



PF SOCIO Vis

PF SOCIO Vis TFT



Manuale operativo - User's Guide - Manuel de l'Utilisateur
Guía del Usuario - Benutzerhandbuch
Guía do Usuario - Kullanıcı Kitapçığı



The logo for Socio Collection features a stylized white figure of a person with a speech bubble, positioned to the left of the word "SOCIO" in a bold, white, sans-serif font. The letters "O" and "O" in "SOCIO" have a small red dot in the center. This entire graphic is enclosed in a black rounded rectangle with a white border. Below this rectangle, the word "COLLECTION" is written in a bold, black, sans-serif font, with a small red dot in the center of the letter "O".



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Indice - Contents – Sommaire - Índice – Indice – Inhaltsverzeichnis - İçindekiler

Sezione 1	Manuale Utente	1-1
Section 2	User's Guide	2-1
Section 3	Manuel de l'Utilisateur	3-1
Section 4	Guía del Usuario	4-1
Abschnitt 5	Benutzerhandbuch	5-1
Seção 6	Guía do Usuario	6-1
Sezione 7	Kullanıcı Kitapçığı	7-1



2 USER MANUAL

2	User Manual.....	2-1
2.1	<i>Foreword</i>	2-3
2.1.1	Contents of the User Manual	2-3
2.1.2	Symbols and glossary of safety-related terms and warnings	2-3
2.1.3	Safety rules	2-4
2.2	<i>Product Description</i>.....	2-6
2.2.1	Upon receipt	2-6
2.2.2	How to obtain your User Password.....	2-6
2.2.3	Product Identification Number.....	2-7
2.2.4	KIT Contents.....	2-7
2.2.5	Optional kits.....	2-8
2.2.6	Description of the display	2-11
2.3	<i>Installation and preliminary operations</i>	2-13
2.3.1	Installation	2-13
2.3.2	Connections.....	2-14
2.3.3	First start-up	2-15
2.3.4	Updating the display hardware.....	2-17
2.4	<i>Operating instructions</i>	2-18
2.4.1	How to start the SOCIO programme.....	2-18
2.4.2	Legend of commands and meaning of icons	2-18
2.4.3	User interface and screen pages.....	2-25
2.4.4	EOBD diagnosis	2-26
2.4.5	How to use the vehicle database.....	2-26
2.5	<i>Troubleshooting</i>	2-27
2.5.1	Problems during operation	2-27
2.6	<i>Appendix</i>	2-27
2.6.1	Warranty information.....	2-27



SOCIO Collection

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2.1 Foreword

Dear Customer, thank you for choosing the SOCIO Collection of diagnostic tools that will enable you to keep the pace with the ever-changing technology of on-board electronics. Please read this manual carefully and follow the indications provided in paragraph Safety rules.

2.1.1 Contents of the User Manual

The User Manual is divided into sections:

Product Description	Product description, list of components
Product installation	Software and Hardware installation
Operating instructions	Description of functions, legend of icons and commands
Troubleshooting	Solutions to frequently encountered problems/FAQ's

2.1.2 Symbols and glossary of safety-related terms and warnings

The following symbols are used throughout the manual to highlight important indications or information:



Warning

This symbol is designed to draw your attention to important operations and procedures



Important

This symbol is designed to draw your attention to important information.



Note

This symbol is used to highlight useful indications on how to use the product.



2.1.3 Safety rules

Signs and symbols:

The symbols used in this paragraph have the following meanings.



DANGER: Failure to comply with or improper use of the information identified by this symbol may result in severe injury or death.



WARNING: Failure to comply with or improper use of the information identified by this symbol may result in personal injury and equipment or property damage.



CAUTION: Failure to comply with or improper use of the information identified by this symbol may result in improper operation of device and/or software.

Precautions required during operation/installation:



DANGER:

- **Abnormal conditions:** Continued operation when the device has been producing smoke or abnormal odours may create a fire or electric shock hazard. Cut off power supply immediately and contact a service centre.
- **Water and foreign matter:** If foreign matter (metal, water or other fluids) enter the device, cut off power supply immediately and contact a service centre.
- **Shocks and damage:** If the device is damaged, unplug it from the power mains and contact a service centre.
- **Disassembly:** Never attempt to dismantle or make changes to the device, as this may result in a risk of fire or electric shock.
- **Placement:** Keep device away from heat, oil fumes or vapour. Such ambient conditions might create a risk of fire and electric shock. Keep the device away from fluids and volatile flammable materials. Non compliance may create a fire hazard.



