LEAR BCP01 RTA Controller User Manual

BCPOI RTA
User Manual

Contents

Intended Use

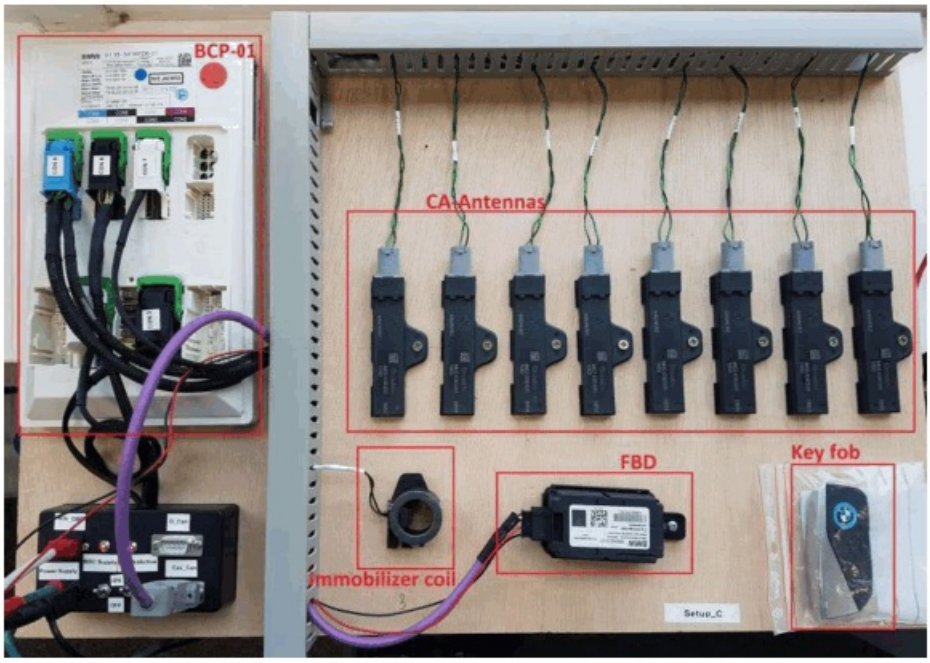
- Body Domain Controller device for controlling sevaral vehicle funtions

Specifications

- Voltage: 13,5 V
- Current: 1,3 A
- Frequency: 125kHz

- Software Version: 130.040.045
- Hardware Version: 113.000.001
- This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:
    - (1) This device may not cause harmful interference, and
    - (2) this device must accept any interference received, including interference that may cause undesired operation

Index/ Process Checklist



SW tools and Setup Preparation

Before start, we need to assure that we have installed the following SW programs on the computer:

- Diagnoser 
- Ediabas and the .prg file related to BCP21 project(BCP _SP21.prg) 

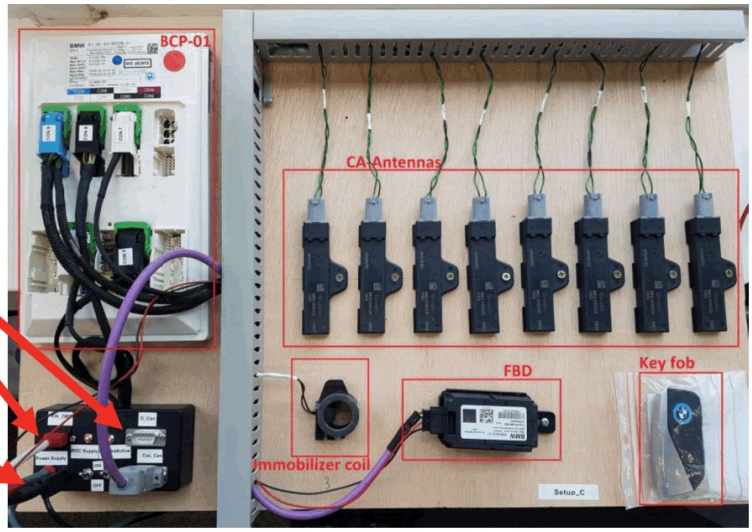
The script needed for automatic cyclical requests:

