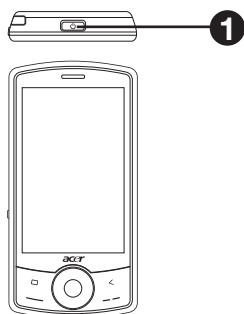


# USER MANUAL



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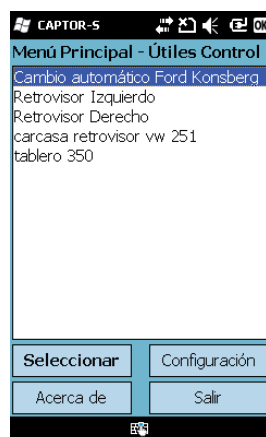
## TURNING THE PDA ON AND GETTING CONNECTED TO THE PROGRAM



1. Turn the PDA on by pressing the button located on the upper side (1).



2. Enter the username and password defined by the Captor-S administrator to enter the Main Menu.



### 3. Main menu

Displays the different measurement gauges available. To work with one of the gauges (measuring or exporting data), select it and click on **“Select”**.

To modify, add or delete gauges data, users, languages and parameters of Captor, click on **“Configuration”**.

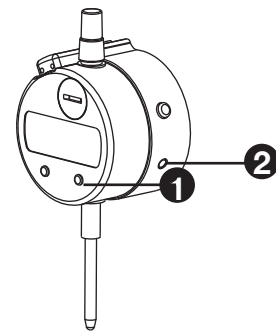
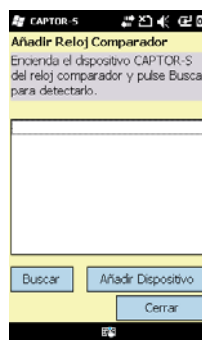
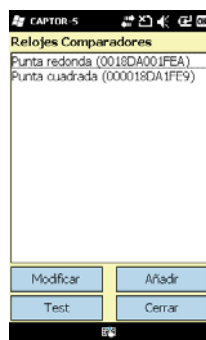
## FUNCTIONS

### A. Configuring dial indicators.

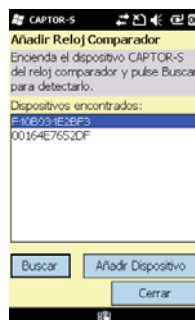


1. The dial indicators included in the CAPTOR-S kit you have received are already configured. The configuration of dial indicators will only be necessary if you decide to add extra dial indicators to the PDA you have already purchased. In the Main Menu, click on "Configuration".

In the Configuration Menu, click on "Dial Indicators".

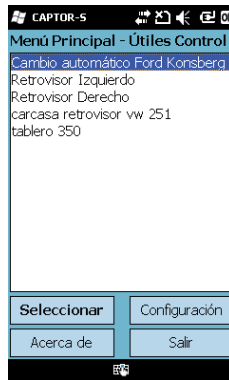


2. Click on "Add".  
Turn on the dial indicator (1) and CAPTOR-S (2).



3. Select your dial indicator and click on "Add Dial Indicator". The PDA may detect other devices close to it, such as Bluetooth mobile phones. To identify your CAPTOR-S, you will have to check the ID number displayed on the sticker on the back part of the device. You can check if your CAPTOR-S works properly by using the PDA test function. To use this function, turn the dial indicator and the Bluetooth unit on, and press the "Test" button on the PDA screen.

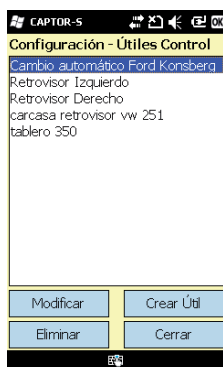
## B. Configuring a new gauge



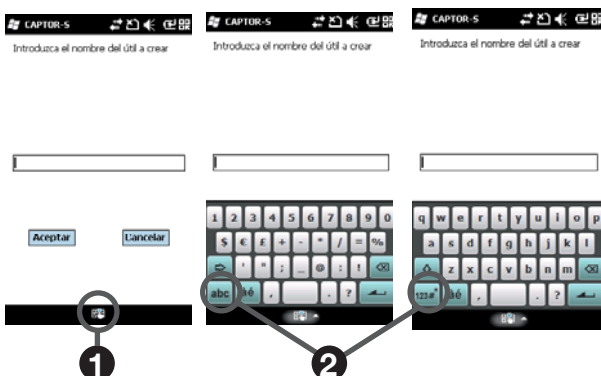
1. In the Main Menu, click on “*Configuration*”.



