

# Making a CD

by

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## 1. Introduction

Even with the rise of the 'download culture', there is still a market for a physical recorded product. CDs give higher quality than MP3 files, and are more acceptable to a generation uncomfortable with online entertainment.

And when you have your master stereo recording in digital data format, producing audio CDs for reference or sale is a straightforward process.

Of course, if you just want a copy for your reference, this can be produced on any PC or Mac with a CD/DVD writing drive.

However, if you want to go ahead and produce a 'proper' product that you can sell, there are other considerations. You will in practice need to deal with a duplication company that can produce a large number of CDs (typically from 50 upwards), complete with packaging and documentation. There are many such companies in the UK.

The process involves the following stages:

- Decide how many CDs you want to manufacture (say 50, 200 or 500+)
- Choose a Duplication company (based on reputation, cost etc.)
- Produce the artwork (in a format acceptable to your Duplicator)
- Get a master CD from your engineer (checked for quality, preferably with a spare)
- Apply for a Manufacture Licence (covers copyright - there are several tariffs)
- Instruct the Duplicator (some may work all-online)
- Check the resultant product (look for errors)
- Sell or otherwise distribute your CDs (the important part!)

Note that you or your organisation need to be prepared to deal with MCPS/PRS and PPL, in whose eyes you will be the 'Record Company', and will therefore be responsible for applying for and respecting relevant licences for the manufacturing and distribution of copyright material.

## 2. How Many CDs?

This is where you have to put your commercial hat on.

Consider the following factors:

CDs get much cheaper per unit as quantity increases.

Duplicators will use recordable CD-Rs for quantities up to 200 or so, and will get 'glass-mastered' CDs for quantities over 500. The latter manufacturing route carries a higher set-up fee. It is used by all mass-manufacturing record labels.

Recordable CD-Rs usually appear slightly coloured on the playing side instead of the 'silver mirror' finish on pressed CDs. Some customers may notice this and be looking for the 'professional' appearance of glass-mastered CDs.

Multi-coloured printing on the CD's label side will be more expensive than a single-colour.

The inlay (the bit that stays in the CD jewel case) and the booklet (the bit you take out and read) will cost more if all in colour, although the default is full colour for the inlay and front cover of the booklet, with single-colour inside the booklet. Most duplicators base their prices on a single open-out sheet for a booklet (4 pages), with more pages at extra cost.

It's always worth having the product shrink-wrapped in clear plastic film, as that prevents people opening the CD cases before they buy them. It adds very little to the cost of each unit, and can be particularly important if you're carting CDs around from gig to gig over several months. A marginally cheaper option is to have CDs in clear self-sealed envelopes, but these often look amateurish, and could be tampered with.

The Duplicator may be able to lay out artwork for you from a couple of digital photos and a track listing, but it's better to get their template (see the section on artwork below), and do it yourself. Many orchestras, bands etc. have someone - a player or a relative or friend - who will be only too happy to do this: it's an interesting activity in its own right!

Do some rough calculations to see how many CDs you might sell, based on the numbers of people in your ensemble and attending your concerts.

For example, each member of a 60-piece orchestra should be able to sell at least two copies to relatives and friends. Sale tables could shift a dozen or so CDs at each concert. So a minimum of 200 might be realistic as a starter. Ask your duplicator about repeat ordering - will there be a saving over the initial run?

### 3 Find a Duplicator

It is difficult to recommend an individual duplicator, as they come and go over the years. Competition keeps their prices low, and service efficient.

My recommendation is to Google 'CD duplication UK' or look in the classified ads section of Sound On Sound magazine. Also, ask other organisations who have recently made CDs for their recommendations.

Costs of duplication are fairly consistent across the patch, due to the high level of competition.

The key to a successful duplication exercise is making sure that you and the duplicator are communicating clearly, and that their and your requirements are properly understood and met.

This may involve your Engineer and Art Director talking separately with the Duplicator, since their technical terms may not make any sense to the ensemble's MD or Secretary who is nominally doing the deal with the Duplicator

Don't leave things till the last minute. If you are intending to sell a Christmas album, aim to have it ready to sell at least a couple of months beforehand. This means recording in Spring and editing in Summer, with manufacture in Autumn.

