RGB board for 220x220mm frame

The RGB board has a single pushbutton that controls all its funcioning modes.

Pushbutton operation:

- Short push (less than half a second): start/stop/change
- Long push (over a second): menu selection

RGB simple mode

With a short push of the button, the board will start or stop the RGB cycle. If the board has just been powered, the cycle will start from red, then will transition to Red \rightarrow Green \rightarrow Blue \rightarrow Red \rightarrow etc.... If instead the cycle was already started and then stopped, it will restart from where it was last stopped.

In this mode, by disconnecting and reconnecting the power supply the board will always start with the RGB cycle, always from the Red color, and always with a transition time between colors of about 20 seconds.

Full mode

With a long push of the button, with RGB cycle off, it is possible to access a 4 levels menu to change all the board settings, and also save them into memory to be preserved even when the power supply is disconnected. The menu level is shown with a colored blink WHILE the button is kept pressed. The transition to the next level occurs every about 2 seconds while the button stays pressed. In order to confirm the level selection, just release the button while in the desired level. NOTE: changing these settings will affect also the "simple mode".

Menu levels:

- Level 1 (red blink): cycle speed selection
- Level 2 (green blink): cycle mode selection
- Level 3 (blue blink): fixed color selection
- Level 4 (white blink): Save the current settings into memory

Once the button is released, the colored blink will show the current setting for the selected menu level. If the button is not pressed within about 2 seconds, the board will revert to the OFF state saving the current settings. NOTE: the settings will be memorized only while the board is powered. In order to commit to memory the settings, the Level 4 menu must be selected.

To browse the available settings of the selected menu level, use short pushes. Once the correct setting is selected, stop pushing the button and wait for at least 3 seconds. This will confirm the setting and return the board to the OFF state.

NOTE: a long push while inside a menu will be recognized as a short push as soon as the button is released.

Level 1 menu options:

- Transition time 20 seconds (red blink) ***
- Transition time 60 seconds (green blink)
- Transition time 140 seconds (blue blink)
- Transition time 300 seconds (vellow blink)
- Transition time 600 seconds (violet blink)

(*** denotes the default software setting)

Level 2 menu options:

- RGB mode (yellow blink) ***

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Red \rightarrow Red + Green \rightarrow Green + Blue \rightarrow Blue \rightarrow Blue + Red \rightarrow Red \rightarrow ...
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- Red mode (red blink)

$$Red \rightarrow Red + Green \rightarrow Red \rightarrow Red + Blue \rightarrow Red \rightarrow ...$$

- Green mode (green blink)

Green
$$\rightarrow$$
 Green + Blue \rightarrow Green \rightarrow Green + Red \rightarrow Green \rightarrow ...

- Blue mode (blue blink)

Blue
$$\rightarrow$$
 Blue + Red \rightarrow Blue \rightarrow Blue + Green \rightarrow Blue \rightarrow ...

- RGBW mode (white blink)

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Red \rightarrow White \rightarrow Green \rightarrow White \rightarrow Blue \rightarrow White \rightarrow Red \rightarrow ...
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Example: select RGBW cycle with a transition time of 140 seconds.

- 1) Keep the button pressed until a red blink starts (menu Level 1), then release it;
- 2) Short push twice, until a blue blink starts (140 seconds transition time);
- 3) Wait until the blue blinking ends;
- 4) Keep again the button pressed, until the blink goes red and then green (menu Level 2), then release it;
- 5) Short push four times, until a white blink starts (RGBW mode);
- 6) Wait until the white blinking ends;
- 7) Use a short push to start/stop the cycle.

Level 3 menu options:

- Fixed colors. A total of 24 colors plus white are available. In this menu level, once the desired color is selected, it will stay on (this differs with the other levels where, once a setting is selected, theboard will go back to the OFF state). The pushbutton can then be used, with a short push, to switch the color ON and OFF as in the RGB cycle mode.