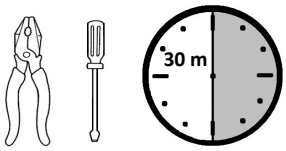
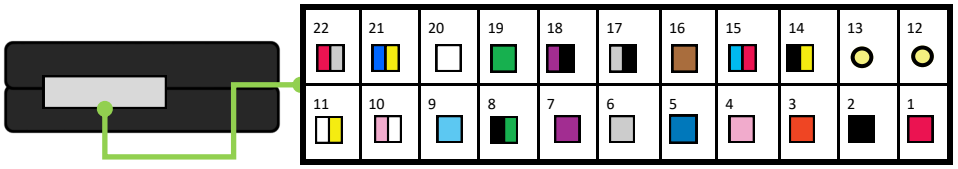
UNICO DUAL PIONEER
CANBUS-KBUS-RESISTIVE
INSTALLATION MANUAL



DESCRIPTION

UNIVERSAL adapter for the OEM steering wheel commands connection.
Its compatibility extends to a wide range of vehicles having **CAN BUS - KBUS** and **Resistive** protocols and to the PIONEER with wired remote control input.
The functions are totally managed by a microprocessor able to self-recognize the steering wheel commands protocol.
The CAN BUS - KBUS protocol setting is managed in SELF-SELECTION.
The Resistive setting is made by following a simple procedure that assign to the unit the functions of the buttons available on the steering wheel.
The present unit allows the integrations in those vehicles in which are available different communication systems; for example, when the car has the steering wheel commands Resistive and the services, such as lights, power ignition, odometer etc, in CAN BUS protocol.

CABLE WIRES DESCRIPTION



POS.	COLOUR	FUNCTION
1	RED	12V
2	BLACK	GND
3	ORANGE	LIGHTS OUTPUT
4	PINK	RESISTIVE INPUT
5	BLUE	REVERSE OUTPUT
6	GREY	AUX 1 (WITH RESISTANCE 1.5k IN SERIES)
7	VIOLET	RADIO RESISTIVE OUTPUT
8	GREEN/BLACK	AUX 3 (WITH RESIST. 560 ohm TO THE GND)
9	LIGHT BLUE	AUX 4 (WITH RESIST. 3.3 k TO THE GND)
10	PINK/WHITE	AUX 5 (WITH RESIST. 1 k TO THE GND)
11	YELLOW/WHITE	HANDBRAKE OUTPUT
12		INFRARED CATHODE
13		INFRARED ANHODE
14	YELLOW/BLACK	AUX 6 (WITH RESIST. 4,7 k TO THE GND)
15	RED/BLUE	AUX 7 (WITH RESIST. 220 ohm TO GND)
16	BROWN	RADIO CODE OUTPUT
17	GREY/BLACK	GND
18	VIOLET/BLACK	K-BUS
19	GREEN	CAN H
20	WHITE	CAN L
21	BLUE/YELLOW	STK OUT
22	RED/GREY	ODOMETER

ATTENTION!

For a right working of the module, please connect the following wires: RED, BLACK (power feeding) and the WHITE and GREEN (CAN) and the radio adapter supplied into the kit, inserting the 4 poles connector into the module harness and the jack to the steering wheel command input of the radio. For more details about the connection CAN, please consult CONNECTION DIAGRAMS.

ATTENTION! In case of PIONEER RADIO, phone buttons are NOT managed!

DIP SWITCHES

UNICO DUAL has 4 dip switches. Dips 1 and 2 must be set before the installation. Dips 3 and 4 are necessary only to manage special functions for some cars. It's important to make the right dip switches setting in order that the unit works properly.

