

Intro

0:00

hello everyone welcome back to Ana dialogue the dialogue on analog music reproduction today we have a special

0:08

episode dedicating to the myths and truths of mastering mainly analog but

0:16

not only also digital and in order to do that we need a reference we need an

0:22

authority and I think we have the right one let's see who's here with us there

0:28

you are hello k Kevin Gray from coherent audio thank you so much for being us with us here today

0:35

my pleasure okay so I think we just jump in

0:41

immediately with the with the different questions since we uh I created so many might as well use our time okay I think

Mastering definition

0:49

it's useful immediately to make a distinction between the concept the meaning of mastering between well you

0:56

tell us where is the the problem sometimes people mix up the concepts I

1:02

totally understand it's changed over the years you know when I got into the business um vinyl rain Supreme um there

1:09

was a cassette but you know that was the only competition and so mastering meant you know putting on the tape listening

1:15

to it making any changes you think necessary taking your notes and then transferring that to lacquer that was

1:21

mastering um it wasn't until digital came along that that all kind of changed

1:26

because um in the early days of of CD when vinyl was still happening uh a lot

1:32

of the times the mastering was done for the CD and then the vinyl was just a

1:38

straight transfer from the CD so you know they'd say Mastered by Joe Blow and

1:44

and know cut by Kevin gray you know or whatever um and I think to this day there's still a bit of confusion over

1:51

that just on discogs last week I saw a title that that I had mastered and it said Mastered by the mastering lab cut

1:58

by Kevin gray well this was in 1975 and I I can only assume that what happened was that the jackets were printed saying

2:04

the mastering lab before it went to me so because mastering have nothing to do with

2:10

it insane and also all the concept of remastering that uh I remember when I

2:17

was a kid it was written all over the place in order to push those the new those new CDs well clearly there was a

2:24

remastering from from the tapes right and you do that as well right you also

2:29

do mastering for for digital for for CDs well actually I don't really um I make a

2:36

transfer to digital either DSD for shcd or highres um for streaming and download

2:44

um at the same time that I cut the locker and that's what's used in that process but I don't actually create um

2:51

okay the finished digital Master perfect okay um uh we hear a lot talking about Half-speed mastering

2:59

half speed speed mastering especially in in the last years there are so many releases with this nice little logo hype

3:05

stickers and things like that c can you tell us your opinion on this I there's

3:11

actually something online I remember where you answered this question but I think it's it's

3:18

interesting yeah there was there was a lot of criticism about that I um I'm not

3:23

a fan of hasped mastering um I think it's more of a detriment than a positive um the problem is that you're

3:31

you're cutting all the bass in half um so you know you're losing an octave on the bottom and on the top end a lot of

3:37

corrective measures have to be taken in cutting to correct for things like vocal sibilance or really excessive symbols

3:43

and that sort of thing and none of the devices that control that work with a

3:49

half-speed signal because it's all half the frequency you know um you know so what would be an 8K symbol is now a 4K

3:55

symbol and it won't respond to it now that can be corrected digitally so I have gone on record as saying you know

4:01

if you're going to cut half speed it almost has to be from digital for it to really come to come out decent at all in

4:07

my opinion I used to hear vocal sibilance and stuff on on the halves speeded Masters and it drove me up the

4:14

wall well that's very interesting for example I I did not know this that there are these problems and actually I agree

4:22

I don't like that much the releases and I also did a video where I compared older halves speeded Masters which were

4:29

were a little little better but I really don't see the positive aspect of this except for maybe marketing I believe I

4:35

mean that's why we we find so many it's marketing hyp totally is yeah let me just explain really

4:42

quickly the way that whole thing got started well before there was enough amplifier power you know because it

4:47

takes one quarter of the amplifier power it's an inverse Square law thing so you'd think it would be half but it's

4:52

actually a quarter which can be very helpful for cutting certain things but the problem isn't as much in cutting as

