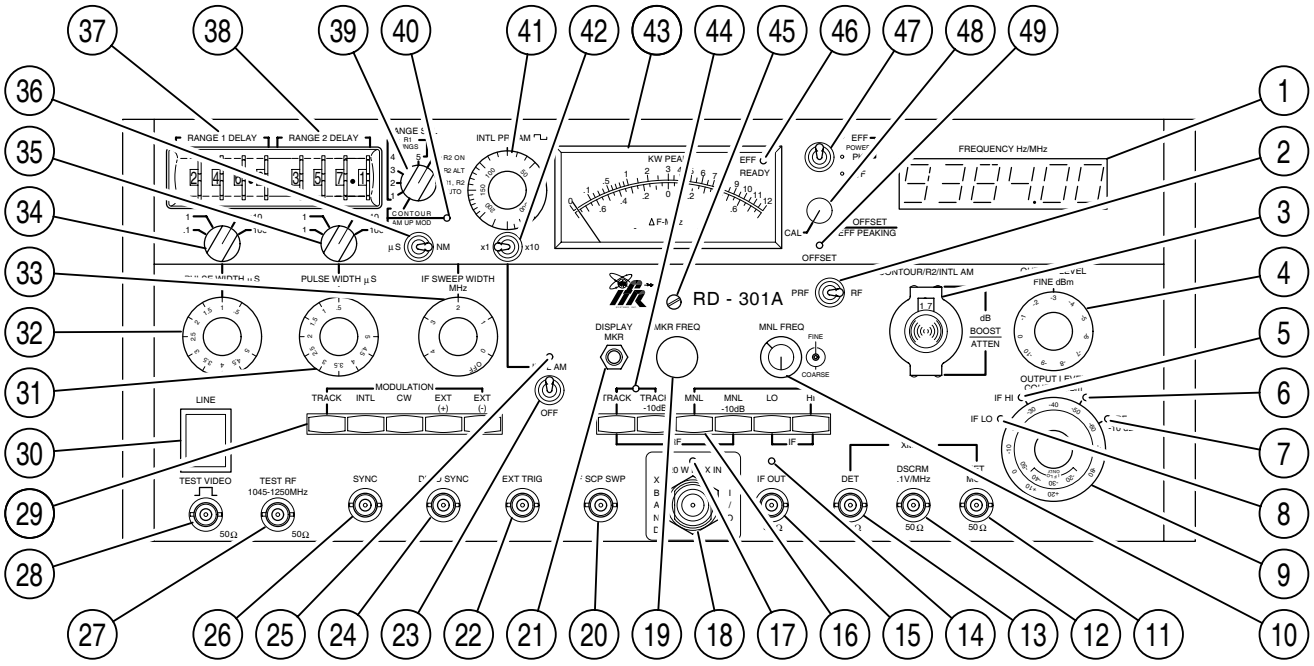
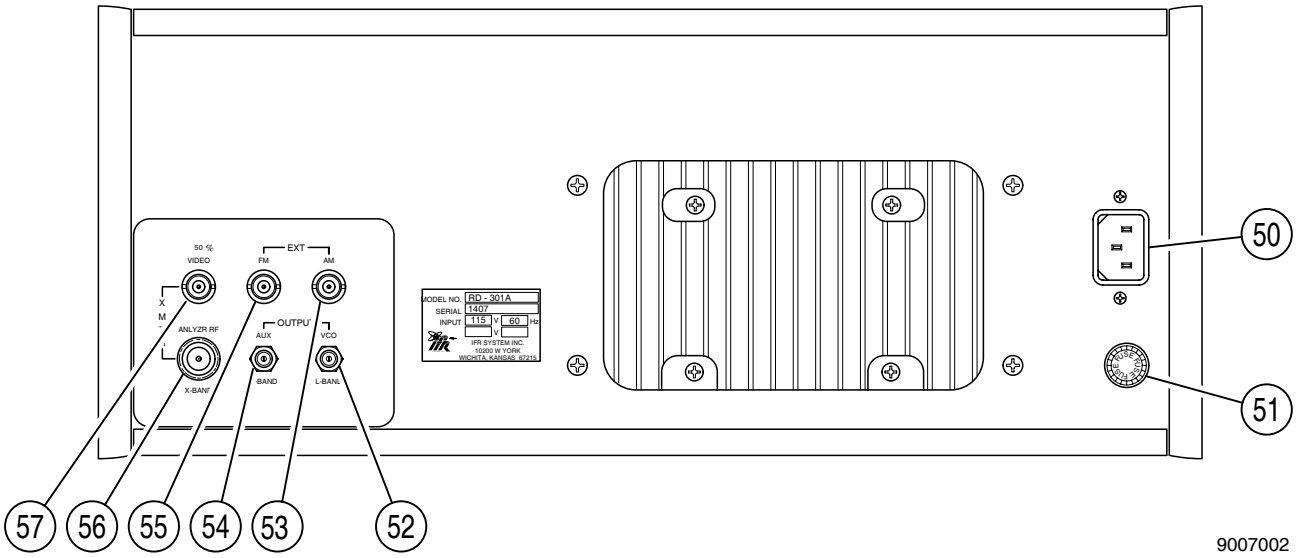
APPENDIX F - CONTROLS, CONNECTORS AND INDICATORS



9007001



9007002

RD-301A Front and Rear Panels
Figure 1

Back To Appendices

1. FREQUENCY Hz/MHz Digital Display
2. PRF/RF Switch
3. CONTOUR/R2/INTL AM dB BOOST/ ATTEN Control
4. OUTPUT LEVEL FINE dBm Control
5. IF HI Indicator
6. RF Indicator
7. RF -10 dB Indicator
8. IF LO Indicator
9. OUTPUT LEVEL COARSE dBm Control
10. MNL FREQ Controls
11. XMTR HET MON Connector (J49028)
12. XMTR DSCRM .1V/MHz Connector (J49027)
13. XMTR DET Connector (J49026)
14. IF OUT Indicator
15. IF OUT Connector (J49025)
16. RF/IF MODE Pushbutton Switches
17. X-BAND SIGNAL Indicator
18. X-BAND I/O Connector (J49016)
19. MKR FREQ Control
20. IF SCP SWP Connector (J49012)
21. DISPLAY MKR Switch
22. EXT TRIG Connector (J49024)
23. INTL AM Switch
24. DLYD SYNC Connector (J49023)
25. INTL AM Indicator
26. SYNC Connector (J49022)
27. TEST RF 1045-1250 MHz Connector (J49021)
28. TEST VIDEO Connector (J49020)
29. MODULATION MODE Pushbutton Switches
30. LINE Switch
31. PULSE WIDTH µS Control (RANGE 2)
32. PULSE WIDTH µS Control (RANGE 1)
33. SWEEP WIDTH MHz Control
34. PULSE WIDTH MULTIPLIER Control (RANGE 1)
35. PULSE WIDTH MULTIPLIER Control (RANGE 2)
36. µS/NM Switch
37. RANGE 1 DELAY Thumbwheels
38. RANGE 2 DELAY Thumbwheels
39. RANGE SEL Switch
40. CONTOUR/AM UP MOD Indicator
41. INTL PRF/AM Control
42. X1/X10 INTL PRF/AM Switch
43. PANEL Meter
44. TRACK Indicator
45. PANEL METER ZERO Control
46. EFF READY Indicator
47. METER SELECT Switch
48. ΔF OFFSET/EFF PEAKING Control
49. OFFSET Indicator
50. AC INPUT Connector (49008)
51. FUSE
52. VCO L-BAND OUTPUT Connector (J49004)
53. AM EXT INPUT Connector (J49005)
54. AUX X-BAND OUTPUT Connector (J49002)
55. FM EXT INPUT Connector (J49006)
56. ANALYZER RF X-BAND XMTR Connector (J49003)

A. RD-301A Front Panel

ITEM DESCRIPTION

1. FREQUENCY Hz/MHz Digital Display

Displays PRF (Hz), IF (MHz) or RF (MHz) as selected with PRF/RF Switch (2) and RF/IF MODE Pushbutton Switches (16). Marker frequency (MHz) is displayed when DISPLAY MKR Switch (21) is pressed. Refer to Appendix F, Table 1.

