

# CORRENTE & CORRENTE+ INSTRUCTION MANUAL



PRS.LTD

# Congratulations on your purchase of a CORRENTE controller

Please read this entire CORRENTE instruction manual carefully before using CORRENTE controller

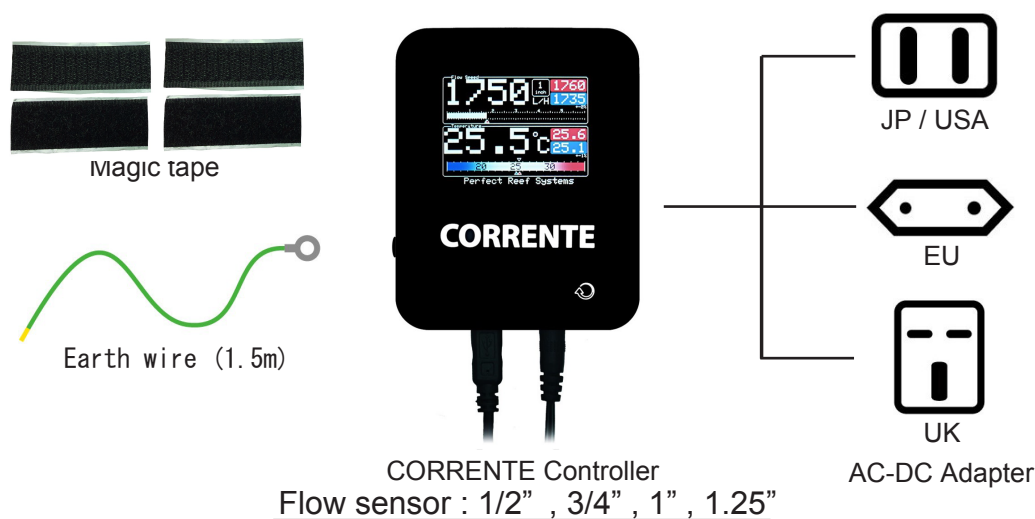
<http://www.ZEOprs.jp> ( [CORRENTE Instruction](#) )

## Package Content

Firstly confirm which controller you have purchased, either the CORRENTE or CORRENTE+ and check that the AC-DC adapter is included and correct for the country that it will be used in

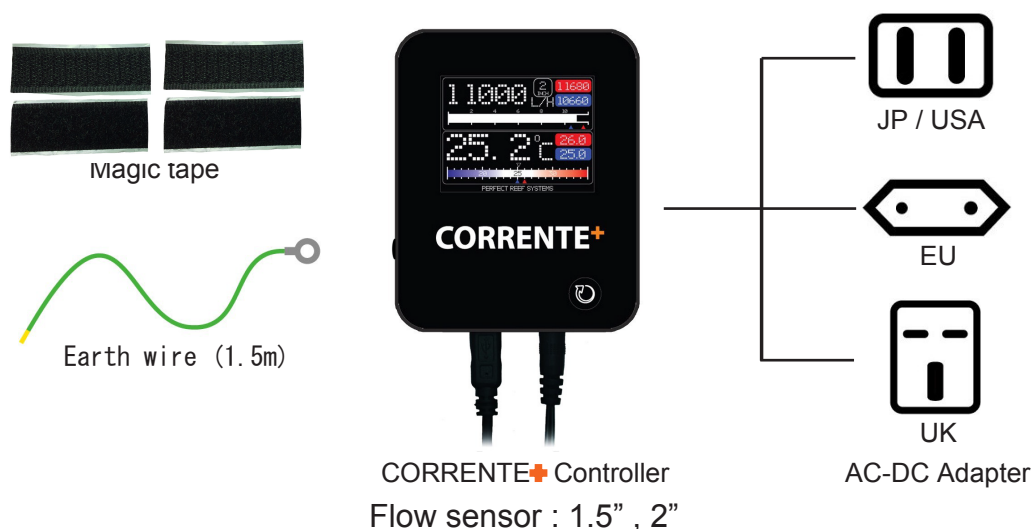
### CORRENTE

Content : CORRENTE controller / AC-DC Adapter / Magic Tape (2 sets) / Earth wire



### CORRENTE+

Content : CORRENTE+ controller / AC-DC Adapter / Magic Tape (2 sets) / Earth wire



