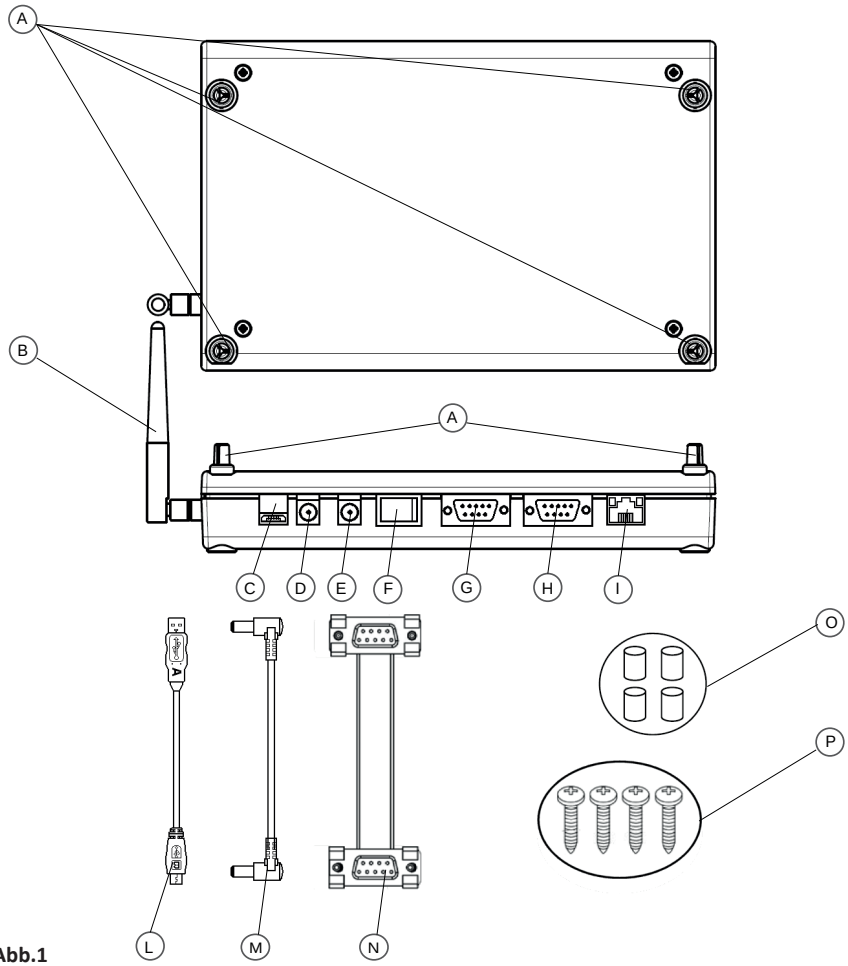
M-BOX

OperatingManual

D446559XA

vers. 1.0



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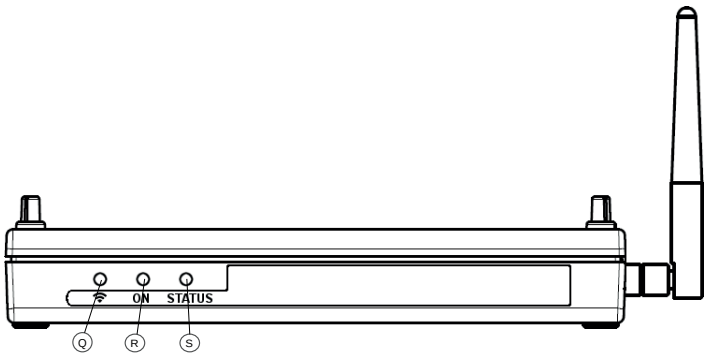

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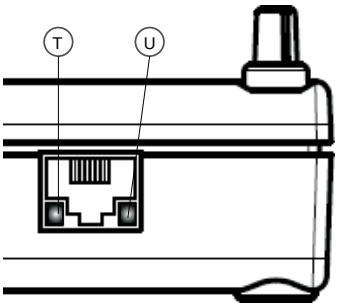

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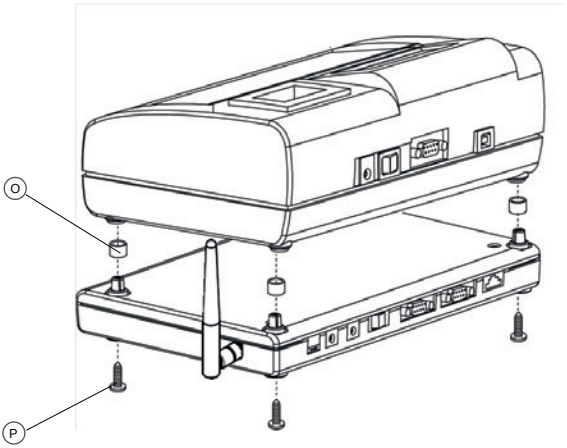