FREQUENCY TYPE	MODE	DISPLAY
PRF	RF TRACK/RF TRACK -10 dB	UUT Transmitter PRF
PRF	INTL	RD-301A Internal Oscillator PRF (Internal AM frequency if On)
PRF	EXT (+), EXT (-)	External Trigger Signal PRF
RF	IF LO/IF HI	IF Signal Generator Frequency
RF	IF LO/IF HI DISPLAY MKR Switch (21) pressed	IF Marker Frequency
RF	RF TRACK/RF TRACK -10 dB	RF Signal Generator/UUT Transmitter Frequency
RF	RF MNL/RF MNL -10 dB	RF Signal Generator Frequency

FREQUENCY Hz/MHz Digital Display Control
Table 1

2. PRF/RF Switch

Toggle switch selects type of frequency shown on FREQUENCY Hz/MHz Digital Display (1). Refer to Appendix F, Table 1.

3. CONTOUR/R2/INTL AM dB BOOST/ATTEN Control

Boosts or attenuates output level set with OUTPUT LEVEL COARSE dBm Control (9) and OUTPUT LEVEL FINE dBm Control (4). Inner knob controls level in 1 dB steps (0-9). Outer knob controls level in 10 dB steps (0-50). Selection appears in small viewing window at top center of control.

Boost is activated when RANGE SEL Switch (39) is in CONTOUR/AM MOD UP position and applies to output levels from -127 to -75 dBm. CONTOUR/R2/INTL AM dB BOOST/ATTEN Control boosts contour or internal AM level from 0 to 20 dB above selected output level.

NOTE: Selecting >20 dB boost produces minimal or no additional level increase >20 dB.

Attenuation is activated when RANGE SEL Switch (39) is in any R2 position (R2 ON; R2 ALT or R1,R2 AUTO) or RINGS 1 through 5 with internal AM activated. Range 2 reply or internal AM is attenuated from 0 to -59 dB referenced to Range 1 reply level set with OUTPUT LEVEL COARSE dBm Control (9) and OUTPUT LEVEL FINE dBm Control (4).

ITEM DESCRIPTION

4. OUTPUT LEVEL FINE dBm Control

   Decreases RF or IF output level in 1 dB steps referenced to level set with OUTPUT LEVEL COARSE dBm Control (9). Range is from 0 to -10 dB.

5. IF HI Indicator

   Green LED illuminates when IF HI is selected with RF/IF MODE Pushbutton Switches (16). Green indicates color of scale used on OUTPUT LEVEL COARSE dBm Control (9).

6. RF Indicator

   Red LED illuminates when RF TRACK or RF MNL is selected with RF/IF MODE Pushbutton Switches (16). Red indicates color of scale used on OUTPUT LEVEL COARSE dBm Control (9).

7. RF -10 dB Indicator

   Red LED illuminates when RF TRACK -10 dB or RF MNL -10 dB is selected with RF/IF MODE Pushbutton Switches (16). Red indicates color of scale used on OUTPUT LEVEL COARSE dBm Control (9).

8. IF LO Indicator

   Red LED illuminates when IF LO is selected with RF/IF MODE Pushbutton Switches (16). Red indicates color of scale used on OUTPUT LEVEL COARSE dBm Control (9).

9. OUTPUT LEVEL COARSE dBm Control

   Varies RF or IF output level in 10 dB increments. Red and green scales on control knob are used according to mode selected with RF/IF MODE Pushbutton Switches (16). Each mode is indicated with an index mark and red or green LED. RF output level is calibrated to -127 dBm using the red scale.

