

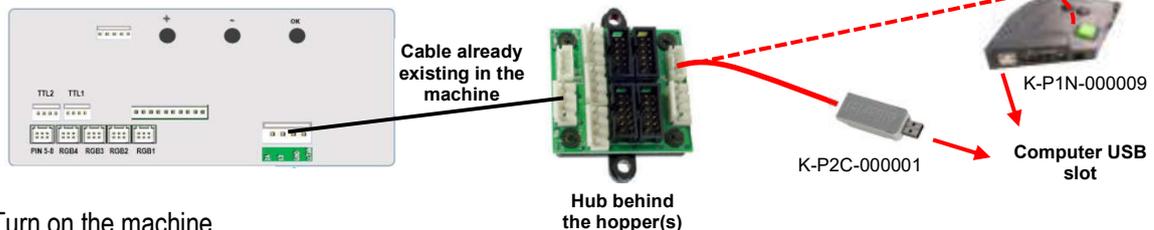
# Updating the CMS (Arm) pcb

## Instructions

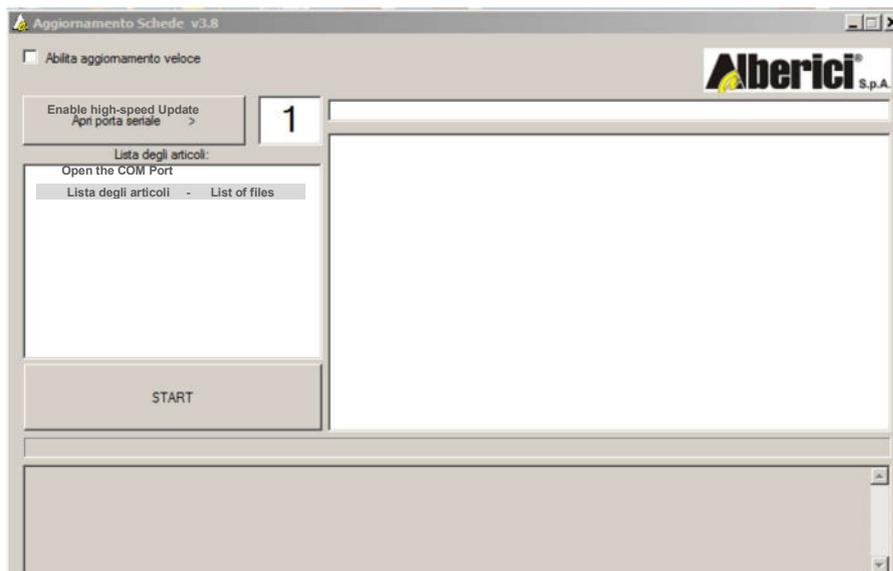
Rev. 1.01 EN

**i - To update the “CMS” Arm pcb when in-built in the machine, follow the instructions below:**

- A. Copy the software “Aggiornamento Schede e Hopper Alberici v. x.xx” on your computer and unzip it.
  - B. Copy as well the "CMS\_ARM\_v. Ax.xx" firmware file to the computer (firmware that is to be transferred to the card by the software and the interface key or interface box).
  - C. Make sure that the USB drivers ("Silicon Labs") for the cct / USB interface key / box are also installed on the PC. If not, download them from the Alberici web site ( <https://www.alberici.it/eng/products/accessories-and-spares-parts/programming-and-connections/universal-programming-kit> ) and install them.
  - D. In order to perform the update process, you need the grey cct / USB interface key (K-P2C-000001), or else the grey cct / USB interface box (K-P1N-000009) - the red / black cable supplied with the key is not required for this purpose, neither is the AC/DC power adapter of the interface box. Insert the key into the USB slot of the PC, or connect the box to the USB slot of the PC by the USB cable provided.
  - E. Make sure that the computer sees the interface via one of the COM ports (Control Panel / Device Manager / Ports [COM and LPT]). COM port should preferably be one among the low-numbered (1-to-7).
1. Open the machine door and remove the hopper on the right to get access to the Hub (Concentrator) pcb.
  2. Connect the cct / USB interface (either key or box) to the Hub pcb, using the 4p / 4p cable supplied with.
  3. Insert the key into the USB port on the computer, or connect the box by its USB cable.



