Istruzioni per l'uso

Instructions for use

Instructions d'utilisation

Gebrauchsanweisung

Instrucciones de uso

CONTAMETRI

CHAIN COUNTER

COMPTEUR MÉTRIQUE

METERZÄHLER

CUENTAMETROS

EV-011

Rev. 09 – 2013

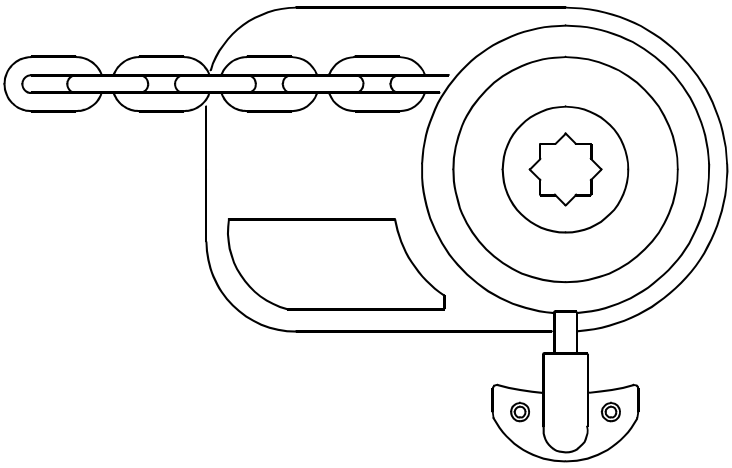


Fig. 1A

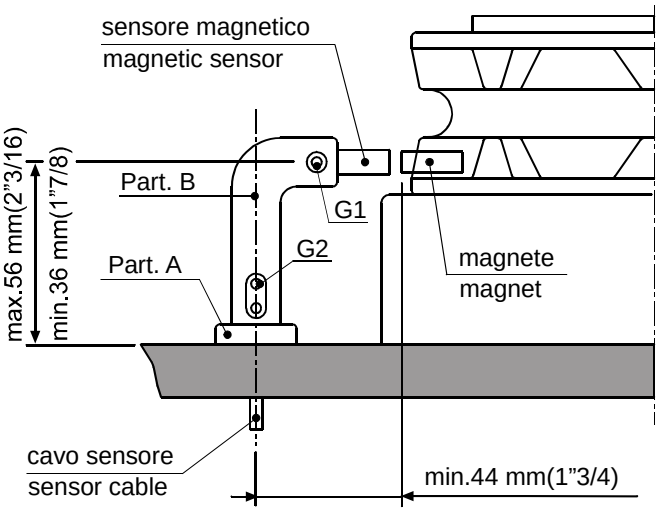


Fig. 1B

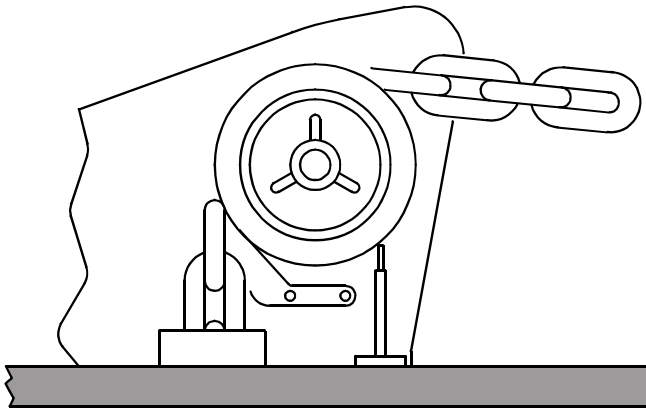


Fig. 2A

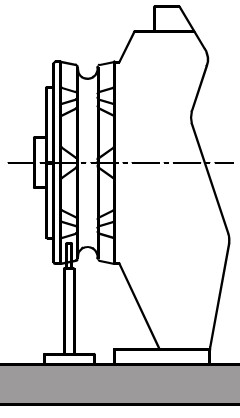


Fig. 2B

Fig. 2C

Description

The EV-011 chain counter displays the length of chain let out by an anchor windlass, expressed in metres or feet.