## Precautions

Take special care to follow the safety instructions listed below . Please keep these instructions for future reference

### Before Using

- \* Remove any plastic and sponges and please check there is no damage to the controller and AC-DC adapter
- \* Please ensure that the CORRENTE controller does not come into contact with any water as the flow sensor socket and DC socket are easily damaged by water

### Safety

- \* If there is smoke or bad smell coming from CORRENTE controller or AC-DC adapter, remove the plug from the socket immediately
- \* The power supply cord and sensor cord should be placed where they are not in danger of being stepped on or crushed
- \* Never take hold of the plug or cord with wet hands. always grasp the plug body when connecting or disconnecting
- \* This CORRENTE controller unit is exclusively for use with aquarium systems. Please do not use for any other systems
- \* For safety purposes, do not modify or polarize the controller
- \* Please ensure that you keep the AC-DC adapter clean
- \* Only use the plug that is supplied with the CORRENTE controller

### Warning

- \* **PRS WILL NOT BE LIABLE for damage to aquariums, any water damage to areas surrounding the aquarium or any other consequential damages resulting from use of the CORRENTE series MAKE WAVES AT YOUR OWN RISK . Please see additional warnings on page 7**

User Memo :

Date of purchase : \_\_\_\_\_

Dealer name : \_\_\_\_\_

Dealer address : \_\_\_\_\_

Dealer website : \_\_\_\_\_

Dealer e-mail : \_\_\_\_\_

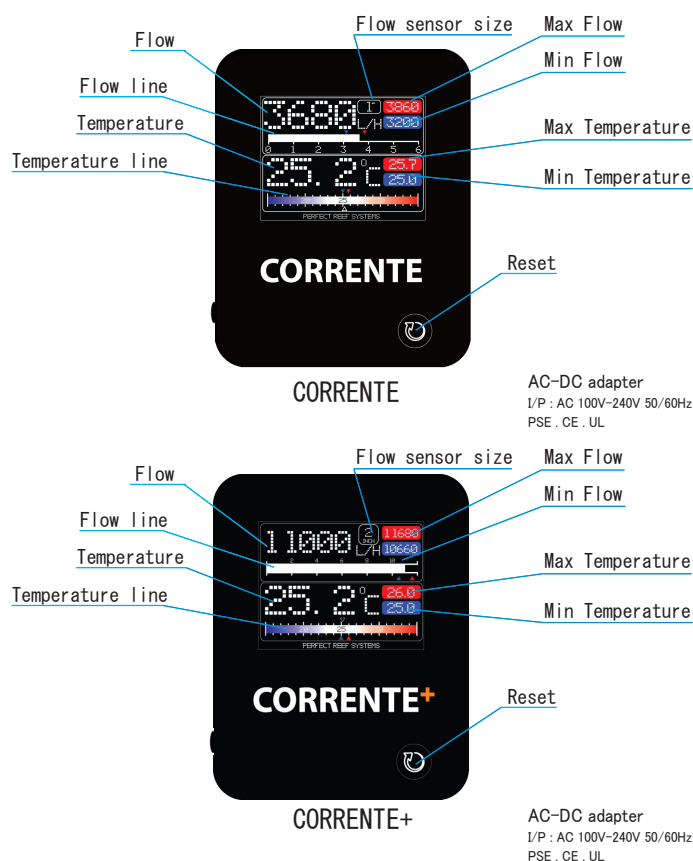
Dealer phone no : \_\_\_\_\_

Contact us : 81-4-2951-6603 [prs@ZE0prs.jp](mailto:prs@ZE0prs.jp)

# Installation

Please confirm that you have all of the parts before connecting AC-DC adapter and flow sensor