4. Turn on the machine.
5. Open the application "Aggiornamento Schede e Hopper Alberici v. x.xx". The following dialogue box is displayed:



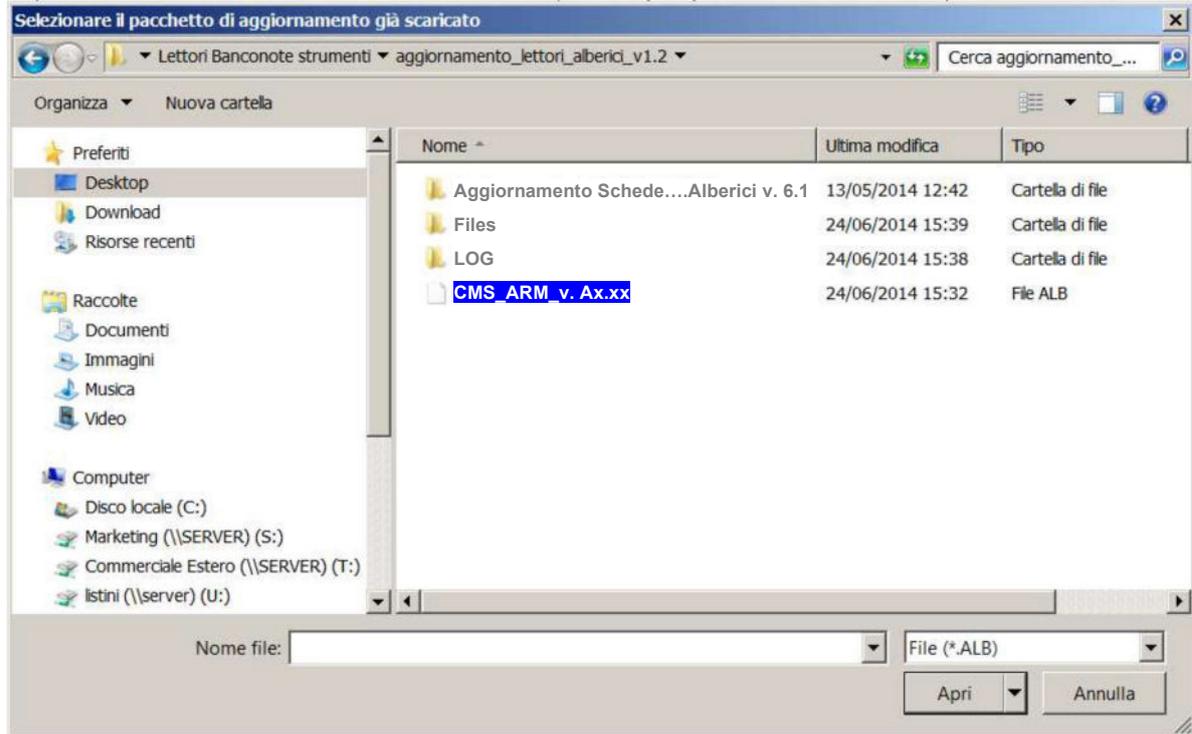
At the same time you will be prompted to confirm whether you have downloaded further update files or not:

You have indeed downloaded a new file ("CMS\_ARM\_v. Ax.xx"), and you have never used it yet, so press "Sì" (Yes):

If you want to use any previously used file, press "No".



6. Find the update file ("CMS\_ARM\_v. Ax.xx") in the navigation window (below) and select it. Then press the "Open" button to confirm that it is the firmware that you are going to write into the CPU pcb.



