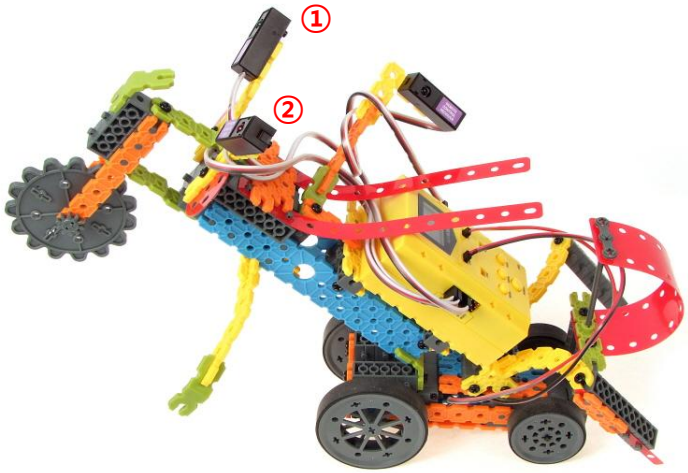
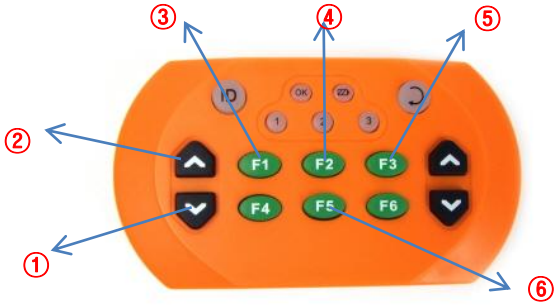
EQ-ROBO Programming : Tricking Car

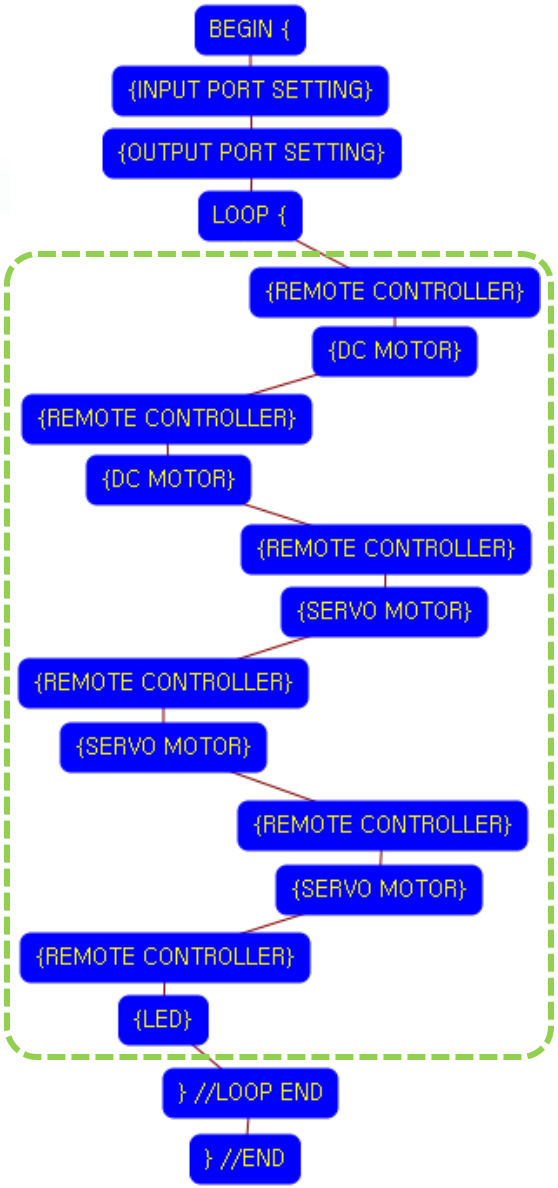


The car model is to study the remote controller programming.

Program name : eq2-2-p31_TrickingCar.ufc



① Go backward
② Go forward
③ Steering wheel turns left 20 degree
④ Steering wheel sets to the straight
⑤ Steering wheel turns right 20 degree
⑥ Turn on the left / right LEDs



Program begin

Input port setting

Output port setting

LOOP starting point (Repeat the command)

Go forward

Go backward

F1 Steering wheel turns left 20 degree

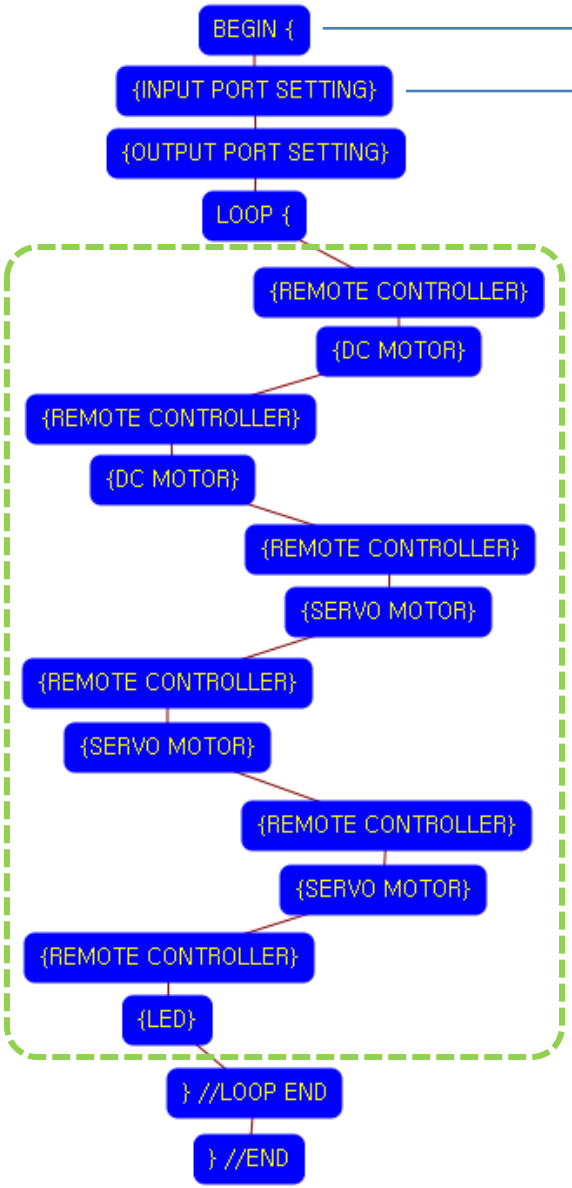
F2 Steering wheel sets to the straight

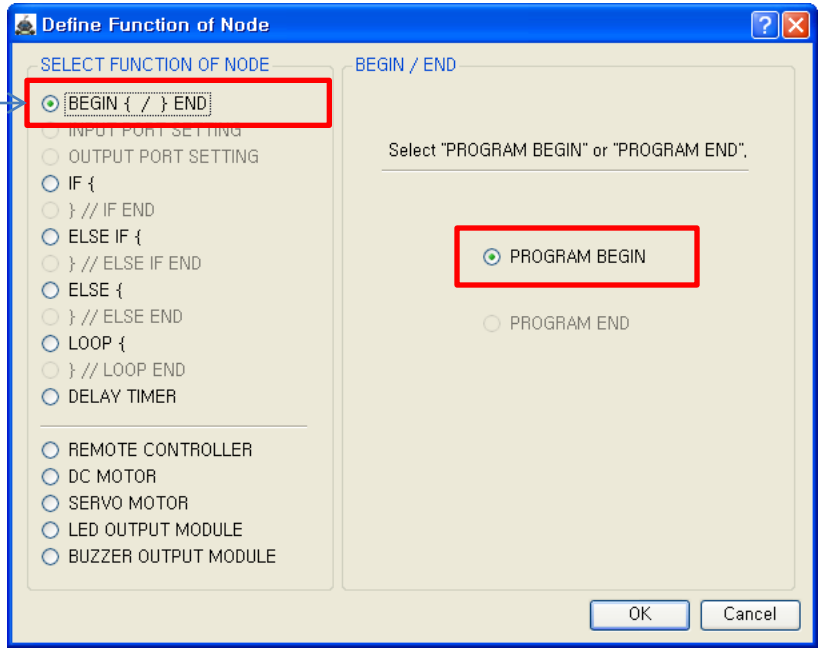
F3 Steering wheel turns right 20 degree

F5 Turn on the left / right LEDs.