10. MNL FREQ Controls

    Sets signal generator frequency for RF MNL, RF MNL -10 dB, IF LO or IF HI mode selected with RF/IF MODE Pushbutton Switches (16). Coarse adjust (outer knob) and fine adjust (inner knob) set frequency shown on FREQUENCY Hz/MHz Digital Display (1).

11. XMTR HET MON Connector (J49028)

    Provides output for displaying radar transmitter pulse frequency characteristics on external oscilloscope. BNC connector requires 50 Ω load for operation.

12. XMTR DSCRM .1V/MHz Connector (J49027)

    Provides output for displaying radar transmitter frequency versus time characteristics on external oscilloscope. BNC connector requires 50 Ω load for an output calibrated at 0.1 V/MHz. System reference pulse, 5 µs wide, occurs approximately 15 µs after transmitter pulse. Reference voltage corresponds to frequency shown on FREQUENCY Hz/MHz Digital Display (1).

13. XMTR DET Connector (J49026)

    Provides output for displaying radar transmitter pulse shape characteristics on external oscilloscope. BNC connector requires 50 Ω load to preserve pulse fidelity.

ITEM DESCRIPTION

14. IF OUT Indicator

    Red LED illuminates when IF LO or IF HI is selected with RF/IF MODE Pushbutton Switches (16) and indicates IF output is available at IF OUT Connector (15).

15. IF OUT Connector (J49025)

    Provides IF signal generator output. Signal level is set with OUTPUT LEVEL FINE dBm Control (4) and OUTPUT LEVEL COARSE dBm Control (9). BNC connector requires 50 Ω load for operation.

16. RF/IF MODE Pushbutton Switches

    Selects one of the following RF or IF operating modes:

    - RF TRACK

      RF signal generator acquires and tracks frequency of UUT transmitter signal received through X-BAND I/O Connector (18). RF Indicator (6) and X-BAND SIGNAL Indicator (17) illuminate when RF TRACK mode is selected.

    - RF TRACK -10 dB

      Used with external 10 dB coaxial attenuator inserted at Waveguide Coupler to provide for UUT transmitters with >12 kW (up to 120 kW) peak power out-put. RF signal generator acquires and tracks frequency of UUT transmitter signal received through X-BAND I/O Connector (18). RF -10 dB Indicator (7) and X-BAND SIGNAL Indicator (17) illuminate when RF TRACK -10 dB mode is selected.

      NOTE: Transmitting replies from the RD-301A while the UUT transmitter is operating during TRACK operations may cause tracking inaccuracies at high generator levels (>-75 dBm). To avoid possible tracking error, the range delay is set greater than the UUT transmitter pulse width.

    - RF MNL

      RF signal generator frequency is set from 9.295 to 9.500 GHz with MNL FREQ Controls (10). Output is calibrated at R/T unit with Serialized Coaxial Cable and Waveguide Coupler. RF Indicator (6) and X-BAND SIGNAL Indicator (17) illuminate when RF MNL mode is selected.

    - RF MNL -10 dB

      Used with external 10 dB Attenuator inserted at Waveguide Coupler to provide for UUT transmitters with >12 kW (up to 120 kW) peak power output. RF signal generator frequency is set from 9.295 to 9.500 GHz with MNL FREQ Controls (10). X-BAND SIGNAL Indicator (17) and RF -10 dB Indicator (7) illuminate when RF MNL -10 dB mode is selected.

    - IF LO

      Activates IF signal generator in low power range from -132 to -20 dBm as selected with OUTPUT LEVEL FINE dBm Control (4) and OUTPUT LEVEL COARSE dBm Control (9). MNL FREQ Controls (10) vary IF frequency from 20 to 70 MHz. IF LO Indicator (8) and IF OUT Indicator (14) illuminate when IF LO mode is selected.

