

CHROMOFLEX RC**Barthelme**
LED Solutions

The Wireless Radio Remote Control

The Remote Control is very easy to use. It can control most of the functions of the Chromoflex RC. Only some special settings (like the 3 user-changeable colour changes, own colour maps, ...) can only be modified with the Chromoflex USB Dongle and the appropriate Software for PC. The range of the Remote Control is depending on the environment, indoor normally the reliable operation range is 20-50 mtr.

Chromoflex RC operates on a frequency of 868.3 Mhz (license free in EC, Switzerland, Norway and Iceland).

Required are 2 batteries, type „Lady“ / „LR03“ / „AAA“ with 1.5 Volt (Alkaline). For opening the enclosure a small cross recessed screwdriver is required.

Safety instructions

Although the devices are equipped with a limited reverse polarity protection, connecting the power in reverse polarity (even for a short time) can destroy the module. Please remove/replace empty batteries immediately, because leaking batteries might cause damage. Do not modify the electronics.

We decline any liability, loss, or damage caused by improperly used devices! Also guarantee is lost in such cases.

This product is not a toy, keep away from children!

First Test

The default factory setup for the Remote Control is network 8 and communication with any Chromoflex RC module. If there is no powered-on Chromoflex RC module in range, the Remote Control will blink for about 3 seconds (pressing any key stops blinking). The same will happen, if the radio frequency is not available (blocked by other devices), but this normally never should occur with CE compliant devices.

The used radio frequency (868.3 Mhz) is also used by other devices (like radio controlled sockets, weather sensors, ...), but the current regulation ensure an interference-free operation. For a reliable transmission the Chromoflex RC therefore uses a 2-way transmission. This means: the Remote Control listens for a reply of the Chromoflex RC!

In the simplest case, the Remote Control (or the USB Dongle (for PC)) has to communicate only with one Chromoflex RC module. Then only both must be set to the same network (1-8). This mode („Normal, Network 8“) is the factory default.

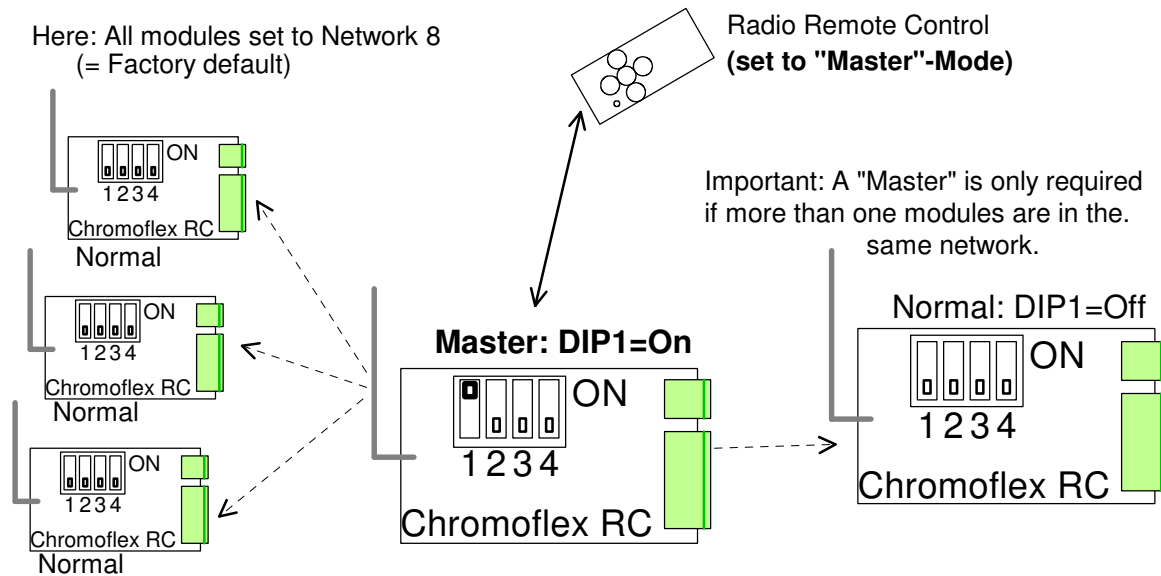
If a command is sent to a Chromoflex RC, normally only a short flashing of the LED on the Remote Control will be seen, if the Chromoflex RC acknowledges the command!