WARNING:

- **Placement:** Do not place the device on unstable surfaces, high shelves or other unstable locations or the unit may fall, leading to injury and/or damage.
- **Foreign bodies:** Do not insert any foreign bodies into the connectors as this may lead to device failure.
- **Maintenance:** Never use thinners, cosmetics or other volatile agents to clean the exterior of the device. Clean with a cloth wetted with a diluted solution of water and mild detergent.



WARNING:

- **Usage conditions:** This appliance has been designed and tested to ensure safe operation. The user is required to observe the information and warnings provided in this manual to ensure safe operation and preserve the safety features of the appliance.






WARNING:

- It is recommended to store the tool in a safe and heated room after use in order to keep LCD image quality to top level.
- **Always store the tool inside its black box and inside the orange case. When you are not using it, ensure the tool does not get in direct contact with dust, water, electromagnetic sources, vibrations and low temperature.**



2.2 Product Description

	<p>PF SOCIO Vis Tft</p> <p>This is the handheld display KIT. The case has the necessary cut-outs to accommodate all optional accessories.</p>
	<p>HANDHELD DISPLAY</p> <p>This is the main component and is equipped with an 8.4" TFT Liquid Crystal Display</p>
	<p>FLASH MEMORY CARD</p> <p>The whole software package resides in the Memory Card. Standard version comes with a 512 MB Memory Card. 1GB Memory Cards are also available at request.</p>

2.2.1 Upon receipt

Upon receipt, check packing and product components for damage in the presence of the carrier. Liability for transport damage attaches to the forwarding agent or carrier. Report any damage, giving details of the nature and severity of the damage, in the shipping document and file a claim against forwarding agent or carrier.

2.2.2 How to obtain your User Password

Submit your User Password request to TECNOMOTOR S.p.A. using the suitable form or through its sales network. TECNOMOTOR will send the personal Password directly to the addressee specified in the request as indicated.






2.2.3 Product Identification Number

A label with the product serial number is affixed to the outside of the case. Quote this Identification Number whenever requesting assistance or requesting to return a product under warranty.



2.2.4 KIT Contents

The content of PF Socio Vis TFT is indicated in the following Table

Image	Description	Item Number
	Case	
	User manual and Socio Collection software kit	
	Handheld display	
	512 MB Memory Card	
	ABS stylus to press icons on the touch-screen display. A storage hole is provided in one side of the display.	



2.2.5 Optional kits

	Battery charger / 2 batteries / 220V adapter	1800024
	220V power mains adapter	1800024
	1 GB Memory Card	1290066
	Leatherette cover	1990112
	Bluetooth module	1800028
	Technical Information Module - MIT	1800031
	Tecnomotor inFORMA (included in MIT module)	1800032
	Analogue RS232 Modem Kit	1800030
	ISDN RS232 Modem Kit	1800034

	Automotive Scope/Multimeter Kit for PALM	2990103
	Kit prelievo misure	1800078
	4 channels expansion Kit SOCIO	1800075
	Amperometric Clamp 10A	1800077
	Amperometric Clamp 1000A	1800080
	Temperature Probe	1800073
	Pressure Kit	1800074
	Belt tightening pulley kit	1800079
	Gas Analysis Module complete with accessories	PF G530II








	Smoke meter module	3500050
	Smoke Meter Module with temperature probe and RPM counter	1800016
	Universal Trolley	PF 1433
	Support for PF 1433 and/or table stand for hand-held display	3500161
	Trolley for Hand – Held display	PF 1440
	Trolley for gas and smoke meter module	PF 1437
	Battery RPM counter	PFM941N-NET
	Temperature probe	1060315

	Windows PC/Printer kit	PF 3000
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2.2.6 Description of the display

2.2.6.1 Description of slots and ports

The display has the following slots and ports:

	Diagnostic module slot (module is included in the PF SOCIO AD package)
	Battery slot (battery is included in the Optional KIT)
	Memory Card slot
	Desk or steering wheel support.
	Keyboard with arrow keys (as an alternative to touch screen, supports nearly all functions)



	Power supply connector
	Green LED (turns on to indicate the display is on and powered from an external power source or from the battery)
	Hardware OFF button (press and hold for over 5 seconds to shut down programme and switch off display). When shutdown procedure is completed, display and green LED switch off.
	VGA port for connection to external CRT monitor
	USB ports
	System RS232 serial port.
	RS232 serial port.

