

Add Offline Running Action



This section takes Arduino source code as an example. It is recommended to back up the source code program before modifying the program.

The provided program and PC software can only save up to 255 actions in each action group. If this number is exceeded, the action will not run. If you want to add action, please follow these steps:

1) Divide the action to be programmed into multiple action groups, e.g. when 225 actions have been programmed into an action group, then save the file and the remaining actions is programmed into the new action group.

2) Open the source code and find the following code in App.C.

```
425 }
426 Timer = millis() + 50;
427 }
428
429 void TaskRun(void)
430 {
431 static bool Ps2State = FALSE;
432 uint8 PS2KeyValue;
433
434 TaskTimeHandle();
435 CheckBatteryVoltage();
436
437 TaskPCMsgHandle();
438 TaskRobotRun();
439
440 if(analogRead(KEY) == 0)
441 {
442 LedFlip();
443 FullActRun(100, 1);
444 }
445
446 ps2Handle();
447
448 }
```

The code means that the programmed action is downloaded into No.100 action group, then press the KEY 1 button on the controller to execute this action. This parameter 100 can be modified. If it is modified, the action is required to download into the modified action group and then the corresponding action can be executed when pressing the key.

1) After the modification is completed in the previous step, there are another modification need to be made, as shown in the following figure:

```

ArduinoServo App.cpp App.h Flash.cpp Flash.h PCMsg.cpp PCMsg.h PS2X_lib.cpp PS2X_lib.h PWM.cpp PWM.h RobotRun.cpp RobotRun.h include.h
112 //不断检测这帧动作在指定时间内运行完成
113 fFrameRunFinish = TRUE;
114 if(++FrameIndex >= FrameIndexSum)
115 //已运行完该动作组最后一个动作
116 FrameIndex = 0;
117 if(ActFullRunTimesSum != 0)
118 //如果运行次数等于0，即代表无限次运行，就不进入if语句，就一直运行了
119 if(++ActFullRunTimes >= ActFullRunTimesSum)
120 //到达运行次数，运行停止
121 fRobotRun = FALSE;
122 if(ActFullNum == 100)
123 {
124     FullActRun(101, 1);
125 }
126 }
127 }

```

- 2) An if statement is added here, which will continue to execute the No.101 action group after the 100th action group is executed. Note: If we modified the value 100 in the previous step, then it also needs to be modified here.
- 3) According to this method, you can continue to add action followed by this action, as shown in the figure:

```

ArduinoServo App.cpp App.h Flash.cpp Flash.h PCMsg.cpp PCMsg.h PS2X_lib.cpp PS2X_lib.h PWM.cpp PWM.h RobotRun.cpp RobotRun.h include.h
115 //已运行完该动作组最后一个动作
116 FrameIndex = 0;
117 if(ActFullRunTimesSum != 0)
118 //如果运行次数等于0，即代表无限次运行，就不进入if语句，就一直运行了
119 if(++ActFullRunTimes >= ActFullRunTimesSum)
120 //到达运行次数，运行停止
121 fRobotRun = FALSE;
122 if(ActFullNum == 100)
123 {
124     FullActRun(101, 1);
125 }
126 else if(ActFullNum == 101)
127 {
128     FullActRun(102, 1);
129 }
130 else if(ActFullNum == 102)
131 {
132     FullActRun(103, 1);
133 }
134 else if(ActFullNum == 103)
135 {
136     FullActRun(104, 1);
137 }
138 }
139 }
140 }
141 }

```

The rule is: the previously executed action group is the judgment condition of the next action group to be executed, so it must be followed when modifying.



4) Click the icon in the red box and wait for the compilation to be completed.



5) If no error is displayed after compiling, then the program will be burnt into Arduino Nano microcontroller .