

The following is a description of how to do an update of decoder software.

The update is performed from a Windows-based computer and the necessary programs and files is located in the same catalog where this document was retrieved from.

New versions of the decoder programs are the files with extension ". hex". Use the right program for the right decoder!

To load e.g. code for the servo decoder on the signal decoder is not a good idea ...

Settings in a decoder is preserved during the update, but for safety, take a backup before the update. NOTE – a backup saves the settings, not the entire decoder program. You cannot restore the whole decoder program by loading a backup!

Instead of doing the upgrade self, the decoder can be sent to the MGP for update. The freight for this is charged but no other costs.

Interface card, USB-interface

To connect the computer to the decoder, an interface card is needed.

The card is the same type of card that is used for smaller Arduino card, a so called FTDI interface. This card can be found in most places that sell cards like Ardiono Mini etc.

The card can also be ordered from MGP – send a mail and ask.

Driver to the USB-interface.

If a driver for the USB interface is not present at the computer, use thew one in the catalogue "FTDI USB Drivers". When the computer asks where to find a driver for the interface then point out the "FTDI USB Drivers" catalog.

The card will be mapped to a "COM port".

Check which COM port number by looking at the "Control Panel"-> "Device Manager" under "ports (COM and LPT), where it now has a new "USB Serial Port ".

Placement of the USB interface

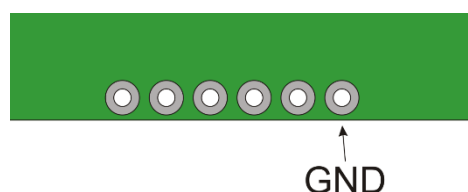
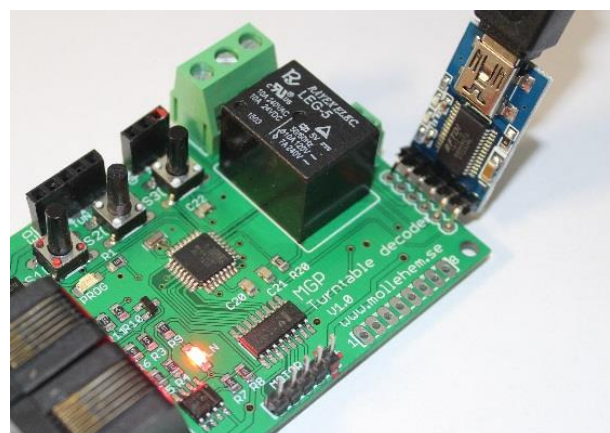
The card is connected by placing the pins on the USB-card loosely in the corresponding hole on the decoder card. Then slightly tilt the USB card to create good contact between the cards.

Important - the component side of the decoder card and the CPU Board should be directed against each other (like in the pictures).

If another USB card, then the one MGP provides, is used, please check the following:

there are variations of the USB board where the pins are placed in the opposite direction. One of the outer legs of the USB card is marked "GND".

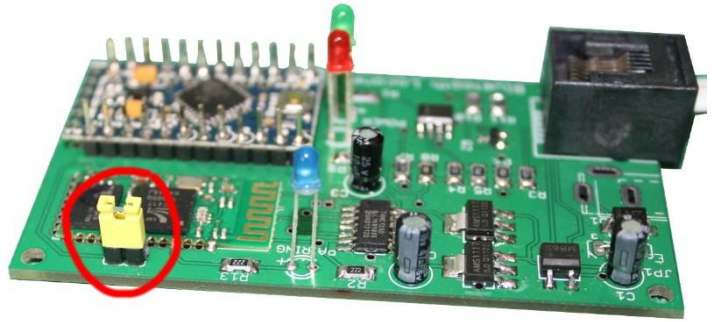
This pin must be in the hole to the right as in the picture.



Updating the Bluetooth interface

When the Bluetooth interface is to be updated, a jumper on the card has to be removed:

- Open the box by placing a small screwdriver and a nail in the small gap and then bend carefully..
- In one corner there is a jumper (marked in the picture), remove it.
- Update in the same way as the other cards.
- **Put the jumper back in place!**
- Check that you remembered to put the jumper back in place.
- Put the card in the box and close it. Be careful so that the LEDs end up in their holes.



To perform the update

- Take a backup of the decoder configuration. Normally all configuration parameters will keep their values during an update, but "better safe than sorry".
- During the update of a servo decoder, the servos can move spontaneously. If servos are connected to something sensitive, disconnect them from the decoder during the update.
- Start Xloader.exe.
Select the HEX file that fits the decoder.
Select Device "MGP".
Select the com port where the USB card ended up. You can check by looking at the "Control panel" -> "Device Manager" under "ports (COM and LPT)", where there is a "USB Serial Port".
Baudrate 57600.
- Place the USB interface into the holes on the processor card, described in the previous chapter.
Be sure that the pins end up in the right hole.
Tilt the USB adapter slightly to ensure good contact.
- Now click on "Upload" and after a few seconds LEDs on the USB card start flashing.
When these stop flashing, the update is completed.