2.2.6.2 Power supply

The display is powered by the “power supply connector” from one of the following power sources:

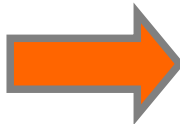
- 220V power mains adapter
- 12 V battery power supply cable

2.3 Installation and preliminary operations

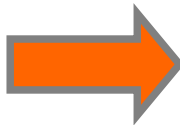
2.3.1 Installation

The display requires no SW installation; all you need to do is to insert the Memory Card into its slot (see table)

DISPLAY



BBAD









2.3.2 Connections


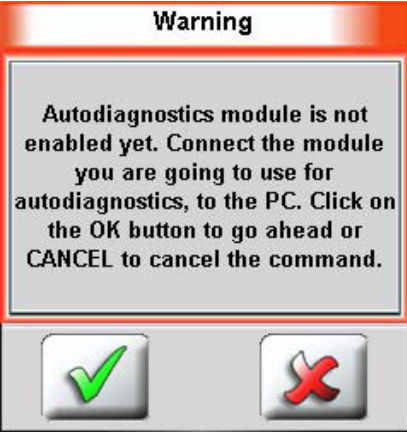
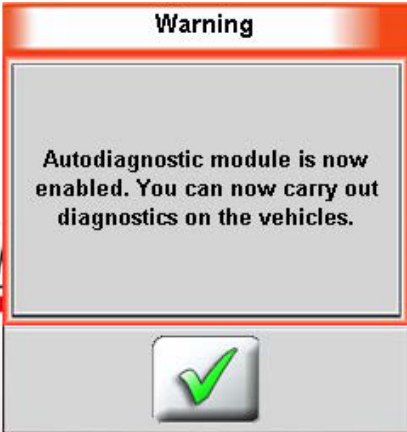


Warning






Make sure the devices are off before performing the connections described below.

	<p>Insert the Self-diagnosis Module into the suitable slot. Push gently until you hear it click into place; the retaining tab will lock the self-diagnosis module into place in its slot.</p>
	<p>Connect the diagnostic cable connector to the connector of the self-diagnosis module (BBAD). If the connector has been inserted correctly, you will hear the retaining clip click into place, indicating the connector has locked into place in the mating piece. To remove the connector, press the tab on the side and then pull.</p>
	<p>Connect the power cord to the self-diagnosis module. While inserting the connector, its armour will slide to lock the connector into place. To remove this connector, pull on the sliding armour and the connector will come clear.</p>
	<p>Connect the power supply clamps to the vehicle battery; be sure to connect the red clamp to the positive terminal and the black clamp to the negative terminal and make sure that the green light is flashing. If you invert the clamps, the self-diagnosis module will not damage; the module will not work. This connection is not necessary when the display is powered from the battery or via the EOBD diagnostic socket</p>

2.3.3 First start-up

 <p>The dialog box is titled "Language selection". It contains six flags: Italy, United Kingdom, France, Germany, Spain, and Portugal. At the bottom, there are two buttons: a green checkmark and a red 'X'.</p>	<p>Upon first start-up, the tool will automatically display a box prompting you to choose the language to be used.</p> <p>Just select the flag corresponding to the desired language and confirm with “ v “.</p> <p>It is possible to change the language at any time.</p>
 <p>The dialog box is titled "Warning". The text reads: "Autodiagnosics module is not enabled yet. Connect the module you are going to use for autodiagnosics, to the PC. Click on the OK button to go ahead or CANCEL to cancel the command." At the bottom, there are two buttons: a green checkmark and a red 'X'.</p>	<p>Upon first start-up, Socio will automatically run the BBAD enable routine.</p> <p>This procedure provides enhanced theft protection, as tool operation can only be enabled by the password holder.</p>
 <p>The dialog box is titled "Warning". The text reads: "Autodiagnostic module is now enabled. You can now carry out diagnostics on the vehicles." At the bottom, there is a single button with a green checkmark.</p>	<p>Follow the on-screen instructions. After the enable procedure, installation is completed and all functions of the SOCIO programme are available.</p>



 <p>Warning</p> <p>The software is executed for the first time. It is necessary to enter the workshop data to be reported in the print-out. Press the key to continue</p> 	<p>After the enable procedure, you will be prompted to enter the shop data that will be indicated in the diagnosis report.</p> <p>Fill in all available fields with your data, using the virtual keypad displayed when selecting each item.</p>																																										
 <p>SOCIO ver2.21</p> <table border="1"><thead><tr><th>Workshop</th><th>Configuration</th><th>Value</th></tr></thead><tbody><tr><td>Software setup</td><td>Address</td><td></td></tr><tr><td></td><td>City</td><td></td></tr><tr><td></td><td>Company name</td><td></td></tr><tr><td></td><td>Country</td><td></td></tr><tr><td></td><td>E-Mail</td><td></td></tr><tr><td></td><td>Fax</td><td></td></tr><tr><td></td><td>Name</td><td></td></tr><tr><td></td><td>Notes</td><td></td></tr><tr><td></td><td>Province</td><td></td></tr><tr><td></td><td>Surname</td><td></td></tr><tr><td></td><td>Telephone</td><td></td></tr><tr><td></td><td>VAT code</td><td></td></tr><tr><td></td><td>ZIP</td><td></td></tr></tbody></table> 	Workshop	Configuration	Value	Software setup	Address			City			Company name			Country			E-Mail			Fax			Name			Notes			Province			Surname			Telephone			VAT code			ZIP		<p>Then press the general functions menu button to go back to main Socio functions</p> 
Workshop	Configuration	Value																																									
Software setup	Address																																										
	City																																										
	Company name																																										
	Country																																										
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	ZIP																																										



