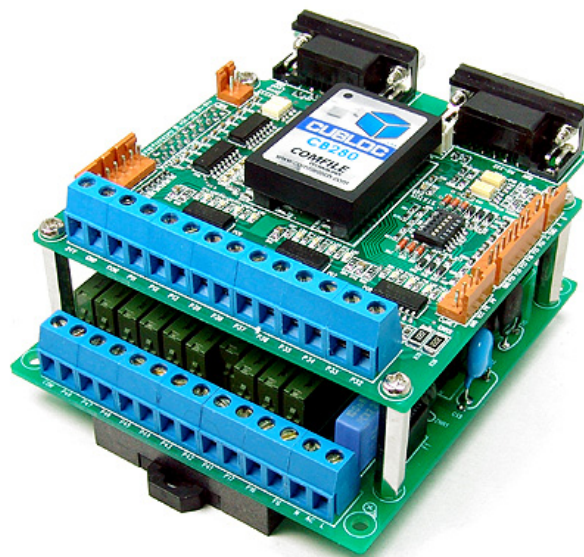


# CuSB-22R

## CUBLOC Integrated Single Body Board

### CuSB-22R Specifications

Power Specs:		Min	Typ	Max
	Input Voltage	Ⓢ 1, 85VAC	Ⓢ 1, 110/220VAC	Ⓢ 1, 264VAC
	Input Current		0.2A / 0.4A	
	Output Voltage	4.5VDC	5.0VDC	5.5VDC
	Output Current	0.6A	0.6A	0.6A
	Output Voltage	18VDC	24VDC	28VDC
	Output Current	0.4A	0.4A	0.34A
	Operation Temp, Rang	0°C to +50°C, 20~90% RH (Non-Condensing)		
Storage Humidity	20°C to +50°C, 20~90% RH (Non-Condensing)			
Input Specs:	Input Port	11Point(Bi-directional) (24V)		
	High Count	2Point		
	AD Input	6Point		
	Key Board	Key Pad Connection		
Output Specs:	Output Port	10Point	(0-30V DC, 0-240V AC)	
	PWM Output	6Point		
	CuNET	SGN or LCD Connection		
Comm. Specs	RS232			



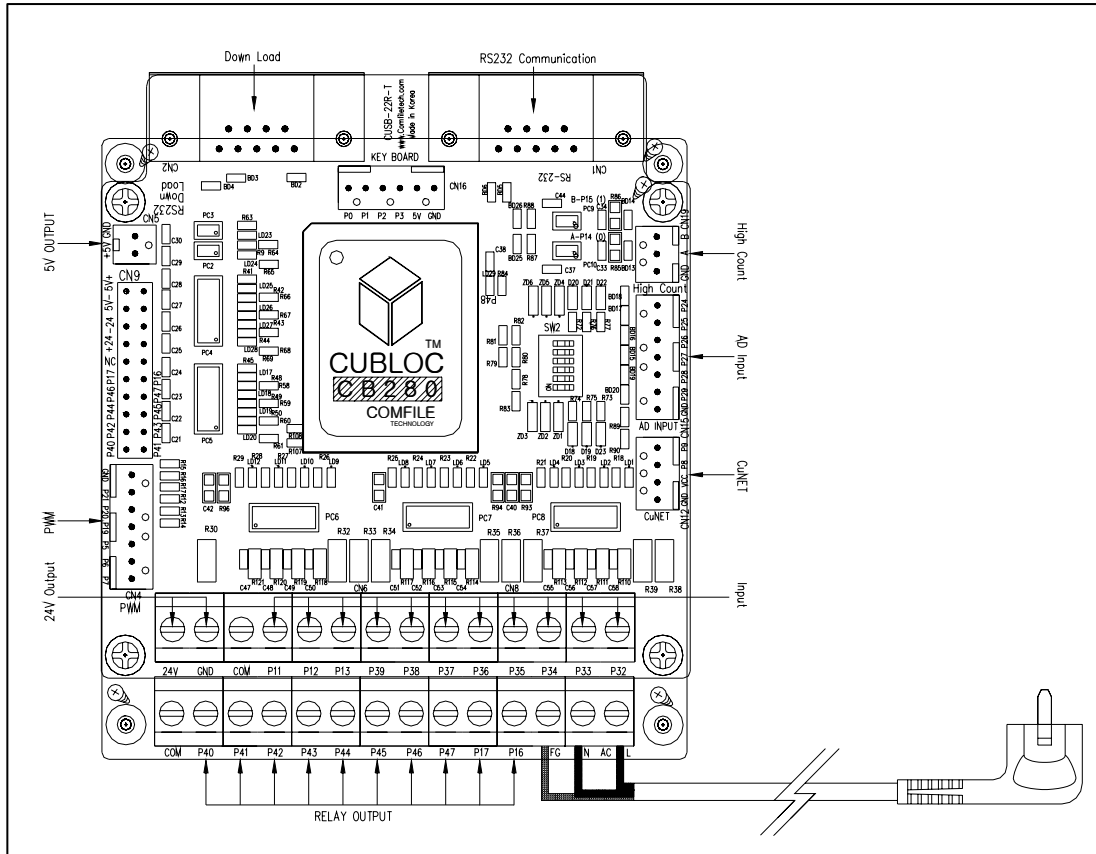
**How to input AC Power (Please be careful of high voltage!)**

