RF Controller in Mezzanine

- 2856 MHz and 81.6 MHz Amplifiers (Master Phase Shifter)
- Splitters for 81.6 and 2856 MHz From YAG Room
- Motorized Phase Shifter
- Phase and Amplitude Potentiometers
- RF Phase/Amplitude Control Unit
- 81.6MHz IN
- 81.6MHz OUT
- 2856 MHz IN
- 2856 MHz OUT
- 2856 Master Phase Shifter
- Master Phase Shifter
- 81.6MHz IN
- 81.6MHz OUT
- REF
- LINAC
- GUN
- Phase Shifter
- RF IN
- RF OUT
- LINAC
- RF IN
- RF OUT
- GUN
- Semi-rigid cable w/o #
- C# 205
- 2856 MHz From MEZZ
- C#975
- 81.6 MHz From MEZZ
- C#289 Motorized Phase Shifter #2
- C#288 Motorized Phase Shifter #1
- DAC BREAK OUT BOX
- CH 6
- C#1128 (BNC)
- 2856 Master Phase Shifter
From Low-power RF to High-power RF

1KW Amplifier

*1

ATTEN

IN

CPL

OUT

Coupler

Narda
M/N 3003-30
S/N 02156

Circulator

Terminated

C# 574

Klystron

To Klystron??

No C#

Circulator

Coupler

Terminated

Digital Power Meter

RF Driver

PRO-COMM INC.
PC-3000S-2KA

Amplification of RF driver needs to be measured twice a month.

1W Amplifier

*1

ATTEN

ATTEN

ATTEN

Semi-rigid
w/o C#
Gun Field Monitor in Mezzanine

- CD-51: Detector
  Elcom Systems
  CD-51 (0.5mV/uW)

* Same device available at EMCO.

1. -10 dB Coupler
   KDI
   CL-2040-10

Control Room

Oscilloscope

CPL

IN

*1

OUT

CD-51

Detector
Elcom Systems
CD-51 (0.5mV/uW)
Linac Field Monitor in Mezzanine

Diagram of Linac Field Monitor in Mezzanine showing the flow of signals through various connectors and components.
Gun Field Monitor in Mezzanine

UNUSED GUN CELL 2

- C203
  - Gun Cell 2
  - RF OUT
  - UNUSED

- C261
  - Gun Cell 2
  - UNUSED

- C98
  - Video OUT
  - UNUSED

- Mini-Circuits ZFRSC-42

- Terminated
Gun Phase/Amplitude Controller in Mezzanine

“RF IN” @ Box side

“Amp” @ Box side
“Phase” @ Box side

C1-10 Connector to Front Side (see next page)

MINI-CIRCUIT ZHL-1042J
MCL ZA4PD-4

2856 MHz
180 deg
Phase Shifter
239-017

“Phaser driver”
Gun Phase/Amplitude Controller in Mezzanine
(Front side)