SignalCore™

PRESERVING SIGNAL INTEGRITY

Software Front Panel User Guide

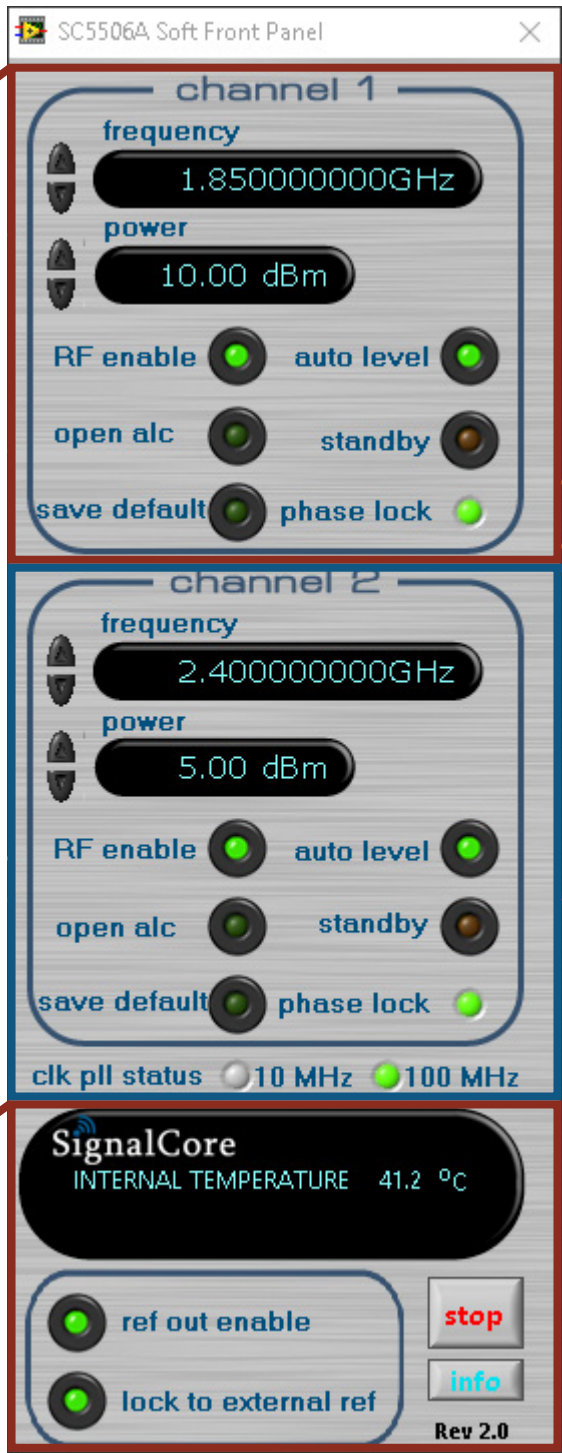## 25 MHz to 6 GHz Signal Source

SC5505A and SC5506A   Rev 1

Contents

Tip: To edit number inputs, click in the box to type or click the up and down arrows.