Important Please do not touch the electronic parts, because electrostatic discharges can cause damage.



Networking and wireless operation

If a group of more than one modules build one network, one module within the network should be set up as a „Master“ module. Only the „Master“ will communicate with the Handheld Radio Remote Control or the USB Dongle. But it will forward its settings (and its time base) periodically (all few seconds) or on a communication event to all other modules within the network.



Even if other modules (non-“Master“) are switched on later, they will receive (at least after a few seconds) the settings from the Master.

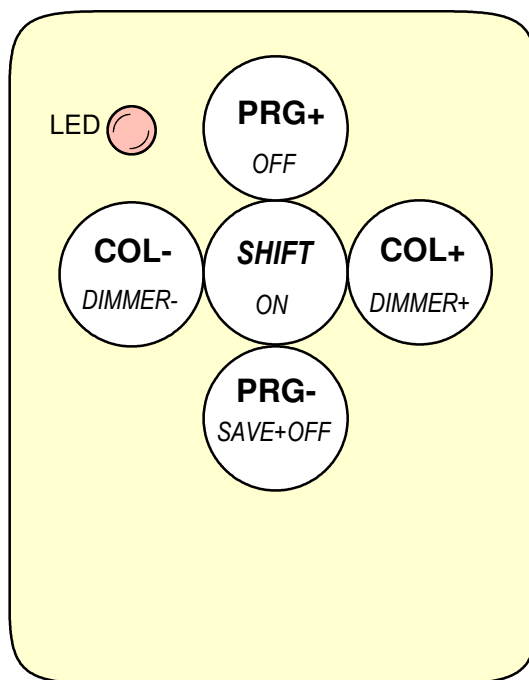
The communication of the Radio Remote Control or the PC Dongle with the Master is 2-way. But the master itself sends signals to the other modules only in one direction. However, this is safe, because if any packet goes lost, the next will follow after a few seconds. Even if many packets are lost, the network will still work synchronously.

It is good practice to set a module in the middle of the network as Master. If there is any of the other modules too far from the master, it will not follow reliably (or not at all) to the Master's commands (so this can be recognised easily).

A word about the range: The Radio Remote Control has a less stronger antenna (it is inside of the enclosure) than the Chromoflex RC modules or the USB Dongle. The range of the Radio Remote Control is therefore normally below the range of e.g. Master to other modules. To achieve a good range, we recommend to justify the antenna directly „into the air“. Dense materials (especially if close to the antenna) like stone, concrete and metal parts may reduce the range significantly. In case of weak signals, sometimes it often already helps, if the module is moved some cm.

Keypad configuration

All buttons on the keypad have multiple functions, grouped in different levels: In the top level the different effects and 20 predefined colours can be selected:

Top level:

COL+ / COL- select 20 predefined colours:

- 16 „rainbow colours“ and
- 4 „white colours (with different nuances)“.

PRG+ / PRG- select 12 different effects:

- 1.) Fixed Colour (last saved fixed colour)
- 2.) Normal Colour Change (all 8 colours of the standard colour table, 5 seconds per colour)
- 3.) Medium Colour Change (all 8 colours of the standard colour table, 20 seconds per colour)
- 4.) Slow Colour Change (all 8 colours of the standard colour table, 40 seconds per colour)
- 5.) „Blob“: Randomly uplighted/dimmed colours (from the 8 colours of the standard colour table)
- 6.) „LSD“: Randomly changing colours (from the 8 colours of the standard colour table)
- 7.) „Fire“: Simulation of a burning fire (red and orange)
- 8.) „Flashes“: Bright random flashes over a deep blue (looks very good with several Chromoflex RC)
- 9.) „Bursts“: Randomly selected, non-synchronised flashes (from the 8 colours of the standard colour table)
- 10.) User Program 1 (can only be modified with the PC software, pre-set: 8 colours with fast changing)
- 11.) User Program 2 (can only be modified with the PC software, pre-set: red-green-blue)
- 12.) User Program 3 (can only be modified with the PC software, pre-set: 3 uplighted/dimmed combined colours)

The 2nd level can be activated by pressing the button in the middle (**SHIFT**, at the same time with the other or first):

DIM+ / DIM- select the 8 level dimming. The dimming level is valid for all effects.