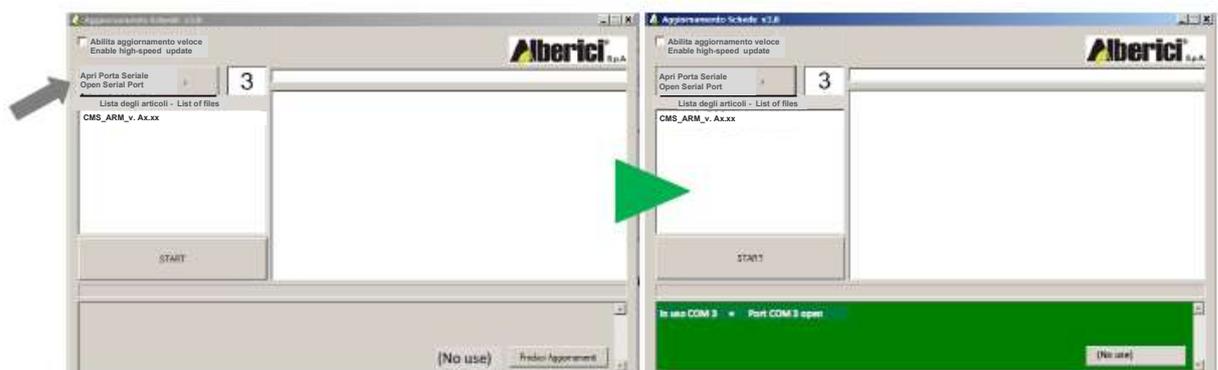
7. The application shall transfer the name of the file to its Portfolio (list of files) and asks if more files need to be downloaded.

Press "No":

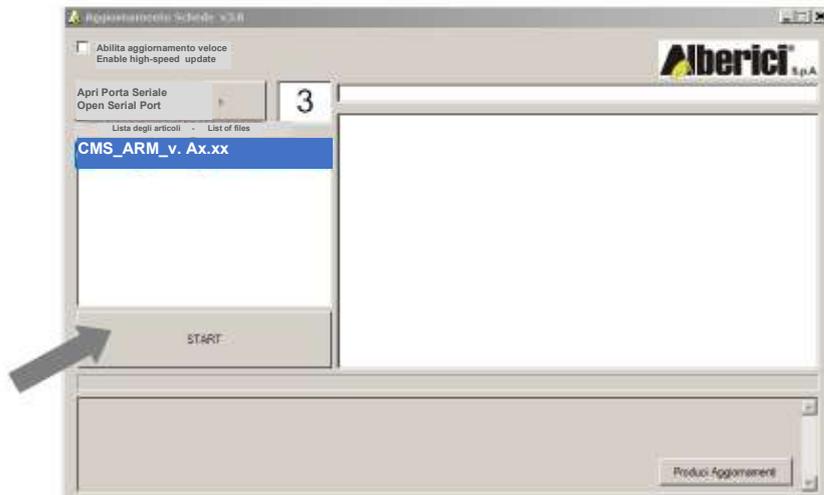


8. Make sure that the COM PORT number next to the "Apri Porta Seriale (Open the Serial Port)" button is correct. If necessary, enter the correct COM port number (e.g. : COM port 1-7) for the interface.

9. Press the "Apri Porta Seriale" (Open Serial Port) button. A message in the green field at the bottom of the dialogue window shall confirm that the COM port has been opened:



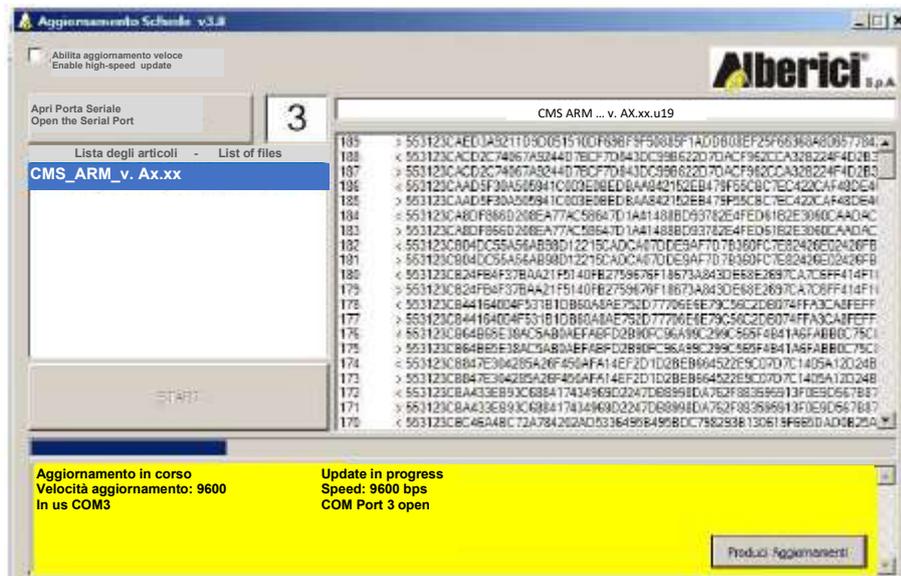
10. Select the firmware file by which the pcb will be updated and click the "START" button:



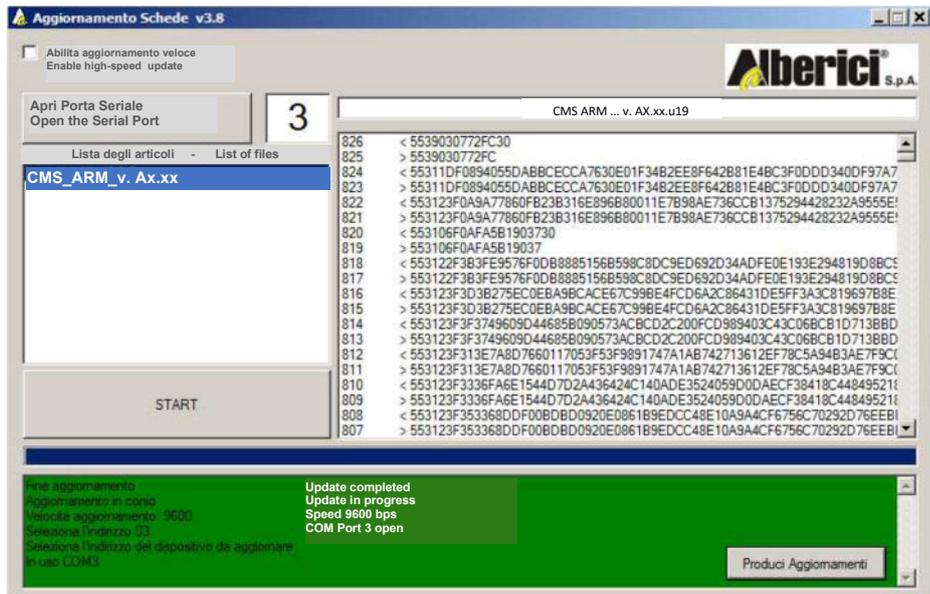
11. You will be prompted to check whether the power to the pcb is off. If not, turn the machine main switch off and press OK. The message immediately following shall prompt you to power up the pcb (turn the machine main switch on) and to press OK right away:



12. The download now begins. The yellow field at the bottom of the dialogue window indicates that the update is being carried out. The extending blue bar shows the progress of the update.



The update process will only take a few minutes. At its end, the confirmation message shall be displayed against a green background.



13. Exit the program.

14. The message showing “RI Code” will be displayed on the screen:

To restore to the operating mode, hold down the pcb 3 buttons (placed on the back of the display) for about 5 seconds and then release them: the CPU will perform its automatic self-configuration steps, before returning to the stand-by mode.



ii - To update the “CMS” Arm pcb on your workbench, follow the instructions below:

A. Copy the software “Aggiornamento Schede e Hopper Alberici v. 6.1” on your computer and unzip it.

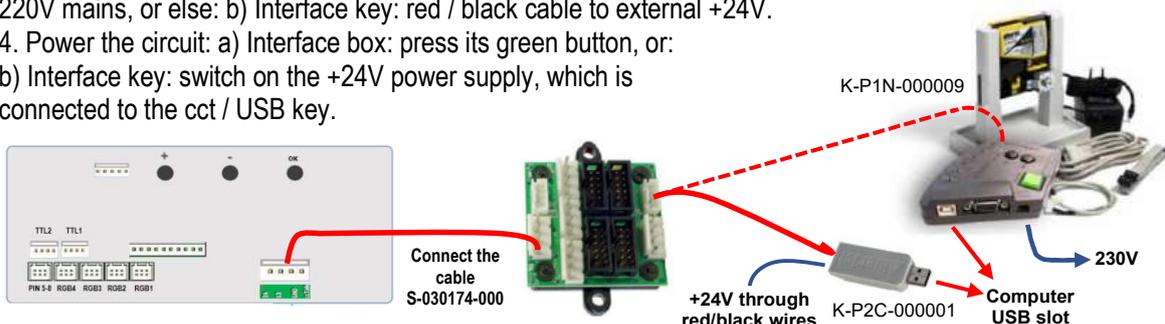
B. Copy as well the "CMS\_ARM\_v. Ax.xx" firmware file to the computer (firmware that is to be transferred to the card by the software and the interface key or interface box).

C. Make sure that the USB drivers ("Silicon Labs") for the cct / USB interface key / box are also installed on the PC. If not, download them from the Alberici web site ( <https://www.alberici.it/eng/products/accessories-and-spare-parts/programming-and-connections/universal-programming-kit> ) and install them.

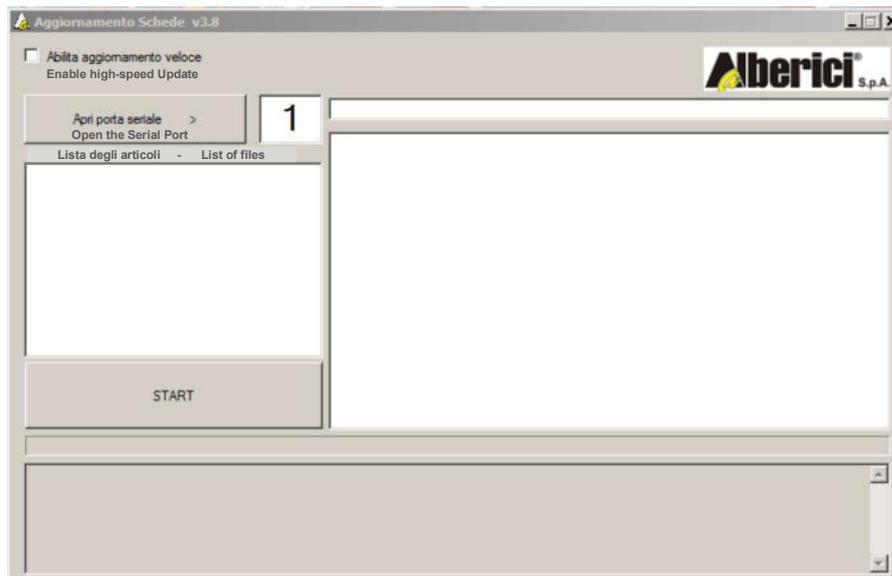
D. In order to perform the update process, you need the grey cct / USB interface key (K-P2C-000001), or else the grey cct / USB interface box (K-P1N-000009) - the red / black cable supplied with the grey key must be connected to an external 24V power supply; else, the AC/DC power adapter must be used for the interface box. Insert the key into the USB slot of the PC, or else connect the box to the PC USB slot by the USB cable provided.

E. Make sure that the computer sees the interface via one of the COM ports (Control Panel / Device Manager / Ports [COM and LPT]). COM port should preferably be one among the low-numbered (1-to-7).

1. Connect the CMS (Arm) pcb to the Hub pcb (Concentrator) using the S-030174-000 cable.
2. Connect the CCT / USB interface (either box or key) to the Hub pcb using the 4p / 4p cable (supplied).
3. Connect the power cords of the interface: a) Interface box: supplied high-voltage AC/DC adapter to 220V mains, or else: b) Interface key: red / black cable to external +24V.
4. Power the circuit: a) Interface box: press its green button, or:  
b) Interface key: switch on the +24V power supply, which is connected to the cct / USB key.