Important

After the enable procedure (or an update), the SOCIO software will only work with the Self-diagnosis Module (BBAD) used when the software was enabled, as it needs to recognise the module Serial Number before it can operate.





Warning Press



to set the tool to starting settings and delete all data previously entered.

2.3.4 Updating the display hardware.

When updating the display cards and the self-diagnosis module (BBAD), there might be a further upgrade relevant to the tool mother board.
 In this case, the tool will display a page similar to the one below.

	<p>Follow the on-screen instructions, ensure the tool is powered from the outside and (if available) insert a charged battery.</p>
	<p>Upgrading procedure might require you to restart the display. Ensure the tool is always powered with the same power in any case.</p>



Warning

Failure to follow the above indications might cause display failure.



2.4 Operating instructions

2.4.1 How to start the SOCIO programme

The programme starts automatically when the display is switched on.

2.4.2 Legend of commands and meaning of icons

The following table provides a list of the icons used in the programme. A brief description is provided for each icon









Note









When running the programme, place and keep the stylus on an icon to view a description of the relevant command.

A “tool-tip” appears with a full-text description of the command.

MAIN MENU

DESCRIPTION		
Single arrow menu key	Lets you select work environment.	
Emission module key	Provides access to emission analysis environment.	
Update key	Setup for direct download of updates	
Setup key	Customised setup of peripherals and shop information.	
Measurement key	Provides access to measurement module	
Double arrow menu key	Provides access to general functions menu	










DESCRIPTION OF GENERAL FUNCTIONS MENU

DESCRIPTION		
Marketing module	Provides access to customer and customer vehicle management area.	
Vehicle selection	Lets you select vehicle to be diagnosed from the self-diagnosis database	
On-line Help	Provides instant access to on-line help.	
Control panel	Lets you customise display hardware settings (battery power save feature, display brightness, stand by, Bluetooth configuration, etc.)	
Language selection	Lets you select display language.	
Product information	HW and SW version.	
Print	Sends documents to a USB printer	
Power off	Saves settings and initiates correct shutdown procedure	



BROWSING

DESCRIPTION

EOBD	Allows vehicle diagnosis with no need of direct selection. It is necessary that self-diagnosis module is inserted in the display and is connected with EOBD cable	
Vehicle selection	Vehicle can be selected by choosing the brand, fuel, model and version. As an alternative, it is possible to recall it from the list of the last 10 vehicles. When you have selected the vehicle, two additional keys are enabled: technical information and system selection	 
Technical information	In this environment, you can browse scheduled maintenance information, timing belt information, general wiring diagrams and guided diagnosis (if available).	
Technical specifications	Provides access to the technical specifications of the selected vehicle.	
Scheduled maintenance	Displays a list of scheduled maintenance operations required at the different service intervals.	
Timing belts	This section contains the full instructions for timing belt replacement. Detailed descriptions and diagrams provide a step-by-step guide for the user to facilitate the replacement procedure	
General wiring diagrams	Displays the wiring diagrams of the selected vehicle with component descriptions.	
Vehicle's failure log	Allows you to check a known fault detected on the vehicle under consideration	

BROWSING

DESCRIPTION

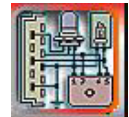
System selection

Lets you select the electronic system of the vehicle to be diagnosed. When you have selected the system, some additional keys are enabled: **diagnosis, road test and step-by-step diagnosis**



System wiring diagrams

Allows you to select the wiring diagram of the system to be diagnosed. The diagram is interactive, click on the single components to display the technical details, the drawing and position in the diagram.



Diagnosis

Enables communication with the ECU. Activating this function enables the buttons that give access to the following functions: view parameters and states, view errors, actuators, diagnostic report, system technical documentation.



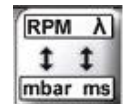
Parameters and states

Displays the parameters and states made available by the ECU.