Technical data

Power supply	from 10 to 30 V DC
Current intake	max 20 mA
Protection rating of front cover	IP65*
Operating temperature	0 / +70 °C (32 / 158 °F)
Display character height	9 mm
Max. chain length	999 metres – 999 feet
Size (mm)	60 x 60 x 18
Weight (g)	55

* excluding cable connection zone

Warning

CONNECT ONLY TO A DC POWER SUPPLY.

General notes

The EV-011 chain counter must be used solely for the purposes described herein, i.e. to display the number of metres/feet of chain let out by an anchor windlass. Any other use is to be considered improper.

Any tampering with the instrument will result in immediate voiding of the warranty.

Components

The package contains:

- chain counter, seal, closure cover and 2 clamping screws;
- 6-pole male connector with crimp-type 6 male contacts;
- instructions for use.

Installation

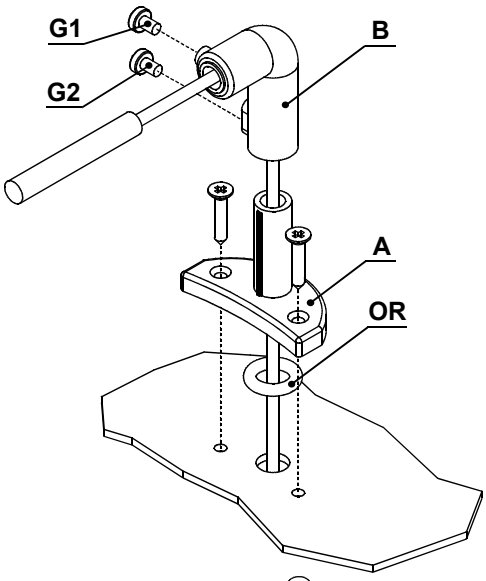
Installing the magnet on the anchor windlass

- A hole having a diameter of 6.5 mm (~1/4”) and depth of 8 mm (5/16”) must be drilled on a tooth of the gipsy, in a place outside the chain’s path.
- In the case of vertical shaft anchor windlasses (see Fig. 1B), drill the hole in the lower circumference of the gipsy.
- In the case of horizontal shaft anchor windlasses (see Fig. 2B), drill the hole in the outer circumference of the gipsy.
- Also make sure that the protruding part of the magnet will not collide with the base or sensor during rotation of the gipsy.
- Insert the metal part of the magnet in the hole, allowing the protected part to protrude by about 2 mm. Fix it in place using an adhesive for metals (two-component epoxy glue) or silicone. The glue used must be able to withstand a marine environment.

Installing the magnetic sensor for vertical shaft anchor windlasses

(see **Fig. 1A – 1B**)

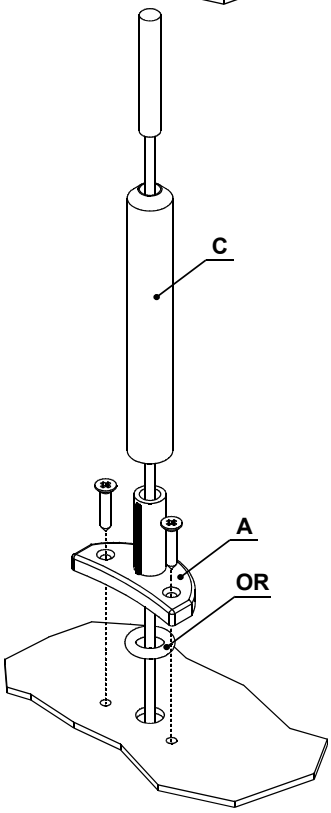
- Drill a 4 mm (~3/16”) hole in the cover through which to thread the sensor cable.
- Fasten Part A of the support with the two screws provided, after having positioned the O-ring in the lower part of the support.
- Fit Part B with the magnetic sensor on support A and adjust its height until it is aligned with the magnet fastened on the gipsy.
- Bring the sensor to a distance of about 3 mm (~1/8”) from the magnet and secure it in place by tightening screw G1. Then tighten screw G2.