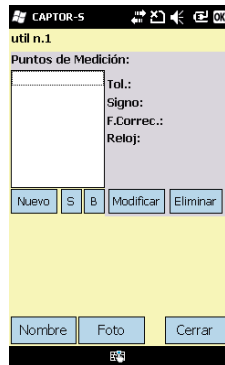
2. Click on “*Gauges*”.



3. Click on “*Create Gauge*” and define the name of the gauge.

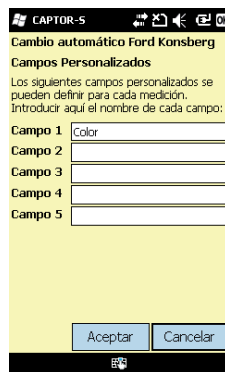


Click on the icon (1) to use the keypad. To switch from letters to digits, click on the key(2)



4. To make the identification of the gauge easier, we recommend you to take a general picture of the gauge by clicking on *“Photo”*. Define the measurement features: number of points (add, modify or delete), tolerances, correction factor (if necessary), type of dial indicator.

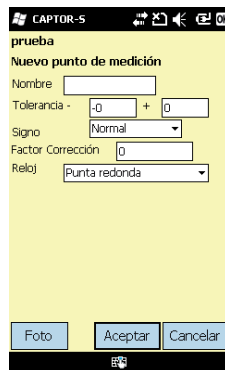
**Note:** the correction factor is a value summed up to the value obtained by the dial indicator. If the correction factor is negative, this value will be subtracted from the value obtained by the dial indicator.



4a. By clicking on *“Fields”*, you can define a series of features of your part to help identifying it (colour, measurement laboratory temperature, etc.). Once you have defined fields, you will have to fill them in before starting to measure.

4b. To prevent any mistakes in the measurement process, we recommend you to take a photo of each measurement point by clicking on *“Photo”*.

4c. To define a measurement point, click on *“New”*, and fill in the corresponding fields. Then, click on *“OK”*.



5. Once you have defined all the gauge measurement points, click on *“Close”*. The new gauge will be displayed in the Main Menu.

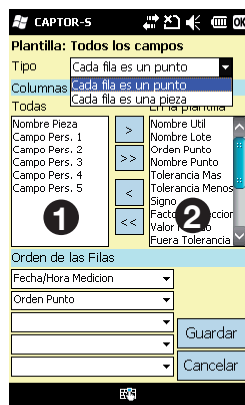
### C. Configuring a data export sheet



1. From the Main Menu, click on *“Configuration”*. In the Configuration Menu, click on *“Export Sheets”*.



2. Click on **“Edit”** to modify an existing sheet.  
To create a new export sheet, click on **“Add”** and enter the name of the sheet.



3. The column (1) displays the list of data available to export. The column (2) displays the list of data you have chosen to export. These data will be displayed on your Excel sheet.

The measurement data will be displayed in the order defined in column (2). Do not forget to define the order of these data to make it correspond to the order of your measurement database.

Ex.: the Excel sheet data are displayed in the same order as in column 2.

To move data from column (1) to column (2) (add data to export), click on **>**.

To move all the data from column (1) to column (2) click on **>>**.

To move data from column (2) to column (1) (remove data to export), click on **<**.

To move all the data from column (2) to column (1) click on **<<**.

Then, click on **“Save”**.

	A	B	C	D	E	F
1						
2	Nombre Util	Orden Punto	Nombre Punto	Tolerancia Mas	Tolerancia Menos	Factor Corrección
3						
4						
5						
6						
7						
8						

## D. Defining or modifying the users data 1

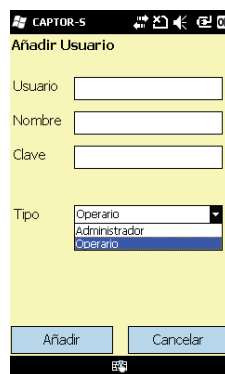


1. In the Configuration Menu, click on “Users”.

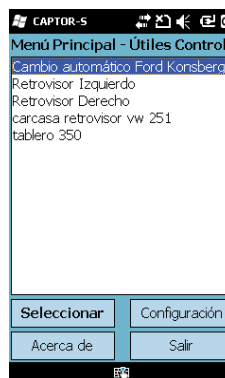
2. Click on “Edit” to modify an existing user.

To create a new user, click on “Add” and fill in the user data.

Then, click on “Add”.

