

## Title: Managing Wave Files for V+ Database Players

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## 1 Introduction

This document provides instructions for managing wave files for V+ database players. There are two V+ objects which use databases for playing wave files.

1. 2008 - Database Player (see Figure 1)
2. 2054 - 3D HRTF Audio Database Player (see Figure 2)

## 2 ODBC Database File Structure

The paragraphs that follow describe how to manage the wave files that these players use. Refer to the object help within V+ for more specific information regarding these objects.



Figure 1, V+ Object 2008 - Database Player

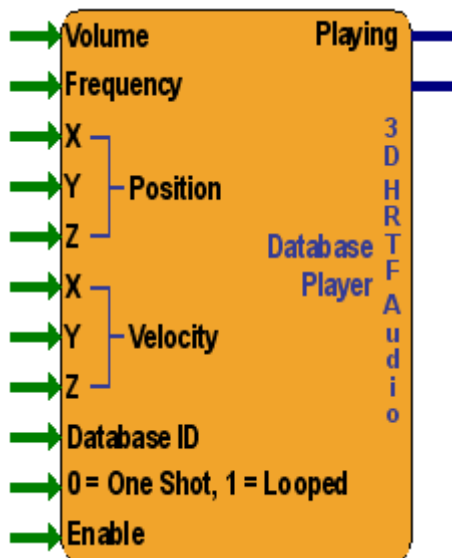


Figure 2, V+ Object 2054 - 3D HRTF Audio Database Player

The players use a database which provides a mapping of an index to a filename for a wave file (.wav) to be played. The database can be constructed with any database tool capable of ODBC (Open Data Base Connectivity) interoperability. Tables in the database are used to provide the index to filename mapping. These tables must have three columns defined as follows (ensure that the KEY field has no duplicate entries):

KEY	index	filename
int	int	string(255)

The name of an ODBC data source needs to be established in order for the players to open it and find the table. This Data Source Name (DSN) must match the Database Name set in the players' static data. The name of the table in the database must match the Table Name also set in static data. The Table Name must **NOT** contain any blank characters (if blanks exist, it simply won't work).

An example of a Microsoft Access database is shown in Figure 3 below. This file is found at the following locations (when V+ is installed on your computer):

32-bit OS: C:\Program Files\VPlus\VPlus Samples\VPlusHelpExamples\VPlus Database Player.mdb

64-bit OS: C:\Program Files (x86)\VPlus\VPlus Samples\VPlusHelpExamples\VPlus Database Player.mdb

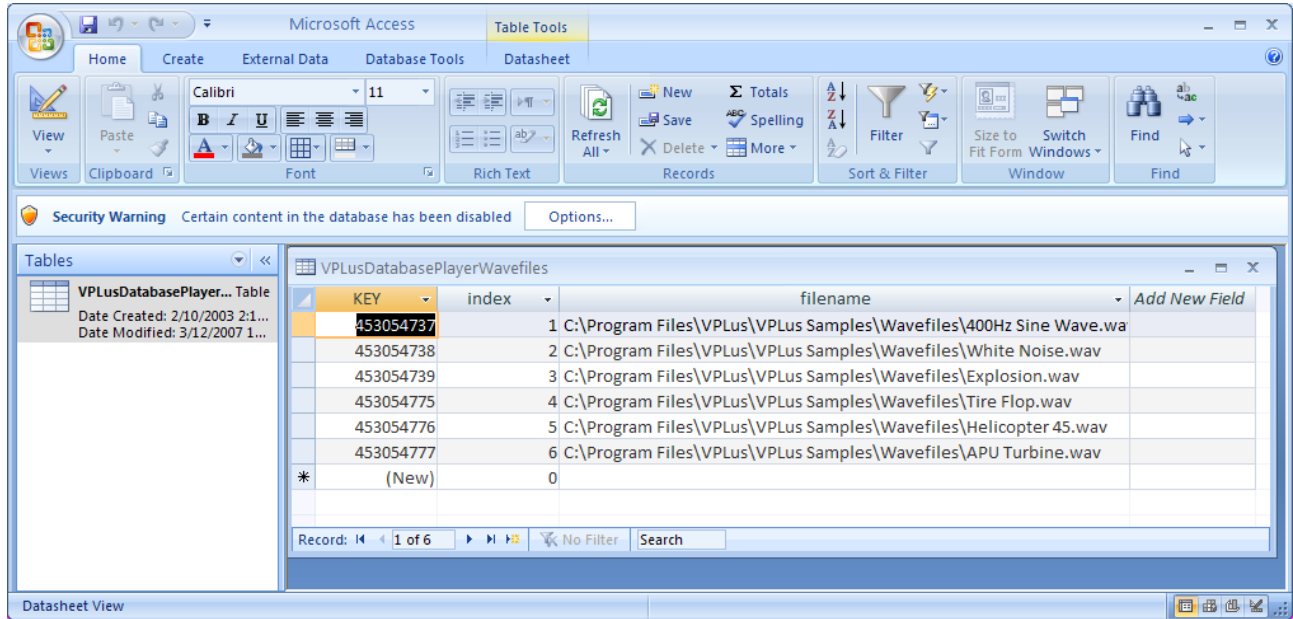


Figure 3. Access Database Example

The **KEY** field in this database generates numbers automatically. The numbers in the **Index** field should be unique. If there are duplicate indices in a table, the database players will play the first occurrence found and ignore subsequent duplicates.

Multiple tables can be created in any given database. This allows you to organize the wave files into logical groupings.

In a lot of cases, there is an ICD associated with a V+ application. It is a good idea to provide tables within the ICD to reflect the organization of these database player tables. This allows the developer of the host interface to quickly reference the Index/Filename relationship of an interface element representing the index to play.