OFF switches off all modules in the network.

With **SAVE+OFF** all modules are switched off too, but all settings (dimmer, effect, fixed colour) are saved in the modules's memory and will be recalled after power on.

If the modules hve been switched off, pressing **SHIFT** will restore the last state.

Pressing the button in the middle longer (**SHIFT**, >4 seconds), the 3.rd level (= Setup) is activated. In this level the communication type („Master“ / „Normal“ and network) can be selected, according to the following table. In the Setup mode the LED of the Remote Control is blinking.

Remark: The Remote Control can also be configured for a „No Echo“ mode. In this mode the Remote Control is working like a „traditional remote control“ and no reply from the modules is expected. Using the „No Echo“ mode only makes sense if several Chromoflex RC modules are operated without a „Master“ in one network.

Technical Data

Radio frequency: 868.3 Mhz (license free in EC, Switzerland, Norway and Iceland)

Batteries: 2 batteries, type „Lady“ / „LR03“ / „AAA“ with 1.5 Volt (Alkaline)

Contact / Internet

Download of the PC Software, manuals, data sheets and technical requests (technical requests only as E-mail please!):

www.chromoflex.com , www.barthelme.de

Manufacturing and distribution:

www.barthelme.de

Setup of the Remote Control

In the setup mode (pressing **SHIFT** for > 4 sec), a 5-digit code must be entered, using the buttons **COL+** and **Col-**. Please press the buttons **COL+** / **COL-** according to the following table. We recommend to use the modes with „Echo“. Only if several modules are operated without a „Master“ in one network, the mode „No Echo“ makes sense. The factory setup is „Network 8, Echo“:

No:	Code Col+/-	Explanation
0:	- - - - -	No Echo, Normal (Any module), Net 1
1:	- - - - +	No Echo, Normal (Any module), Net 2
2:	- - - + -	No Echo, Normal (Any module), Net 3
3:	- - - + +	No Echo, Normal (Any module), Net 4
4:	- - + - -	No Echo, Normal (Any module), Net 5
5:	- - + - +	No Echo, Normal (Any module), Net 6
6:	- - + + -	No Echo, Normal (Any module), Net 7
7:	- - + + +	No Echo, Normal (Any module), Net 8
8:	- + - - -	No Echo, Only master, Net 1
9:	- + - - +	No Echo, Only master, Net 2
10:	- + - + -	No Echo, Only master, Net 3
11:	- + - + +	No Echo, Only master, Net 4
12:	- + + - -	No Echo, Only master, Net 5
13:	- + + - +	No Echo, Only master, Net 6
14:	- + + + -	No Echo, Only master, Net 7
15:	- + + + +	No Echo, Only master, Net 8
16:	+ - - - -	Echo, Normal (Any module), Net 1
17:	+ - - - +	Echo, Normal (Any module), Net 2
18:	+ - - + -	Echo, Normal (Any module), Net 3
19:	+ - - + +	Echo, Normal (Any module), Net 4
20:	+ - + - -	Echo, Normal (Any module), Net 5
21:	+ - + - +	Echo, Normal (Any module), Net 6
22:	+ - + + -	Echo, Normal (Any module), Net 7
23:	+ - + + +	Echo, Normal (Any module), Net 8 (** Factory Default **)
24:	+ + - - -	Echo, Only master, Net 1
25:	+ + - - +	Echo, Only master, Net 2
26:	+ + - + -	Echo, Only master, Net 3
27:	+ + - + +	Echo, Only master, Net 4
28:	+ + + - -	Echo, Only master, Net 5
29:	+ + + - +	Echo, Only master, Net 6
30:	+ + + + -	Echo, Only master, Net 7
31:	+ + + + +	Echo, Only master, Net 8