JRDAB-02
DAB/DAB+ module for CAR

Model:
JRDAB-02 CAN for RNS-E

INSTALLATION MANUAL

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1. INTRODUCTION

Digital radio tuner DAB/DAB+ for factory car radio AUDI RNSE. The JRDAB-02 module allow to receive and play digital radio stations DAB/DAB+ on factory multimedia system using the AMI platform. The device has the function of tracking the selected station while driving (SERVICE FOLLOWING). It fully integrates with the CAN bus system.

important:
If the car is equipped with a factory-made AMI module and we want to keep it functionality and at the same time connect additional devices (JRDAB-02 or JAUX_BT-02), use the CAN-JSW-02 switch available in our offer.

2. RECOMMENDATIONS

Copyright

All assembly and operating instructions are protected by copyright. Distributing documentation via print or online media is only allowed with the prior consent of JUNA electronics.

Important

Please read installation manual very careful and keep it in right way. During installation, pay attention to all relevant aspects related to safety of installation and use of the device.

The priority during the design and production of all devices by JUNA electronics company is security and service comfort. It has been achieved by applying the modern techniques of design and production processes of electronic devices.

Module should be installed in technical workshops by qualified personnel or by people who have experience in this type of installations. Installation of devices by not qualification people can cause injury to persons or damage to property.

It is recommended keep to the general safety rules and pay attention for any threat that can cause of damage to the vehicle.

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2.2 RECOMMENDATIONS

We advice to mount device in safety place, where it is not exposed for moisture, water or too high temperatures.

Device should not be installed in places where it could difficult safe driving or operating efficiency of other units installed in vehicle.

The devices can be connected only to 12V. Modules can't be used in vehicles with 24V and higher voltage.

Please note that most of our devices are based on software that may require an update. That's why you should always mount the device in easily available place in the vehicle.

In some countries it may be necessary to check the legal provisions before installation and startup of the device. In the interest of high quality and development of our products, JUNA Electronics reserves the right to make technical changes.

In the case of a warranty claim, the device should be sent back to the seller in original packaging with a detailed description of the problem with attached purchase invoice.

Warranty claims as well as exploitation rights expire due:

A) Not authorized changes in devices or accessories, which have not been approved or have not been provided by the manufacturer or his partners.
B) Opening the device's box
C) Yourself repair the device
D) Improper use / improper operation of the device
E) Mechanical damage
F) Flooding with water or other liquids

3. CONNECTION SCHEDULE OF SET COMPONENTS

Correct placement of JRDAB-02 components:

1. JRDAB-02 module connection place
2. Factory radio system
3. DAB/DAB+ antenna installation place

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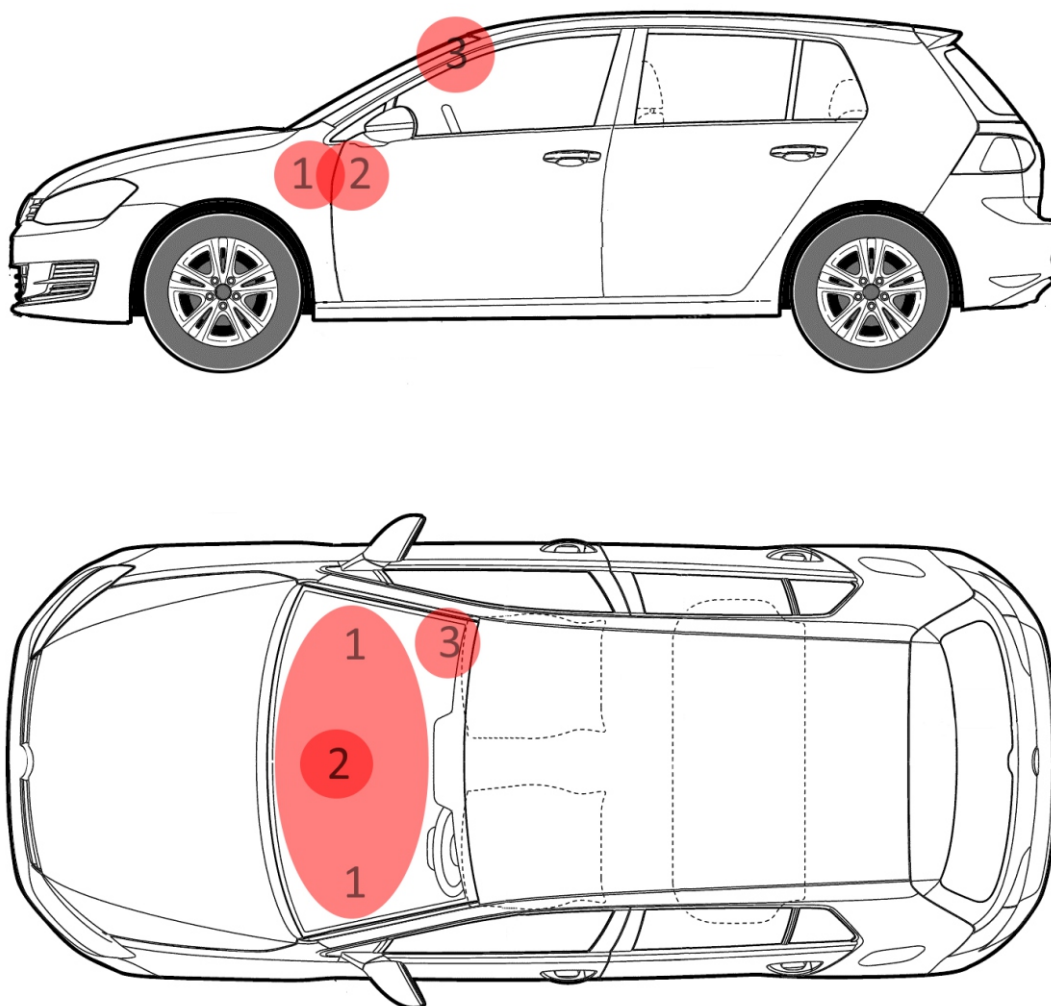
4. Antenna connection

The JRDAB-02 assembly kit includes an active antenna that must be mounted according to the instructions described below. The JRDAB-02 module is adapted to be connected with active antenna which supports the "Phantom" power system - 12V, max 200mA.
The JRDAB-02 module also allows to connect different antenna that will meet the matching conditions. This can be a factory-installed active antenna that is already installed in the car, or another active antenna dedicated for car radio systems DAB/DAB +. Connecting the antenna other than included in the kit requires special care and fulfillment of all parameters matching the JRDAB-02 system.

Important:

During installation antenna cable along the pistol it is necessary to pay attention for side airbags. Cable must be installed in way to not disturb the proper operation of the air curtain.

Installation process:

1) Installation of antenna is not recommended when windscreen is very cold
2) Antenna should be mounted on windscreen from passenger side
3) Carefully remove the passenger side pistol cover
4) Clean a place where antenna will be mounted
5) Antenna should be mounted 15 cm from top edge and 7 cm from side edge of windscreen
6) Ground element of antenna amplifier should touch metal part of post. It can be join to factory painted part of pistol
7) Antenna cable should be mounted in way to not interference with side airbag

Grounding the antenna with the vehicle body

15cm

7cm

Example of mounting a DAB/DAB+ antenna

Before antenna installation on windscreen remove top safety cover.

To join a metal ground component of antenna amplifier remove top safety cover. Join copper ground component with metal part of cars pistol.

Grounding element

Antenna cable - 6m

Antenna amplifier

Antenna

Antenna DAB/DAB+

5. DAB/DAB+ MODULE CONNECTION DIAGRAM

1. Turn off radio and ignition in vehicle
2. Disconnect factory ISO connector from radio
3. Connect the W-RD103 to factory radio **①**
4. Connect factory ISO connector to bundle W-RD103 **②**
5. Plug a connector of W-RD103 to JRDAB-02 module **③**
6. Connect the 32-pin audio connector to the vehicle's radio **④**
7. Connect FAKRA plug to antenna socket **⑤**
8. Turn on ignition and startup radio
9. Start a process of finding new stations

