

### Chart 13 XMTR Output Level Calibration (No PA)

#### PURPOSE

Use this procedure to calibrate the UD-35() Transmitter output in radio configuration that is not equipped with the optional PA. This procedure sets the high and low rails that the controller uses to control the output of the XMTR and for alarming.

#### TOOLS REQUIRED

PC With RS-232 Interface Cable Alcatel PN 695-7848

DVM

Power Meter With Medium Power Sensor

Adapter, SMA-M to Type N-F

Test Lead and Tool Kit

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STEP	PROCEDURE
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*Exposure to energy radiated at microwave frequencies can cause eye injury and eventual blindness. Do not operate the system with a waveguide port unterminated.*



*Wear ground straps according to local office procedures.*



*This is an out-of-service procedure when on a nonstandby (unprotected) system. On a hot-standby or frequency diversity system, switch traffic on the channel under test to protect.*

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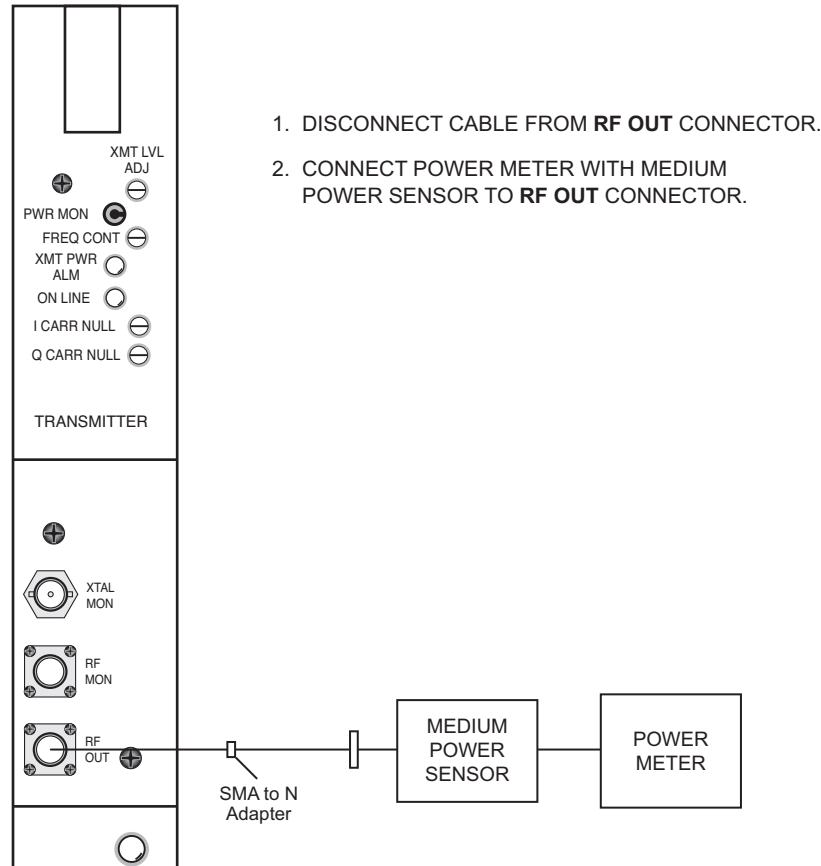
**STEP                    PROCEDURE, CONTINUED**

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- 1                    See Figure 9-18.

**Note**

*If ATPC is enabled, disable (XMTR will go to high power).*



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**Figure 9-18 XMTR Output Level Check/Adjustment Test Setup**

- 2                    Open Transmit Power Calibration screen.
- 3                    Perform transmit power calibration. See [Figure 9-19](#).

1. DETERMINE XMTR NOMINAL HIGH AND LOW OUTPUT LEVEL:

XMTR NOMINAL HIGH OUTPUT LEVEL = LEVEL AT TOP OF STACK + INSERTION LOSS OF DIPLEXER FILTER/XMT FILTER (MARKED ON LABEL ON FILTER).

XMTR NOMINAL LOW OUTPUT LEVEL = XMTR NOMINAL HIGH OUTPUT LEVEL - 10 dB.