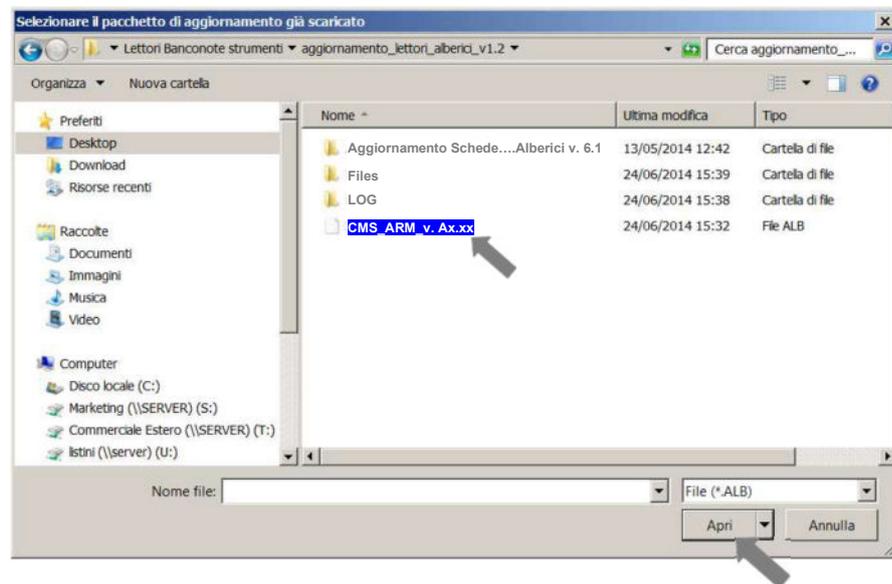
5. Open the application "Aggiornamento-Schede-e-Hopper-Alberici-6.1". The following dialog box is displayed:



At the same time you will be asked to confirm if you have downloaded further update files or not:  
 If you have not received any new file, or you received it but have never used it, press "Sì" (yes):  
 If you want to use a previously used file, press "No".



6. Find the update file ("CMS\_ARM\_v. Ax.xx") in the navigation window (below) and select it. Then press the "Open" button to confirm the selected file.



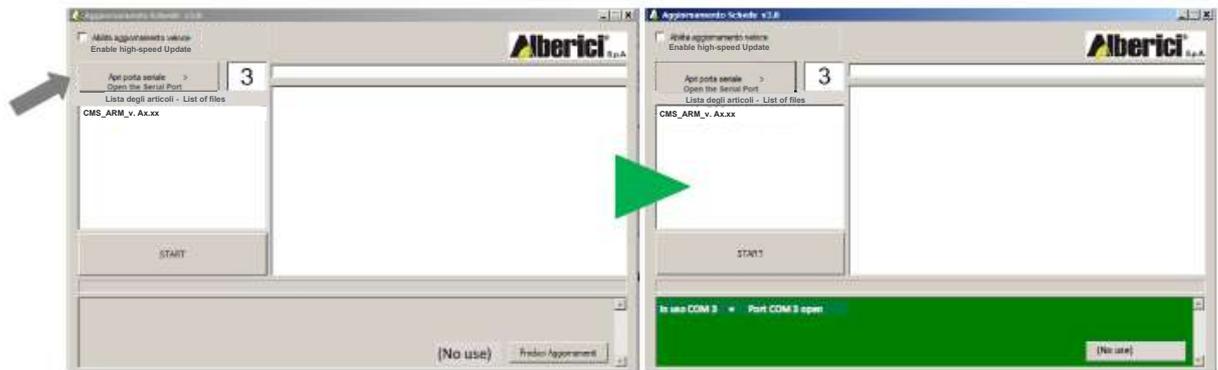
7. The application shall transfer the name of the file to its Portfolio (list of files) and will ask if any more files must be downloaded.

Press "No":



8. Make sure that the COM PORT number next to the "Apri porta seriale (Open the Serial Port)" button is correct. If necessary, enter the correct COM port number (e.g. : COM port 1-7) for the interface.

