



## SETTING THE OUTPUT POWER

Specifying the Absolute Output Power Levels to some predetermined reference-point (*for example our N-Type RF output connector*) combines four effects:

- Base output power resulting from digital processing: This power component is normalized using our [Calibration Procedure](#). *Typically it is about - 65 dBm.*
- The Nominal [Channelized Link Power](#) specified for the Scenario. This is the apriori power attenuation applied to each of the 12 or 16 tracking channels. *Typically this is + 10 dB..*
- [Flex-Power](#) reflects the CODE power level differences between and within the various frequency links. This only applies to a MODERNIZED system. *For a LEGACY system these should all be 0.*

These effects are accessed from the *Build Scenario* main pull down **OUTPUT POWER**:

The screenshot shows the 'RF-OUTPUT POWER LEVELS' dialog box. At the top, there's a dropdown for 'APPLICABLE RF' set to '1' with a checked 'APPLY TO ALL RF OUTPUTS' option. Below this are sections for 'BASE POWER LEVELS', 'EXTERNAL ATTENUATION', 'RF ATTENUATION', 'DIGITAL ATTENUATION', and 'TOTAL LINK POWER'. Red arrows point from the text descriptions on the right to specific controls in the dialog box. The 'INTERLINK POWER LEVELS (MODERNIZED FLEXPOWER)' section also has red arrows pointing to its controls. Buttons for 'SET LEVELS ICD-GPS-200' and 'SET LEVELS TAPESTRY.INI' are shown at the bottom right.

CALIBRATION VALUES. THESE ARE THE VALUES ON THE YELLOW CALIBRATION STICKER AFFIXED TO YOUR UNIT. THIS IS THE OUTPUT POWER AT OUR N CONNECTOR WITH 0 ATTENUATION

APPLIED IN-LINE ATTENUATION PAD.

ANALOG ATTENUATOR APPLIES TO ALL CHANNELS. THIS IS THE RF-GAIN SHOWN ON THE RUN SCENARIO MAIN SCREEN.

