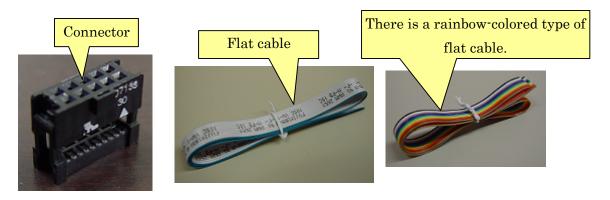
## EXTENSION BOARD CONNECTION CABLE FOR VS-RC003 MAKING MANUAL

Vstone Co.,Ltd.

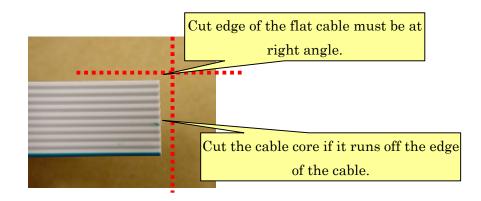
A small CPU board "VS-RC003" for robots can connect IXBUS type extension boards. It needs to make connection cable for connecting these extension boards. This manual describes the way to make this cable.

Connection cable consists of connector and flat cable(see drawing below).



\*There is a kind of flat cable which is divided each cable. But purchase binded cable because it is difficult to crimp with connector.

At the beginning, cut the flat cable into appropriate length. It is better to consider mounted spot in the robot. We would recommend to make the cable a little bit longer if there is enough space to put away the cable. Cut edge of the flat cable must be at right angle, and cut the cable core if it runs off the edge of the cable.



It is necessary to use industrial tool for crimping connector to flat cable. Commercial available vise or crimp tool suffices for it.

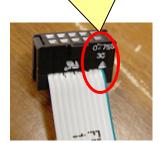
Take care of terms described below about crimping connector.

Make sure to crimp in the right direction that triangle-mark of the connector and the specific line fit together. Crimp the claws on both sides until snapping on each other, with fitting the back side of the connector and the cut edge of the cable together.

Physical interference with other connector on the CPU board and loose connection may be occurred if the flat cable is run off the connector or not inserted all the way.

Fit the triangle—mark of the connector and blue cable core together when they are crimped.

Fit the triangle-mark of the connector and brown cable core together if you have rainbow-colored type of flat cable.

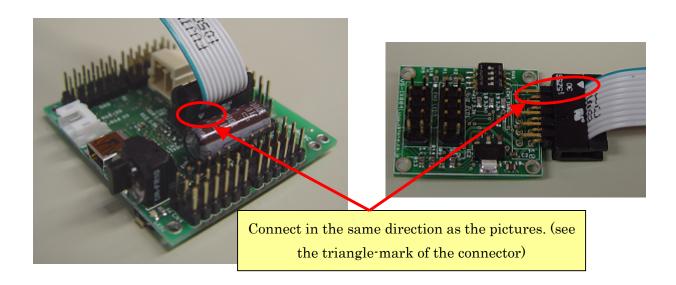


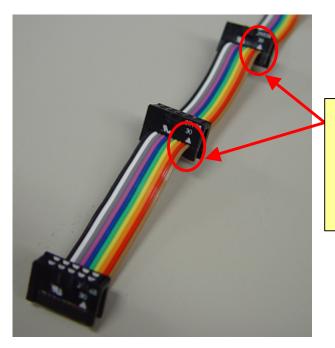


Fit the back side of the connector and the cut edge of the cable together.



When you have crimped the connector to one side of the flat cable, next, crimp it to the other side. After making the cable, connect the CPU board and the extension board like the pictures below. (For reference of extention board, LED extension board "VS-IX004" is in the pictures below)





Fit the triangle-mark of the connector and the color of the flat cable together if you crimp the connector to the halfway of the flat cable.