RESISTIVE PROTOCOL	DIP 1 ON
CAN BUS / K-BUS PROTOCOL	DIP 1 OFF
HYBRID PROFILE: RESISTIVE STEERING WHEEL COMMANDS CANBUS SERVICES OUTPUTS	DIP 1 and 2 ON
OPTIONS MANAGEMENT	DIP 3 ON
UNIT SOFTWARE UPGRADING	DIP 4 ON

SET THE DIP SWITCHES WITH UNICO DUAL NOT POWERED

ATTENTION! YOU ALWAYS MUST TO SET DIP 3 AND 4 IN POSITION "OFF" ONCE THE SETTING IS DONE

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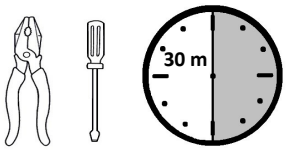
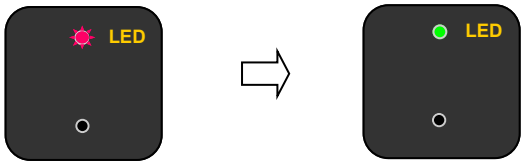


CANBUS-KBUS CONFIGURATION

Selection of the CAN BUS - KBUS protocol is carried out in SELF-LEARNING; Once the connections are done, by powering the unit, in a few seconds the synchronization is coming, operation shown by short RED blinking of the module's LED. As soon as the vehicle is recognized, the LED will light GREEN. This indicates that the unit selected the car protocol.

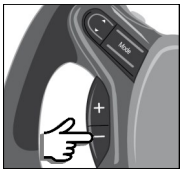


Plug the REMOTE adapter back the radio. The unit is ready to work.
For the connections follow the table CANBUS KBUS CONNECTIONS.
In case of troubles reset the unit.

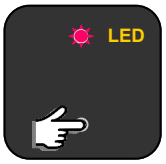
RESISTIVE PROTOCOL CONFIGURATION

Management of resistive protocols is done through a **programming procedure**; Once done the connections, turn on the ignition to supply power to UNICO DUAL ; the LED will flash RED quickly, indicating that the condition **"no button pressed"** is memorized.
Now follow the steps below.

Assign desired functions to each of the buttons/levers of the vehicle's steering wheel command. The allocation of functions follows the sequential logic described in FUNCTIONS TAB below. The first function available is VOLUME —.
Each time you press a steering wheel button/lever, UNICO DUAL LED emits a short RED flash to indicate the successful storage of the function.



To skip a function simply press quickly the button UNICO DUAL.
It's possible to memorize maximum 8 buttons/levers. If buttons/levers are less than 8, it is necessary to exit the procedure.



To exit the procedure, you must press and keep pressed one of the memorized buttons till the **LED light YELLOW. As soon as you release the button, LED will light GREEN.**
Plug the REMOTE adapter back the radio, unit is ready to work.

Unit is ready to work when LED light GREEN, now if you press any button memorized, LED will light YELLOW.
In case of anomaly, do the procedure of RESET

FUNCTIONS TABLE	
FUNCTION	**PIONEER**
1	**VOLUME —**
2	**VOLUME +**
3	**SEEK —**
4	**SEEK +**
5	**SOURCE**
6	**MUTE**
7	**UP/BAND**
8	**DOWN/UP**
9	**X/DOWN**
10	**X/FUNC**

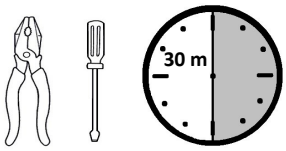
WARNING

IF YOU NEED TO INSTAL THE SAME IN A NEW CAR (EVEN IF IN A SAME GROUP MODEL) IT IS NECESSARY TO RESET THE MODULE.

RESET:

1. **WITH THE UNIT POWERED, PRESS AND KEEP PRESSED THE UNICAN BUTTON TILL THE LED SWITCH OFF.**
2. **WITH THE LED SWITCHED OFF RELEASE THE BUTTON, THE RESET IS DONE.**

UNICO DUAL PIONEER CANBUS-KBUS-RESISTIVE INSTALLATION MANUAL



DETAILS

UNICO DUAL was born principally to recover the steering wheel commands functions dedicated to the car radio.
This module allows you to control a wide range of aftermarket car radio directly by OEM steering wheel commands.

UNICO DUAL has others functionality that are important for the integration of the aftermarket systems in the car.