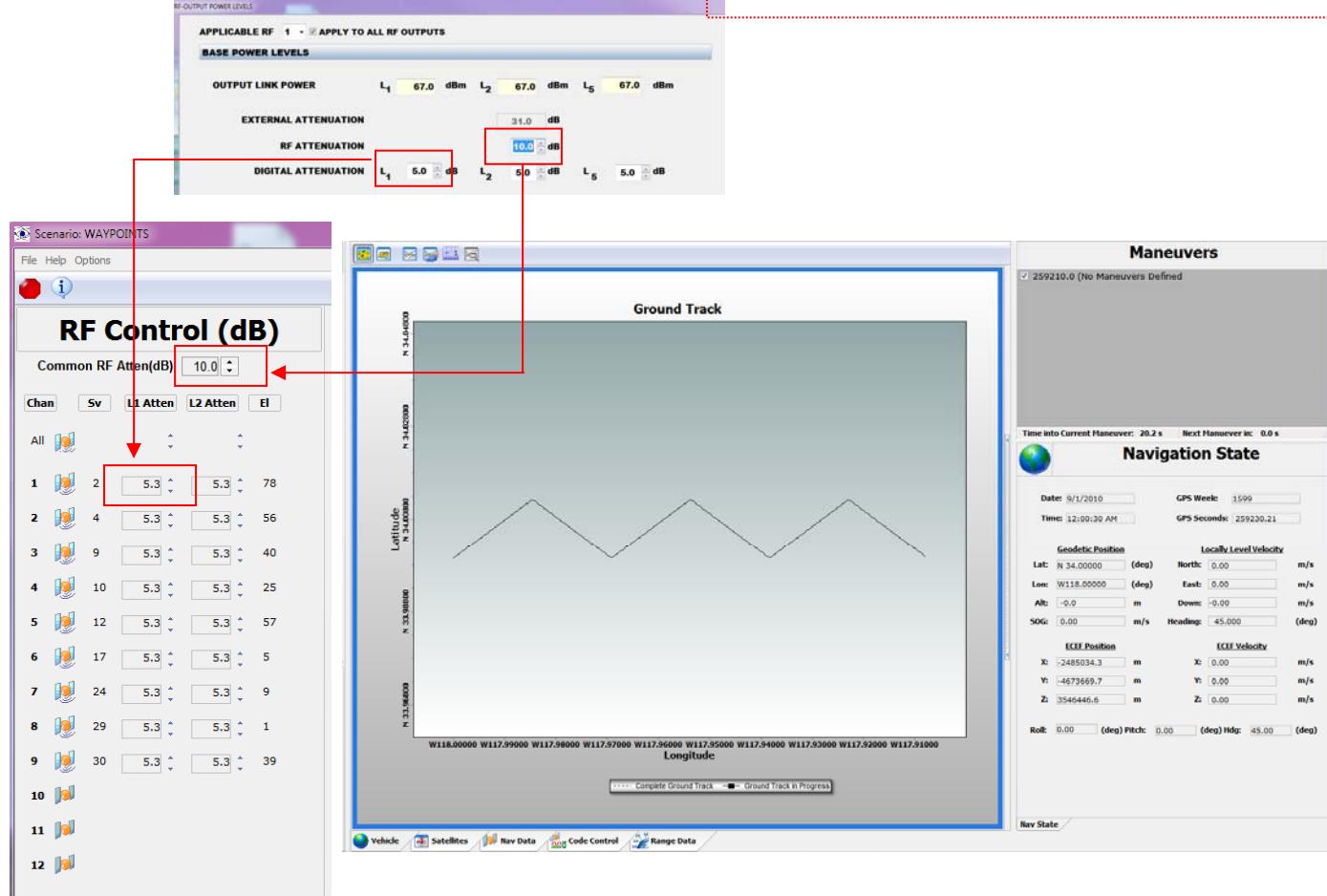
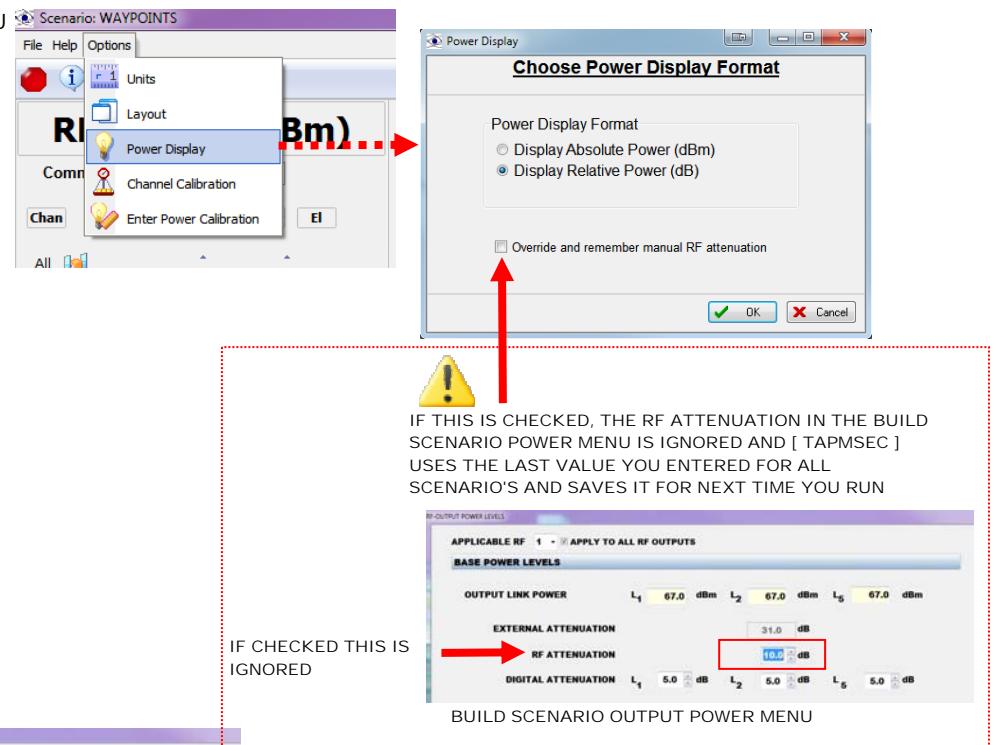
APRIORI DIGITAL ATTENUATOR APPLIES TO INDIVIDUALLY TO ALL CHANNELS.

FLEX POWER. INDIVIDUAL LINK POWER C/A TO MP ETC. CAN BE SPECIFIED.  
 \*NOTE: ONLY MODERNIZED GPS HAS FLEX-POWER CAPABILITIES. FOR LEGACY THESE ARE IGNORED

The following figure illustrates how these values are accessible real-time with RUN SCENARIO.