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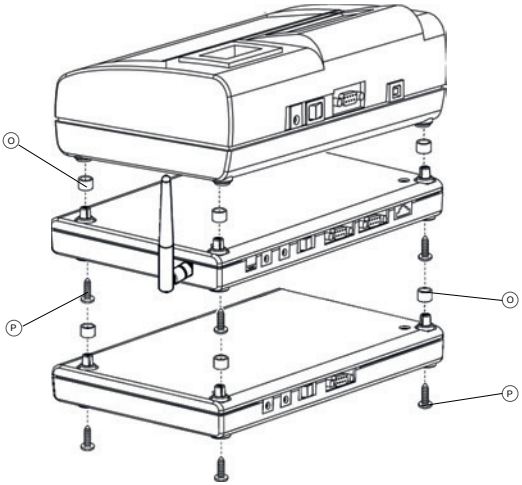

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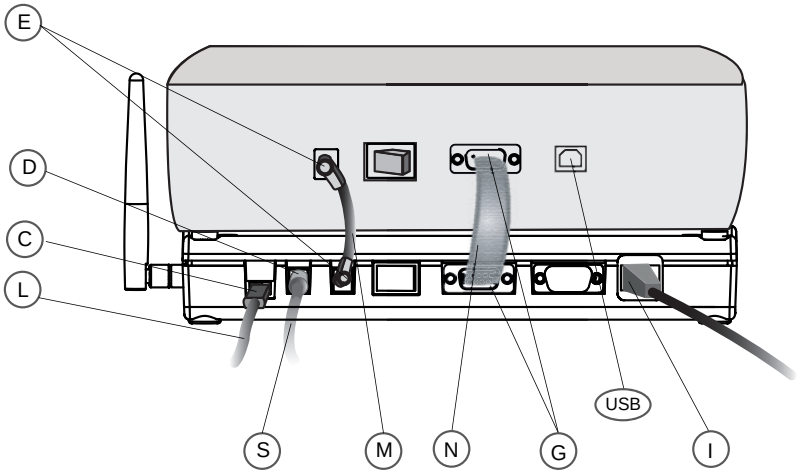

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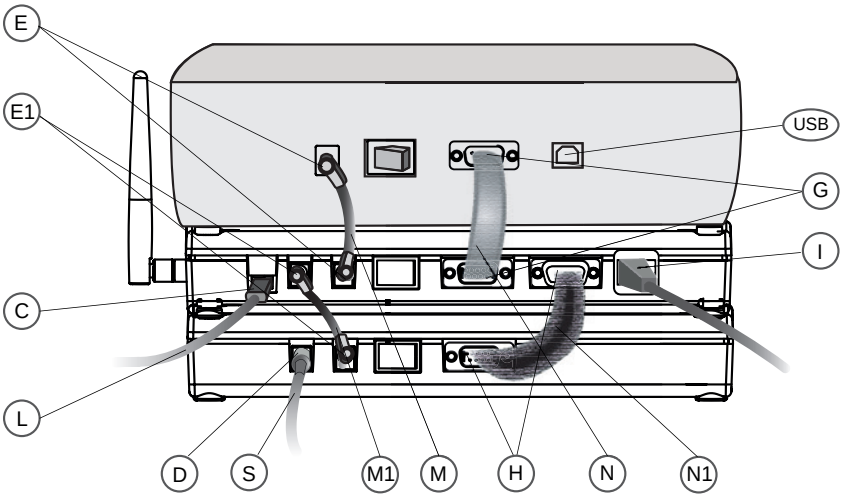

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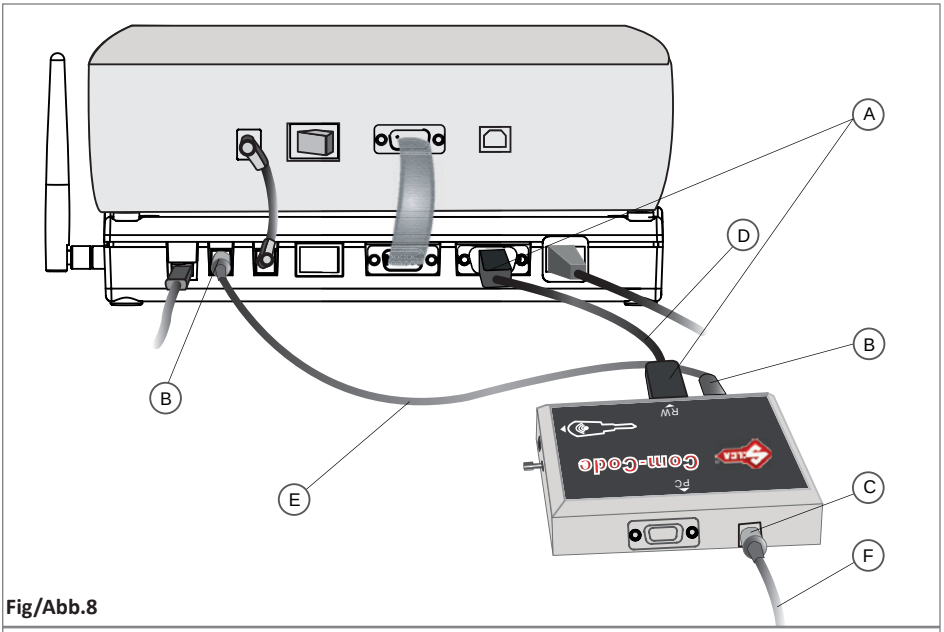

