

Magneti Marelli

ACI100 / 500 / 600

For ASW-NEXT

Short User Manual

Immo

 *Tools.it*

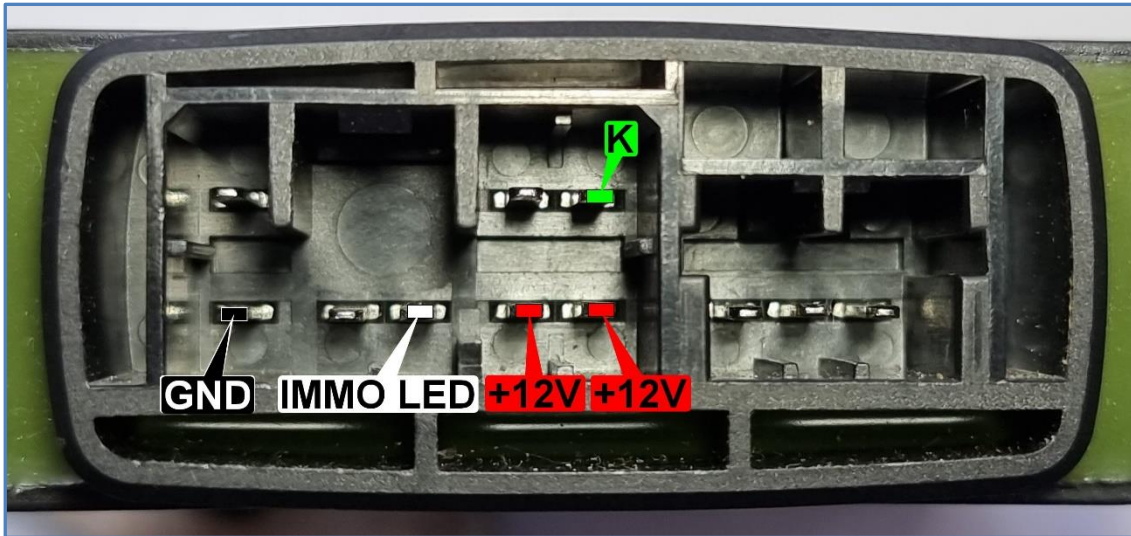
July 2022

Important notes:

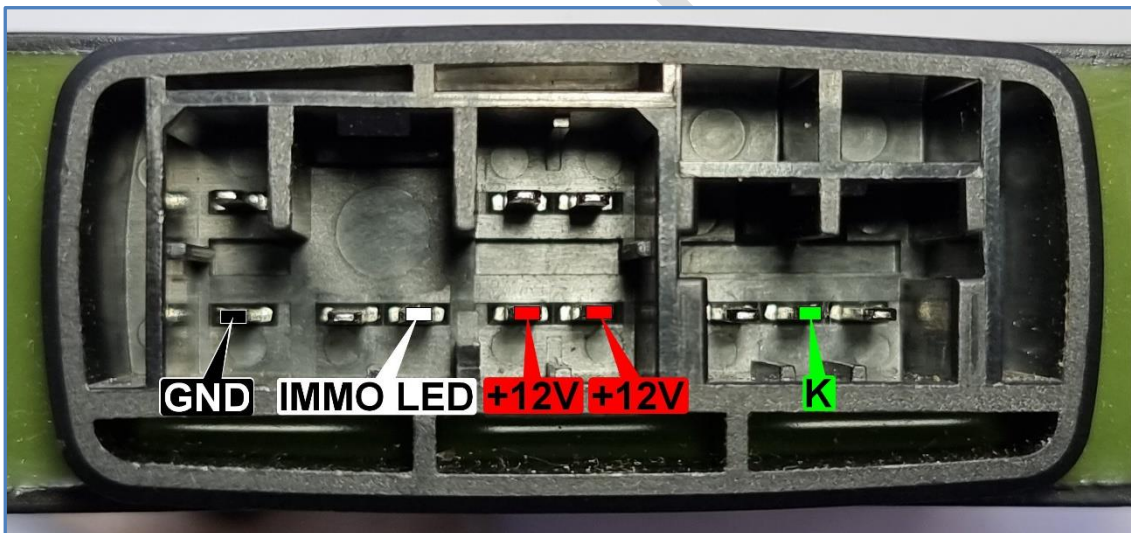
This user manual applies to CDI units manufactured by MAGNETI MARELLI. They can be recognized by presence of MAGNETI MARELLI logo on the label of CDI unit.



