

INTERLOCKS: CHECK

AIR

FAULT

MAIN CAB

H. V. CAB

EXT.

PHASE LOSS

OVERLOADS: CHECK

AFC

IPA VSWR

PA VSWR

PA SCREEN

PA PLT

FILAMENT

EXT: N/A

STATUS: CHECK

FAULT

FAILSAFE

IPA OUTPUT POWER (BAR GRAPH DISPLAY)

FORWARD 585 WATTS

REFLECTED 0.6 WATTS

OUTPUT POWER (ANALOG METERS)

PLATE VOLTAGE 12 KV

PLATE CURRENT 3.1 Amperes

FORWARD 28,500 (100% :

VSWR 1.05:1

CONTROL SETTINGS

OUTPUT LOADING 23.3

PLATE TUNING 10:00 O'CLOCK

GRID TUNING 175.7

INPUT MATCH 12.3

MULTIMETER READINGS**BASIC READINGS**

PLATE I	<u>3.11</u>	A
PLATE E	<u>12.2</u>	KVDC
SCREEN I	<u>97.0</u>	ma
SCREEN E	<u>990</u>	VDC
FILAMENT	<u>7.5</u>	VAC
IPA FWD	<u>577</u>	W
IPA REF	<u>0.0</u>	W

IPA READINGS

IPA FWD	<u>574</u>	W
IPA REF	<u>0.0</u>	W
IPA OVR	<u>65.0</u>	W
IPA E	<u>49.4</u>	VDC
IPA I	<u>16.8</u>	A
IPA T	<u>91.0</u>	F

PA READINGS

PLATE E	<u>12.2</u>	KVDC
PLATE I	<u>3.10</u>	A
PLATE OVR	<u>3.77</u>	A
PA FWD	<u>28.6</u>	KW
APC PWR	<u>28.6</u>	KW
PA REF	<u>0.03</u>	KW
PA OVR	<u>1.14</u>	KW
SCREEN E	<u>1010</u>	VDC
SCREEN I	<u>75.5</u>	ma
SCN OVLD	<u>250</u>	ma
GRID E	<u>-555.5</u>	VDC
GRID I	<u>-140.5</u>	ma
FILAMENT	<u>7.5</u>	VAC
INLET T	<u>77.8</u>	F
STACK T	<u>141.9</u>	F

PREAMP/EXCITER READINGS

PREA/EXC PWR	<u>23.6</u>	W
PREAMP E	<u>N/A</u>	VDC
PREAMP I	<u>N/A</u>	A
PREA DRV/EXC	<u>4.2</u>	W

CONTROL STATUS

PHASE A	<u>211</u>	VAC
PHASE B	<u>211</u>	VAC
PHASE C	<u>211</u>	VAC
+5 SUPPLY	<u>5.0</u>	VDC
+12	<u>12.0</u>	VDC
-12	<u>-12.2</u>	VDC
+ 10 REF	<u>10.0</u>	VDC
-10 REF	<u>-10.0</u>	VDC
TEMP	<u>97.8</u>	F

PA PLATE EFFICIENCY AT CUSTOMER OPERATING POWER

	<u>AMPS</u>	<u>VOLTS</u>	<u>EFFICIENCY</u>
90% 25,650 W	<u>2.66</u>	<u>12,000</u>	<u>80.36%</u>
100% 28,500 W	<u>2.96</u>	<u>12,000</u>	<u>80.24%</u>
105% 29925 W	<u>3.10</u>	<u>12,000</u>	<u>80.44%</u>

PA PLATE EFFICIENCY AT RATED POWER OUTPUT**POWER OUTPUT**

x	<u>30KW</u>	<u>AMPS</u>	<u>VOLTS</u>	<u>EFFICIENCY</u>
	<u>35KW</u>	<u>3.1</u>	<u>11,850</u>	<u>80.40%</u>

AC POWER (Maximized)

PA CABINET

HIGH VOLTAGE PWR. SUP.