ITEM DESCRIPTION

- IF HI

  Activates IF signal generator in high power range from -92 to +20 dBm as selected with OUTPUT LEVEL FINE dBm Control (4) and OUTPUT LEVEL COARSE dBm Control (9). MNL FREQ Controls (10) vary IF frequency from 20 to 70 MHz. IF HI Indicator (5) and IF OUT Indicator (14) illuminate when IF HI mode is selected.

17. X-BAND SIGNAL Indicator

    Red LED illuminates when RF TRACK, RF TRACK -10 dB, RF MNL or RF MNL -10 dB is selected with RF/IF MODE Pushbutton Switches (16) and indicates RF output is available at the X-BAND I/O Connector (18).

18. X-BAND I/O Connector (J49016)

    N connector couples RD-301A to UUT through antenna waveguide. Output is calibrated at R/T unit using Serialized Coaxial Cable and Waveguide Coupler furnished with Test Set. Output level is set using the OUTPUT LEVEL COARSE dBm Control (9), OUTPUT LEVEL FINE dBm Control (4) and (if applicable) CONTOUR/R2/INTL AM dB BOOST/ATTEN Control (3).

    CAUTION: MAXIMUM INPUT LEVEL CANNOT EXCEED 120 W.

19. MKR FREQ Control

    Adjusts IF marker frequency when DISPLAY MKR Switch (21) is pressed.

20. IF SCP SWP Connector (J49012)

    BNC connector provides an approximate 5 V_{P-P}, 100 Hz ramp output for horizontal drive to external oscilloscope during IF sweep tests.

21. DISPLAY MKR Switch

    Momentary contact switch adds marker signal (approximately -20 dBc) to IF output, when pressed. Marker frequency is set with MKR FREQ Control (19) and shown on FREQUENCY Hz/MHz Digital Display (1).

22. EXT TRIG Connector (J49024)

    BNC connector used to apply external trigger when EXT (+) or EXT (-) is selected with MODULATION MODE Pushbutton Switches (29). Trigger input requires 2 to 25 V peak pulse or sine wave to initiate range delay.

23. INTL AM Switch

    INTL AM (On)/OFF toggle switch adds 50% AM (square wave) to reply pulse out-put. Frequency is set with INTL PRF/AM Control (41) and X1/X10 INTL PRF/AM Switch (42). Amplitude is set with CONTOUR/R2/INTL AM BOOST/ATTEN Control (3) and is relative to output level set with OUTPUT LEVEL FINE dBm Control (4) and OUTPUT LEVEL COARSE dBm Control (9).

24. DLYD SYNC Connector (J49023)

    BNC connector provides delayed synchronous pulse output to external oscilloscope. Leading edge of positive pulse is coincident with leading edge of reply pulse.

25. INTL AM Indicator

    Red LED illuminates when internal AM is activated with INTL AM Switch (23).

ITEM DESCRIPTION

26. SYNC Connector (J49022)

    BNC connector provides synchronous pulse output to external oscilloscope. Leading edge of positive pulse is coincident with start of each range delay.

27. TEST RF 1045-1250 MHz Connector (J49021)

    BNC connector, providing 50 Ω load, receives L-Band test signals for calibration and verification of tracking circuits.

28. TEST VIDEO Connector (J49020)

    BNC connector, providing 50 Ω load, receives external pulse signals and is used with TEST RF 1045-1250 MHz Connector (27) for calibration and verification.

29. MODULATION MODE Pushbutton Switches

    Selects range delay trigger source or enables continuous wave output. Selectable modes are as follows:

    - TRACK

      Starts range delay coincident with leading edge of UUT transmitter pulse at 50% amplitude point.

    - INTL

      Starts range delay with every leading edge of pulses generated by internal PRF oscillator. Triggering rate is set with INTL PRF/AM Control (41).

    - CW

      Selects continuous wave RF output at X-BAND I/O Connector (18) or continuous wave IF output at IF OUT Connector (15) according to RF/IF MODE Pushbutton Switches (16).

    - EXT (+)

      Starts range delay when triggered with rising edge of a 2 to 25 V peak pulse or positive half of sine wave input applied to EXT TRIG Connector (22).