AMPLI WAKE UP
This feature permits to control of the OEM amplifier so to recover all the functions of the system without bypassing the OEM device.
This function is active by default; see the table of compatibilities to know the car compatible models.

PARKING SENSORS RECOVER
This function permits to recover the OEM parking sensors. Many cars with parking sensors lose the function if the OEM car radio is substituted with an aftermarket one. This trouble is due because the parking sensor's beeps are managed by the OEM car radio.
By setting the option 2 as parking sensors output and by connecting a buzzer to the related wire, the function is completely recovered.
This function isn't active by default; see the table of compatibilities to know the car compatible models.

SETTINGS MANAGING
Some vehicles have some regulations, like: hour setting, date setting, power ignition setting etc, that you can set trough the OEM car radio. By changing the OEM car radio with an aftermarket one, this function is lost.
UNICO DUAL permits to recover this function.
Read the section named SETTINGS to know the car models on which is possible to do this operation and how to do it.

TROUBLESHOOTING

- **The unit doesn't work and the LED is off.**
- **Check the connections of the power supply.**
- **The unit which is correctly powered,doesn't work and the LED is off.**
- **Check the CANBUS connections.**
- **The unit which is correctly powered,doesn't work and the LED is off.**
- **Check that the dip switches are correctly set.**
- **The unit is connected correctly and the RED LED flashes quickly.**
- **The unit hasn't been synchronized with the CANBUS, contact Paser.**
- **The unit is connected correctly and the RED LED flashes in an irregular way.**
- **Check the CANBUS connections.**
- **The unit is connected correctly and the RED LED is on.**
- **The unit has undertaken the synchronization with the CANBUS but hasn't been able to individuate the vehicle, contact Paser.**
- **The unit is connected correctly but can't handle the K-BUS protocol.**
- **Check that the dip switches are correctly set.**
- **The unit is connected correctly, the GREEN LED is on but doesn't control the radio.**
- **Check that the module's PLUG is connected to the radio's REMOTE input or contact Paser.**
- **The unit is set resistive but buttons make wrong functions.**
- **Reset the module and repeat the programming resistive procedure.**

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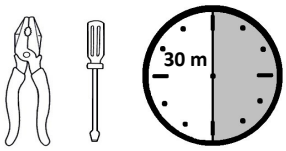

Connection and configuration procedure of Unico Dual PIONEER module (from FWP 50) on vehicles with steering wheel commands without long key pressing system (i.e. FIAT GROUP)

CONNECTION

For CANBUS connections, please consult the appropriate technical sheets on Paser website: http: / automotive.paser.it/technical_tables.php.

To connect Unico Dual PIONEER module, first connect the purple wire of the module to the Key A (or SW 1) of the radio.

Then connect the grey-black wire of the module to the Key GND (or SW GND) of the radio.

CONFIGURATION

Please turn on the panel, the Unico Dual PIONEER led will turn on FIXED GREEN.

Press the RESET button on Unico Dual PIONEER 5 times, the interface will start flashing RED and GREEN (to simulate the long press system on the steering wheel commands).

Enter the radio's resistive learning menu and memorize the steering wheel commands according to the radio documentation.

Wait at least 5 seconds during the pairing of one button to the other, the maximum number of keys recovered is 6, excluding the phone keys not recovered.

Save the memorization of the keys following the saving mode of the installed radio.

Switch the panel on and off, the Unico Dual PIONEER led will return to FIXED GREEN (in this way the simulation of the long press system of the steering wheel commands will be deactivated).

Finally, you can test steering wheel commands working towards the radio.

TECHNICAL CHARACTERISTICS	
POWER SUPPLY	10/16 VDC
ABSORPTION AT REST	0,001 A
ABSORPTION WHEN WORKING	0,040 A
MAX CHARGE IGNITION OUTPUT	2,000 A
MAX CHARGE SIDELIGHTS / HANDBRAKE / REVERSE GEAR OUTPUT / ODOMETRIC SIGNAL	0,040 A