4:58

it is in playback and so you can cut stuff that you can't play back uh so in

5:04

in uh in the mid 70s I guess 74 I don't know somewhere around there um they were

5:11

doing the the discrete quad mastering which put a 30 kerz subcarrier on the

5:17

disc which was like an FM demodulator signal that allowed you to take stereo

5:23

and create it turn it into a quad and the problem was that didn't last it didn't it didn't continue and so JVC

5:31

cutting CER was left with a half speed mastering system and nothing to cut half speed and that was when uh Stan Ricker

5:37

convinced Brad Miller to start mobile Fidelity and the rest is history yeah interesting thank Direct metal mastering

5:44

you well speaking about uh types of mastering uh I was also thinking about

5:51

something also I covered but clearly it with people who really are inside

5:56

this type of Industry know what we're talking about we only have have ideas that's why I wanted to do this this

6:02

episode uh I was talking about DMM direct metal mastering that's mainly

6:07

used from what I understand at least mainly in Europe is that correct or are there some facilities in America that

6:13

use it today the only people in the United States that have DMM are the scientologists they're doing their own

6:20

oh things using DMM uh all of the systems that were set up for doing half

6:26

speed or for excuse me for doing DMM and the us got converted back over to cutting for lacquer so yeah gz I think

6:33

in the Czech Republic is probably the main one doing DMM now what do you think about not a big

6:40

fan technique not a big fan well it has a lot of limitations too um the groove

6:46

can't be as deep um as it is on uh on lacquer mastering you know for for a

6:51

record and so um it generally requires panning the sides in um to keep it from

6:57

getting too deep uh generally requires U an extreme low frequency

7:02

rolloff um and and there just other problems with it um I can usually hear

7:08

it on a on a recording to me it has if you'll forgive the expression sort of a digital sound um interesting true I I

7:18

do think it has advantages I mean you don't get any pre-echo because that's caused by you know highly modulated

7:24

Groove next to a silent Groove you know taking on the shape of the modulated groove which doesn't have happen in

7:29

metal mastering so there are certain advantages to it but um I think the advantages are outweighed

7:37

by the disadvantages probably and they're probably no no well I mean there is a

7:45

reason why others aren't doing it I would suppose so maybe some people some

7:50

labels are using it because they are the only ones or at least among the few doing that maybe I don't know I mean

7:55

there are excellent stuff like for example stockfish but I do sense what

8:01

you're what you're talking about sometimes so great okay so let's try to

Signal chain

8:07

dive in a little bit more in the technical part even though I want more if possible a highlight of the

8:13

processing of the signal meaning from playback okay let's say tape all the way

8:19

to the cutting head very interesting chain

8:26

there okay do you do well I'm not quite sure where to start

8:31

uh okay so so the tape gets put on the playback machine it runs through the console and you adjust levels and EQ if

8:40

it needs it um I'm I'm quick to say don't mess with it you know if it sounds great leave it alone you know but if it

8:47

needs some help then we try to give it some help um now then then that signal

8:52

is transferred to the to the cutting electronics and and then to The Cutting head on the lathe um I think maybe what

8:59

you're asking you had mentioned something about Raa and and some of that yeah well I

9:05

mean that all happens sort of automatically in the disc cutting

9:10

Electronics um you know that that isn't done by me in the mastering so to speak

9:16

I mean it happens automatically going through the cutting

9:22

electron so no I'm very fascinating no no don't worry

Low frequencies cutting

9:29

uh I'm very fascinating from uh the low frequencies because this is a huge debate among audio files among in forums

9:37

and things like that so is there a limitation of the lower register is it

9:43

cut in mono is the the raaa curve enough to

9:49

compensate illuminate us oh I see what you're asking I see what you're asking yeah um yeah I think the Raa curve was

9:57

was chosen very wisely you always doing something like that is a compromise you

10:03

know um but it allows you to get record stuff on the record and have it come

10:08

back you know relatively quiet you know if you didn't have the high frequency boost you know you'd be in the noise

10:14

floor and if you didn't roll off the base you know you'd have five or 10 minutes on the side instead of 15 or 20

