

# libkondo4 for RoBoard's COM3

DMP Electronics Inc  
Robotic Division  
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# Installation for VS2008

# Installation

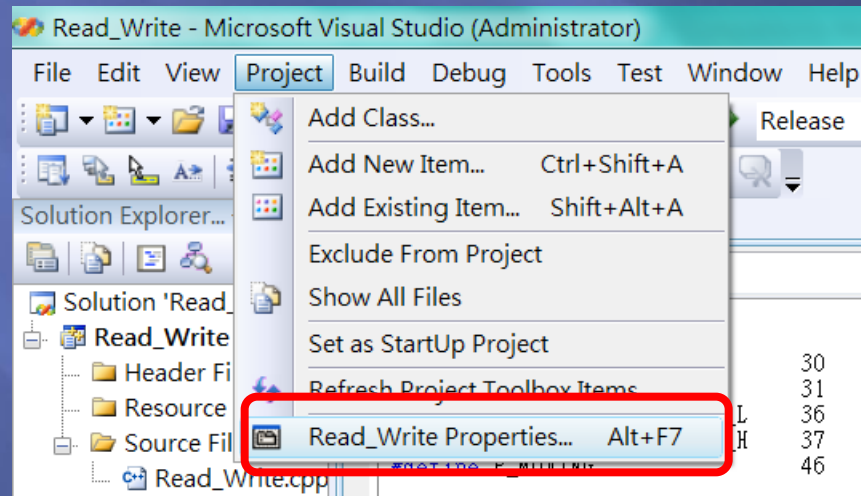
- ▣ Decompose **libkondo4 for RoBoard** zip-file to your PC.



- ▣ In the “**libkondo4 for RoBoard**” folder, it contains:
  - **bin**: Binary files of the SDK (for COM3).
  - **utils**: Modified sample codes on the original libkondo4.
  - **src**: Source code of the SDK.

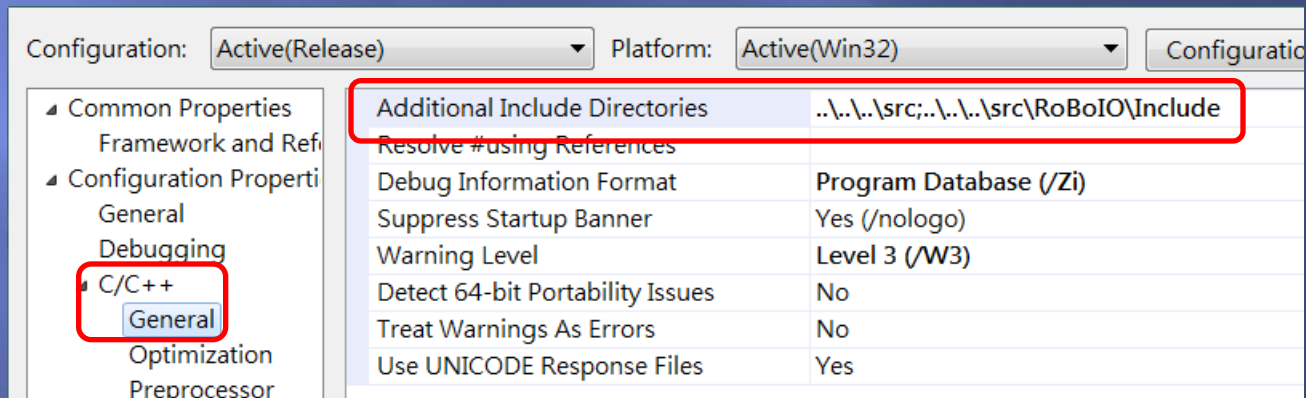
# Setting in VS2008 Projects

- ▣ Before using the SDK in your project, you need to set it in VS2008.
- ▣ Open the **Properties** window:



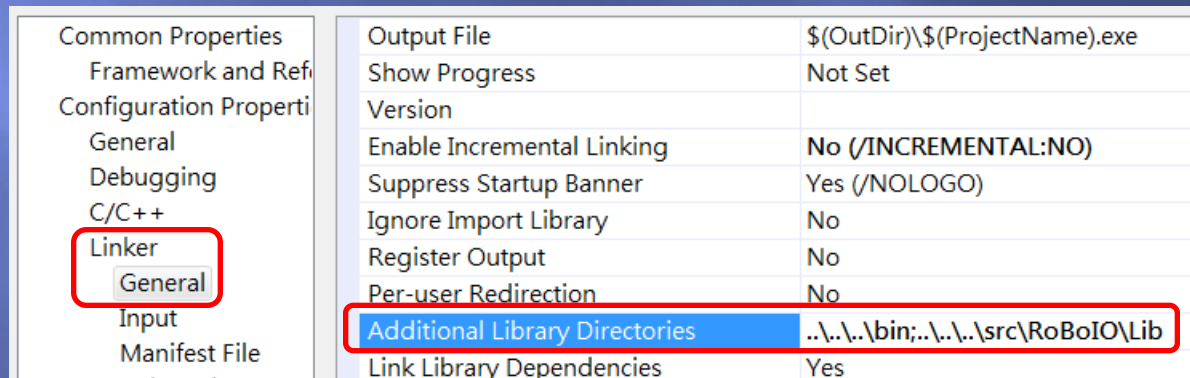
# Setting in VS2008 Projects

- ▣ Set **Additional Include Directories**.
  - ▣ Path1: Set to “**src**” in the “**libkondo4 for RoBoard**” folder;
  - ▣ Path2: Set to the “**Include**” path of RoBoIO library.



# Setting in VS2008 Projects

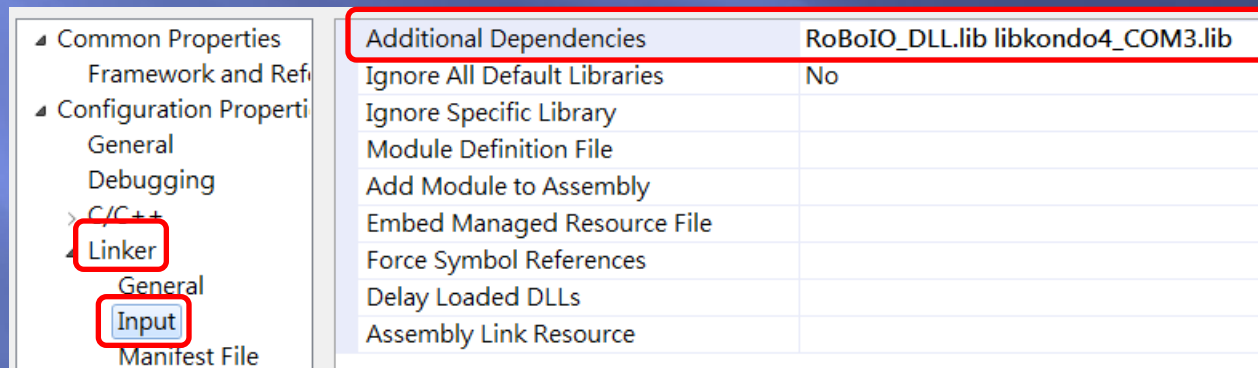
- ▣ Set **Additional Library Directories**.
  - ▣ Path1: Set to “**bin**” in the “**libkondo4 for RoBoard**” folder;
  - ▣ Path2: Set to the “**Lib**” path of RoBoIO library.



# Setting in VS2008 Projects

## ▣ Set **Additional Dependencies** .

- ▣ File1: Add **libkondo4\_COM3.lib**;
- ▣ File2: Add **RoBoIO\_DLL.lib**.



# Usage Overview



# Usage

- ▣ Should include
  - **ics.h**
  - **rcb4.h**
  - **roboard\_dll.h**in your code.
- ▣ Before using the SDK, should first call **roboio\_SetRBVer(...)** to set the correct model of your RoBoard.
  - See also RoBoIO introduction slide for reference.

```
.....  
#include "ics.h"  
#include "rcb4.h"  
#include "roboard_dll.h"  
.....  
int main()  
{  
    roboio_SetRBVer(...);  
    .....  
    // use API of  
    // libkondo4 here  
    .....  
}
```

# Remarks

- ▣ For the usage of libkondo4, see the official website of libkondo4:
  - <https://bitbucket.org/vo/libkondo4/wiki/Home>
- ▣ The SDK sets 115200bps as the default baudrate.

