

## Tilt Measurement Feature

### Introduction

This document will describe the correct procedure for measuring Tilt on a DSP meter. For this example, we will be using the 1G DSP, though the procedure is the same on all meters.

While the Tilt function is available in the full channel plan scan, some may find it easier or more familiar in the Mini View display in the Scan function. The Mini View display only shows the channels selected as favorites in the channel plan. Up to 14 channels can be selected as favorites.

### Selecting Favorite Channels in ViewPoint

To select the desired channels as favorites, open the channel plan in ViewPoint or ViewPoint Express and select **Edit**. Select the checkbox in the **Favorite** column adjacent to each channel you want as a favorite.

After the channel plan has been edited and saved, be sure to sync the meter to update the plan in the meter.

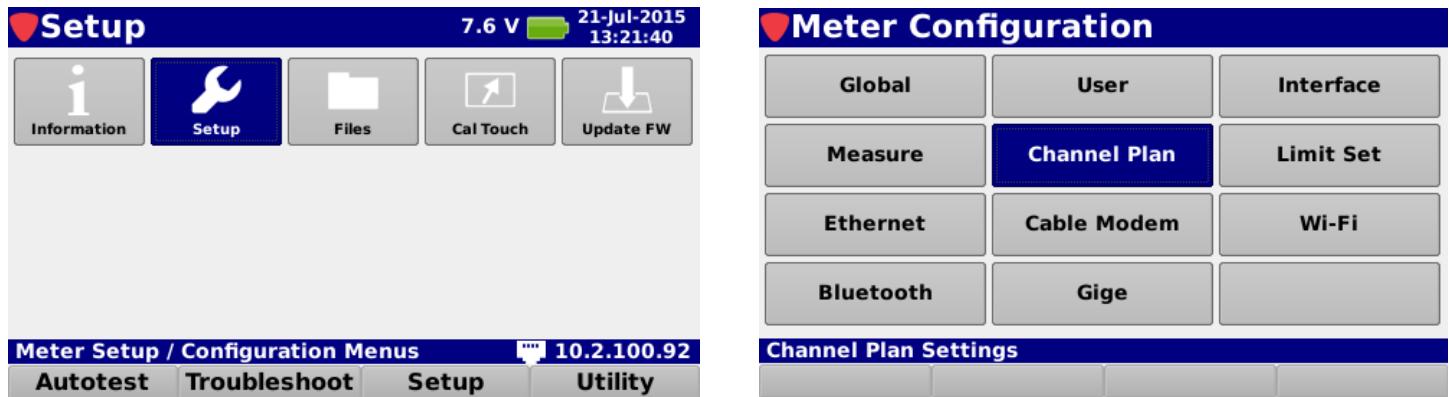
Preset	Frequency (MHz)	Number	Name	Enabled	Favorite
NTSC	97.250 MHz	96		<input type="checkbox"/>	<input type="checkbox"/>
NTSC	103.250 MHz	97		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
NTSC	109.250 MHz	98		<input type="checkbox"/>	<input type="checkbox"/>
NTSC	115.250 MHz	99		<input type="checkbox"/>	<input type="checkbox"/>
NTSC	121.250 MHz	14		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
NTSC	127.250 MHz	15		<input checked="" type="checkbox"/>	<input type="checkbox"/>
NTSC	133.250 MHz	16		<input checked="" type="checkbox"/>	<input type="checkbox"/>
NTSC	139.250 MHz	17		<input checked="" type="checkbox"/>	<input type="checkbox"/>
NTSC	145.250 MHz	18		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Docsis 256	153.000 MHz	19		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
NTSC	157.250 MHz	20		<input checked="" type="checkbox"/>	<input type="checkbox"/>

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## Selecting Favorite Channels Manually in the Meter

If you do not have any favorite channels selected and do not have the ability to download an updated channel plan from the software, you can select up to 14 favorite channels in the channel plan manually. Follow the instructions below to manually select favorite channels.

From the **Setup** menu, select the **Setup** icon, and select the **Channel Plan** option.



Select the **File** softkey, select **Open**, highlight the channel plan you want to edit and select **Enter**.

The channels that have been selected already will have a blue checkmark beside the channel number.