- RTA_transp+Ant_testing.SKR diagnoser Script 

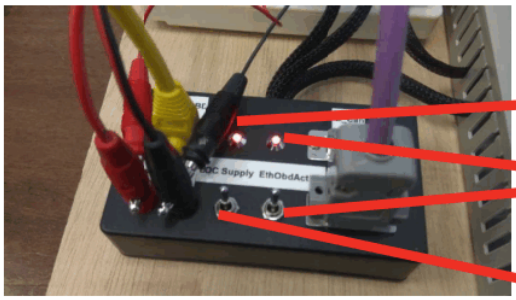
Setup and connectors

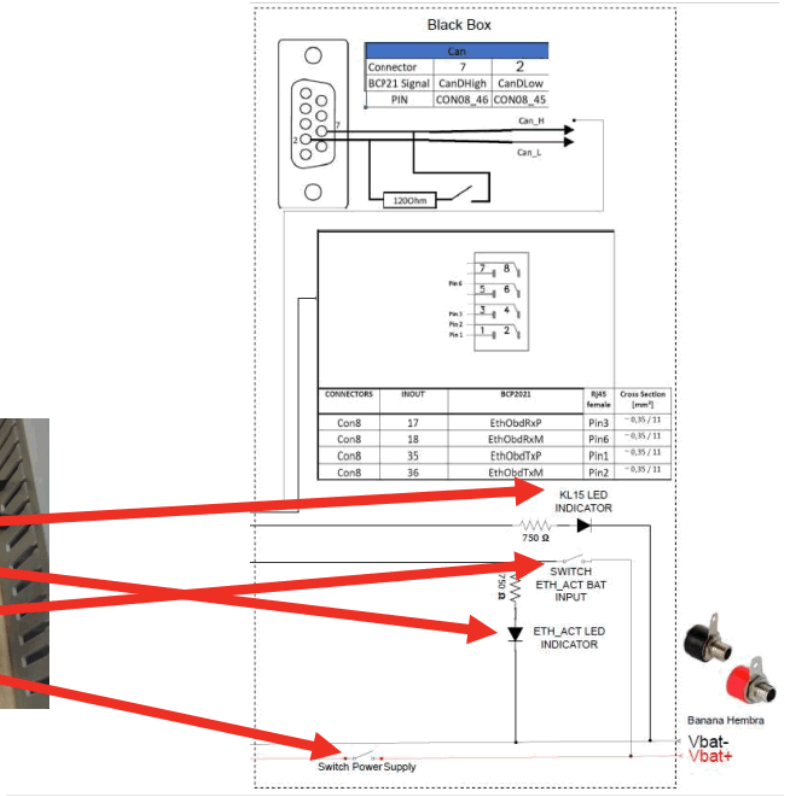
Ethernet Port and D_CAN:
Establish communication with
SW tools Diagnoser and Ediabas

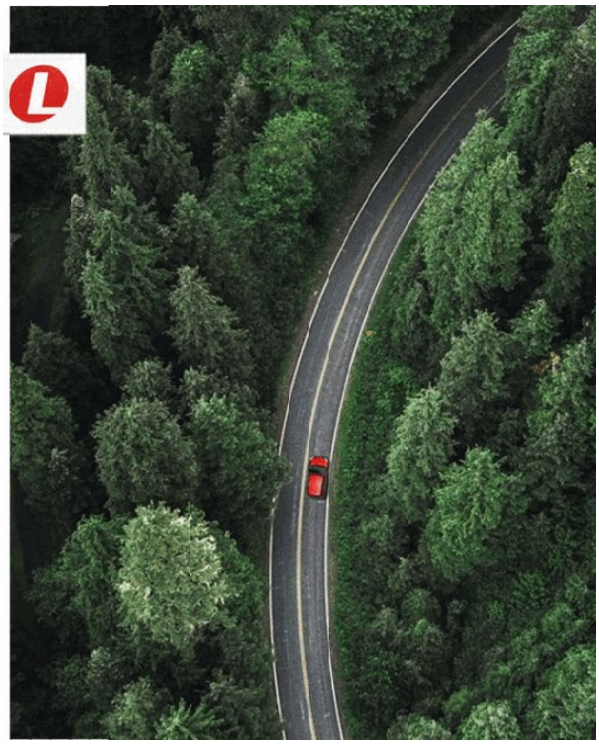
Supply Line: 13,5 Vdc and Gnd



Power supply and ETH_ACT switches must be switched on in order to supply the part and activate ethernet communications.
Once the part is powered up and ETH_ACT is activated, both LED indicators must be turned on in order to indicate the correct status of the part.
The third switch present on the D-sub connector that is related to the termination resistance is needed if CAN communication is used and some communication issue is present.







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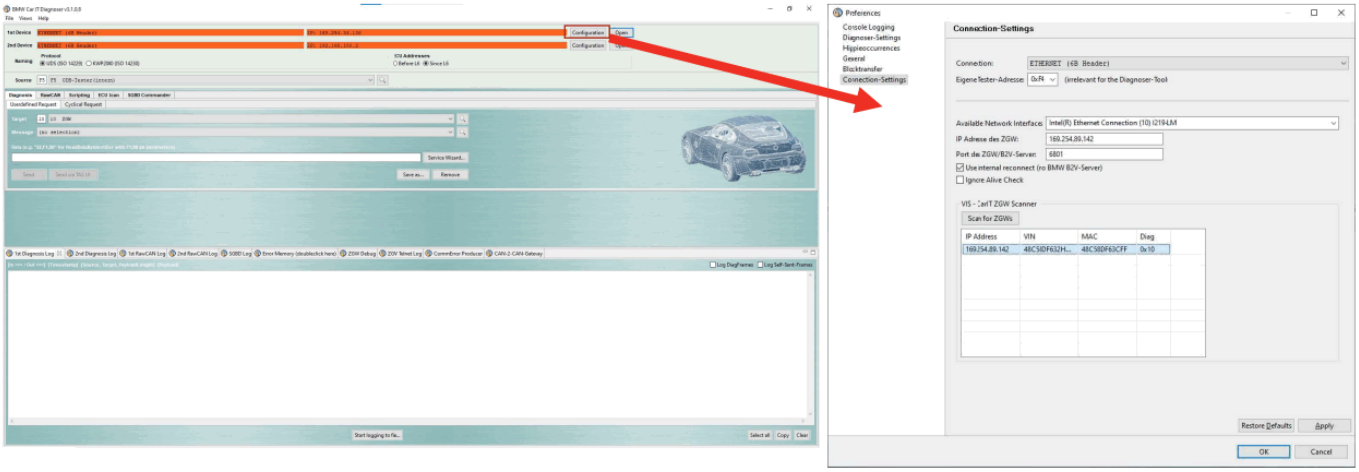
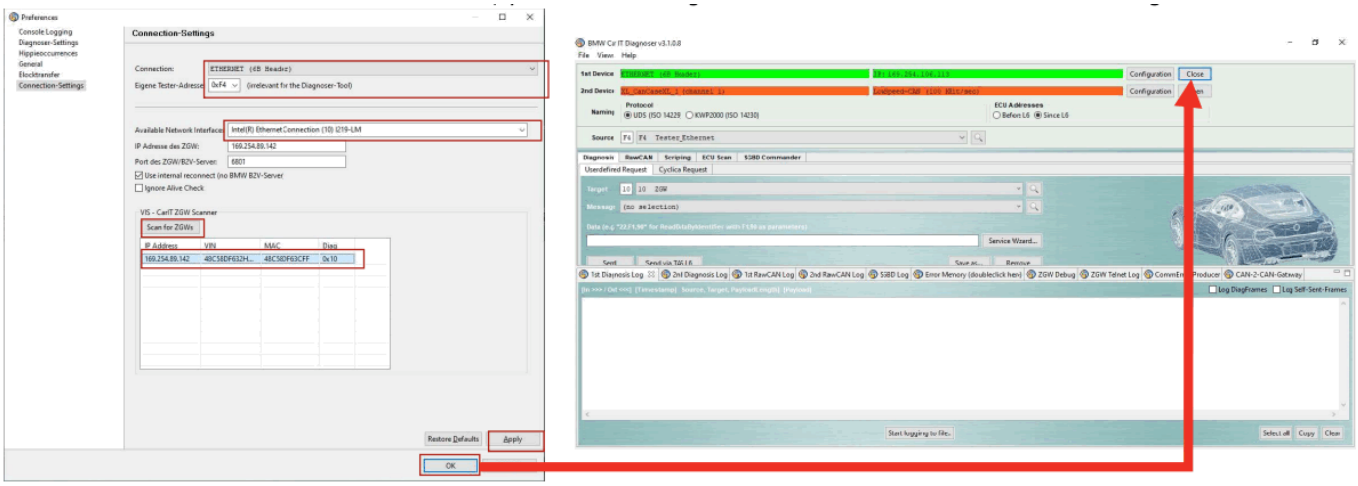
Diagnoser Connection

