UPDATE INSTRUCITON

Update instructions for RC Electronics units



Manual version: 1.3

RC Electronics

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Introduction

The RC Electronics devices have capability of later firmware updates to newer firmware version, which can be performed by you. This document describes procedure how to perform an update for each unit, step by step.

RC Multi 2

- 1. Download latest firmware for RC Multi 2 from our web site. Firmware should start with name RC_Multi_2_vXXX.bin. XXX is version number (108 means v1.08).
- 2. Connect special USB cable 10pin connector (part of delivery) to RC Multi 2, but do not connect it to PC!

If you have uploaded **v1.08** or earlier use following procedure:

- Press update button, see figure 1, which is located on the other side of the JR cable and hold it pressed. When button is pressed, connect the USB to PC. LED on the RC Multi 2 should not turn ON. If LED is ON, disconnect USB from PC and try again.
- You can release button and wait for 15s. New disk drive (figure 2) will appear with firmware.bin file on it.

If you have uploaded **v1.09 or later** use following procedure:

- Connect USB to PC (LED on RC Multi 2 must turn ON).
- Press update button, see figure 1, and new disk drive must appear (figure 2).
- Delete firmware.bin file and copy latest firmware file to this disk drive.
- When you see new FW file on this disk, you can disconnect USB from PC and update is finished.



Figure 1: Update button.

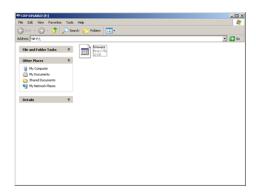
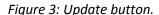


Figure 2: New disk drive.

RC TRX30

- Download latest firmware for the RC TRX30 from our web site. Firmware should start with name RC TRX30 vXXX.bin. XXX is version number (101 means v1.01).
- Connect special USB cable to 10 pin connector (part of delivery with RC Multi 2) to the RC TRX30, but do not connect it to PC!
- Press update button, see figure 3, which is located near the 10 pin connector and hold it pressed. When button is pressed, connect the USB to PC. LED on the RC TRX30 should not turn ON. If LED has blinked, disconnect USB from PC and try again.
- You can release button and wait for 15 s. New disk drive (figure 4) will appear with firmware.bin file on it.
- Delete firmware.bin file and copy latest firmware file to this disk drive.
- When you see new FW file on this disk, you can disconnect USB from PC and update is finished.





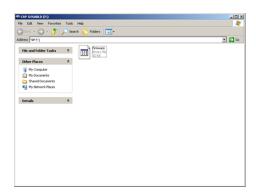


Figure 4: New disk drive.

RC Programming Card

To update the RC Electronics Programming Card to the latest firmware, you will need to make a cable to connect it to the USB interface.

You will need two 4 pin female connectors (one for each end of cable). 1st and 2nd pins (red and black on picture) are direct in line connections (power supply lines 3 V and ground). 3rd and 4th pins (blue and green on picture) are crossed (rx and tx lines).

Please take a look at the picture to see how you must connect this "update" cable. Red dot on the RC Programming Card must be up while red dot on USB interface is facing down.

To start update, run the standard firmware uploader, select the *RC FXJ Programming Card v1_x* HEX file, press update and connect the RC Card to the USB interface via updating cable. Update will start automatically. If not, disconnect the RC Card and try again.

You can download firmware uploader from web site under download -> software. Latest firmware can be found under download -> firmware.



Figure 5: Updating cable.

RC T3000

To update the RC T3000 unit, please download latest fw from web site and follow instructions:

- Save update file to **root** of the SD card (you should see RC folder and update file).
- Rename **RC T3000 vxx.bin** file to **fw.bin**. (xx means version 16 and .bin is file extension)
- Insert the SD card to the RC T3000 unit.
- Press the ON button on the T3000. You will see "Updating..." screen. When update is finished (after 3 s), unit will turn OFF automatically. Turn it ON again and you are ready to try a new firmware.

If any wav files are included in zip file, unpack them into RC/AUDIO folder.

RC T2020 and RC T2020 HE

- Download the latest firmware for the RC T2020 unit from our web site. Firmware should start with name RC_T2020_vXXX.bin. XXX is version number (101 means v1.01).
- Connect the unit with a USB A to mini B cable to PC.
- Press right (OFF) button and hold it pressed. When OFF button is pressed, press and hold down left (ON) button. See figure 6.
- You can release OFF button, but ON button must be held pressed until the end of the firmware update.
- Wait for around 15 s and new disk drive (figure 7) will appear with firmware.bin file on it.
- Delete firmware.bin file and copy latest firmware file to this disk drive.
- When you see new FW file on this disk, you release the ON button and update is finished.
- Turn ON device and update is finished.



Figure 6: Left and Right buttons.

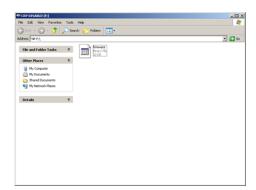


Figure 7: New disk drive.

RC Altimeter #2 and #3 series

The RC Altimeter #2/#3 module provides the ability to upload new firmware to the module. No installation is required for the Firmware Upgrade software. You can download it from www.rc-electronics.org.

After downloading, run the Firmware Upgrade.exe file. Select the correct COM port and then specify the new firmware file (RC_Altimeter_v2.xx.hex). After you have selected the firmware file, connect the module to the USB interface so it will run and LED will flash. Wait for about 4 s and click the "Upload" button. If something goes wrong during update, disconnect the module from the USB interface and restart Firmware uploader. Again, select correct COM port and update file and click Upload button.

After pressing the "Upload" button, quickly connect the USB interface to the RC Altimeter #2/#3 and the upload of the new firmware will start.

You should only use a firmware update file specifically provided for the RC Altimeter #2/#3 module. Using an incorrect update file will render the RC Altimeter #2/#3 module inoperable.



Figure 8: Firmware uploader.

RC GPSlog

To update the RC GPSog unit, please download latest fw from web site and follow instructions:

- Save update file to **root** of the SD card (you should see RC folder and update file).
- Rename **RC GPSlog vxx.bin** file to **fw.bin**. (xx means version 16 and .bin is file extension)
- Insert the SD card to the RC GPSlog unit.
- Power the module and update will be made. After update, FW file will be automatically deleted from SD card.