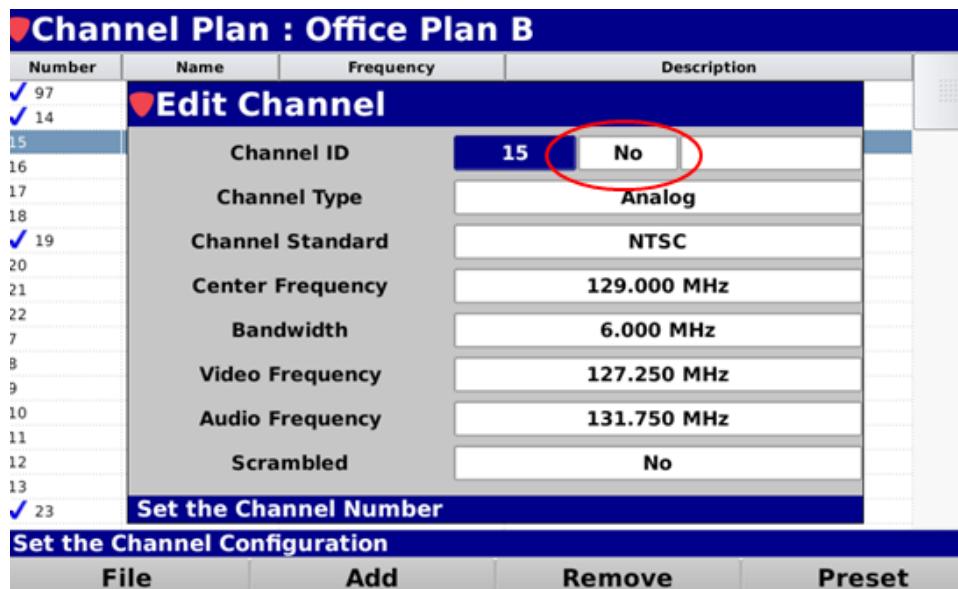
Channel Plan : Office Plan B			
Number	Name	Frequency	Description
✓ 97		103.250 MHz	Analog NTSC
✓ 14		121.250 MHz	Analog NTSC
15		127.250 MHz	Analog NTSC
16		133.250 MHz	Analog NTSC
17		139.250 MHz	Analog NTSC
18		145.250 MHz	Analog NTSC
✓ 19		153.000 MHz	DOCSIS 256QAM AnnexB
20		157.250 MHz	Analog NTSC
21		165.000 MHz	DOCSIS 256QAM AnnexB
22		169.250 MHz	Analog NTSC
7		175.250 MHz	Analog NTSC
8		181.250 MHz	Analog NTSC
9		189.000 MHz	DOCSIS 256QAM AnnexB
10		193.250 MHz	Analog NTSC
11		199.250 MHz	Analog NTSC
12		205.250 MHz	Analog NTSC
13		213.000 MHz	DOCSIS 256QAM AnnexB
✓ 23		217.250 MHz	Analog NTSC

**Set the Channel Configuration**

To select a channel as a favorite, use the up\down arrow buttons to highlight the channel, and select **Enter**.

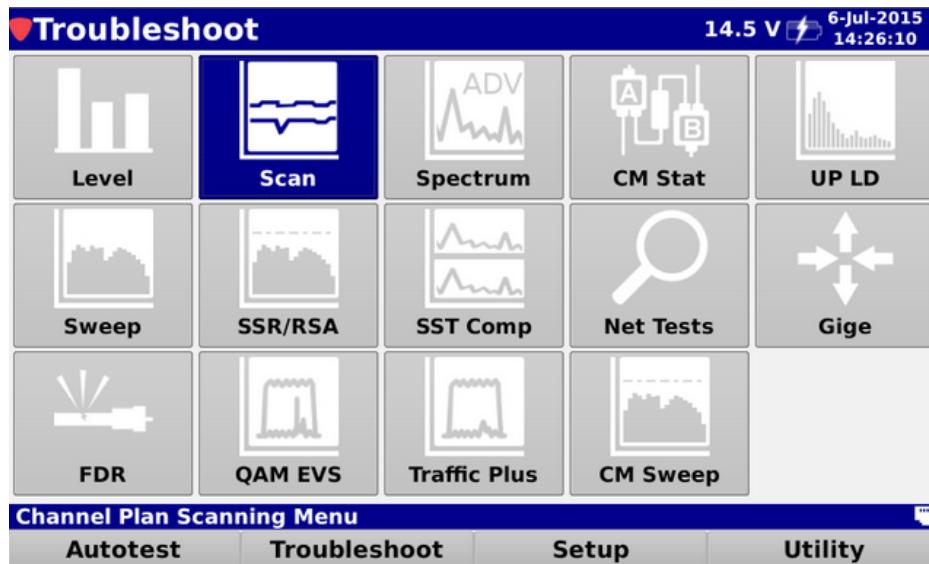
Next to the **Channel ID** field there is a field with a **Yes** or **No** in it. To select the channel as a favorite, highlight this field, use the up arrow to change the **No** to a **Yes**, then select the **Back** button.

Edit each channel you want to be a favorite (up to 14) and then select the **Back** button. You will be prompted to save the channel plan.