## The Controller



Flow : When the controller is OFF it will show 0 L/h. When the controller is ON the actual litres will be shown

Flow line : This Flow line ▲ shows the Min historical flow. This Flow line ▲ Max historical flow

Min Flow : Min historical flow in litres

Max Flow : Max historical flow in litres

Temperatur line : This Temperature line ▲ shows the Min historical Temperature  
This Temperature line ▲ shows the Max historical Temperature

Min Temperature : Min historical Temperature

Max Temperature : Max historical Temperature

Flow Sensor size : The controller will detect which size sensor is used when connected

Reset : Re-start

## Flow sensor series

Please choose Flow sensor you require from PRS Flow sensor series

CORRENTE can connect to all 4 types of Flow sensor 1/2", 3/4", 1", 1.25". There are also Splash proof and Water proof Flow sensor. CORRENTE+ can connect to 2 types of Flow sensor 1.5" and 2". CORRENTE and CORRENTE+ can automatically detect which Flow sensor is used



Model : 1/2" SP or WP  
Working range : 0-30L/min  
Water pressure :  $\leq 1.0$ Mpa  
Flow Accuracy :  $\pm 2\%$   
Temperature Accuracy :  $\pm 1\%$   
Inside diameter : 8.8mm



Model : 3/4" SP or WP  
Working range : 0-60L/min  
Water pressure :  $\leq 1.0$ Mpa  
Flow Accuracy :  $\pm 2\%$   
Temperature Accuracy :  $\pm 1\%$   
Inside diameter : 13.8mm



Model : 1" SP or WP  
Working range : 0-100L/min  
Water pressure :  $\leq 1.2$ Mpa  
Flow Accuracy :  $\pm 2\%$   
Temperature Accuracy :  $\pm 1\%$   
Inside diameter : 20mm



Model : 1.25" SP or WP  
Working range : 0-120L/min  
Water pressure :  $\leq 1.2$ Mpa  
Flow Accuracy :  $\pm 2\%$   
Temperature Accuracy :  $\pm 1\%$   
Inside diameter : 25mm



Model : 1.5" WP  
Working range : 0-150L/min  
Water pressure :  $\leq 1.5$ Mpa  
Flow Accuracy :  $\pm 2\%$   
Temperature Accuracy :  $\pm 1\%$   
Inside diameter : 33.6mm



Model : 2" WP  
Working range : 0-200L/min  
Water pressure :  $\leq 1.5$ Mpa  
Flow Accuracy :  $\pm 2\%$   
Temperature Accuracy :  $\pm 1\%$   
Inside diameter : 43.8mm



Sealing tape  
(contain in the Flow sensor)



# Installation

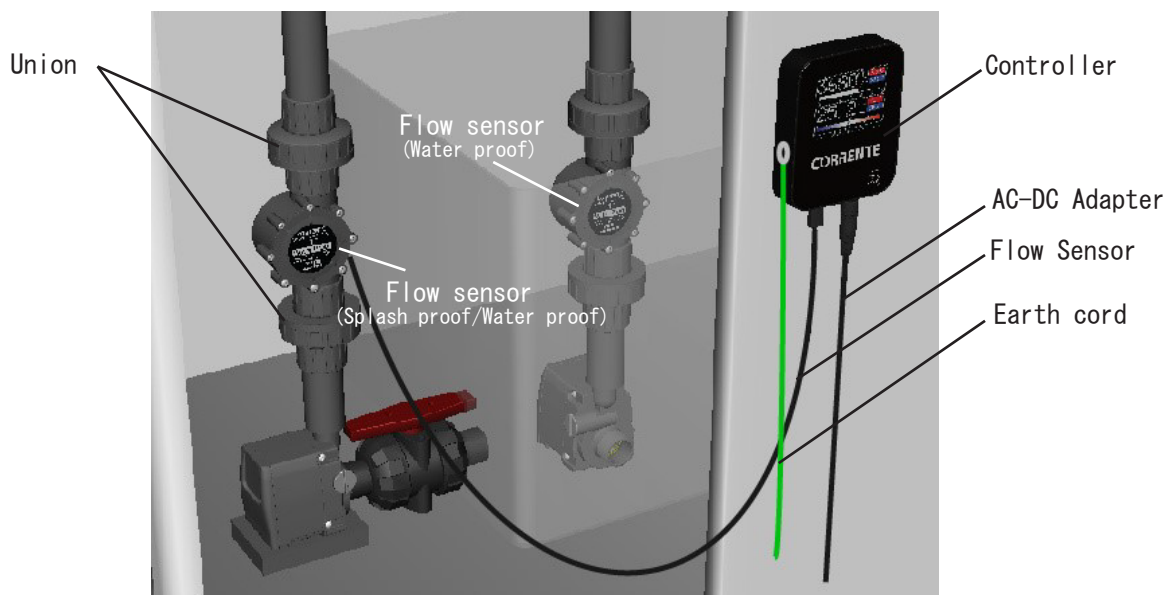
Please confirm your setting using the information listed below