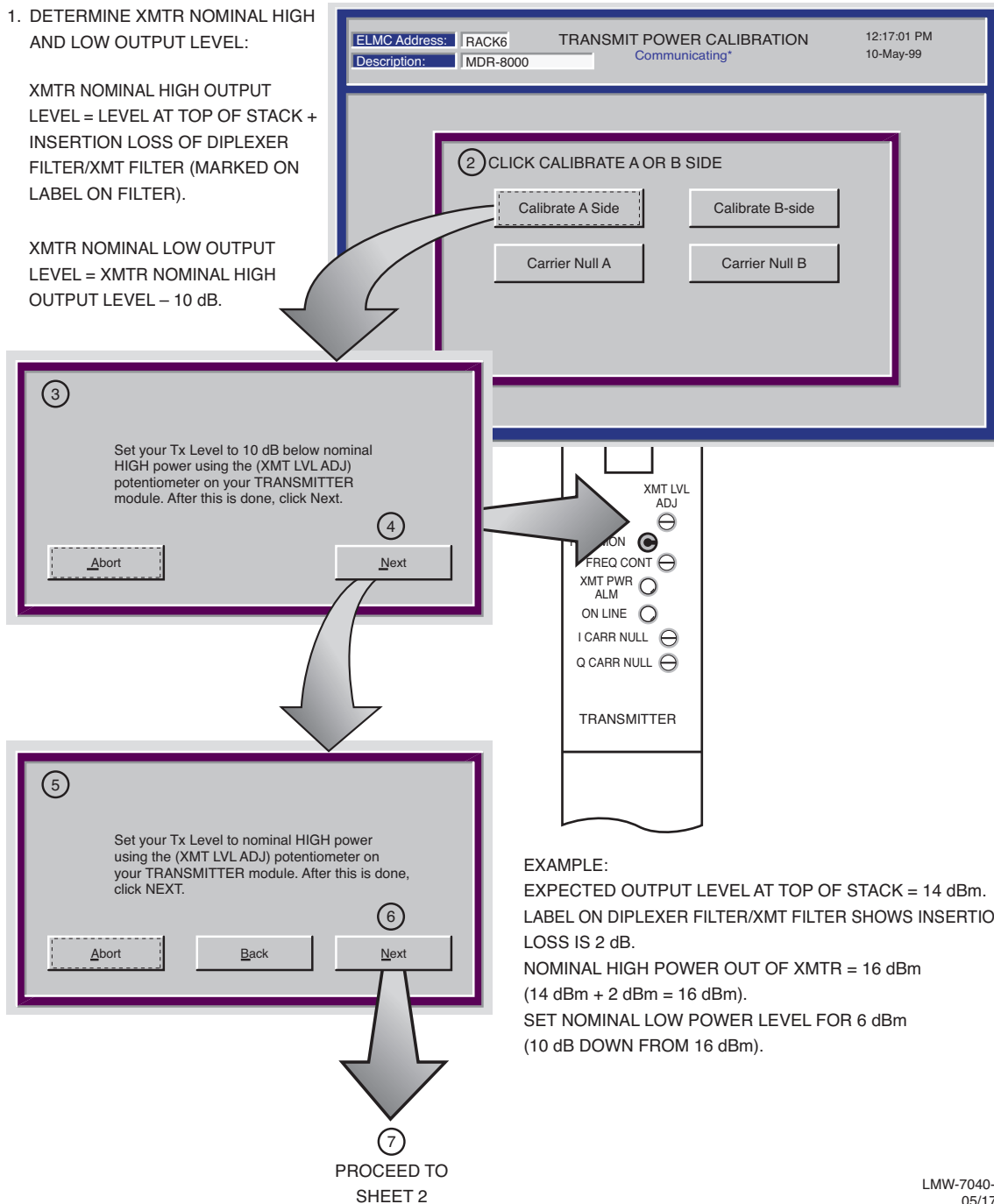
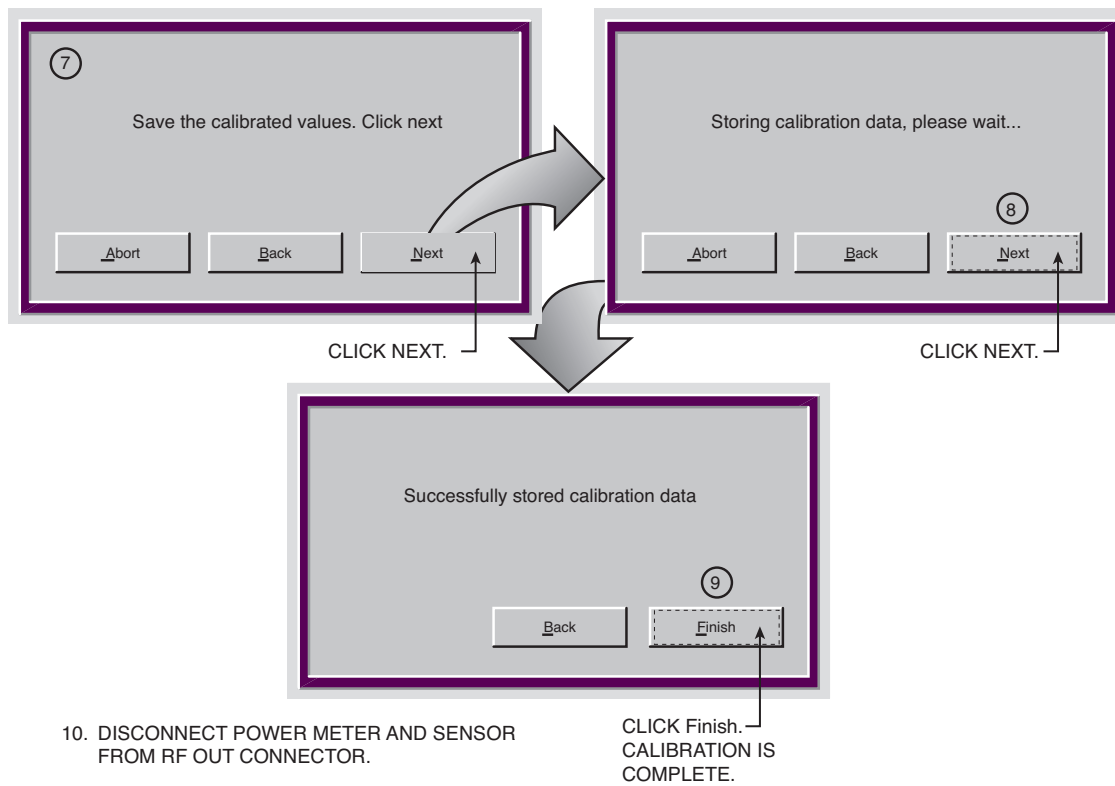


