### THE BENEFITS OF USING A PHYSICAL CUBE PLAYER

This fact sheet illustrates the benefits of using a physical CUBE player versus using a service that runs online in your browser, or as an app you install on your phone or computer.



### There is always playback equipment involved.

When you're playing music at your store, there is *always* equipment responsible for doing the playback, putting the audio signal into your amplifier and speakers. Either you're using a physical player device, like CUBE, or you're running software on a phone, tablet or computer. In any case, there is always some piece of equipment involved.

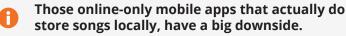


#### Streaming of music is not good for business.

When your music is being streamed over your internet connection, this can use as much as 100 times more bandwidth than a music solution which automatically stores the songs locally, able to use them again. Streaming can slow your network down, making other business functions (like processing of transactions) take longer! Also, when your internet has an outage, or is slow, your music will be interrupted.

# Many online-only systems that claim they do not stream, are stretching the truth!

Some online services claim that they store songs locally on your device, and therefore are not streaming. This is often stretching the truth very thinly! Especially when the service is playing the music from inside a web browser, the amount of space that it can use to store songs locally, is in fact very small: typically only enough for 5 to 10 songs. So either you are going to be listening to the same few songs over and over again; or the browser will secretly keep fetching every song every time that it is played: which is just a form of streaming.



Say that you're using an online service that really does store songs locally on your device. This means that you had to install software, like a special app, on your tablet, phone, PC or Mac.

Imagine you installed this onto your tablet. A good quality music program can easily use up 16GB of space. More, if you want to be able to change between programming locally, this can use up a significant portion of the storage you have available on your tablet or phone. You may not have space for much else!

Perhaps you might think that the program can be set up to use less space, or perhaps you can use an SD card to expand your tablet's storage. However: the less space it uses, the more you are back to having a streaming system. And the more frequently the software has to swop out songs on your tablet, the faster its storage memory will wear out. Yes, flash storage memory wears out, and your tablet will gradually get slower and slower because of this. If you've expanded its storage with the kinds of SD cards you can buy from computer stores, the SD card will wear out even faster than the tablet; and you'll have to keep buying replacement cards.

# **1** There is a hidden cost to using your tablet or phone device for business music playback.

We have already discussed above how business music services that actually store songs locally can wear out your tablet or phone's storage - and if they don't store songs locally, you have all the problems that come with streaming.

Whether its a streaming or a storing system, you will probably need to leave your tablet or phone connected to power, so the battery remains charged all the time. This will wear the battery out faster. Also, you will discover that other things you want to use your tablet or phone for, are suddenly much more difficult, because your phone or tablet will no longer truly be a mobile device. As a result, you will probably need to buy another phone or tablet faster than you would have done otherwise. As we said earlier: when you play business music, there is *always* equipment playing the music, and that equipment is never free!



#### There is a hidden cost to using a PC or Mac for business music playback.

Now you might think that you're OK because you've installed the playback software on your PC or Mac instead.

Did you know that most credit card companies do not like you having other software running on the same computer used for your point of sale system? They especially do not like other software that have to talk to the internet to install things - like downloading songs or installing updates - because those things might all be used to gain access to your computer from the outside; which could then result in the theft and compromise of personal payment data. This has proven to be such a big problem, that you can get into serious trouble with your payment processors if you do not respect this rule.

Therefore, you probably have another PC or Mac that you have to use for playing music. This means another computer that might get broken into from the outside, another computer that has to be maintained, managed and kept up to date with software patches, anti-virus, anti-malware and so forth. In other words, running your business music playback on a PC or Mac means that your IT services cost more.

### Unlike other playback devices, CUBE has been designed with security in mind.

Some music services use their own playback devices, similar to CUBE. However, did you know that many of these systems are not very secure? These days, anything that is connected to the internet, that has not been designed with security in mind, is at risk of being broken into remotely. For example, see these articles about simple internet webcams being broken into and used to launch attacks:

http://www.bbc.com/news/technology-37504719 http://www.bbc.com/news/technology-37540732

This even applies to playback devices based on Android: for example see this article about hacking Android devices by using malicious MP3 and MP4 files! http://motherboard.vice.com/ read/new-stagefright-bugs-leave-more-than-1-billion-android-users-vulnerable

If you have an insecure device on your network that is taken over, not only does this place your customers at risk through the theft of private data from your network; it can also mean substantial bandwidth usage because your internet connection can then be used to attack others. CUBE has been designed with lots of security built in. We worry about security, so that you don't have to!

## CUBE can do everything that any online-only music service can do.

You may find an online-only music service attractive, because you may feel you have a certain level of control over the music that you can play. CUBE can do everything that you can do from any online-only music service: including for example using your computer, phone or tablet to control or influence what is actually playing. Simply ask us how!

### SUMMARY

If you are using a phone, tablet, PC or Mac for your music playback, then you face many hidden costs - from extra bandwidth to faster replacements of your tablet, to additional IT expenses. If you add up all those hidden costs, do you really arrive at a system that is actually cheaper than a CUBE player? We don't think so: simply consider what it would cost you to have to replace your tablet every 12 to 18 months...

We designed the CUBE player so that it is easy and worry-free: and so that you can see all the costs up front. You can simply plug it in, without having to think or worry about IT costs, flash memory wear, bandwidth use or security. There are no hidden costs; everything is visible up front.

