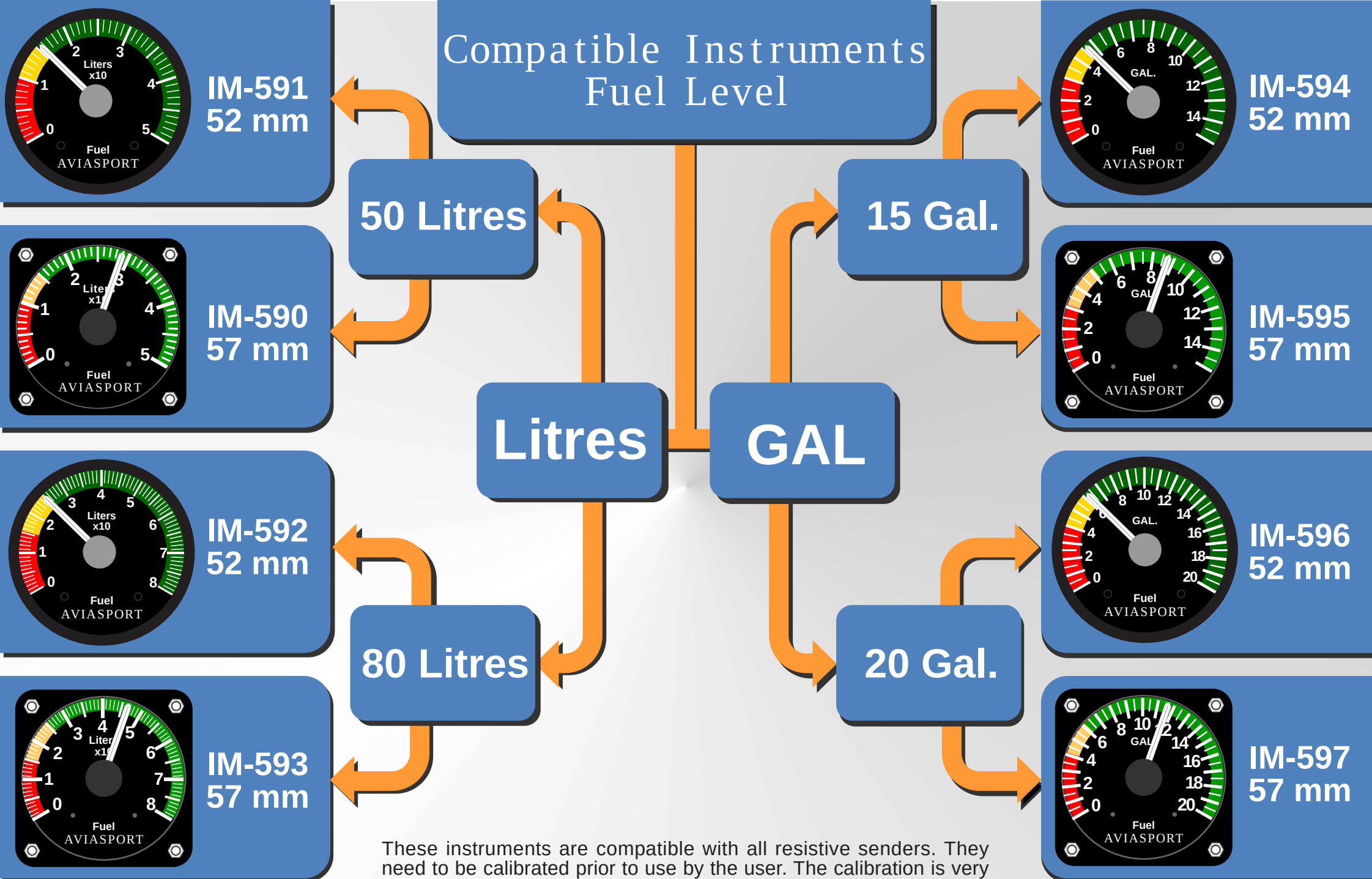




AVIASPORT

Fuel Level Calibrator

User Manual



These instruments are compatible with all resistive senders. They need to be calibrated prior to use by the user. The calibration is very easy, first empty the fuel tank, then fill the tank at equal intervals, and with the software included note the amount in the instrument memory.