Connect the part and assure that the 2 LED indicators are ON. Open Diagnoser tool and click on Configuration:



Click on Scan for ZGWs and you will find the part's IP, click on it, then "Apply" and finally "OK". After that, click on "OPEN". If the connection is well established, you will see the green window as shown in the bellow image:

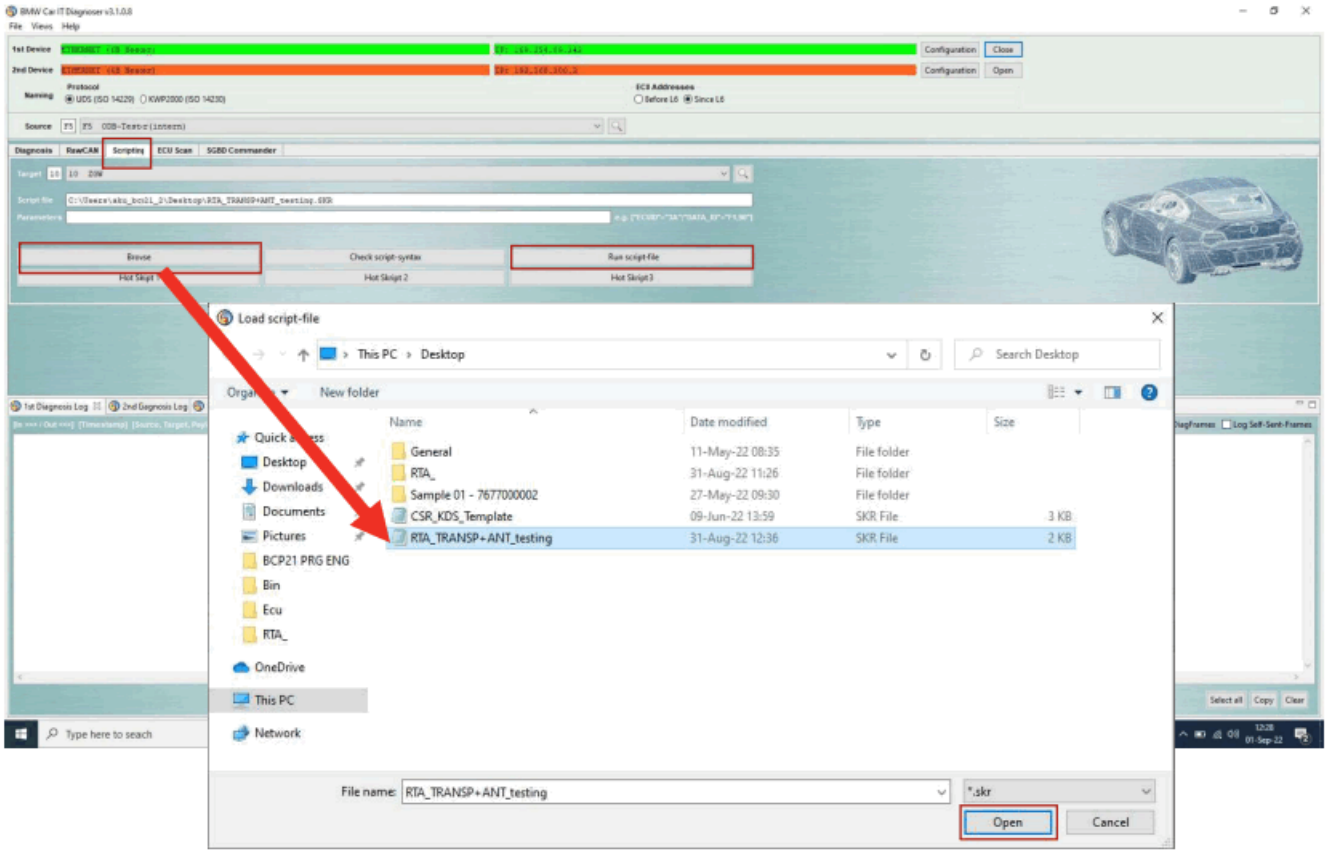


Diagnoser Script Selection

Go to Scripting widows;
Click on “Browse” to select the script;
Select

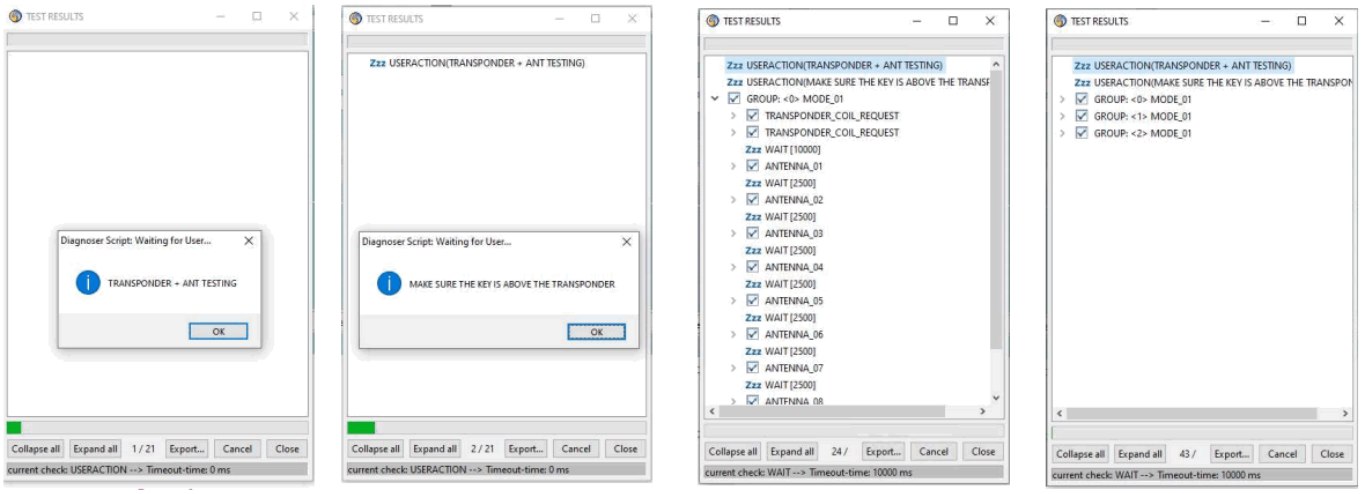
“RTA_transp+Ant_testing.SKR” 

“
Click on “Run script-file” to execute it.