Change parameters/states

Lets you select and change displayed parameters and states to suit specific diagnostic needs.



Save data to report

Lets you save self-diagnosis data in the report.



Change display mode









Lets you change the display mode of selected parameters/states from tabular form (values) to graphical from (histograms).















BROWSING

DESCRIPTION

Errors	Lets you view the errors stored in the ECU. The View Errors function is active as long as communication with ECU is maintained.	
Actuators	Lets you check operation of actuators and components connected to ECU.	
Actuate component	Lets you actuate the selected component	
Actuation sequence	Lets you select several components and actuate them in a sequence	
Settings	Lets you set some special parameters.	
ECU Info	Displays general information on the ECU and its SW release.	
Report	Lets you view the data stored during the diagnosis procedure. (parameters and states, errors, actuated components, settings, etc.).	
Specifications	Displays the specifications of the system you are diagnosing.	







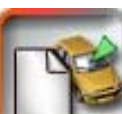


BROWSING

DESCRIPTION		
Start/Stop	Turns communication with ECU on and off.	
Road test	Enables diagnosis and detection of parameters/states during a road test. The progression over time of up to three parameters can be recorded and stored on the card	
Change reference system	Lets you choose between graphical display with one reference system or with 3 separate graphs.	
Select road test parameters/states	Lets you select up to three parameters to be stored during a road test	
View errors	Lets you view the errors detected during a road test	
Acquisition start	Lets you set data acquisition parameters, such as acquisition time and when acquisition will start (right away, when an error occurs, from within a given range of a particular parameter).	
Play	Lets you view the information recorded during a road test.	
Save road test	Lets you save a road test to retrieve it at a later time.	
Retrieve road test	Lets you retrieve a road test saved previously.	
Time base rule	Lets you set the time base for road test display.	






BROWSING

DESCRIPTION

Marketing Module	Provides full customer information: customer details, vehicle information, repairs grouped by work order, maintenance schedules, diagnostic and road test reports. In other words, it provides an overview of the vehicle's repair history.	
Add new customer	Lets you add a new customer record to the marketing database.	
Add new vehicle	Lets you add a new vehicle to the database and associate vehicle to an existing customer	
Find customer/vehicle	Lets you locate a customer or a vehicle searching the database by customer surname or vehicle frame number .	
Delete customer	Removes customer from marketing database	
Delete vehicle	Removes vehicle from vehicle database	
Work order	Lets you create and manage a work sheet listing all repairs required by a vehicle. You can also enter specific customer requests manually using a virtual keyboard.	
Planning	Lets you plan shop activities and retrieve them by date, type, customer and vehicle.	
Self-diagnosis log	Keeps a log of all self-diagnosis operations performed on a vehicle based on diagnosis and road test reports.	

2.4.3 User interface and screen pages

The table below reports a few example screen-shots.

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Vehicle selection</p>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Position of diagnostic socket</p>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Routine maintenance guide</p>	



2.4.4 EOBD diagnosis

For EOBD diagnosis, you need not select the system from the System Database; to establish communication with the ECU once you have performed the necessary connections, all you need to do is press the EOBD button from the main menu. For connection to an ECU equipped with EOBD port, use the S641 cable.



Warning:

EOBD diagnosis will only work with vehicles that support this protocol.



Important

When you select the vehicle from the database - even for EOBD Diagnosis - you will obtain useful information, such as the location of the diagnostics port.

2.4.5 How to use the vehicle database

After activating the relevant functions from the menu, you can select a vehicle in one of two ways:

- Select in the order: make, fuel, vehicle model and version
- Choose from the last ten vehicles diagnosed.



Warning:

Before connecting the diagnosis connector to the vehicle system, ensure that the cable is the number specified by the software when selecting the ECU to be diagnosed.



Warning:

For correct vehicle diagnosis, all specifications of the system to be diagnosed must be selected correctly.



Warning:

The status of communication with ECU can be monitored on a dedicated graphic display.



Warning:

If there are any errors stored in the ECU, the corresponding graphic display is turned on.

2.5 Troubleshooting

2.5.1 Problems during operation

Problem: After selecting a vehicle correctly, the tester reads “system not enabled”

Remedy Enable or update session omitted or failed.
Check your ID and Password
Repeat the update procedure.

Problem: Failure to establish communication with ECU

Remedy Make sure the vehicle and ECU selected in the software match the system to be diagnosed.

2.6 Appendix

2.6.1 Warranty information

This product is covered by 12-month warranty from date of purchase. For detailed information on warranty terms and service procedures, please see the Warranty Terms and Conditions or contact TECNOMOTOR S.p.A. “Customer Service”.