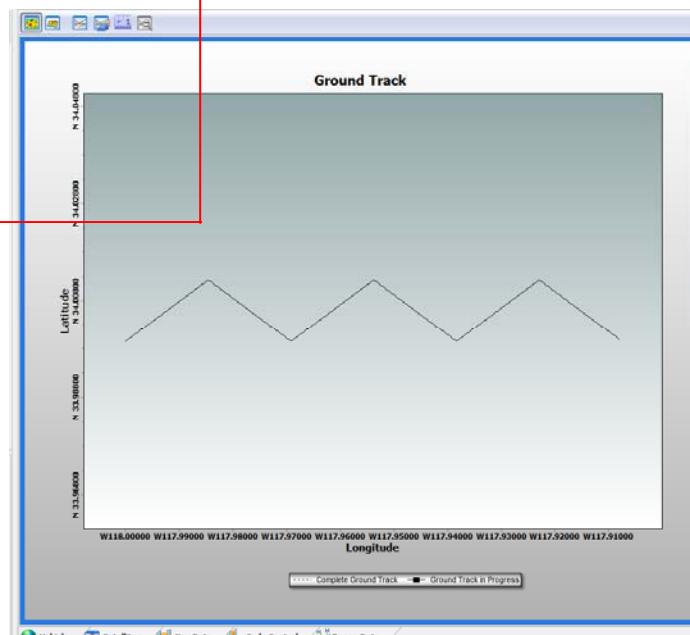
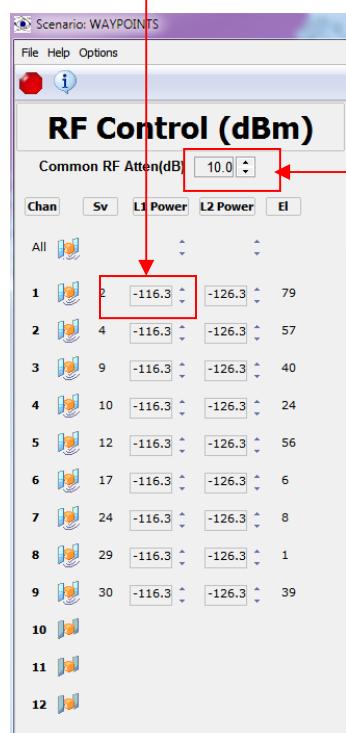
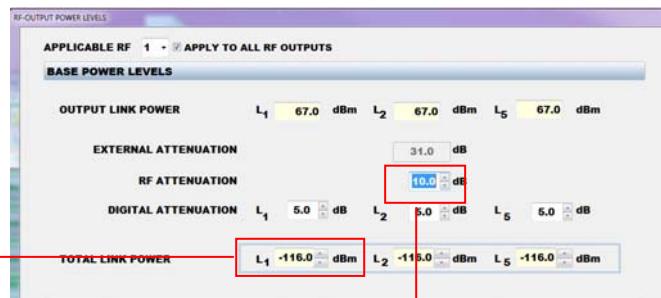
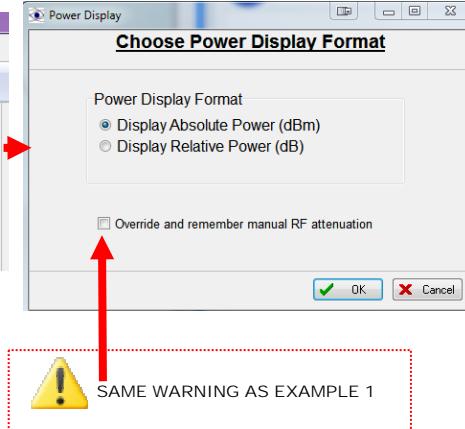
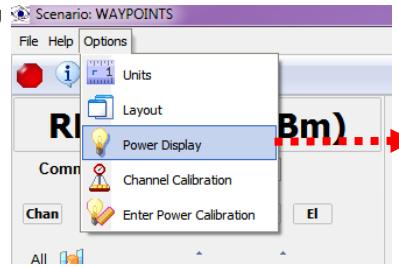
EXAMPLE 1: TAPMSEC IN RELATIVE POWER DISPLAY MODE

