

VINYLYL

Vinyl Manufacturing Process, Colors and Sample Products

 **UNIFIEDMFG2023**

www.unifiedmanufacturing.com

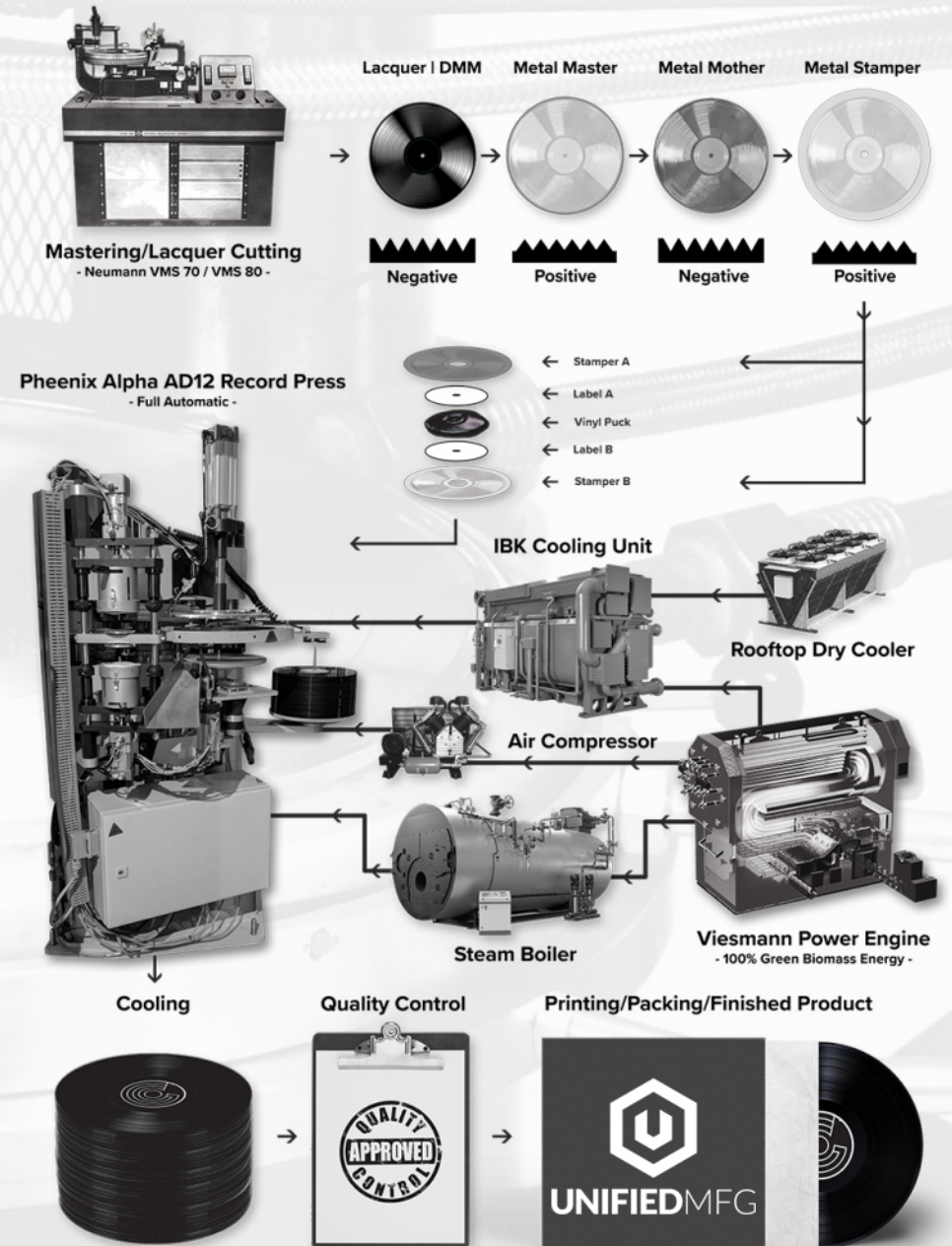
Vinyl Manufacturing Process

Brand new green innovative technology make our Records as perfect as can be where quality meets perfection, with a minimum of waste..