① W-RD103

② Factory connector ISO

Factory radio RNS-E

Audio connector **③**

JRDAB-02

6m connector FAKRA **⑤**

1m **④**
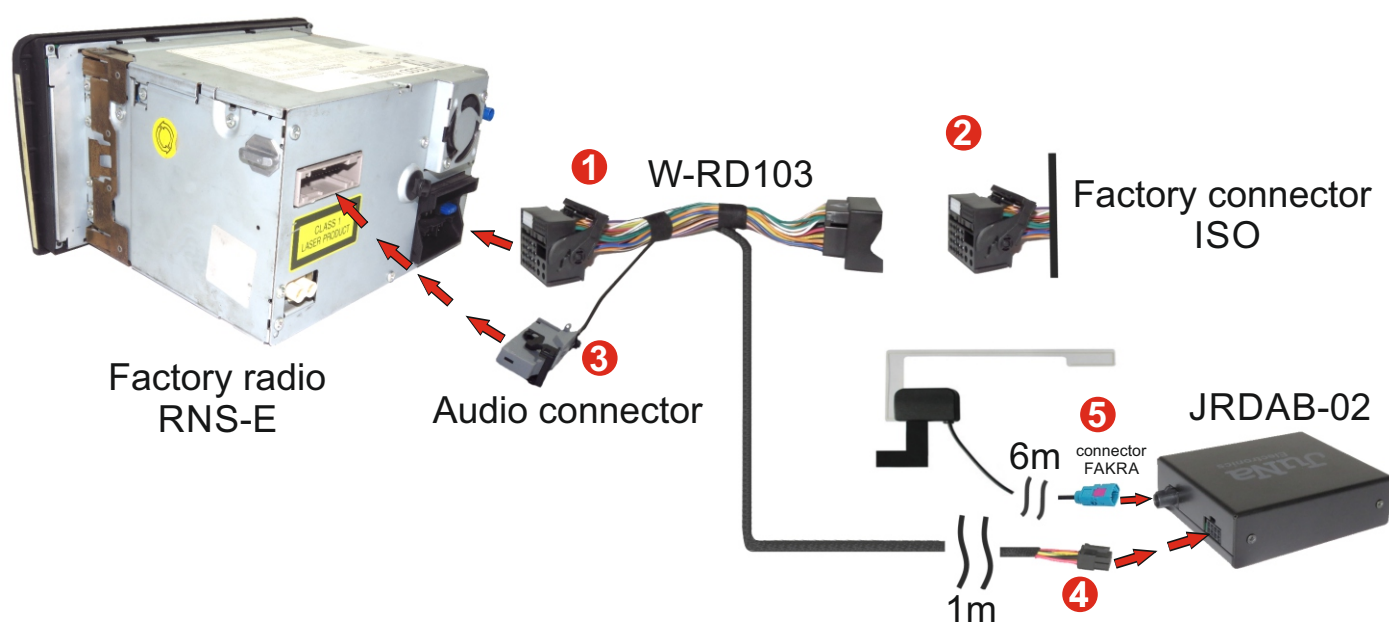
INFORMATION:

If DAB/DAB+ option doesn't appear in the Source menu after connection of JRDAB-02 module then AMI platform must be activated via OBD connector *(see item 4/p.4)*
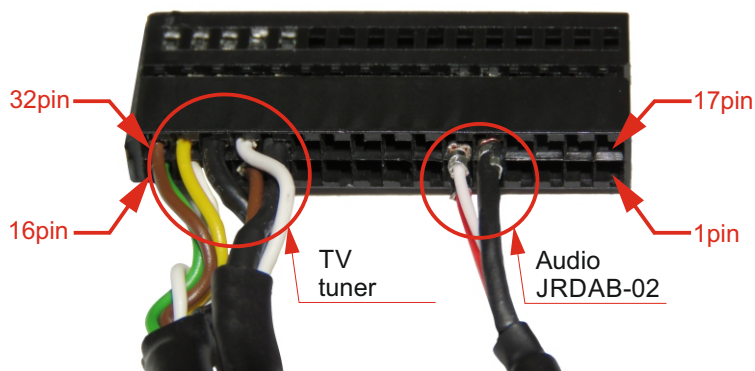
6. INSTALLATION 32 PIN HEADER FROM SET

Vehicle with RNS-E multimedia system can be equipped with TV tuner, rear camera, AUX, etc. devices which are connected by 32 pin AMP Connector. In this case to connect JRDAB-02 module it is necessary to disassemble factory 32 Pin AMP Connector and install wires form cable of W-RD103 bundle. In case when vehicle is not equipped with additional devices uses 32 Pin AMP Connector then it is necessary to use 32 Pin AMP Connector which is included in JRDAB-02 set and install wires form cable of W-RD103 bundle.

