E n g l i s h $\overline{1\text{-}7}$

Read carefully before using your DOLPHIN TWO BY TWO robot pool cleaner

1)   S a f e t y

1.1) Power supply positioning
The Caddy and power supply **[1, page 7]** should be positioned so that the DOLPHIN can reach all the corners of the swimming pool and must be at a minimum distance of 3 meters [10 Ft.] from the edge of the pool.
For best operation of the DOLPHIN Swivel cable **[2, page 7]** leave excess cable rolled outside of the pool. **[Fig. A]**.
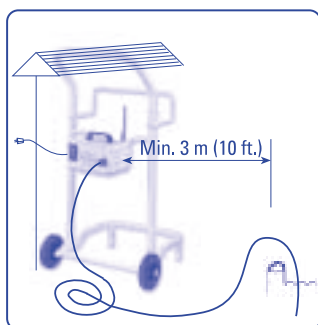
1.2) Electrical requirements
Factory-wired for either 100V, 115V or 230V mains supply, the voltage rating should be checked before connection.
The power supply must be supplied through a residual current device (RCD) with a rated residual operating current 30 mA. This power supply must be connected to a grounding type receptacle.
Use only the original DOLPHIN power supply.

Warning! DO NOT ENTER THE SWIMMING POOL WHILE THE DOLPHIN IS IN OPERATION.

2)   D O L P H I N   s e t - u p

2.1) Caddy assembly
Refer to assembly instructions and diagram enclosed in Caddy carton.
Caution: Improper use may cause injury or damage the Caddy.

2.2) Handle
The DOLPHIN features an adjustable handle **[3, page 7]** fitted into slots on each side of the DOLPHIN body. This handle must be locked in a diagonal position across the top of the DOLPHIN body in order to ensure optimum cleaning results. Press downwards on the latch **[4, page 7]** to move the handle arm to a diagonal position **[Fig. B]**.
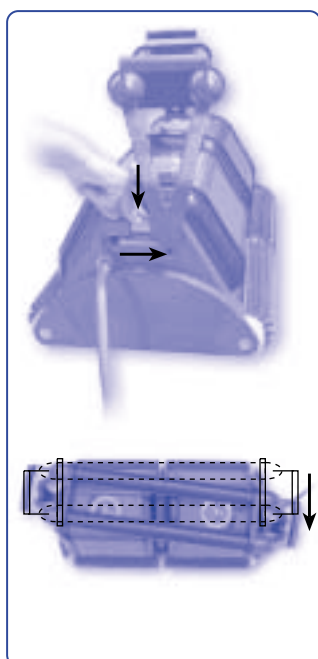
2.3) Remote control unit [R.C.U.]
Place two enclosed 1.5 V AAA batteries into the R.C.U. and position them as shown in the drawing inside the battery compartment.
The R.C.U. is splash-proof only. This R.C.U. is equipped with a digital screen, soft touch buttons and a joystick for manual operation.

3)   O p e r a t i o n

3.1) Power Supply
At the front section there are lights that indicate when the DOLPHIN is operating or when the filter bag needs to be cleaned or washed.

ON
Will lit up when switching ON power supply.
Will blink at initial performance of self test .
Will turn off automatically at the end of operation

Filter bag
Will remain unlit during normal operation.
Will lit up and blink when the filter bag fills up and needs cleaning.
Will remain lit when the filter bag is clogged and needs washing.

Reset - To reset filter bag indicator if indication light stays lit after the filter bag is already clean.

Note: If the power supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer.
Caution: When working, the power supply should be placed in the shade. It must also be well protected from water reach (splashes, sprinklers etc).

3.2) DOLPHIN Installation:
• Connect the cable to the power supply.
• Release minimal required floating cable length, ensuring proper pool coverage.
• Place the DOLPHIN in the pool **[Fig. C]**.
• Rock from side to side, releasing trapped air, until the DOLPHIN slowly sinks to the bottom of the pool.
• Connect the power supply to a protected grounded outlet and switch on.
• If the DOLPHIN exits the water in a beach-entry pool the DOLPHIN will reverse in an attempt to re-enter the water.
• Optimum water temperature for the DOLPHIN is 12°C – 32°C [54°F – 90°F].
• Maximum operating depth of the DOLPHIN is 5 meters.
Caution: **Do not operate the DOLPHIN out of water. This may result in extensive damage to the pump motor seals, thus invalidating the warranty.**
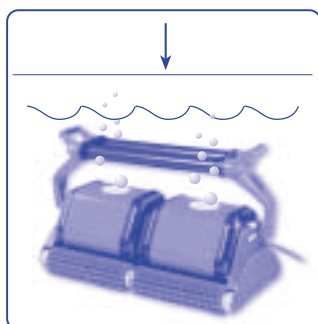
Min. 3 m (10 ft.)