10:20

so um so that's all done intentionally and I think it was a good choice uh they

10:26

they they you know had several curves prior to the Raa and they were experimenting with different things and Raa is what got settled on worldwide and

10:33

and I think it's a good compromise um now as far as limitations yes there are

10:40

limitations go ahead no no there are limitations delay

10:47

unfor yeah I I I see it hear it um but

10:52

the problem the problems are all at very low frequencies I mean below 20 Cycles

10:58

um you can get 20 Cycles on the record um if it's real percussive stuff that

11:04

can be a problem in terms of its skipping um I can get it on the record you might not be able to play it back um

11:11

so but but I I I throw out this example when people ask me that I don't know if you've heard the um mastering of uh

11:19

Blade Runner that I did for audio Fidelity the soundtrack I hav it from the movie U that has 25 cycle base on it

11:27

I'm sorry the new one yeah the one the one that I did uh it was quite a few years ago actually it

11:33

was maybe 2012 13 14 I somewhere in there I think

11:39

but uh that's got really low base on it and sometimes at fairly High amplitude although it's not like drum beat Bas

11:47

it's more like steady you know synthesizer kind of

11:52

Base cool obviously I'm purchasing purchasing it immediately after this

11:58

session but is it true that that um that you have to like as a compromise U cut in

12:06

mono sometimes still today or or that's not happening anymore okay um are you

12:14

talking about using like a low frequency crossover that combines the channels to Mono I I often do that but I always keep

12:20

it below 70 Cycles so um you know it's 60b proactive so there's not a whole lot

12:26

of combined happening um and it's it's more um to keep it so that it'll play

12:33

you know on on less than audio file systems um I don't really filter the

12:39

base a lot of people did that back in the day and uh yeah and and I've heard

12:44

stuff that's been been crossed over all the way up to like 700 Cycles which is the highest position on most of them and

12:51

I don't see any need to ever do that okay that's good can answer the question

12:56

we we can hear that actually I think but you never know it's we're we're also asking questions in general not just

13:03

your work obviously mainly focused on your work but you have experience and

13:08

you have been in contact with people so you know how things have have been doing in the past and been done in the

13:14

past and doing now um they well actually I have the same question for the higher High frequencies cutting

13:20

frequencies is there a rolloff today are we cutting a lot of stuff or not or not

13:25

that much in the end there's yeah yeah um yeah I mean my system goes

13:34

up to 100 kHz the the the audio about 175 KHz actually the the audio chain now

13:41

that doesn't mean that the cutterhead responds up there the cutterhead is pretty flat up to 20 kHz and then rolls off after that um but you do have to

13:51

impose some kind of um it's it's it's sort of dynamic filtering for things

13:58

like vocal sibilant and excessive and I mean excessive sibilants the kind of stuff

14:03

that you mostly find on on rap and disco music not so much pop music or or

14:08

classical um and it depends from program to program what you have to do I mean you

14:14

can look at on the disc cutting Electronics there are meters that indicate how much current is being drawn

14:20

uh by the cutterhead you know from the power amplifiers yeah and you can tell when that gets too high it's not going

14:27

to play back properly so it's necessary to high frequency limit to keep that in

14:33

bounds do you think that this let's say round uh more Supple more euphonic upper

14:42

frequencies help uh bring people closer to vinyl is it making more easier to

14:49

listen what is your take on that uh not quite sure how to answer that I I mean

14:56

yes I I I think that but I'm not sure that it's because of anything that I'm

15:02

imposing I I I don't know quite how to explain it I mean I explained when I gave a talk at expan that there is a

15:09

certain artifact to vinyl um the audio files don't want to hear that they want

15:14

to think that it's perfect in digitals all full of problems well they both have their own you know pros and cons um but

15:22

yeah I I I think what most people like about vinyl is the warmth of it and some

15:28

of that some of that is sort of an artifact of of the whole process don't know how else to put it

15:36

but I love vyl that's that's what I listen to at home when I'm listening seriously oh that's interesting thank

