

AUDIO PRE-PROCESSING FRONT-END AND VCR COMBINATION

VUI Application Example including APF and VCR

When your voice user interface (VUI) application has the flexibility to interact with endpoint systems through local voice command recognition (VCR), it typically won't be operating in complete silence. Environments with ambient noise force the user to repeat their request or the system misses the command. Despite the mass VCR deployments across a wide range of applications, recognition quality is crucial in noisy acoustic conditions. This combination solution enhances end user experience by adding Audio Pre-processing Front-end (APF) application examples to the Voice Command Recognition (VCR) solution.

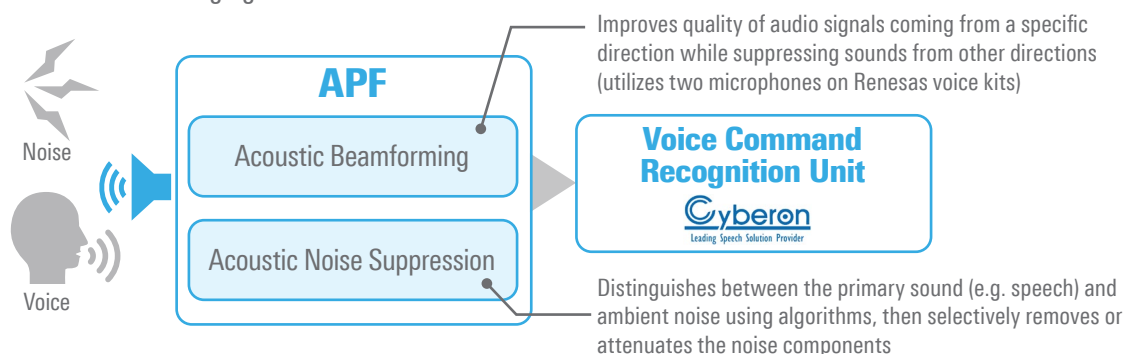


Benefits and Features

- APF provides an ultra-lightweight library of voice processing algorithms designed to enhance voice recognition with:
 - Improved accuracy
 - Increased Reliability
 - Footprint and CPU-efficient
 - Enhanced user experience
- Selectable combinations:
 - VCR: Easy command customization and optimization using text-to-model adoption
 - USB: Set up to enumerate as USB audio device for direct recordings

Project Workflow

This technique enhances voice clarity, especially in environments with significant ambient noise where typical voice command recognition approaches become challenging.



Target Applications

Edge VCR applications tailored for noisy environments (coffee grinder, cooking hood, dryer, lawnmower, noisy cities).

■ Other AI Voice Application Example