    - EXT (-)

      Starts range delay when triggered with falling edge of a 2 to 25 V peak pulse or negative half of sine wave input applied to EXT TRIG Connector (22).

30. LINE Switch

    Applies power to RD-301A.

31. PULSE WIDTH μS Control (RANGE 2)

    Adjusts Range 2 reply pulse width from 0.05 to 500 μs, depending on PULSE WIDTH MULTIPLIER Control (RANGE 2) (35) setting. PULSE WIDTH μS Control (RANGE 2) setting is variable from 0.5 to 5 μs and is multiplied by the PULSE WIDTH MULTIPLIER Control (RANGE 2) (35) setting to obtain the Range 2 reply pulse width.

ITEM DESCRIPTION

32. PULSE WIDTH μS Control (RANGE 1)

Adjusts pulse width from 0.05 μs to 2.5 ms, depending on PULSE WIDTH MULTIPLIER Control (RANGE 1) (34) setting. PULSE WIDTH μS Control (RANGE 1) setting is variable from 0.5 to 5 μs and is multiplied by the PULSE WIDTH MULTIPLIER Control (RANGE 1) (34) setting to obtain the pulse width. Range 1 reply width is set in RF operating modes or IF pulse width is set in IF operating modes according to RF/IF MODE Pushbutton Switches (16).

33. SWEEP WIDTH MHz Control

Sets sweep width (in MHz) of IF signal generator output. Sweep width is set from 0 to 4 MHz. Sweep rate is 100 Hz. Control has detent OFF position.

34. PULSE WIDTH MULTIPLIER Control (RANGE 1)

Selects multiplier (.1, 1, 10, 100 or 500) used with PULSE WIDTH μS Control (RANGE 1) (32) setting. The PULSE WIDTH MULTIPLIER Control (RANGE 1) setting multiplied by the PULSE WIDTH μS Control (RANGE 1) (32) setting obtains Range 1 reply or IF pulse width.

35. PULSE WIDTH MULTIPLIER Control (RANGE 2)

Selects multiplier (.1, 1, 10 or 100) used with PULSE WIDTH μS Control (RANGE 2) (31) setting. The PULSE WIDTH MULTIPLIER Control (RANGE 2) setting multiplied by the PULSE WIDTH μS Control (RANGE 2) (31) setting obtains Range 2 reply pulse width.

36. μS /NM Switch

Selects unit of measurement (microseconds [μS] or nautical miles [NM]) for both Range 1 and Range 2 simulated reply delays.

37. RANGE 1 DELAY Thumbwheels

Sets delay for Range 1 simulated reply. Delay is set from 0.1 to 999.9 in microseconds or nautical miles depending on position of μS/NM Switch (36). A residual time delay (nominally 0.1 μs) is added to the delay set by RANGE 1 DELAY Thumbwheels. The source selected by the MODULATION MODE Pushbutton Switches (29) triggers the delay.

38. RANGE 2 DELAY Thumbwheels

Sets delay for Range 2 simulated reply. Delay is set from 0.2 to 999.9 in microseconds or nautical miles depending on position of μS/NM Switch (36). A residual time delay (nominally 0.4 μs) is added to the delay set by RANGE 2 DELAY Thumbwheels. The source selected by the MODULATION MODE Pushbutton Switches (29) triggers the delay.

ITEM DESCRIPTION

39. RANGE SEL Switch

Provides simulated reply variations. Nine position rotary switch selects boost, selects number of Range 1 reply rings (1-5) or activates Range 2 reply.

- CONTOUR/AM UP MOD

  Provides selectable 0 to 20 dB boost above level set with OUTPUT LEVEL FINE dBm Control (4) and OUTPUT LEVEL COARSE dBm Control (9). Boost is set using CONTOUR/R2/INTL AM dB BOOST/ATTEN Control (3) and only applies when initial output levels are from -75 to -127 dBm. Range 1 reply is boosted when INTL AM Switch (23) is OFF. Internal AM is boosted when INTL AM Switch (23) is set to INTL AM.

