APPENDIX SA – SPECTRUM ANALYZER

Last Revised: 10 August 2017

This appendix describes the additional capability provided by the integrated SBS or SBS-2 Spectrum Analyzer option. It is provided as a supplement to the RC4500 baseline manual.

1 Introduction

1.1 Overview

The spectrum analyzer option adds an additional panel to the graphical user interface (GUI). This panel provides a traditional spectrum monitoring with control of frequency, amplitude, bandwidth, and marker functions.

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AZ: 180.00 EL: 45.00	i i	EXT: 2728 SAT: A SPD: EAST	MAN	UAL	Mode	CCW	2 AN	CW Pol			
<mode>MENU</mode>	/ <0-9>JOG	<bksp>BCN</bksp>	18:03	:22	Scroll Angle/CT	4 E Az	5 H/V	6 W Az			
RC4500 Antenna Contr					Scroll↓ RF/SS	7 Sat-H	805 EI	9 Sat-V			
					Enter	• Stop	0 Speed	+/- BKSP			
				-100 dB							
				440 dP	Frequency Ampli		itude	ude			
				110 00	Band	Bandwidth Mark		ker			
				-120 dB							
				420 40		1250.0	1250.000 MHz				
				-130 06		Cente	r Freq				
				-140 dB		1000.0	00 MHz				
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0000.000 MHz	0000.000 MHz		0000.000 MHz								

2 Configuration

No special configuration is required for this option.

3 Detailed Operation

3.1 Spectrum Analyzer Control Panel

The following sections show the available spectrum analyzer controls. Click the '+' or '-' to cycle through available choices. Some controls can accept typed values. Invalid values are not accepted.

3.1.1 Frequency Controls



3.1.2 Amplitude Controls



3.1.3 Bandwidth Controls



3.1.4 Marker Controls



3.2 Configuration Interface

The main configuration interface panel has several navigation buttons. Clicking on these buttons will switch between the available pages. Individual pages can have several expandable panels which can be expanded and collapsed to show or hide their contents.

3.2.1 SBS Configuration

The System Configuration > SBS Configuration panel allows the user to change the initial spectrum analyzer settings. These values will automatically be applied at powerup.

192.168.1.1/config ×	Guest	9 <u>220</u>	×
← → C ① 192.168.1.1/config			 :
RC4500 Configuration			
System Summary System Configuration Advanced			
► GUI Configuration			
✓ SBS Configuration			
Powerup Settings			
Center Freq: 1500.000 MHz			
Span: 1000.000 MHz			
Ref Level: dB			
Scale: 5 🗸 dB/div			
RBW: 1000 - kHz			
VBW: 30 VHz			
Save Return			

The "Save" button will become enabled when a change has been detected, indicating that a save is required.

Clicking the "Return" button will go back to the main user interface.