

# CORRENTE & CORRENTE+

## INSTRUCTION



PRS.LTD

# Congartulation on your purchase of a CORRENTE

Please read this entire CORRENTE instruction carefully before using CORRENTE

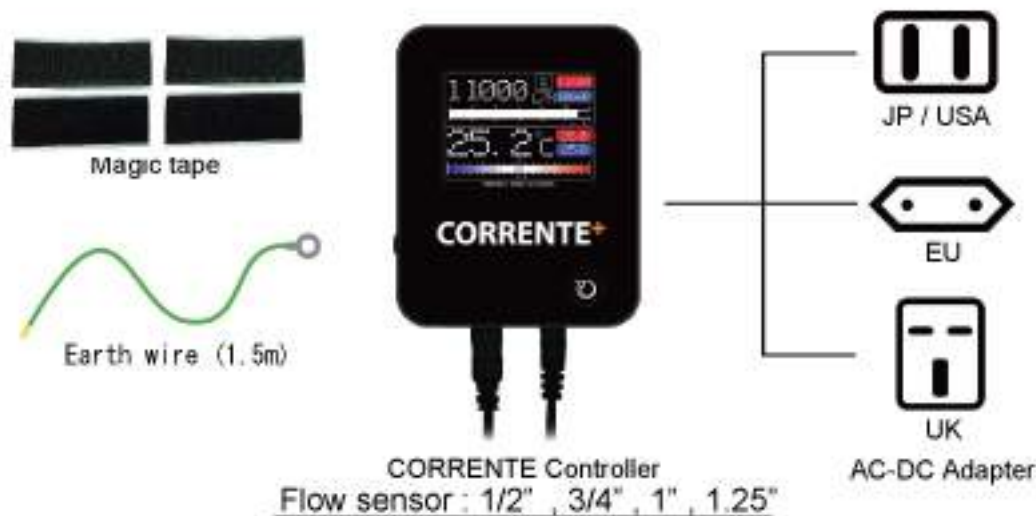
<http://www.ZEOprs.jp> ( CORRENTE Instruction )

## Package Content

Please confirm first which your type unit of CORRENTE or CORRENTE+ and check the AC-DC adapter is correct own country type or not with content in package

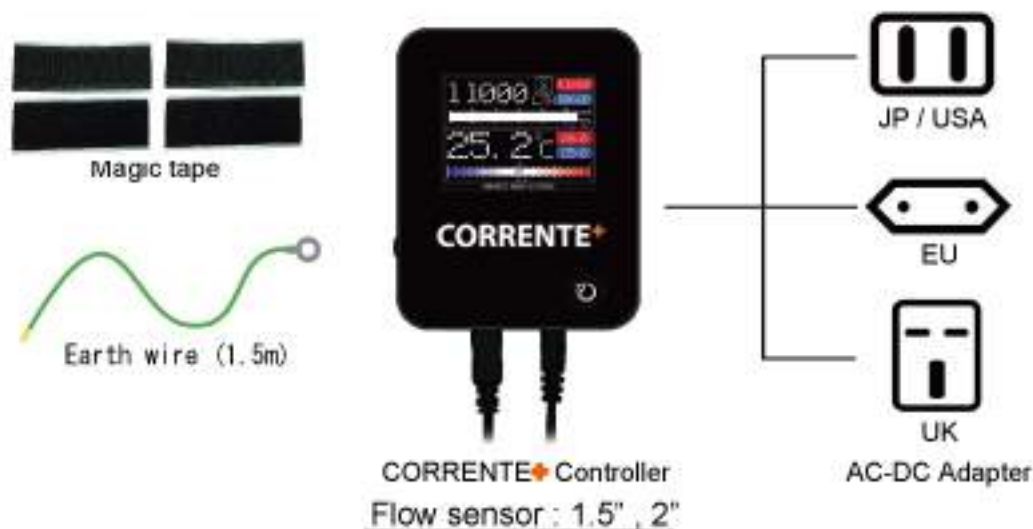
### CORRENTE

Content : CORRENTE controller / AC-DC Adapter / Magic tape (2 set) / Earth wire



### CORRENTE+

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



## Precautions

Take special care to follow the safety suggestions listed below . Afterwards keep this instructions handy for your future reference

