



Air Suspension Digital Control Unit

Product Instructions

PREMIUM 4-way System

Installation manual and all information within are the property of airRIDE-System.pl

Copying or distributing them is a copyright infringement.

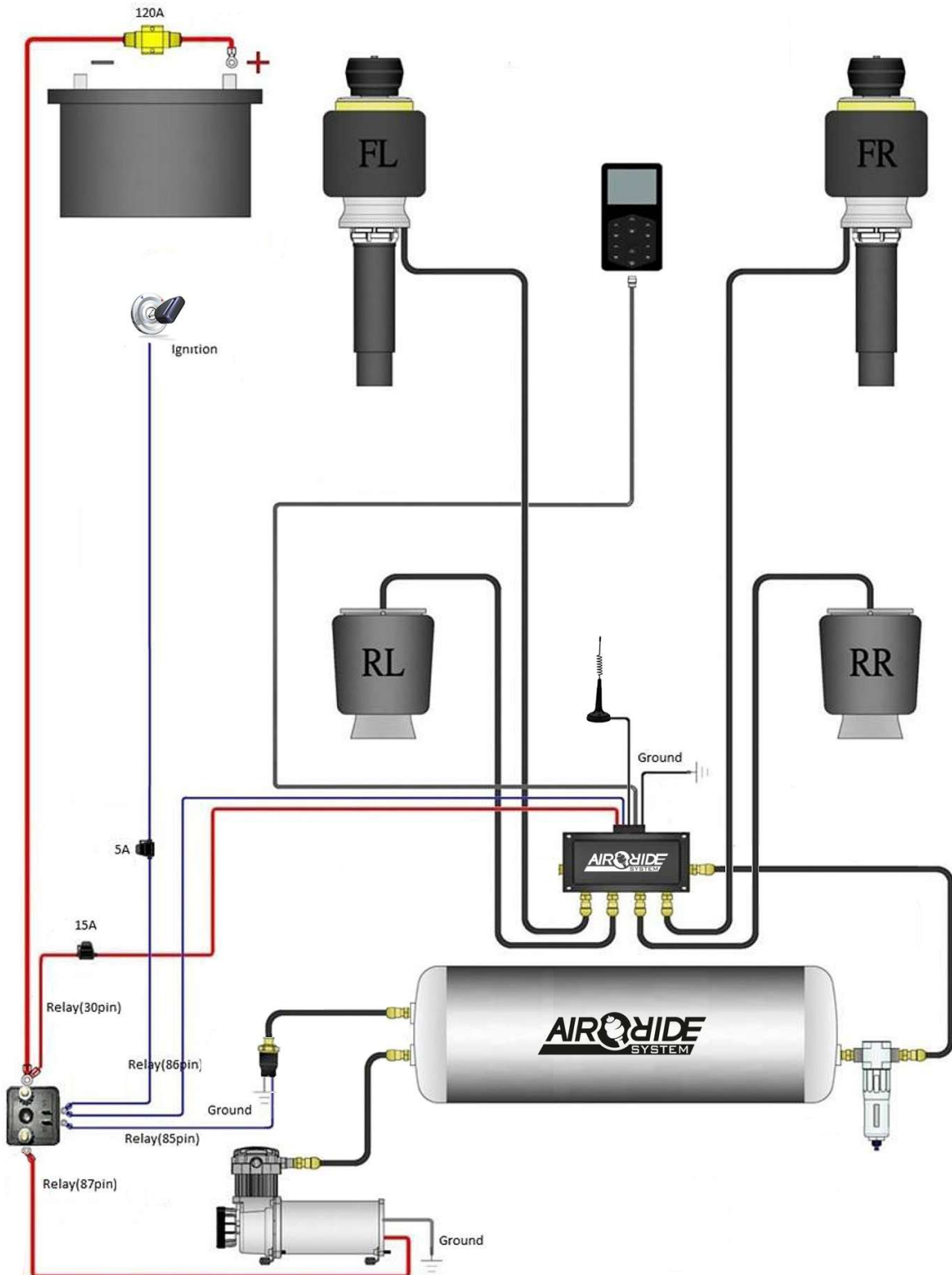
INTRODUCTORY INFORMATION

The airRIDE-System.pl suspensions are not approved or certified to be used on public roads. They are built specifically for exhibition cars. Anyone who uses them on the roads, does it on their own responsibility. We have been building air-suspensions since 2011 and have a long history of working with sports suspensions.