LOOP ending point

Program end

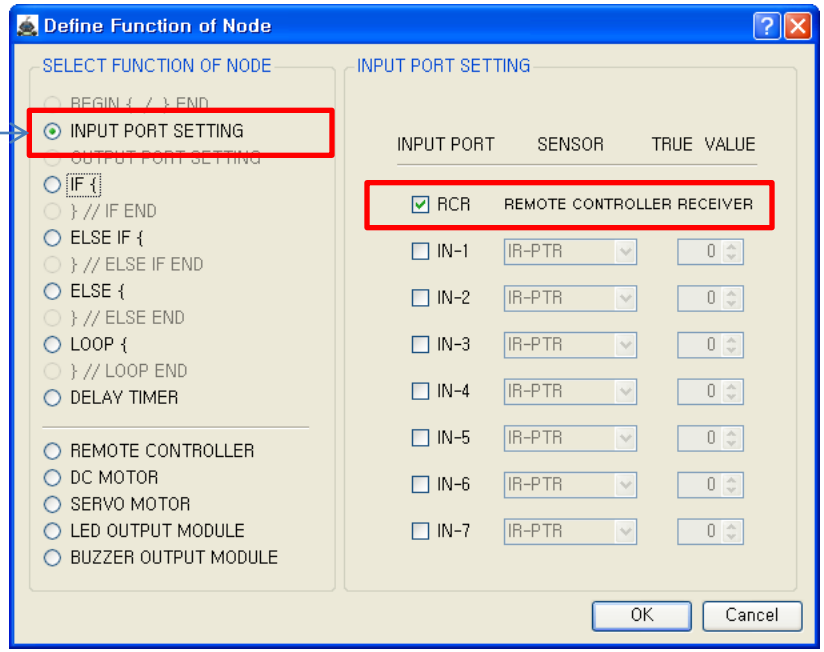




This means that program begins from hear.

You have to place this node at the first of program.

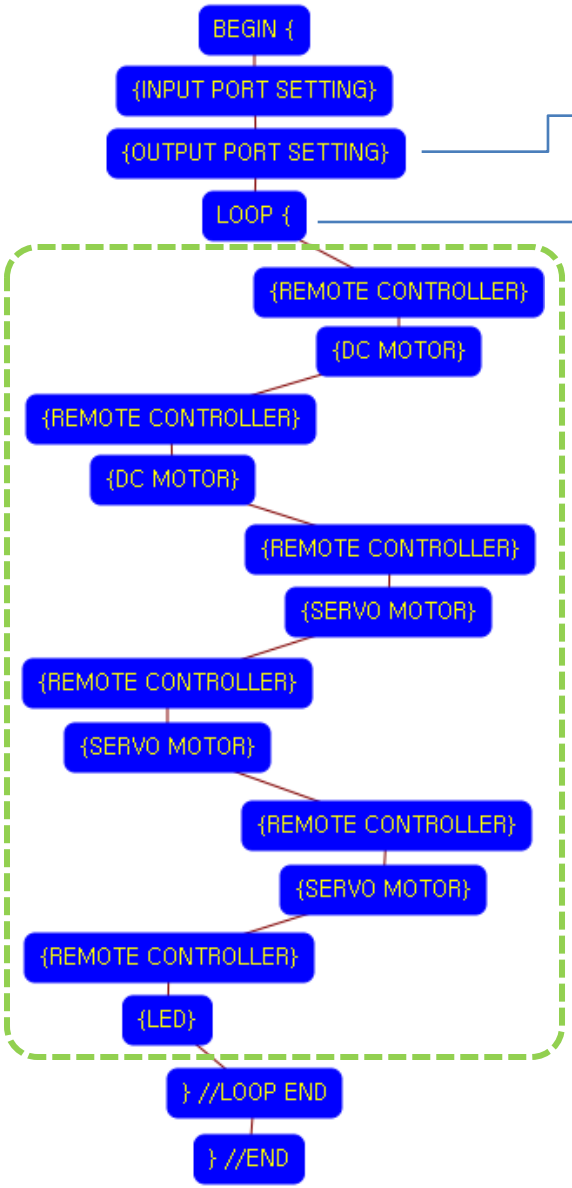
“PROGRAM END” is not active because you did not define “PROGRAM BEGIN” yet.

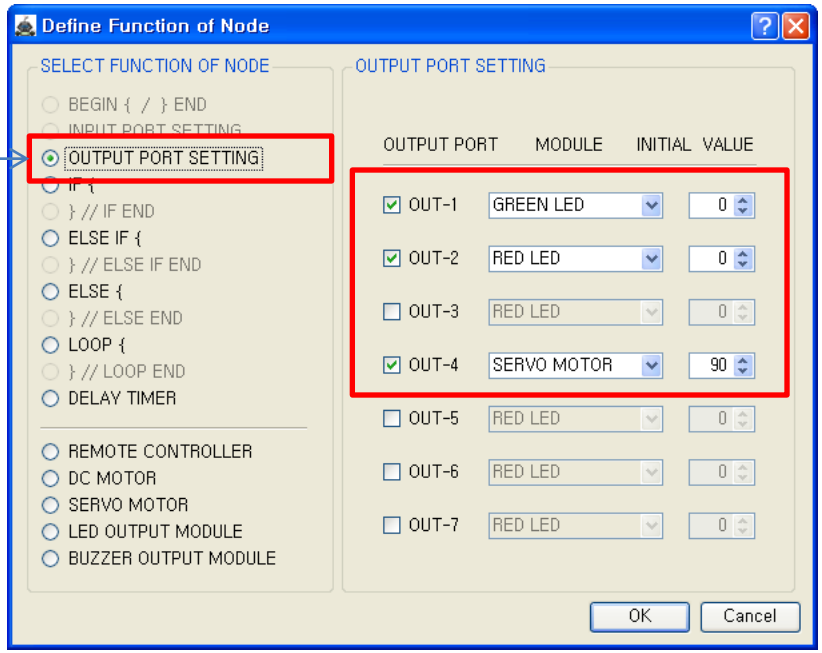


This model use 1 remote control receiver module as input device.

You have to connect the remote control receiver to the RCR input port of main board. And check the RCR in software to use.

If the real connection of sensors are different to the setting on software, it will make robot to wrong operation.

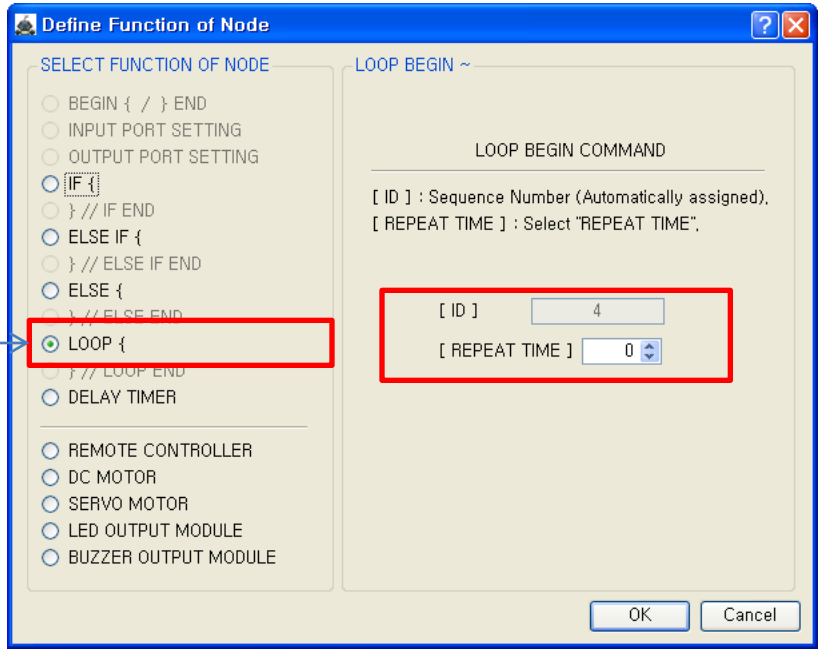




This model use 2 LED modules and 1 Servo Motor as output device.

You have to connect the right ① LED module to the OUT-1 output port and left ② LED module to the OUT-2 output port and Servo motor to the OUT-4 output port of main board. The initial value of Servo motor is to be 90.

If the real connection of output modules are different to the setting on software, it will make robot to wrong operation.

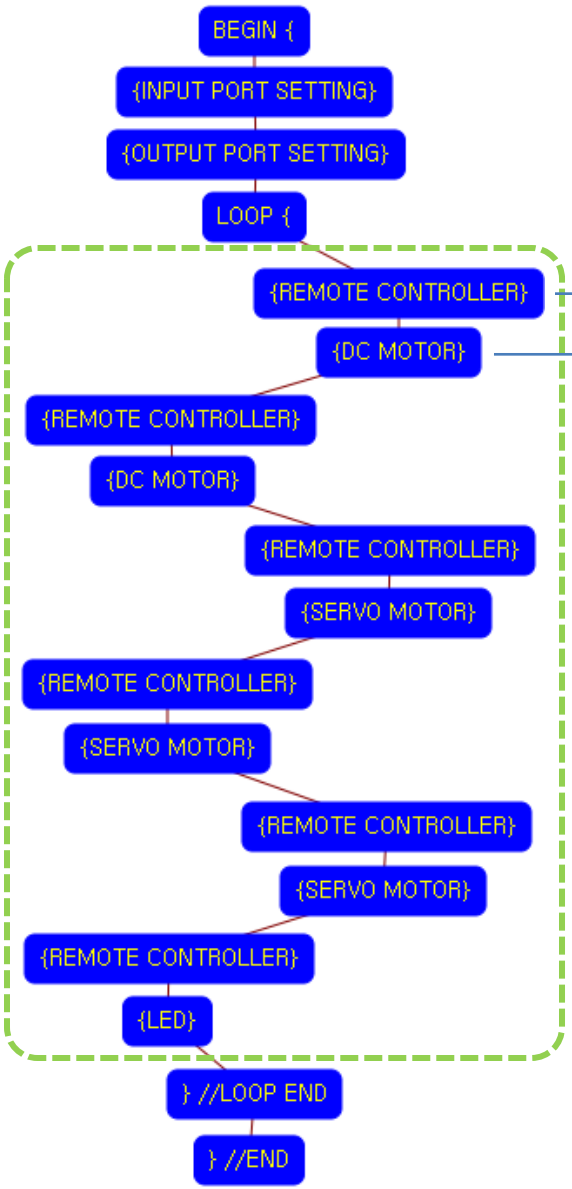


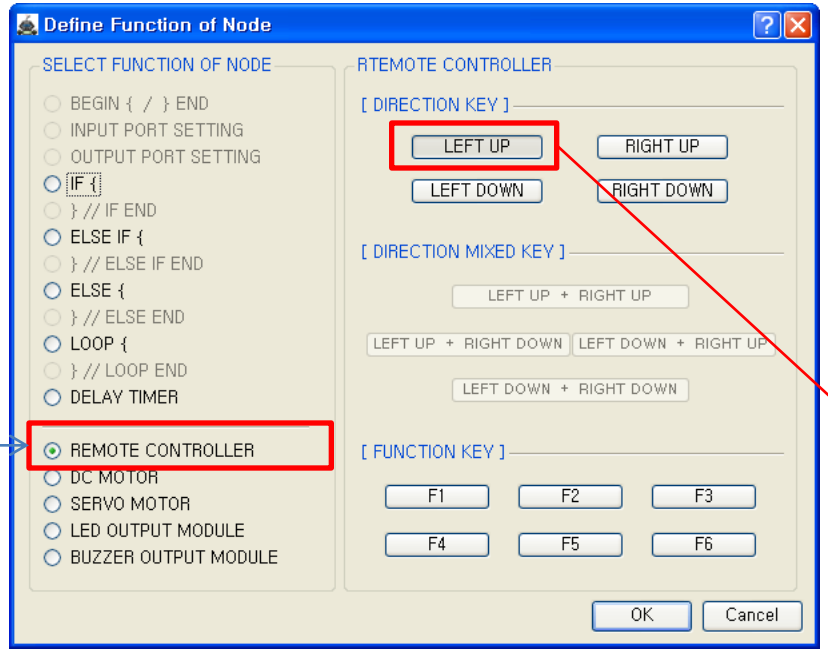
LOOP command is used to repeat the commands.

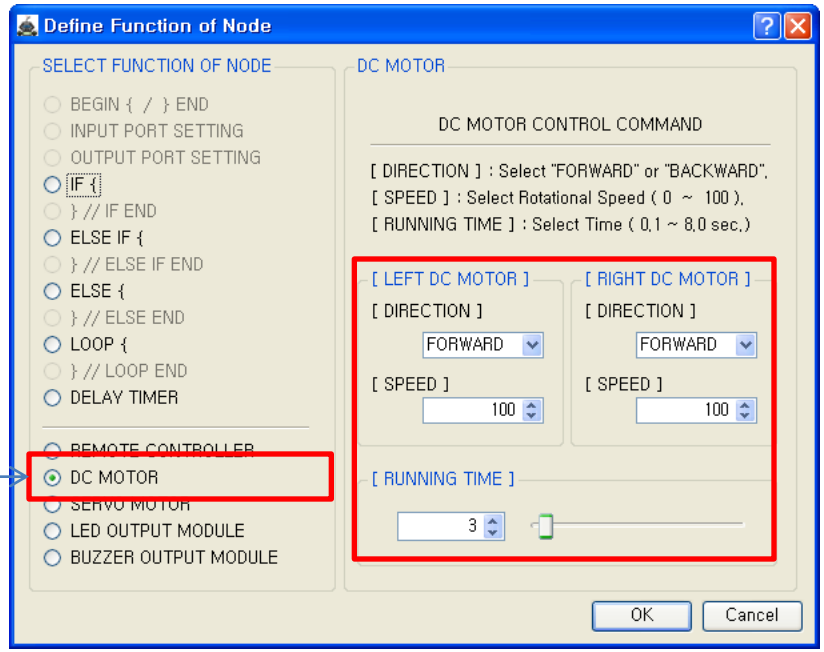
“REPEAT TIME” is the repeat number you want.
If you want permanent repetition, you have to set “0”.

