structural support.	Free	—
2	Jet	1 year	Damage on Failure on Jets.	Free	—
3	Electric System	1 year	Failure on System or Components.	Free	—
4	Other Components	1 year	Damage, Failure or Invalidation.	Free	Cartridge is Not Include

The Cleaning and Maintenance of the Limitless Swimming Pool Unit

The Cleaning and Maintenance of the Limitless Swimming Pool Unit	09
The Maintenance of the Control Panel	09

The Maintenance of the Laminar Flow Thruster.....	09
---	----

Warranty and Service of the Product

Warranty.....	10
The Following Repair Situations Are NOT Free	10
After-sales Service	11
Service Commitment.....	11
Warranty Content.....	11

1 Instruction

Owners of those small and medium sized swimming pools usually have trouble in enjoying the swimming process as they need to make turns constantly when the Pool Size is limited. As an innovative product for improving swimming experience, LASWIM Limitless Swimming Pool Unit brings you a villa's pool for real swimming limitlessly.

Our Limitless Swimming Pool Unit comes with an adjustable strong laminar flow thruster and a control system, which enables directional laminar flows above the pool water surface when the swimmer swims against the directional flows, he will have the same feeling as swimming in a flowing river without the limitation caused by the pool's dimension and enjoy the benefit of fitness as well as the fun of swimming freely.

A whole set of circulation, filtration and disinfecting system is employed in our Limitless Swimming Pool Unit, which saves you from complicated manual operation and costly professional management. It is also excellent in saving the expense for the pool's operation and maintenance.

Our Limitless Swimming Pool Unit, with different specifications and models, can be applied into projects in different shapes and dimensions, such as newly-built villa pools, reconstruction of community pools or old pools, natatorium and swimming clubs. Apart from the standard configuration, customers are able to choose other configuration according to their need.

2 Main Features

Spot-orientation Swimming Function

The Limitless Swimming Pool Unit uses the patented laminar flow thruster to impulse water in order to produce a circulation flow. Three features are as follow:

- (1) Powerful water flow;
- (2) Smooth water surface;
- (3) Adjustable flow rate according to different needs, feel like swimming in a real river!

Light Guidance Function

Controlled by the control panel, those highly waterproof LED lamps inside the Limitless Swimming Pool Unit can be transformed into different colors and effects, offering guidance and directions to swimmers at night.

3 Cautions

(1) Waterproof Requirements

Sufficient waterproof process should be provided around the Limitless Swimming Pool Unit to protect device from coming into water, in case that there is a risk of electric leakage or electric device damage.

(2) Safety

For safety considerations, please add some protective equipments around the

Trouble	Cause	Solution
Pumps Self-stopping while the unit is being used	<ol style="list-style-type: none"> ① Exceeds the longest default operating time of the system; ② Over-temperature protection of pump motors. 	<ol style="list-style-type: none"> ① Press the key for pumps again and restart the pumps; ② Stop the pumps for more than 1 hour and restart them after cooling.
The unit doesn't start in any modes	<ol style="list-style-type: none"> ① Not power ② Fault of electronic control occurs 	<ol style="list-style-type: none"> ① Check whether the power switch or the leakage protector is on ② Check the attached Manual for Electronic Control Functions for reference and contact the dealer for repair after finding out the meaning of the fault code.

8 Warranty and Service of the Product

Warranty

- (1) Our responsibility for the product is limited to the product's quality. Any other fees are not included in the warranty.
- (2) Under warranty, for all faults caused by the product's quality, customers can contact the dealer for repair or components' exchange, with the Product Warranty Manual.
- (3) Customers should keep the Product Warranty Manual as receipt. If exceed the warranty period, customers could contact our company and order those components.
- (4) When product needs to be provided warranty, it is customer's responsibility to offer information like Product ID and Product Name to the after-sales staff, so that our staff can solve your problems in a more effective and accurate way.