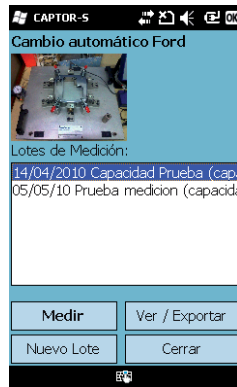


## E. Measuring with CAPTOR-S



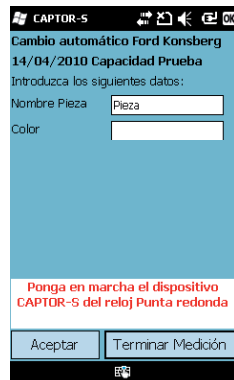
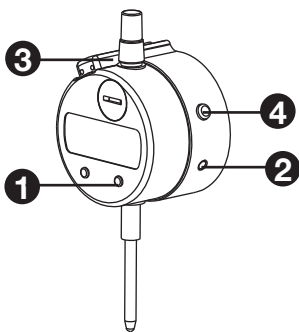
1. Main menu: displays the gauges available. To work on one of the gauges, select it and click on “OK”.



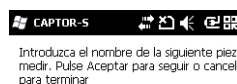


2. In each of the gauges folders, you can define measurement groups, that is, a group of measured parts with a common feature (month of measurement, first injection, etc.). To add new measurements in an existing group, select the corresponding group and click on “*Measure*”.

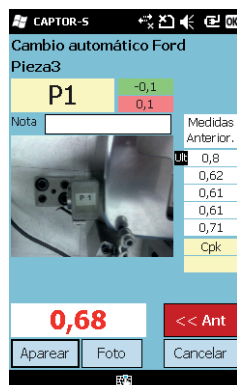
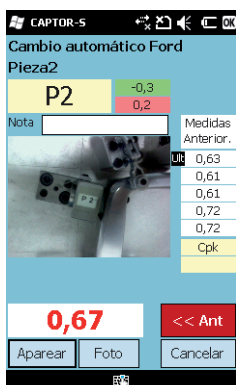
To prepare a new measurement group, click on “*New group*”, define its characteristics (name, tolerances, number of points with their corresponding photo), and click on “*Measure*”.



3. Turn the dial indicator on (1) and the Bluetooth unit (2). When the right LED (3) turns green, click on the PDA screen. The Bluetooth and PDA will get matched, and the left LED (3) will turn orange. These two lights will remain turned on while the two systems are matched.



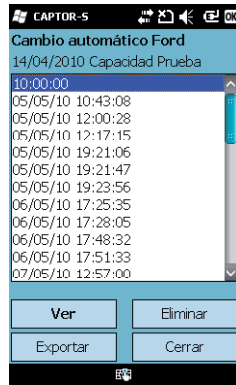
4. Enter the name of the part to measure and the defined field/s - if you have defined any -. It can be a number or a name. The name “*Part*” will be displayed by default, this name will be automatically changed to measure the next parts “*Part2*”, “*Part3*”, etc.



5. Click on the button (4). The measured value will be displayed on the screen, as well as whether the value is within our out of tolerance. Then, Captor will pass automatically to point 2.

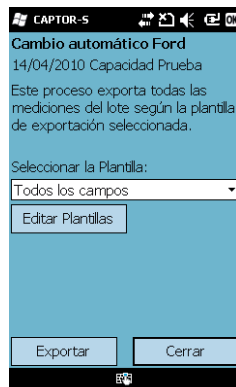
The mention “*Last*” shows the last value measured.

## F. Exporting measurement data

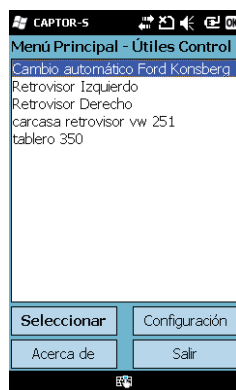


F.1. Exporting measurement data once you have finished to measure.

1. Once the measurement is over, the list of measured parts will be displayed on the screen. Click on “Export” to export a measurement group.



2. If you have already created an export sheet, select the sheet and click on “Export”. To define an export sheet, see section C.