We love music and we love Records but we also love our planet so why not combining all to waste as minimum as possible with a maximum of pleasure... Making Vinyl is a very complex craftsmanship where steam, cooling and air compression are components which have to be steady and have to be used with utter care to deliver your caring crafted music on a maximum level on Vinyl. Unified Manufacturing is pressing with brand new equipment on Pheenix (Toolex) Alpha AD12 pressing machines, the legendary 'Rolls Royce' from well-made Swedish origin, which contains a new level of diagnostic equipment to guarantee you a maximum result. The granulate we use is made on a calcium sink base which is the most eco-friendly in today's market. Our steam boiler and cooling equipment is also brand new from excellent, efficient German quality. All the infrastructure we use is high-end and is being maintained with utter care to guarantee a premium quality end-product to push it even further..

Unified Manufacturing is the first and only vinyl pressing plant that is completely build upon green power and 100% green bio-mass energy! Our sustainable energy supply to serve the steam, cooling and pressing is generated by two Viessmann boilers and is running on pruning waste from nearby. Our factory is almost 100% circular, where we are striving to have minimum waste, with recycled products, so we can be very efficient with our energy and materials, for a maximum result, a better price and a better planet! We ship our products with a carbon neutral courier with heavy duty ECO-friendly shipping boxes made completely out of FSC certified materials.

We are very confident about our quality of our records where the FSC certified printing, cutting and mastering is also of outstanding quality and we think is hard to beat!



FREE

Vinyl Records Details

Analog vs Digital

Despite what many vinyl enthusiasts proclaim, very few untrained ears can discern the difference between analog and digital sound, or the music produced by a record as opposed to the music produced by a CD or some other high-quality digital style. The largest differences in sound quality are attributed to the physical quality of the record player, amplifier, speaker, and sometimes the vinyl disk itself.

Unless there is an issue with the device itself—scratches, grease, dirt, deformities—there is little to no recognizable difference between analog and digital media. However, there is something to be said for the aesthetics of the listening device and the intense comfort and nostalgia a record player has that a computer or CD player could never replicate.

Record Speeds

The science behind record sizes and speeds is fairly simple to understand. All records are measured and sorted by their RPM, which stands for revolutions per minute. This metric refers to how many times the platter, and therefore the record, will spin completely in one minute.

There are only three speeds in which a vinyl record can be produced:

- 33 1/3 RPM
- 45 RPM
- 78 RPM

33 1/3 RPM

After World War II, vinyl discs started gaining popularity and Columbia Records' 33 RPM records (better known as '33s') hit the scene. These recordings are often called 'LPs' or 'LP records,' short for 'long play,' as the slower playback speed and narrow grooves allowed 33 rpm records to store more audio than older varieties. 7-inch discs could hold two to three songs, while the 12-inch breed fits four to five.

45 RPM

RCA Victor released its 45 RPM record format around 1950, roughly the same time that 33s were unleashed. Despite using the same microgroove technology, 45s were often called 'singles' because each side normally held just one song. Since these vinyl records often stored popular radio hits, they also found their way into jukeboxes back in the day.

78 RPM

Right before 78 RPM records – '78s' – were standardized, most discs were already recorded and played back at speeds from 70 to 80 RPM. Most 78s were actually made out of minerals and cotton fibers held together with a resin called shellac. Shellac records are far less durable than the younger vinyl generation, so many surviving 78s tend to be rare and their playback quality is greatly diminished over time.

Vinyl Records Details

Record Sizes

Chances are, the records you'd like to listen to are full-size 12-inch records, spinning at 33 1/3 RPM, or 7-inch singles, spinning at 45 RPM. Often, EPs and maxi-singles are produced on 12-inch disks that also rotate at 45 RPM. Make sure you look for the revolution per minute designation on your record before dropping it on your turntable's platter. If you don't match your record player's setting to the rotation needs of the disk, you could distort the record to the point where it would be impossible to play it again.