Figure 9-19 XMTR Output Level Check/Adjustment (Sheet 1 of 2)

**Note**

*After nominal high and low output levels have been calibrated and saved, the XMTR output power alarm point is automatically calculated and set by software 5 dB down from the nominal output power.*



- 10. DISCONNECT POWER METER AND SENSOR FROM RF OUT CONNECTOR.
- 11. RECONNECT CABLE TO **RF OUT** CONNECTOR.
- 12. GO TO CHART STEP (□ 4) BELOW.

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**Figure 9-19 XMTR Output Level Check/Adjustment (Sheet 2 of 2)**

**STEP PROCEDURE, CONTINUED**

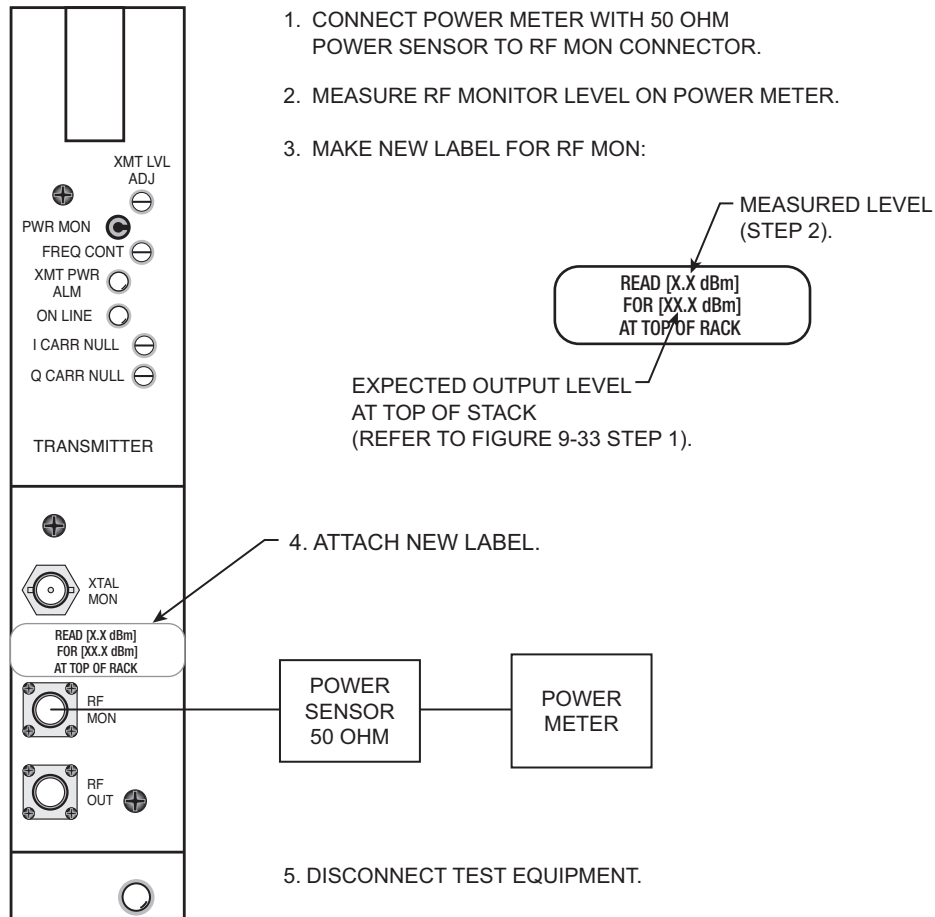
- 4 Observe RF MON label on XMTR front panel. On label, is the measured READ level in dBm or Vdc?

