



**Service & Repair Notes (SRN)**

**Bulletin**

**Technical Information**

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**SRN: S-0156**  
**APC: 509**  
**DATE: March 2005**  
**EXPIRES: N/A**

**SUBJECT:** Aligning and Measuring the Quantar High Power Booster (HPB) RF Power Amplifier Output

**SYSTEMS AFFECTED:** ASTRO® Conventional, SmartNet®, SmartZone® 3.0, 3.5, & 4.1, and ASTRO 25 6.X systems

**MODEL & OPTIONS AFFECTED:** T5365A Quantar ordered with the CA00052AB VHF or the CA00116AA 800MHz High Power Booster (HPB) amplifier option

**ALIGNMENT PROCEDURE:** When aligning a Quantar station with a HPB, the RF output from the Quantar low power PA is disconnected from the HPB, and is connected to an external in-line Wattmeter Adapter and Element or other external through line wattmeter to measure the RF output power. Make sure the PA output is terminated in a 50 Ohm load. The Quantar PA output power is aligned, saved, and the station is reset to use the aligned value for regulating the low power Quantar PA. After the alignment is completed, connect the PA output to the HPB input.

When measuring the final output RF power, the HPB should be terminated into a 50 Ohm load, and the RSS: Digital Metering: Exciter/PA screen should be used to give the user the most reliable accurate reading on the power being delivered by the HPB. Care should be taken in using external wattmeters to measure the output of the HPB. Due to internal tolerances and variations among different wattmeter manufacturers, use of an external in-line wattmeter with the HPB amplifier should be used for relative RF measurements only.

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