RUN SCENARIO [ TAPMSEC ] MAIN MENU



EXAMPLE 2: TAPMSEC IN ABSOLUTE POWER DISPLAY

RUN SCENARIO [ TAPMSEC ] MAIN MENU





NOTE: IF YOU DO NOT SET THE FIXED ATTENUATION PAD TO THE CORRECT VALUE, THE ABSOLUTE POWER WILL BE WRONG BUT THE RELATIVE POWER WILL NOT

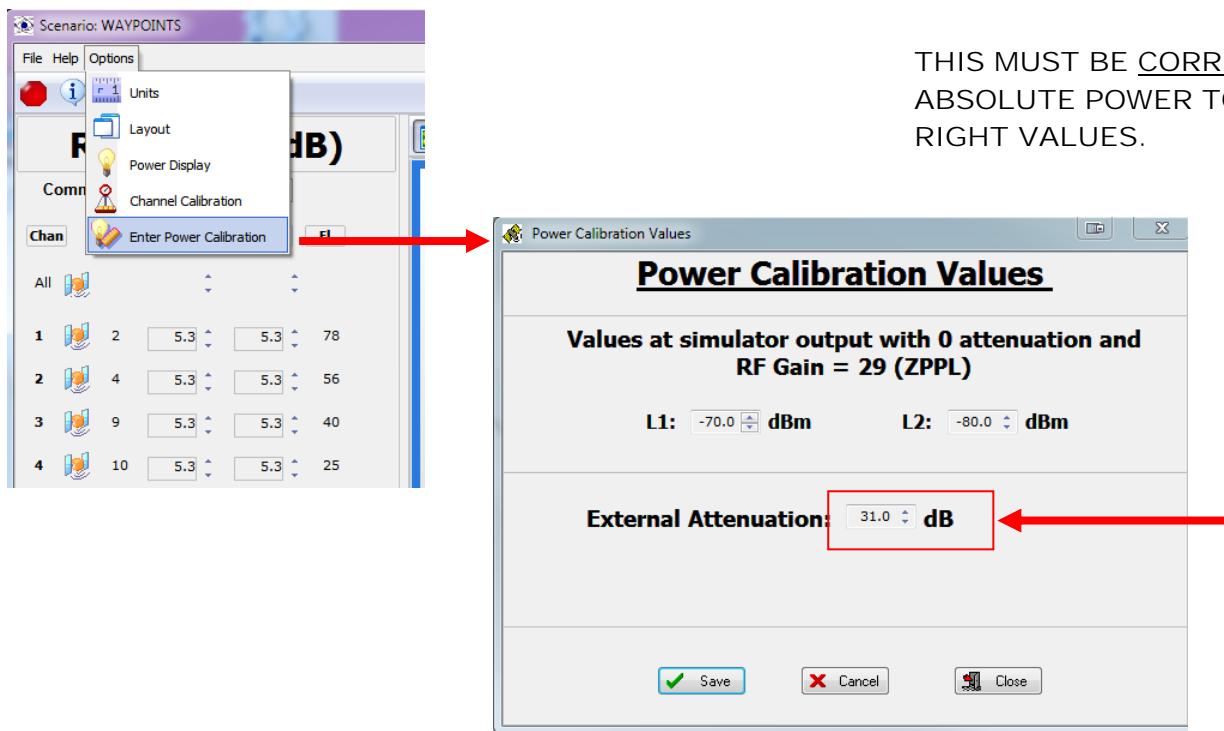
NOTE: IF YOU CHANGE THE RF ATTENUATION IN THE RUN SCENARIO, AND DO NOT MAKE THE SAME ADJUSTMENT IN BUILD SCENARIO, THE RF GAIN WILL REVERT TO THE PROGRAMMED VALUE AND NOT THE LAST VALUE YOU SET WITH THE UP/DOWN CONTROL.

BE AWARE OF THE CHECK SITUATION ON THE RF GAIN OVER-RIDE - SEE THE WARNING TRIANGLE ABOVE

IF YOU HAVE 0 FIXED ATTENUATION, THEN YOU HAVE TO ADJUST THE RF GAIN TO A LARGE VALUE TO COMPENSATE OR YOU WILL OVERDRIVE THE GPS RECEIVER. ( NO DAMAGE WILL RESULT )

TO CHANGE THE CALIBRATION VALUE, OR TO ADJUST FOR THE IN-LINE FIXED ATTENUATOR MAKE THE CHANGES AS FOLLOWS:

- FROM RUN SCENARIO [ TAPMSEC ] MAIN PULL DOWN





## LEGACY RF OUTPUT SIGNAL-POWER BREAKDOWN