Fig **A**

Fig **B**

Fig **C**

4) Cleaning modes

The DOLPHIN 2x2 model offers two modes of operation - AUTOMATIC or REMOTE CONTROL.
The DOLPHIN will work in AUTOMATIC mode unless changed to REMOTE CONTROL mode, through the REMOTE CONTROL UNIT [R.C.U.].

4.1) Remote control mode
In REMOTE CONTROL mode, you can maneuver the DOLPHIN to give special attention to certain areas of the pool. Move the joystick in the direction you desire the DOLPHIN to clean.
Note: If joystick is not touched for 2 minutes the R.C.U. will switch off and the DOLPHIN will enter AUTOMATIC CLEANING mode.
The RCU is also used to modify parameters and/or cleaning programs. These parameters have to be transmitted from the RCU to the DOLPHIN while it is working in the pool.
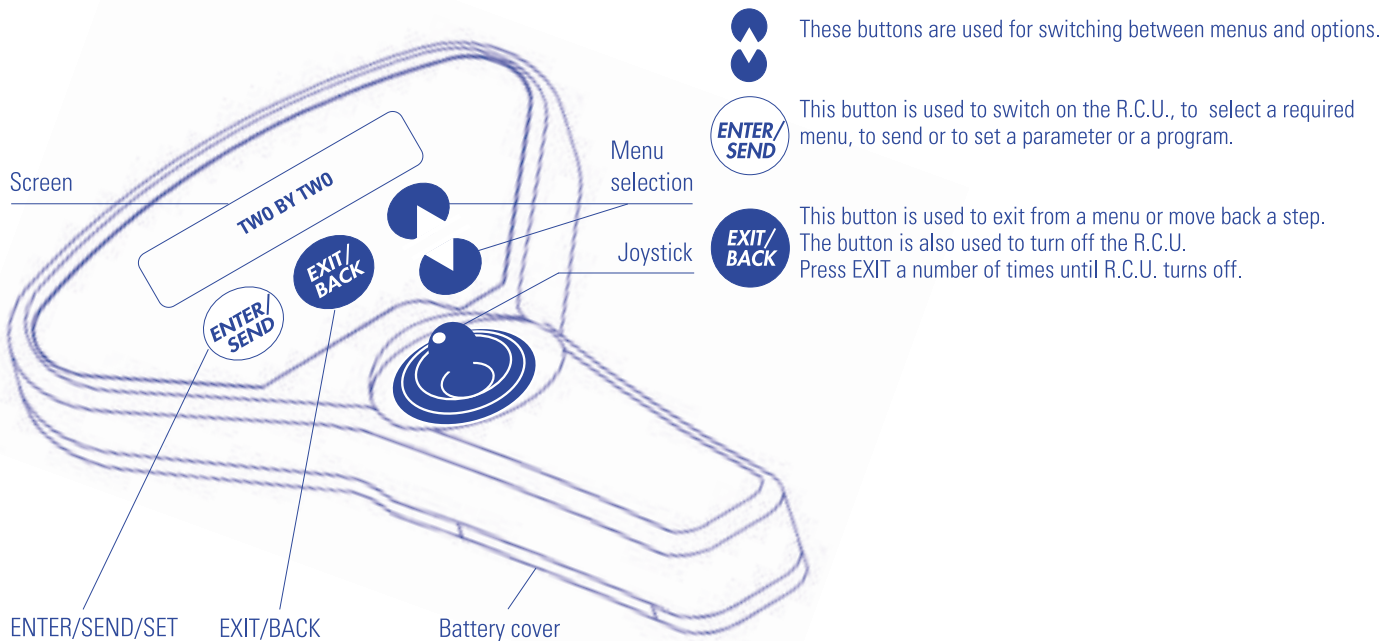
4.2) Automatic cleaning mode
In AUTOMATIC CLEANING mode the DOLPHIN calculates its own cleaning path.
The flow chart in 5.3 represents the factory pre-set parameters and cleaning programs.
These may be adjusted to suit your preferences by means of the RCU.
Once set, the parameters will remain in the DOLPHIN memory until modified.

5) Remote control unit [R.C.U.]

These buttons are used for switching between menus and options.