- RINGS 1 through 5

  Selects number of equally spaced simulated Range 1 replies transmitted by the RD-301A. RANGE 1 DELAY Thumbwheels (37) set Ring 1 delay and distance between all succeeding rings (equidistant). Minimum range for Rings 2 through 5 is 0.3 μs or 0.3 nmi.

- R2 ON

  Activates Range 2 reply in addition to Range 1 reply. Range 1 output level is set with OUTPUT LEVEL FINE dBm Control (4) and OUTPUT LEVEL COARSE dBm Control (9). Range 2 output level is attenuated from Range 1 output level with CONTOUR/R2/INTL AM dB BOOST/ATTEN Control (3). Range 2 delay is set with RANGE 2 DELAY Thumbwheels (38).

- R2 ALT

  Activates Range 1 reply with every trigger as selected with MODULATION MODE Pushbutton Switches (29) and Range 2 reply every other trigger. Range 2 output level is attenuated from Range 1 output level with CONTOUR/R2/INTL AM dB BOOST/ATTEN Control (3).

- R1/R2 AUTO

  Automatically selects Range 1 or Range 2 reply depending on width of UUT transmitter pulse. Only Range 1 reply responds when UUT transmitter pulse width is <0.4 μs. Only Range 2 reply responds when UUT transmitter pulse width is >0.4 μs.

  NOTE: If Range 1 delay set by RANGE 1 DELAY Thumbwheels (37) is <0.4 μs, Range 1 reply always responds. If Range 2 delay set by RANGE 2 DELAY Thumbwheels (38) is <0.4 μs, Range 2 reply never responds.

  NOTE: The factory calibrated threshold setting is 0.4 μs. The threshold setting is adjustable from 0.2 to 1.0 μs.

40. CONTOUR/AM UP MOD Indicator

Red LED illuminates when CONTOUR/AM UP position is selected with RANGE SEL Switch (39).

ITEM DESCRIPTION

41. INTL PRF/AM Control

Used with X1/X10 INTL PRF/AM Switch (42) to regulate the RD-301A internal oscillator frequency (Internal PRF and/or AM frequency). INTL PRF/AM Control sets internal AM frequency when INTL AM Switch (23) is set to INTL AM. INTL PRF/AM Control sets internal PRF when INTL is selected with MODULATION MODE Pushbutton Switches (29). INTL PRF/AM Control sets both internal PRF and AM frequency when INTL AM Switch (23) is set to INTL AM and INTL is selected with MODULATION MODE Pushbutton Switches (29). Frequency is adjustable from 50 to 500 Hz or 500 to 5000 Hz, depending on X1/X10 INTL PRF/AM Switch (42) position.

42. X1/X10 INTL PRF/AM Switch

Selects multiplier (X1 or X10) used with INTL PRF/AM Control (41) setting. The INTL PRF/AM Control (41) setting multiplied by 1 or 10 as selected with the X1/X10 INTL PRF/AM Switch provides the RD-301A internal oscillator frequency.

43. PANEL Meter

Indicates effective peak power of UUT transmitter, peak power of UUT transmitter or frequency offset between UUT transmitter and RD-301A Test Set signal generator. PANEL Meter operates when RF TRACK or RF TRACK -10 dB is selected with RF/IF MODE Pushbutton Switches (16). Function is selected by METER SELECT Switch (47).

- KW PEAK Scale

  Indicates effective peak or peak RF power of UUT transmitter at X-BAND I/O Connector (18) using a 0.1 to 12 kW range. KW PEAK Scale is used when METER SELECT Switch (47) is set to EFF POWER or PK POWER positions. For units above 12 kW (up to 120 kW), an external 10 dB Attenuator is connected to the Waveguide Coupler output (UUT power is scale reading multiplied by ten). Power is calibrated and accuracy specified from 1.0 to 12 kW.

