

This document lists all common Solartron Transducers and link settings for the OD4, OD5 range of electronics.

Every effort will be made to keep this list up to date. If the transducer being used cannot be found then please ask.

The settings given here are a starting point only.

Full instructions for setting up any output and offset are given in the user manual.

### Setting a $\pm 10$ V Output

The Course Gain Range indicated in the tables will produce an output just below  $\pm 10$  V. For an accurate  $\pm 10$  V output, the Fine Gain Control should be adjusted.

### Setting a $\pm 5$ V Output

For a  $\pm 5$  V fullscale output, select the Course Range one down from that shown in the tables.

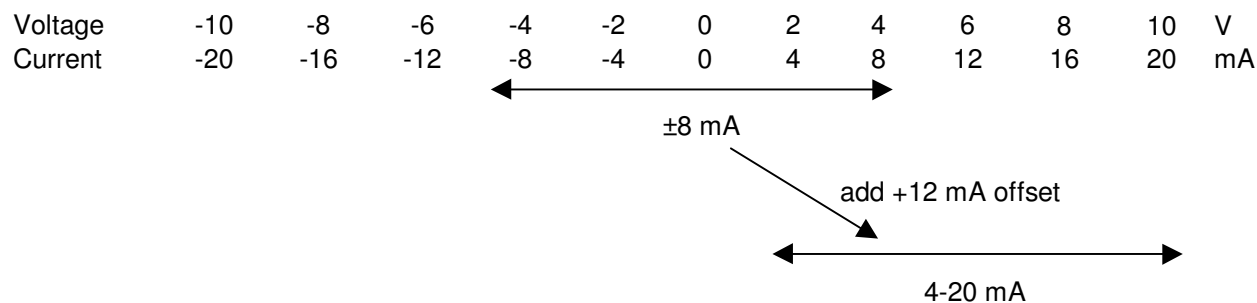
**Example:** Range 4 will give  $\pm 10$  V fullscale; Range 5 will give  $\pm 5$  V fullscale (after Fine Gain adjust).

### Setting a 4-20 mA Output

The current output and voltage output are related as shown below. Voltage and current are available concurrently.

4-20 mA is the same as a  $\pm 8$  mA with a +12 mA offset.

When relating current and voltage, 4-20 mA is the same as a 2 to 10 V span (or  $\pm 4$  V with a +6 V offset).



To set 4-20 mA, perform the following steps.

1. Select the Course range setting for  $\pm 5$  V (approximately  $\pm 10$  mA)
2. Adjust the fine gain control to give  $\pm 8$  mA.
3. Add a fixed offset of +10 mA (+VE and 5 V course link).
4. Adjust the fine offset control to give  $\pm 8$  mA.

Solartron LVDT Transducers

	Sensitivity mV/V/mm	±Range mm	Full Range Output mV	Calibration Load Resistance kΩ	Calibration Frequency kHz
<b>B-Series</b>					
BS/1.5	158	1.5	711	100	5
BS/2.5	154	2.5	1155	100	5
BS/5	108	5	1620	100	5
BS/7.5	48	7.5	1080	100	5
BS/10	29	10	870	100	5
BS/15	27	15	1215	100	5
BS/25	16	25	1200	100	5
BS/50	10.8	50	1620	100	5
BS/75	9	75	2025	100	5
BS/100	8.2	100	2460	100	5
BS/125	5.9	125	2212.5	100	5
<b>Optimum Series</b>					
OP/1.5	102	1.5	459	100	5
OP/6	81	6	1458	100	5
OP/12.5	72	12.5	2700	100	5
OP/1.5+	110	2.5	825	100	5
OP/6+	76	8	1824	100	5
OP/12.5+	72	15	3240	100	5
<b>SM Series</b>					
SM/1	147	1	441	100	5
SM/3	130	3	1170	100	5
SM/1+	147	2	882	100	5
SM/3+	130	4	1560	100	5

