

# KBSW180124 Win32-

get\_sensor\_value,

---

- - 
    -
  - 
  - 
  -
- 

- - Visual Studio 2010 SP1
  - Slamware Windows SDK:[Slamware Windows SDK](#)
  - RoboStudio():[Robostudio installer](#)
  - Sample Code:



Visual Studio











Visual Studio 2010SP1.Net FrameworkSP1

- - Slamware SDP mini
    - Slamware Slamware
    - Apollo/Ares/Athena
- 

Win32-

---

## 1. samplesget\_sensor\_value, StartUp project

-  Solution 'samples' (9 projects)
- >  artifacts\_demo
  - >  composite\_map\_demo
  - >  configure\_network\_demo
  - >  get\_laser\_scan
  - >  get\_power\_status
  - >  **get\_sensor\_value**
  - >  go\_home\_to\_charge
  - >  move\_to\_spot
  - >  rotation\_action\_demo

## 2. get\_sensor\_value, Slamware SDK includelib



Slamware SDKincludelibVisual Studio



## 5. Console(sensor id 1bumper0)

```
PS C:\Users\yixuan.yuan\Desktop\demo (update) \SlamwareApplicationDemos-Windows-master\Debug> .\get_sensor_value.exe 192.168.11.1
Connecting SDP @ 192.168.11.1...
SDK Version: 2.8.2_rtm
SDP Version: 2.8.0_rtm (Jun 16 2021)
Sensor id : 0
Sensor coreSensorType: Bumper
Sensor Type: Digital
Sensor Position: ( 0.175 , 0.126 , 0.063 ) ; Yaw = 0.624023
Sensor Value : 3.40282e+038

Sensor id : 1
Sensor coreSensorType: Bumper
Sensor Type: Digital
Sensor Position: ( 0.175 , -0.126 , 0.063 ) ; Yaw = 5.65916
Sensor Value : 0

Sensor id : 5
Sensor coreSensorType: Cliff
Sensor Type: Digital
Sensor Position: ( 0.185 , 0 , 0.038 ) ; Yaw = 0
Sensor Value : 3.40282e+038

Sensor id : 6
Sensor coreSensorType: MagTapeDetector
Sensor Type: Digital
Sensor Position: ( 0.14588 , 0.1089 , 0.03185 ) ; Yaw = 0.64126
Sensor Value : 3.40282e+038

Sensor id : 7
Sensor coreSensorType: MagTapeDetector
Sensor Type: Digital
Sensor Position: ( 0.14588 , -0.1089 , 0.03185 ) ; Yaw = 5.64193
Sensor Value : 3.40282e+038

Sensor id : 2
Sensor coreSensorType: Sonar
Sensor Type: Analog
Sensor Position: ( 0 , 0.181 , 0.1696 ) ; Yaw = 1.5708
Sensor Value : 0.196

Sensor id : 3
Sensor coreSensorType: Sonar
Sensor Type: Analog
Sensor Position: ( 0.1935 , 0 , 0.1485 ) ; Yaw = 0
Sensor Value : 0.4735
```

```
SlamwareCorePlatform sdp = SlamwareCorePlatform::connect(ip_address, 1445);
std::cout << "SDK Version: " << sdp.getSDKVersion() << std::endl;
std::cout << "SDP Version: " << sdp.getSDPVersion() << std::endl;
std::vector<ImpactSensorInfo> sensors;
bool result = sdp.getSensors(sensors);

if (result)
{
    for (std::vector<ImpactSensorInfo>::iterator it = sensors.begin(); it != sensors.end(); ++it)
    {
        std::cout << "Sensor id : " << it->id << std::endl;
        if (it->coreSensorType == SensorTypeBumper)
            std::cout << "Sensor coreSensorType: Bumper" << std::endl;
        else if (it->coreSensorType == SensorTypeCliff)
            std::cout << "Sensor coreSensorType: Cliff" << std::endl;
        else if (it->coreSensorType == SensorTypeSonar)
            std::cout << "Sensor coreSensorType: Sonar" << std::endl;
        else if (it->coreSensorType == SensorTypeMagTapeDetector)
            std::cout << "Sensor coreSensorType: MagTapeDetector" << std::endl;
        else
            return 1;

        if (it->type == ImpactSensorTypeAnalog)
            std::cout << "Sensor Type: Analog" << std::endl;
        else if (it->type == ImpactSensorTypeDigital)
            std::cout << "Sensor Type: Digital" << std::endl;
        else
            return 1;

        std::cout << "Sensor Position: ( " << it->pose.x() << " , " << it->pose.y() << " , " << it->pose.z() << " ) ; Yaw = " << it->pose.yaw() << std::endl;

        ImpactSensorValue value;
        sdp.getSensorValue(it->id, value);
        std::cout << "Sensor Value : " << value.value << std::endl;
    }
}
```

```
        std::cout<<std::endl;  
    }  
}
```