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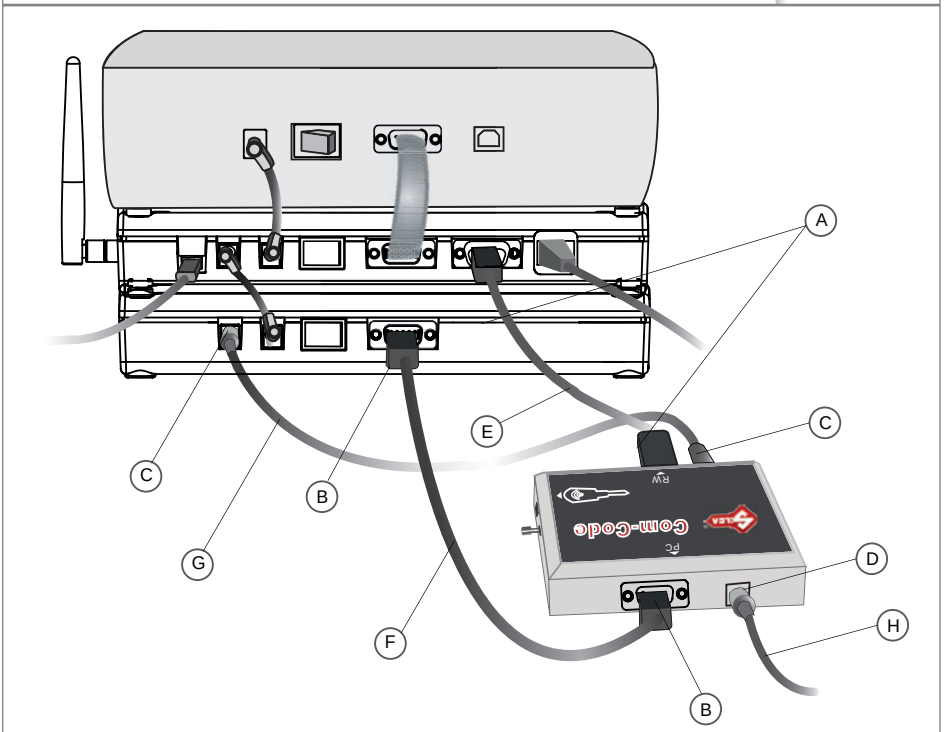

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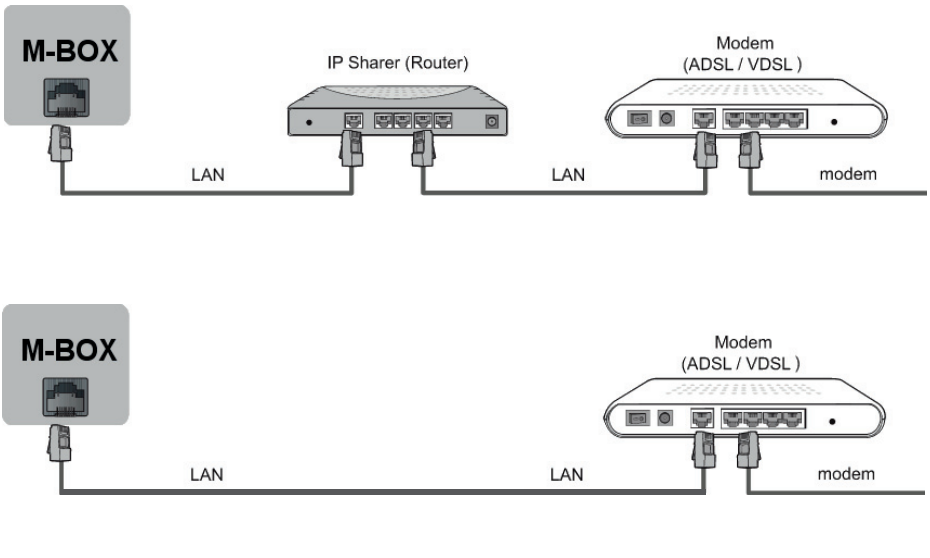

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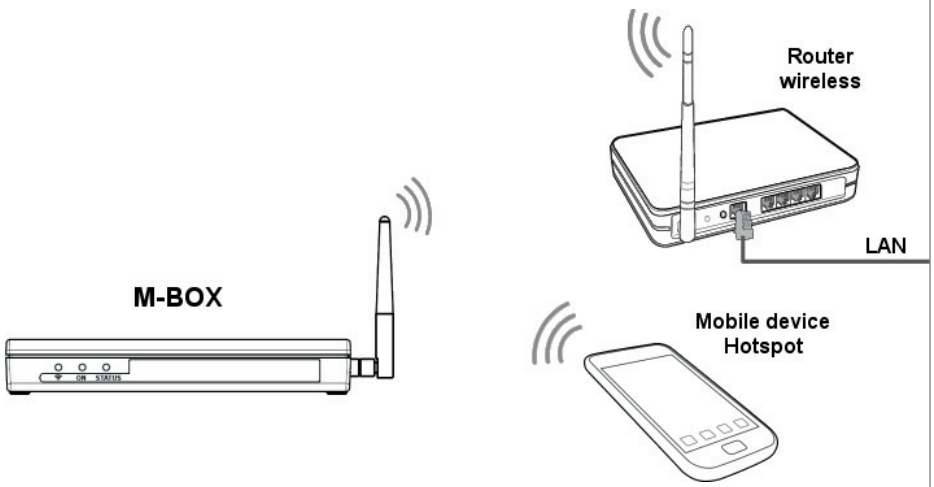


Fig/Abb.11

DEVICE DESCRIPTION

The M-BOX device is used to connect Silca devices to the Internet through LAN or WI-Fi:
RW4 Plus,
FastCopy Plus,
Ezclone Plus,
RW4 with P-BOX,
FastCopy with P-BOX,
Ezclone with Plus-BOX
in order to copy vehicle keys with Megamos® Crypto **transponder (ID48).**

IMPORTANT Notes:
- Prepare an Internet connection accessible via cabled LAN or a Wi-Fi router.
- RW4, FastCopy and Ezclone devices not connected to a P-BOX cannot make copies of ID48.

TECHNICAL DATA

Power supply

Device power supply: 15 ⎓ (+ o - 10%) - 700mA
Universal AC/DC power supply conforming to certified IEC/EN 60950-1'.

IMPORTANT Notes:
- The M-BOX device must be powered through a universal charger and the cable provided with all RW4 Plus, FastCopy Plus, Ezclone Plus, RW4, FastCopy and Ezclone devices.

Environmental conditions

The M-BOX device will operate at ambient temperatures from -20°C to +55°C.

Dimensions

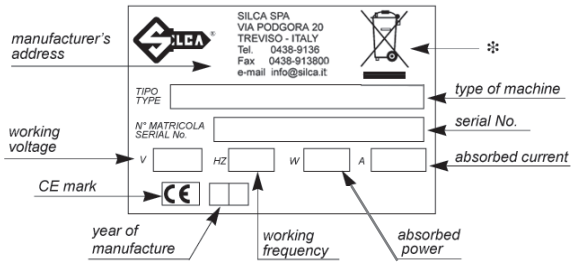
Length 157 mm
Width 275 mm
Height 38mm (105mm with antenna in vertical position)

Weight

0.5 Kg.

Product identification

The **Silca serial number / Mac Adress WI FI** is given on the label under the device.



WORKING PARTS

The device has an extremely simple structure:

(Fig.1)

A - pins to attach to RW4/FastCopy/Ezclone devices B - WiFi antenna to screw into special seating C – micro USB communications port D – input power supply connector E – output power supply connector F – switch	G - RS232 communication port for RW4/FastCopy / Ezclone machines H - RS232 communication port for optional modules I - LAN Ethernet RJ-45 port for connection to web L - USB A / Micro B cable for communication with PC M - power supply cable from M-BOX to RW4/ FastCopy/Ezclone N – serial cable for connection to RW4/FastCopy/ Ezclone O – pin gaskets P – fixing screws

FEATURES

FRONT PANEL

The front panel contains 3 LEDs:

(Fig.2)

Q – bicolour “Wi-Fi” LED:
- blue fixed light indicates that M-BOX is connected to a Wi-Fi network.
- blue flashing light indicates data exchange from M-BOX to the internet.
- violet fixed light indicates that M-BOX is turning on.
- off indicates Wi-Fi not active.

R – green “ON” LED:
- fixed light indicates that M-BOX is on and working.
- fast flashing light indicates an anomaly on M-BOX.

S – red “STATUS” LED:
- off indicates that the Silca server has received no requests for data with which to copy keys.
- slow flashing light indicates that M-BOX is waiting for the Silca server to send data calculated for copying one or more keys.
- fast flashing light indicates that the data required for copying are ready to be downloaded from the Silca server.
- fixed light for 3 seconds and 3 fast flashes indicate there is no Internet connection.

LAN PORT ON REAR PANEL

The LAN port located on the rear panel contains 2 LEDs:

(Fig.3)

T – green “connection/activity” LED:
- flashing light indicates activity on the port.
- off indicates no activity on the port.

U – green and amber “speed indicator” LED:
- amber section on indicates a 1 Gbps connection.
- green section on indicates a 100 Mbps connection.
- off indicates a 10 Mbps connection.

DEVICE CONNECTION

MECHANICAL CONNECTION

The M-BOX module is designed to be integrated with the following machines: RW4 Plus, FastCopy Plus, Ezclone Plus, RW4 with P-BOX, FastCopy with P-BOX and Ezclone with Plus-BOX

Connecting to RW4 Plus, FastCopy Plus and Ezclone Plus

- Make sure the machine is turned off.
- Disconnect the power supply cable from the machine.
- Disconnect the RS-232 and/or USB communication cables from the machine.
- Remove the four rubber feet on the bottom of the machine. **(Fig.4)**
- Place M-BOX on a bench with the pins **(A)** pointing upwards.
- Fit the gaskets **(O)** onto the pins.**(Fig. 4)**
- Place the machine on top of the M-BOX making sure the four pins enter the holes on the bottom of the machine.
- Hold the devices together and turn upside down.
- Screw the screws **(P)** into the bottom of M-BOX and tighten well.
- Fit the four rubber feet into the holes on the bottom of M -BOX.

Connecting to RW4 with P-BOX, FastCopy with P-BOX and Ezclone with Plus-BOX

IMPORTANT Notes:

- The RW4, FastCopy and Ezclone devices must have the P-BOX or Plus-BOX module in order to make copies of Megamos® Crypto transponders.
- The M-BOX module must be placed between the RW4 (FastCopy/Ezclone) device and the P-BOX module.
- Make a note of the M-BOX device ID (Silca serial number and Mac-Address Wi-Fi) given on the labels located under the device. These are necessary for the registration of the M-BOX device.

- Make sure the machine and P-BOX module are off.
- Disconnect the power supply cable from the P-BOX module.
- Disconnect the power supply cable between the P-BOX module and machine.
- Disconnect the USB communication cable from the machine.
- Disconnect the RS-232 serial communication cable between the machine and P-BOX module.
- Remove the four rubber feet located on the bottom of the P-BOX module. **(Fig.5)**
- Loosen the fixing screws on the bottom of the P-BOX module. **(Fig.5)**
- Carefully separate the P-BOX module from the machine. **(Fig.5)**
- Place the M-BOX module on a bench with the pins **(A)** pointing upwards.
- Fit the gaskets **(O)** onto the pins **(Fig.5)**
- Place the machine on top of M-BOX making sure the four pins enter the holes in the bottom of the machine.
- Screws the fixing screws into the bottom **(P)** of M-BOX and tighten well.
- Place the P-BOX module on a bench with the pins **(A)** pointing upwards.
- Fit the gaskets **(O)** onto the pins **(Fig.5).**
- Place the M-BOX module and machine on top of the P-BOX module making sure the four pins enter the holes on the bottom of the M-BOX module. **(Fig.5)**
- Hold the devices together and turn upside down.
- Screw the fixing screws **(P)** into the bottom of P-BOX and tighten well.
- Fit the four rubber feet into the holes on the bottom of P-BOX.

ELECTRICAL CONNECTION

When the M-BOX module has been installed under the RW4 Plus, FastCopy Plus, Ezclone Plus, RW4 with P-BOX or FastCopy with P-BOX or Ezclone with Plus-BOX machines make the electrical connection:

Connecting to RW4 Plus or FastCopy Plus or Ezclone Plus. (Fig.6)

- Connect the power supply cable (M) provided with the M-BOX module to the connectors (E).
- Connect the RS-232 serial communication cable (N) provided with the M-BOX module to the connectors (G)
- Fit the machine power supply cable (S) into the connector (D).
- To connect the M-BOX module to a PC fit the USB cable provided (L) into the M-BOX port (C).
- To connect to the LAN network fit an Ethernet cable (not provided) into the connector (I).

Connecting to RW4 with P-BOX or FastCopy with P-BOX or Ezclone with Plus-BOX (Fig.7)

- Connect the power supply cable (M) provided with the M-BOX module to the connectors (E).
- Connect the power supply cable (M1) provided with the P-BOX module to the connectors (E1).
- Connect the RS-232 serial communication cable (N) provided with the M-BOX module to the connectors (G).
- Connect the RS-232 serial communication cable (N1) provided with the M-BOX module to the connectors (H).
- Fit the machine power supply cable (S) into the connector (D).
- To connect the M-BOX module to a PC fit the USB cable provided (L) to the M-BOX port (C).
- To connect to the LAN network fit an Ethernet cable (not provided) into the connector (I).

CONNECTING THE COM CODE MODULE (OPTIONAL)

Connecting to a RW4 Plus or FastCopy Plus or Ezclone Plus (Fig.8)

- Connect the connectors (A) to the communication cable (D) provided with the COM-CODE module.
- Connect the connectors (B) to the communication cable (B) provided with the COM-CODE module.
- Connect the connector (C) to the machine power supply cable (F).