TABLE OF CONTENTS:

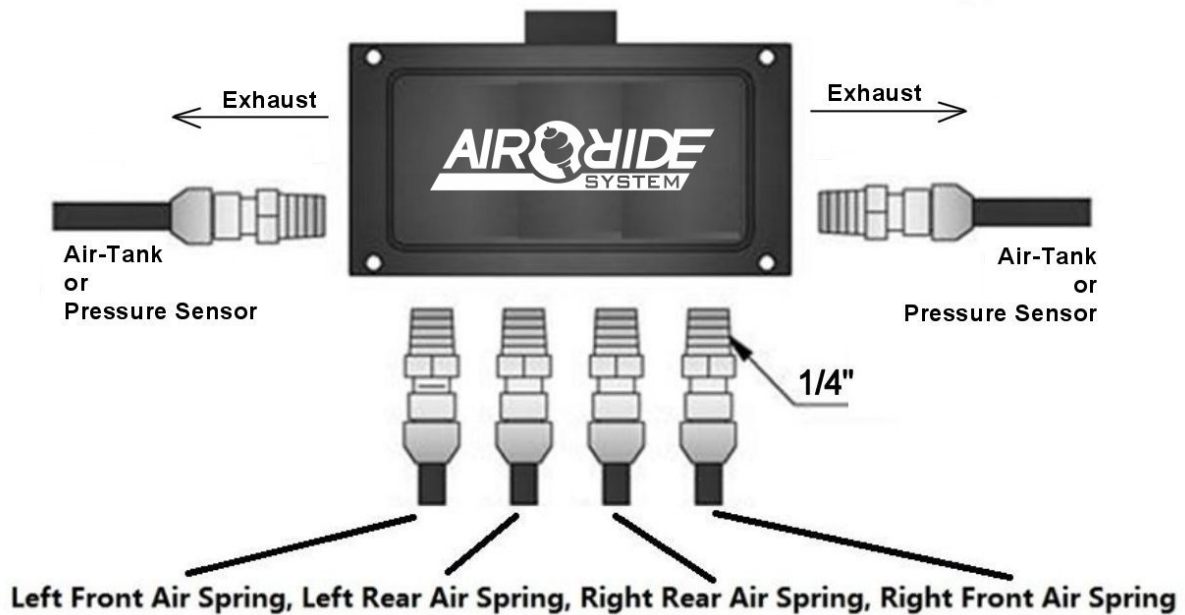
[1] System layout diagram 2
[2] Air-line info and main rules3
[3] System test4
[4] Wired remote control4
[5] Remote control menu6
[6] Instructions for using the APP10
[7] Compressor installation and use11
[8] Installation of bag brackets on a threaded shock abosrber.....12

[1] SYSTEM LAYOUT DIAGRAM



[2] AIR-LINE INFO AND MAIN RULES

I. Connecting to manifold



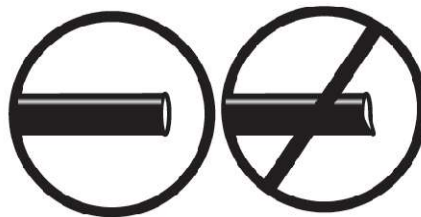
II. Connecting Bags / Compressor / Air-Tank

According to the "system layout diagram", the bags, the air-tank and the solenoid valve group are connected by the air-pipe.

It is recommended to install an air filter! The air filter must be installed to ensure stable operation of the pneumatic system and is necessary for warranty!

Note:

1. Use standard pipe cutters or blades to ensure that the ends are as round and flat as possible.
2. The air line is away from sharp edges and heat sources, if necessary, using insulated casing.



III. Connecting the manifold

1. Plan proper component location first. Ideally, the manifold should be located at a level above the compressor and tank to avoid compressor ingested water from gathering in the manifold. This is most important for vehicles operated in below-freezing climates.
2. Air compressors take in moisture/humidity from the air and deposit it in the airtank. Our system includes a water trap that reduces moisture to enter the manifold. However – air tank must be regularly purged to eliminate the possibility of water entering the manifold. Install the filter between the manifold and the airtank!

Joint assembly guide

1. Apply sealant on the joint thread if the thread is without o-ring.
2. Screw the connector thread into the interface screw hole and tighten.

[3] SYSTEM TEST

When most of the components of the system are installed and connected - the system can be tested.

Note: The test procedure is carried out on a lift as described below.

System Test

I. Start the car, the compressor will start to inflate the air tank. When the airtank is inflated to the maximum pressure - the compressor will automatically turn off.

