# Application Note

Monitoring Battery Supply Voltage

In order to measure the battery supply voltage we use an analogue input configured for 0-10V range and you need to wire in a voltage divider. By connecting this to the controller it enables the signal to be converted and data received in a measurable capacity which can trigger an alarm when the voltage reaches a set level.

Using a simple voltage divider (as shown below) where Vin is from the +ve side of the battery supply, Vout goes to the analogue input on the Q48 and ground to ground on Q48.
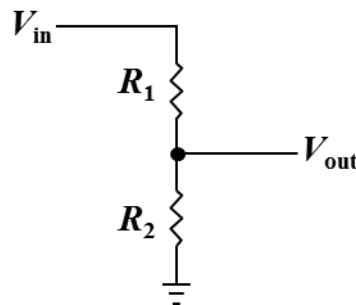
The following values for R1 and R2 should be used

These are standard resistor values which are available at Jaycar for example.

12V nominal supply (0-15V range)

R1 = 8K2 ohm
R2 = 10K ohm

24V nominal supply (0-30V range)

R1 = 24K ohm
R2 = 10K ohm

Configuration in SMS Messenger

12V nominal (0-15V range)
Scale to 0 – 19.7V

24V nominal (0-30V range)
Scale to 0 – 40V

Please contact us if you would like any further technical information in relation to battery supply voltage monitoring.