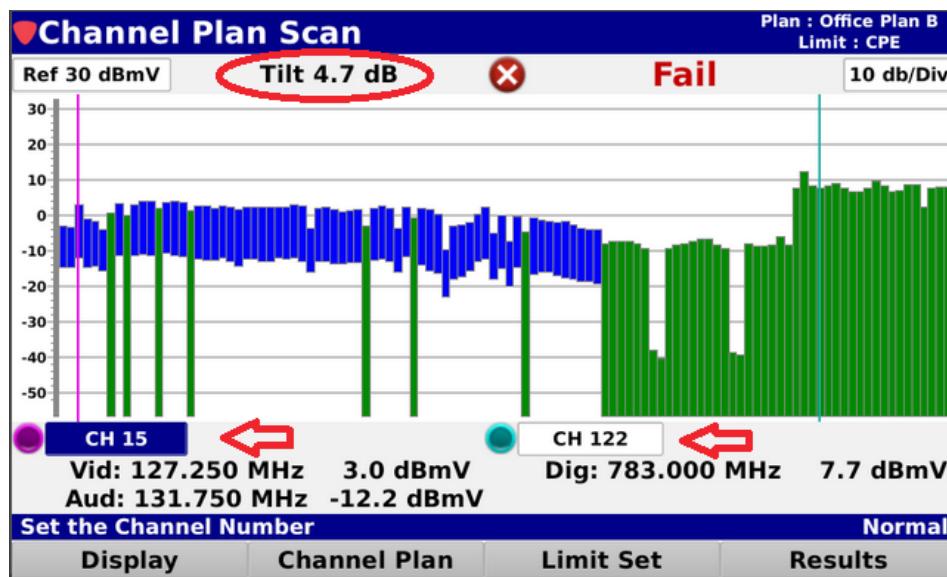


## Measuring Tilt

From the Troubleshoot menu, select the Scan icon.

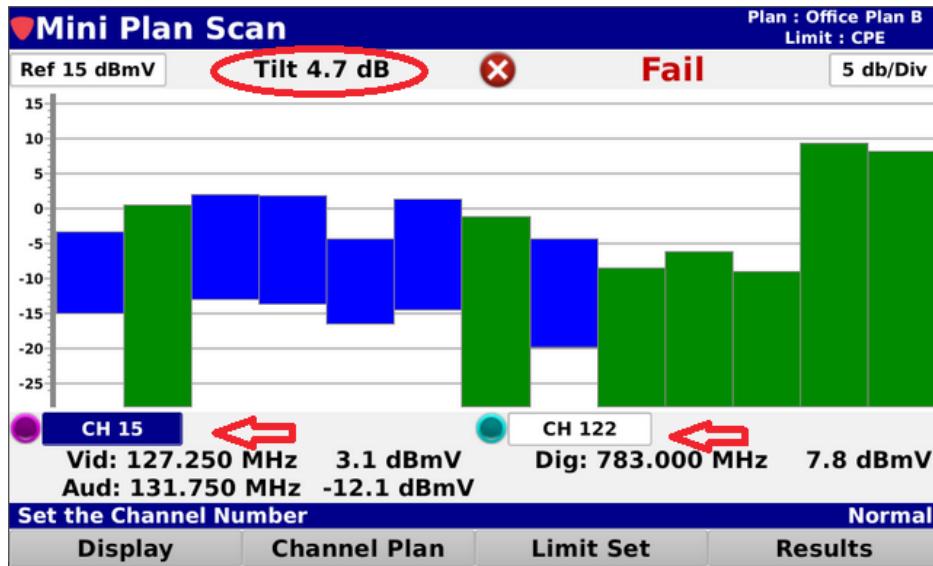


At the top of the Channel Plan Scan screen, you will notice the word "Tilt" followed by a value expressed in "dB". This value is the difference between the channels selected in the marker fields below the main display. These values are also represented by a purple and light blue vertical line on the display. To change the marker (or Tilt) channels, highlight the field and select **Enter** or use the up\down arrows.



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You can also see the Tilt measurement when utilizing the “Mini View” in the Scan function by pressing the **Display** softkey and selecting **Mini View**.



You will notice that in the Mini View, the markers do not change from the Full Scan view. To use the channels in this display you will have to change the low and high channel numbers to reflect a favorite channel. You can change the display to Text View temporarily to see the actual channel numbers that have been selected as favorites. Also, the meter will hold the last display mode if you back out, and then re-enter the Scan function.

Although the DSP family of meters does not have a separate icon that says “Tilt”, they can make the same measurements as other meters that do. A tilt measurement is simply the level difference between two selectable channels and is available within the Scan function of the meters.



NOTE

**For Additional Help, Contact Trilithic Applications Engineering**  
**1-800-344-2412 or 317-895-3600**  
[support@trilithic.com](mailto:support@trilithic.com) or [www.trilithic.com](http://www.trilithic.com)

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