Installing the magnetic sensor for horizontal shaft anchor windlasses

(see **Fig. 2A – 2B – 2C**)

- Drill a 4 mm (~3/16”) hole in the cover through which to thread the sensor cable.
- Fasten Part A of the support with the two screws provided, after having positioned the O-ring in the lower part of the support.
- Cut Part C to measure using a hacksaw. The sensor must be positioned at a distance of about 3 mm (~1/8”) from the magnet.
- Fit Part C with the magnetic sensor on support A and fix it in place using an adhesive for plastic (two-component epoxy glue) or silicone.
- Using the same glue, attach the sensor to Part C.



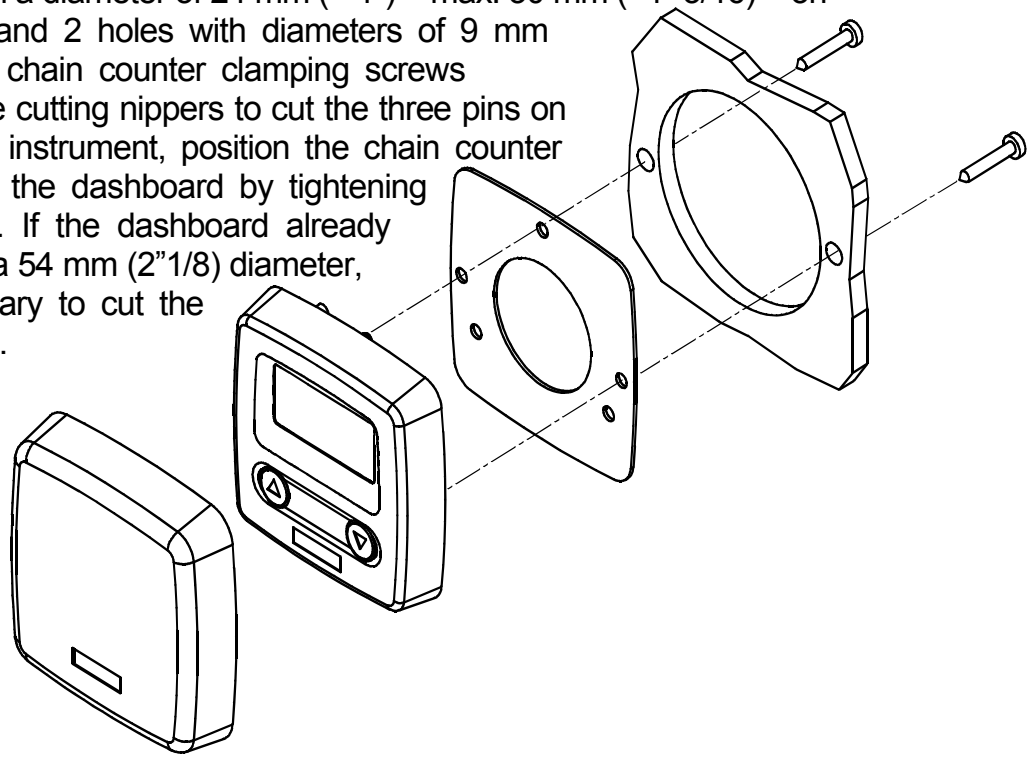
Installing the chain counter

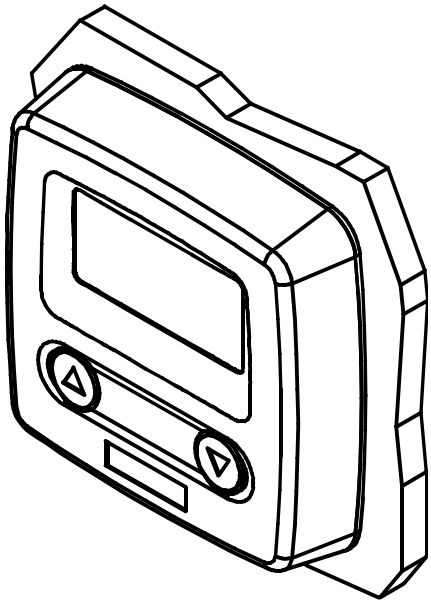
(see connection diagram)

