

## **Azure/Pearl/Sapphire 2000 Cache Builder**

This application creates subsets of personality files from the files available, making patching faster and easier.

Although we have made the CacheBuilder as easy as possible to use, you should have a basic understanding of copying files and renaming them within Windows.

### **Explanation of the Personality file formats used in 2000 series consoles**

The 2000 series consoles can use one of three personality file types:

- ~ the fully expanded individual fixture file, this will have the extension .r20,
- ~ a compressed file on disk, which will have the file name aps.cmp,
- ~ a compressed file which has been loaded into the console, the source file being named p2000per.cmp

#### **.r20 format**

The number of .r20 files on a floppy disk is limited to the capacity of the disk, typically 200 or so. You can have as many disks as you wish with different .r20 files on them.

#### **P2000per.cmp format**

The p2000per.cmp file currently has a default capacity of about 50 fixtures. The exact number is dependant on the complexity of the fixtures selected. The capacity can also be extended by leaving out certain pieces of information such as Preset Focuses and Range Tables, potentially allowing around 350 fixtures to be compressed into the internal cache. More details about this are available section 3b below.

#### **Aps.cmp format**

The aps.cmp file is only limited to the floppy disk size. However, there is also a limit of 1000 fixtures which cannot be exceeded in any desk.

Providing the aps.cmp file is within the size limits of the disk, and contains no more than 1000 personalities, it can be created by renaming the p2000per.cmp file to aps.cmp. You can use this to test the file before storing it in the console or on a permanent basis. This might be useful if you are not the owner of the console but wish to have your own configuration whenever you use an Avolites 2000 console.

New fixtures are frequently added to our database, and whenever we find an improvement we can make to a fixture file this is placed on our web as a free download. Please therefore visit our web site on a regular basis to check for updates and download these before creating any files. A download containing all .r20 files in one directory is provided entitled "R20 files for Cachebuilder", which contains all the latest personalities available at any point in time. ([www.avolitesdownload.com/Personality Library/default.asp](http://www.avolitesdownload.com/Personality Library/default.asp))

#### **Editing files**

The compressed files cannot be edited, however the individual fixture .r20 files can be edited to have your own preferences included, and a standard windows application like Notepad can be used for this.

## **File Size**

The maximum size for installed files is

Azure	91 KBytes
Pearl	96 KBytes
Sapphire	96 KBytes

When you use the CacheMaker application you will be warned if the file size exceeds this. If it does you must remove some fixtures and try again. If your file is to be used on a disk as an aps.cmp file, then there is no limit to the file size.

## **Detailed instructions:**

The CacheBuilder application uses standard Windows operations and is generally intuitive to use.

### **Instructions:**

1. Downloading
2. Installation
3. Usage
  - a) Deploying the Cache Builder.
  - b) Controls
  - c) Results
4. Using the cache file
  - a) Loading
  - b) Using
5. Fixture Personality Database Management
  - a) How to create one.
  - b) Usage.

### **1. Downloading:**

The application can be downloaded from <http://www.avolitesdownload.com/>

Go to Cache Builder on the menu, and scroll down until you find a download titled CacheBuilderv1.5.msi. Click on the link for this file, and save it to your computer, remembering which directory you chose.

### **2. Installation:**

Click on the downloaded file and follow the on screen instructions. Please note that Windows installer 2.0 is required. This will be installed first, and if needed you will be required to reboot and run the Cache Builder installation a second time.

### **3. Usage:**

- a) Deploying the Cache Builder  
Press Start > Programs > Avolites > Cache Builder > Cache Builder
- b) Controls

The Current Directory is where the database of Personality files are stored. Click on Browse to change this.

The left window shows the personality files in the working folder. Click on Device or Manufacturer to alphabetically sort these columns. Select the files for the cache builder, use Ctrl in combination with the left mouse button to add to the selection, Use Shift in combination with the left mouse button to select a range of files

Click Add to queue the selected personality files, these will then be copied to the right window.

Click Add All to queue all files from the working folder

Remove can be used to deselect queued files.

Click Remove All to deselect all queued files.

The three tick boxes available at near the bottom of the window allow you to decide which personality information is included in your Cache file. By default, all information is added, but you can leave out certain information to increase the number of files you can successfully fit into the cache. You can choose to leave out Preset Focuses (palettes), Range Tables (disables intelligent display on attribute wheels) and Macros if you wish.

Click on Build Cache to Create the Cache file. Fill in your name and some notes, choose a destination folder for the cache file and click OK. The file p2000per.cmp will be created in the output directory.

c) Results

The results window indicates the cache file conformity. A tick means that the cache file can be loaded permanently into the desk, a cross means that the cache file can only be used off the disk, in this case rename the cache file to aps.cmp

#### 4. Using the Cache File

a) Loading

In the Pearl and Sapphire, Set keyswitch to SYSTEM, press [G]Utilities, [D]Load Cache File. In the Azure, set User Level to AVO then press [E] Utilities followed by [D] Load Cache file

b) Using

Make sure there is not disk in the drive, then Patch a fixture as usual.

#### 5. Fixture Personality Database Management

a) Populating the personality folder with new files

The Cache builder is supplied with the full database of Fixture personality files and during installation these are placed in the working folder [Program Files/Avolites/Cache Builder]. New personality files can be downloaded from our [Personality Library](#) (look for the download called "R20 files for Cachebuilder") or created using a text editor such as Notepad.

b) Aps.cmp

This is the full database of fixture personality files in compressed form. This has the same format as the cache file, so to create one, carry out the steps to create a cache file, as above, and rename the output file to aps.cmp

## **What's New**

### Version 1.5

- Improved recognition of manufacturers using ShortNames. This will be completed with the renaming of the remaining personality files shortly.
- Cache Builder now allows a user to choose which information from a personality is included. Range Tables, Preset Focuses and Macros can currently be left out.

### Version 1.4

- Compression improved by around 20%
- Cache Builder now informs the user if the 1,000 file limit has been exceeded once the file has been built.

### Version 1.3

- 2000/2004 compatibility option removed due to bug in the implementation which forced either Range Tables or Preset Focuses to be removed from Personalities in the cache.