Standard Sizes

Standard Sizes

Vinyl record sizes differ based on how much music is stored on the surface of the disk. Records come in three standard sizes: 7-inch, 10-inch, and 12-inch. At a certain point, records can become cramped with grooves and have to expand in size to accommodate the extra music play while maintaining the quality of the audio. The grooves are simply too narrow to fit all the detail of multiple sound recordings if this extra area is not accounted for.

7 INCH

The smallest record size is a standard 7-inch single. It was designed to be less expensive than its musical counterparts. However, due to its smaller size, it holds much less music than a full-length album. Many 7-inch singles that were converted to vinyl from albums designed for CDs feature exclusive cuts of songs that are normally extended to the five-minute playing time mark that a 7-inch disk typically allows for.

10 INCH

The most uncommon revolution per minute classification is 78 RPM, which is generally reserved for 10-inch records and most records pressed before the 1950s. You don't necessarily have to worry about this rare speed unless you are an avid vinyl record collector or you've discovered a few boxes worth of disks in your grandparents' attic that you're dying to listen to.

12 INCH

The largest record size is a 12-inch album. Each side can generally store up to 22 minutes of music. Vinyl records have reached a limitation in competition with modern media. CDs generally store around 60 minutes of music, whereas an album made for vinyl is capped at around 45 minutes if it takes advantage of both sides of the disk.

Vinyl Records Details

Record Weight

The LP record ranges in weight from approximately 80 grams (Dynaflex 1969) to 200 grams. Most pressings weigh from 100 to 130 grams. One reason the heavier and thicker records sound better is the vinyl will not vibrate to the degree as the light weight records. The 180 and 200 gram records are the choice for less vibration, and can render better sound. The rule is simple, the more damping applied to the LP the better it sounds. This result can be obtained from its own vinyl mass or external. To achieve the best external damping, the record vinyl needs to come in total contact with a vibration damping material (mat). In the past a few record mats have used small rings or points to support the record in a few places. This flies in the face of common logic.

Holding the record to a damping material is the job of weights and clamps. An LP record's label is thicker than the vinyl playing surface. The label varies from approximately 20 to 60 thousandths of an inch thicker than the vinyl. A record mat will have a depression in the center to allow the record vinyl to lay flat, otherwise the label would be the only contact point. If a center weight is used that is very heavy, let's say 2 lb. the lighter records will lift from the mat. This happens because the mat depression edge will act as fulcrum. This information tells us we should use a center weight tuned for the record thickness and weight. However this is impractical. Here is the solution: Use a center weight that weighs 8-12 oz. This weight will work with all but the lighter records. The alternative to a weight is the screw down clamp.

These clamps have pluses and minuses. The plus is down force on the record can be controlled. The minus is if not designed properly (unfortunately most are not) spindle energy is coupled into the record. It takes very little intrusion of external energy to cloud the mechanical output of the stylus. (I wrote a paper on proper screw down clamp design about 25 years ago.)

The best answer is the periphery clamping weight along with a center weight. The weight balance between these two should be calculated for even and optimal down force on the entire vinyl area.

As the stylus traces the groove, energy is radiated in all directions, as it reaches the periphery of the record it then reflected back into the groove area. The periphery clamp will help damp this edge energy before it is reflected into the groove area. The center weight also acts as a damper. The first production periphery clamp was used on the Merrill Heirloom Turntable 1980. Kenwood also introduced theirs about the same time. Other manufacturers are now discovering the benefits of this type of clamp system.

Vinyl Sizes



7 inch

The most common form of the vinyl single is the "45" or "7-inch". The names are derived from its play speed, 45 rpm, and the standard diameter, 7 inches.



10 inch

10 inch Records (same size as classic 78's) can be cut at 45 RPM or 33 1/3 RPM. When cut at 33 1/3 you can hold approximately 12:00 minutes per side. When cut at 45 you can hold approximately 9:00 minutes per side.



12 inch

The 12 inch single is a type of gramophone record that has wider groove spacing and shorter playing time compared to LPs. Each side of a 12-inch LP could play for about 22 minutes.