The instrument IM-59X (Series) can be connected to most market resistive fuel sender. The problems of other fuel gauges are:

- Display in percent.
- The gauges are linear, but the shape of the deposit is not rectangular.

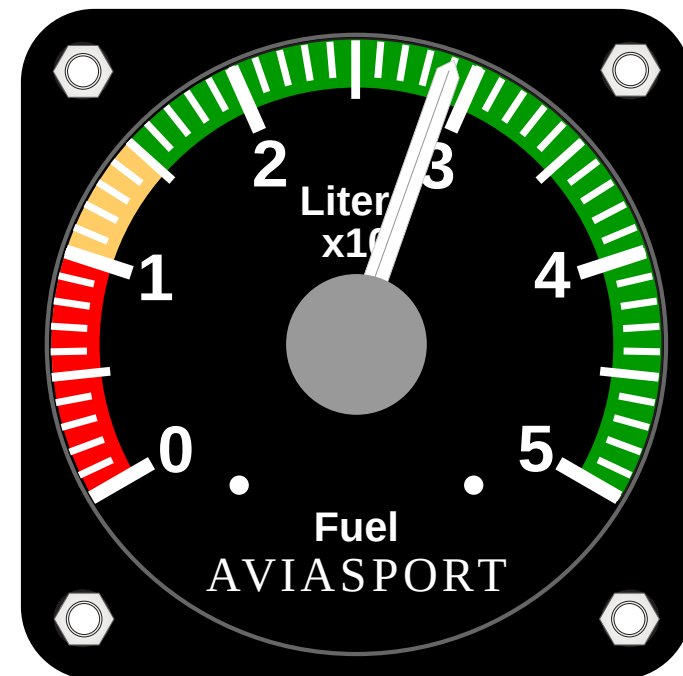
This is a big problem especially in the tanks installed on the seats and that instead of being rectangular, have the seat shape-

The instrument IM-59X (Series) show the fuel level in Liters or gallons.

The instrument IM-59X (Series) are available in 52 and 57 mm diameters.

They need to be calibrated prior to use by the user. The calibration is very easy, first empty the fuel tank, then fill

the tank at equal intervals, and with the software included note the amount in the instrument memory.



For the calibration you need;

- Calibration board
- Usb cable. (Not included)
- Software

Calibration board .- Connect the USB cable to board connector and PC
Connect the green wire to the battery negative and red to terminal 4 of the instrument.
The calibration board is powered by the USB wire