Summer can be a frustratingly unproductive time for a lot of organisations that are linked to educational establishments, as key personnel (Musical Director, Art Director etc.) may be teachers and disappear for several weeks at a time during the school holidays!

Important: Please be aware that all reputable Duplicators will insist on receiving their copy of your MCPS duplication licence (see below) before starting to duplicate CDs.

### 4 Produce the Artwork

Way before your potential customers have heard the music on your CD, they will have seen the artwork in the CD jewel case. So it's important for it to look attractive to your target audience as well as convey critical information about the mood of the album, the appearance and biographical details of the performers, and the nature of the music and its composers.

A commercial Duplicator will normally expect to see artwork delivered by email or direct upload, in a format compatible with one of the major illustration packages, or as a machine-independent PDF file (typically CMYK colour, to the PDF-X1a or a related standard). Each duplicator will furnish their own in-house templates for the various artwork elements (inlays, booklet, on-body label), and these should be complied with precisely. Photographic images need to have sufficient resolution, generally 300dpi minimum.

If all of this is confusing to you, it's a matter of finding someone in your organisation with experience and compatible computer tools to liaise with the Duplicator. There's a lot of jargon and loads of scope for messing-up. In particular, the Duplicator may use only Macs, while you may be using PCs - the two do not always mix...

As well as an attractive design, don't forget that there will be a lot of text on a CD, and that this should be proof-read by several people before committing to print: there's nothing worse than a spelling mistake, especially if it's someone's name!

The Duplicator should send you a proof print before committing to a full print run, and that is a final chance to catch any typos as well as ensuring that colours are being correctly rendered (especially if you have logos or other images that need to be of a consistent shade).

One trivial point is to ensure that the spine lettering runs the correct way - look at commercial CDs and copy the orientation, if it's not already indicated in the template from your Duplicator.

It's always possible that someone in your organisation is in the Printing trade, and can get inlays and booklets produced separately, but this puts another loop in the process and may just serve to confuse the Duplicator, so beware!

#### A Note on Product Codes

If you are distributing your CDs through a commercial distributor, website or shop, it helps to have a 11-digit Universal Product Code (UPC) or 13-digit European Article Number (EAN).

This is conventionally incorporated into the CD inlay artwork in the form of the familiar barcode, so that it can be scanned at point-of-sale without opening the shrink-wrapping. If this is not possible, pre-printed self-adhesive labels with the relevant barcode can be stuck to the outside of the shrink-wrap packaging.

Google 'EAN buy uk' to find a suitable supplier who will sell you the number(s) and barcode images for incorporation into your CD inlay. Be careful, as not all code vendors are genuine, and may produce non-unique codes.

## **5 Get a Master CD**

The Duplicator will require your master material in one form or another.

This will either be as an audio CD master, as an ISO image, or as one or more uncompressed audio files with an associated cuesheet file. Your Engineer should liaise with the Duplicator on this aspect, and be prepared to create backup copies of the master discs.

Note that the gap between tracks is an artistic decision and must be made with the artist or producer, assisted by the Engineer:

A complete silence is common in pop albums where each track is a stand-alone piece.

For music representing a continuous performance, such as a concert, it is often desirable to have no absolute silence between tracks.

The Engineer will ensure that track boundaries need to conform to Red Book Audio CD standards, to prevent clicks or glitches between contiguous tracks.

#### A note on International Standard Recording Codes (ISRC)

ISRCs are recognised alphanumeric codes that will identify individual recordings - typically at single-CD-track level. These are made up from a 5-digit alphanumeric prefix (the 'first registrant

code') identifying the nationality and identity of the record label or person who holds the rights in the recording, and 7 further digits assigned by the record label.

First registrant codes are allocated in the UK by Phonographic Performance Limited (PPL), who use ISRCs as a simple mechanism for their collection of 'needle-time' royalties from radio, TV and Internet broadcast stations and content producers.

The record label then assigns the first 2 digits as the year of release, followed by 5 digits allocated sequentially to individual recording releases - normally broken down by album and track.

