

LIGO HANFORD OBSERVATORY

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# MEMORANDUM

DATE: September 19, 2014

|  |  |
| --- | --- |
| TO: | ISC team |
| FROM: | Daniel Sigg |
| SUBJECT: | RF Power Splitter/Combiners for RF Distribution Amplifier D1000124 |
| Refer to: | LIGO-E1400377-v1 |

In a view instances, mainly EOM/Pockels cells, the 13 dBm output of the RF distribution amplifier D1000124 is just short of the required RF power level. RF power splitter / combiners can be used give an amplitude gain of 1.41, 1.73 and 2 for 2-way, 3‑way and 4-way combiners, respectively.

BOM (for 3 ifo):

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| Qty | Item | Distributor | Description |
| 1 | 802-4-0.252 | Meca | 5-500MHz 2-Way 50Ω Power Divider |
| 1 | 803-2-0.252 | Meca | 5-500MHz 3-Way 50Ω Power Divider |
| 1 | 804-4-0.252 | Meca | 5-500MHz 4-Way 50Ω Power Divider |
| 1 | PE9007 | Pasternack | N Female to N Female Adapter |

Meca: <http://e-meca.com/rf-power-divider.php>

Pasternack: <http://www.pasternack.com>