- If any other connections are required, see the M-BOX connection diagram for RW4 Plus or FastCopy Plusor Ezclone Plus

Connecting to RW4 with P-BOX or FastCopy with P-BOX or Ezclone with Plus-BOX (Fig.9)

- Connect the connectors (A) to the communication cable (E) provided with the COM-CODE module
- Connect the connectors (B) to the communication cable (F) provided with the COM-CODE kit for P-BOX (OPTIONAL).
- Connect the connectors (C) to the power supply cable (G) provided with the COM-CODE module.
- Connect the connector (D) to the machine power supply cable (H).

- If any other connections are required, see the M-BOX connection diagram for RW4 with P-BOX or FastCopy with P-BOX or Ezclone with Plus-BOX.

OPERATING GUIDE

REGISTERING THE M-BOX DEVICE

The M-BOX device mustb e registered in order to access the Silca Web services. This operation can bep erformed from any internet browser through the link silcawebsw site or by means of the Silca Remote Service program.
For details of the procedure see the instructions provided by the Silca Remote Service program.

ATTENTION: to register the product you need the M-BOX device ID (Silca serial number and Mac-Address Wi-Fi). These can also be found on the labels located under the device.

M-BOX CONFIGURATION

Toconfigure the M-BOX device you need to connect the device to a PC USB port using the USB cable provided (type A/Micro B). On website Silca provides a Windows program called Silca Remote Service or SRS to guide the operator through configura tion.
T Follow the path described below:
“Products-> Silca Key Programs -> SKP Modules-> Silca Remote Service”

NOTE:

All details of the stages for M-BOX configuration are given in the on-line instructions provided by the Silca Remote Service program.

CONNECTING M-BOX TO THE INTERNET

The M-BOX device can be used only with an internet connection.
There are two ways to connect to the internet (cabled LAN network; Wi-Fi Wireless network).
Both can be configured and enabled, but remember that first choice for the device is always a cabled LAN connection.

CONNECTING TO A LAN NETWORK (CABLED NETWORK)

The M-BOX device can be connected to its local network by connecting a standard LAN cable (Ethernet/Cat 5) to the LAN port located on the back of the M-BOX.

(Fig.10)

M-BOX is configured by default to automatically obtain an IP address from the network through the Dynamic Host Configuration Protocol (DHCP). For advanced network settings (fixed IP address, subnet mask, gateway, etc.) see the **Silca Remote Service** program.

CONNECTING TO THE WI-FI NETWORK (WIRELESS)

The M-BOX device can be connected to its WIRELESS network by specially configuring the SSID and password of a chosen Hot Spot (router or Wi-Fi modem or mobile tethering device). Use the guided procedure described in the Silca Remote Service program.

Wi-Fi connected M-BOX is configured by default to automatically obtain an IP address from the Wi-Fi network through the Dynamic Host Configuration Protocol (DHCP). For advanced network settings (fixed IP address, subnet mask, gateway, etc.) see the Silca Remote Service program.

NOTE:
- The security protocols compatible with M-BOX are: WPA, WPA2 and WEP.
- M-BOX takes IEEE 802.11 b/g/n communication protocols.
- To ensure a reliable connection:
- The distance between the router and M-BOX must be less than 10 metres.
- The device antenna must always be in the vertical position.

(Fig.11)

SOFTWARE UPDATES

The M-BOX device program updates itself automatically by means of a web service provided by SILCA. If this is not available, updating can take place through the **Silca Remote Service** PC program.

The M-BOX device can download updated software for RW4 Plus, FastCopy Plus, Ezclone Plus, RW4 FastCopy, Ezclone from the Internet and apply it through a direct serial connection.

All details are given in the specific manuals for RW4 Plus, FastCopy Plus, Ezclone Plus, RW4, FastCopy, Ezclone.

INFORMATION FOR USERS OF PROFESSIONAL EQUIPMENT

From "Actuation of Directive 2012/19/EU regarding Waste Electrical and Electronic Equipment (WEEE)"

The symbol of a crossed waste bin found on equipment or its packing indicates that at the end of the product's useful life it must be collected separately from other waste so that it can be properly treated and recycled.
In particular, separate collection of this professional equipment when no longer in use is organised and managed:

a)directly by the user when the equipment was placed on the market before 31 December 2010 and the user personally decides to eliminate it without replacing it with new equivalent equipment designed for the same use;

b)by the manufacturer, that is to say the subject which was the first to introduce and market new equipment that replaces previous equipment, when the user decides to eliminate equipment placed on the market before 31 December 2010 at the end of its useful life and replace it with an equivalent product designed for the same use. In this latter case the user may ask the manufacturer to collect the existing equipment;

c) by the manufacturer, that is to say the subject which was the first to introduce and market new equipment that replaces previous equipment, if it was placed on the market after 31 December 2010;

Suitable separate collection for the purpose of forwarding discarded equipment for recycling, treatment or disposal in an environmentally friendly way helps to avoid possible negative effects on the environment and human health and encourages re-use and/or recycling of the materials making up the equipment.