The Following Repair Situations Are NOT Free:

- (1) No Product Warranty Manual;
- (2) Customers have not followed the manual to operate and maintain;
- (3) Change products without our company's authorization;
- (4) Damage caused by corrosive or poor cleaning agents on product surface;
- (5) Damage caused by deficient maintenance or delivery;
- (6) Damage caused by force majeure such as natural disasters and fire disasters;
- (7) Damage caused by passing time (for example, the product's outer parts fade);
- (8) Damage caused by human factors.

7 The Cleaning and Maintenance of the Limitless Swimming Pool Unit

It's very important to offer cleaning and maintenance to the Limitless Swimming Pool Unit. Taking correct and suitable measures of cleaning and maintenance at regular intervals can prolong the unit's lifespan, bringing you a better swimming experience. Please see the following steps for reference.

The Cleaning and Maintenance of the Limitless Swimming Pool Unit

- (1) The inner finish of the unit is made of acrylic. Due to the direct and long-term exposure to sunlight, the cover of the unit should be cleaned once or twice a week to make sure it is clean.
- (2) Dirt can be cleaned with a wet towel. For daily cleaning, neutral detergent and soft towel can be used. Do NOT use detergents which contain ketone, chlorine, acid or alkaline.
- (3) Please do NOT use tools with tough surface to clean the cover. Do NOT sweep the inner surface with hard or sharp objects. If there are scratches on the unit's surface, please polish it with 2000# water sand paper; wipe and polish it with toothpaste and soft towels.
- (4) Do NOT let the nail polish, nail polish remover, dry cleaning fluid, acetone, paint remover or other chemical solvents exposed to acrylic surface.
- (5) Do NOT let the cigarette or heat source stay near the unit's surface.

The Maintenance of the Control Panel

- (1) Do NOT touch the display screen with hands or tough items to avoid bad influence on the usage of the screen. Do NOT press or squeeze keys on the control panel.
- (2) Please avoid exposure to direct sunlight.
- (3) Please keep the control panel dry when the Limitless Swimming Pool Unit is out of use.

The Maintenance of the Laminar Flow Thruster

- (1) In normal conditions, the consumption of lubricating oil should be checked after 30-45 days. Fill lubricating oil when it is not enough. Please check the pictures in the right as picture shown.
 - a. Find out the laminar flow thruster;
 - b. Fill lubricating oil as picture shown
- (2) When the machine or the laminar flow thruster fails to work correctly, please contact the dealer for help.



Limitless Swimming Pool Unit. Do NOT step on the cover of the Limitless Swimming Pool Unit (except those with beds).

(3) Weather Conditions

Please do NOT operate or use the Limitless Swimming Pool under bad weather, such as thunderstorm, hurricane, etc.

4 The Installation Instructions of the Limitless Swimming Pool Unit

Unit Installation

The Limitless Swimming Pool Unit must be installed under the guidance of professionals. Manufacturer will NOT be responsible for casualties or product damage if users do not install or operate according to the requirements!