F.2. Exporting saved measurement data

1. Click on the measurement group in the Main Menu, and click on “OK”.



2. Click on “See/Export”.

3. Follow the steps described in section F.1.

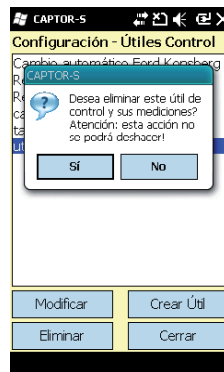
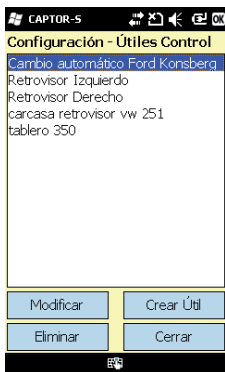
## G. Deleting data

### G.1. Deleting a gauge

1. In the Configuration Menu, click on “*Gauges*”.

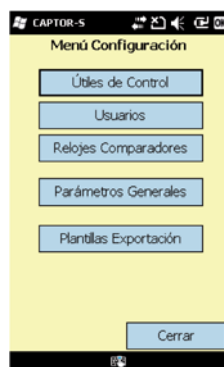


2. Select the gauge and click on “*Delete*”. Then, click on “*Yes*”. All the measurement groups, photos and information related to this gauge **will be deleted**.



### G.2. Deleting an export sheet

In the Configuration Menu, click on “*Export sheets*”. Select the sheet, and click on “*Delete*”.

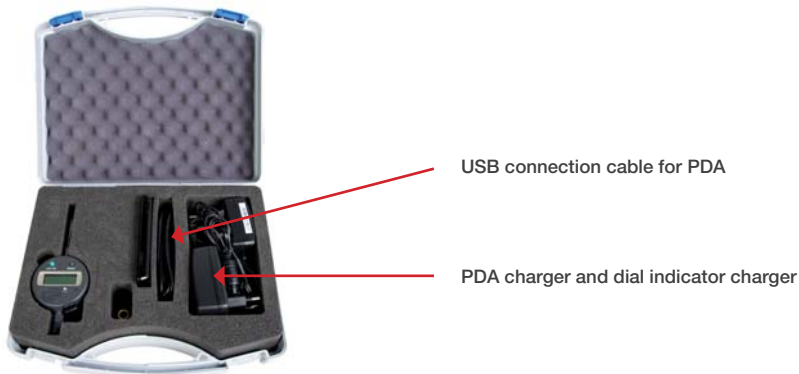


### G.3. Deleting a user

In the Configuration Menu, click on “*Users*”. Select the user, and click on “*Delete*”.

## MAINTENANCE

### A. Charging the dial indicator and the PDA



#### 1. Charging the PDA:

a. By connecting the PDA to the PC: connect the USB plug (1) to your PC USB port. Connect the Micro USB output (2) to the PDA. A red LED will turn on on the PDA upper right side.

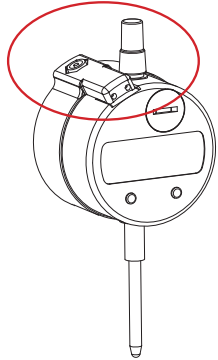
When the LED has turned to green, your PDA is charged.



b. By electric plug: connect the Micro USB port to the PDA and plug in the charger. A red LED will turn on on the PDA upper right side.



2. Charging the dial indicator: connect the 2.1 port(1) To the dial indicator connector (2). Plug the charger in. It will take 3 hours to charge it completely. The dial indicator does not have any level of battery display. If you see that your device does not emit any signal, it may be due to a low battery level.



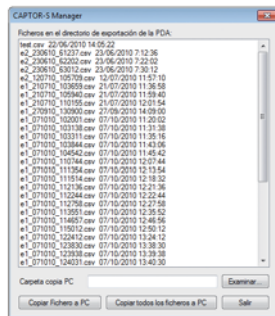
## B. Calibrating the dial indicator

To have the dial indicator calibrated by a certification laboratory, it is not necessary to dismount the Bluetooth unit. The calibration will be done in exactly the same way as for a dial indicator without Bluetooth unit.

**If the Bluetooth unit is dismounted, the CAPTOR-S guarantee will not be applied.**

## C. Updating of the PDA software

### Automatic updating of the software



1. Install Microsoft ActiveSync (Windows XP and previous versions) or Windows Mobile Device Center (Windows Vista, Windows 7).

2. Connect the PDA to the PC by Active Sync or Windows Mobile Device Center. No synchronization is necessary.

3. Install CAPTOR-S Manager by executing the application setup.exe in the setup directory "captors\_manager\_install\_vx".

**Note:** it may be necessary to restart the PDA (complete turn off) before connecting it to the PC.

4. Execute CAPTOR-S Manager. If the PDA is not connected, a message will be displayed and the window will close.

5. If the connection has been done correctly, the main screen will display the files available in the PDA export directory.

6. To send a file to the PC, select first the directory in the PC (Search...), select the file and click on "Copy File to PC".

