

# RF DC MOTOR THROTTLE - HC01

- module is suitable to command a DC motor (analog locomotive) with Radio frequency remote for a long distance
- suitable for garden layout, H0, OO or bigger gauges

## Transmitter:

- loco speed with rotary encoder
- direction/Stop with rotary encoder's push button
- loco address selection with rotary encoder using „Address” button
- 2 buttons control 4 universal outputs (lights, smoke generator, horn, coupler, etc.)
- direction change protection (direction change is allowed only if loco stopped)
- 10 locomotives simultaneously with one Transmitter
- 7 segments display - shows locomotive address
- 9V battery power supply

## Receiver:

- 1,5 A output (2,3 A peak for 10 seconds)
- up to 30 volts power supply
- selectable address between 1 - 10 (soldering iron needed)
- front/rear lights output (each 100 mA) - the lights lit depends on direction
- 4 universal outputs (each 100 mA)
- 4th output is active if loco moves on (smoke generator, warning flasher, sound)
- size: 40 x 20 mm (1,6” x 0,8”).

## Setting:

### Select address:

- press down and hold „Address” button
- turn knob to clockwise or counter-clockwise to select loco
- read address on display (number „0” means address 10)
- release button

### Direction:

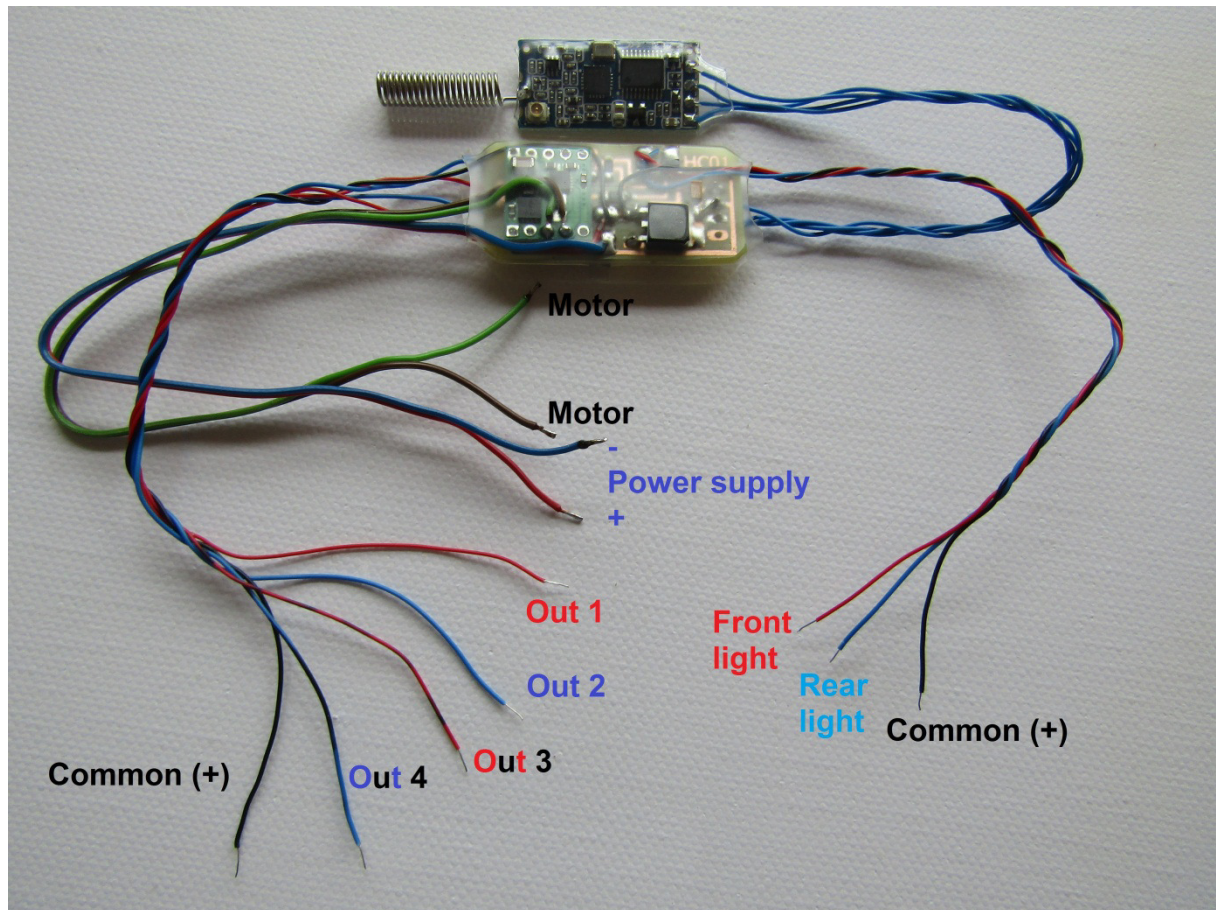
- press down shortly the knob to stop loco
- press the knob once again to change direction

