

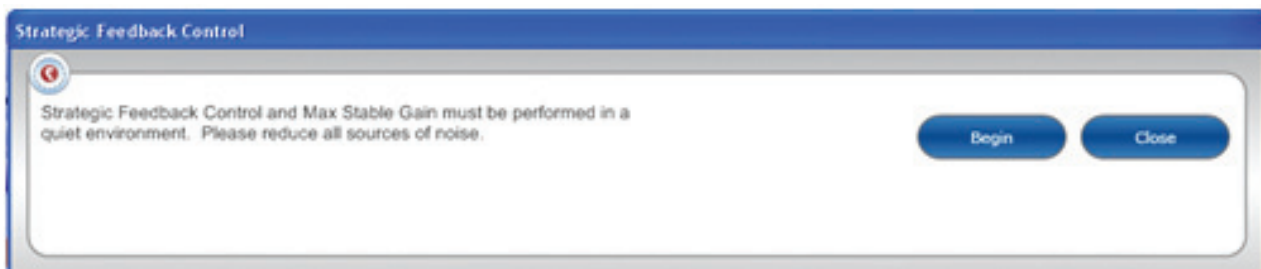



## Strategic Feedback Control

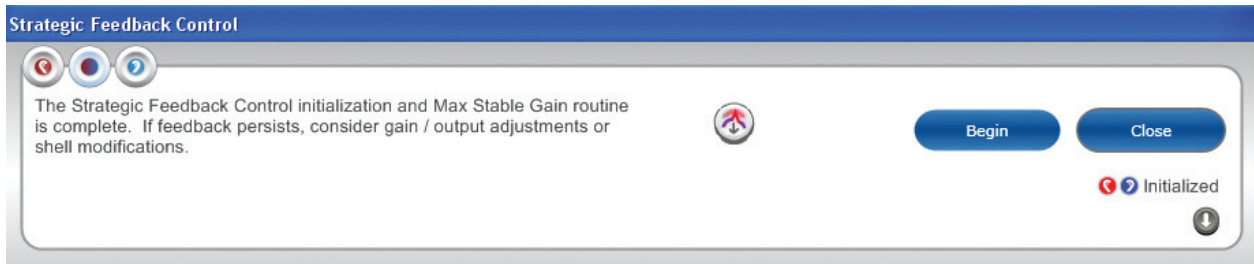
All Imagine products use a new feedback cancellation system, called Strategic Feedback Control. Capitalizing on Impulse Platform, Micro-Tech's new open architecture platform, Strategic Feedback Control prevents feedback in a wide variety of environments. It provides the professional with the freedom to fit a broader range of hearing losses with the patient's own choice of style.

When fitting patients with Imagine products, a custom initialization of the individual ear's feedback path is recommended. This measurement must be done while the hearing device is in the patient's ear and patients should be counseled to remain quiet during the measurement. The Strategic Feedback Control initialization is included as the second step of the AutoPath routine. It can also be accessed via the  icon on the QuickFit or the Features screens. Clicking the  icon will display the following window:



When **Begin** is selected, an animated  icon will appear on the screen, indicating the presence of a brief, complex sound in the patient's ear. The level of the sound is based on the matrix of the device. If there is a considerable amount of noise during the measurement, the system will automatically attempt a second measurement at the same or higher signal level. If after a second attempt the system is still unable to obtain initialization data, Inspire will offer the **Adaptive** and **Off** settings for Strategic Feedback Control; the **Static** setting will be unavailable. If a custom initialization is not performed, **Self Learning** occurs, during which the feedback path of a particular device is determined over many hours of wear time with the Strategic Feedback Control in the **Adaptive** setting.

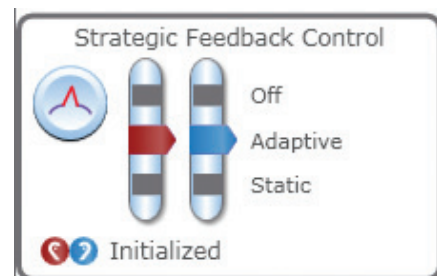
## Strategic Feedback Control: Custom Filters



Inspire allows you to view the custom initialization data, provided the device has a custom initialization filter stored in the hearing aid. This information is available from the Strategic Feedback Control dialog box. When looking at the results of the initialization, there can be three different results:

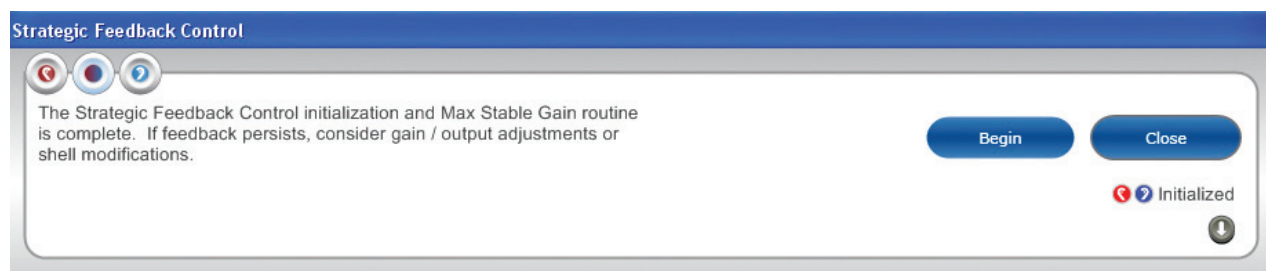
ICON	EXPLANATION
	The custom initialization filter is stored in the device, was obtained during the current fitting session and Maximum Stable Gain curves can be examined by clicking on the down arrow.
	The custom initialization filter is stored in the hearing device but not obtained during the current fitting session. (To be able to view the filter data, re-run the custom initialization measurement).
	The custom initialization filter is not stored in the hearing device. During the initialization, a filter was unable to be obtained.

Upon successful completion of custom initialization, the filter is stored in the device and it functions in the **Static/ Adaptive** settings. The ear icon will be displayed. The **Static** filter setting will be available from the Features screen. **Static** may be preferred for patients who have specific lifestyle environments where an adaptive feedback cancellation system is not desired. Some examples would be healthcare workers and musicians, who are exposed to high frequency, repetitive sounds which may be interpreted as feedback. The **Static** setting would not attempt to cancel those sounds automatically.

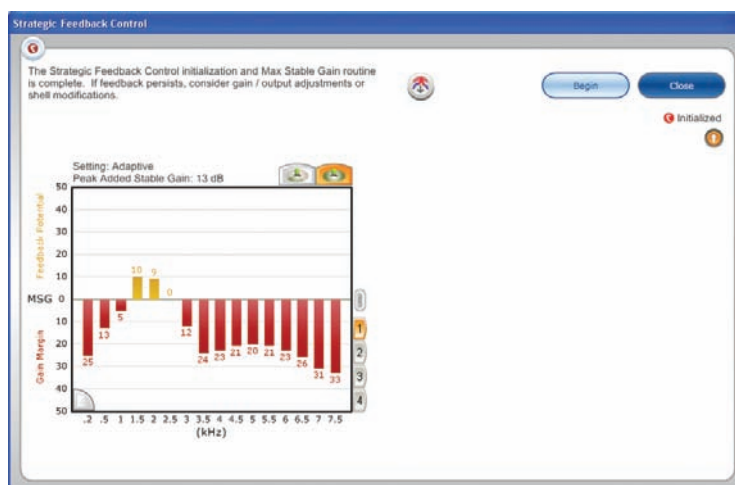



## Strategic Feedback Control: ASG and MSG

Strategic Feedback Control provides detail for both ASG (Added Stable Gain) and MSG (Maximum Stable Gain). To view the detailed information, select the down arrow in the Strategic Feedback Control screen. The displayed screens will provide detail regarding the feedback canceller, as described below:



Added Stable Gain (ASG) is a measurement of the feedback canceller performance and reflects the additional gain available when Strategic Feedback Control is initialized. The larger the number, the less the feedback potential. The Maximum Stable Gain (MSG) data are memory and frequency specific; red bars (right ear) and blue bars (left ear) appear below 0 on the figure and show the available gain margin before feedback. The larger the number, the greater the available stable gain in a that channel.



Yellow bars only appear above the 0 line; these bars indicate potential for feedback. The Auto Gain Adjust  icon, located in the center of this screen, will automatically adjust gain to eliminate feedback potential. This icon is only shown when feedback potential is present in one of the hearing aid memories. By selecting this icon, you can eliminate the yellow regions (feedback potential) in all memories automatically.