ENTER/ SEND This button is used to switch on the R.C.U., to select a required menu, to send or to set a parameter or a program.

EXIT/ BACK This button is used to exit from a menu or move back a step. The button is also used to turn off the R.C.U. Press EXIT a number of times until R.C.U. turns off.

Screen
Menu selection
Joystick
TWO BY TWO
EXIT/ BACK
ENTER/ SEND
ENTER/SEND/SET   EXIT/BACK   Battery cover

5.1) Description and use of menus and cleaning programs
• **Regular** - Floor and walls cleaning program.
• **Ultra Clean** - Slower movement for special thorough cleaning. For best results, remember to position the handle as shown in **Fig B**.
Notes: If you chose the **Ultra Clean** mode, the DOLPHIN will automatically revert to the default mode of **Regular** cleaning after end of cleaning cycle.
Ultra clean mode can be selected from Regular mode only.
• **Climbing** - This option controls the frequency of wall climbing eg: at which frequency the DOLPHIN should climb on the walls. **Factory default setting mode is non-climbing**.
• **Cycle time** - Choose the most suitable cycle time.
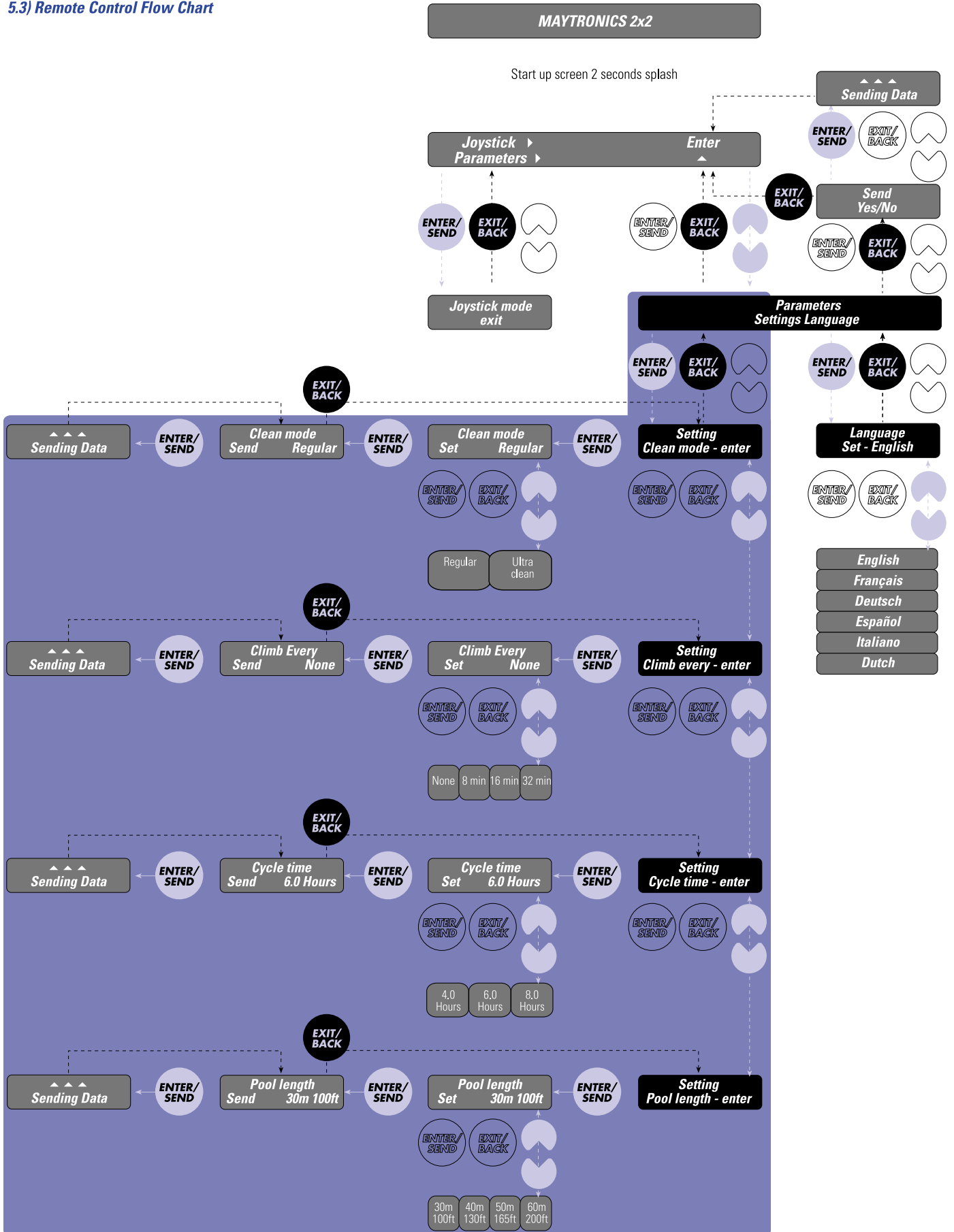• **Pool length** - Program the pool length.