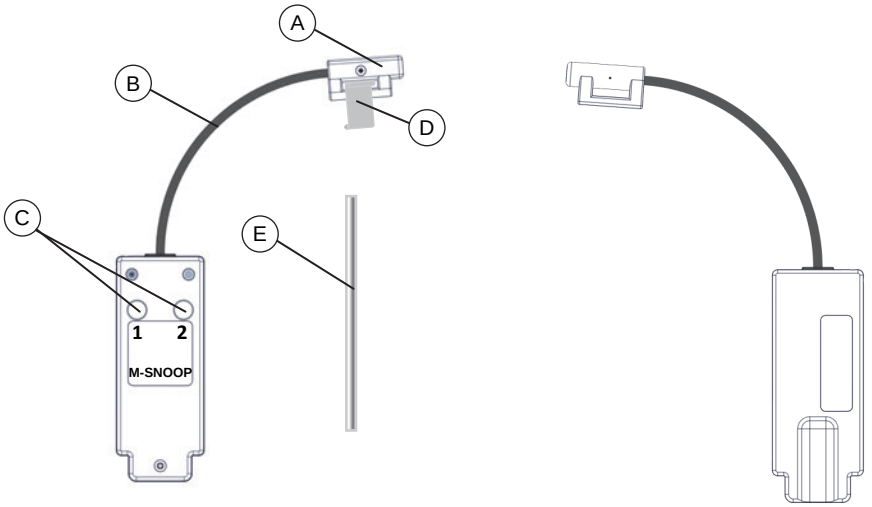
The sanctions currently provided for by law shall apply to users who dispose of products in unauthorised ways.

M-SNOOP

Operating Manual

D446583XA

Vers. 1.0



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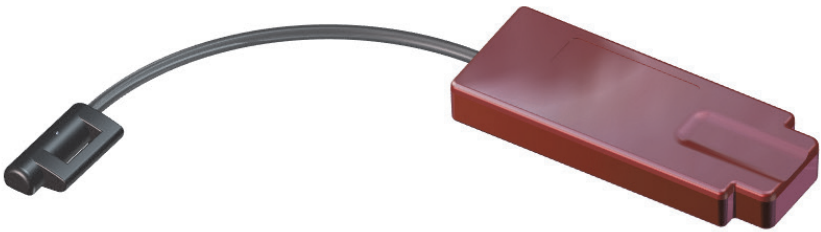

Fig./Abb2

Fig./Abb3

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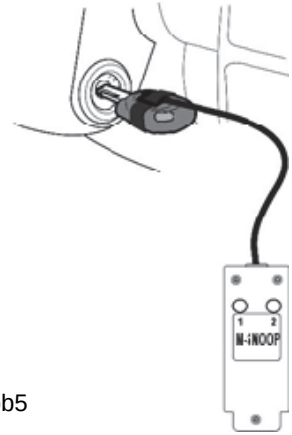

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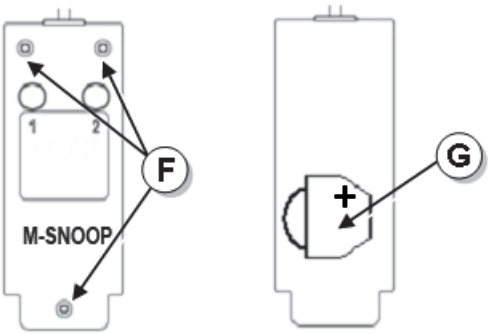

Fig./Abb.6

EQUIPMENT AND WORKING PARTS *(Fig.1)*

A – Antenna
B – Antenna cable
C – LED signal (1 and 2)
D – Elastic band
E – Belt

DEVICE DESCRIPTION *(Fig.2)*

The device is used for data logging to make copies of keys with Megamos® Crypto transponders together with the machines:

Silca ***RW4 and P-BOX, FastCopy and P-BOX, and M-BOX ; Ezclone and Plus Box and M-BOX***
Silca ***RW4 PLUS , FastCopy PLUS and M-BOX ; Ezclone Plus and M-BOX***

To see the list of vehicle makes and models for which keys can be copied, consult the key blanks in the Silca catalogues and updates.

USE *(Fig.3)*

See RW4 and FastCopy (Plus) operating manuals:"Copy Megamos® Crypto (ID48) Transponders" chapter.
Environmental conditions: The M-SNOOP working operates at an ambient temperature of -20 to +55°C.
Positioning on the machine **(test, reading and writing operations): Place M-SNOOP as shown in the illustration.**
Positioning antenna on key (for use on the vehicle only):
The M-SNOOP antenna must be attached to the head of the key to be copied. See Fig.4.
Place the antenna in the centre of the key head. Secure the antenna to the key with the elastic band (D).