Please connect AC100~240V as shown below to L and N. (FG is Frame Ground.)

(Polarity does not matter w/ AC)

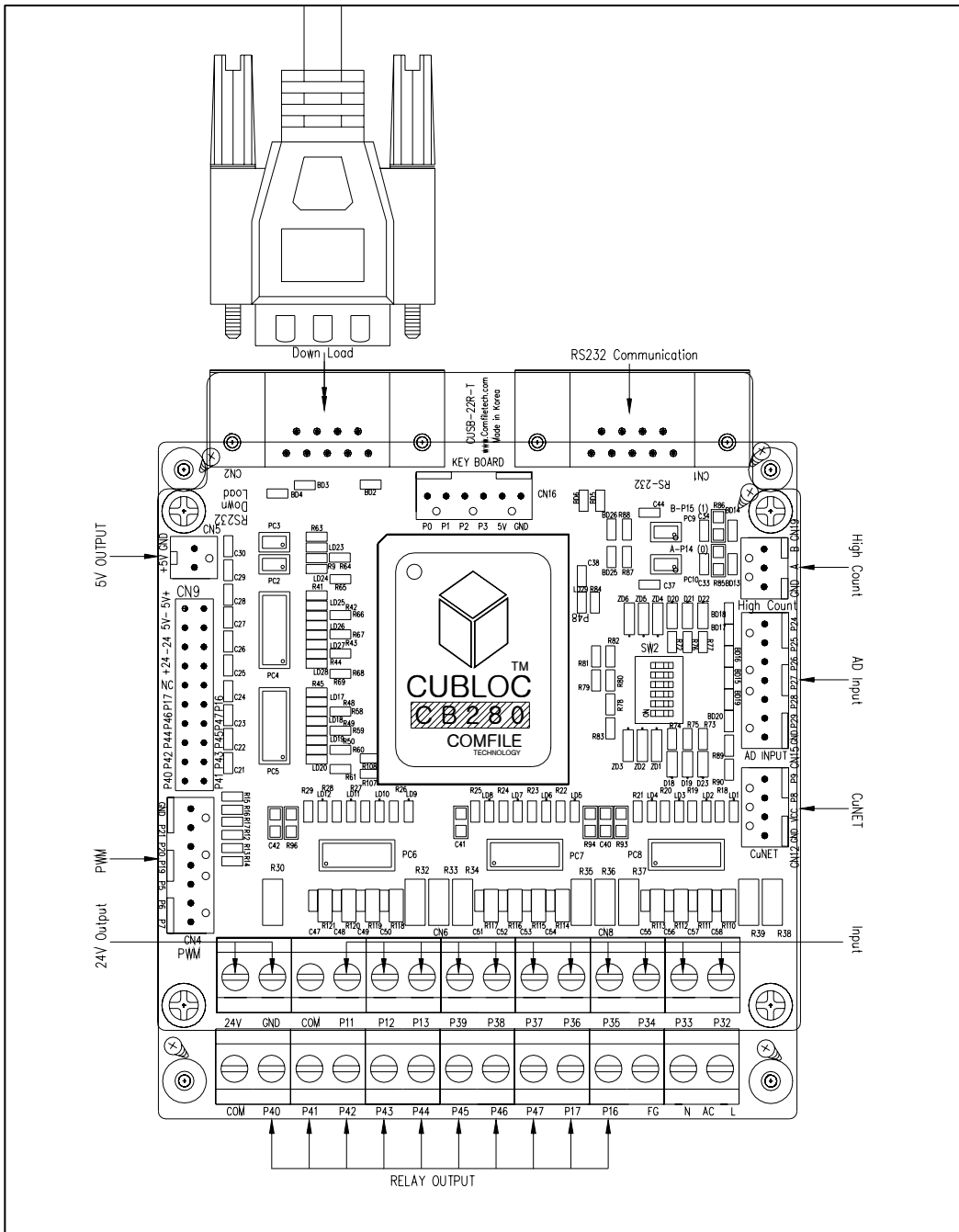
When AC power is inputted, LED1 will turn GREEN.