Section 1

This section contains the settings for Channel 1, including the ability to adjust frequency, power, and toggle other settings.
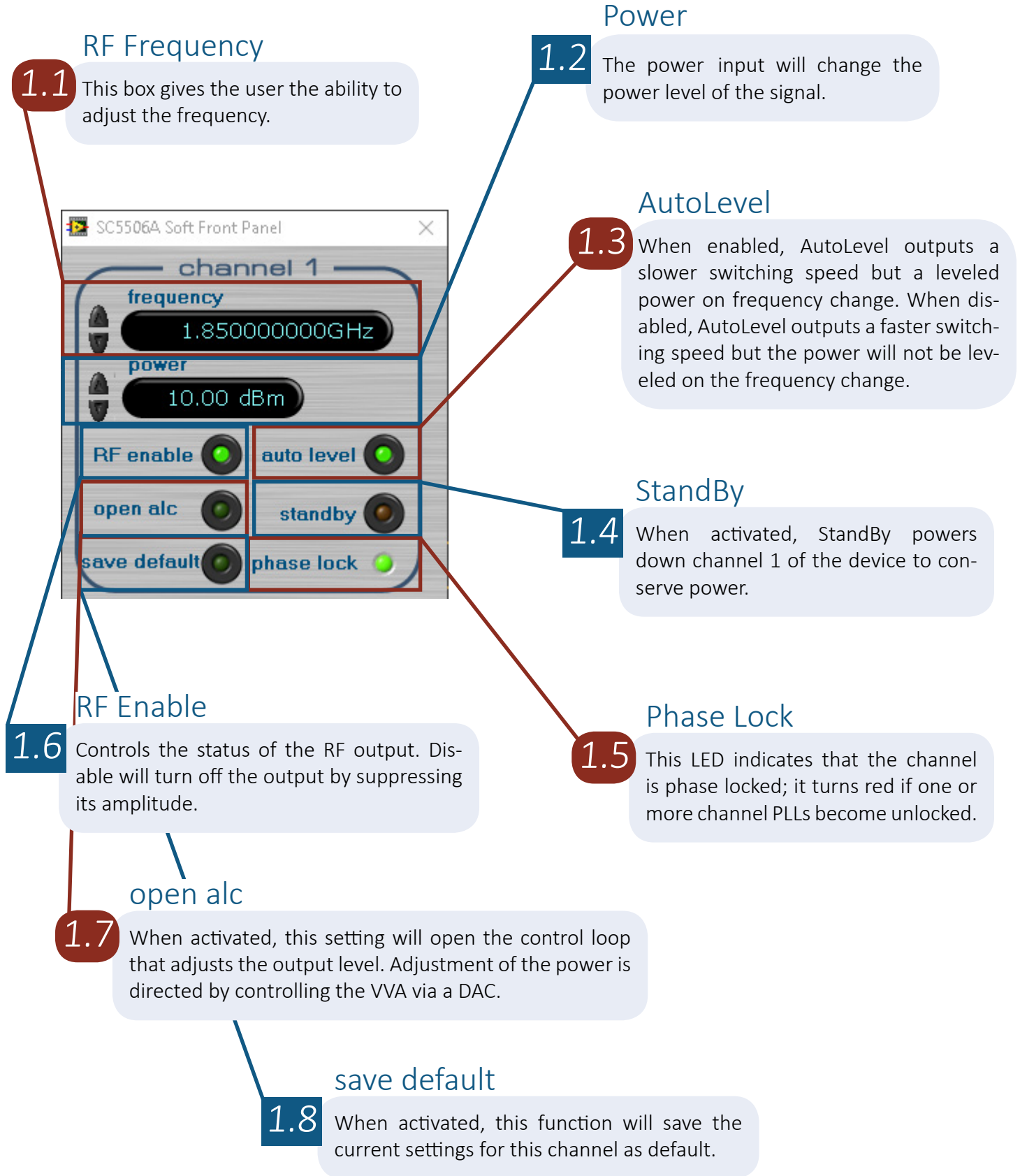
Section 2

This section contains the settings for Channel 2. They are the same as Channel 1. The clk pll status setting is included in this section but applies to both channels.

Section 3

This section contains device information and the ability to adjust external reference settings.

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Channel 1 Section 1

RF Frequency

1.1 This box gives the user the ability to adjust the frequency.

Power

1.2 The power input will change the power level of the signal.

AutoLevel

1.3 When enabled, AutoLevel outputs a slower switching speed but a leveled power on frequency change. When disabled, AutoLevel outputs a faster switching speed but the power will not be leveled on the frequency change.

StandBy

1.4 When activated, StandBy powers down channel 1 of the device to conserve power.

RF Enable

1.6 Controls the status of the RF output. Disable will turn off the output by suppressing its amplitude.

Phase Lock

1.5 This LED indicates that the channel is phase locked; it turns red if one or more channel PLLs become unlocked.

open alc

1.7 When activated, this setting will open the control loop that adjusts the output level. Adjustment of the power is directed by controlling the VVA via a DAC.

save default

1.8 When activated, this function will save the current settings for this channel as default.

SC5506A Soft Front Panel

channel 1

frequency
1.850000000GHz

power
10.00 dBm

RF enable   auto level

open alc   standby

save default   phase lock

Channel 2 Section 2

RF Frequency

2.1 This box gives the user the ability to adjust the frequency.

Power

2.2 The power input will change the power level of the signal.

AutoLevel

2.3 When enabled, AutoLevel outputs a slower switching speed but a leveled power on frequency change. When disabled, AutoLevel outputs a faster switching speed but the power will not be leveled on the frequency change.

StandBy

2.4 When activated, StandBy powers down channel 2 of the device to conserve power.

Phase Lock

2.5 This LED indicates that the channel is phase locked; it turns red if one or more channel PLLs become unlocked.

RF Enable

2.6 Controls the status of the RF output. Disable will turn off the output by suppressing its amplitude.

open alc

2.7 When activated, this setting will open the control loop that adjusts the output level. Adjustment of the power is directed by controlling the VVA via a DAC.

clk pll status

2.9 The pll status will display whether the device is running at 10 MHz or 100 MHz.

save default

2.8 When activated, this function will save the current settings for this channel as default.

Section 3

Message Box

3.1 This message box displays the current device operating temperature, detection of an external source, and whether external locking is successful.

Stop

3.2 Clicking the stop button disconnects the software front panel from the device.

Info

3.3 Clicking this button will display the device information such as hardware revision, firmware revision and the manufacture date.

ref out enable

3.4 Enabling this function will enable reference out.

lock to external ref

3.5 This setting allows the user to lock the internal reference clock to an external source.