### Outputs:

- press button „Out1 / Out3” shortly to activate/deactivate Out 1
- press button „Out1 / Out3” for 1 sec to activate/deactivate Out 3
- press button „Out2 / Out4” shortly to activate/deactivate Out 2
- press button „Out2 / Out4” for 1 sec to activate/deactivate Out 4
- Out4 goes on if the loco moves on and goes off if the loco stopped

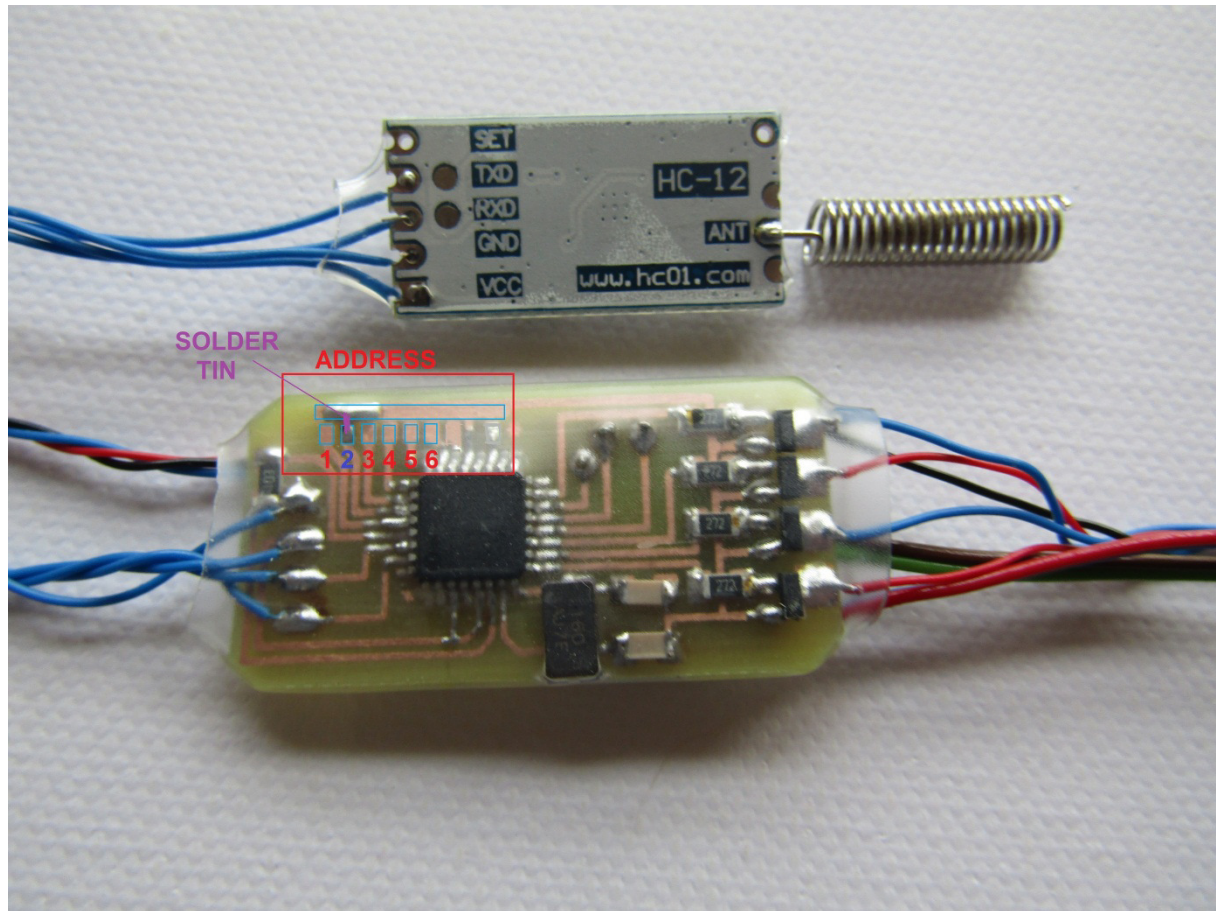
### Stop loco(s):

- press the knob shortly to stop selected loco
- press the knob for 2 seconds long to stop all locos (Emergency stop). After the Emergency stop has been used the Throttle restarts.



### Address selection:

- remove heat-shrink foil carefully
- bridge the small area on the board with common copper line ( picture 3 - red square) with soldering iron:



### Addresses:

*(solder tin bridge with common copper line)*

- 1 - address 1
- 2 - address 2
- ...
- 6 - address 6

- 1+2 - address 7
- 1+3 - address 8
- 1+4 - address 9
- 1+5 - address 10

The default address is 1.  
If you order more items the addresses will be consecutive.

Push-buttons may have different color.