Phase 1	<u>210.0</u> Volts	<u>14.5</u> Amps	<u>210.0</u> Volts	<u>116.4</u> Amps
Phase 2	<u>210.0</u> Volts	<u>14.6</u> Amps	<u>210.0</u> Volts	<u>113.2</u> Amps
Phase 3	<u>210.0</u> Volts	<u>3.0</u> Amps	<u>210.0</u> Volts	<u>111.6</u> Amps

TUBE SOCKET & CAVITY FD PARTS & DIMENSIONS

PILLARS 4 USED SLIDE

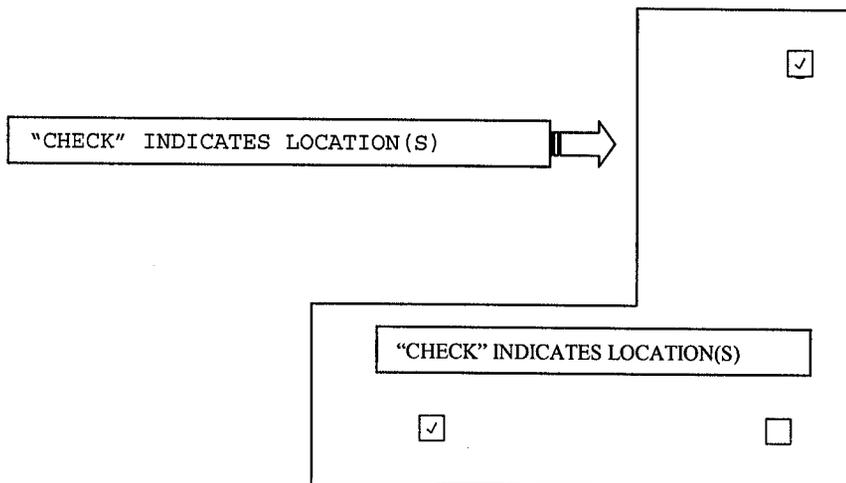
LOCATIONS: INNER CIRCLE 4 OUTER CIRCLE

SIZE 0.5 " DIAMETER

SPACERS USED (0 OR 4) 0

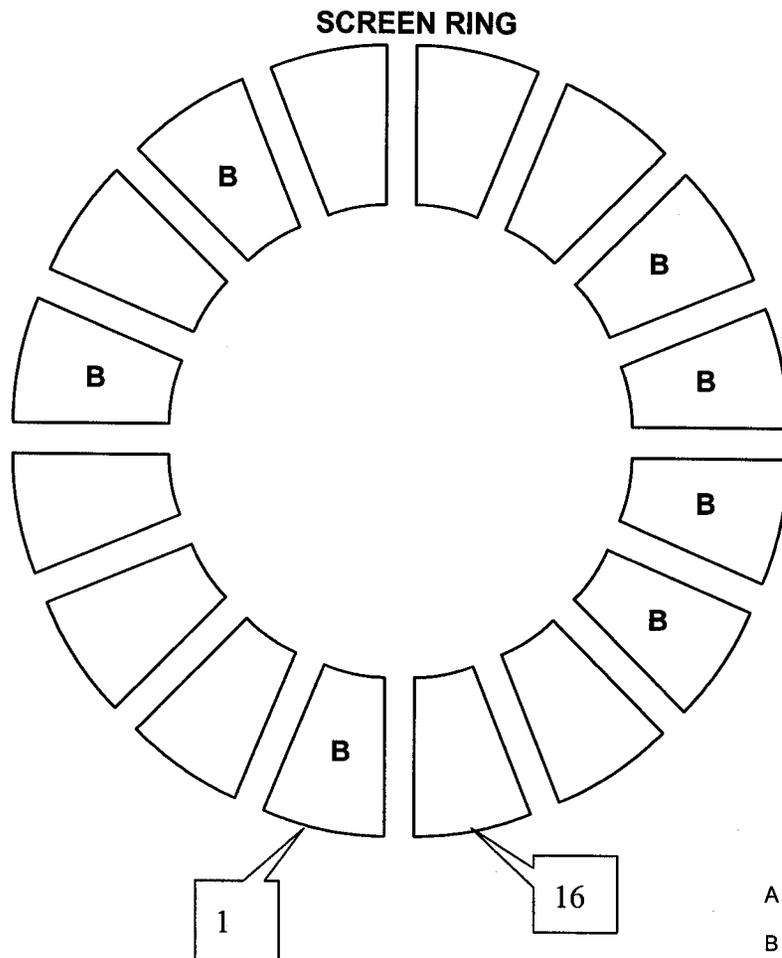
RINGS USED (0 OR 2) 0

CAVITY LENGTH SET TO 16.75 INCHES



ADDITIONAL INFORMATION

EXTENDED AND REMOTE CONTROLS CHECKED	<input checked="" type="checkbox"/>
700 WATT IPA S/N	D16370
PA TUBE S/N	XLU-162
CPU S/N	801838
SOFTWARE VERSION	HT 1.0.2