### Before using

- \* Remove any plastic and sponge and please check there are any damage o controller and AC-DC adapter or not .instructions handy for your future reference
- \* Especially , CORRENTE controller does not allow any water .please take special care to Flow sensor socket and DC socket .these parts get will easy damage by water

### On safety

- \* If there are smoke or bad smell from CORRENTE controller or AC-DC adapter after have been connected socket , take out plug from socket immedeiateely
- \* The power supply cord and sensor cord should be routed so that they are not likely to be walked on or pinched by items place upon or against them
- \* Never take hold of the plug or cord if your hand wet .and always graspthe plug body when connecting or disconnecting
- \* This CORRENTE is aquariums system' s exclusive units .therefore please don' t use for other uses
- \* Do not defeat the safety purpose of polairzed or modifying
- \* If you have been continuing to use this CORRENTE without any maintenance of AC-DC adapter for a long times , please pay attention socket there are some dust or not
- \* Please keep to take a ground for using CORRENTE by earth wire
- \* You should use the plug which have been installed in box . Never use other one

### Warning

- \* **PRS DISCLAIMS AND WILL NOT BE LIABLE FOR damage to aquariums or their surrounding water damage ,or any other consequential damages resulting from our CORRENTE series MAKE WAVES AT YOUT OWN RISK . Please see additional warranings on page 8**

User Memo :

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

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

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

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

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

Deler phone no : \_\_\_\_\_

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



# Installation

Please confirm each parts name before connecting AC-DC adapter and Flow sensor

## Each parts name



CORRENTE

AC-DC adapter  
I/P: AC 100V-240V 50/60Hz  
PSE, CE, UL



CORRENTE+

AC-DC adapter  
I/P: AC 100V-240V 50/60Hz  
PSE, CE, UL

Flow : OFF line is 0 L/h and ON line is actual liter will be shown  
 Flow line : Showing on Flow line ▲ is Min Flow in past and ▲ is Max Flow in past  
 Max Flow : Max Flow liter in past  
 Min Flow : Min Flow liter in past  
 Temperatur : Showing on Temperature line ▲ is Min Temperature in past and line ▲ is Max Temperature in past  
 Max Temp : Max temperature in past  
 Min Temp : Min temperature in past  
 Flow Sensor : It will be shown Flow sensor size after have been connected to size CORRENTE or CORRENTE+  
 Reset : Re-start

## Flow sensor serise

Please choose Flow sensor your wish from PRS Flow sensor serise

CORRENTE can connect each one of 4 kinds of type Flow sensor 1/2", 3/4", 1", 1.25", also have 2 type Splash proof and Water proof and CORRENTE+ can connect each one of 2 kinds of type Flow sensor 1.5", 2" CORRENTE and CORRENTE+ can recognize itself automatically which type