ID is automatically assigned.
You have to set the same ID at “LOOP END”.

Automatically assigned ID is different according to the sequence of making nodes.







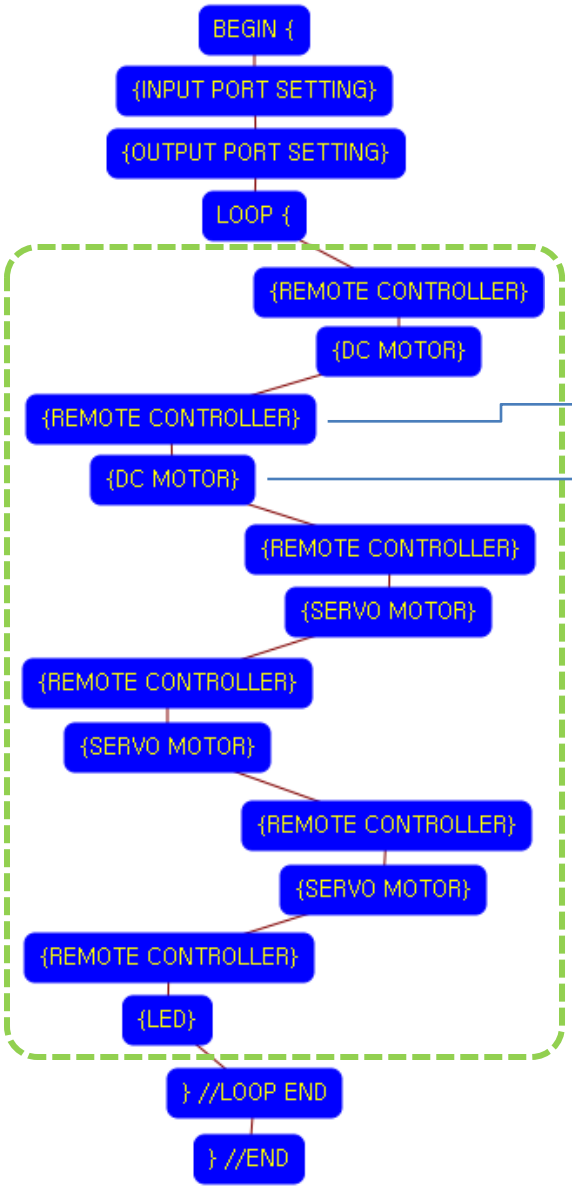
Set the “LEFT UP ” key of remote controller.

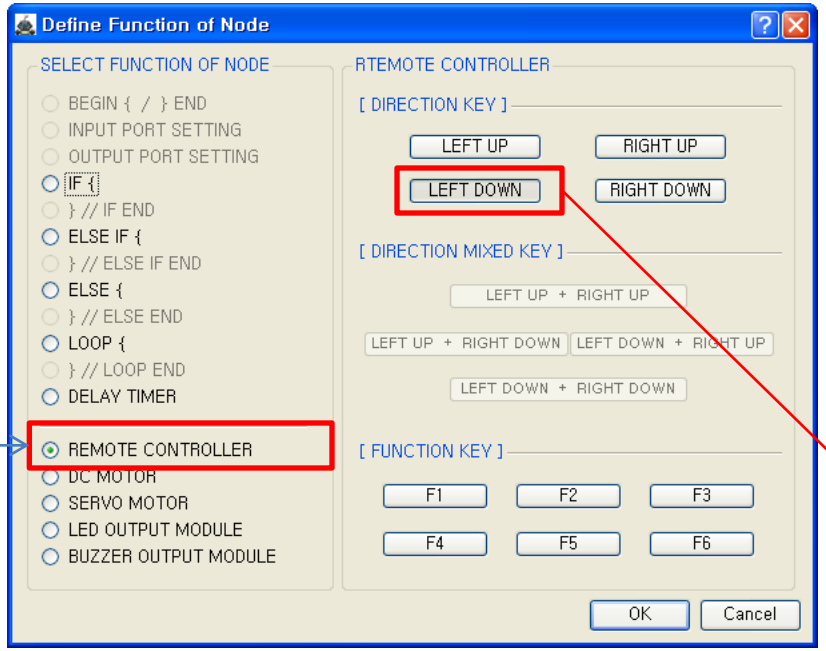
If the “LEFT UP” key is pressed, both of DC motor run like as followings.

Both DC Motor
- Direction : Forward
- Speed : 100
- Running Time : 3

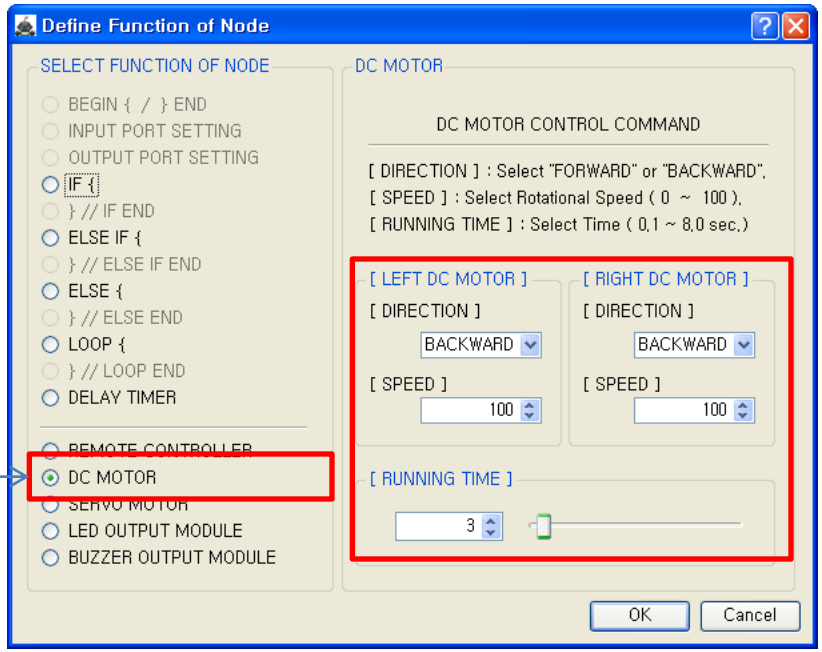
➔ Robot goes forward during 0.3 second

If the “LEFT UP” key is pressed continuously, car go forwards continuously.





Set the “LEFT DOWN ” key of remote controller.

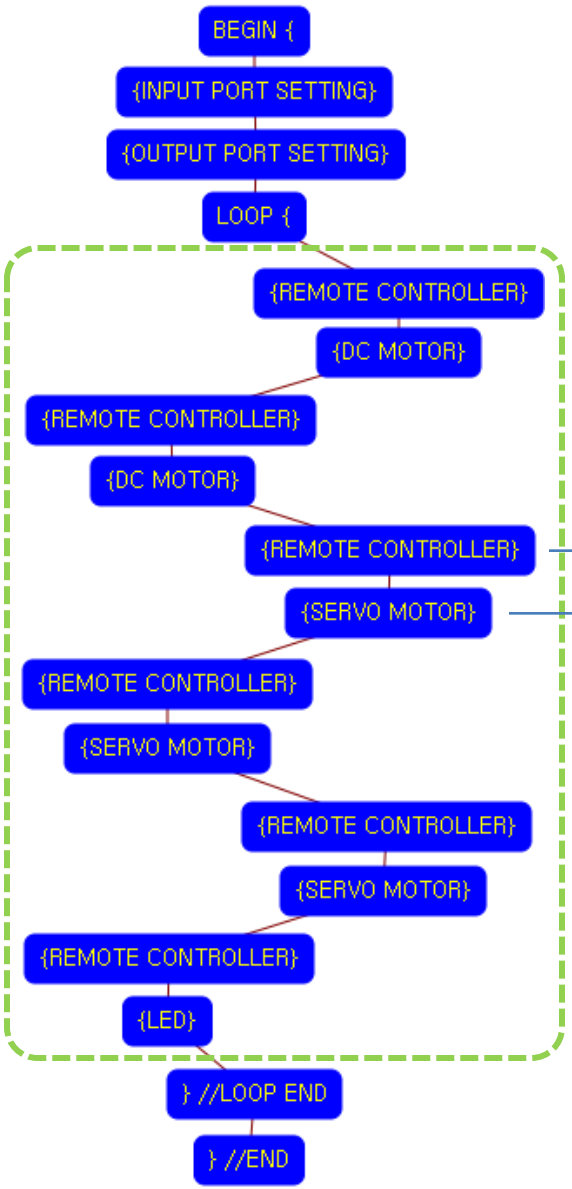


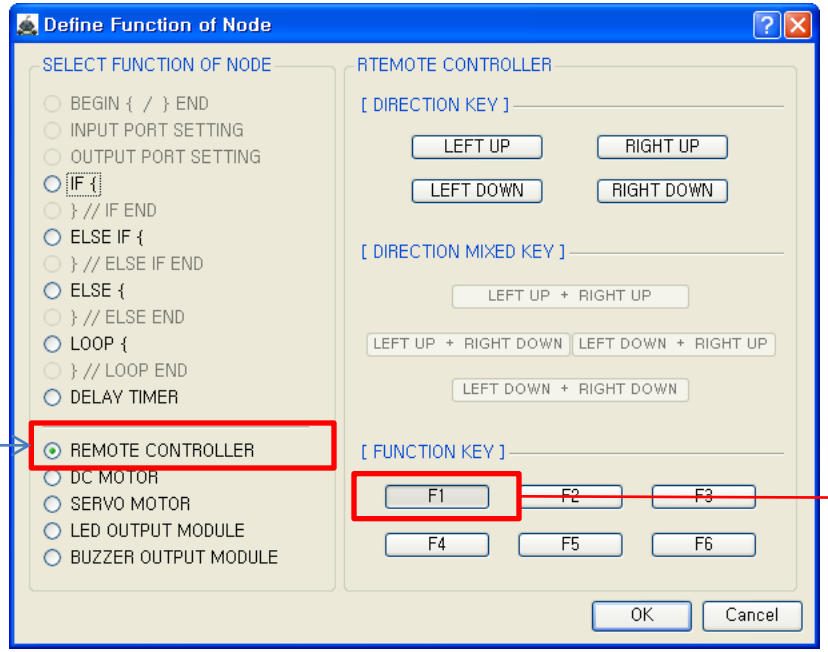
If the “LEFT DOWN” key is pressed, both of DC motor run like as followings.

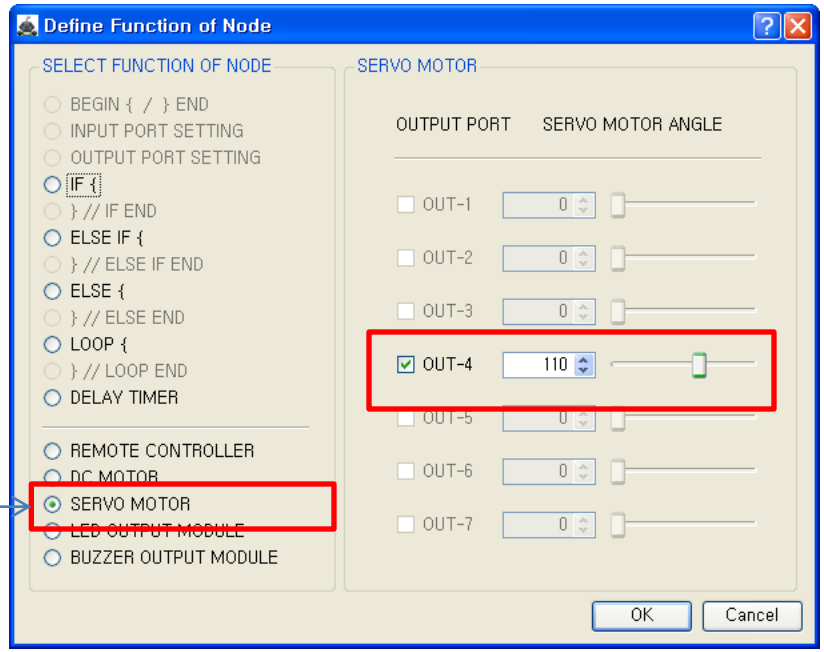
Both DC Motor
- Direction : Backward
- Speed : 100
- Running Time : 3

➔ Robot goes backward during 0.3 second

If the “LEFT DOWN” key is pressed continuously, car go backwards continuously.