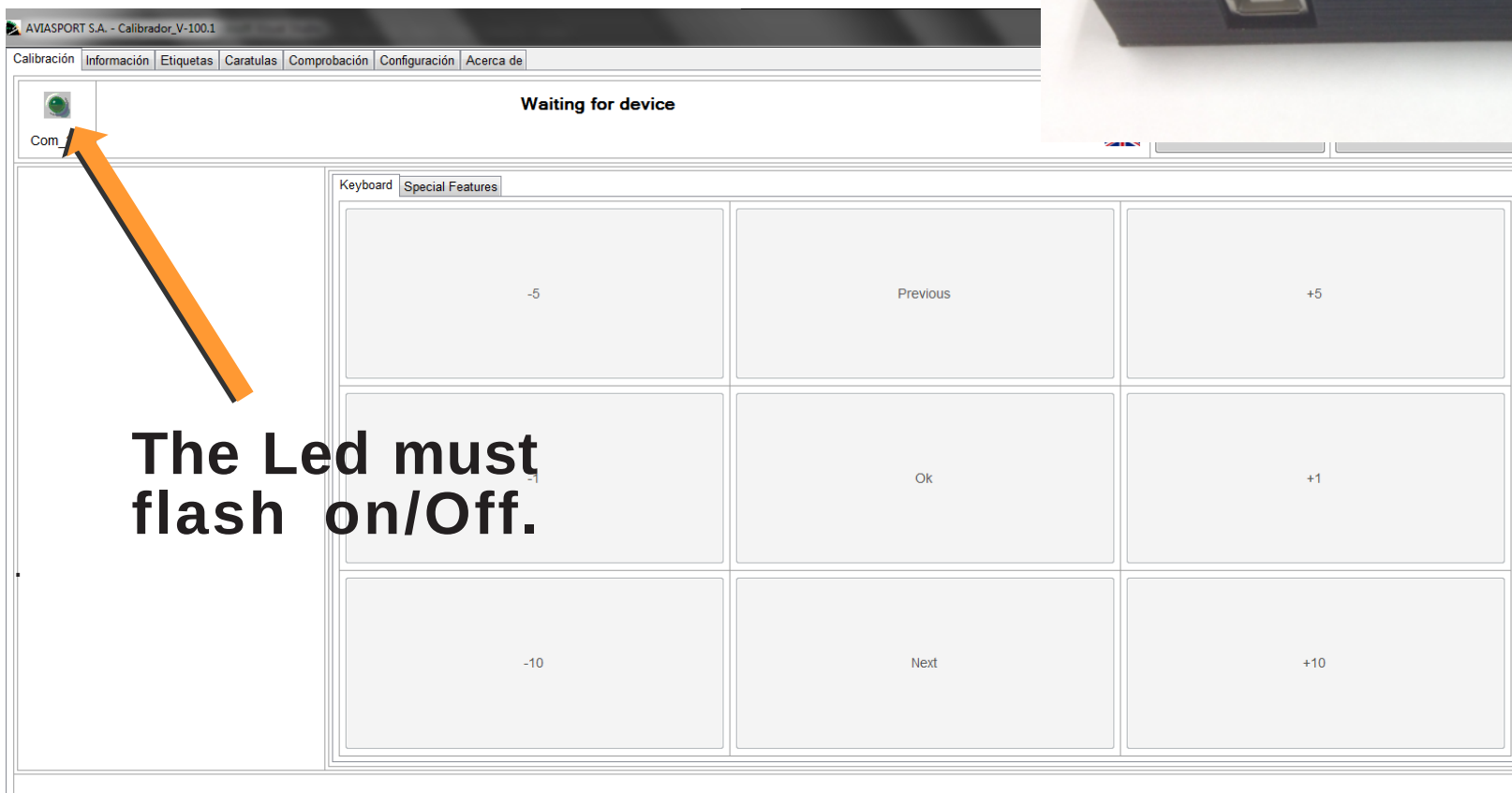
Software : You can download free in :

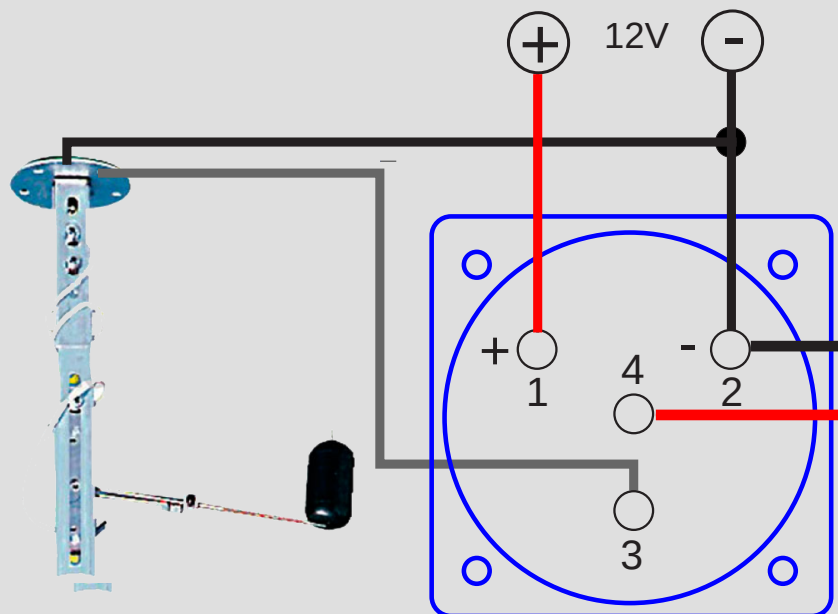
www.aviasport.com/Calibrador.rar

Please unzip the file and run the program.

