Basic function description:

GRC linkage light control system is set as lamplight analogue simulation. The main functions include: Normal steering control,turning signal lamp linkage flash. Rapidly turning on turning signal switch twice to turn on and turn off emergency flasher. The function of headlamp can be set up flexibly: for instance, when starting vehicle, daytime running lamp can be half-on, and full-on when moving. Headlamp can be set as linkage startup or normally-on. Increase channel 2/3 control, each channel can control individual on-off/simultaneous on/alternative flash/simultaneous sharp-flash of two-channel lamplight.

Function description of each output port:

port 1: Headlamp (low beam/daytime running lamp is half-on when power on and full-on when moving)
port 2: Headlamp (high beam is not on when power on and full-on when moving)
port 3: Left turning signal
port 4: Right turning signal
port 5: Reversing light
port 6: Brake lamp
port 7: Linkage end of standby port 2 (transfer switch controls different linkage states under linkage state)
port 8: Linkage end of standby port 6 (transfer switch controls different linkages state under linkage state)
port 9: Channel 3 control switch or flickering state (DIY connect chassis lamp, front bumper lamp, etc.)
port 10: Channel 3 control switch or flickering state (DIY connect chassis lamp, front bumper lamp, etc.)
port 11: Channel 4 control switch or flickering state (DIY connect spot lamp, ceiling lamp, etc.).Note 1
port 12: Channel 4 control switch or flickering state (DIY connect spot lamp, ceiling lamp, etc.)Note 1,

Function description of each control switch:

switch 1: reversed-phase switch of channel 1 (switch setting when linkage of tail lamp is reversed)
switch 2: reversed-phase switch of channel 2 (switch setting when left and right turning signal lamp is opposite)
switch 3: control mode switch of channel 3: ON is cyclic trigger state and OFF is individual on-off state. Note 2
Switch 4: control mode switch of channel 4: ON is cyclic trigger state and OFF is individual on-off state. Note 3
Switch 5: port 7 linkage switch: state of port 7 and port 2 is consistent in ON state, and lamp is normally-on in OFF state.
Switch 6: port 8 linkage switch: state of port 8 and port 6 is consistent in ON state, and lamp is normally-on in OFF state.

Note 1: output terminal 11 and 12 are high-power output outlets, which output power is double of other 10 terminals, can be connected with other lamp load of high brightness, such as ceiling lamp and spot lamp.
Note 2: linkage cyclic mode: channel 3 executes on-off-on or off-on-off action once, controller switches current output mode of port 9 and port 10 once, see following description for specific change (trigger of 6 states in cycle): 9 off 10 off——» 9 on 10 off ——» 9 off 10 on——» 9 on 10 on——» 9 and 10 alternative flash ——» 9 and 10 simultaneous sharp-flash.
Note 3: linkage cyclic mode: channel 4 executes on-off-on or off-on-off action once, controller switches current output mode of port 11and port 12 once, see following description for specific change (trigger of 6 states in cycle): 11 off 12 off——» 11 on 12 off——» 11 off 12 on ——» 11 on 12 on——» 11 and 12 alternative flash ——» 11 and 12 simultaneous sharp-flash.

(Standard version)

Standard port output connection reference

Definition of lamp line and corresponding color of lamplight

Blue and white line 5mmLED white light:
daytime running lamp (port 1),
front bumper lamp (port 9)
other lamps (port 10)

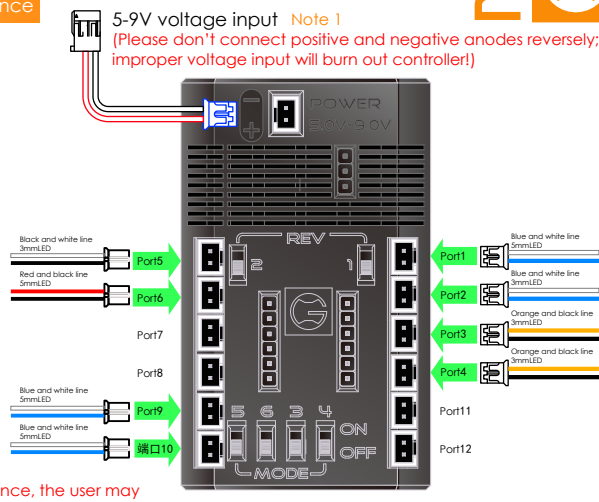
Blue and white line 3mmLED white light:
Headlight /High beam

