

Section 3 Operating Instructions

3-1 Introduction

This section contains operating instructions for the SPA9329-35N Two-Channel Power Booster Amplifier module.

3-2 Initial Start-Up and Operating Procedures

Operating controls, indicators, and connectors located on the SPA9329-35N booster amplifier module are listed in table 3-1 and corresponding locations for each are shown in figure 3-1. To perform the initial start-up, proceed as follows:

1. Verify that all power and RF input and output cables are properly connected as described in section 2.

CAUTION

Before applying power, make sure that the input and output of the amplifier are properly terminated at 50 ohms. Do not operate the amplifier without a load attached. Refer to table 1-2 for input power requirements. Excessive input power may damage the amplifier.

NOTE

The output coaxial cable between the amplifier and the antenna must be 50-ohm. Use of any other cable will distort the output.

2. Set the power ON–OFF switch to ON. The corresponding PWR and ALARM LED indicators should illuminate.

Table 3-1 SPA9329-35N Controls, Indicators, and Connectors

Function	Description
RF IN (2)	RF channel input connectors
RF OUT (1)	RF output connector
PWR IN	-48 VDC power input connector
ON–OFF	ON–OFF switches. Apply DC power to amplifier channel
PWR	LED indicators – Illuminates when corresponding amplifier channel ON–OFF switch is set to ON
ALARM	LED indicators – Illuminates when corresponding amplifier channel disables because of an alarm.
ALARMS Connector	Alarms cable interface connector (see section 2 for definitions).

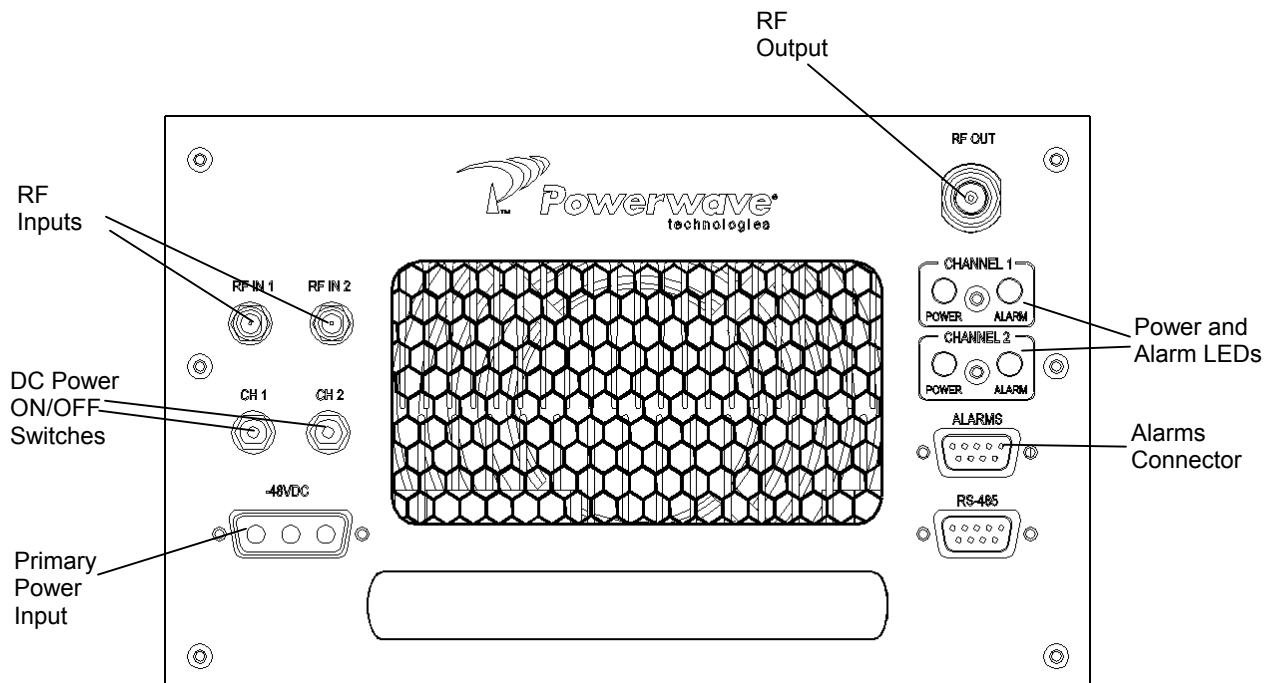


Figure 3-1 SPA9329-35N Controls, Indicators, and Connector Locations

3-3 Power Setting Procedure

Note

The power amplifier must be warmed up for a minimum of 20 minutes prior to setting power levels. Failure to properly warm the amplifiers may result in lower output power, once the amplifiers reach operating temperature.

WARNING

Turn the amplifier off when disconnecting and moving amplifier RF cables. Never remove or install coaxial cables on either the input or output port when the power amplifier is turned on. Operating the power amplifier while disconnecting and connecting RF cables may damage the equipment and/or cause personal injury.

A simplified power-setting example is shown in figure 3-2.

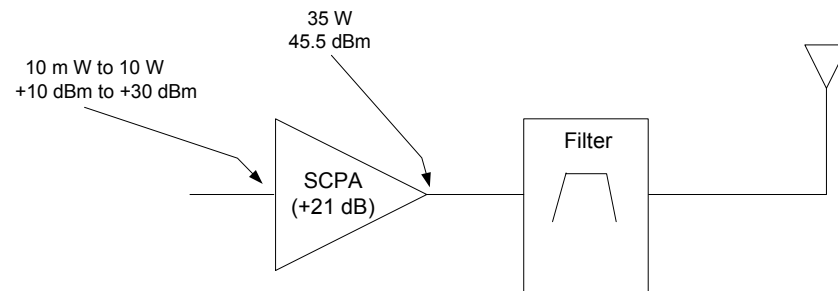


Figure 3-2 Gain Example Block Diagram

1. Turn on external exciter/transceiver and apply RF input signal. Adjust the input power to achieve the desired output power (refer to table 1-2).