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 ±10 V Output

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

#### Setting a ±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 ±4 V with a +6 V offset).



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      SCIGATE AUTOMATION (S) PTE LTD

      No.1 Bukit Batok Street 22 #01-01 Singapore 659592

      Tel: (65) 6561 0488

      Email: sales@scigate.com.sg

Fax: (65) 6562 0588
Web: www.scigate.com.sg
```

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Business Hours: Monday - Friday 8.30am - 6.15pm
```



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

- 1. Select the Course range setting for ±5 V (approximately ±10 mA)
- 2. Adjust the fine gain control to give ±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

			Full Range	Calibration	Calibration	
	Sensitivity	<b>±</b> Range	Output	Load Resistance	Frequency	
	mV/V/mm	mm	mV	kΩ	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	
Optimum Series						
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	
SM Series						
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	Input	Course Gain			
	Resistance	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

			Full Range	Calibration	Calibration
	Sensitivity	±Range	Output	Load Resistance	Frequency
	mV/V/mm	mm	mV	kΩ	kHz
AC, ACR Ra	ange				
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
Submersib	le Range				-
SAF(CR)/15	34	15	1530	100	5
SAF/25	20	25	1500	100	5
SAF/50	9.3	50	1395	100	5
AX, AXR, A	T, ATR Rang	ge. Also	BG(R) and MD w	here ±Range is	s the same
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
A6G, M6D1	and AU/1				
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	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

			Full Range	Calibration	Calibration	
	Sensitivity	±Range	Output	Load Resistance	Frequency	
	mV/V/mm	mm	mV	kΩ	kHz	
AX, AXR, AT, ATR Range. (U) means unstandardised (usually unplugged)						
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*	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.