## Controller Installation

- \* CORRENTE / CORRENTE+ should only be used indoors. Ensure that the controller never gets wet and is not installed into a cabinet
- \* Remove the next line (Before working CORRENTE / CORRENTE+ , please take earth from controller earth screw)
- \* Please insert mini USB plug into Flow sensor
- \* Please insert AC-DC adapter (DC5V) into controller
- \* If **ERR** message is shown, push Reset once
- \* Please confirm the Flow sensor size you have chosen is showing on the Monitor

## Flow sensor Installation

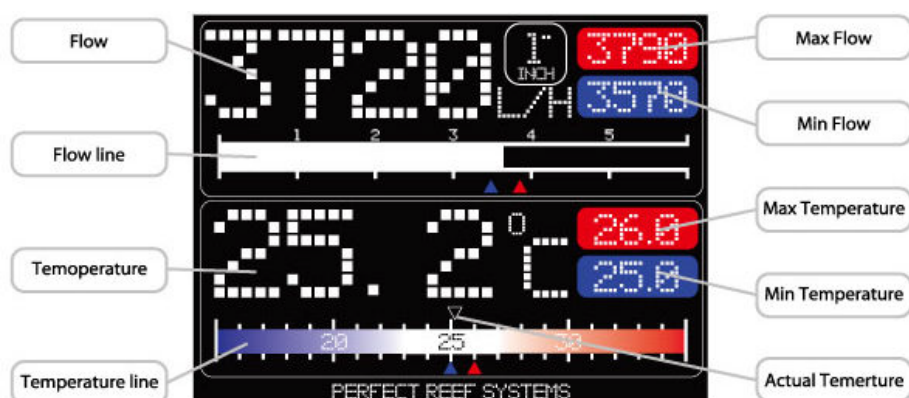
- \* Be aware of whether you have a Splash proof or Water proof Flow sensor. Do not install the Splash proof sensor into water. Water proof sensor can be installed in or out of water
- \* When you install the Flow sensor into your aquarium, please ensure the flow arrow is in the right direction. **This is Water inlet and outlet direction. You must ensure this is correct** ( 1.25" Flow sensor does not show a water direction )
- \* You must keep the Flow sensor below the **Working range / Water pressure** on the Flow sensor label
- \* You must use the Flow sensor within 5°C- 45°C(41°F-113°F)
- \* Please wind enough sealing tape around both ends of the Flow sensor before sealing the joints
- \* The Flow sensor can recognize its own size . Please ensure that the correct size is showing on the Monitor, if the ERR message appears, push Reset once
- \* The Flow sensor will only remain in good working order if nothing is jammed in the rotar. Please carry out regular maintenance. Warranty is not covered for these issues
- \* The Flow sensor will accurately read the flow of your pump and temperature that the heater is working at
- \* Take note of your flow level 24 hours after installation as your reference



Setting sample

# Operation

## Monitor Operation



**Flow(L/G) :** When the Flow sensor is ON it will show actual flow in litres (gallons). When the Flow sensor is OFF it will show " 0 " litres (gallons)

