

Tower	note	High Current - Low Noise	Smooth Transition (2 DAC per Coil)	Series resistor [Ω] low noise	Sensing resistor [Ω] low noise	DC Actuation [mA/V] high current	DC Actuation [mA/V] low noise	DC Sensing [V/A] high current	DC Sensing [V/A] low noise	Filtering
NE										
up – down	Standard (last) CoilDriver	YES	Yes	300, 1200, 2400, 4800		~124	~3.1(LN1) ~0.82(LN2) ~0.41(LN3) ~0.2(LN4)	~10.8	327.5 (LN1)	Actuation (LN1): 2pole@0.9Hz, 2zero@9Hz Sensing (LN1): zero@3.4Hz, pole@97Hz
right – left	Standard (last) CoilDriver	YES	Yes	300, 1200, 2400, 4800		~124	~3.1(LN1) ~0.82(LN2) ~0.41(LN3) ~0.2(LN4)	~10.8	327.5 (LN1)	Actuation (LN1): 2pole@0.9Hz, 2zero@9Hz Sensing (LN1): zero@3.4Hz, pole@97Hz
Marionetta Left & Right	still in Voltage mode (G=1.947)							2		Actuation: pole@1Hz, zero@10Hz
WE										
up – down	Standard (last) CoilDriver	YES	Yes	300, 1200, 2400, 4800		~124	~3.1(LN1) ~0.82(LN2) ~0.41(LN3) ~0.2(LN4)	~10.8	327.5 (LN1)	Actuation (LN1): 2pole@0.9Hz, 2zero@9Hz Sensing (LN1): zero@3.4Hz, pole@97Hz
right – left	Standard (last) CoilDriver	YES	Yes	300, 1200, 2400, 4800		~124	~3.1(LN1) ~0.82(LN2) ~0.41(LN3) ~0.2(LN4)	~10.8	327.5 (LN1)	Actuation (LN1): 2pole@0.9Hz, 2zero@9Hz Sensing (LN1): zero@3.4Hz, pole@97Hz
Marionetta Left & Right	still in Voltage mode (G=1.947)							2		Actuation: pole@1Hz, zero@10Hz
BS										
up left – up right	Standard (last) CoilDriver	YES	Yes	300, 1200, 2400, 4800		~124	~3.1(LN1) ~0.82(LN2) ~0.41(LN3) ~0.2(LN4)	~10.8	327.5 (LN1)	Actuation (LN1): 2pole@0.9Hz, 2zero@9Hz Sensing (LN1): zero@3.4Hz, pole@97Hz
down left – down right	Standard (last) CoilDriver	YES	Yes	300, 1200, 2400, 4800		~124	~3.1(LN1) ~0.82(LN2) ~0.41(LN3) ~0.2(LN4)	~10.8	327.5 (LN1)	Actuation (LN1): 2pole@0.9Hz, 2zero@9Hz Sensing (LN1): zero@3.4Hz, pole@97Hz
NI										
up – down		YES	NO	6k	3k	~195	0.33	10	6000	Actuation: pole@3Hz, zero@28Hz Sensing: zero@3.4Hz, pole@97Hz
right – left		YES	NO	6k	3k	~195	0.33	10	6000	Actuation: pole@3Hz, zero@28Hz Sensing: zero@3.4Hz, pole@97Hz
Marionetta Left & Right	still in Voltage mode (G=1.947)							2		Actuation: pole@1Hz, zero@10Hz
WI										
up – down		YES	NO	48k	24k	~195	0.04	10	48000	Actuation: pole@3Hz, zero@28Hz Sensing: zero@3.4Hz, pole@97Hz
right – left		YES	NO	48k	24k	~195	0.04	10	48000	Actuation: pole@3Hz, zero@28Hz Sensing: zero@3.4Hz, pole@97Hz
Marionetta Left & Right	still in Voltage mode (G=1.947)							2		Actuation: pole@1Hz, zero@10Hz
MC	still in Voltage mode (G=1.947) + series resistor (47 ohm) (150 ohm for Lateral Coils)	NO		47 or 150		~35		2		
IB	still in Voltage mode (G=1.718) + series resistor (67 ohm)	NO		67		~23		ONLY VOLTAGE SENSING (gain = 200)		Actuation: pole@3Hz, zero@28Hz Sensing: zero@0Hz, pole@1.6Hz
PR	still in Voltage mode (G=1.947) + series resistor (91 ohm)	NO		91		~19		2		Actuation: pole@1Hz, zero@10Hz
OB	still in Voltage mode (G=1.958) + series resistor (30 ohm)	NO		30		~58		2		Actuation: pole@3Hz, zero@28Hz