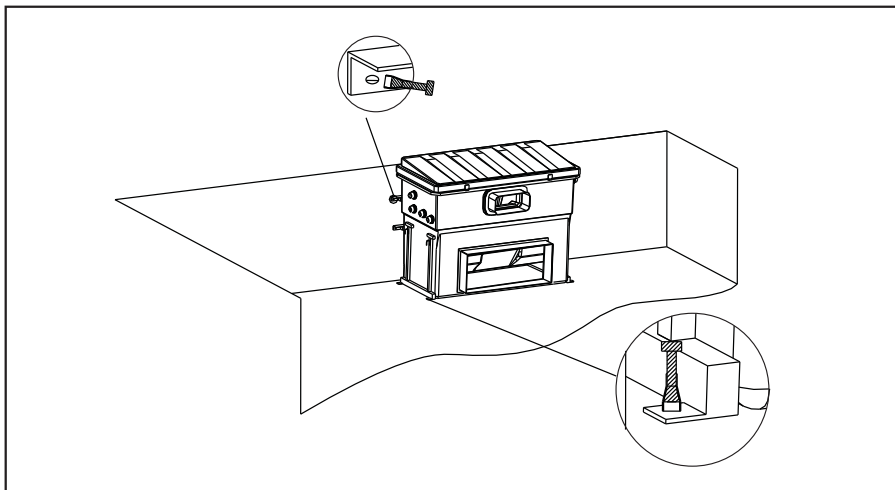
- (1) An installation base should be casted at a specified position outside the pool and in a specified dimension according to the installation instruction. After the installation base is solidified, the Limitless Swimming Pool Unit can be installed.
- (2) Clean and check the quality certificate of the Limitless Swimming Pool Unit before installation. Find out the flat unit base and be ready for the installation.
- (3) Rated voltage : AC220V or AC380V; Frequency: 50Hz
- (4) Installation personnel should carefully read this manual before the installation. This electrical equipment should be connected to a power supply with leakage protection device whose rated current is more than 32A. The leakage protection device must meet the requirements of EMC as well as other local safety standards.
- (5) Before installation, pre-bury electric wires which meet the national standards: over 3X4mm²(and over 5X4mm² wires for 380VAC power supply); the length of the wire should be less than 20m. Please check the attached table (Specification & Length of the Power Cord) for reference.
- (6) Install the Limitless Swimming Pool Unit based on the instruction and illustration; adjust the level through a gradienter. The levelness should not be more than 2mm. The unevenness can be flattened and fixed by gaskets. Fix the position by filling the unit base with concrete and mortar.
- (7) Install drain pipes, sewers and wiring conduits according to the installation instruction. In additions, all the circuit connections should be installed and tested by qualified electricians and meet the requirements of the instruction.
- (8) During the installation, the joint between the Limitless Swimming Pool Unit and pool walls should be filled with cement and sealed by sealant.
- (9) After the installation, decorative finish can be used, in accordance with the whole structure of the pool.
- (10) The whole unit must stay away from the chemicals.
 - a. Our Limitless Swimming Pool Unit can be installed inside the pool and the installation depth is 1200mm;
 - b. Please confirm the plane dimension, foundation setting out and earthwork, as well as punning the bottom of the pool and strengthening the bed course. While doing the project of bed course, please pre-bury those related pipes, including pipes for drainage in the bottom of the pool and the pipes for the circulation and filtration of the unit.

EPU-00 Limitless Swimming Pool Unit

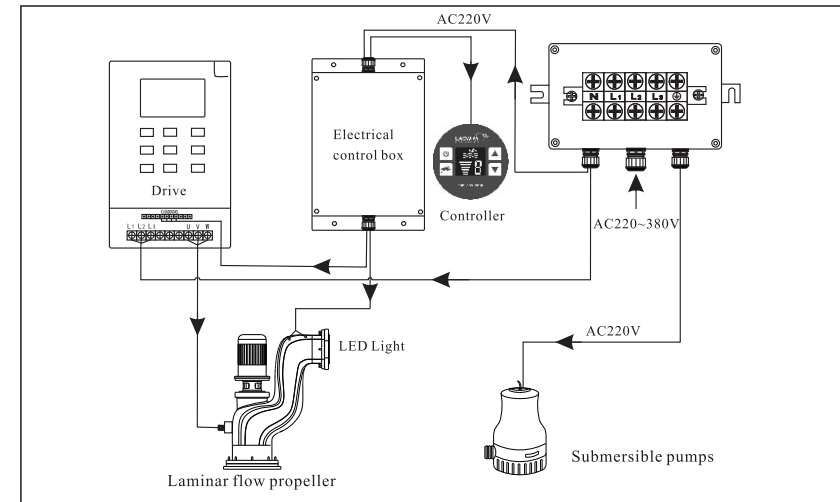
- c. Place the reinforced bars for both the bottom and the walls of the pool; go on with the pre-buried pipes for relevant accessories.
- d. Pouring concrete for both the bottom and the walls of the pool; taking care of the waterproof construction and the leak proof test.
- e. Place the Limitless Swimming Pool Unit in proper position according to the installation diagram; positioning it and getting it fixed, as shown in figure 1.
- f. Properly connect the relevant outside pipes to the Limitless Swimming Pool Unit and lay down the pipes after they are accepted through the pressure test, as shown in figure 2.
- g. Depending on the installation size of the Limitless Swimming Pool unit's requirements, separate the Limitless Swimming Pool unit by penetrating walls around it, backfill the clearance around the unit (available plain concrete backfill), decorated surface of the pool, seeing the specific sectional installation diagram as shown in Figure(See Figure 3).
- h. Do a vertical cut for the water outlet and inlet of the Limitless Swimming Pool Unit, in order to make it in the same level with the pool wall, as shown in figure 4.
- i. Fix the inlet and outlet of the Limitless Swimming Pool Unit according to the reserved dimensions.
- j. You'd better debug and test to run the unit. For details, please check the Manual for Electronic Controller of the Limitless Swimming Pool Unit for reference.

