Orion/Orion II Model(s) 565 / 566 S-Meter Scale Adjustment

The Ten-Tec Orion (565), with firmware version 2.064x11 or later, has a built in algorithm to adjust for differences between the various types of S-meters used during production. This feature is also available in the Ten-Tec Orion (566), with firmware version 3.033xa or later.

To access this feature press the **MENUS** button, followed by the **STEP** button to access the **RX** menu and, finally, press the **PWR** (RF power output) button. This will bring up a screen (See figure 1 highlighted area) that allows you set the S meter in digital counts. The **S-meter readings** and default values are shown in figure 1 below.

S-Meter Reading	Counts	Record your values here
Signal S-0	0	
Signal S-1	15	
Signal S-2	25	
Signal S-3	34	
Signal S-4	41	
Signal S-5	51	
Signal S-6	58	
Signal S-7	66	
Signal S-8	76	
Signal S-9	89	
Signal S-9 + 10	105	
Signal S-9 + 20	121	
Signal S-9 + 30	165	
Signal S-9 + 40	193	
Signal S-9 + 50	221	
Signal S-9 + 60	0	Leave this at 0

Table 1: S-meter Default Settings

The adjustment procedure is made in a manner similar to other Orion menu items. Using the Main tuning knob for VFO A select the S signal level you wish to adjust. While watching the S-meter, turn the Multi knob until *your* S-meter reads correctly.

For example:
- Enter the **RX menu** mode and push the **PWR** (RF power output) button
- Let's assume you are adjusting the S-meter for **Signal S-4**
- Turn the **Main** tuning knob for VFO **A** to highlight **Signal S-4**
- The default reading is **41** counts but perhaps *your* S-meter reads S-3 not S-4
- Using the **Multi** knob, change the value from 41 until *your* S-meter reads S-4
- Do this for ALL signal levels and adjust the values as needed
- Do not change the **Signal S-9 + 60**; leave it at **0**
- Finally **RECORD** these values and exit the Menus.

Note: If you do a Master Reset *your* values will be replaced with the default values.