LGM TFD ARRAY/FSX-1S Radio Spectrograph

North-South Dipoles Feed Line

East-West Dipoles Feed Line

Building

Patch Panel

Poly-Phasers

ZSC-2-1 Power Combiner

E-W Beam Time Delay

N-S Beam Time Delay

RCP IN

LCP Multicoupler +3dB

FSX-1S RADIO SPECTROGRAPH

RCP Multicoupler +3dB

LCP IN

RCP IN

DQK-701B 90 Hybrid

N-S Dipoles

E-W Dipoles

+3dB

OUT

LCP OUT

RCP OUT
## LGM Square TFD Array Feed System Losses

<table>
<thead>
<tr>
<th>Freq (MHz)</th>
<th>One Way Loss (dB)</th>
<th>One Way Loss (dB)</th>
<th>Loss (dB)</th>
<th>Loss (dB)</th>
<th>Loss (dB)</th>
<th>Inputs (dB)</th>
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**ASSUMED same as 12/19/2015 AJ4CO feeds 08/11/2013 08/11/2013 Hybrid λ RG-58 Mini-Circuits ZSC-2-1W+ Combiner BALUN16-1A 16:1 Balun**

Loss Between Antenna Terminals and Hybrid.
20.1 MHz POLARIMETER

NOTE:
This is a 50 Ω system.
All coaxial cables are Belden RG-58/U, velocity factor = 0.66 unless otherwise noted.
LGM RADIO ALACHUA DATA FLOW

- **TFD ARRAY**
  - N/S
  - E/W
  - IN
  - OUT

- **90 Degree Hybrid**
  - IN
  - OUT

- **LCP Multicoupler**
  - In

- **RCP Multicoupler**
  - In
  - Out +3 dB
  - Ant
  - In

- **Icom R-75 SSB-AGC Off**
  - Audio Out
  - Line In

- **RADIO JOVE ARRAY**
  - Ant
  - In

- **Radio Jove Receiver**
  - Audio Out (R)

- **COMPUTER**
  - Ch. 2 Icom @22.4 MHz
  - Ch. 1 Radio Jove

- **Sky Pipe (LGM Radio Alachua)**