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| MIXED REALITY ROBOTICS |  Miscellaneous  |

**SENSOR\_CARD\_DETECT**
This sensor indicates the state of the SD Card slot, giving feedback as to whether or not there is an SD Card with a program that will override the Pleo’s out-of-the-box code. A value of “1” indicates that an SD Card is inserted, while a value of “0” indicates that there is no SD Card detected.

**SENSOR\_WHITE\_PROTECT**
This sensor reflects the state of the write protect switch on the inserted SD Card and is triggered when the card is inserted or removed. If the value is “1” the card is protected; if the value is “0” the card is not protected.

**SENSOR\_OBJECT**
This sensor indicates whether or not there is an object in front of the Pleo. The value of the sensor ranges between 0 and 100 – 100 means there is definitely something and 0 indicates that nothing is there. This sensor does not measure distance, but rather the probability that an object is present, has appeared, or has disappeared.

**SENSOR\_TERMINAL**
This sensor triggers when a line has been entered. The value of the sensor is the number of characters received and the sensor triggers when the user types one or more characters on the monitor interface, including just a return.

**SENSOR\_USB\_DETECT**
This sensor reflects the state of the USB port. A value of “1” is returned is a USB is detected and plugged into the computer and a value of “0” is returned if no USC cord is detected.

The following sensors are not very important and are little known about:
SENSOR\_RESERVED
SENSOR\_CHARGER\_STATE

**The Battery**

**SENSOR\_BATTERY**
This sensor revolves around the state of the battery and returns the current percentage value of the charge level. The battery level is measured on a scale of 0 to 100. However, the robot’s performance in relation to the battery level is very unpredictable and unreliable. The battery will rarely charge fully to 100% and often begins to work poorly below 50% - and the amount of time it takes for the battery to die varies greatly. Pleo goes into sleeping position/mode and then shutdown when battery value is below 25%.

**SENSOR\_BATTERY\_TEMP**
This sensor is used to monitor the temperature of the battery in the Pleo robot. Pleo’s firmware will automatically shut down if the temperature reaches 58 degrees Celsius.

**SENSOR\_BATTERY\_CURRENT**
This sensor returns the number of milliamps being consumed from the battery by all the motors in the Pleo on a scale of 0 to 5000.

Here is an example of sensor feedback received about a Pleo’s battery:

