

# 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.

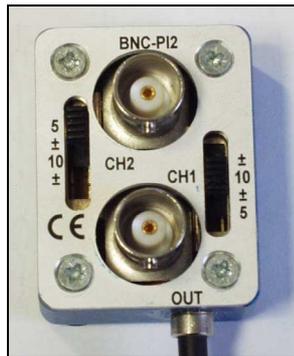


Figure 1: BNC\_PI2.

## 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

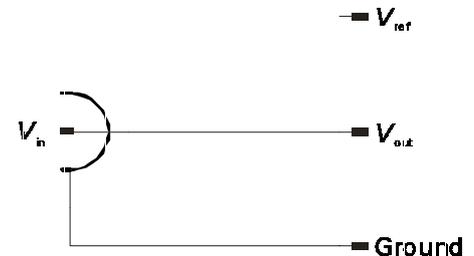


Figure 2: Circuit Diagram ( $V_{in} = 0...5$  V).

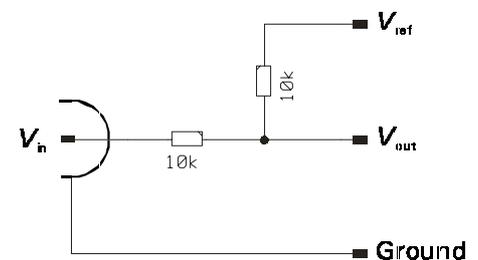


Figure 3: Circuit Diagram ( $V_{in} = -5...5$  V).

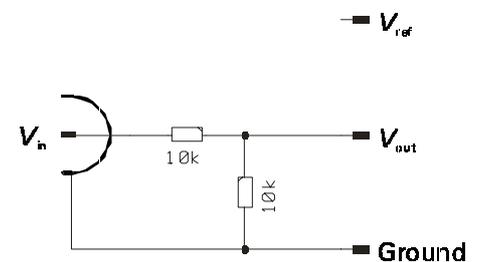


Figure 4: Circuit Diagram ( $V_{in} = 0...10$  V).

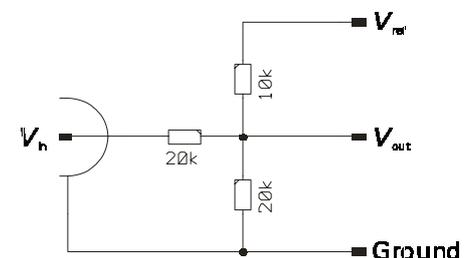


Figure 5: Circuit Diagram ( $V_{in} = -10...10$  V).