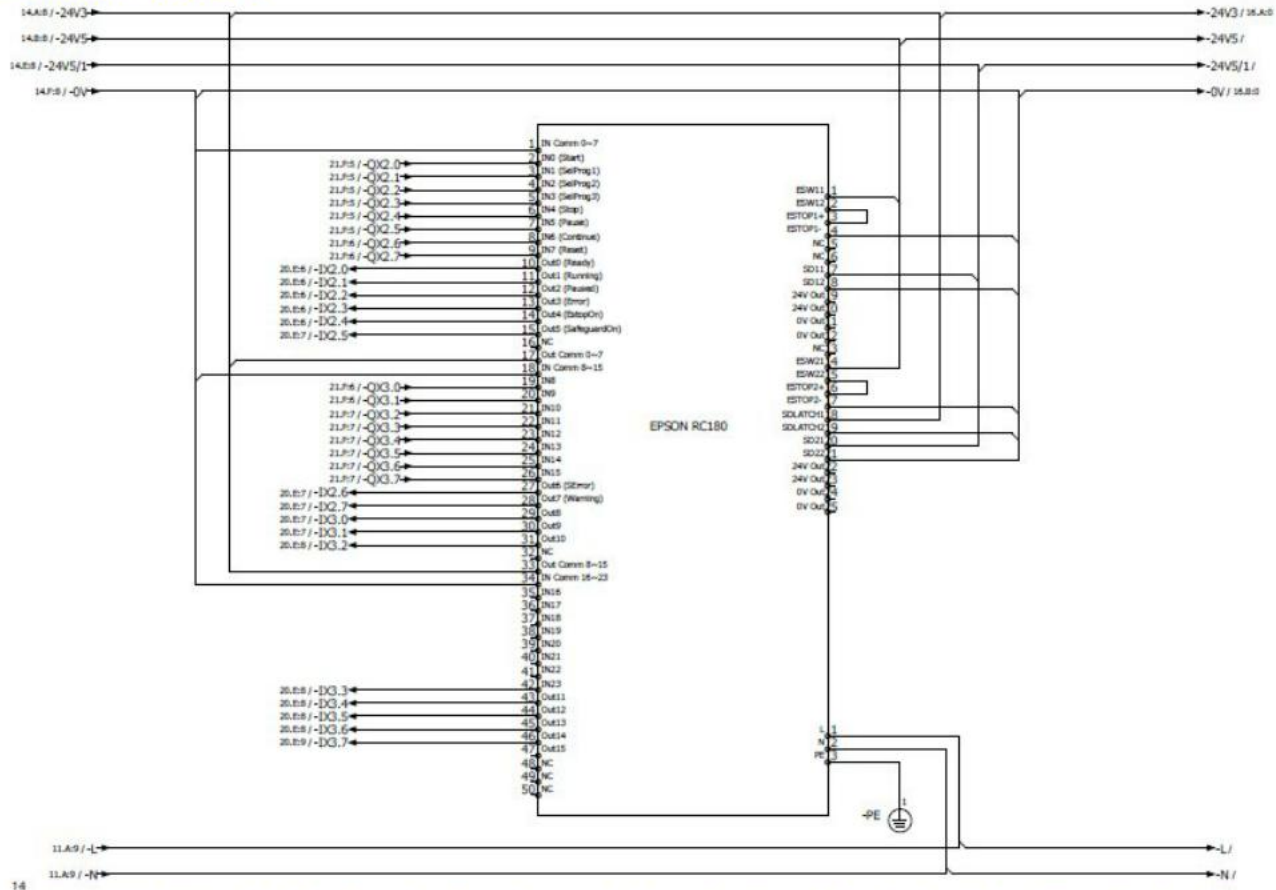


Epson机器人应用及程序标准

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控制器接线:



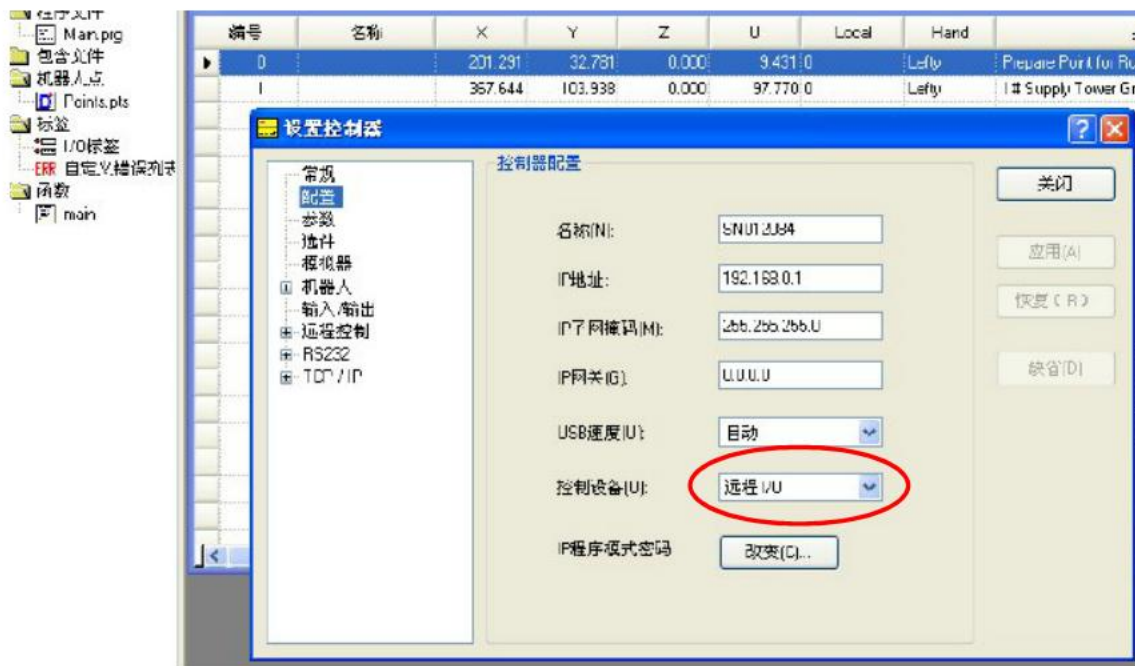
机器人控制器上的标准**16**点输入和**16**点输出全接；第**2**组**8**位输入用于选择点位；第二组**8**点输出用于检测机器人走点状态使用

软件及参数设置



启动模式选择自动

软件及参数设置



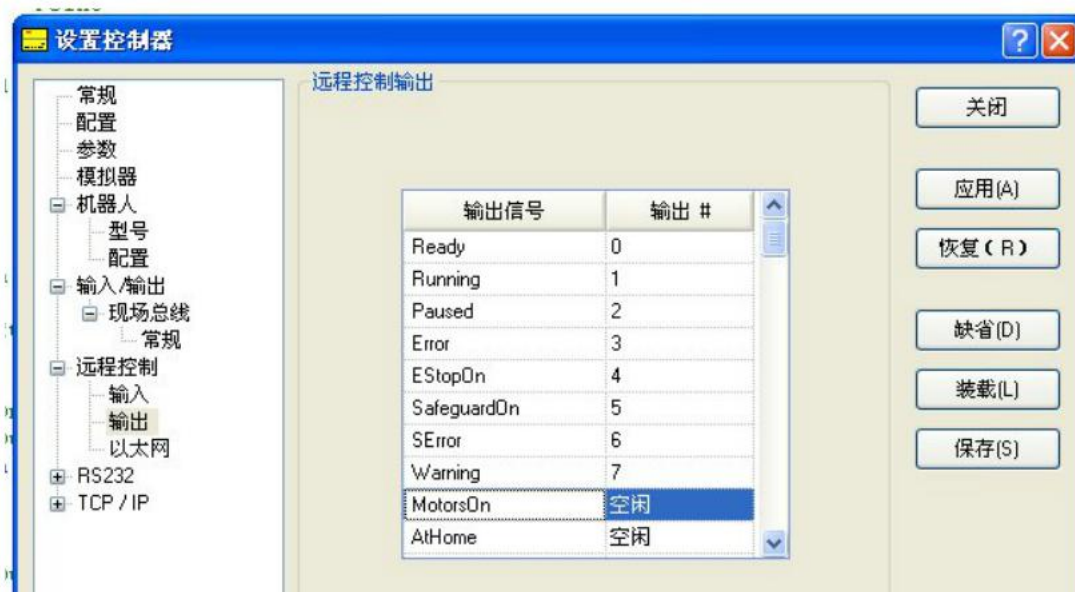
配置中控制设备必须选择远程I/O控制，并且在下载运行程序时选择激活远程I/O才能通过PLC控制机器人运行。