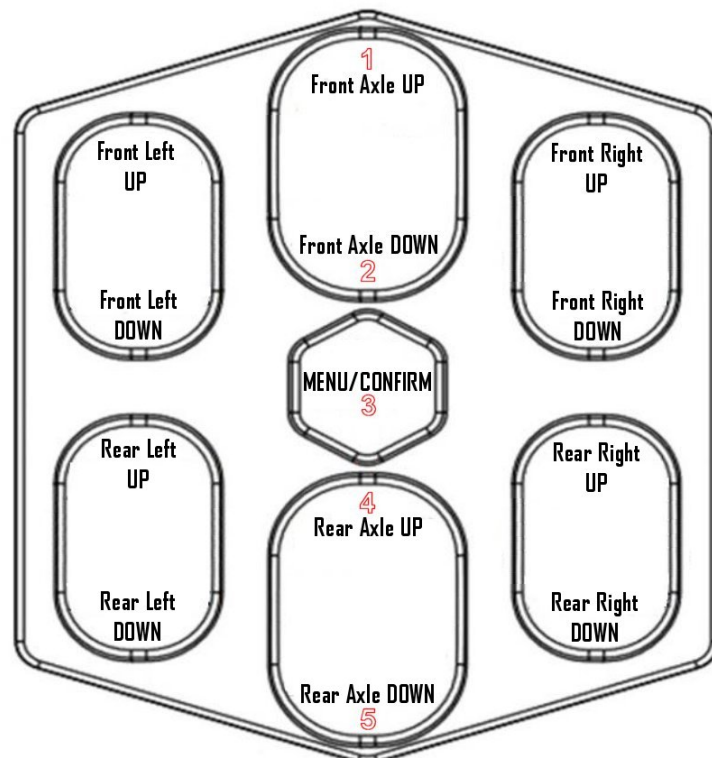
II. Adjust the wired remote control button to see if the corresponding wheel position will rise and fall. When the body is raised, air will be consumed, and the compressor will start automatically when necessary.

III. When the vehicle is on the jack, the inspection of the mechanical system can be done properly: check the clearance between the entire range of the air spring and the surrounding components.

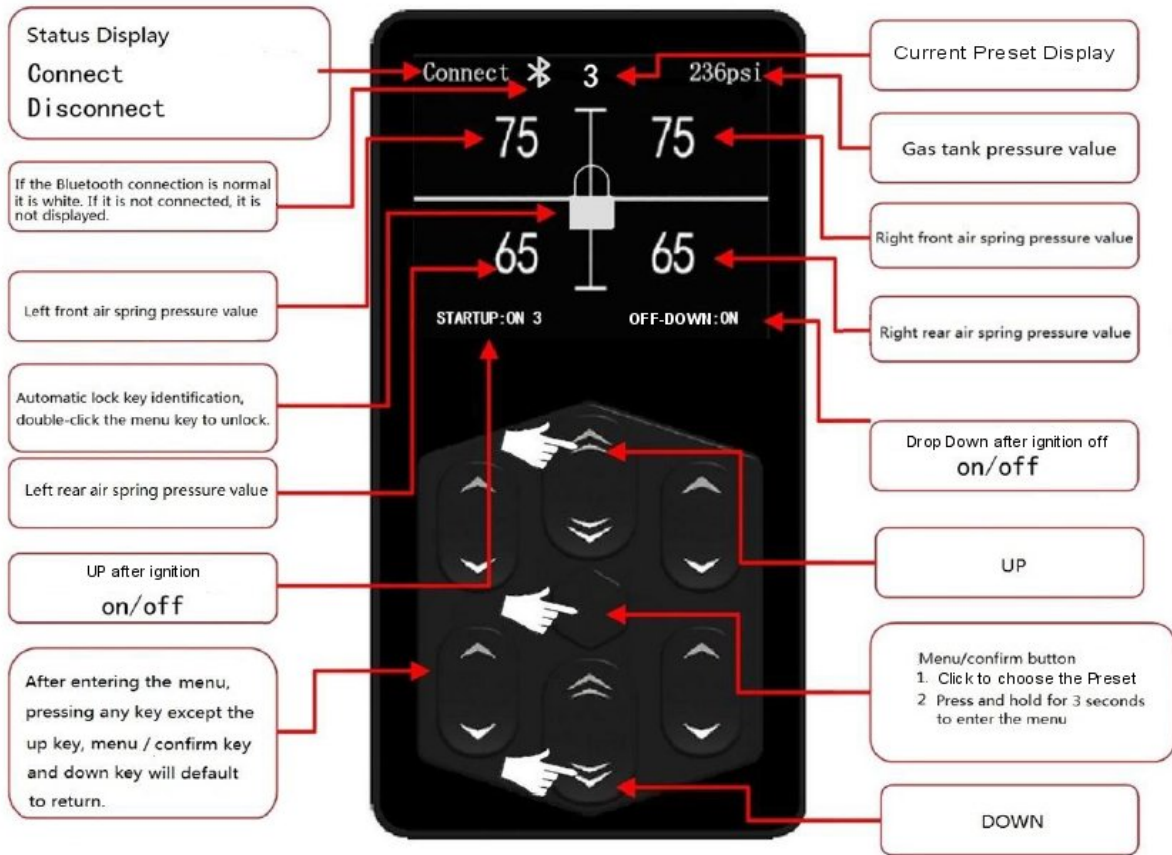
IV. Check all threaded fittings for leaks with soapy water or another tester. When repairing the leak, first lower the lift, then turn off the ignition and let go of the air from the tank.

[4] WIRED REMOTE CONTROL

I. Buttons Description – main functions



II. Wired remote control the display interface



[5] REMOTE CONTROL MENU

Press and hold the "Menu / Confirm" key for 2-3 seconds to enter the menu.

