I-8124W / I-87124 FAQ

Q1: How much time does the I8124_WriteOutputArea function cost with the I-8124W? (2013/10/05, Johney) 2
Q2: How to connect the M12 connector with the I-8124W? (2013/11/02, Johney) 3
Q3: How to connect the DeviceNet slave which has 2-byte instance ID with the I-8124W? (2013/11/05, Johney) 4
Q4: What is the problem that the I/O value of remote slave does not be refreshed? (2017/08/03, Johney)..... 5
Q5: How can I read all input data from all slave devices? (2017/08/10, Johney)..... 6
Q6: How can I write all output data to all slave devices? (2017/09/17, Johney) 7

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Q1: How much time does the I8124_WriteOutputArea function cost with the I-8124W? (2013/10/05, Johney)

Ans:

All APIs in the I-8124W use the critical-section (Lock & Un-Lock). That could guarantee that only one API would be access at the same time. If you use one API much frequently, it will influence the time of the I8124_WriteOutputArea function. The user can use the following code to estimate the time.

ex.

```
int Start = Environment.TickCount();
    I8124_xxx(....)
Int End = Environment.TickCount();
```

If you have found that the API become slow to response, please check which APIs have been called much frequently.

(2013/10/05, Johney)

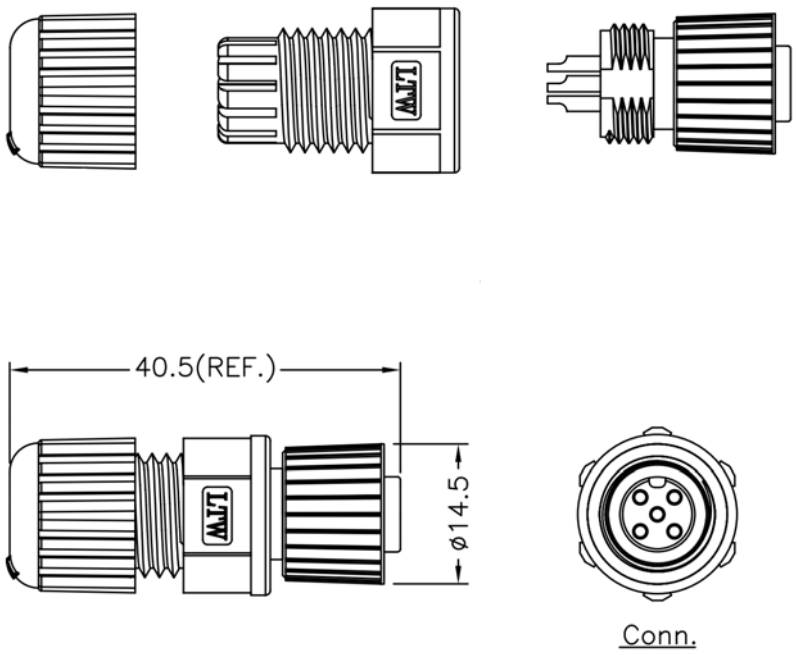
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Q2: How to connect the M12 connector with the I-8124W? (2013/11/02, Johney)

Ans:

We have provided the M12 connector on the website. Here shows the information.





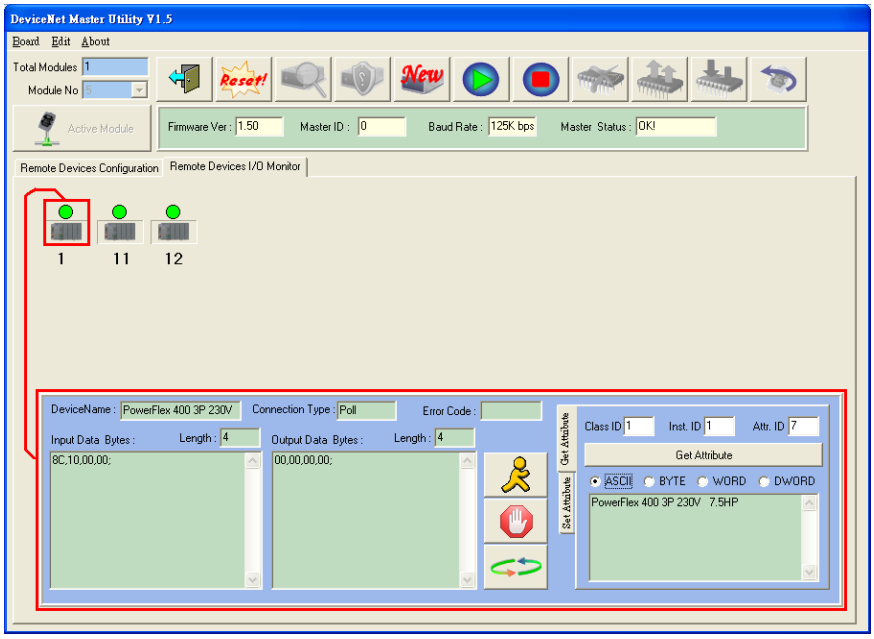
(2013/11/02, Johney)

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Q3: How to connect the DeviceNet slave which has 2-byte instance ID with the I-8124W? (2013/11/05, Johney)

Ans:

We have provided the new firmware to support the 2-byte instance ID. Please update the firmware to v1.80 or newer. We have verified the firmware works fine by the AB inverter.





