GYRO/ACCELERATION SENSOR EXTENSION BOARD
"VS-IX001" FOR VS-RC003
HARDWARE MANUAL

Advanced Telecommunications Research Institute International

Vstone Co., Ltd.

The Manual describes the hardware specifications, such as connectors and the DIP switch, of a gyro/acceleration sensor extension board "VS-IX001" (to be referred to as the "gyro/acceleration sensor extension board") for a small CPU board "VS-RC003" for robots.

The names of the connectors, etc. used in the Manual abide by the description of a list of connectors provided at its end. See the list for your information.

● SW1

SW1-1, SW1-2: Sets the sensitivity of an acceleration sensor.

±1.5G	off	off
±2G	off	ON
±4G	ON	off
±6G	ON	ON

SW1-3, SW1-4: Sets an IXBUS address.

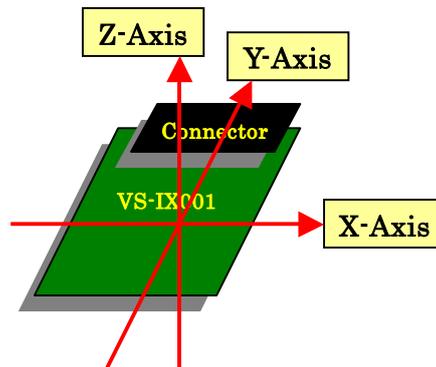|		
0x90	off	off
0x92	off	ON
0x94	ON	off
0x96	ON	ON

A DIP switch located on the gyro/acceleration sensor extension board. It is used to set the I2C bus address of the gyro/acceleration sensor extension board and the sensitivity of the acceleration sensor. For the I2C bus address, the RobovieMaker for VS-RC003 has the same setting item. Ensure that the setting of the item conforms to that of the DIP switch.

● CN1 IXBUS

A connector to connect to the VS-RC003. The details of its pins are omitted.

● Sensor Coordinate System

The coordinate system of various sensors mounted onto the VS-IX001 abides by the following figure. Seeing this coordinate system, determine the position and direction of the board installed into the robot.

Z-Axis

Y-Axis

Connector

VS-IX001

X-Axis

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