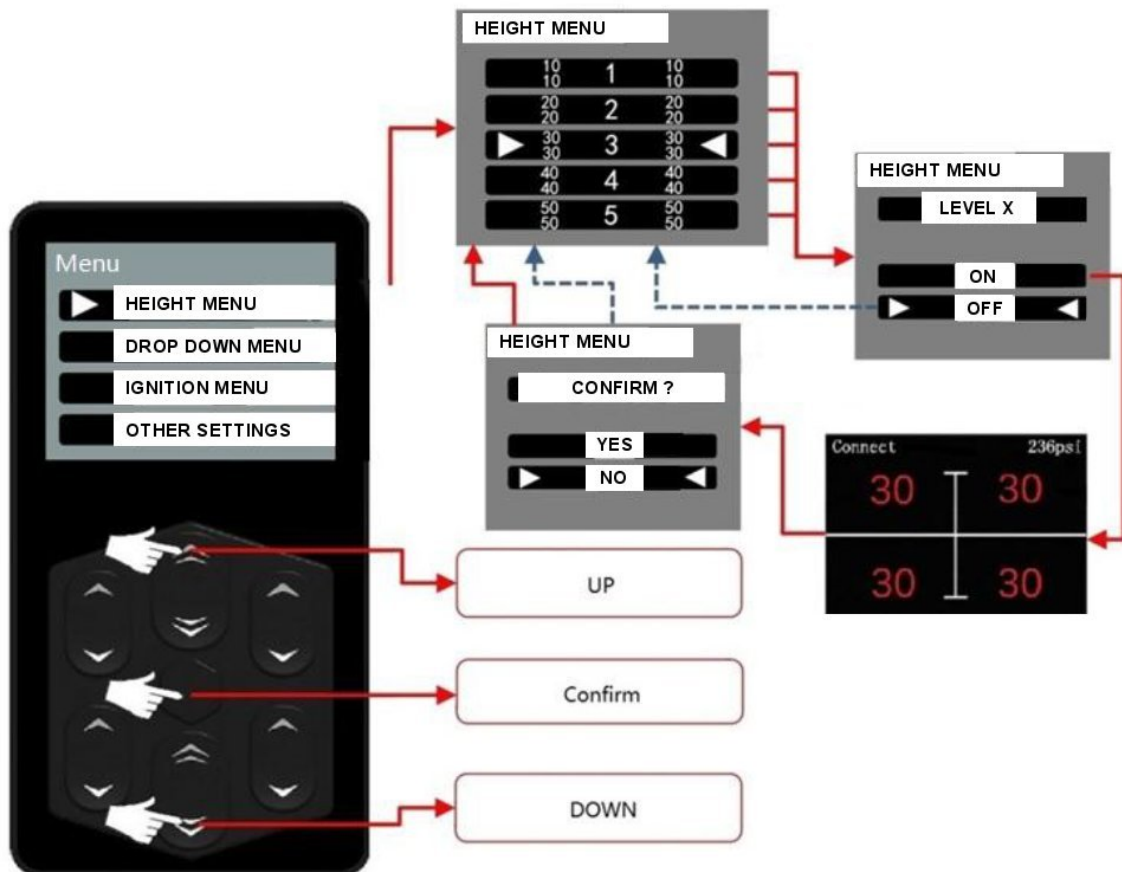
I. PreSets

a) This product has 5 presets – by pressure, and You can set 5 different body heights according to Your preferences. Each of the 5 positions can be turned on / off independently.

b) To set the Presets You have to go inside the „HEIGHT MENU” and choose position You want to change from 1 to 5. Then if You are in the chosen LEVEL – You choose „ON” and set the pressure for each bag. To save it push the central button to enter the „CONFIRM” menu and choose YES.

c) If You want to deactivate the choosen Preset then You have to go to this LEVEL and choose „OFF” and push center button to confirm.

d) The presets will be distinguished by color on / off, "Gray" is off. In addition, the saved value will be displayed in each preset.