Colored Vinyl Records



If you have spent any time around records, either 45 RPM singles or albums, you might have encountered the term “colored vinyl records.” You might think that’s a strange question; after all, all records are colored vinyl records, aren’t they? And aren’t they all black?

Historically, most records are black, probably because black vinyl is relatively inexpensive compared to other colors of vinyl and possibly because the dark colors might help obscure any impurities that might be in the compound.

This isn’t a new thing; since the introduction of the commercial cylinder record in 1889, most records of any kind have been made from materials that were either naturally black or which were colored during the manufacturing process to make them appear black. The reasons for this had to do with both cost and with quality control. When you use different types of materials and different sources, you can make sure that all of your finished product looks the same by adding substances to make them look black.

Despite this, over the years, a few recordings, dating to the cylinder era, have been manufactured as colored vinyl records, with “colored vinyl” generally defined as some color other than black. Colored vinyl records have long been popular with collectors and they usually command a premium price on the collector market. In this article, we’ll cover the history of colored vinyl records and show examples of some of the more interesting ones we’ve seen over the years.

Transparent Colored Vinyl



UNIFIED MANUFACTURING VINYL COLORS

All our Records are produced from Green/ECO-Friendly calcium sink based Vinyl granulate.

COLOR PMS



BEIGE COLOR
PMS 7501C



BLEU PASTEL
COLOR PMS 291C



