RC TRX30

Transceiver module for RC Multi 2
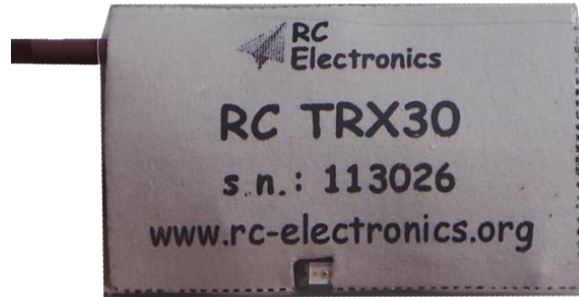
Manual version: 1.0

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Introduction

The RC TRX30 module is a transceiver for the RC Multi 2 unit, which transmits data to the ground for real-time telemetry display. Ground unit can be the RC T2020 or the RC T3000.

Module transmits data on ISM 433MHz with 25 kHz channel spacing.

Key features

- Lightweight at only **4 grams with antenna.**
- Small: 29 mm x 18 mm x 9 mm.
- PC **USB** interface for loading firmware updates.
- Plug and play
- Easy to mount.

Specifications

Module Dimensions	1.14" x 0.71" x 0.35" 29 mm x 18 mm x 9 mm
Antenna Bandwidth	422 MHz with 25KHz channel spacing
Weight with Antenna	4 grams
Temperature Range[1]	-10°C ~ +60°C

[1] Specifications are taken from component ratings and system limits and may not have been tested to the full extent of the specified ranges.

Physical overview

Figure 1 shows the RC TRX30 hardware module. On the upper side you can see module antenna. On the other side you have modular connector and a smaller Update button. Led light is used to show when module is on power (blinking).
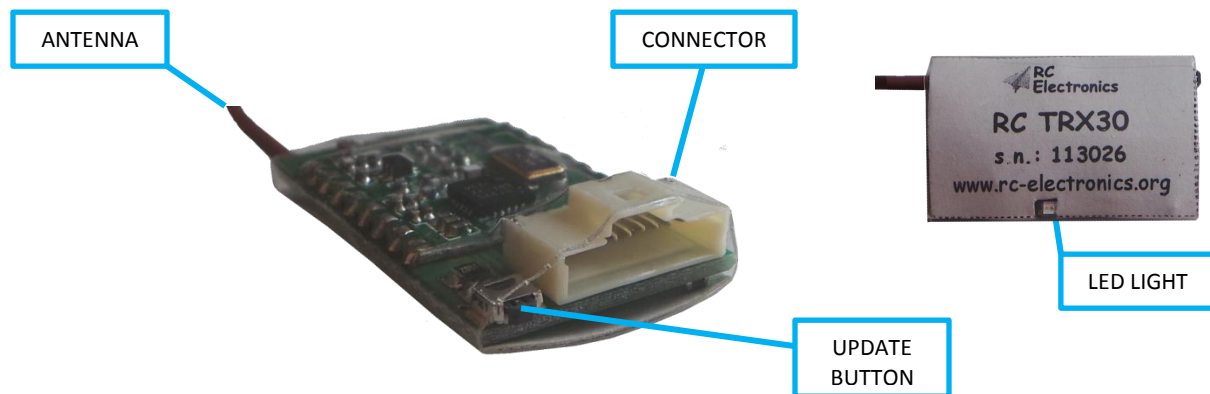

Figure 1: The RC TRX30 module.

Using the RC TRX30 module

Powering the module

The RC TRX30 module does not have its own power source. It uses RC Multi 2 as a power source, more precise, its battery. Therefore to turn the module ON, simply connect it to the RC Multi 2. Yellow LED light should start blinking, indicating the module is operating.

Module has a 10 pin connector for connecting it with the RC Multi 2. Use a shipped 1:1 cable with 10 pin connector on both sides (figure 2). If you already have some other module connected to the RC Multi 2, connect the RC TRX 30 to the RC BUS. Make sure to connect RC Bus to RC Multi 2 too, of course.

Figure 2: The RC TRX30 cable.

Updating firmware

Step 1: Download latest firmware for your RC TRX30 module from our web site. Firmware should start with name RC_TRX30_vXXX.bin. XXX is version number (109 means v1.09).

Step 2: Connect the RC TRX30 module to your PC USB port with the 10 pin connector to USB cable. LED light should start blinking.

Step 3: Press and hold the Update button for approximately 3 seconds.

Step 4: New disk drive will appear with the "firmware.bin" file on it (figure 3). Delete this file and copy latest firmware file to this disk drive. When copying is finished, you can disconnect the cable from your module. Turn module OFF and ON again. Update is finished.
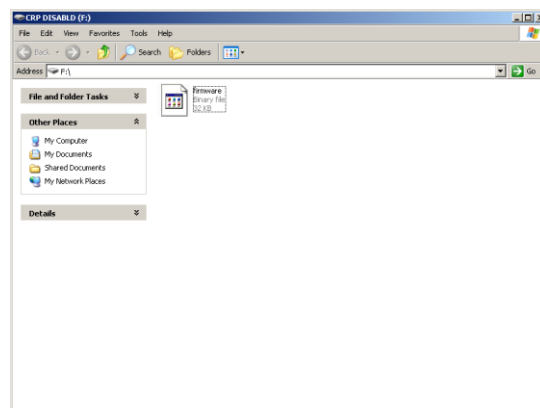

Figure 3: New disk drive.

Revision history

April 2013	Initial release of owner manual.