If labeled READ X.X dBm, perform XMT Power Calibration Figure 9-20.

If labeled READ X.X Vdc, perform XMT Power Calibration Figure 9-21.

**Note**

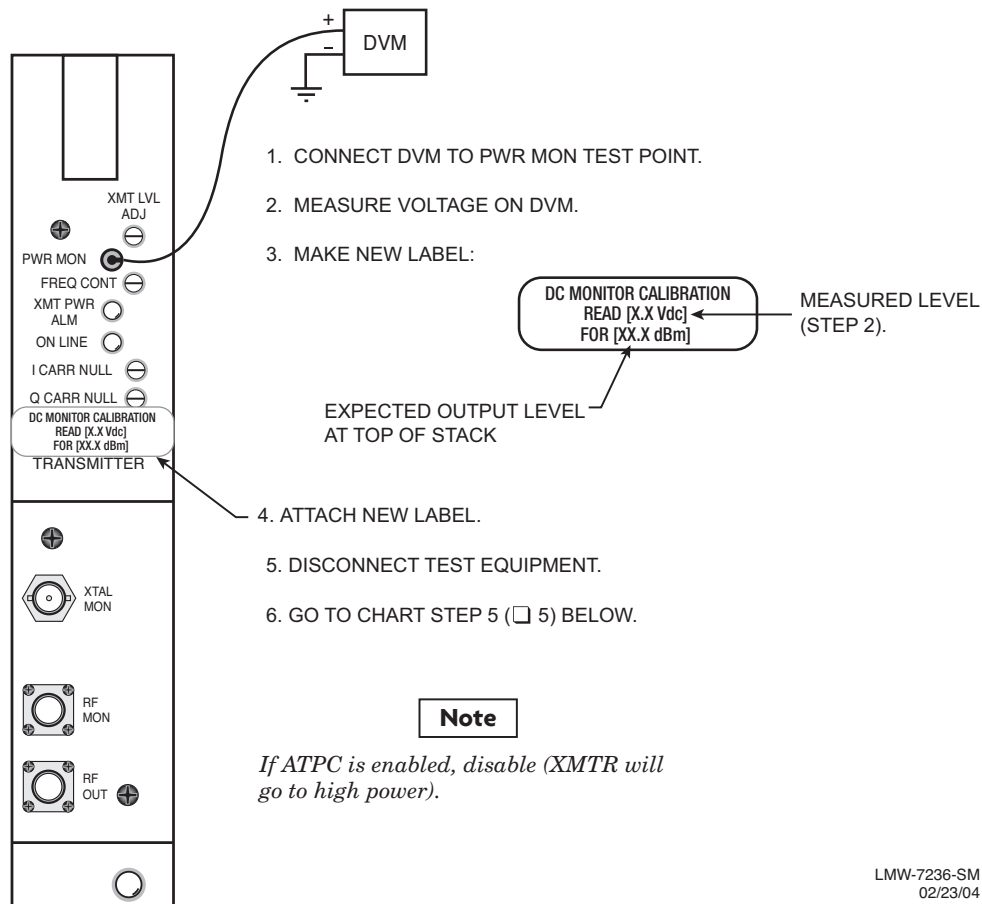
*Ensure ATPC is disabled.*



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**Figure 9-20 XMTR RF Monitor Level in dBm.**

**STEP PROCEDURE, CONTINUED**



**Figure 9-21 XMTR DC Monitor Level in Vdc**

- 5 Was this procedure performed as a routine power adjustment?  
Yes, skip step 6. STOP. This procedure is complete.  
No, go to step 6.
- 6 Re-check carrier null ([Chart 10](#), [Chart 11](#), or [Chart 12](#), this section).

**Note**

*If ATPC was enabled prior to performance of this procedure, re-enable.*

- 7 STOP. This procedure is complete.