1. How to connect?



ACI100



ACI500 / ACI501 / ACI502 / ACI503 / ACI504 / ACI505

ACI600 / ACI601 / ACI602 / ACI603 / ACI604 / ACI605 / ACI606

2. Software features

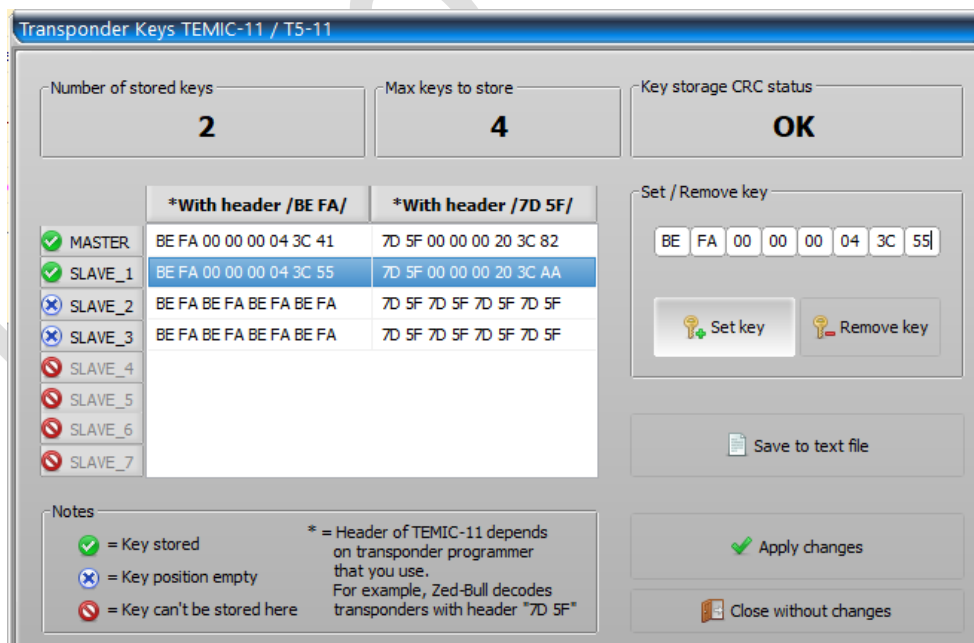
- **Read / Write internal MCU EEPROM** (256 bytes)
- **Read / Set keys**
To read existing and to store new desired values of transponders. Up to 3 keys for **ACI100** and up to 4 keys for series **ACI500 / ACI600** can be programmed during this procedure.
- **Reset to VIRGIN**
Erases all keys. Control unit is ready to self-learn new transponder values after Reset-to-VIRGIN.

3. Key programming procedures

Let's overview several possible situations:

- **All keys were lost**

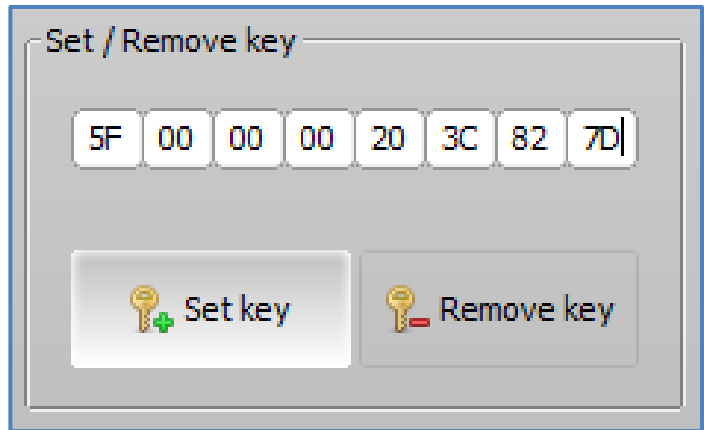
Connect wires from interface of ASW-NEXT to CDI unit, apply +12V power to connection and press „**Read /Set Keys**“ button. Diagnostic connection to CDI unit will be established and transponder values will be read:



Write value of any active (marked with green) key to transponder **T5** as **TEMIC-11** using any suitable transponder programmer. Choose data with header „**BE FA**“ or „**7D 5F**“ depending on type of your transponder programmer.

- You want to set key(s) manually to CDI unit

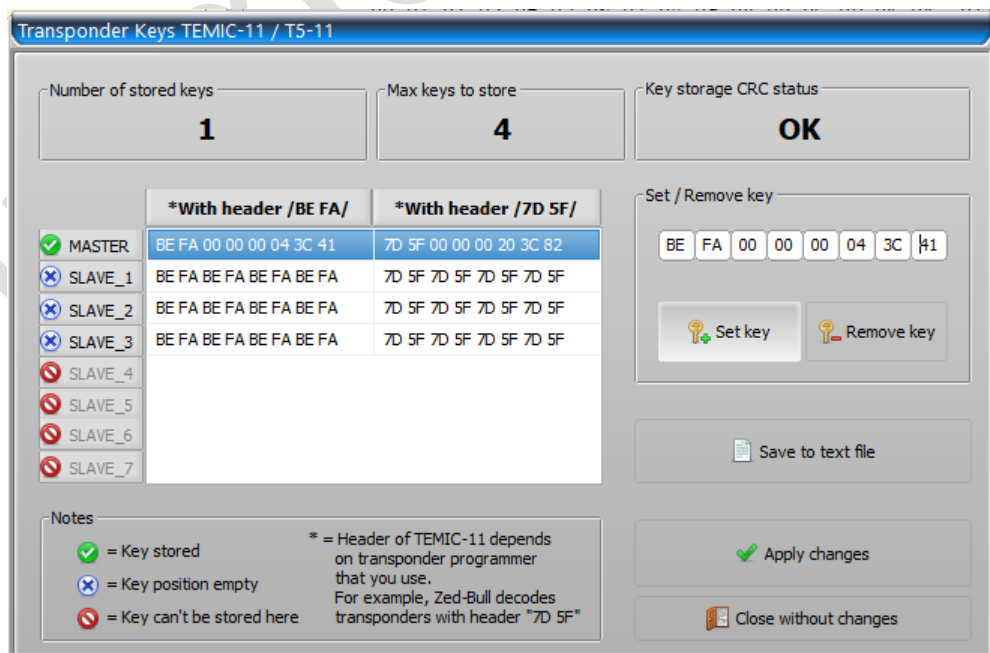
Press „**Read /Set Keys**“ button. Diagnostic connection to CDI unit will be established and transponder values will be read. Select position to set key to. Read key you want to store to CDI unit with any transponder programmer.