**Flow line :** This flow line shows ▲ the Min litres (gallons) historical flow. the indicator position will update automatically. This flow line shows ▲ is Max litres (gallons) historical flow the indicator position will update automatically

**Min flow :** Min litres (gallons) historical flow in litres

**Max flow :** Max litres (gallons) historical flow in litres

**Temperature :** Actual temperature will be displayed on monitor  
(°C)/(°F)

**Temperature line :** This temperature line ▲ shows the Min historical temperature. the indicator position will update automatically. This temperature line ▲ shows Max historical temperature. the indicator position will update automatically.

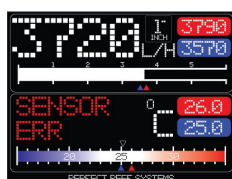
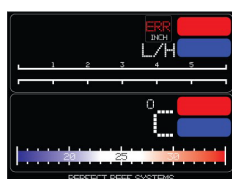
**Min Temp :** Min historical temperature

(°C)/(°F)

**Max Temp :** Max historical temperature

(°C)/(°F)

**Flow sensor size :** The controller will detect which size sensor is used when connected



\* Flow sensor is disconnected

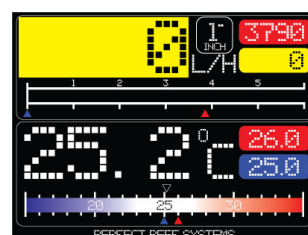
\* Flow sensor issues

Please push Reset once . it will go out . if you push Reset and the controller does not recover it may have been water damaged. please read page 2 and 7

## Flow Alert Function

- \* Once Flow sensor is set up and connected to the controller the actual flow ( in litre or gallon / hr ) will be displayed on the monitor
- \* When there is no Flow sensor is connected ( or there is no actual flow ) the monitor will show " 0 " and litres(gallons) display will change to yellow
- \* Each Flow sensor is different per litre(gallon)

- 1/2" ---- per 2 litre / 1 gallon
- 3/4" ---- per 2 litre / 1 gallon
- 1" ---- per 10 litre / 2 gallon
- 1.25" ---- per 20 litre / 5 gallon
- 1.5" ---- per 20 litre / 5 gallon
- 2" ---- per 50 litre / 10 gallon



( 3.78533 Litre = 1 Gallon )

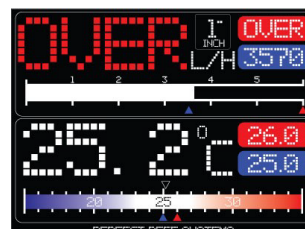
# Operation

## Monitor Operation

- \* Each Flow sensor will have a difference limit showing in litres (gallons)  
If the flow litres (gallons) is over the max, the flow display will be changed to "OVER"

1/2"	-----	Limited 1,800 L/h ( 475 G/h)
3/4"	-----	Limited 3,600 L/h ( 951 G/h)
1"	-----	Limited 6,000 L/h ( 1,584 G/h)
1.25"	-----	Limited 7,200 L/h ( 1,900 G/h)
1.5"	-----	Limited 9,000 L/h ( 2,375 G/h)
2"	-----	Limited 12,000 L/h ( 3,170 G/h)

(3.78533 Litre = 1 Gallon )



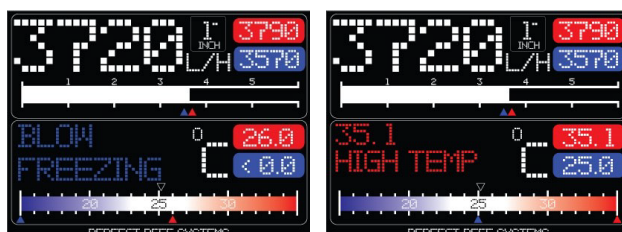
## Flow History Chart

- \* ▲ This Flow line shows the Min litres (gallons) per hour recorded and ▲ is the Max flow recorded litres(gallons) per hour since the last Reset
- \* The indications position will update automatically when this is a new record. The Max and the Min record will be shown on the Max and Min display

