

ENVIRONMENT MANAGER

PRODUCT AVAILABILITY: Muse iQ, SoundLens Synergy iQ, and Halo iQ Devices

Environment Manager features are technology-tier and style dependent. Higher levels of technology provide more options and assistance for the patient. Default values are research-driven based on patient performance and preference.

Environment Manager allows for adjustments to Comfort, Auto Music, Directionality, and Immersion Directionality on a per-memory basis.

Launch **Inspire X**, then connect and detect hearing devices and select **Environment Manager** on the left navigation bar. Refer to the *Initial Fit Protocol QuickTIPS* for more information.

Devices feature Environment Manager, a series of sound classification and automatic gain adaptation algorithms.

Environment Manager includes adjustments and automatic adaptation for Comfort, Auto Music, and Directionality, including Immersion Directionality.

Adjustments and feature availability are tier-dependent.

COMFORT

» **Speech and Noise:** Fast-acting noise management and speech preservation system designed to provide comfort in speech in noise situations and reduce listening effort.

» **Quiet:** Expansion algorithm designed to provide comfort for low-level noise.

» **Wind:** Noise reduction algorithm designed to provide comfort for wind noise when turbulence is detected over the microphones.

» **Machine Noise:** Noise reduction algorithm designed to provide comfort for loud, steady state noise.

There are two ways to adjust the Comfort controls:

1. Select the **Setting Value** on the adjustment table. The control will turn blue. Select the **up** or **down** arrows to increase or decrease the amount of noise control, or:
2. Select **Details** adjacent to Comfort to access all of the Comfort settings. Select a **higher radio button** for more noise control or a **lower radio button** for less noise control.

| Environment Manager | 1 | 2 | 3 | 4 |
|---------------------|--------|-------|----------|----------|
| | Normal | Crowd | Disabled | Disabled |
| Speech and Noise | 3 | 3 | ... | ... |
| Quiet | 3 | 3 | ... | ... |
| Wind | 3 | 3 | ... | ... |
| Machine Noise | 3 | 3 | ... | ... |

Comfort

Comfort

AUTO MUSIC

Hearing devices will automatically adjust their settings to provide an optimal music listening experience when music is detected in the environment. Auto Music defaults ON in *Normal, Streaming, Stream Boost, and Auditorium memories. It can be manually enabled in other memories (except for the dedicated Music memory).

NOTE: Use of the Music memory is recommended for dedicated music listening. Refer to the *Music Memory QuickTIP* for additional information.

There are two ways to adjust the Auto Music controls:

1. Select the **Setting Value** on the adjustment table. The control will turn blue. Select the **up** or **down** arrows to make music signals more robust or less robust, or:
2. Select **Details** adjacent to Auto Music. Select a **higher radio button** or a **lower radio button** to make music signals more robust or less robust, respectively.

DIRECTIONALITY

The optimal microphone mode will be determined as a function of the chosen memory environment. It is recommended to leave the directionality mode at the default settings in most situations. Professional flexibility is provided for adjusting the microphone mode and settings, as necessary.

There are two ways to adjust the Directionality settings:

1. Select the **Setting Mode** on the adjustment table. The control will turn blue. Select the **up** or **down** arrows to change the mode, or:
2. Select **Details** adjacent to Directionality to make more detailed adjustments:

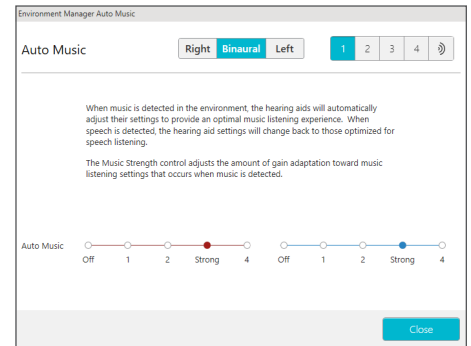
Directionality Mode:

- » **Adaptive:** Automatic, adaptive null steering with Speech ID to protect speech at all angles around the listener
- » **Dynamic:** Automatic switching between omnidirectional and fixed directional modes based on the environment
- » **Directional:** Fixed directional; amplifies sound from in front of the listener more than from behind via a hypercardioid polar plot
- » **Omni:** Fixed response; amplifies sound from all directions equally

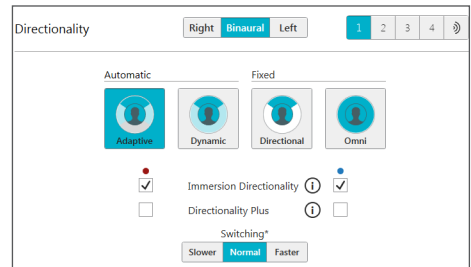
Immersion Directionality: Defaults ON in the Adaptive, Dynamic, and Omni modes in standard devices for all memories except Streaming, Stream Boost, Phone, Coil, or Loop memories. Defaults OFF in custom devices with directional microphones but may be turned on by selecting the check box.

Directionality Plus: Defaults OFF in all modes. Select the check box to activate when the device switches into a directional mode.

Switching: Defaults to **Normal** in all modes. Select **Slower** or **Faster** to decrease or increase the speed of directional switching, respectively.



Auto Music



Directionality

Immersion Directionality: Recreates the acoustics of the pinna by adding a more natural, high frequency directional response whenever the hearing devices are in an omnidirectional state.

NOTE: Available in all devices with directional microphones.

Directionality Plus: Combines aggressive Speech and Noise reduction with directionality to achieve better comfort in extremely challenging environments.

Switching: Changes to switching apply to all memories. Switching is available in i2400 devices only.

SPATIAL HEARING

Spatial Hearing is a feature available for Muse iQ CIC and SoundLens Synergy iQ IIC devices. It is designed to provide access to high-frequency information to improve hearing, sound quality, and environmental awareness for those with mild-to-moderate high frequency hearing loss.

It is enabled by default for audiograms featuring mild to moderate hearing losses. e-STAT AI is the default fitting formula when Spatial Hearing

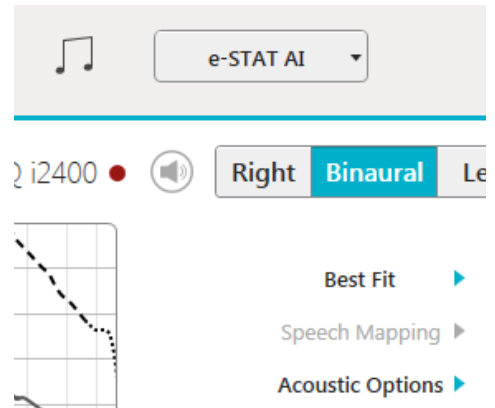
Spatial Hearing may be enabled or disabled independently in each memory. To manually enable Spatial Hearing for a hearing loss that defaults Spatial Hearing OFF:

1. Select the **e-STAT AI fitting formula** on the upper menu bar from any of the fitting screens.
2. Select the **up or down arrows** on the adjustment table on the **Environment Manager** screen to toggle between OFF and ON.

NOTE: Spatial Hearing cannot be enabled in Music, Streaming, Stream Boost, Phone, Coil, or Loop memories.

| | 1 | 2 | 3 | 4 | 5 | Ear to Ear |
|---------------------|--------|-------|----------|-----------|------------------|-------------------------------------|
| Environment Manager | Normal | Crowd | Outdoors | Autophone | Stream Boost Off | |
| Speech and Noise | 3 | 3 | 3 | 3 | --- | |
| Quiet | 3 | 3 | 3 | 3 | --- | |
| Wind | 3 | 3 | 4 | 3 | --- | |
| Machine Noise | 3 | 3 | 3 | 3 | --- | <input checked="" type="checkbox"/> |
| Strength | 3 | OFF | OFF | OFF | --- | <input checked="" type="checkbox"/> |
| Spatial Hearing | On | On | On | N/A | --- | |

Environment Manager: Spatial Hearing



eSTAT AI