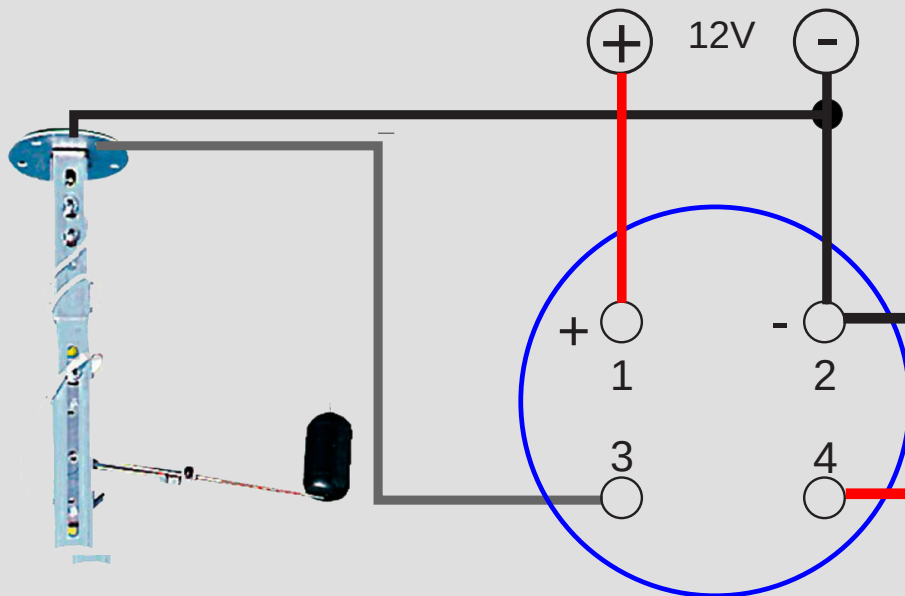
The Led must flash on/Off.

Please connect the gauge and tank sensor as is showed on the next page.