15:42

you for sharing that oh yeah I only use CDs for like playing background music at

15:49

parties okay that's clear now no no I understand but well do you

15:55

do you know if this is done also in digital if rolloff or cutting some

16:01

frequencies here and there and for creating the digital Masters I'm sure it is but I can't

16:07

really answer that I mean you know again when you get into rap and dance music there's so much excessive high-end on

16:13

that I'm I'm sure that in mastering other people are pulling that down a little bit from the way it's originally

16:19

mixed okay but just guessing let's pass to another topic

33RPM vs 45RPM

16:27

which is also High debated the 33 RPM versus for 45 RPM which clearly brings

16:36

some uh benefits this is undoubtable but I don't know can you elaborate a little

16:41

bit on that what's what's your what's your take also on this sure um 45 RPM

16:47

okay problems in playback are all due to the curvature of the groove and that

16:53

means the higher the frequency the closer together The Wiggles are and the higher the amplitude

16:59

the more drastic the curves are so if you can take the same program and cut it at 45 RPM it spreads that curvature out

17:08

and makes it easier to track so yes there's and and we're talking about I

17:13

think it's 35% is the sort of the speed difference

17:19

between 33 and 45 so it's reducing the curvature by that amount um and and so

17:26

yeah on certain program material it's it's noticeable it's very noticeable um okay that having been said

17:33

I really don't care for 45s because of having to flip the sides over all the

17:38

time you know I just it it breaks up the listening experience for me it it destroys the flow so again compromise

17:47

you know I mean I guess if you want ultimate Sonics yeah 45 but if you want

17:52

just an enjoyable experience you know listening to a photograph record I usually pick 33

17:59

I must admit that I have to agree I also said this in a dedicated episode people hated me for it but for example the the

18:07

Fantastic box set of the doors I love it but every time you reach out for it you

18:13

know they're going to you're going to have to get up after every seven or eight minutes it's it's a little too

18:19

much yeah for me it just destroys the flow I mean you know the songs were sequenced with a specific timing in

18:25

between songs you know intended and uh and and you have to kind of throw that

18:30

out the window to put it on 45 sides true okay another important part

Analog & digital delay

18:38

aspect I wanted to to ask you which was unfortunately somehow again

18:45

debated on another video micro fer thought I was accusing you guys of using

18:50

it no I'm talking about analog versus digital delay okay I know that you guys

18:56

don't have digital delay but in the past that was shocking we did have that and I

19:03

mean well you tell us a little bit about it I don't want spoil anything oh no no

19:08

no no uh it's a very good point and I'm happy to you know put my two cents worth

19:15

in as we say um in uh let's see how do I

19:23

start okay back when the photograph record went away you know the first time you know like in the like 1990 I guess a

19:31

lot of people built mastering consoles for doing digital and they didn't put the provision in to have a program chain

19:37

and a preview chain preview being what feeds a computer in the cutting lathe

19:42

that adjusts the groove spacing um when the grooves uh when the music's loud it

19:48

spreads the grooves further apart when the music gets quiet it closes them down allows you to get more time or more

19:53

volume or both on the record okay when

19:59

when vinyls started to come back in again in the in the mid 90s uh and

20:04

particularly in the mid 2000s people had all these consoles that didn't have previews so they would have to take um a

20:10

tape machine that didn't have a preview head on it and run it through a digital delay and you would use the signal off

20:16

the tape to feed the computer and the delayed signal to feed the cutting

20:21

electronics and the cutting it and um it's basically like you might as will

20:28

be doing it from a digital file because it has the same exactly you know you're

20:33

you're you're doing the brick wall filtering and and and the Reconstruction filter and all of that stuff you know in

20:41

the digital delay so yeah and you know people said well wouldn't there be less

20:46

wow and flutter and it's like having the tape go around one more or two more Loops that I don't see and I've made the

20:54

measurements it doesn't increase wow and flutter so yeah I my my system's all analog and