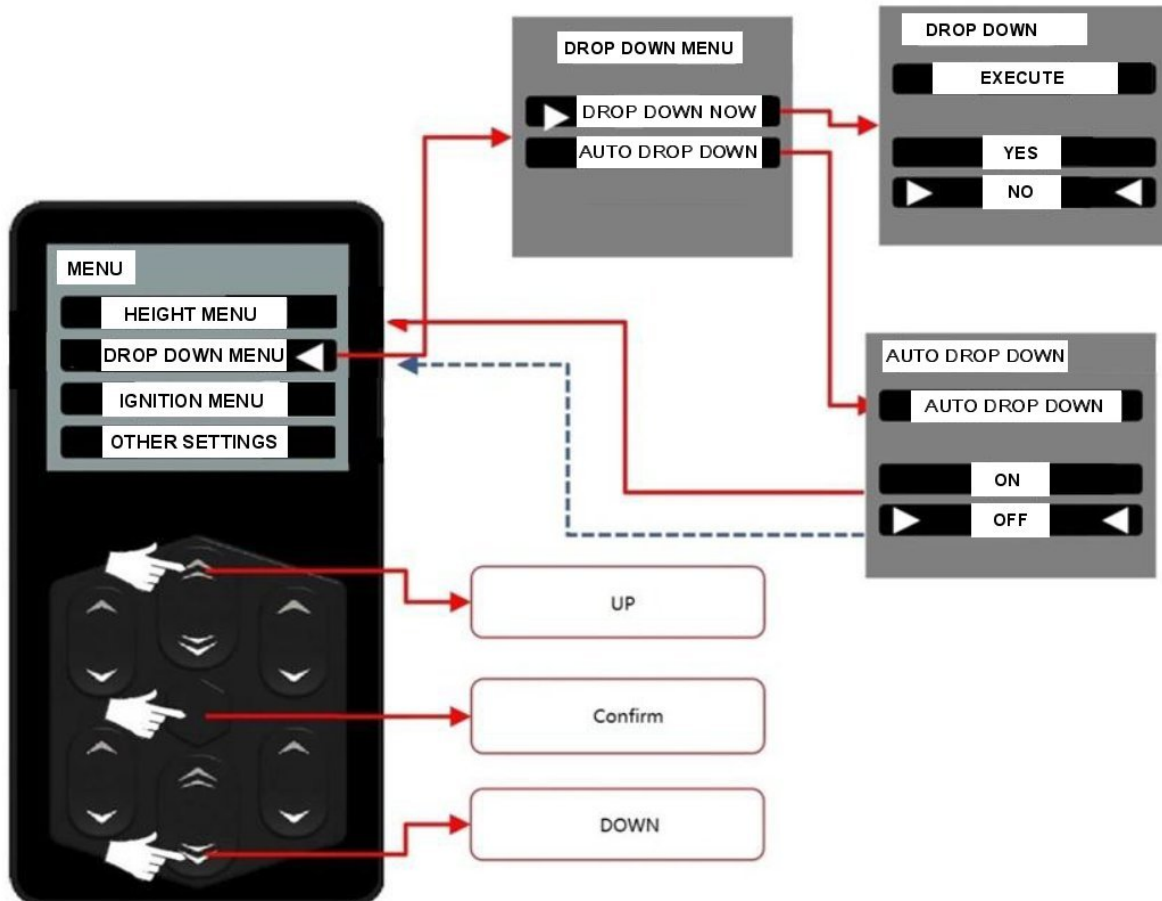


e) To set the Preset You want - push the center (Menu/Confirm) key/button and then choose the LEVEL. Click "Front Axle Up" to 1st level, "Front Axle Down" to 2nd level, "Menu / Confirm Key" to 3rd level, "Rear Axle Up" to 4th level, and "Rear Axle Down" to 5th level.

f) Prohibited to operate while driving!

I. Drop Down Menu

- a) You can put car on ground in this menu option. Enter „DROP DOWN MENU” and choose „DROP DOWN” and push the center button. Then system asks You if You want to execute the option – YES/NO.
- b) System has an option that car can go full down (0 PSI in the bags) automaticly after ignition is off or manually from menu.
- c) „DROP DOWN MENU”- You can put car on ground automaticly after ignition is off. In this menu You can choose OFF if You do not want to use it or ON – if You want to turn this function on. Then after ignition is off - car will automaticly drop max down.