DIY

RoBoard  $\leftrightarrow$  KRS-2552  
Connection Line

# Preparation



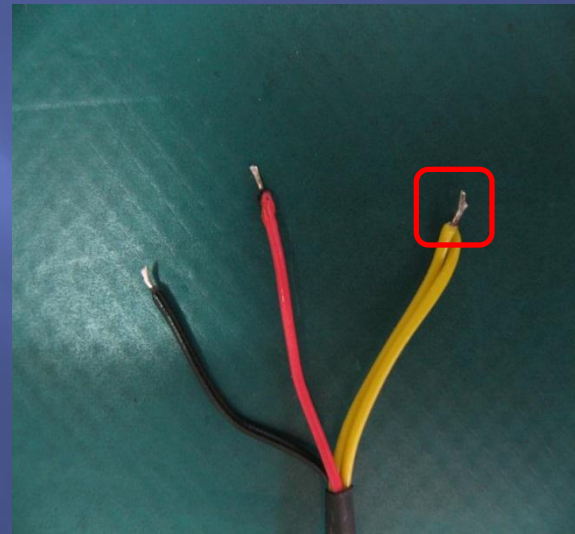
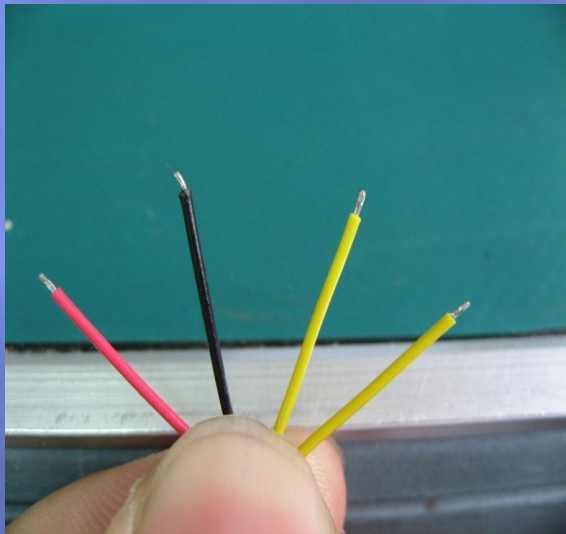
COM3 line in RoBoard Cable set



3-pin header of  
2.54mm pitch

# Step 1

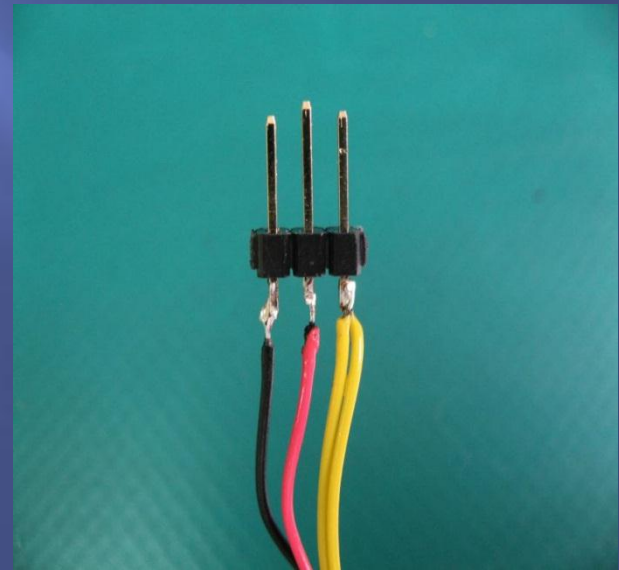
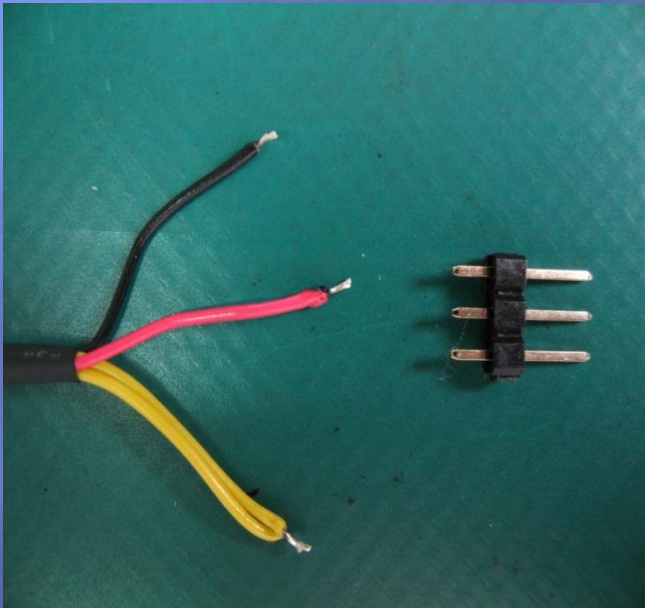
- ▣ Short the TXD/RXD pins (yellow lines)