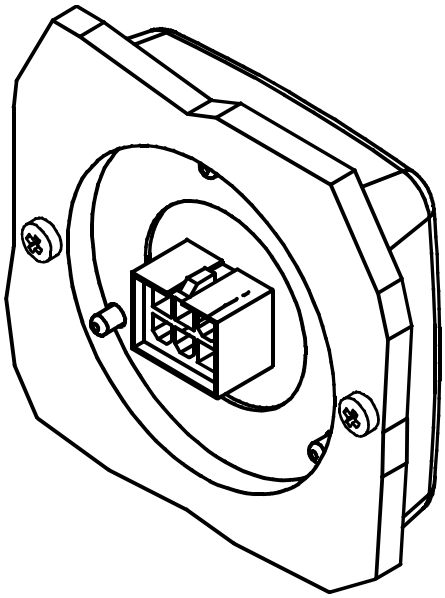
Warning

ALWAYS DISCONNECT THE BATTERY PRIOR TO INSTALLATION.

- The chain counter must be positioned so that the display will be easy to read. It should not be exposed to direct sunlight.
- The rear part of the instrument must be protected from contact with water or moisture.
- The instrument may be fastened to dashboards whose thickness is more than 6 mm (~1/4”). In order to fasten it, please employ M3 x 5 screws for 6 mm (~1/4”) dashboards. For bigger thickness please use M3 screws whose length must be 2/3 mm (~1/8”) less than the dashboard’s thickness.
- In the part to the rear of the dashboard there must be minimum clearance of 35 mm (1” 3/8) and there must also be adequate access to perform installation and maintenance work.
- Make a hole with a diameter of 24 mm (~ 1”) – max. 30 mm (~1” 3/16) – on the dashboard and 2 holes with diameters of 9 mm (~7/16”) for the chain counter clamping screws (see figure). Use cutting nippers to cut the three pins on the back of the instrument, position the chain counter and fasten it to the dashboard by tightening the two screws. If the dashboard already has a hole with a 54 mm (2”1/8) diameter, it is not necessary to cut the pins on the back.