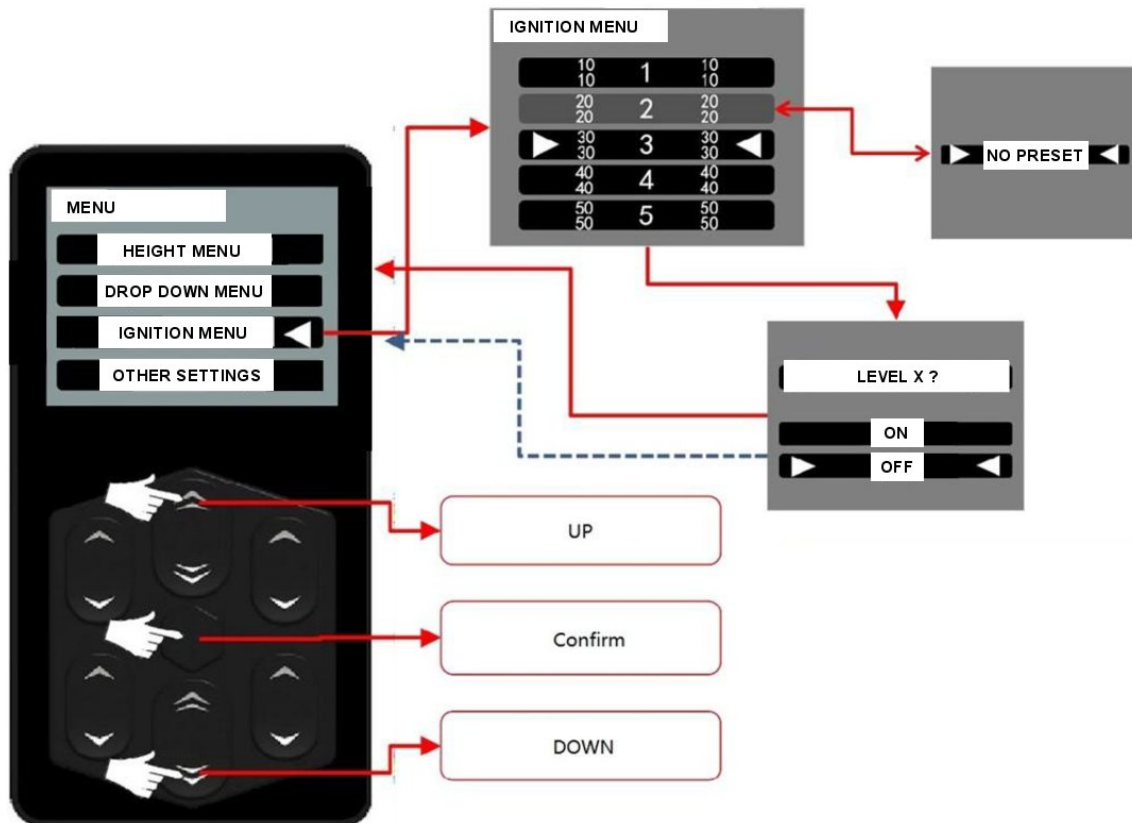


III. Ignition settings

- After entering „IGNITION MENU” You can select one of five presets. Chosen level/pressure will be executed after ignition is on.
- Autoleveling can be “ON / OFF”, just click “confirmation key” and choose ON or OFF.

Tips:

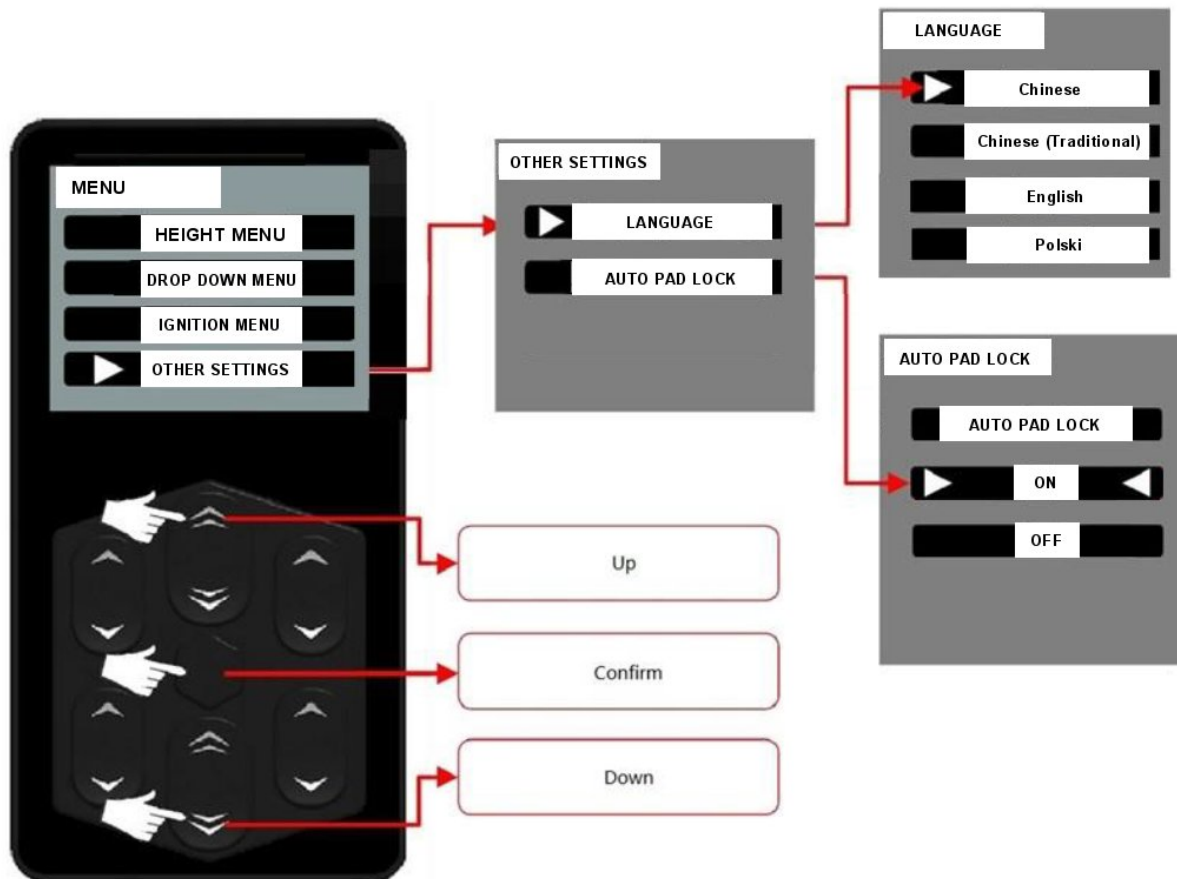
- When lift after ignition function is ON and You turn off the car within 10 seconds – the „auto-lift after ignition” does not work.
- After ignition is ON auto-drop function is not active for 15 seconds. When You turn off ignition at this time – car will not drop down.