21:00

I don't go through any digital delays and the only time I ever use a digital delay is if I'm mastering from a

21:05

CD H obviously so you can confirm that the

21:11

digital delay is going on the record when used when adopted absolutely yeah the

21:18

Signal's going through it people say no that's not true and I don't know how to it is

21:23

true yeah I got into an argument with a guy online about this who didn't have a clue what he was talking talking about

21:29

but he kept saying he said that the VMS 80 lathe had

21:34

a digital delay built into it so that everything went through a digital delay when you cut on a VMS 80 not true it has

21:41

a computer which is digital uh the comp the audio the computer isn't in the audio

21:47

it's it's machine control it's just driving a motor that that moves the the cutter head across the disc for more

21:53

Precision yes of course yeah okay that wasn't that's a very

Mastering from & for high-res / DSD

21:59

important point I'm happy we discussed it I'm glad you're bringing these points up Guido this is why I was willing to do

22:05

this interview because your questions were great you know I think I initially either I said no or I said I wasn't that

22:11

interested or something and then you said can I send you my questions and yeah let's do it thank you thank you so

22:17

much and please jump in if you have to if you want to add anything we need more

22:23

information absolutely all right I'm the first one I'm the first it really um uh

22:31

I was wondering since I have there's this fantastic little um recommendation

22:37

on your on the coherent audio site where you say that you're completely against

22:42

loudness and you're not going to master things squishing everything so right can you tell us a little bit uh how are

22:50

things done when you have to master highres or DSD files even though I understand you're you don't do that that

22:56

much in the end clearly you're mainly focused on vinyl ultimately yeah my my

23:02

um the the sacs and and the high-res download and and streaming stuff is all

23:09

done from files that I create when I cut the photograph record so it's exactly the same EQ and everything that went on

23:15

the on the vinyl um so but that's what I

23:20

do you know there are so many many many many people doing digital mastering and

23:26

it's you know the whole idea is to make everything sound the same volume on on your playback medium you know originally

23:33

it was it was the iPod and and then it was well actually originally was on CD

23:39

Changers you know so that You' had remember the old carousels where you'd have five CDs in there so you wanted

23:44

every CD to sound the same volume you know you didn't want one to sound six or eight DB lower which is what it would be

23:50

if it wasn't digitally compressed which is you know so and then then came the iPod and and then all the other personal

23:57

you know listening things and and you know computers and so with especially

24:02

with iTunes and Spotify and all that they want everything to basically be the same volume and so they just they put

24:08

six to eight DB of digital compression on everything and it doesn't matter whether it's jazz or classical it's done

24:15

to everything really really I I I was expecting at

24:20

least a little less on on Jazz and classical music usually oh maybe a couple of but it's still it's still

24:27

digitally rest so at least in your experience when you're cutting vinyl from

24:35

digital are there is there the is there the full spectrum in that case or is it

24:42

just the the same the same process and in the end I mean you have it's pretty

24:47

much the same process I mean whatever the bandwidth is on the CD you're putting onto the vinyl um except for you

24:54

know maybe down below 20 Cycles there's a little bit more low low loo base on a digital um file but um yeah that's

25:04

that's about it um did I answer the question yes Yes

25:10

actually I was thinking also in Reverse when they when you you or anybody else

25:16

does um a master for a super audio CD is there some cutting there in the lower

25:22

and upper register I I mixed up sorry no I wouldn't say so okay that's good at

25:29

least that's good um uh I was also thinking about uh

Digital vs analog mastering percentages

25:34

the percentages if you can if you have an idea of uh uh CD uh super audio CD

25:41

meaning DSD liquid mastering against tape vinyl I I I imagine vinyl is you

25:49

mean for me yes yes what I see oh you know it's funny it's it's totally

25:55

flip-flopped in in the the 13 years 14 years I've been operating my business

26:00

now when I first started I was probably doing 30 to 40% from analog tape and

26:07

60% uh or something like that you know digital from digital files some from cdrs back in the first days that I