COLOR PMS 032C



COLOR PMS 108C



COLOR PMS 299C



COLOR PMS 368C



COLOR PMS 702C



COLOR PMS 1555C



MARRON COLOR
PMS 4625C



ROSE JAUNE CORAIL
PMS 209C



SILVER COLOR
PMS 877C



VIOLET COLOR
PMS XXX

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COLOR OPAQUE STANDARD



BLANC OP



BLEU OP



BLEU TURQUOISE OP



IVOIRE OPAQUE



JAUNE OPAQUE PMS7548



MARRON CHOCOLAT



ORANGE OPAQUE



ROSE OPAQUE



ROSE PECHE OPAQUE



ROUGE OP



ROUGE ROUILLE OP



VERT OLIVE



VERT OPAQUE



VIOLET OPAQUE

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STANDARD TRANSPARENT COLOR



BLEU FONCE
TRANSPARENT



BLEU TURQUOISE
TRANSPARENT



JAUNE TRANSPARENT



NATUREL



ORANGE TRANSPARENT



ROUGE TRANSPARENT



TRANSPARENT



VERT CLAIR
TRANSPARENT



VERT FONCE
TRANSPARENT

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SPECIAL COLOR



GOLD



GRIS SILVER OP



ORANGE FLUO



PHOSPHORESCENT
JOUR



PHOSPHORESCENT NUIT



ROSE FLUO



VERT FLUO

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CRYSTAL



CRYSTAL AMBER



CRYSTAL APPLE
GREEN



CRYSTAL CLEAR



CRYSTAL CURACAO



CRYSTAL FUCHSIA



CRYSTAL GOLDEN
YELLOW



CRYSTAL PURPLE



CRYSTAL ROSE

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MARBLE



MARBLE 1



MARBLE 2



MARBLE 3



MARBLE 4



MARBLE 5



MARBLE 6



MARBLE 7



MARBLE 8



MARBLE 9



MARBLE 10



MARBLE 11



MARBLE 12



MARBLE 13



MARBLE 14



MARBLE 15



MARBLE 16



MARBLE 17



MARBLE 18

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MARBLE



MARBLE 19



MARBLE 20



MARBLE 21



MARBLE 22



MARBLE 23



MARBLE 24



MARBLE 25



MARBLE 26

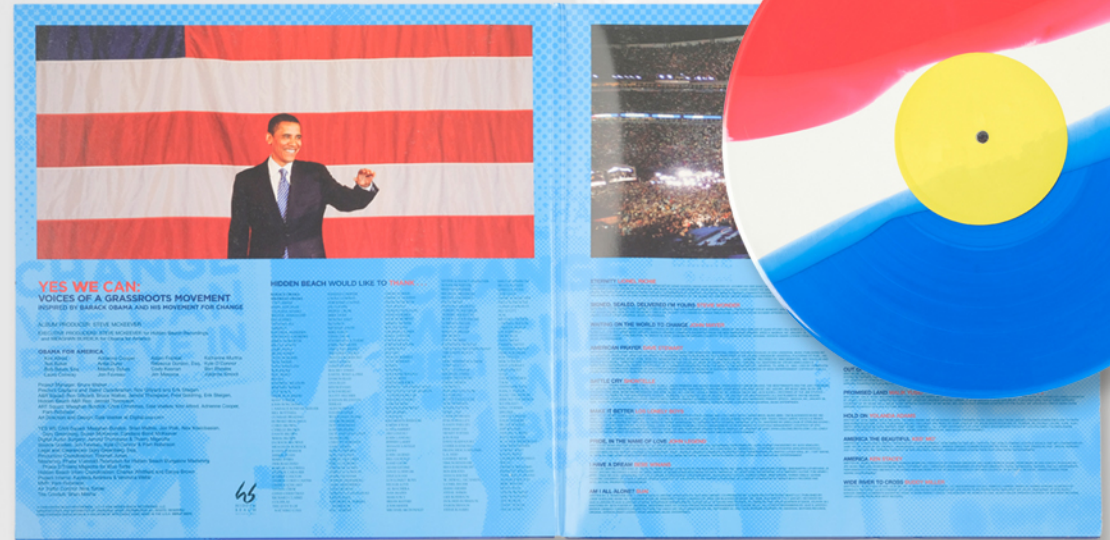
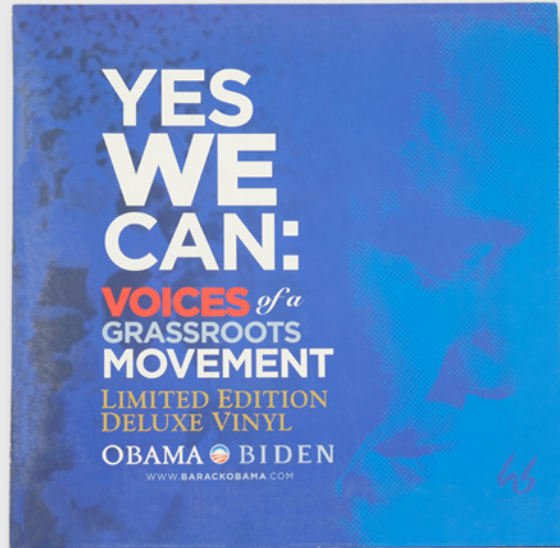