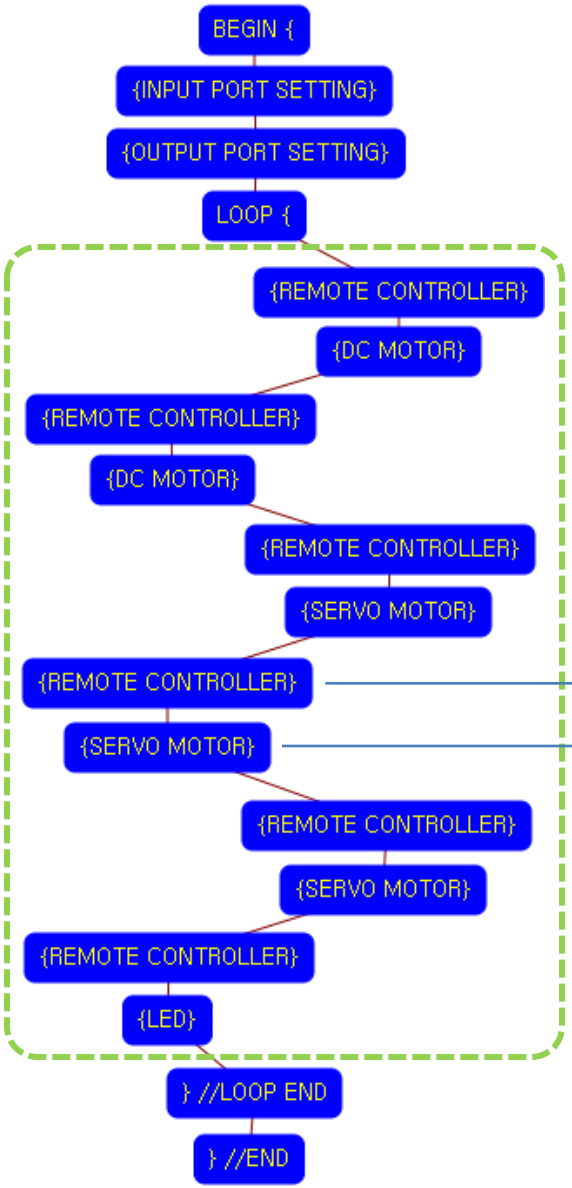


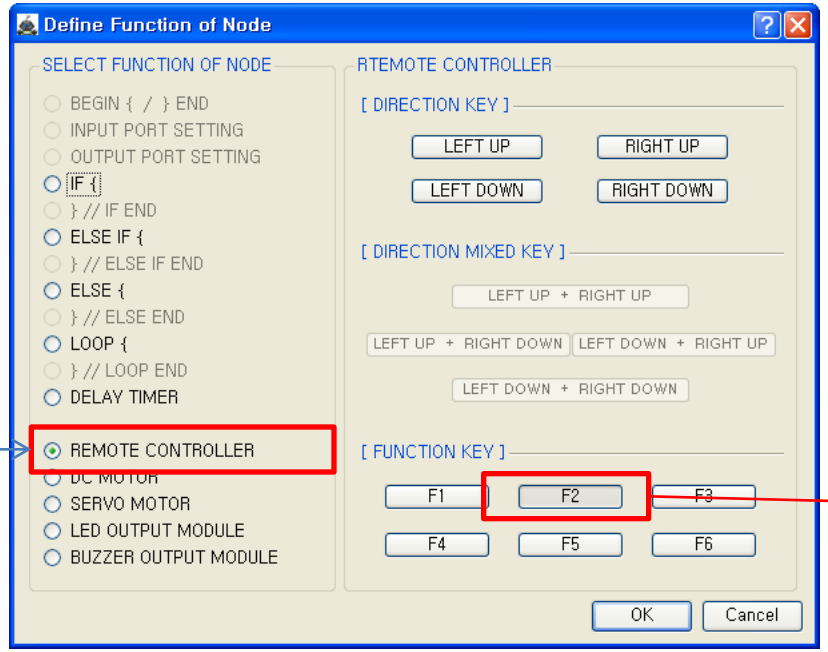


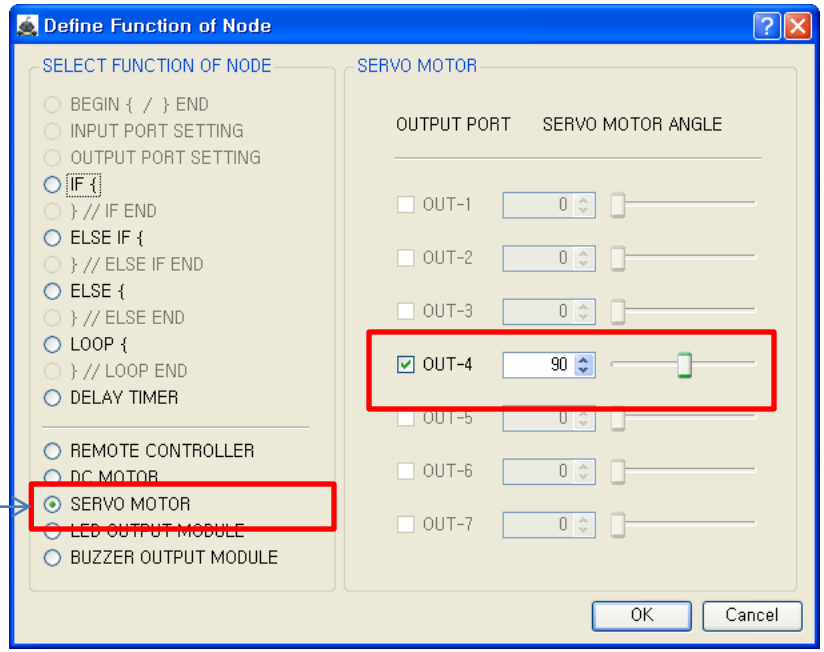
Set the “F1 ” key of remote controller.

If the “F1” key is pressed, the servo motor sets to the 110 degree.

Viewing from the rear side, the steering wheel turns left 20 degree.
(If the servo motor assembly is different with the assembly manual, the servo motor operation is different also)