26:15

opened um very little of that anymore it's mostly high-risk digital if it's digital but it's all flip-flop now I

26:21

mean I'm doing so much you know when you look at all the stuff that I'm doing for blue note there's two different series

26:28

The poets and classics all of the stuff that I'm doing for thanks all of the

26:33

stuff that I'm doing for uh for Concord craft you know all of that's from analog

26:38

original analog tapes uh oh and then the the Rhino High High Fidelity series is

26:43

all from original analog tapes so that's my favorite a lot of tapes in my

26:49

room I bet I bet fantastic and at this point maybe maybe 15% is is

26:56

digital that's good but there are times where there's more

27:02

digital let's say not not after the vinyl Resurgence I bet or or yes instead

27:08

there are some moments um even after the vinyl Resurgence people were doing a lot of stuff from digital in the early days

27:14

of that um yeah so do you mainly Focus now on we

Audiophile vs "normal" cuts focus

27:21

could call it audio file mastering or do you accept even let's say normal

27:26

projects oh well that's an interesting question I accept just about anything uh as long as

27:35

it isn't an MP3 or something really bad like that but uh but I I do um most of

27:43

that is for the smaller labels and unfortunately I'm so busy doing all of the work that I just mentioned that I'm

27:50

taking very few of those projects anymore um I started Turning Away business around 2017 and I'm still

27:56

turning business away and I don't want to be that way I'd love to be doing everything for everybody but uh I gotta

28:02

sleep sometime yes please do obviously we want

28:08

these fantastic records no well I I do want to take a minute I mean a few seconds because I said this before it

28:14

was off camera but I do really uh it's not for flattering I mean your work is

28:21

just incredible I mean the records in my opinion the top records now out there

28:26

that we are having these fantastic three issues are cut from you and they're astonishing I mean your your your hand

28:33

your art artisanal way of doing things and clearly also your fantastic new set

28:39

which we will talk briefly about afterwards your analog all tube setup

28:44

congratulations I had to say this well thank you quido I really appreciate that thank you thank you for what you do

Mass-produce vs audiophile vinyl

28:52

um can you give us an idea I know it's difficult because you're you're focused on work but uh what are the main

29:00

differences from Mass produce vinyl mastering and what we call audio file or

29:06

simply that's a great question that's a great question I'm very happy to answer that you know back in the 70s

29:13

um pressings were barely acceptable as far as I was concerned um 60s and 70 I

29:20

mean I started in 72 but I was collecting records in the 60s and you know it was not unusual to have to take

29:26

a record back a couple of times to get a good one into a record store and uh when

29:31

everything was mass-produced um the quality kind of went out the window I mean you you couldn't get a pressing

29:39

from three different pressing plants of the same material you know the lacquers were cut successively but you know

29:46

exactly the same way um you know when I would Master for Colombia you'd cut two sets of Masters for the Santa Maria

29:53

California plant two sets for the Tera Hood Indiana plant and two sets for the Pitman New Jersey plant they were all

29:58

cut at the same time one right after the other all same EQ same everything same batch of lacquers probably you get

30:05

pressings back from the three plants and they all sounded different okay so Inc that I think

30:13

explains the biggest part of the mass-produced problem so when people

30:18

started doing audio file releases in the mid 70s the mid to late 70s um so much

30:24

more care was taken at every step along the way the the the mastering the

30:29

processing the Press you processing mean you know the the plating um yeah the the

30:36

pressing um it just it was night and day different you know there there's a guy I

30:43

won't even mention his name and give him credit but he sells these super high price three 400 500 \$600 you know

30:50

mass-produced records you know that he's handpicked and uh and he bashes my work

30:56

he's made a career of bashing my work um

31:02

and I just it to me the whole thing is just so unbelievable that people buy

31:07

into it you know um you know I like to say that he puts I

31:13

like to say that he puts out the cream of the crop of mass-produced

31:19

garbage well put I don't know who that is I have maybe an idea but maybe afterwards well we can talk about it off

