

Tower	note	High Current - Low Noise	Smooth Transition (2 DAC per Coil)	Series resistor [Ω] low noise	Sensing resistor [Ω] low noise	Actuation [mA/V] high current	Actuation [mA/V] low noise	Sensing [V/A] high current	Sensing [V/A] low noise	Filtering
<b>NE</b>										
up – down		<b>YES</b>	Yes	6k	3k	194.7	0.323	10	6k	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@3.4Hz, pole@97Hz
right – left		<b>YES</b>	NO	6k	3k	194.7	0.323	10	6k	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@3.4Hz, pole@97Hz
LATERAL right	<b>still in Voltage mode (G=1.947) +</b>			1k				2		
LATERAL left	<b>series resistor (1k ohm)</b>									
<b>WE</b>										
up – down		<b>YES</b>	Yes	6k	3k	194.7	0.323	10	6k	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@3.4Hz, pole@97Hz
right – left		<b>YES</b>	NO	6k	3k	194.7	0.323	10	6k	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@3.4Hz, pole@97Hz
LATERAL right	<b>still in Voltage mode (G=1.947) +</b>			1k				2		
LATERAL left	<b>series resistor (1k ohm)</b>									
<b>BS</b>										
up left – up right		<b>YES</b>	Yes	1k	500	194.7	1.926	10	1k	Actuation: pole@3Hz and 20Hz, zero@28Hz and 100Hz - Sensing: zero@3.4Hz, pole@97Hz
down left – down right		<b>YES</b>	Yes	1k	500	194.7	1.926	10	1k	Actuation: pole@3Hz and 20Hz, zero@28Hz and 100Hz - Sensing: zero@3.4Hz, pole@97Hz
<b>NI</b>										
up – down		<b>YES</b>	NO	6k	3k	194.7	0.323	10	6k	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@3.4Hz, pole@97Hz
right – left		<b>YES</b>	NO	6k	3k	194.7	0.323	10	6k	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@3.4Hz, pole@97Hz
<b>WI</b>										
up – down		<b>YES</b>	NO	6k	3k	194.7	0.323	10	6k	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@3.4Hz, pole@97Hz
right – left		<b>YES</b>	NO	6k	3k	194.7	0.323	10	6k	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@3.4Hz, pole@97Hz
<b>MC</b>	<b>still in Voltage mode (G=1.947) + series resistor (47 ohm) (150 ohm for Lateral Coils)</b>	<b>NO</b>				~35		2		
<b>IB</b>	<b>still in Voltage mode (G=1.718) + switched series resistor (67 ohm)</b>	<b>YES</b>	NO	67		~200	~25	<b>ONLY VOLTAGE SENSING (gain = 200)</b>	<b>ONLY VOLTAGE SENSING (gain = 200)</b>	Actuation: pole@3Hz, zero@28Hz - Sensing: zero@0Hz, pole@1.6Hz
<b>PR</b>	<b>still in Voltage mode (G=1.947) + series resistor (91 ohm)</b>	<b>NO</b>				~20		2		
<b>OB</b>	<b>still in Voltage mode (G=1.947) + series resistor (30 ohm)</b>	<b>NO</b>				~20		2		Actuation: pole@3Hz, zero@28Hz