9. Press the "Apri Porta Seriale" (Open Serial Port) button. A message in the green field at the bottom of the dialogue window shall confirm that the COM port has been opened:



10. Select the firmware file by which the pcb will be updated and click the "START" button:

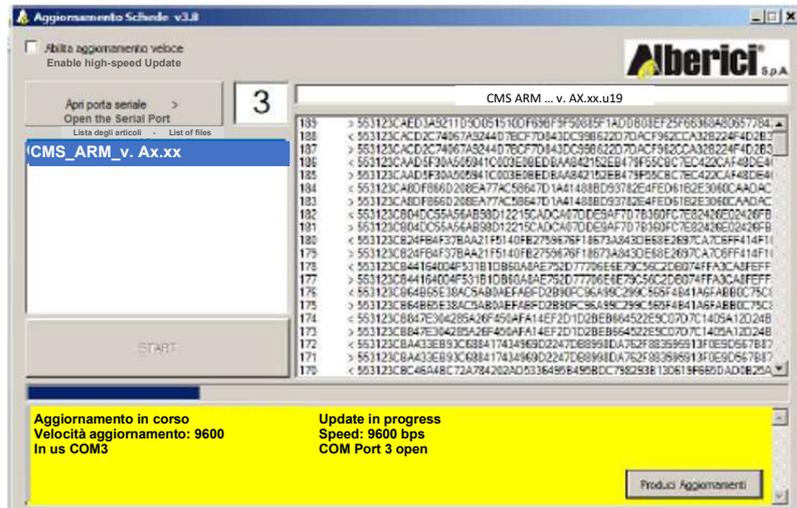


11. You will be asked to turn off the power. Switch off the green button on the interface box, or disconnect the 4p plug from the key: then press OK.

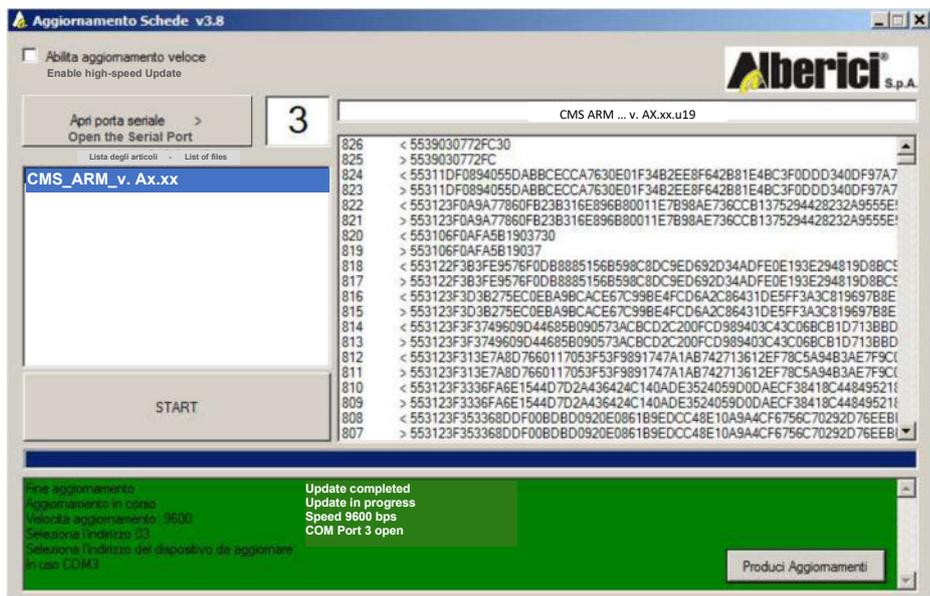
The following message will ask you to press OK and to switch the power on immediately thereafter: switch on the green button on the interface box, or connect the 4p plug of the interface key.



12. The download shall now begin. The yellow field at the bottom of the window indicates that the update is in progress. The progressing blue bar shows the advancement of the update process.



The update process will only take a few minutes. At the end, the confirmation message is displayed against a green background.



13. Exit the program.

14. The message showing "RI Code" will be displayed on the screen of the CPU pcb:



To return to the operating mode, hold down the 3 buttons (on the back of the display) for about 5 seconds and then release them: the CPU will perform its automatic self-configuration steps, before returning to the stand-by mode.



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