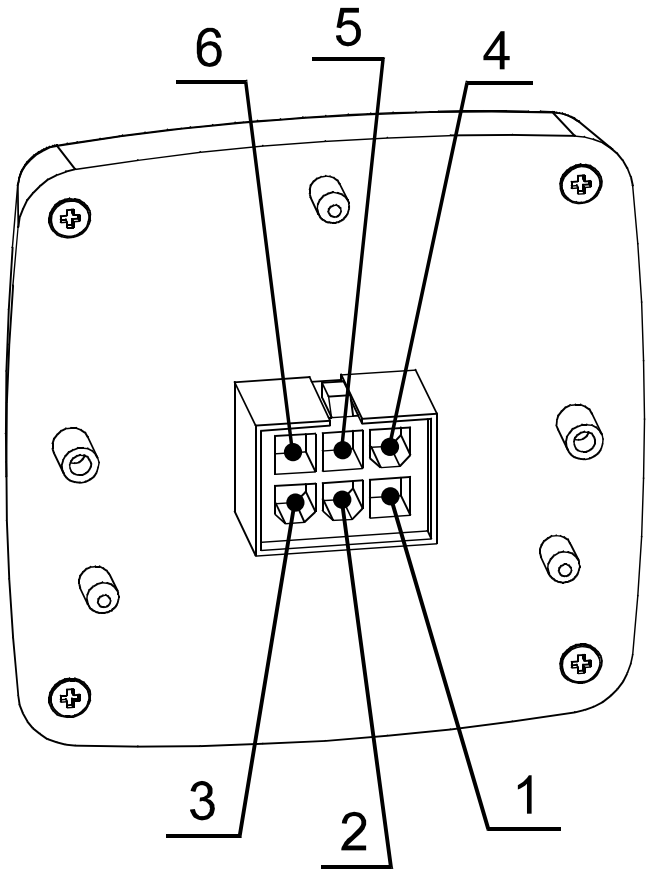






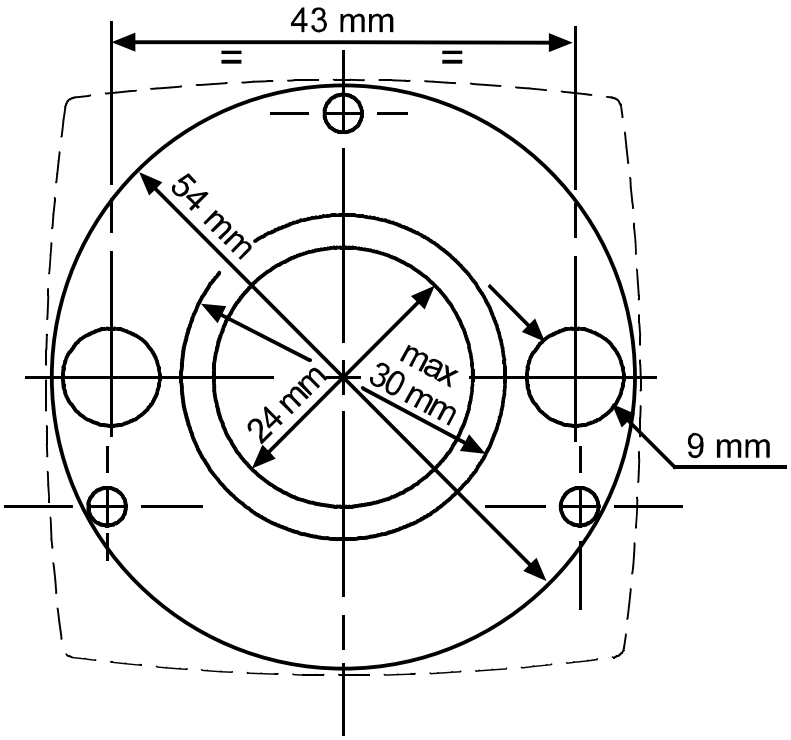
- The seal must be positioned between the cain counter and the dashboard.
- For instructions on making electrical connections, see the attached diagram. The wires must have a minimum cross section size of 1.5 mm². Do not use the voltage generated by the engine battery set to provide power.
- Install a 0.5 A (ampere) safety fuse on the + wire of the battery.
- The instrument complies with EMC standards (EN55022) and must be positioned at a distance of 0.5 metres (1.64 Ft) from radio receiver devices.

Connections

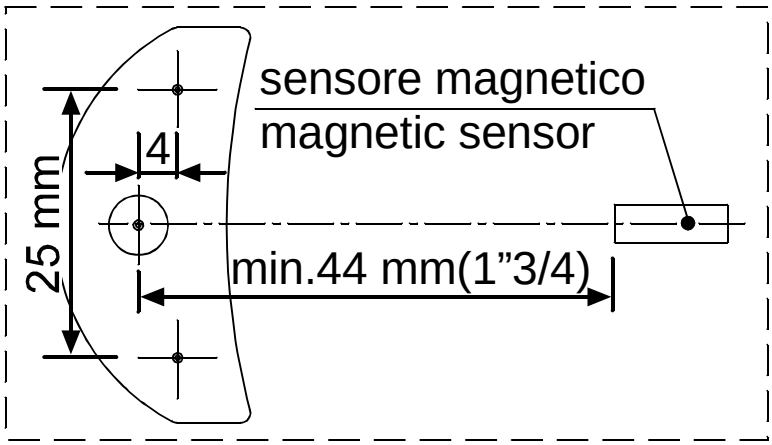


6-POLE REAR CONNECTOR	
PIN	SIGNAL
1	+ battery
2	DOWN command
3	UP command
4	Magnetic sensor
5	
6	- battery