Important:: If RNS-E system is equipped with factory AUX unit it is necessary to disconnect AUX wires from 32 Pin Connector and replace them by wires form cable of W-RD103 bundle.
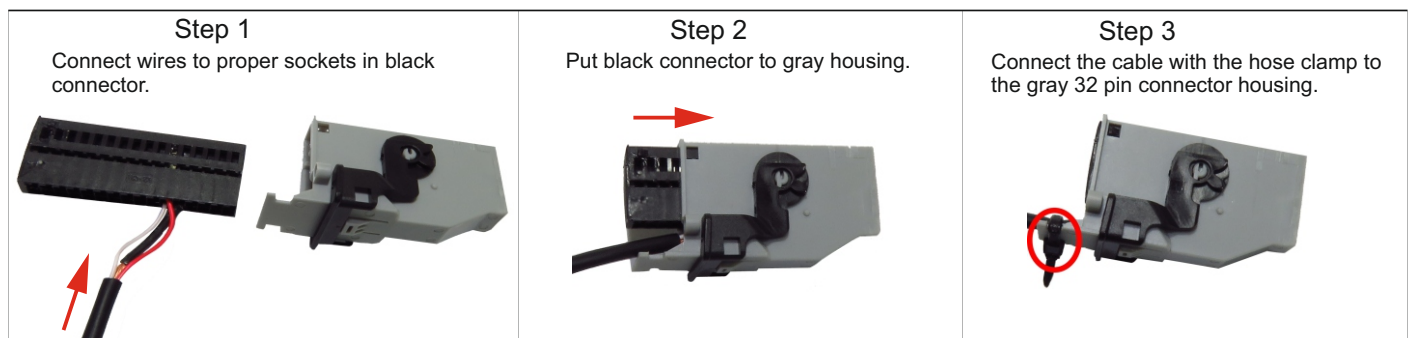
Both cases are connected according to diagram:

32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

1 N.C.
2 N.C.
3 N.C.
4 N.C.
5 N.C.
6 AUX-IN | right [W-RD103 - **red**]
7 N.C.
8 N.C.
9 N.C.
10 N.C.
11 N.C.
12 N.C.
13 Audio-IN navigation system | right
14 Navigation system screen | mass
15 Video-IN navigation system | synchronization
16 Wideo-IN navigation system | green

17 N.C.
18 N.C.
19 Signal-IN low frequency (-) (unused)
20 Signal-IN low frequency (+) (unused)
21 AUX-IN | mass [W-RD103 - **black**]
22 AUX-IN | left [W-RD103 - **white**]
23 N.C.
24 N.C.
25 N.C.
26 N.C.
27 N.C.
28 Audio navigation system | mass
29 Audio-IN navigation system | left
30 Video navigation system | mass
31 Video-IN navigation system | blue
32 Video-IN navigation system | red

An example of connecting the factory navigation and the JRDAB-02 module for the RNS-E radio

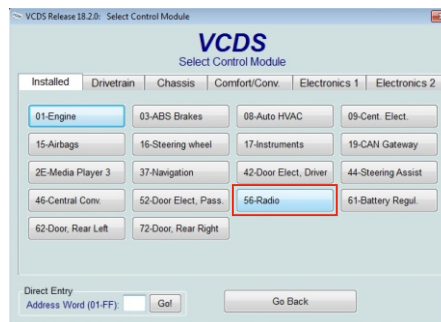| Step 1	Step 2	Step 3
Connect wires to proper sockets in black connector.	Put black connector to gray housing.	Connect the cable with the hose clamp to the gray 32 pin connector housing.