IV. Other settings:

a) **Language:** This product is available in four languages: Chinese, English, Polish, Japanese. To change the language enter "Language", select your own language, and click "Confirm" button.

b) **Automatic key lock function:** Enter the „AUTO PAD LOCK” and choose ON or OFF and push center „Menu / Confirm" button. This function can be turned on and off according to customer needs. When the function is ON and the remote control is not operated, the keyboard is automatically locked after 10 seconds. To unlock the keypad push the center button 2 times.



[6] INSTRUCTIONS FOR USING APP

I. Product features:

- Bluetooth effective distance: 0 ~ 30 meters in open environment (depending on the antenna placement) .
- Support Android 4.3+, iOS7.0+.

II. Connection

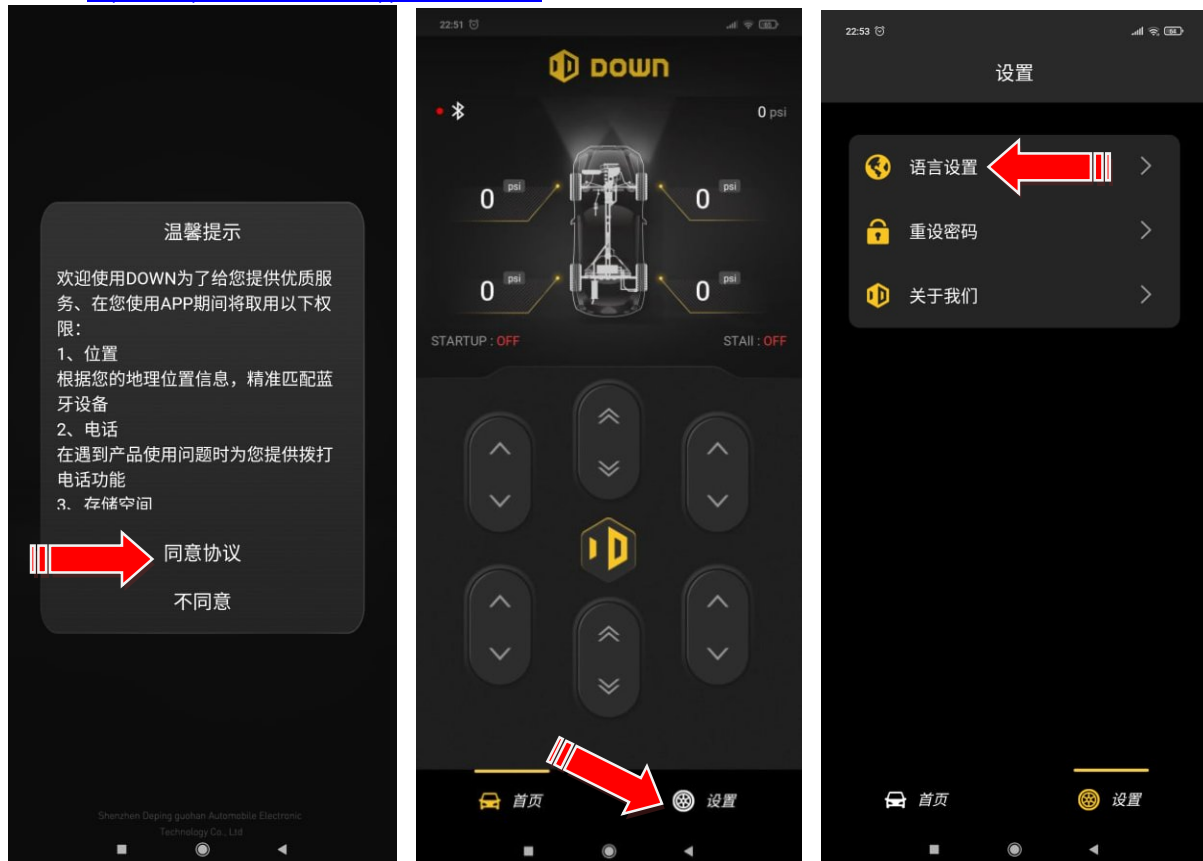
- When the app is connected to the system, Bluetooth automatically recognizes it. After the connection is successful the Bluetooth sign has green dot.
- Password setting process: With the first start You have to set the Password. Enter the 4-digit password. After clicking the "Confirm" button, the password is set successfully. This password is the only authentication to enter the program. Please remember the password you set. If you need to change the password, you can reset the system in the Other Settings in the APP menu.
- After the connection is successful, the connection with the ECU is started. The ECU data is refreshed in real time, and all data is fully synchronized with the physical remote control.

c) When the APP works in Rother language when first launched. In order to change the language to English:

- 1)On the start screen press the upper button / inscription
- 2)Select the „wheel icon” in the lower right corner
- 3)Choose the option with the „earth icon”
- 4)Choose the English language
- 5)Confirm

Link to Download the APP for ANDROID: https://www.mapet-tuning.com/xxx/airride_digital/ARS%201.1.apk

To Download the APP for Iphone please find in APPLE store: DOWN 嚙
or here: <http://cn.depcon.com.cn/down-app-download.html>



[7] COMPRESSOR INSTALLATION AND USE

I. Initial REMARKS:

1. Do not try to repair or modify the compressors.
2. Do not use the product where it can be flooded with water or other liquids.
3. Compressor should only be used in 12V installations.
4. The products should never be left unsupervised when in use.
5. Never allow children to use the compressor.
6. The compressor heats up considerably during and directly after use. Do not touch any of its elements with bare hands during and directly after the use.
7. Never use the product close to fire or explosive materials.
8. Never use the device in places where oxygen is supplied.
9. Do not pump anything other than atmospheric air with the device.
10. Do not direct the air nozzle at another person.
11. The compressor is equipped with an automatic temperature off switch. Always disconnect the device from the power source when the switch is activated.
12. Use only in well ventilated spaces.

Please, read and follow the installation manual to avoid bodily harm, as well as compressor or vehicle damage.

II. Installation instructions:

Choosing the right spot for the air compressor will help provide long and seamless service life of the compressor.

1. Select flat surface in a secure spot where the compressor can be installed.
2. To maximize the performance of the air compressor, it is best to place it close to the battery.
3. Select an installation place as far from heat sources as possible.
4. Never install the compressor in places where it is likely to come into contact with water.
5. Make sure that the air filter inlet is located in a dry place.
6. Seal the connection well. Large amount of Teflon tape is not recommended.

INSTALLATION:

1. Disconnect the ground cable from the vehicle battery.
2. Temporarily place the air compressor in the spot where it will be installed.
3. Connect the ground wire to the battery (-) or appropriate grounding point.
4. Installation of the air compressor is done using 4 screws in designated places.
5. Install the provided air filter.
6. The compressor is equipped with steel-braided hoses, with 380C / 444C -1/4" or 480C - 3/8" NPT threading at the ends. Do not remove the hose from the compressor.
7. The compressor hose has an integrated backflow preventer. It should not be removed!
8. Connect + cable to the compressor, from the relay to the pressure switch.
9. Insert an appropriate power fuse onto the + cable from the battery. Place the fuse as close to the power source as possible.
10. Before connecting to the power source, double check all connections.
11. Connect and test the system by starting the compressor for a short time and check the pressure increase in the air tank.
12. Once the air pressure reaches the value set by the pressure switch, the compressor should shut down. Check all of the air connections, e.g. with water and soap solution.

NOTICE:

1. Always use the compressor at or below its maximum pressure level.
2. If, at any given moment during its operation, the compressor shuts down automatically, do not try to restart it. You can continue to safely use the compressor after leaving it for around 30 minutes to cool off.
5. To avoid discharging the car battery, it is recommended to keep the engine running while using the compressor. The performance of the compressor is then increased.

CAUTION! Make sure the compressor does not heat up drastically. Frequent cooling of the compressor is recommended. If it reaches the temperature of 100 degrees Celsius, it can overheat and shut down!

MAINTENANCE AND REPAIRS

1. Periodically check all electric connections and all fixing screws. Clean and tighten if necessary.
2. Periodically change the air filter. The frequency of changes depends on how frequently the device is used and the working environment.
3. Regularly clean the motor cylinder to remove dust and dirt.
4. The air compressor is equipped with motor lubrication system. Never lubricate the compressor.

[8] INSTALLATION OF BAG BRACKETS

CAUTION! This step should be skipped, if you have purchased a set with shock absorbers included! To install the Bag Brackets, screw them on the thread and seal them. You can seal the Airspring Brackets using e.g. adhesive for threaded joints, Teflon, silicone, glass adhesive and other sealing compounds. The sealing of threads with larger thread size is more difficult, therefore it is recommended to use silicone-density adhesives for coarse threads with the pitch over 2mm.

An important element is the placement of the bottom bracket on the shock absorber. To optimally utilize the travel of the absorber, the fitting should be threaded low enough so that when the top bracket is pressed with hands, it touches the shock absorber casing inside the air bag (fig. 2) (fig. 3 shows what it should look like without the air bag). However, it is important to remember about the dimensions of rims and tires. When positioning the fittings, remember to first check whether they fit behind the wheel and, if necessary, correct their placement. If you want to adjust how low the car sits (when it sits too low and, for example, the wheel scrapes the wheel arch), we recommend placing a polyurethane bumper inside or over the top bracket, to reduce the down-travel of the suspension. ***In ARS2 bag suggested distance from the top of shock to the bottom of bag bracket is 8,5cm and in ARS3 bag this distance should be about 9,5cm.***