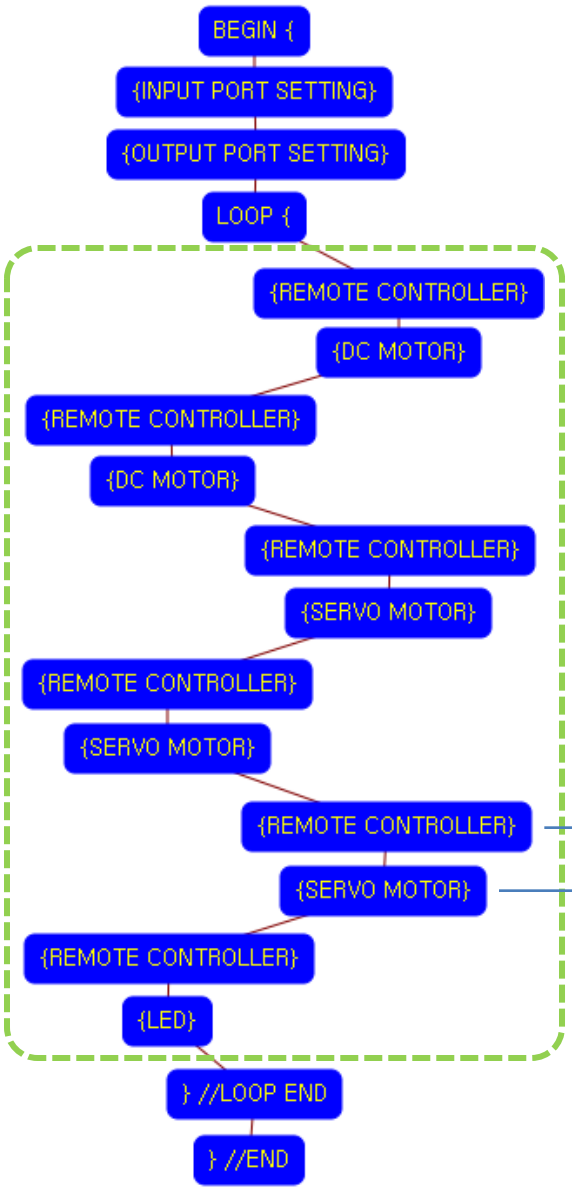


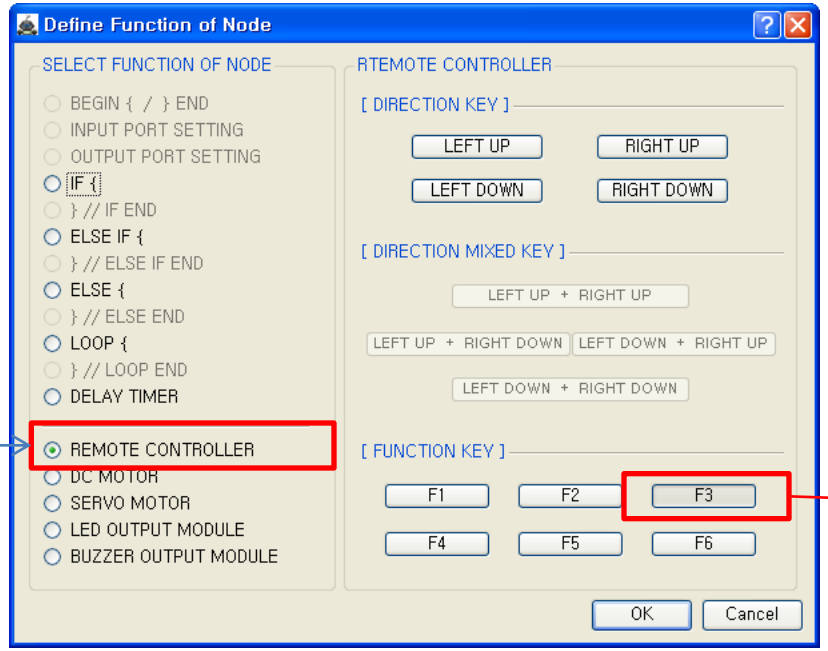


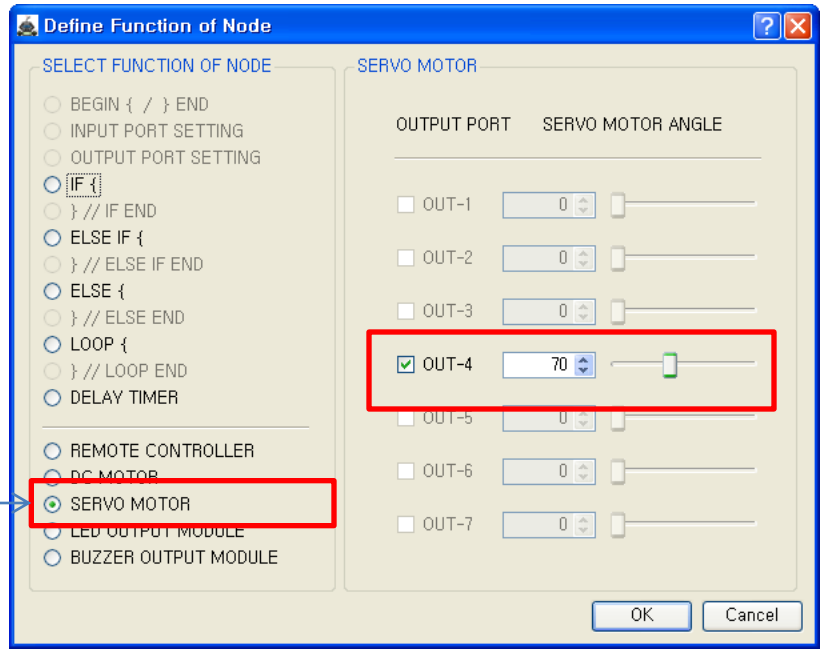
Set the “F2 ” key of remote controller.

If the “F2” key is pressed, the servo motor sets to the 90 degree.

Viewing from the rear side, the steering wheel sets to the go straight.
(If the servo motor assembly is different with the assembly manual, the servo motor operation is different also)



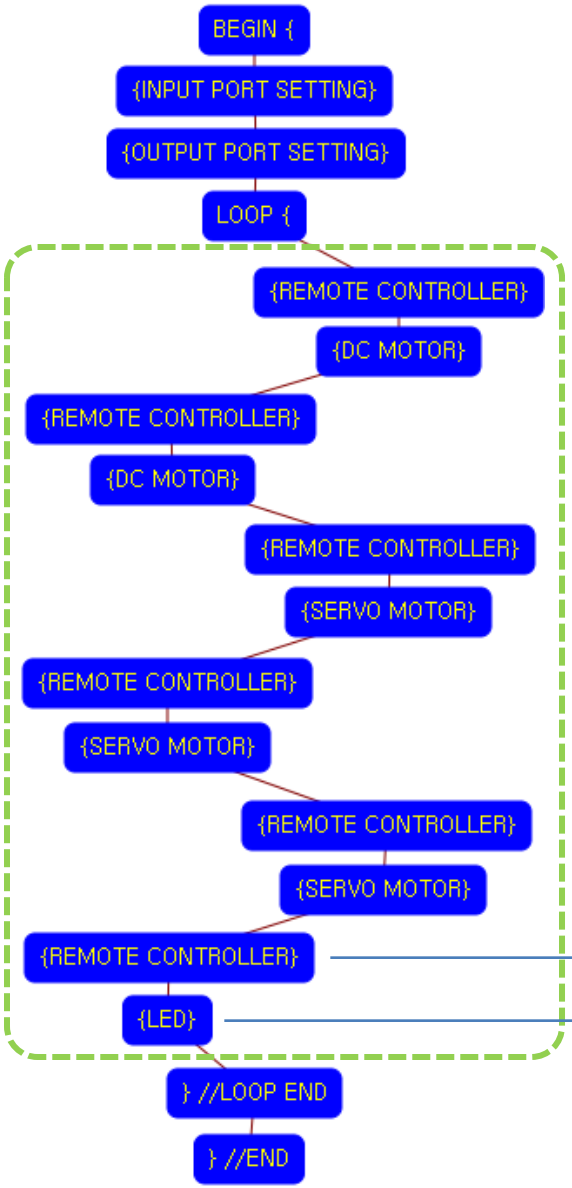


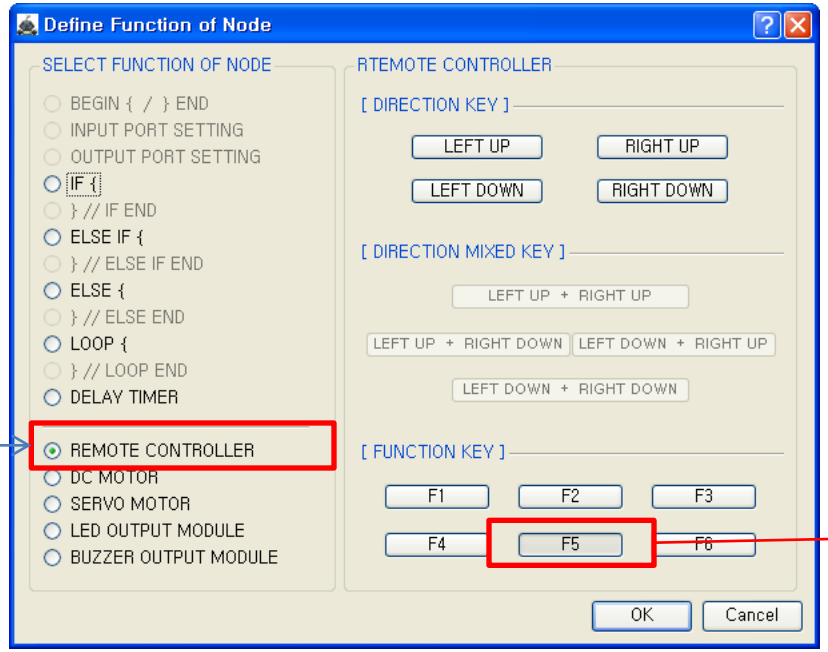


Set the “F3 ” key of remote controller.