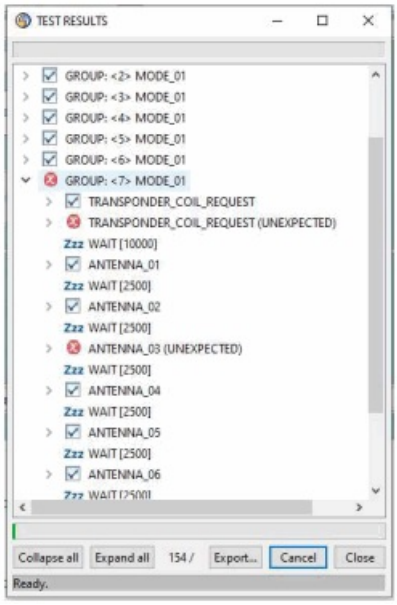


Diagnoser Script Execution

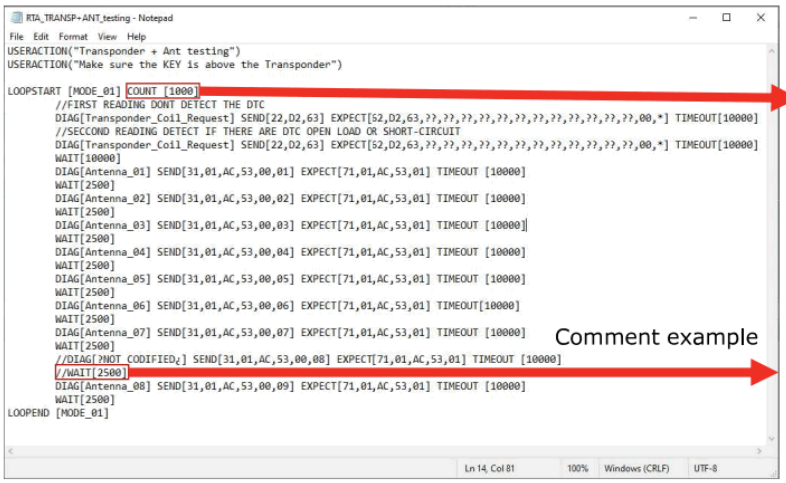
Click OK on both prompts, then the cyclical testing will start. Each group is a complete set of testing



If an error is found, the GROUP will be marked with the red marking and will specify which load is presenting an issue.
For the bellow example, we simulated an open load at the transponder coil and antenna_03. To stop the testing click on “cancel” then “close”.



Diagnoser Script modification (if needed)
The script is a TXT file and can be opened with any editor.

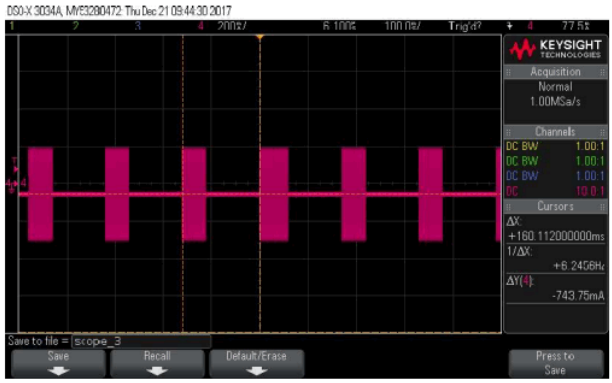


This parameter defines the times that the loop will be executed. It can be edited according to the Laboratory needs.

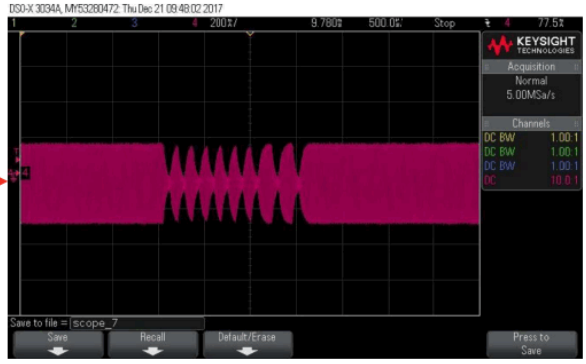
Transponder and individual Antenna testing can also be modified according to lab needs.
In order to skip some steps just needs to apply “//” before the line in order to comment on it.

Transponder Coil Function

When the key has a low battery and the car can't be started via the keyless go function, the key must be placed next to the transponder coil and trigger the communication.
When there is no key placed on the transponder coil and the immobilizer is activated:



Zoomed:



If you see that the signal is changed as it is in the last two pies that means the key is identified and the SW will decide if this key is the right key and if the car can be started.

HW version: 113.000.001 SW version: 130.040.045
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Documents / Resources

	LEAR BCP01 RTA Controller [pdf] User Manual BCP01, TTR-BCP01, TTRBCP01, BCP01 RTA Controller, Controller