Construction Drawings

Figure 1: Fix the equipment on the pool with expansion screw. For installation height, please see the best water level label on the equipment for reference.



(4) Electrical installation wiring diagram.



Instructions of the Laminar Flow Thruster

The laminar flow thruster is a main part of the Limitless Swimming Pool Unit for its swimming function. Based on the actual physical strength, the equipment provides flows in different speeds, from Level 1 to Level 9. We suggest the swimmer chooses the suitable speed and swims at the position which is about 120cm away from the water outlet. The swimming effect will be the best when the height of water is around the best water level.







6 Product Configuration of the Limitless Swimming Pool Unit

Name	Configuration (EPU-00)	Name	Configuration (EPU-00)
Unit Dimension	910X1000X1385mm	Disinfection System	/
Package Dimension	1060X1150X1650mm	Electronic Control System	Electronic Control System (380V)
Net/Gross Weight	128Kg/200K	Motor	2.8KW (with frequency conversion), 1
Voltage/Power	AC220V/AC380V/3KW	Valve	/
Circulation Pump	/	Chemical Feeder	/
Filter	/		


EPU-00 Limitless Swimming Pool Unit

(2) Detailed Operation of Function Keys

- Press the  key to turn on the Power of Control System. Re-press it to turn it off;
- Press the  to start the laminar flow thruster, then Icon for Swimming function, Swimming Intensity and the swimming Speed Grade will be shown on the LCD; the laminar flow thruster will regard the last memorized mode and level as default and will start from the lowest force to the last memorized force within 5 seconds.
- In terms of the Swimming Intensity, users can choose by pressing  or , at the same time, symbol for swimming force and the swimming Speed Grade will be shown on the LCD; Swimming Intensity varies from 1 to 9, totally 9 levels for adjustment.
- Comparison Table between Swimming Intensity and Flow Rate.

Swimming Intensity (F)	1	2	3	4	5	6	7	8	9
Flow Velocity (m / s)	0.9	1.2	1.5	1.7	1.9	2.2	2.5	2.8	3.1

NOTE: The specification is for your reference only.

- Press and Hold the  key for 2 seconds to close the swimming function.

NOTE: When nobody presses any keys, the laminar flow thruster will stop automatically after running continuously for 45 minutes.

(3) Electric Parameters and Performance Indicator

Rate Voltage	AC220V~380V/50Hz	Max Working Current	6.8A
Electrical Strength	1250V/1 minute, NO breakdown		
Grounding Resistance	<0.1 Ω	Insulation Resistance	≥ 200M Ω
Waterproof Grade	IPX4	Electric Shock Protection Grade	I Grade

Figure 2: Connect the pipelines as shown.