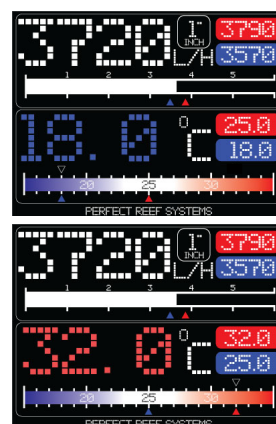


## Temperature Alert Function

- \* Temperature colour will be shown ▲ and ▲ with same colour on the temperature line
- \* Each Flow sensor has a Min display temperature if below 0°C or 32°F a message of "BELOW FREEZING" will appear and "< 0.0" or "< 32" will be shown on the Min temperature display
- \* Each Flow sensor has a Max display temperature. if the temperature is above 35.1°C or 95.1°F a message of "HIGH TEMP" will appear 99.9°C or 211°F will be shown as a message on the Max temperature display

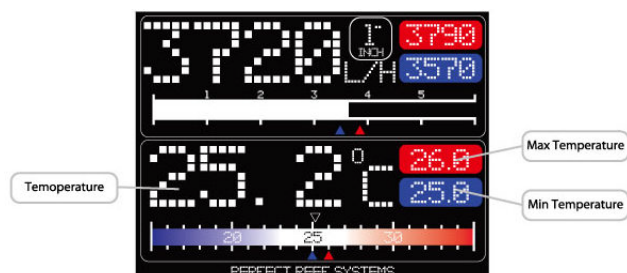


$$(1.8 \times ^\circ\text{C} + 32 = 1^\circ\text{F})$$



## Temperature History Chart

- \* ▲ is Min temperature (°C or °F) and ▲ is Max temperature recorded (°C or °F) since the time of last Reset
- \* The ▲ and ▲ position will change automatically when this new record is made . The Max and Min record will be displayed



# Limited Warranty

PRS.LTD Japan warrants to original purchaser that this product is free from defects in materials and workmanship for the period of one year from the date of purchase . This warranty does not apply to damage due directly or indirectly to misuse such as the product falling in the water, negligence or accidents, repair or alterations not carried out by us or due to lack of recommended maintenance . If a defect exists during the warranty period please return the product to us where free technical repair support will be provided

Flow Sensor is for the period of three months from the date of purchase

Shipping cost should be paid by purchaser so please contact us with your details prior to shipping and ensure that you have the courier details too

PRS.LTD Japan makes no warranty or representation either expressed or implied with respect to the products quality , performance , merchantability or fitness for a particular purpose . As a result this product is sold " AS IS " and you, the purchaser assume the entire risk as to it' s quality and performance

The warranty disclaimer and remedies set forth above are exclusive and replace all others oral or written expressed or implied. At no time will any PRS.LTD dealers , agents or employees be authorized to make any modifications , extension or addition to this warranty

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages , so the above limitation or exclusion may not apply to you

## Declaration of Conformity

We hereby declare in our sole responsibility that the following product conforms to all the relevant provisions

Product Name : DIGITAL FLOW SENSOR  
Model Name : Controller : CORRENTE / CORRENTE+ / CORRENTE-  
Flow Sensor : 1/2" WP , 1/2" SP , 3/4" WP , 3/4" SP , 1" WP , 1" SP , 1.25" WP , 1.25" SP  
1.5" WP , 2" WP

Council Directive : : EMC 2014/30/EU  
: LV 2014/35/EU  
: RoHS 2011/65/EU

The above product has been evaluated for conformity with EMC Directive , Low Voltage Directive and RoHS Directive by the following European standards . The technical documentation for this product is retained at the above manufacturer' s location

Applicable Standards : EN 61326-1 2012  
: EN 61010-1 2013  
: EN 50581 2012

Trade Name : CORRENTE  
Manufacture : PRS.LTD  
Date of Declaration : 1 May 2015

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