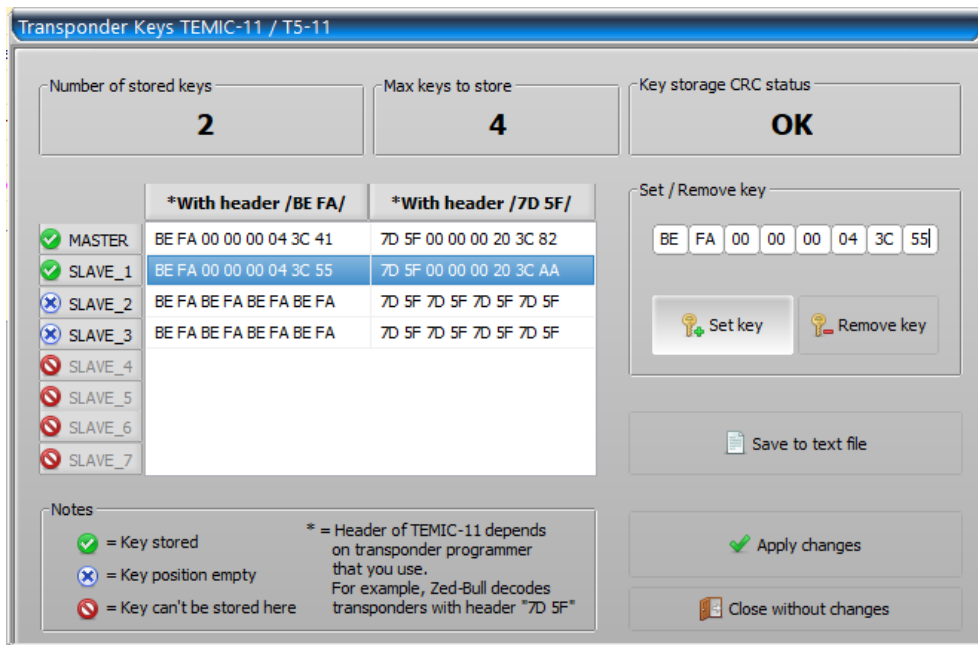
Let's say you've got **TYPE-11** or **T5-11** transponder and your transponder reader displayed value as in the picture above.

Enter this value to the „**Set / Remove key**“ field and press „**Set key**“ button. **Software will accept valid transponder value from a key programmer of every type – no data conversion of any kind is required.**

Software will automatically re-align bits and now it looks like this:



You may delete unneeded keys and set as many keys as you need (max 3 for **ACI100** and max 4 for series **ACI500** / **ACI600**):



- Use „**Save to text file**“ to access transponder data later if no physical transponder is prepared yet.
- Press „**Apply changes**“ button to write key programming values to control unit

Please note that CDI unit will treat itself as not completely programmed with only one key stored. To avoid this you must to store one more key, even if single key is needed. Just enter any valid value for a second key position, different from value of **MASTER** key.

- **You want to reset CDI unit to VIRGIN state**
 - ◆ Just press button „**Reset to VIRGIN**“

- You want to learn keys to the VIRGIN CDI unit

- ❖ Make yourself two valid **T5-11** transponders or take two ready suitable keys of **TEMIC-11 / TYPE-11**.

To make **T5-11** transponders please program to one of them, for example:

BE FA 00 00 00 11 22 33 (7D 5F 00 00 00 88 44 CC)* and

BE FA 00 00 00 11 22 34 (7D 5F 00 00 00 88 44 2C)* to another.

Both transponders must be programmed with different values.

- ❖ Turn on ignition with first key for 1.5 sec. Turn off ignition while LED is still on. Key will be stored as a **MASTER**
- ❖ Turn on ignition with second key for 1.5 sec. Turn off ignition while LED is still on. Key will be stored as a **SERVICE**
- ❖ Turn on ignition with first key again for 1.5 sec. Turn off ignition while LED is still on. Programming procedure closed.

NOTE: Do not exceed time of 1.5 seconds when changing key in ignition lock between every step.

*- Depends on type of transponder programmer (does it use "BE FA" or "7D 5F" header)