  NOTE: Correct calibration depends on the use of the Waveguide Coupler and Serialized Coaxial Cable furnished with RD-301A Test Set. If a replacement coupler or cable is used, the Test Set must be recalibrated.

- ΔF-MHz Scale

  Displays amount of offset between UUT transmitter frequency and Test Set signal generator frequency. Offset is adjusted with ΔF OFFSET/EFF PEAKING Control (48). The ΔF-MHz Scale is used when METER SELECT Switch (47) is set to ΔF position.

44. TRACK Indicator

Red LED illuminates when Test Set RF signal generator system has acquired and is tracking UUT transmitter frequency.

45. PANEL METER ZERO Control

Inset screw used to align PANEL Meter (43) needle to zero when LINE Switch (30) is OFF.

46. EFF READY Indicator

Green LED illuminates when Test Set is ready to measure UUT effective peak power.

ITEM DESCRIPTION

47. METER SELECT Switch

Toggle switch selects PANEL Meter (43) operating mode as follows:

- EFF (Effective) (Peak) POWER - PANEL Meter (43) displays in kW, the UUT effective peak power resulting from effects of phase distortion and frequency inconsistencies of the UUT transmitter pulse.
- PK (Peak) POWER - PANEL Meter (43) displays UUT peak power in kilowatts.
- ΔF (Frequency Offset) - PANEL Meter (43) displays frequency offset from UUT frequency ≤±75 kHz as adjusted by ΔF OFFSET/EFF PEAKING Control (48).

48. ΔF OFFSET/EFF PEAKING Control

Offsets RD-301A internal RF signal generator frequency from UUT transmitter frequency from 0 to ±0.75 MHz and is used when RF TRACK or RF TRACK -10 dB is selected with RF/IF MODE Pushbutton Switches (16). CAL (detent) position provides zero offset (RF signal generator frequency = UUT transmitter frequency). Offset is displayed usingΔF Scale on PANEL METER (43) when METER SELECT Switch (47) is in ΔF position.

49. OFFSET Indicator

Red LED illuminates when ΔF OFFSET/EFF PEAKING Control (48) is not in CAL (detent) position and RF TRACK or RF TRACK -10 dB is selected with RF/IF MODE Pushbutton Switches (16). LED indicates RD-301A is tracking magnetron frequency with offset determined by ΔF OFFSET/EFF PEAKING Control (48).

B. RD-301A Rear Panel

ITEM	DESCRIPTION

50. AC INPUT Connector (49008)

    Provides for 115 to 230 VAC single phase power input to the RD-301A. Power Supply Assembly automatically adjusts according to source voltage available.

51. FUSE

    2.0 A, 250 V Fast Blo for 115 VAC operation or 1.0 A, 250 V Fast Blo for 230 VAC operation.

52. VCO L-BAND OUTPUT Connector (J49004)

    SMA connector provides VCO sample for testing tracking accuracy at L-Band.

53. AM EXT INPUT Connector (J49005)

    BNC connector provides input for external amplitude modulation. Sine, square or triangle wave signal input modulates the RD-301A reply pulse. External modulation source is 0 to 5 Vp-p providing up to 50% AM, depending on source frequency. (3 dB bandwidth at 3 Vp-p and 30% AM is from 30 Hz to 5 kHz.)

54. AUX X-BAND OUTPUT Connector (J49002)

    SMA connector provides auxiliary RF output from X-Band front end for signal generator applications and calibrating tracking accuracy of Test Set at X-Band. Output level is set with OUTPUT LEVEL FINE dBm Control (4) and OUTPUT LEVEL COARSE dBm Control (9).

55. FM EXT INPUT Connector (J49006)

    BNC connector provides input for external frequency modulation.

56. ANALYZER RF X-BAND XMTR Connector (J49003)

    N connector provides radar signal attenuated by 56 to 68 dB for a spectrum analyzer to check X-Band front end.

57. 50% VIDEO XMTR Connector (J49007)

    BNC connector provides detected pulses from the radar transmitter at TTL level and sliced at the 50% amplitude points.