7. To send all the files to the PC, proceed in the same way and click on "Copy all the files to PC".

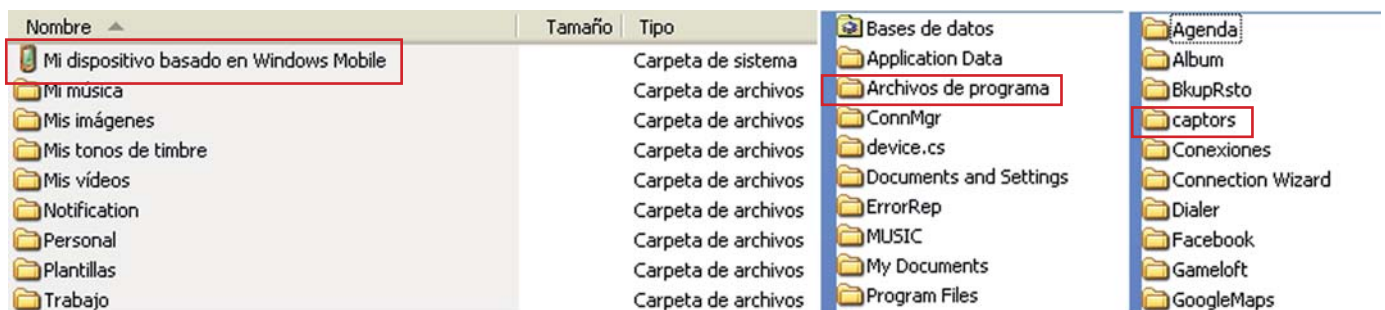
If the automatic updating of the software does not work, you can update the software manually in the following way:

### Manual updating of the software

1. The new version of software will be available on the website. Get connected to <http://www.captorsystem.com> and download the application **captor.exe**.
2. Connect the PDA to the computer with the USB cable (see point 1.a of the Maintenance section).  
Open the folder “*Mobile Device*” in My Desktop.



3. Go to My device – Program Files – captors.



1. Change the name of the software version to be replaced (ex. Put Captor V1 – V2, etc.)
2. Copy the new application captor.exe inside the “*captors*” folder.

### D. RECOMMENDATIONS

**Warning: you must not dismount or try to modify the Bluetooth unit connected to the dial indicator. The guarantee will be cancelled if this prohibition is not respected.**

#### Recommendations:

- **Do not subject CAPTOR-S to sudden changes of temperature, which can trigger damages on the dial indicator.** If the message “*Err C*” is displayed on the dial indicator screen, turn it off 2 hours to enable it to have its temperature stabilised with the temperature of the room.
- **Blows:** CAPTOR-S is a system suitable for industrial use. However, to maintain the quality of the product you must avoid blows, falls, or a use other than the measurement on gauges.

## E. TROUBLESHOOTING AND TECHNICAL SUPPORT

### Troubleshooting

Battery of the different components of CAPTOR-S:

- CAPTOR-S remains matched during approximately 1 minute if no measurements are being made. After this time it unmatches to save energy.
- CAPTOR-S remains turned on during approximately 2 minutes and 20 seconds if no measurement are being made. After this time it turns off to save energy.
- The dial indicator never turns off automatically. Do not forget to turn it off when you do not use it.
- To send data from the dial indicator to the PDA, the two LEDs (orange and green) have to be turned on.
- In the point measurement screen, if the orange led is not turned on, click on the “*Match*” button (on the screen) and wait until it turns on again.
- In the point measurement screen, if the green led is not turned on, turn on CAPTOR-S, check that the green light gets turned on, click on the “*Match*” button (on the screen) and wait until it turns on again.
- The “*Match*” button on the point measurement screen will re-match automatically CAPTOR-S with the PDA. It may take some time due to the Bluetooth protocol. You must wait until the orange light turns on.
- If the green light does not turn on when you switch on CAPTOR-S, there is not battery left. You have to charge the battery.
- It takes 3 hours to charge completely the battery.
- If the orange LED does not turn on when measuring (it does not get matched), there may be 2 reasons: 1) you are not using the right CAPTOR-S, 2) the CAPTOR-S does not work properly.
- To check if you are using the right CAPTOR-S go to Configuration | Dial Indicators, look for the dial indicator in the list (the Bluetooth ID should correspond to the one displayed on the sticker on the back of CAPTOR-S), and test it. If it does not get matched with the PDA, there may be a hardware problem.
- When you are sending data to the PDA, if the message “*Mitutoyo off or without connection*” is displayed on the dial indicator, the connection between CAPTOR-S and the dial indicator does not work. You must send the set back to have it repaired.

### Technical Support

In case of technical problems that have not been solved by this manual, call **0034 938 43 64 30** and say that you are calling for a technical problem with CAPTOR-S.