(If LED1 does not turn GREEN, please check your AC power.)



**How to Download**

Connect the serial cable to the Download port as shown below:



## Example Code

The following code is an example of declaring in Basic when using CuSB22-R I/Os and High Count.

```
Const Device = cb280           'Declare device
  Set Ladder On                 'Set Ladder ON when using Ladder Logic
  Set Count0 On                'Set Count0 ON when using Count
  Do
    _d(0) = Count(0)
    _d(1) = Count(1)

    Usepin 11,In                'Set input ports to input
    Usepin 12,In
    Usepin 13,In
    Usepin 32,In
    Usepin 33,In
    Usepin 34,In
    Usepin 35,In
    Usepin 36,In
    Usepin 37,In
    Usepin 38,In
    Usepin 39,In

    Usepin 41,Out              'Set output ports to output
    Usepin 42,Out
    Usepin 43,Out
    Usepin 44,Out
    Usepin 45,Out
    Usepin 46,Out
    Usepin 47,Out
    Usepin 48,Out
    Usepin 16,Out
    Usepin 17,Out

  Loop

End
```

**I/O TEST**

**Condition**

**Relay-On Responsible Time**

CH1 — Input Port

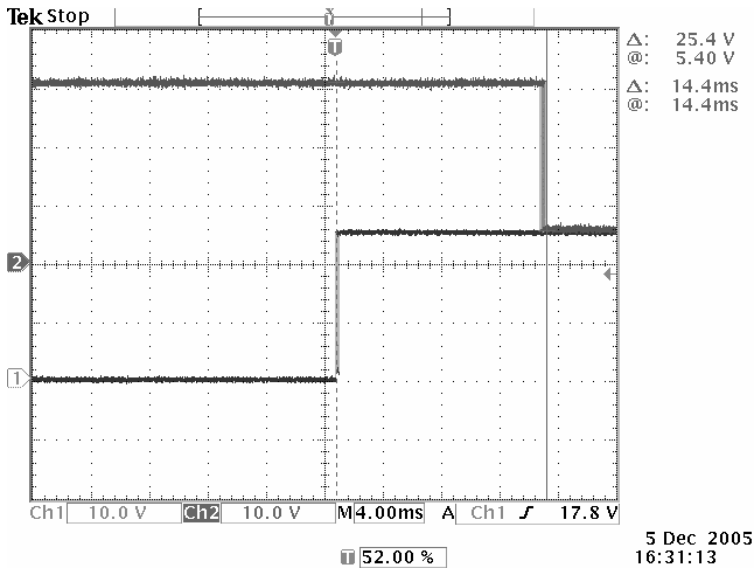
CH2 — Output Port

Input Port : P13

Output Port : P40

Input Voltage : 24VDC

Output Voltage : 24VDC