Solder end of TX & RX lines

## Step 2

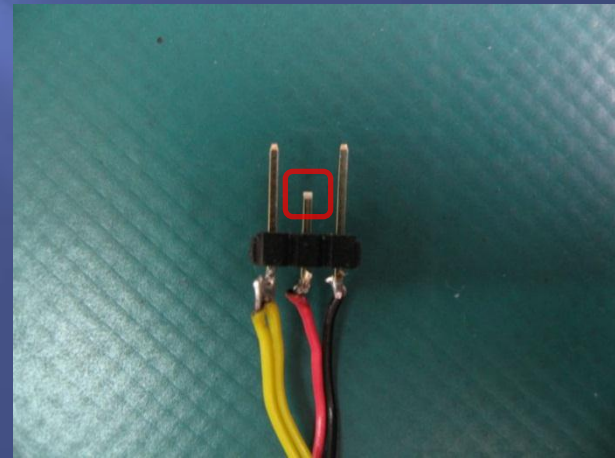
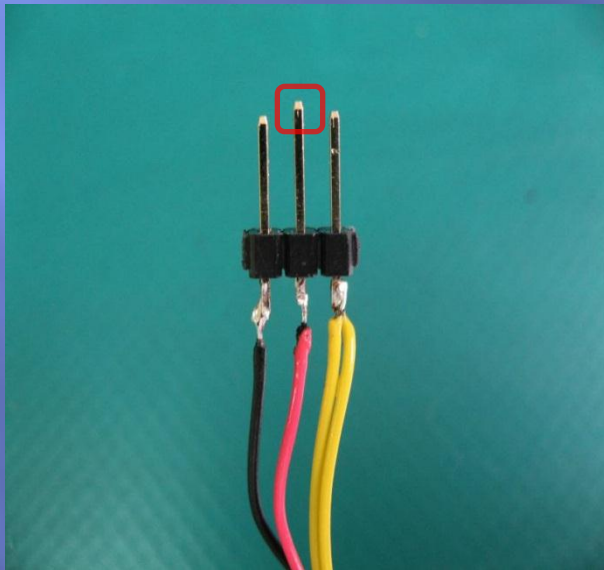
- ▣ Solder the COM3 line and the pin header together.





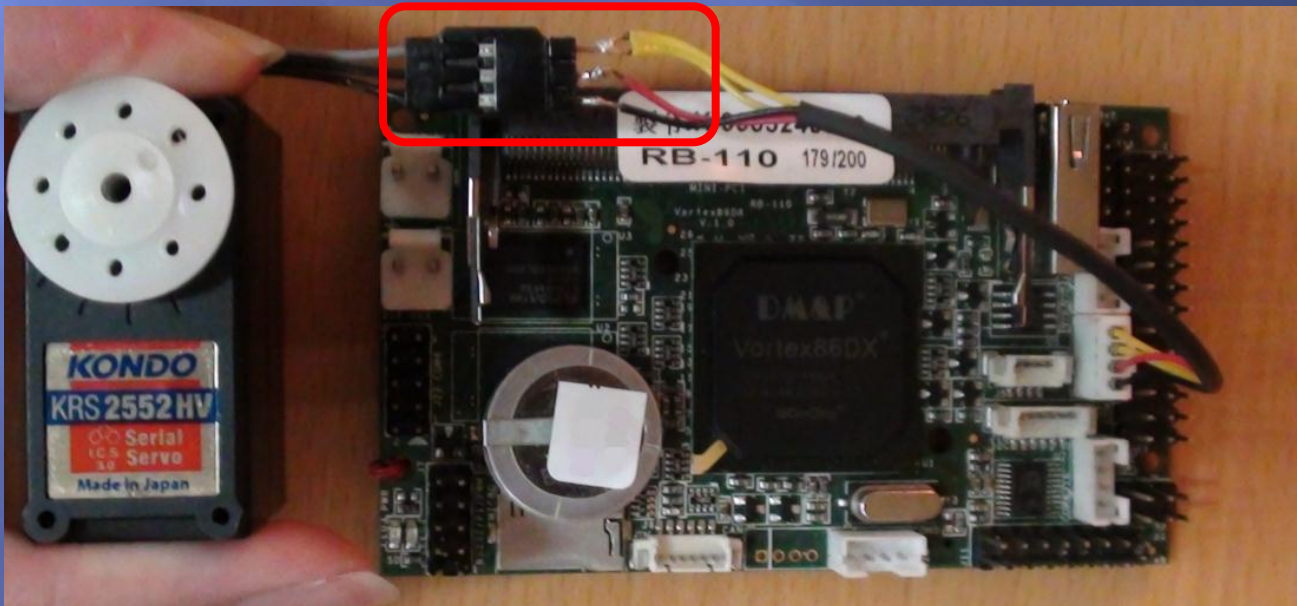
# Step 3

- Shorten the  $V_{xx}$  pin (useful for hot-plugging KONDO servos).



# Usage on RoBoard

- ▣ Now you can connect KONDO KRS-2552 servos to RoBoard's COM3 using the connection line.
- Note: don't plug the connector in wrong direction.





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## Thank You

[tech@roboard.com](mailto:tech@roboard.com)  
<http://www.roboard.com>