31:26

camera absolutely okay um well since you uh recently let's

Tube vs solid state mastering

31:33

say created this new setup for all tube from what I understand for your

31:39

mastering uh choices and work maybe you can give us an idea of the differences

31:45

between solid state let's say and what you're using now the differences so yeah it it

31:53

started to get used recently but the whole process went back to 2005 when I

31:58

started building the system wow so um yeah there's a there's a 17-minute video

32:04

on YouTube that you can watch if you're curious about that just go to uh coherent with the h r spelling um record

32:11

I'll put the link below in the video description wonderful okay right thank you so much thank you problem anyway

32:17

it's it's got something like 880,000 hits now which shocked me you know I would have been happy to get a thousand hits I was I I I couldn't believe it so

32:25

anyway and that helped a lot selling the first record because that was the only promotion we did for Kristen Edkins

32:31

record so anyway I I I spent a lot of time building the system um great thank

32:40

you thank you um so I I I spent a lot of time building the system years building

32:46

the system I had no idea it was going to take that long and I was about ready to start recording in

32:51

2017 but then I thought well if I start recording now and I start putting

32:56

records uh in you know or tapes on the shelf and I can't cut them uh I'm going

33:01

to wind up with a backlog and that's not going to be good so I decided to wait until I had the disc cutting system

33:07

finished and that took another three years so I got that finished just as covid hit in 2020 so bad timing yeah so

33:16

uh two things happened in the course of that uh the studio that I was going to be taking my gear to to record and they

33:22

were actually going to let me keep it there so I wouldn't have to shle it back and forth um they want out of business

33:28

during Co shut down gone and sold off all their equipment just gone so that

33:34

left me without a place to record and that was when I saw this website by a guy named Rich capeless uh rvg legacy.

33:41

org U recommend anybody interested in in oldtime jazz um read up on that um so it

33:49

talks about Rudy van gilder's studio in hackin sack New Jersey and he put up the plan for the for the layout of the room

33:55

and I took a look at it and went wow that's just about the same size as my living room dining room area in the

34:01

house so I showed it to my wife and she said hey let's convert the living room

34:07

dining room into a recording studio so we went Full Speed Ahead and uh I I really appreciate her uh her uh support

34:16

you know you have the wife the best wife absolutely she's awesome and in fact you

34:23

wrote that I I think on on the website or somewhere maybe on the records I don't remember

34:28

this that that you were thanking for for well this communal communal intent

34:34

thanks for your wife wife um something else I have been discussing on uh on a

34:41

recent video let's go back to that at some point because I didn't really get

34:46

into the the differences in the sound but but goad that's right I'm sorry I'm sorry I'm just I just make sure we no no

34:53

no you're right I'm sorry forgive me go ahead go ahead no no that's fine so it

34:59

it's a very different sound um when you consider the whole chain I haven't really broken it down too much into

35:05

pieces if you know what I mean um because I look at the whole thing as a whole with the idea of sort of creating

35:11

a vintage sound with modern music that was the concept um and it's kind of hard

35:17

to quantify what changes the sound where in terms of you know it's well you probably are aware

35:26

that in 2020 just kind of for a lark I cut the war greatest hits when it came

35:33

in with my tube cutting Electronics only so it was just the cutting rack with the

35:39

power amplifiers and the Raa and and and all of that um just to see how it would

35:45

sound and I was thrilled with the way it sounded and we put it out there and didn't say anything to anybody it was

35:51

for Record Store Day 2020 and about two years later I Let It Drop That by the way that was cut with my tube rig

35:57

because my record hadn't even been released yet so people were saying well we're really anxious to hear how your system sounds I said well if you want to

36:04

hear the disc cutting part of it you can buy this record it's already there and and suddenly it sold out so I guess

36:10

there were there was a lot of interest but you know I would say that it you know it's such a cliché but there is a

36:17

little bit of a warmer sound to to tubes um and it's not just that they glow and

36:24

put off heat I I've heard that joke um but um

36:30

the top end's a little sweet the bottom end is has got a lot of Slam to it um

36:36

but it's not quite the same as as my you know Class A solid state system um I'm

36:41

happy to go on record and say I actually think my class A solid state system is a

