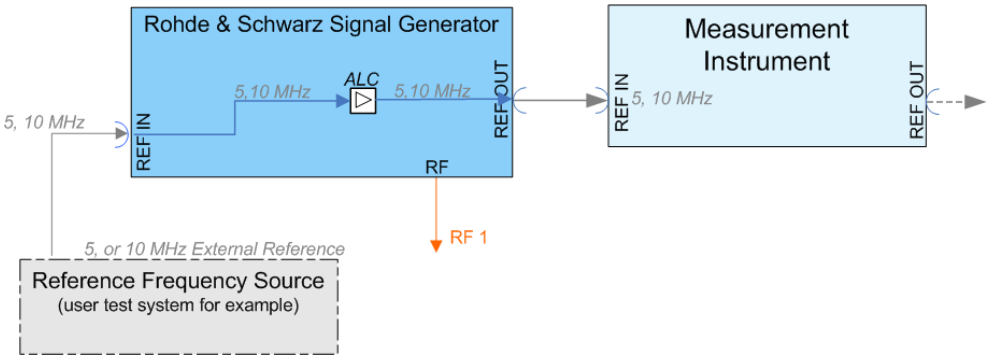


Figure 4-3: Synchronizing a subsequent instrument an externally applied reference frequency of 5 or 10 MHz

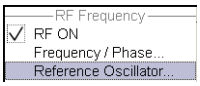
Settings:

– Source: "External"
– External Reference Frequency: "5 or 10 MHz"

Input and output connectors of the reference frequency

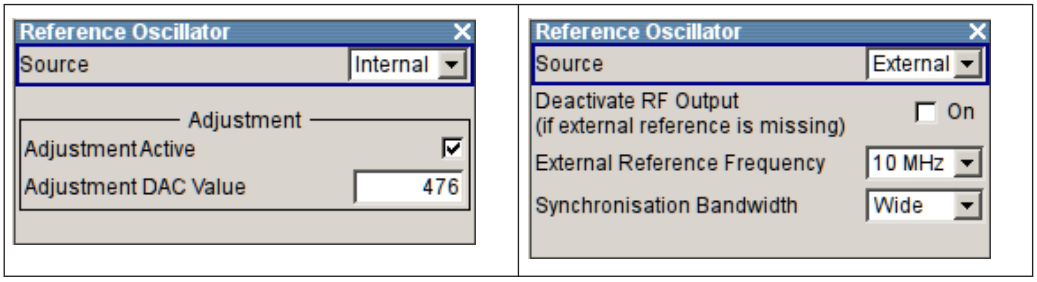
The appropriate connectors are located at the rear panel, see "[REF IN]" on page 57 and "[REF OUT]" on page 57.

4.3.4.1 Reference Oscillator Settings



To access the settings dialog for configuring the reference signal, perform one of the following:

- In the block diagram, select "RF > config... > RF Frequency > Reference Oscillator"
- Press the [menu] key and select "RF > RF Frequency > Reference Oscillator"
- Press the [setup] key and select "Setup > System > Reference Oscillator"



In the "Reference Oscillator Settings" dialog, you can select the signal source and frequency to be used as the reference frequency, and determine a user-defined adjustment value.

The remote commands required to define the reference oscillator settings are described in Chapter 6.13.14, "SOURce:ROSCillator Subsystem", on page 409.

Source
Selects the source of the reference frequency.

See Chapter 4.3.4, "Reference Oscillator", on page 142, which provides an overview of the different test scenarios for configuring the reference frequency.

"Internal" Uses the internal 10 MHz reference signal, either with the calibrated or a user-defined adjustment value.

"External" Uses an external reference signal.
The frequency of the external reference signal must be selected under "External Reference Frequency" on page 145.

Remote command:
`[:SOURce]:ROSCillator:SOURce` on page 412

Deactivate RF Output (if external reference is missing)
Turns the RF output off when the external reference signal is selected, but no signal is supplied.

This function prevents that no improper RF signal due to the missing external reference signal is used for measurements. A message indicates that the external signal is missing and the RF output is deactivated.

This setting is not affected by a reset.

Remote command:
`[:SOURce]:ROSCillator:EXTernal:RFOFf[:STATe]` on page 410

External Reference Frequency
Determines the frequency of the external reference signal.

You can select an external reference signal having a frequency of 5 MHz or 10 MHz.

Note: The installed hardware determines the available settings. Use the Hardware Config dialog to check the hardware the instrument is equipped with.

For information on the required hardware revision, refer to the release notes.

Remote command:
`[:SOURce]:ROSCillator:EXTernal:FREQuency` on page 410

Synchronization Bandwidth
Selects the synchronization bandwidth for an external reference signal.

"Narrow" Synchronization bandwidth is 50 Hz.

"Wide" The synchronization bandwidth is approximately 350 Hz.
This mode is useful for very precise reference sources of high spectral purity.

Remote command:
`[:SOURce]:ROSCillator:EXTernal:SBANdwidth` on page 411

Adjustment Active
Selects the adjustment mode.

"OFF" Uses the calibrated internal reference frequency.

"ON" Allows you to apply a deviation to the internal reference frequency, according to your requirements. To enter the value, use Adjustment DAC Value.