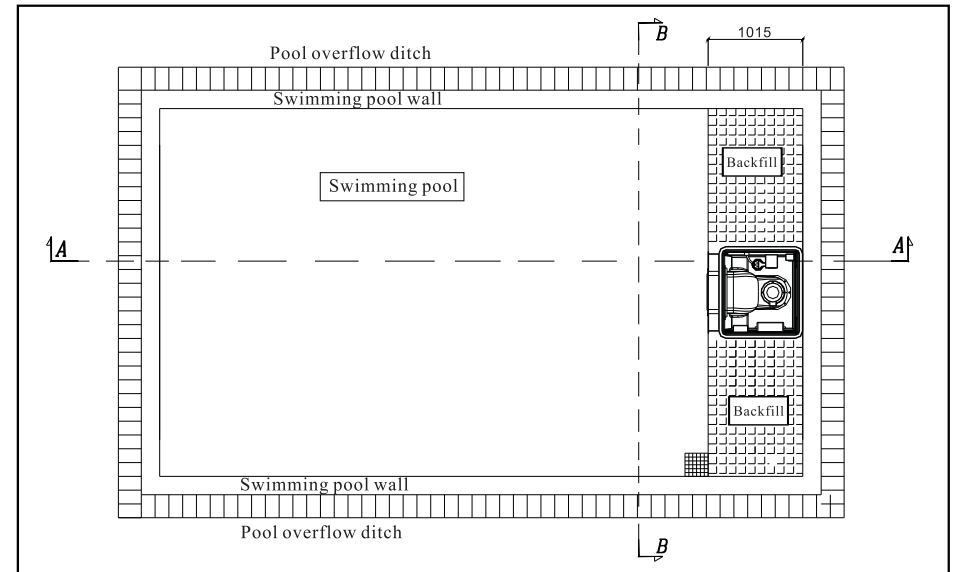
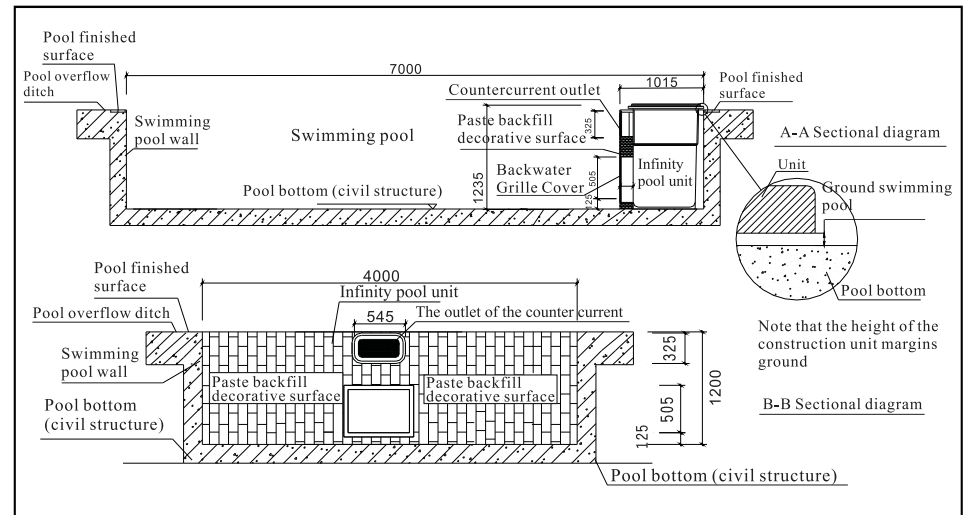
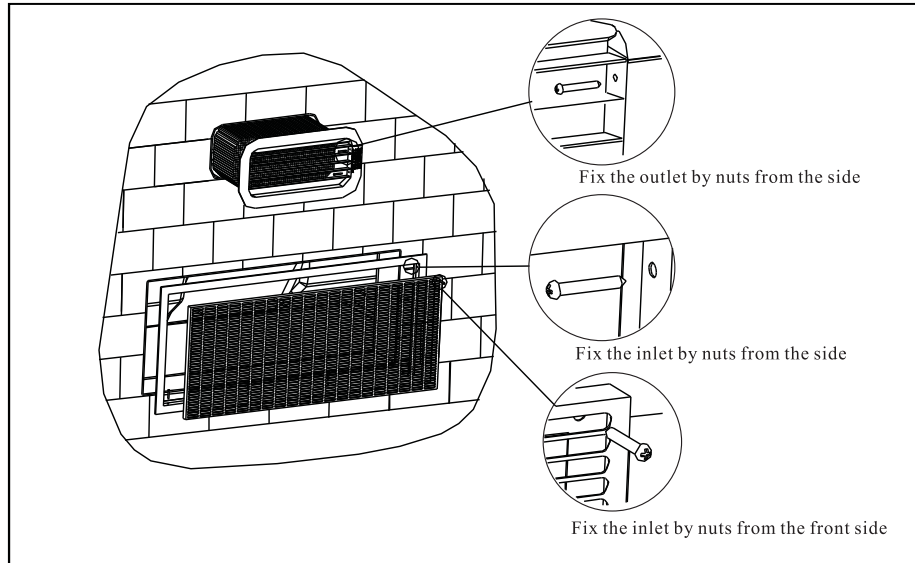