**Condition**

**Relay-Off Responsible Time**

CH1 — Input Port

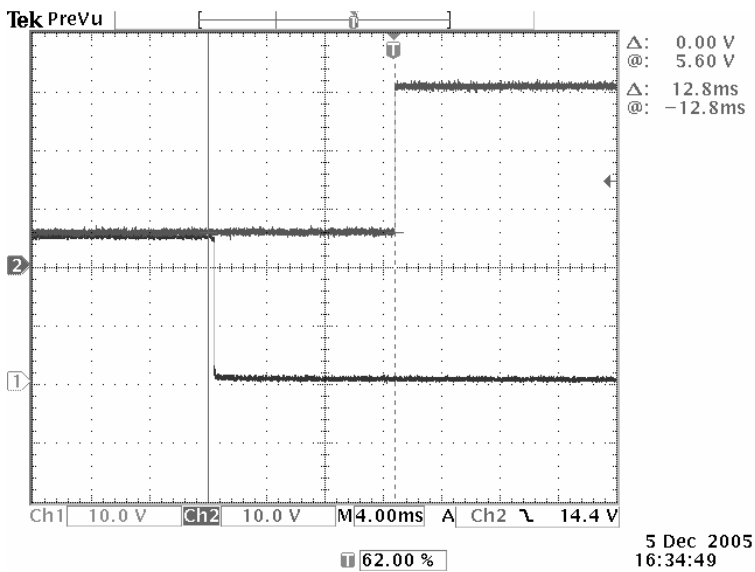
CH2 — Output Port

Input Port : P13

Output Port : P40

Input Voltage : 24VDC

Output Voltage : 24VDC



## How to connect to Keyboard Input

Please connect as shown below if using Comfile's Keypad Controller:

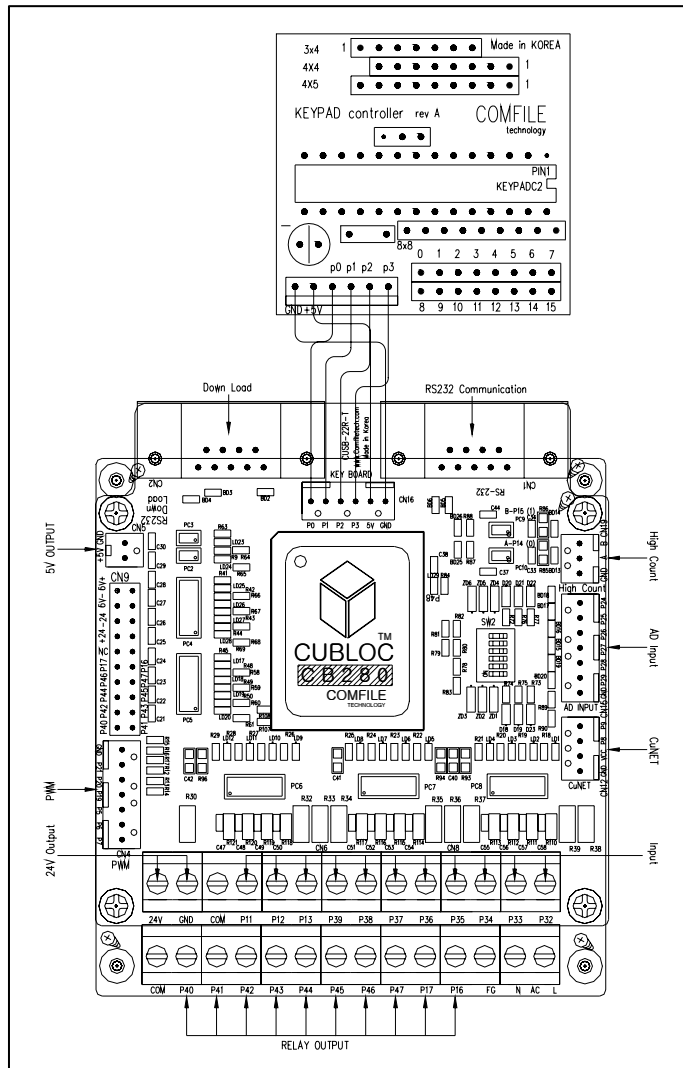
**Warning :** Please be aware the Keypad Controller Pin arrangement are GND, 5V, P0, P1, P2, and P3 while CUSB-22R's pin arrangements are GND, 5V, P3, P2, P1, and P0.

Please make sure to wire the connectors so the pins match.

Below is example code for a 3x4 Keypad:

```

Const Device = cb280
  Set Ladder Off
  Set Pad 0,1,4
  Dim I As Byte
  Dim X As Byte
  Const Byte KEY_TABLE = (0,1,4,7,10,0,0,0,0,2,5,8,0,0,0,0,0,3,6,9,11)
  On Pad Gosub PAD_RTN
  Do
  Loop
PAD_RTN:
  X = Getpad(1)
  If X > 20 Then Return
  X = KEY_TABLE(X)
  If X = 10 Then
    X = &H2A
    Debug X,Cr
  ElseIf X = 11 Then
    X = &H23
    Debug X,Cr
  Else
    Debug Dec X,Cr
  End If
  Return
  
```



**How to connect to XPORT + XPORT Dongle**

**Simply connect XPORT Dongle to either of the serial ports as CuSB-22R serial ports will provide 5V automatically to the pin 9 of serial ports.**