MARBLE 27

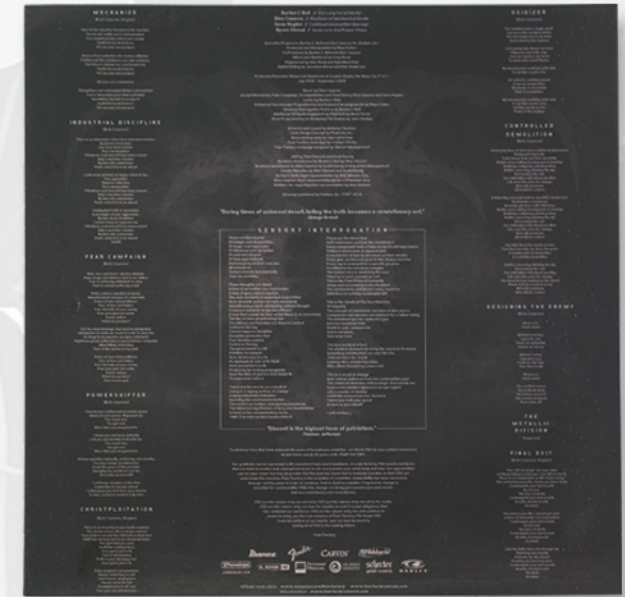


MARBLE 28

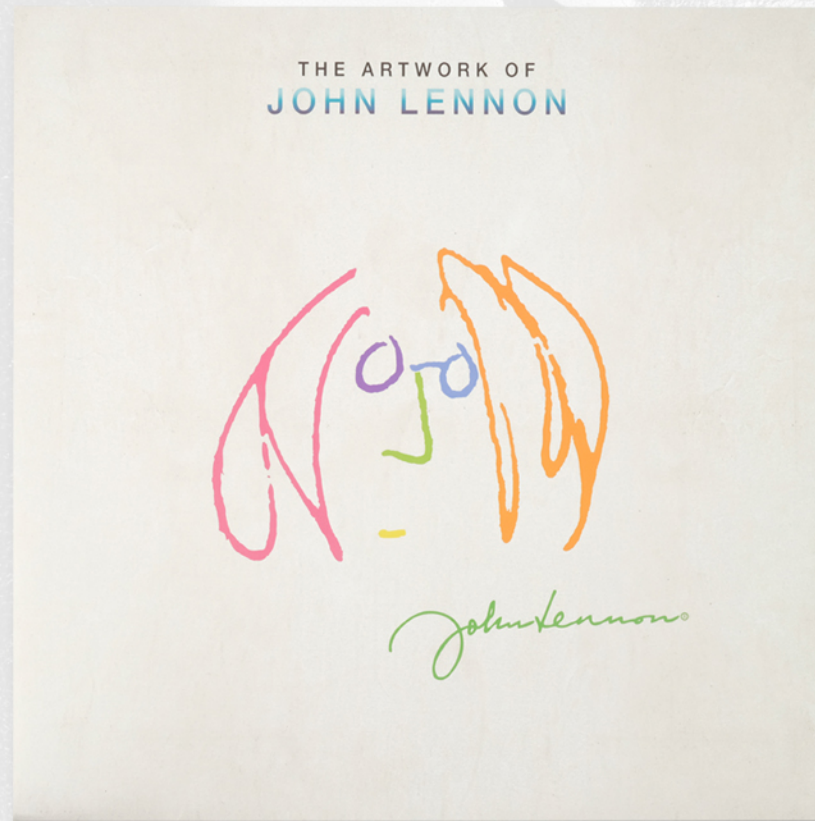
OBAMA WHITE HOUSE - YES WE CAN: CHANGE IS NOW



FEAR FACTORY - MECHANIZE



JOHN LENNON - THE ARTWORK OF JOHN LENNON



TWIN FORKS AND DAN LAYUS BY FOLSOM



Black 12 inch Vinyl Records



Colored 12 inch Vinyl Records



Placing an Order

How can I place an order?

Go to our website, www.unifiedmanufacturing.com and click on **INSTANT QUOTE**.

Step 1

Choose the category of your order to VINYL and from there you can choose the packaging format, size, color and other details. You can also choose if you need to have the finished product with a polywrap and to have a UPC barcode. Choosing the desired production time is also needed so we can gauge the production of your vinyl order.

Step 2

Unified Manufacturing would love to help you with regard to your artwork. If everything is ready template-wise or if you need help assembling it on our templates, we can assist you with this. If your artwork is ready, you can upload or drag and drop your files on the boxes provided.

Step 3

It is important to fill out the space provided like catalog number and album title in this next step. You also need to choose whether its a compilation album or not.

Step 4

This next step is crucial in order for us to start manufacturing your vinyl. You need to fill up the **IPR FORM** so we will have all the details. A **SUBMISSION FORM** will also be sent to you as soon as you have confirmed your order. You also need to put your signature on the box provided. Don't worry. You just need to draw your signature using your mouse or your finger if you are using your mobile device.

Placing an Order

How can I place an order?

Step 5

After filling up the needed details for your vinyl order, it's time to put your shipping information. Please take note that the address you provide will be used to ship your Test Pressings (in case you ordered one), as well as your whole order when we have finished manufacturing them. You can also opt to have your ordered picked up in our office in Los Angeles if you want to save on shipping charges.