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

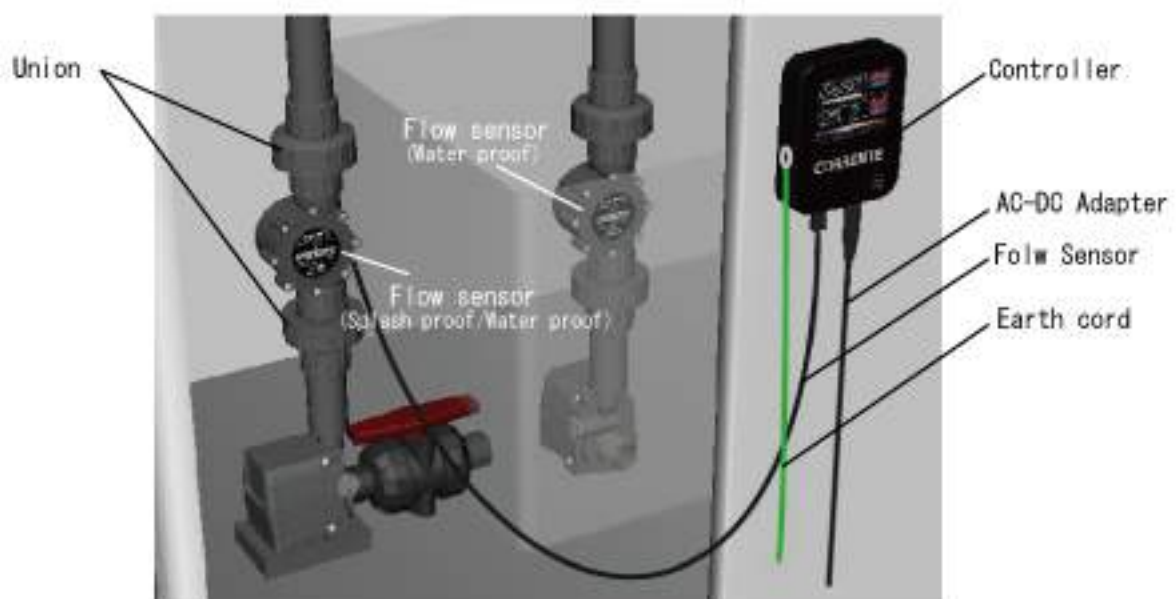
Please confirm entire setting with below setting figure first and pay attention each installation

## Contoroller Installation

- \* ORRENTE / CORRENTE+ controller are installed indoor only . Even if never install into wet environment( Never install controller into cabinet )
- \* Before working CORRENTE / CORRENTE+ , please take earth from controller earth screw
- \* Please insert Flow sensor plug ( mini USB plug for Flow sensor ) to controller
- \* Please insert AC-DC adapter pin plug (DC5V) to controller . and insert pulg to socket
- \* If some **ERR** will be shown , please push Reset once
- \* Please confirm showing Flow sensor size you have chosen on Monitor

## Flow sensor Insttation

- \* Please make sure which your tipe Splash proof or Water proof of Flow sensor . we recommend that Splash proof is better no install inside water . Water proof can install outside or inside water
- \* When you will install Flow sensor in your aquarium system , please confirm showing back on the body " → " **This is Water inlet and outlet direction . Please never do mistake !**  
( 1.25" Flow sensor have not water direction )
- \* You must keep strictly observ to use below Flow sensor **Working range / Water pressure** on Flow sensor label
- \* You muct use Flow sensor within 5°C-45°C(41F-113F)
- \* Please wind sealing material enough both thread of Flow sensor and install
- \* Each Flow sensor can recognize itself which size . Please confirm that showing Flow sensor size on Monitor is correct or not . If some **ERR** is showing , please push Reset once
- \* Flow sensor' s useful term is depend on using water environment . Please check inside of Flow sensor that there are some object or not . and Do maintenance inside sometimes  
( **We can not do warranty for these problems** )
- \* These Flow sensor' s Flow Accuracy and Temperature Accuracy will be over from label showing by pump performance or voltage change or etc possibility
- \* Please take flow level after for 24 hours as your reference