7. CODING

If Audi Music Interface [AMI] wasn't pre-installed in the car there might be a needs to activate function using VAG, VCDS or other diagnostic program
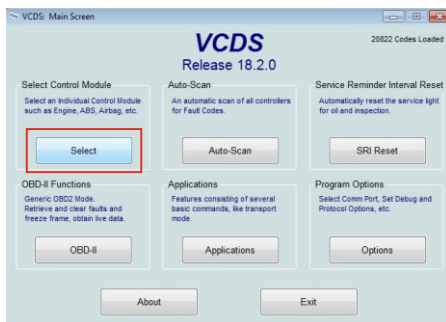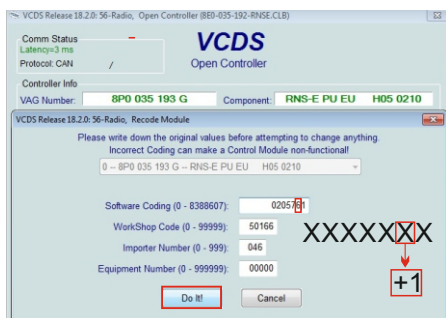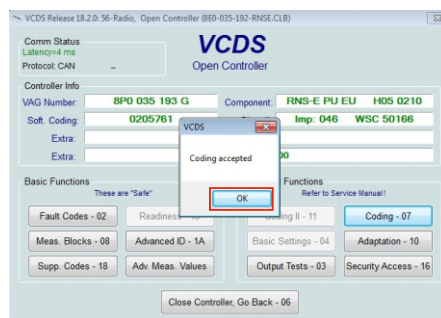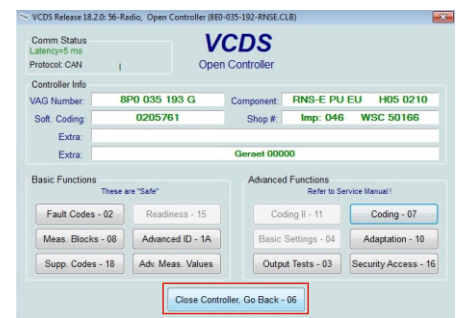

1.Select Control Mode.

2.Option 56 Radio.
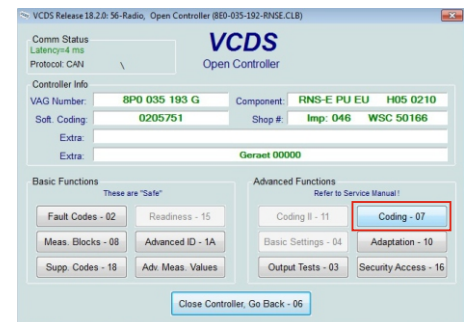
3. Codin - 07.

4.We always add 1. Change is saved with the "Do it" button.

5.We confirm changes.

6.We're leaving the coding process.

After the coding has been done, the radio should be reset.

We can achieve this, e.g. by:
- Momentary disconnection and connection of the radio power supply.
- Holding the RADIO + SETUP buttons (for about 10 seconds) until the radio is reset.

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8. BASIC TECHNICAL PARAMETERS

1. Power supply voltage   - 12V
2. Resting current   - 0mA
3. Power consumption with antenna   - 154mA
4. Power consumption without antenna - 110mA
3. Communication and control   - CAN
4. Housing   - Metal
5. Dimensions   - 78mm x 95mm x 27mm
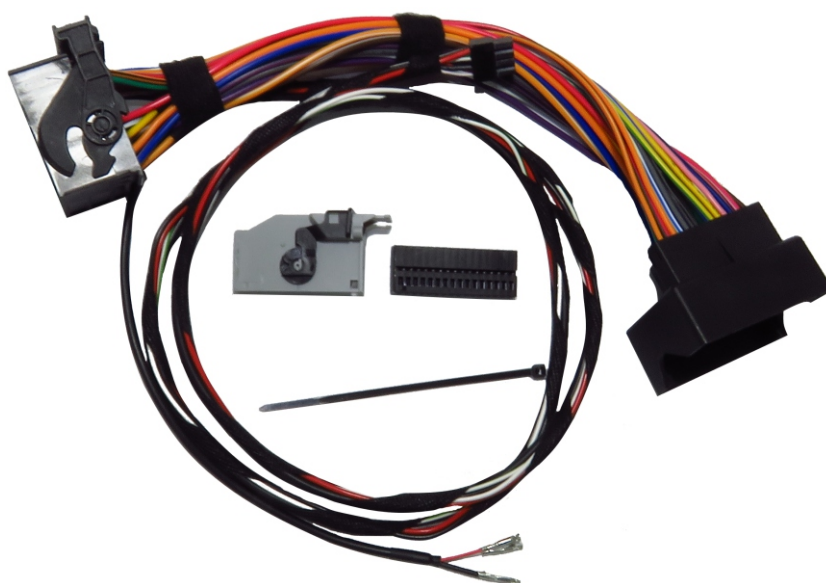6. Weight   - 210g

9. ELEMENTS OF THE SET

1. DAB/DAB+ radio module [JRDAB-02]
2. Connection cables [W-RD103]
3. Antenna [TLG7205]

TLG7205

JRDAB-02

W-RD103

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