Step 6

Now that we are ready to receive your order, it's time for the payment. In this step, you can apply a discount coupon (in case you have one) and the total price of your order will show on the screen. You can then add your credit card details on the spaces provided. Our website uses the most safest methods to store your credit card information and we also value your privacy. Rest assured you are in good hands with Unified Manufacturing.

Once everything is set up, click on **START PROJECT** and we will then start to process your order.

How can I request for a quote?

No need to worry on getting a quote. As you type in the details for your order in the **INSTANT QUOTE** page, a window on the lower right hand side of the page will show the total calculation.

We understand that you will be very busy thinking about the expenses on your project so we have added a feature where you can save your project or quote in case you want to do a further review. You just need to provide your name, email address and phone number. We love doing business with you and we understand your situation. We will do everything we can to make your Unified Manufacturing order process a breeze.

Intellectual Property Rights Form (IPR)



UNIFIEDMFG
INTELLECTUAL PROPERTY RIGHTS FORM

**Label Name/
Releasing Body:**

Artist/Band Name:

Title of Album:

Catalogue Number:

How will the product be distributed?

Countries where distributed:

Is this project a compilation? YES NO

Are you the Intellectual Property Rights Owner (IPR) for all contents?

"I declare that all information provided herein is true and that all disc contents indicated as being "licensed" are properly licensed for replication under the terms of an effective agreement with the original rights holder(s). I further declare that I am the intellectual property rights owner for all contents indicated as being "owned" and I authorize its replication. I understand that in accordance with the Anti-Piracy Compliance Program procedures and standards of the International Recording Media Association (www.recordingmedia.org) the replicator reserves the right to refuse the processing of any order not strictly complying with the Anti-Piracy Compliance Program guidelines or such other guidelines adopted by the replicator."

YES NO

If the answer is no, please attach proof of all licensed material.

Print Name and Title:

Date:

Signature:




- Signature must be a representative of the party soliciting the order, and must be completed by an individual or organization ordering replication, not by a broker or intermediary
- Letters of indemnity are not adequate
- Licensed content requires proof of licensing for replication from the intellectual property rights owner



UNIFIEDMFG

5029-B West Jefferson Blvd
Los Angeles, CA 90016 USA

Submission Form



UNIFIED MANUFACTURING: SUBMISSION SHEET

LABEL NAME:		DATE SUBMITTED:	
BAND/ARTIST NAME:		SALES REP:	
TITLE OF ALBUM:		CONTACT NAME:	
CATALOGUE NUMBER:		EMAIL ADDRESS:	
PO NUMBER:		PHONE NUMBER:	
IN-HAND REQUIRED DATE:			

BILLING ADDRESS - Required

CONTACT NAME:	
STREET & NUMBER:	
CITY & STATE/PROVINCE:	
POSTAL/ZIP CODE:	
PHONE NUMBER:	

TEST PRESS SHIPPING ADDRESS, IF DIFFERENT FROM BILLING ADDRESS

CONTACT NAME:	
STREET & NUMBER:	
CITY & STATE/PROVINCE:	
POSTAL/ZIP CODE:	
PHONE NUMBER:	

FINAL PRODUCT SHIPPING ADDRESS, IF DIFFERENT FROM TEST SHIPPING ADDRESS

CONTACT NAME:	
STREET & NUMBER:	
CITY & STATE/PROVINCE:	
POSTAL/ZIP CODE:	
PHONE NUMBER:	

PROJECT DETAILS:

RPM (33 OR 45):	
SIDE A TRACKS (EX. 1-5):	
SIDE B TRACKS (EX. 6-10):	
SIDE C TRACKS:	
SIDE D TRACKS:	
SPECIAL ENGRAVING (A):	
SPECIAL ENGRAVING (B):	

GENRE:

LOUD CUT or SAFE CUT*	

* choose from drop down menu in above cell

TRACK LISTING:

TRACK NUMBER	TRACK NAME	LENGTH
SIDE A:		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
SIDE B:		
TRACK NUMBER	TRACK NAME	LENGTH
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
SIDE C:		
TRACK NUMBER	TRACK NAME	LENGTH
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
SIDE D:		
TRACK NUMBER	TRACK NAME	LENGTH
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		