

*MEMORANDUM*

DATE: May 1, 2018

TO: ISC/IO/PSL team  
 FROM: Daniel Sigg  
 SUBJECT: Modifications to the location of the EOM drivers  
 Refer to: LIGO-T1800196-v1

As part of the implementation of the new alignment scheme requiring a 118 MHz modulation, we retuned the three EOM electrodes for 9.1 MHz, 118 MHz and 45.5 MHz. The fourth modulation is added to the 45.5 MHz signal using an RF combiner/amplifier, [D1800116](#).

We will take this opportunity to make the LHO setup the same as the LLO one, by moving the EOM driver electronics outside the PSL enclosure. We use an 8U space at the bottom of the PSL-R1 rack to install a RF patch panel, [D1101479](#), the RF combiner/amplifier and the 2 EOM drivers for 9.1 and 45.5 MHz, [D0900760](#).

9	Unused (ventilation)	
8	EOM Driver 9 MHz, D0900760	EOM Driver 45 MHz, D0900760
7		
6	Unused (ventilation)	
5	RF combiner/amplifier, D1800116	
4		
3	RF patch panel, E1101479	
2		

**Figure 1: Bottom of PSL-R2 Rack**

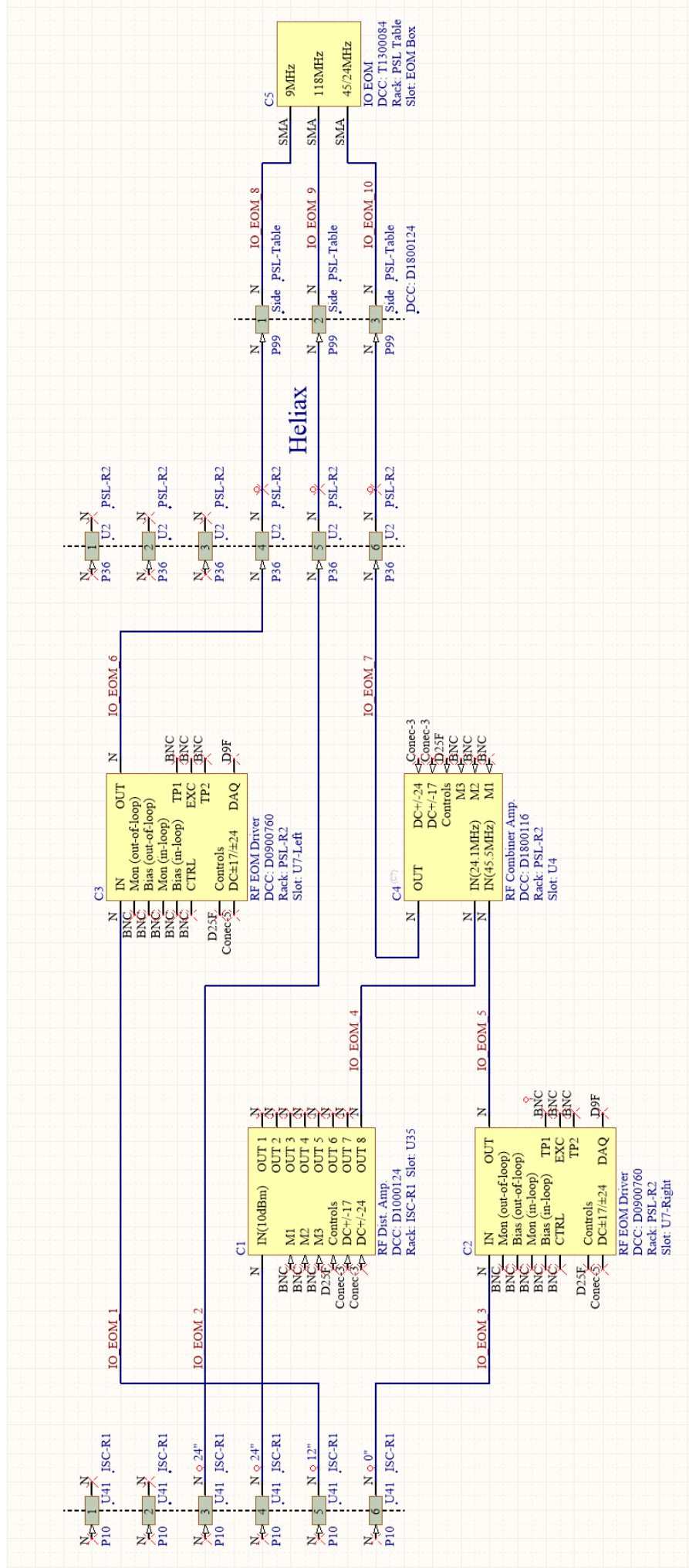


Figure 2: Schematics of the EOM Driver Setup