5.2) Battery replacement
If the message "Low Battery" appears on the RCU screen:
• Open the battery cover.
• Remove all used batteries from the R.C.U.
• Place two 1.5 V AAA batteries into the R.C.U. as shown in the drawing inside the battery housing.
• Close the battery cover.

If you are not using your REMOTE CONTROL UNIT for more than 6 months - remove batteries.

5.3) Remote Control Flow Chart

MAYTRONICS 2x2

Start up screen 2 seconds splash

Sending Data

Joystick ▶
Parameters ▶   **Enter**

Joystick mode exit

Send Yes/No

Parameters Settings Language

Language Set - English

English
Français
Deutsch
Español
Italiano
Dutch

Sending Data — **Clean mode Send   Regular** — **Clean mode Set   Regular** — **Setting Clean mode - enter**

Regular   Ultra clean

Sending Data — **Climb Every Send   None** — **Climb Every Set   None** — **Setting Climb every - enter**

None   8 min   16 min   32 min

Sending Data — **Cycle time Send   6.0 Hours** — **Cycle time Set   6.0 Hours** — **Setting Cycle time - enter**

4.0 Hours   6.0 Hours   8.0 Hours

Sending Data — **Pool length Send   30m 100ft** — **Pool length Set   30m 100ft** — **Setting Pool length - enter**

30m 100ft   40m 130ft   50m 165ft   60m 200ft

Note: If R.C.U. is not operated the DOLPHIN will enter AUTOMATIC CLEANING mode according to the last set of parameters used.

6) Automatic shut down

The DOLPHIN will automatically shut down after the cleaning cycle ends. Should another cycle be required, switch off the power supply for at least 30 seconds before restarting.
The DOLPHIN has an advanced computerized self protecting diagnostic mechanism. It will automatically shut off if it encounters a problem. The performance history of the DOLPHIN is stored in its memory. It can be accessed by an approved DOLPHIN service center only.
Caution: Surges and interruptions to electric power may cause the DOLPHIN to restart.

SWITCH OFF THE POWER SUPPLY BEFORE REMOVING THE DOLPHIN FROM THE POOL.

6.1) Removal of DOLPHIN from pool
After the cycle time is completed SWITCH OFF the power supply.
- Remove the DOLPHIN from the water by gently pulling in the cable.
- When the DOLPHIN reaches the surface, lift it out by the handle, NOT by the cable **[Fig. D]**.
- After carefully reeling in and coiling the cable, place it on the cable support unit of the Caddy.
- When out of the water, store the DOLPHIN on its Caddy in a dry, shaded place at a temperature of between 5°C – 45°C [41°F – 113°F] **[Fig. E]**.

6.2) Maintenance
- Place the DOLPHIN up side down. Release the locking clips **[5, page 7]** on the bottom lids **[6, page 7] [Fig. F]** and remove the bottom lids assemblies **[Fig. G]**.
- Remove both filter bags **[7, page 7]** from the bottom lids, and turn the filter bags inside out. Using a garden hose wash both bags thoroughly **[Fig. H]**. The bags may be laundered, using a regular synthetics wash-cycle.
- Clean bottom lids, inlet flaps, springs and under the locking clips.
- Refit the filter bags with the fluffy surface inwards. The tag should be on the outside and positioned centrally on the long side of the bottom lid **[Fig. I]**.
- Install the filter bag clips **[8, page 7] [Fig. I]**.
- Install the bottom lid assemblies in the body and lock them in place.
Note: The bottom lid assemblies fit loosely into the DOLPHIN body. If you encounter any difficulties, the filter bags are probably incorrectly fitted.
- **Important:** Regularly disconnect cable from the power supply. Extend, uncoil and straighten the cable to remove entanglements.

7) Periodical removal of debris from the moving parts (timing belts, wheels, impeller)

Warning! DISCONNECT MAINS BEFORE REMOVING IMPELLER TUBE [9 page-7]

- The impeller can be cleaned by twisting and removing the impeller tube **[Fig. J]**.
- Remove debris or hair that has clogged the impeller **[10 page-7]**.
The impeller can be unscrewed by means of a Philips screwdriver.
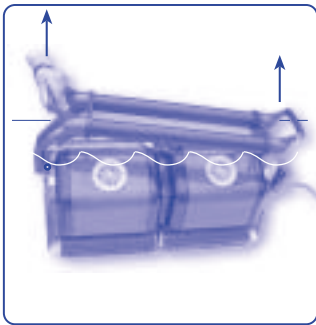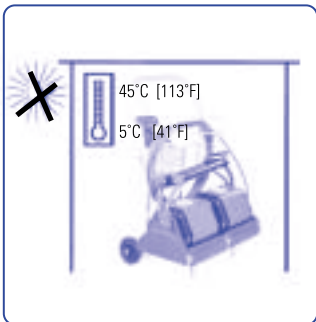- Remove the debris that has accumulated between timing belts **[11 page-7]** and wheels **[12 page-7]**.
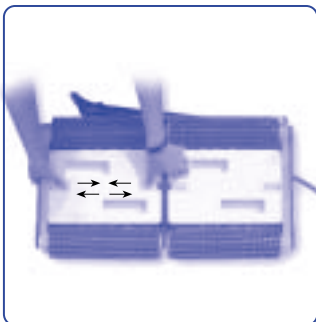
Fig D

45°C [113°F]
5°C [41°F]

Fig E

Fig F

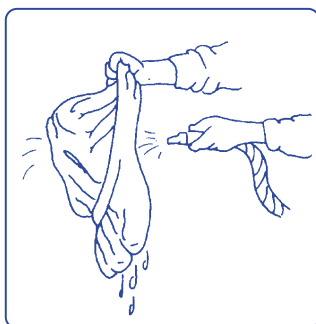**Fig G**

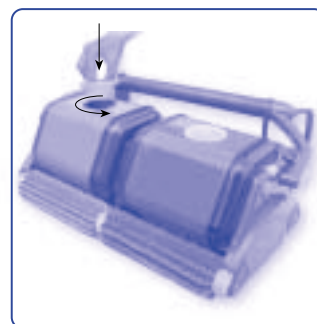**Fig H**

Clip
Tag

Fig I

Fig J

8)   H e l p f u l   t i p s

• Clean the filter bags whenever you remove the DOLPHIN from the pool [if a bag is left dirty it may become unusable].
• Check PH level of pool water [optimally 7.0 - 7.2].
• An optional filter bag is available for collection of rough debris.
• Always switch the power supply "off", wait 30 seconds and switch "on" again to start a new cleaning cycle.
• Replace worn brushes **[13, page 7]** to ensure maximum cleaning performance.
• Wonder Brushes or combined brushes are available for pools with very smooth surfaces - contact your dealer.
• Wonder Brushes or combined brushes are to be cleaned and kept wet throughout their life cycle.
• Wonder brushes or combined brushes should be kept wet even when stored for a long period of time.

9)   G e n e r a l   s p e c i f i c a t i o n s

Calculated Ground Speed	900 M/Hr	50 ft/min
Calculated Scanning Rate	700 M^2/Hr	126 ft^2/min
Suction Rate [self controlled]	36,000 L/Hr	158 gal/min (USA)
Weight [w/o cable]	19 kg	41.8 lb

Power Supply

Input Voltage	100 VAC / 115 VAC / 230 VAC / 250 VAC
Output Voltage	30 VDC - nominal
Rated output	240 Watts
Maximum ambient air operating temperature is 45°C [113°F]	

Equipment installation shall be approved in accordance with the country's national rules.

These specifications may vary for different swimming pools and for the various electrical configurations.

Although the DOLPHIN has been tested in a wide range of swimming pools, MAYTRONICS cannot accept responsibility if the DOLPHIN is not entirely suitable for any particular swimming pool.

Note: The sealed motor unit and the DOLPHIN power supply contain no user-serviceable parts. Opening these units will automatically invalidate your warranty.

The manufacturer reserves the right to change these specifications without prior notice.
U.S. Patent No. 4168557. S.A. Patent No. 76/7474. AUST Patent No. 509698.

CE/ETL Approved.

3 - Handle

9 - Impeller Tube

10 - Impeller

1 - Power supply

Cable

2 - Swivel

4 - Handle latch

11 - Timing belt

12 - Wheel

13 - Brush

Filter screen

8 - Black Filter Bag Clips

7 - Filter Bag

6 - Bottom lid assembly & support.

5 - Locking Clips