软件及参数设置



第一组输入信号除了选择程序的**SelProg1,2,4** 设置成空闲，其他的不做改动；这三个信号作为特殊用途另外使用

软件及参数设置



第一组输出信号不做改动；
第二组输出信号可定义为：**8 Busy; 9 Done ; 10 Safe;**
其他的信号可按需要自己定义

标准程序说明

```

' **** Epson RC90 Standard Program   Edit:  HuBo 2013.9.9*****

Function main
  Motor On           'Start motor
  Power Low          'High 'Running in low Power, (High for High power)
  Integer var        'Point
  Real XX, YY, ZZ    'Position Value

'*****Define Low Speed parameters *****
  Speed 20           'Speed for Go, Jump method X%
  Accel 20, 20       'Accels for Go, Jump method X%
  SpeedS 50          'Speed for Move method (0-2000)
  AccelS 50, 50     'Accels for Move method (0-25000)

```

程序开头及定义 **Power Low** 参数

```

'*****Return to Origin Position automatically*****
XX = CX(CurPos)
Wait 3;           'After Motor on 3 seconds go to P0
Move Here :Z(0)
If XX > 35 Then
  Move P0         'Origin Position
  On 9, 1         'Output Done signal
ElseIf XX < 35 Then
  Move P18
  Wait 0.1;
  Move P0
  On 9, 0.2      ' Output Done signal
EndIf

```

根据当前机器人位置定义机器人自动回设备原点路径

标准程序说明

```
'*****Define High Speed parameters *****  
Power High           'Running in low Power, (High for High power)  
Speed 20             'Speed for Go, Jump method X%  
Accel 40, 40        'AccelS for Go, Jump method X%  
SpeedS 200          'Speed for Move method (0-2000)  
AccelS 500, 500     'AccelS for Move method (0-25000)
```

定义 **Power High** 参数

```
'*****Define Low or High Speed (An option for Epson Program) *****  
If Sw(1) = On Then 'Use a input signal to define Low or High speed  
    Power High  
ElseIf Sw(1) = Off Then  
    Power Low  
EndIf
```

根据某一控制信号定义机器人高低**Power**，一般开机生产前**1-3**个产品时最好用低速生产，运行没问题时通过按钮切换到高速模式

标准程序说明

```
'*****Define Save Signal *****  
If XX < 220 And XX > 190 And YY < 40 And YY > 25 And ZZ < 5 And ZZ > -5 Then  
    On 10      'Save for running signal  
Else  
    Off 10  
EndIf
```

定义安全输出信号，比如可定义**Z**轴升起，或是回到安全点坐标后，输出一个信号，允许转台旋转等，比程序控制安全

```
'*****Off Done Output*****  
    If Sw(0) = Off Then  
        Off 9  
    EndIf
```

定义机器人完成信号**Off**，在**Start**信号**Off**时，立即将**Done**信号置**Off**，防止程序高速允许是出错

标准程序说明

```

*****Position Mode Flow*****
var = In(1)      'Get the point number
Wait 0.03;      'Delay 30ms for point number
If Sw(3) = On Then      ' Move mode
  If Sw(0) = On Then      'Get the start signal
    On 8      'Output Busy signal
    Move Here :Z(0)      ' Move to safe point, Z=0
    Wait 0.1;
    var = In(1)      'Get the point number
    Move P(var) ! DO; On 8; Wait 0.2; Off 8 ! 'Move to the wanted point
    On 9, 0.1      ' Output Done signal
  EndIf
EndIf

If Sw(3) = Off Then      'Go mode
  If Sw(0) = On Then      'Get the start signal
    On 8      'Output busy signal
    Move Here :Z(0)      ' Move to safe point, Z=0
    Wait 0.1;
    var = In(1)      'Get the point number
    Go XY(CX(P(var)), CY(P(var)), 0, CU(P(var)))      ' Move to the wanted point, Z=0
    Wait 0.1;      'Delay 0.1 second
    Go P(var) ! DO; On 8; Wait 0.2; Off 8 ! 'Move to the wanted point
    On 9, 0.1      ' Output Done signal
  EndIf
EndIf

```

机器人走点程序，根据信号**3**的状态，确定走点模式是**Move**，还是**Go**；
然后在信号**0 (Start)** 来后，执行走点程序

The word "END" is rendered in a 3D, blocky font with a green, textured surface. The letters are slightly offset from each other, giving a sense of depth and perspective.

先项目导入程序避免程序被覆盖，程序修改完成要选择成远程模式，运行