Dashboard hole



Sensor hole



Setting the chain counter

Note

THE INSTRUMENT IS SUPPLIED ALREADY PRE-SET IN METRES FOR A GIPSY CIRCUMFERENCE OF 33 cm.

To change the factory setting, use the table below to identify the type of gipsy and corresponding circumference measurement.

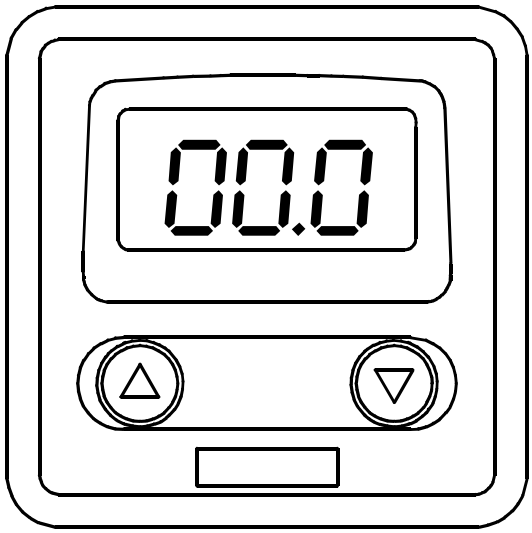
Table 1

Chain Type	Number of recesses	Gipsy Circumference (cm)	Gipsy Circumference (inches)
6 mm	6	22	9
	9	34	13
7 mm	6	25	10
8 mm	5	24	9
	6	28	11
	7	33*	13
	8	38	15
10 mm	5	31	12
	6	36	14
12 mm	5	36	14
	6	43	17
13 mm	6	46	18
14 mm	5	42	16

* factory settings of instrument

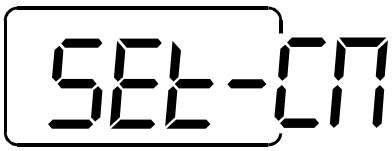
Starting up

The chain counter features a 3-digit display and two buttons:  and  .

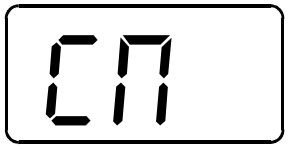
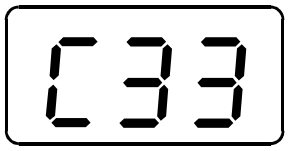
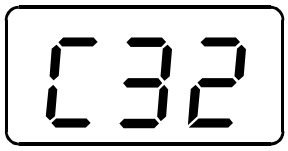
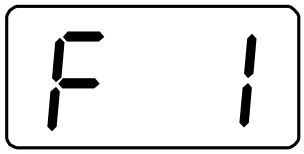
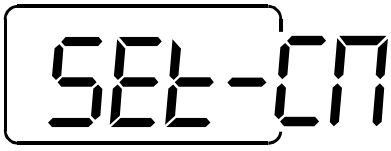


The display backlight will switch off 3 minutes after the last command given.