Use on the vehicle *(Fig.5)*

- Insert the key with the M-SNOOP antenna attached into the ignition switch.
- Turn on the vehicle control panel; LED “1” on M-SNOOP will flash for a few seconds to indicate that the first data reading operation has been successful.
- When LED “1” goes out, turn off the control panel and remove the key.
- Wait 10-20 seconds or until the immobilizer warning light starts flashing, if applicable.
- Insert the key into the ignition switch again.
- Turn on the vehicle control panel; LED “1” on M-SNOOP will go on and LED “2” will flash for a few seconds to indicate that the second reading operation has been successful.
- When LED “1 and 2” goes out, turn off the control panel and remove the key.
- Wait 10-20 seconds or until the immobilizer warning light starts flashing, if applicable.
- Insert the key into the ignition switch again.
- Turn on the vehicle control panel; LED “1 and 2” on M-SNOOP” will flash for a few seconds to indicate that the third reading operation has been successful. Both LEDs will go out.

M-SNOOP now has the necessary data to transmit to the machine for a copy of the original key. Turning on the vehicle control panel again will put the M-SNOOP LEDs permanently ON, which indicates that all the necessary data has been downloaded.

- If there are problems during data logging (LEDs do not go on) try:
  placing the antenna in a different position so that when the key is in the ignition switch the antenna is farther away or nearer to the switch.

BATTERY REPLACEMENT *(Fig.6)*

- Carefully loosen the three screws (F) and remove the cover.
- Insert a non-metallic point into slot (G) of the battery holder and press lightly to remove the battery.
- Fit a new 2032 lithium battery.

ATTENTION: fit the battery with the "+" sign towards the battery holder, as shown. Close the M-SNOOP device without forcing the 3 screws (F).

WASTE DISPOSAL

From "Actuation of Directive 2012/19/EU regarding Waste Electrical and Electronic Equipment (WEEE)"

The symbol of a crossed waste bin found on equipment or its packing indicates that at the end of the product's useful life it must be collected separately from other waste so that it can be properly treated and recycled .

In particular, separate collection of this professional equipment when no longer in use is organised and managed :

a. directly by the user when the equipment was placed on the market before 31 December 2010 and the user personally decides to eliminate it without replacing it with new equivalent equipment designed for the same use ;

b. by the manufacturer, that is to say the subject which was the first to introduce and market new equipment that replaces previous equipment, when the user decides to eliminate equipment placed on the market before 31 December 2010 at the end of its useful life and replace it with an equivalent product designed for the same use. In this latter case the user may ask the manufacturer to collect the existing equipment;

c. by the manufacturer, that is to say the subject which was the first to introduce and market new equipment that replaces previous equipment, if it was placed on the market after 31 December 2010 ;

With reference to **portable batteries/accumulators,** when such products are no longer in use the user shall take them to suitable authorised waste treatment facilities.

Suitable separate collection for the purpose of forwarding discarded equipment and batteries/ accumulators for recycling, treatment or disposal in an environmentally friendly way helps to avoid possible negative effects on the environment and human health and encourages re-use and/or recycling of the materials making up the equipment.

To remove batteries/accumulators, consult the manufacturer's specific instructions: *(see relevant chapter in the users' manual).*

The sanctions currently provided for by law shall apply to users who dispose of equipment, batteries and accumulators in unauthorised ways .

Declaration of Conformity

We, the undersigned,

Company	SILCA S.p.A.

certify and declare under our sole responsibility that the following equipment:

Product description / Intended use	Key Data Acquisition for Automotive use at
EU / EFTA member states intended for use	**EU**: all members **EFTA**: all members
Member states with restrictive use	none
Manufacturer	SILCA S.p.A. I - 31029 Vittorio Veneto (TV)
Brand name	SILCA
Type/Model	M-SNOOP

is tested to and conforms with the essential requirements for protection of health and the safety of the user and any other person and Electromagnetic Compatibility, as included in following standards:

Standard	*Issue date*
EN 50371	2002
EN 60950-1	2006
EN 301 489-3	V1.4.1 (2002-08)
EN 301 489-1	V1.8.1 (2008-04)

and is tested to and conforms with the essential radio test suites so that it effectively uses the frequency spectrum allocated to terrestrial/space radio communication and orbital resources so to as to avoid harmful interference, as included in following standards:

and therefore complies with the essential requirements and provisions of the **Directive 1999/5/EC** of the European Parliament and of the council of March 9, 1999 on Radio equipment and Telecommunications Terminal Equipment and the mutual recognition of their conformity and with the provisions of Annex II.

TCF reference nr.	TCF_CCAT 004
Date	February 08 , 2016
Sign	
Name and position	Dott. Setti Stefano Plant Manager