(2013/11/05, Johney)

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Q4: What is the problem that the I/O value of remote slave does not be refreshed? (2017/08/03, Johney)

Ans:

There some conditions which causes the I/O value freeze.

(1) The I/O device is out of order. Try to output some different values to make sure this.

(2) The I/O connection between master and slave is broken. Check out the status by calling the GetSlaveStatus API.

(3) Try to call “StopDevice” and “StartDevice” API. These two functions will force to re-connect to the slave device.

(4) Check whether the status of the CAN bus is fine or not.

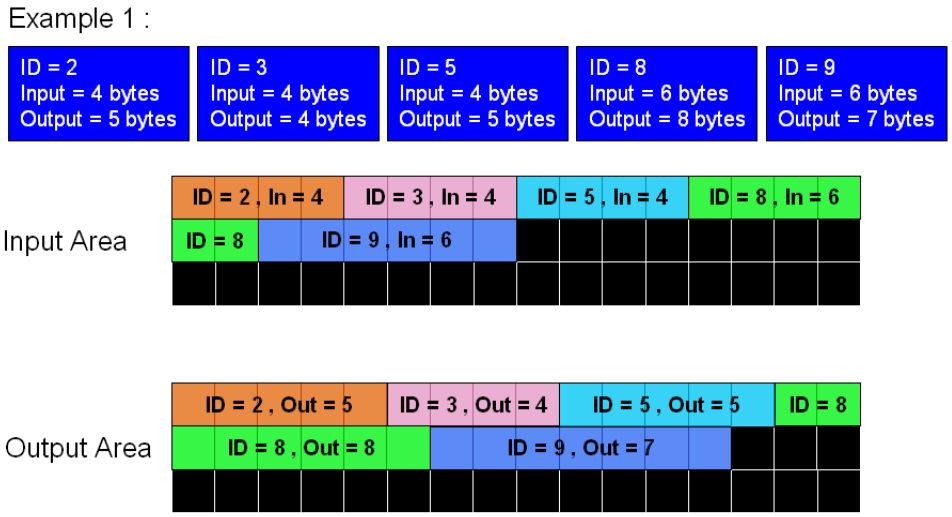
(2014/12/03, Johney)

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Q5: How can I read all input data from all slave devices? (2017/08/10, Johney)

Ans:

The “I8124_ReadInputArea” function could read the bulk data from the input area memory. Users can use this function to read all the input data with one call of this function. Here shows the example.




```
BYTE cSlot = 0; //Assume that the I-8124 was plugged in the slot 0.
WORD Offset = 0;
WORD DataLen = 0;
BYTE DataArray[512] = {0};

//Read whole input data of all slave devices.
Offset = 0; //Read the data from the beginning of the input area.
DataLen = 4 + 4 + 4 + 6 + 6; //The sum of all slave’s input length.
I8124_ReadInputArea (cSlot, Offset, DataLen, DataArray);
DataArray = [The whole input data of all slave devices];

//Read input data of the slave device which ID = 5.
Offset = 4 + 4; //Read the data from the beginning of the ID = 5.
DataLen = 4; //The input length of the ID = 5.
I8124_ReadInputArea (cSlot, Offset, DataLen, DataArray);
DataArray = [The input data of the slave device which ID = 5];
```

(2017/08/10, Johney)

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Q6: How can I write all output data to all slave devices? (2017/09/17, Johney)

Ans:

The “I8124_ WriteOutputArea” function could write the bulk data to the output area memory. Users can use this function to write a large amount of the output data with one call of this function. Here shows the example.

Example 1 :

ID = 2	ID = 3	ID = 5	ID = 8	ID = 9
Input = 4 bytes Output = 5 bytes	Input = 4 bytes Output = 4 bytes	Input = 4 bytes Output = 5 bytes	Input = 6 bytes Output = 8 bytes	Input = 6 bytes Output = 7 bytes






```
BYTE cSlot = 0; //Assume that the I-8124 was plugged in the slot 0.
WORD Offset = 0;
WORD DataLen = 0;
BYTE DataArray[512] = {0};

//Write the whole output data of all slave devices.
Offset = 0; //Write the data from the beginning of the output area.
DataLen = 5 + 4 + 5 + 8 + 7; //The sum of all slave’s output length.
DataArray = [The whole output data];
I8124_WriteOutputArea (cSlot, Offset, DataLen, DataArray);

//Write the output data of the slave device which ID = 5.
Offset = 5 + 4; //Write the data from the beginning of the ID = 5.
DataLen = 5; //The output length of the ID = 5.
DataArray = [The output data of the ID = 5];
I8124_WriteOutputArea (cSlot, Offset, DataLen, DataArray);
```

(2017/09/17, Johney)

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