

BNC_PI2

General

The dual channel voltage transformer BNC_PI2 adjusts the voltage signal V_{in} to match the input voltage range of signal converter SICO2 and data logger DL16.

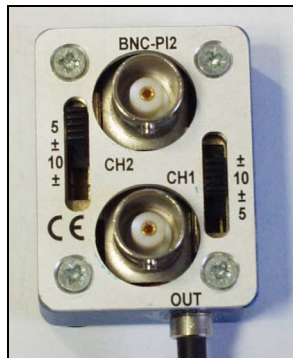


Figure 1: BNC_PI2.

Input Range

The input voltage range of each channel is given by the corresponding switch position:

Scale CH1	V_{in} Range	Scale CH2	V_{in} Range
±	-10...10 V	5	0...5 V
10	0...10 V	±	-5...5 V
±	-5...5 V	10	0...10 V
5	0...5 V	±	-10...10 V

Output

The output voltage depends on the input voltage range and is given as follows:

V_{in} Range	V_{out}	$V_{DL16/SICO2}$
0...5 V	V_{in}	V_{in}
-5...5 V	$V_{in} / 2 + V_{ref} / 2$	$V_{in} / 2 + 2.56$ V
0...10 V	$V_{in} / 2$	$V_{in} / 2$
-10...10 V	$V_{in} / 4 + V_{ref} / 2$	$V_{in} / 4 + 2.56$ V

Circuit Diagrams

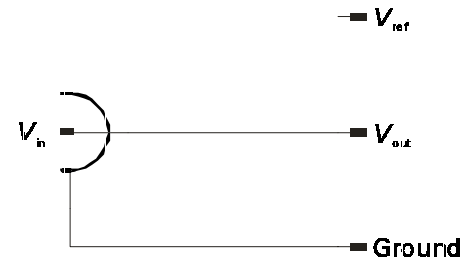


Figure 2: Circuit Diagram ($V_{in} = 0...5$ V).

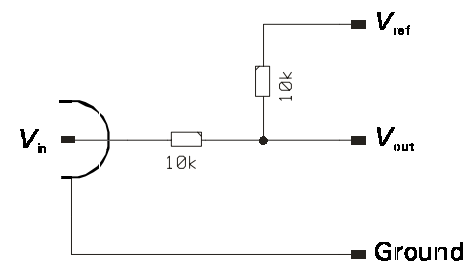


Figure 3: Circuit Diagram ($V_{in} = -5...5$ V).

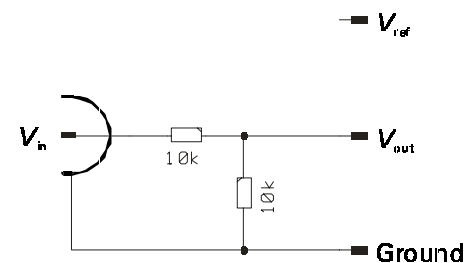


Figure 4: Circuit Diagram ($V_{in} = 0...10$ V).

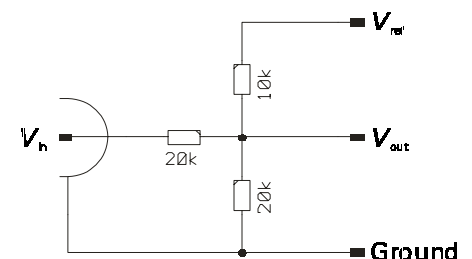


Figure 5: Circuit Diagram ($V_{in} = -10...10$ V).