Setting sample



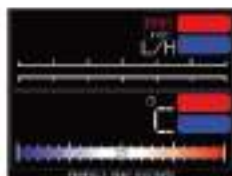
# Operation

## Monitor Operation



- Flow : If already Flow sensor is on line ( have been set ) , actual flow liter(gallon) will be shown (L) / (G) and if Flow sensor is not on line ( have been not set ) , " 0 " liter(gallon) will be shown
- Flow line : Shown on flow line ▲ is Min liter(gallon) in past .and ▲ is Max liter(gallon) in past and ▲ and ▲ position will be changed every time shown Max or Min liter(gallon)
- Max flow : Max flow liter(gallon) in past
- Min flow : Min flow liter(gallon) in past
- Temperature : Actual temperature will be displayed on monitor (°C) / (°F)
- Temperature : Shown on temperature line ▲ is Min temperature in past .and ▲ is Max temperature in past and , ▲ and ▲ position will be changed every time shown Max or Min temperature
- Max Temp : Max temperature in past (°C) / (°F)
- Min Temp : Min temperature in past (°C) / (°F)
- Flow sensor size : Flow sensor size you have set will be shown on the monitor

CORRENTE : 1/2" , 3/4" , 1" , 1.25"    CORRENTE+ : 1.5" , 2"



- \* Flow sensor is disconnected
- \* Flow sensor trouble by somethings

Please push Reset once , it will be go out , even if push reset but not recover , Flow sensor already have problem by water or some Please read P3 and P8

## Flow Alert Function

- \* Once Flow sensor is set up and connected to the controller the actual flow ( in liter 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 liter(gallon) display will be changed to yellow
- \* Each Flow sensor have difference every each liter(gallon)

- 1/2" ---- 2 liter / 1 gallon every each
- 3/4" ---- 2 liter / 1 gallon every each
- 1" ---- 10 liter / 2 gallon every each
- 1.25" ---- 20 liter / 5 gallon every each
- 1.5" ---- 20 liter / 5 gallon every each
- 2" ---- 50 liter / 10 gallon every each



( 3.78533 Liter = 1 Gallon )

# Operation

## Monitor Operation

- \* Each Flow sensor have difference every each limited showing liter(gallon)  
If flow liter(gallon) will be over below limited , 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 Liter = 1 Gallon )



## Flow History Chart

- \*  $\Delta$  is Min flow ( in liter or gallon / hr ) recorded and  $\Delta$  is Max flow recorded ( in liter or gallon / hr ) since the time of last Reset
- \* These  $\Delta$  and  $\Delta$  position will be automatically changed when these is new record made . also these Max and Min record will be shown on display of Max flow and Min flow



## Temperature Alert Function

- \* Temperature value color will be shown  $\Delta$  and  $\Delta$  with same color on temperature line
- \* Each Flow sensor have limited showing temperature . If below 0 °C or 32 °F , " **BELOW FREEZING** " message will be shown on display temperature . and " < 0.0 " or " < 32 " will be shown on display of Min temperature
- \* Also If over 35.1 °C or 95.1 °F " **HIGH TEMP** " will be shown on display temperature . but actual temperature will be continue showing on display of temperature and Max temperature till 99.9 °C or 211°F



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

## Temperature History Chart

- \*  $\Delta$  is Min temperature (°C or °F) recorded and  $\Delta$  is Max temperature recorded (°C or °F) since the the time of last Reset
- \* These  $\Delta$  and  $\Delta$  position will be automatically changed when these is new record made . also these Max and Min record will be shown on display of Max temperature and Min temperature





# 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 , like falls into water , negligence or accidents , repair or alterations outside our facilities or to lack of maintenance . If defect exist during warranty period please kindly send back to us . We provide free technical repair support but with your own mailing cost

Shipping cost should be bear by purchaser hence please contact with us ( ...put email / phone ...etc ) prior to deiver and make sure you will have the account number for the courier servise

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

We shall in no event be liable for death , injuries to person or property or for incidental , contingent special or consequential damages arising from the use of our product

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 PTS.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 warrantys or liability for incidebtal 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 fro 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 Nme : CORRENTE  
Manufacture : PRS.LTD  
Date of Declaration : 1 May 2015

Company Name : PRS.LTD  
Company Address : 2-37-4 Wada Higashitokorozawa Tokorozawa city  
Saitama pref Japan zip 359-0023  
TEL : 81-4-2951-6603 FAX : 81-4-2951-6606