- A 1/2" DIA METAL SPACER
- B 1/4" DIA METAL SPACER
- C NON-METALLIC SPACER WITH NYLON SCREW
- D NON-METALLIC SPACER WITH METAL SCREW
- E ALUMINUM BLOCK

SPECIFIED PERFORMANCE:SPECMEASUREDCARRIER FREQUENCYCUSTOMER + 300 Hz103,699,987EXCITER MULTIMETERFWD POWER0W TO 55W23.1 WREF POWER0.0 WPA AMPS2.27 APA VOLTS15.7 V**ANALOG I/O WIDEBAND****SPECIFIED PERFORMANCE:****SPEC****MEASURED**

Audio Input Level

3.5V P-P

3.5

WIDEBAND RESPONSE

±0.2 Db

@ 30 Hz	<u>0.0</u>	(REF)
@ 100 Hz	<u>0.0</u>	
@ 1 KHz	<u>0.0</u>	

@ 5 KHz	<u>0.0</u>
@ 15 KHz	<u>0.0</u>
@ 53 KHz	<u>0.0</u>

FM NOISE

≤-80 dB

-90

AM NOISE

ASYNCHRONOUS

≤-55 dB

-61

SYNCHRONOUS

≤-50 dB

-53

I.M. DISTORTION (60/7000 Hz, 1:1 DE-EM) ≤0.02 %

0.009

ANALOG I/O MONO**OPERATIONAL FUNCTIONS:****CHECK****PRE-EMPHASIS (SET-AT)****FLAT** **25US** **50US** **75US** **SPECIFIED PERFORMANCE:****SPEC****MEASURED****AUDIO LEVEL****+10.0 ±1dBm**10.0**AUDIO RESPONSE (SEE III)****≤1.0 dB**0.08**AUDIO T.H.D. (MAX) (SEE III)****≤0.15%**0.12**I.M. DISTORTION****≤0.10%**0.01**F.M. NOISE****≤-80 dB**-96.0**III. AUDIO RESPONSE AND T.H.D. DATA**

FREQUENCY	RESPONSE	MONO THD	FREQUENCY	RESPONSE	MONO THD
30 Hz	0.0	0.008	5,000 Hz	0.08	0.01
100 Hz (REF)	0.0	0.007	15,000 Hz	0.02	0.011
400 Hz	0.0	0.008			



ADDENDUM

Broadcast Systems Division
P.O. Box 4290 Quincy, Il. 62305

INSTRUCTION BOOK

Equipment: HT30CD

Serial No. PRD02034380002

TECHNICAL MANUAL No. 988-2541-001

It has always been the policy of Harris Corporation, Broadcast Products Division, to give our customers the advantage of the latest product improvements. This addendum insures you that the latest improvements have been incorporated in your equipment. This way we can provide up to date information without a delay due to printing new instruction manuals.

Please make the necessary corrections as listed below. Please use ink for a permanent record.

This addendum may be removed after corrections have been made.
Thank you for your cooperation.

1. **Filament voltage management.**
 - a. **Transmitter operating at TPO**
 - b. **Power control in manual**
 - c. **Observe filament voltage via front panel multimeter.**

Filament voltage for first two hundred hours of operation on new tube should be maintained at 7.5 volts. After two hundred hours (note the power output) the filament voltage should be reduced gradually until power output begins to decrease. Increase voltage until previous TPO is reached (note filament voltage) and increase voltage above this 0.1 - 0.2 volts. Do not decrease voltage to less than 6.5 volts. Disregard 5% below nominal rating recommendation as in bulletin AB-18.
2. **Cable #233 (RG393) from 1AA3J1 to 1A15J1 selected to 59.0 inches.**
3. **Transmitter shipped operating at 28,500 watts.**
4. **Forward powers meters were calibrated to 100% @ 28,500 watts.**