Figure 3: After the pipelines' connection, seal the front of the Limitless Swimming Pool Unit and paste it with decorative finish. Have the inner space backfilled.

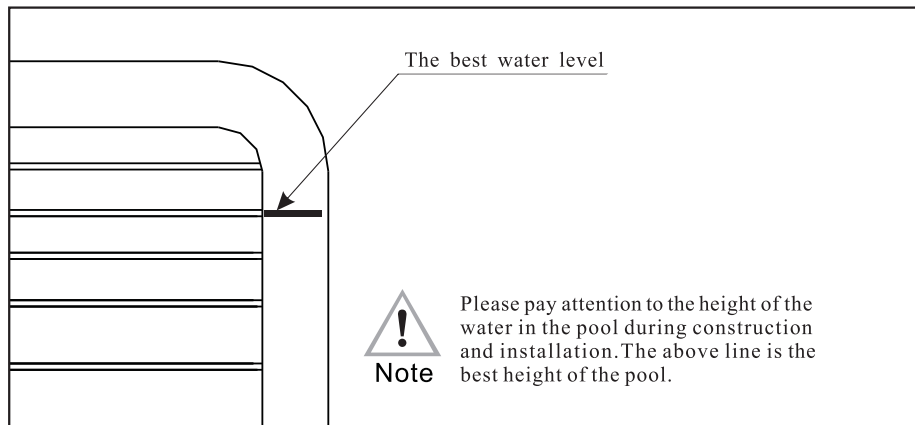


EPU-00 Limitless Swimming Pool Unit

Figure 4: Cut out the extra part of the water outlet and inlet, install the water outlet of the laminar flow thruster and the inlet of the Limitless Swimming Pool Unit.



In order to ensure the best swimming effect, the water height of the pool should be at the best water level. (Please take this height into consideration during the construction.)



Electrical Installation

- (1) The power supply of the Limitless Swimming Pool Unit must be a special power supply with a leakage circuit breaker. The leakage circuit breaker must strictly follow the requirements of the International Electrotechnical Commission (IEC). Do NOT use the same power supply for other electric appliance. Wiring connection must be done by a licensed or certificated electrician.
- (2) The Limitless Swimming Pool Unit must be safely grounded. The earth wire must be carefully checked by professional electricians before usage. Sensitive leakage circuit breakers must be installed for the main power supply. Leakage circuit breaker in 30mA rated current is recommended.

5 The Usage of the Limitless Swimming Pool Unit

Before the first start of the Limitless Swimming Pool, test under the guidance of the professional personnel is required. Please also carefully read the following important notes.

Preparation before the first injection

- a. Please tighten the jointed nuts of each pump and heating equipments (thermostats or heat pumps) as they may become loose during the transport.
- b. Make sure that the Pull Values in both ends of the pumps are in the "Pull" position.
- c. Make sure that the Limitless Swimming Pool Unit has been power on. Keep an eye on the first water filling to avoid possible leakage caused by the looseness of the jointed nuts of pumps and heating equipments.



NOTICE

The equipment damage is NOT included in the warranty, if the leakage is caused by inappropriate operation.

Instructions of the Control Panel

(1) Instructions of the Keys