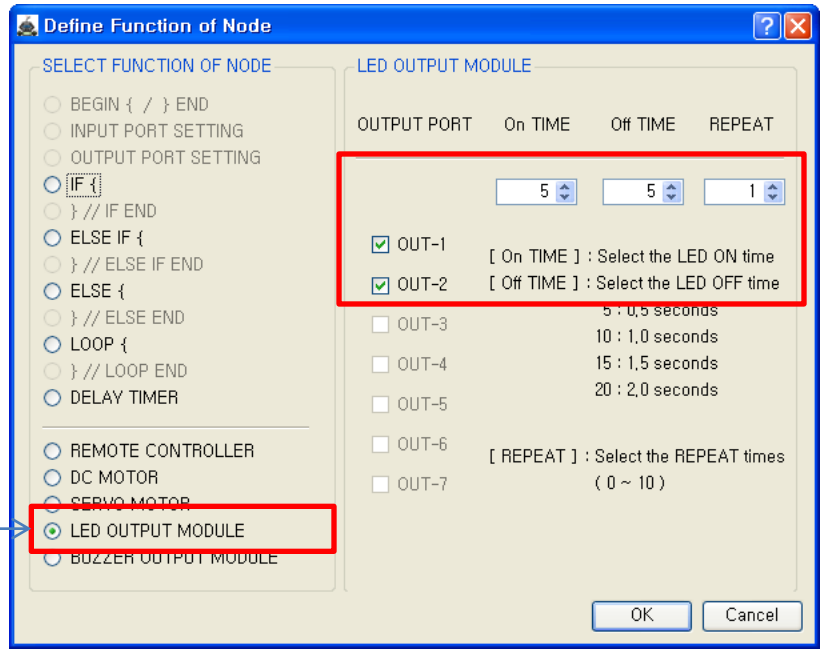
If the “F3” key is pressed, the servo motor sets to the 70 degree.

Viewing from the rear side, the steering wheel turns right 20 degree.
(If the servo motor assembly is different with the assembly manual, the servo motor operation is different also)

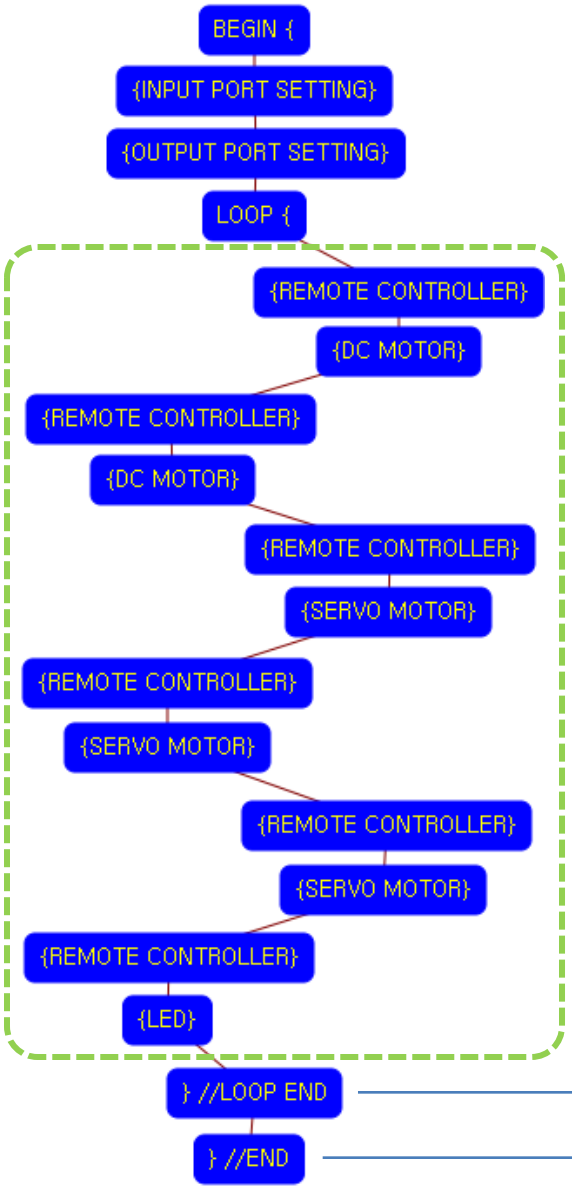


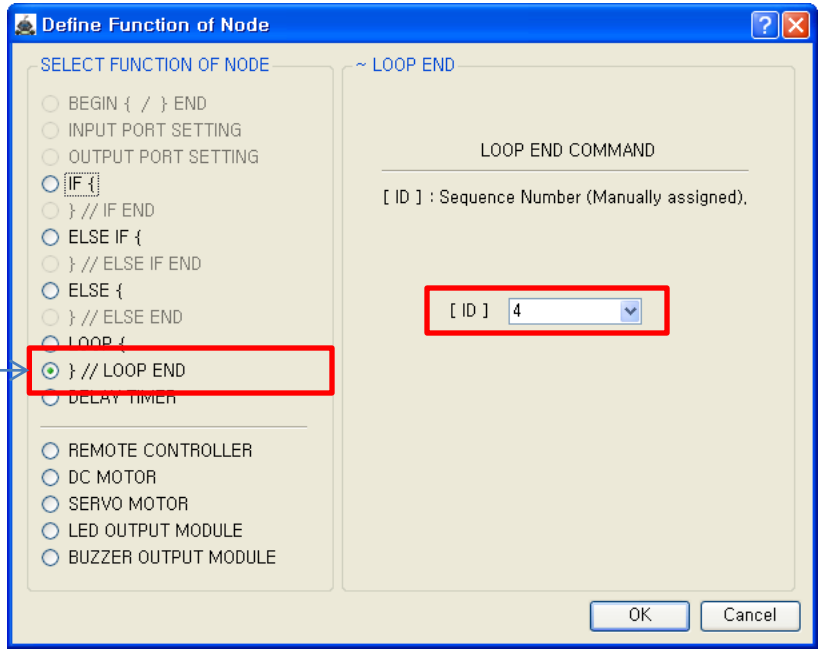


Set the “F5 ” key of remote controller.



If the “F5” key is pressed, both of the LEDs turn on and off with interval 0.5 second.

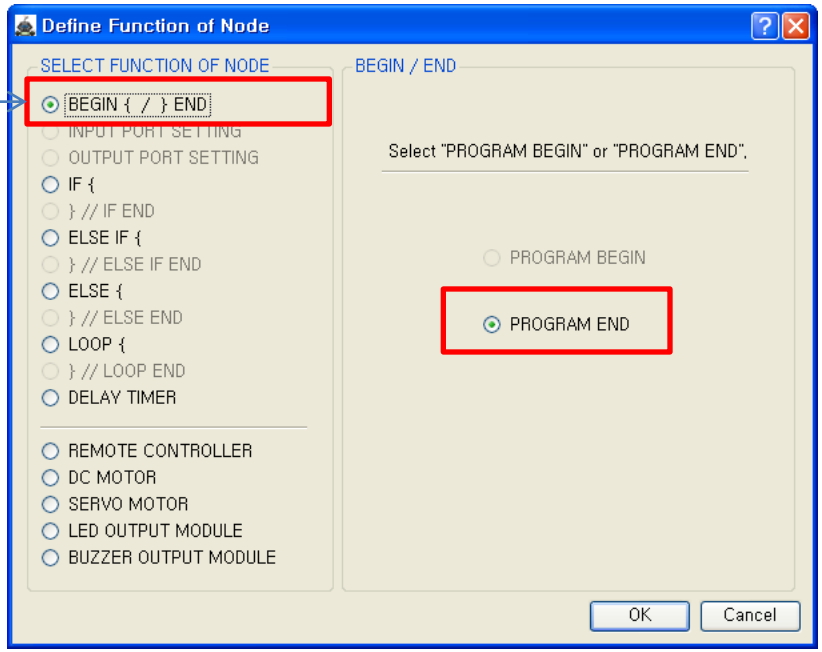




The end point of “LOOP {“ repetition command.

You have to assigned the ID of paired “LOOP {“ repetition command.

(It is necessary to know that which “LOOP {” among the many “LOOP {” repetition commands in program.



This means that program ends hear.

You have to place this node at the end of program.

“PROGRAM BEGIN” is not active because you already define at the program.

To run the robot, it is necessary to download the program into the robot.
(Refer to download manual)