Orange and black line 3mmLED orange light:
Turn signal

White and black line 3mmLED white light:
Reversing light

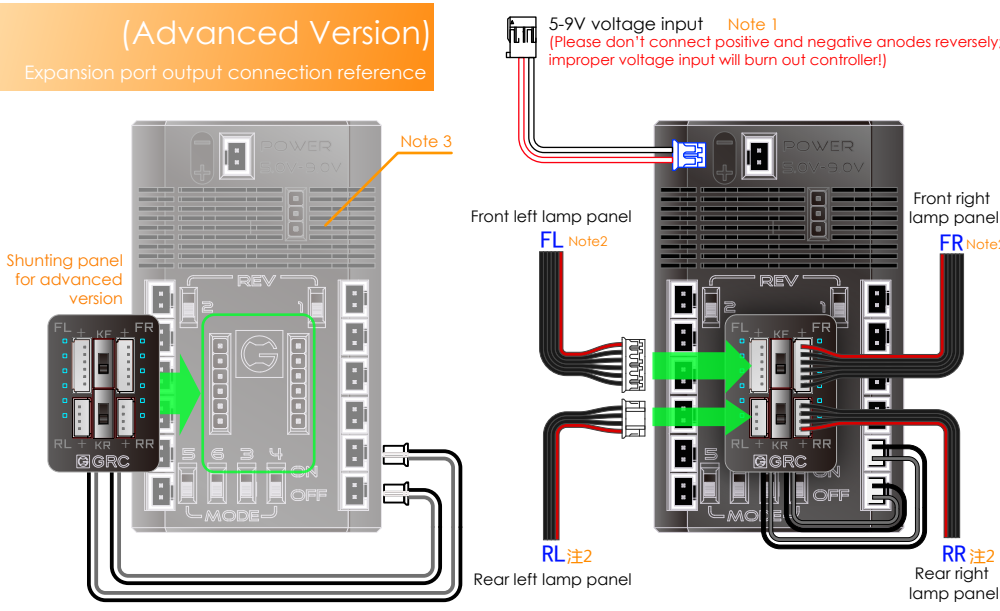
Red and black line red light:
Brake light

(Above definitions of lamplight are only for reference, the user may switch between different output ports as needed.)



(Advanced Version)

Expansion port output connection reference



Note 1: when receiving power supply, the use of high-power lamplight may lead to insufficient power supply for other electronic equipment. It is recommended to cooperate with the use of UBEC. In case of supplying power by AA battery, it is recommended to use alkaline dry cell so as to obtain better brightness output. When adopting 2S Lipo to supply power, maximum power output will be obtained, and it is necessary to pay attention to preventing under-voltage over-discharge of battery when using lithium battery because inside of product is not provided with function of low-voltage disconnection.

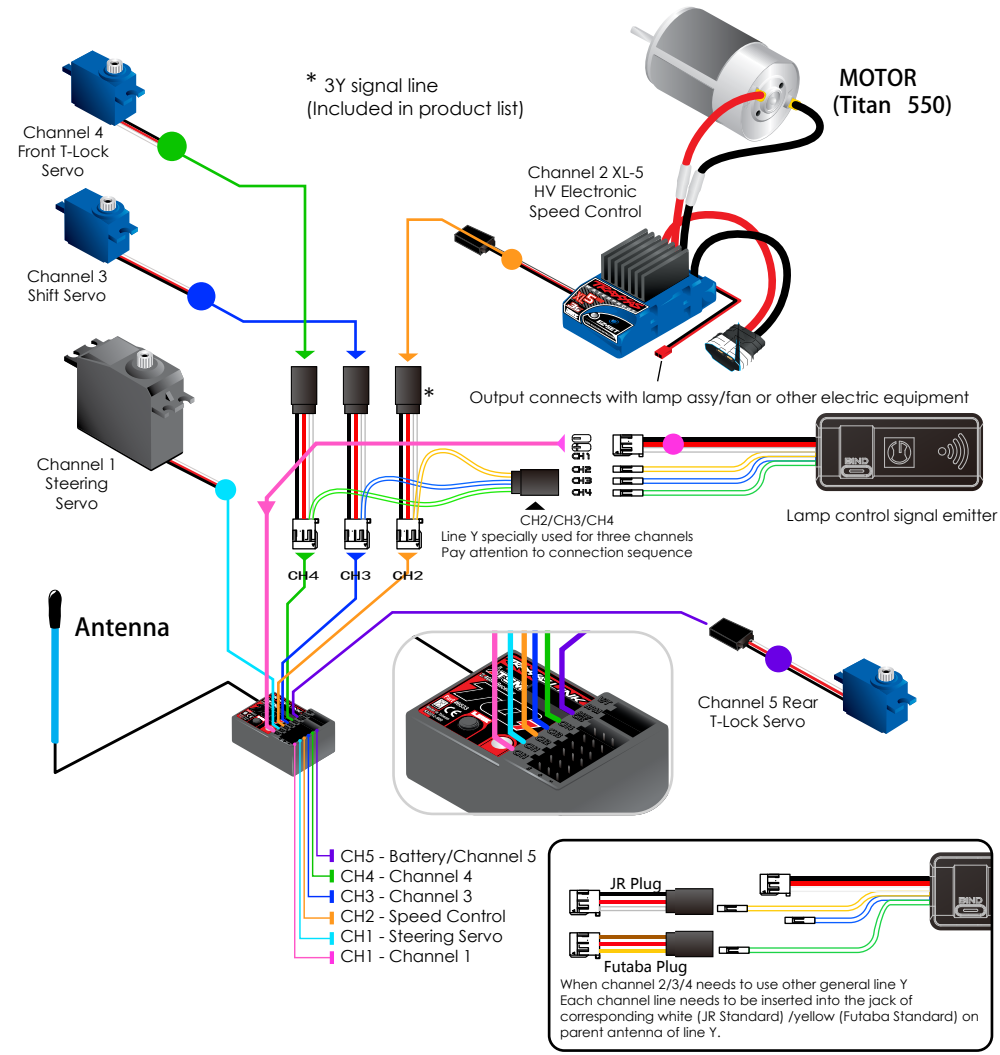
Note 2: only SMD lamp panel specially used for GRC is adopted, in case of using other unknown lamp panel, it may cause irreparable damage to reception controller.