Links			
Freq	Input Resistance	Input Gain	Course Gain Range
parked	parked	parked	2
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	2
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	4
parked	parked	parked	4
parked	parked	parked	4
parked	parked	parked	1
parked	parked	parked	3
parked	parked	DIV2	4
parked	parked	parked	2
parked	parked	parked	3
parked	parked	DIV2	5
parked	parked	parked	1
parked	parked	parked	3
parked	parked	parked	2
parked	parked	parked	3

## Solartron LVDT Transducers

	Sensitivity mV/V/mm	±Range mm	Full Range Output mV	Calibration Load Resistance kΩ	Calibration Frequency kHz
<b>AC, ACR Range</b>					
AC/15	35	15	1575	100	5
AC/25	2	25	1500	100	5
AC/50	9.3	50	1395	100	5
AC/100	5	100	1500	100	5
AC/150	3.2	150	1440	100	5
AC/250	2.1	250	1575	100	5
AC/300	1.7	300	1530	100	5
<b>Submersible Range</b>					
SAF(CR)/15	34	15	1530	100	5
SAF/25	20	25	1500	100	5
SAF/50	9.3	50	1395	100	5
<b>AX, AXR, AT, ATR Range. Also BG(R) and MD where ±Range is the same</b>					
AX/0.25	272	0.25	204	10	5
AX/0.5	272	0.5	408	10	5
AX/1	210	1	630	10	5
AX/1.5	150	1.5	675	10	5
AX/2	150	2	900	10	5
AX/2.5	150	2.5	1125	10	5
AX/5	105	5	1575	10	5
AX/10	33	10	990	10	5
<b>A6G, M6D1 and AU/1</b>					
A6G	269	1	807	10	5

Links			
Freq	Input Resistance	Input Gain	Course Gain Range
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	parked	parked	3
parked	10k*	X2	4
parked	10k*	parked	1
parked	10k*	parked	2
parked	10k*	parked	2
parked	10k*	parked	1
parked	10k*	parked	3
parked	10k*	parked	3
parked	10k*	parked	4
parked	10k*	parked	2

\* For some transducers, especially standardised types, better performance can sometimes be achieved with 100K load. This is due to interaction between transducer, standardisation components and components needed to meet EMC requirements.

## Solartron Half Bridge Transducers

	Sensitivity mV/V/mm	±Range mm	Full Range Output mV	Calibration Load Resistance kΩ	Calibration Frequency kHz
<b>AX, AXR, AT, ATR Range. (U) means unstandardised (usually unplugged)</b>					
AX/0.25	73.5	0.25	55	2*	10
AX/0.25(U)	84	0.25	63	2*	10
AX/0.5	73.5	0.5	110	2*	10
AX/0.5(U)	84	0.5	126	2*	10
AX/1	73.5	1	221	2*	10
AX/1.5	49	1.5	221	2*	10
A6G/1	73.5	1	221	2*	10
AX/10	7.35	10	221	2*	10
AX/2.5	29.4	2.5	221	2*	10
AX/5	14.7	5	221	2*	10
AX/1(U)	83	1	249	2*	10
A6G/1(U)	88	1	264	2*	10
AX/1.5(U)	82	1.5	369	2*	10
AX/2.5(U)	82	2.5	615	2*	10
AX/5(U)	51	5	765	2*	10
AX/10(U)	33	10	990	2*	10

Links			
Freq	Input Resistance	Input Gain	Course Gain Range
on	2k*	X4	1
on	2k*	X4	1
on	2k*	X4	2
on	2k*	X4	2
on	2k*	X2	1
on	2k*	X2	1
on	2k*	X2	1
on	2k*	X2	1
on	2k*	X2	1
on	2k*	X2	1
on	2k*	X2	1
on	2k*	X1 (parked)	1
on	2k*	X1 (parked)	2
on	2k*	X1 (parked)	2
on	2k*	X1 (parked)	2

\* For some transducers, especially standardised types, better performance can sometimes be achieved with 100K load. This is due to interaction between transducer, standardisation components and components needed to meet EMC requirements.