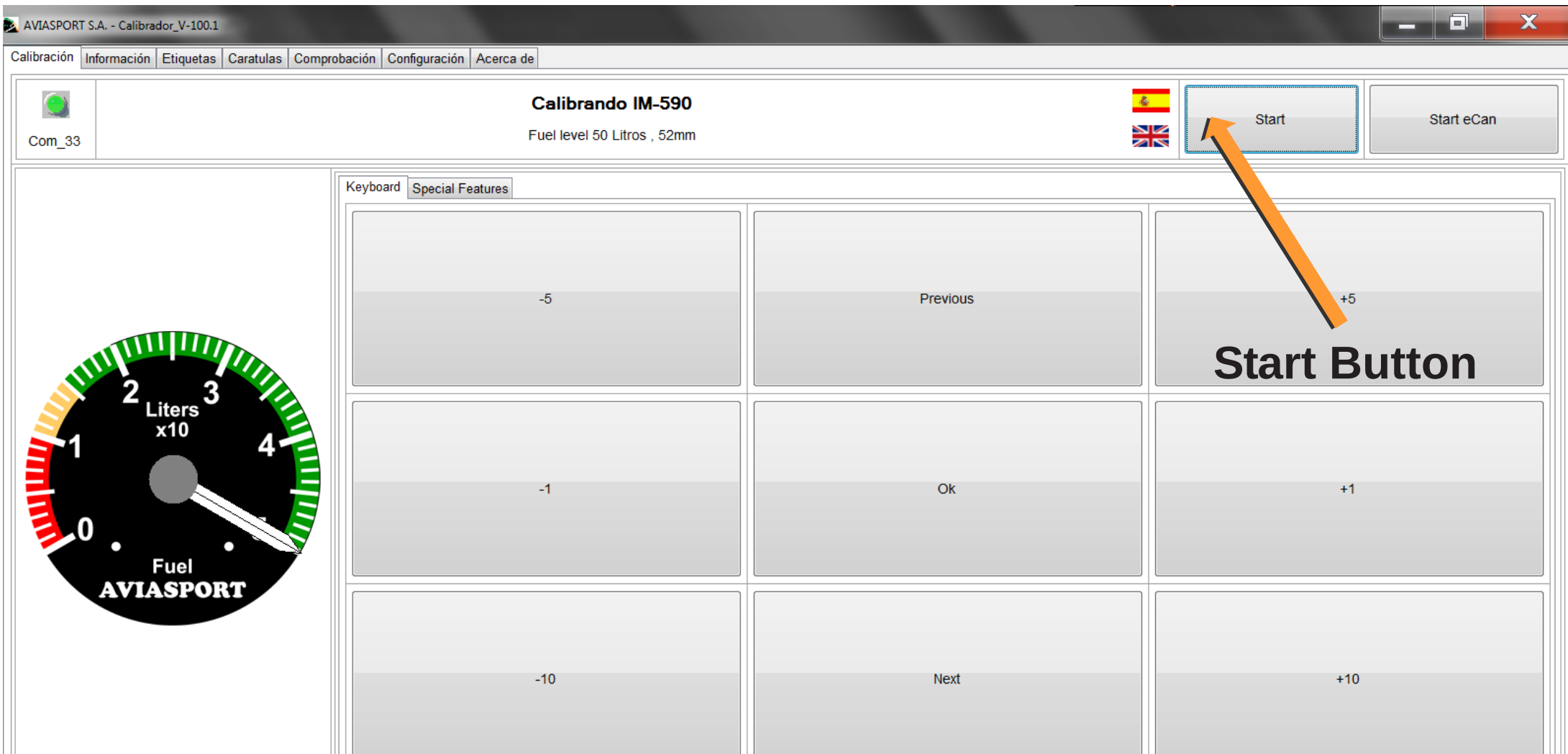
57mm gauge
Connection diagrams



52mm gauge
Connection diagrams



1.- Push the start Button.



2.- Select Special Features Tab

AVIASPORT S.A. - Calibrador_V-100.1

Calibración Información Etiquetas Caratulas Comprobación Configuración Acerca de

Com_33

Calibrando IM-590

Fuel level 50 Litros , 52mm

Spanish Flag British Flag

Start Start eCan

Keyboard **Special Features**

Correcciones

0	0	Maximo	50
1	186	Minimo	0
2	370		
3	553	so	10
4	725		
5	900	Fec	3/7/2015
6	1024		
7	0	K	25
8	0		
9	0	Preescaler	4
10	0	PR2	255
11	0		
12	0		
13	0		
14	0		
15	0	Version	0

Borrar

Tank Capacity 50

Step number 5

Liters/Gal. by step 10

Options

- ☒ Start with empty tank
- ☐ Start with full tank

Position	Litros	Valor
0	0	787
1	10	785
2	20	787
3	30	787
4	40	785
5	50	787

Iniciar Calibracion

Special Features Tab

50 Litros / 900

3.- Insert the fuel tank Capacity

AVIASPORT S.A. - Calibrador_V-100.1

Calibración | Información | Etiquetas | Caratulas | Comprobación | Configuración | Acerca de

Com_33

Calibrando IM-590
Fuel level 50 Litros , 52mm

Start Start eCan

Keyboard Special Features

Correcciones

0	0
1	186
2	370
3	553
4	725
5	900
6	1024
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

Maximo 50
Minimo 0
Paso 10
Fecha 3/7/2015
K 25
Preescaler 4
PR2 255
Version 0

Tank Capacity 50
Liters/Gal. by step 10
Step number 5

Options
☒ Start with empty tank
☐ Start with full tank

Position	Litros	Valor
0	0	787
1	10	785
2	20	787
3	30	787
4	40	785
5	50	787

Borrar

fuel tank Capacity

Iniciar Calibracion

50 Litros / 900

4.- Insert the step number (2 to 16)

AVIASPORT S.A. - Calibrador_V-100.1

Calibración | Información | Etiquetas | Caratulas | Comprobación | Configuración | Acerca de

Com_33

Calibrando IM-590

Fuel level 50 Litros , 52mm

Start Start eCan

Keyboard Special Features

Correcciones

0	0
1	186
2	370
3	553
4	725
5	900
6	1024
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

Maximo 50

Minimo 0

Paso 10

Fecha 3/7/2015

K 25

Preescaler 4

PR2 255

Version 0

Borrar

Tank Capacity 50

Liters/Gal. by step 10

Position	Litros	Valor
0	0	787
1	10	785
2	20	787
3	30	787
4	40	785
5	50	787

Options

☒ Start with empty tank

☐ Start with full tank

Step number 5

step number

Iniciar Calibracion

50 Litros / 900

5.- Select start with empty tank or start with full tank

AVIASPORT S.A. - Calibrador_V-100.1

Calibración Información Etiquetas Caratulas Comprobación Configuración Acerca de

Com_33

Calibrando IM-590

Fuel level 50 Litros , 52mm

Start Start eCan

Keyboard Special Features

Correcciones

0	0
1	186
2	370
3	553
4	725
5	900
6	1024
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

Maximo 50

Minimo 0

Paso 10

Fecha 3/7/2015

K 25

Preescaler 4

PR2 255

Version 0

Borrar

Tank Capacity 50

Liters/Gal. by step 10

Position	Litros	Valor
0	0	787
1	10	785
2	20	787
3	30	787
4	40	785
5	50	787

Options

- ☒ Start with empty tank
- ☐ Start with full tank

Iniciar Calibracion

Start Options

50 Litros / 900

6.- Push Start Calibration button

AVIASPORT S.A. - Calibrador_V-100.1

Calibración Información Etiquetas Caratulas Comprobación Configuración Acerca de

Com_33

Calibrando IM-590

Fuel level 50 Litros , 52mm

Spanish flag / British flag

Start Start eCan

Keyboard Special Features

Correcciones

0	0
1	186
2	370
3	553
4	725
5	900
6	1024
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

Maximo 50

Minimo 0

Paso 10

Fecha 3/7/2015

K 25

Preescaler 4

PR2 255

Version 0

Tank Capacity 50

Liters/Gal. by step 10

Step number 5

Options

- ☒ Start with empty tank
- ☐ Start with full tank

Fuel Gauge: A circular gauge with a black face and white needle. The scale ranges from 0 to 4, with 'Liters x10' indicated. The needle is pointing to approximately 2.5. The text 'Fuel AVIASPORT' is at the bottom.

Table:

Position	Litros	Valor
0	0	787
1	10	785
2	20	787
3	30	787
4	40	785
5	50	787

Borrar

Start Calibration Button (indicated by an orange arrow pointing to the 'Iniciar Calibracion' button)

Iniciar Calibracion

50 Litros / 900

7- First step

Tank Capacity

50

Step number

5

Liters/Gal. by step 10

Options

- ☒ Start with empty tank
- ☐ Start with full tank

Position	Litros	Valor
0	0	786
1	10	777
2	20	785
3	30	777
4	40	777
5	50	776

Add 10 Liters to the tank

The tank must have 50 Liters

Next step

**Follow
the instructions
Then push the
next step
Button**

8- Calibrating

Tank Capacity

50

Step number

5

Liters/Gal. by step 10

Options

- ☒ Start with empty tank
- ☐ Start with full tank

Position	Litros	Valor
0	0	786
1	10	777
2	20	785
3	30	777
4	40	777
5	50	776

Add 10 Liters to the tank

The tank must have 50 Liters

Next steep

repeat until
the tank
is completely
full / empty.

6.- Timer Adjust

AVIASPORT S.A. - Calibrador_V-100.1

Calibración Información Etiquetas Caratulas Comprobación Configuración Acerca de

Com_33

Calibrando IM-590

Fuel level 50 Litros , 52mm

Start Start eCan

Keyboard Special Features

Correcciones

0	0
1	186
2	370
3	553
4	725
5	900
6	1024
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

Maximo 50

Minimo 0

Paso 10

Fecha 3/7/2015

K 25

Preescaler 4

PR2 255

Version 0

Tank Capacity 50

Liters/Gal. by step 10

Step number 5

Options

- ☒ Start with empty tank
- ☐ Start with full tank

Iniciar Calibracion

Borrar

Fuel Level Gauge:

Liters x10

Fuel AVIASPORT

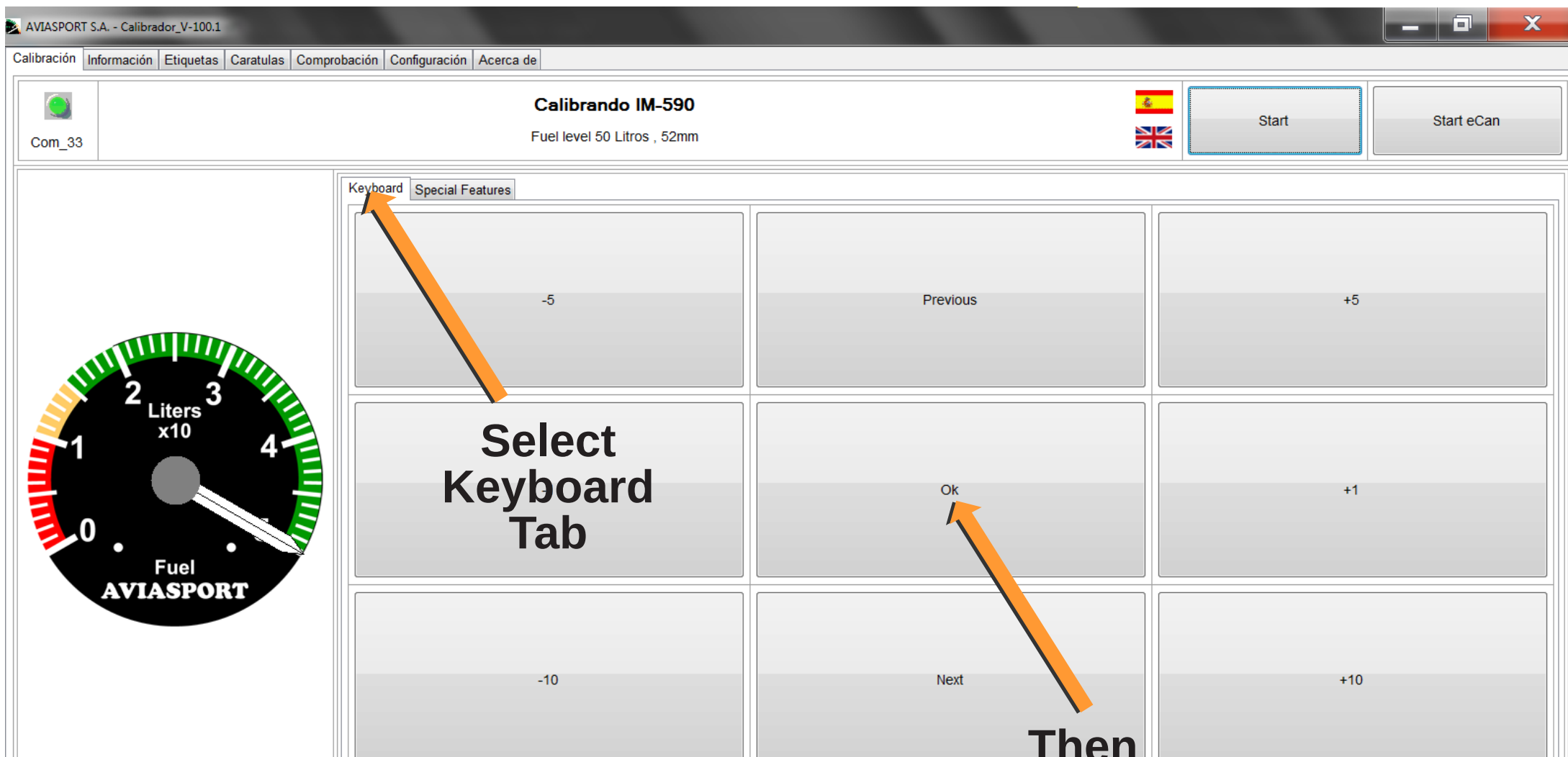
Position Litros Valor

0	0	787
1	10	785
2	20	787
3	30	787
4	40	785
5	50	787

To avoid fluctuations due to roll and pitch, the instrument incorporates an adjustable timer. The default value is 25. Increase the K value only if is necessary,

50 Litros / 900

9.- Select Keyboard Tab



10.- Finish

When the OK button is pressed a message appears saying that the calibration is correct.

Disconnect the cables.

The calibrator will not be necessary in about five years when there will be small gaps in the float potentiometer.

If you want you can test calibration adding or removing fuel and observing that the instrument displays correctly.