Note 3: the controller will get heated when working under heavy load. you may use active cooling fan when using higher power to output so as to obtain stable output in the state of extreme power.

Reference instructions for GRC lamp control emitter connection

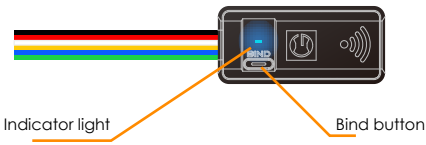
Demonstrated by TRX4 TQi5 reception

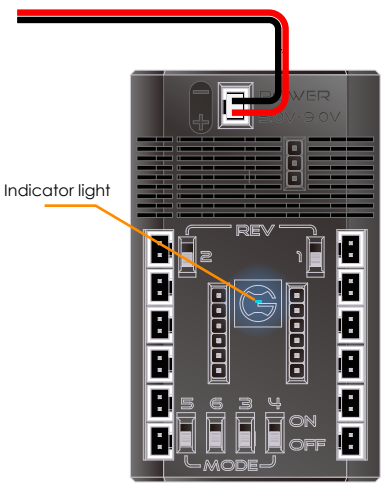
When connecting wire for wireless emitter, channel 1 is the channel required to be connected (if is not connected or there is no signal output for some reason, wireless emitter won't be able to work), channel 2 (yellow line), channel 3 (blue line) and channel 4 (green line) are optional channel for wiring. When channel line is correctly connected and receives signal, corresponding output port will output control action.



Above only describes TQi5 as wiring reference, illustrated emitter is adaptive to most of two-channel or multiple-channel emitters which are available in market, please adjust mode of connection according to specific operating environment.

Basic function description:
when product suite is used for the first time, it is necessary to perform frequency alignment operation. After the first frequency alignment is successful, it is unnecessary to perform frequency alignment in future. One emitter can pair with multiple reception controllers. When one emitter is used and pairing with multiple reception controllers, wireless emitter will only memorize the reception controller of the latest paring. If it is necessary to change different reception controller, please perform frequency alignment once. Effective working distance between emitter and receiver is within 5m.





Link device:

1,Connecting line of wireless emitter and corresponding reception channel must be connected with channel1&2, while channel 3 and 4 is optional.

2,Turn on remote control of vehicle and then power of reception controller. Then wireless emitter's blue lamp flashes, waiting indicating lamp in normally-on state (signal meso-position learning is completed), and then enter into frequency alignment operation of the emitter.

3,The receiver is power on. After power on, central indicating lamp flashes quickly once and waits for frequency alignment signal of the emitter. After power on, light of port 1 and port 6 will be on.

4,Press bind button of wireless emitter, the emitter indicating lamp enters into slow flash state, waiting for 5-7 seconds, indicating lamp of reception controller changes into quick flash state, and frequency alignment is successful. At this moment, indicating lamp of wireless emitter stops flashing, signal duration of once frequency alignment of wireless emitter is more than 25 seconds, indicating lamp stops flashing until pressing frequency alignment key again next time to perform frequency alignment again. Note 1, Note 2

Note 1: Keep close distance between emitter and receiver to be paired.
Note 2: When performing frequency alignment operation, if there are multiple reception controllers to be paired at site, the emitter will pair with reception controller at site randomly after pressing frequency alignment key. The emitter will only pair with one of the reception controllers. The mode of one-to-many is not supported.