## 6 Apply for a Manufacture Licence

If you record any piece of music which is still 'in copyright' (generally within 75 years of the death of the Composer), you will have to pay a 'mechanical royalty' - a percentage of the sale value of the CD - to the composer or the composer's estate.

This would be an organisational nightmare were it not for the Mechanical Copyright Protection Society (MCPS), who act as a single-point clearance agency for most composers.

Royalty is generally worked out as a percentage of the retail price of the CD, factored by the proportion of the CD duration that contains music whose copyright is represented by MCPS. This is not as complex as it sounds - here's an example:

CD runs 1 hour, with two pieces: Piece 1 is 45 mins long by a living composer (it is 'in copyright' and represented by MCPS). Piece 2 is 15 mins long and is mediaeval plainsong (out of copyright and in the Public Domain).

You plan to sell the CD for £10. You pay MCPS 6.5% of £7.50 (three-quarters of the CD by duration), so that is 49p per CD.

There is also a special Limited Manufacture Licence for low-volume manufacture of CDs that will be sold by the organisation directly and not sold through commercial distributors. You will have to do the maths to figure out if this is a more cost-effective route for your organisation.

This can all be done on-line via the MCPS website. When you have paid, you and your Duplicator will be sent separate copies of a Manufacture Licence.

Some points to note:

The Duplicator will not start to duplicate without his copy of the Manufacture Licence.

You pay mechanical royalties up-front - so factor this into your production costs.

Some 'in-copyright' compositions may not be represented by MCPS, so you will not be charged by MCPS for these, but you must make your own arrangement with the composer.

An out-of-copyright composition may have been arranged by another person, who has an active copyright interest - the Licence application form includes an 'Arranger' field.

Even if you know MCPS does not hold any interest (you may have written the music yourself), you should still apply for a Licence; the Duplicator will want to see that evidence.

## 7 Checklist for Instructing the Duplicator

By the time you have decided which Duplicator to engage, you should have:

- Produced a final version of your CD (edited, properly levelled, in the right playing order and with correct inter-track spacing and embedded ISRCs), in hardware or electronic form.
- Generated a set of artwork masters as application files or PDFs for the booklet, inlay and on-body printing, with a valid UPC/EAN barcode.
- Understood the quality of CD manufacture, printing and packaging to be expected.
- Understood the costs of the initial and potential subsequent manufacture runs, and of delivery charges.
- Understood the timescale involved in supplying master material and receiving the goods\*.
- Prepared a list of contact telephone numbers for yourself and the Engineer and Art Director.
- Paid your MCPS royalties and ensured that they have the correct address for the Duplication facility, so that their copy of the duplication Licence will arrive as soon as possible.

\* This is critical if you are planning an album release event (premiere concert, launch party etc.)

## 8 Sell or Distribute your CDs

It's important not to 'drop the ball' when your CD is finally manufactured, even if everybody in the band is probably heartily sick of the whole process by that time!

Far too many organisations make a CD, have a few hundred copies manufactured, and then carry them around to concerts for several years without making any real attempt to shift them.

If you do it right, even selling only 60% of your production run, you should be able to triple your manufacture investment (assuming your ensemble played for free).

There is nothing sadder than an artist hawking around ten-year-old recordings in a battered cardboard box.

Start things off with a bang - hold an event to celebrate the CD's release. Get as many friends and family as possible enthusiastic to sell them. You could even offer a small discount for bulk - remember you are tripling your investment, so you can offer a little incentive. Timing is all - why not push them as potential Christmas presents and time the release date accordingly (it's also the start of the winter concert season).

Make use of the promotional allowance that MCPS gives - a small percentage of your run will be exempted from royalties on the assumption that they will be given away to stimulate further sales.

Send copies to all the local (and national) radio stations you can think of - and be prepared to do an interview as part of the promotion.

Sell them at as many concerts / gigs as you can - not just where the ensemble that did the recording is playing, but where any even loosely associated bands play or organisations meet.

Going abroad? Sell them there - Euro for Pound!

Remember that you owe it to the musicians, technicians, artists and composers that were involved in creating your CD to make it as popular and successful as possible!

Alan Hames - April 2017