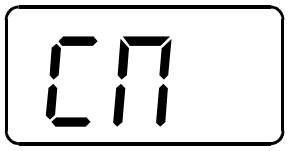
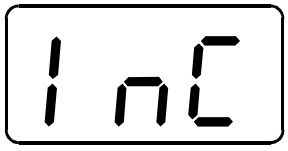
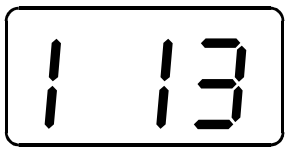
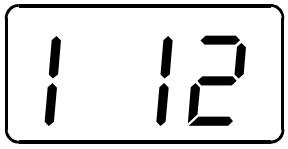
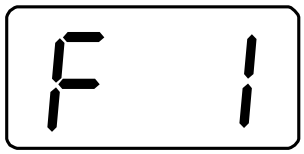
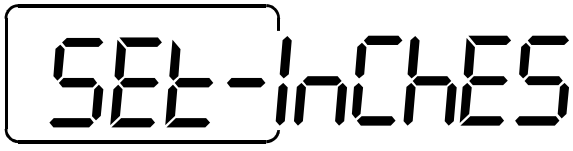
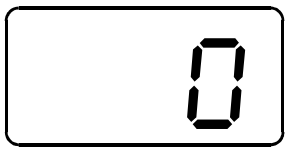
When the instrument is turned on for the first time, it will set up as programmed in the factory.

The words SET CM will run across the display screen.	
The instrument will set up to count chain deployment in metres – in 0.5 m increments up to 99.5 metres and in 1 m increments up to 999 metres.	

Setting up to count in metres

1	Press ▲ for three second.	
2	Then the gipsy circumference programmed in the factory (33 cm) will be displayed.	
3	Press ▲ to increase the number on the display until reaching the value corresponding to the length of chain on the gipsy. Press ▼ to decrease the set value by one unit (e.g. 32 cm).	
4	Then the division factor will be displayed. If you use the 3-wire inductive sensor set here the number of signatures of the gypsy obtained from **Table 1**. If you use the 2-wire magnetic sensor leave the value set to **1**.	
5	On reaching the set value wait for 5 seconds. The words SET CM will run across the display screen.	
6	At this point the instrument will set up to count chain deployment in metres – in 0.5 m increments up to 99.5 metres and 1 m increments up to 999 metres.	

Setting up to count in feet

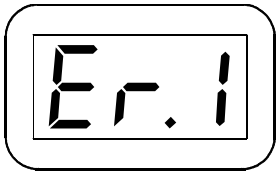
1	Press  for three second.	
2	Press  .	
3	Then the gipsy circumference programmed in the factory (13”) will be displayed.	
4	Press  to increase the number on the display until reaching the value corresponding to the length of chain on the gipsy. Press  to decrease the set value by one unit (e.g. 12”).	
5	Then the division factor will be displayed. If you use the 3-wire inductive sensor set here the number of signatures of the gypsy obtained from **Table 1**. If you use the 2-wire magnetic sensor leave the value set to **1**.	
6	On reaching the set value wait for 5 seconds. The words SET INCHES will run across the display screen.	
7	At this point the instrument will set up to count chain deployment in feet – in 1, 2 or 3 foot increments depending on the size of the gipsy.	

Note

IF PROGRAMMING OPERATIONS ARE SUSPENDED FOR MORE THAN 60 SECONDS THE INSTRUMENT WILL AUTOMATICALLY RELOAD THE PREVIOUSLY SET DATA.

In order to reset the measure press the DOWN  **button for 3 seconds**

Troubleshooting

FAULT	CAUSE	CORRECTIVE ACTION
	Though **UP** or **DOWN** buttons are pressed, the instrument doesn't receive any signal from the magnetic sensor for more than 12 seconds.	Check the sensor electric connections. Check if sensor operates properly. If not, replace it. Check the position of sensor and magnet on gipsy and their distance (3 mm). Check the operation of electric installation or anchor windlass.

Warranty

We guarantee our products from manufacturing defects for 2 years from the purchase date (purchase ticket or any other purchase proof will be requested). Guarantee does not include damages and breakage during the transport, damages and breakage due to faulty installation or improper use. Warranty is no longer valid when repairs or servicing have been made by unauthorized people or made with spare parts which are not original. Warranty does not include the complete replacement of the goods and refers exclusively to the replace of faulty pieces and necessary labour. It does not include transfer or transport expenses. The Customer will not ask for expenses refund.

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