36:47

little more accurate in terms of giving you exactly what's on the tape but I

36:52

love the sound of the tube system and I think for and and that's why I'm basically saving it for my projects I'm

36:59

not using it for other people's projects and I'm not going to be doing reissues or anything like that so at least not

37:05

planning to uh people have asked me but oh okay so e so only for your um for

37:13

the coherent audio records you've been using that exactly that's all I didn't know that I didn't know that

37:20

okay cool cool en with that one exception of of the uh yeah the Rhino uh

37:27

War Greatest Hits and it's the single it's the single record one that's pressed on kind of a gold swirled vinyl

37:34

because there's a two record War set that came out greatest HS that came out about the same time that's not my

37:40

mastering so I know it just recently came out I think the double win 20 oh

37:47

the double win no actually it's been out for at least a year maybe longer okay but that created some

37:53

confusion I got the other one I have it I knew there was something going around

38:00

that and the the single one would have been better great I'm happy about that

38:05

um okay well thank you about for that um I just wanted to focus a minute on the Loudness war vs vinyl

38:11

loudness War so-called loudness War sure uh meaning that uh at least that's my

38:18

perception and I shared this in a recent video that that is one of the reasons

38:23

why I think it's worthwhile to buy to purchase vinyl because the mastering is

38:29

a little more softer it's less compressed right is that true absolutely

38:35

absolutely now that having been said there is stuff that's mastered from premaster digital that's really

38:42

compressed and obviously I have no control over that you know a lot of the newer

38:48

releases they just they provide digital files you know I used to do a lot of

38:53

work with a guy named Joe gastor and we were kind of a tag team because people would go to him for the CD and and the

39:00

Digital streaming and download stuff and then he would send the files to me for cutting and Joe was an old cutting

39:06

engineer from the Sony days and he knows how much better it sounds when it's not

39:12

compressed to death and so he would create a file for me that didn't have all the digital compression that he was

39:18

doing for the digital uh releases and I wish more people would do

39:24

that and I've suggested it to people haven't seen it happen too much he's he was the main guy that I thank for doing

39:31

that cool um I don't know but um do you think do

39:39

you do you sense because your your ear is trained that let's say just let's call them normal releases normal quality

39:46

releases uh do you sense a lot of compression let's say I don't know

39:52

though I don't want to make it say any names not just to not discriminate anyone but let's just say normal

39:58

releases that you find on Amazon not high quality audio file releases do you sense a lot of compression there most of

40:04

it has a lot of compression on it yeah okay I would I would say it it's just it's it's the audio

40:12

file stuff and you touched on something there I think is really true I think a lot of people are buying audio file

40:18

releases today because it's the only way they can get the material without all the compression now the audio file

40:25

labels are also putting them out usually for download and streaming um not on

40:31

Spotify because they'll compress it themselves but you know if you go to like kobas who's releasing um the kren

40:38

edins that that I you know did um those those files sound wonderful there was a

40:44

review I could send it to you if you want that where a guy was actually comparing the uh the Spotify and the

40:52

cobas and the vinyl and uh I think he nailed it you know so

40:58

cool absolutely yes please send it it's it's fascinating I mean it's

41:04

something that um a lot of people don't even imagine and once again I think we

41:10

have to put that out and and and spread the word um exactly I'm glad you're

41:15

doing it I I just want to go back a second when I when when we were talking about Extreme high frequencies mastering (slight return)

41:20

the high frequencies in the mastering um when you receive a high res file I mean

41:27

a really highrisk file with a lot a huge spectrum of

41:32

frequencies even if it's noise I mean going really up like 40 50 60 uh

41:38

kilohertz is that possible to put on vinyl or it's just you're not going to be able to play that back well there's

41:46

there's so little music over 25 KZ it's

41:51

hardly worth talking about the cutterhead is going to roll it off naturally you know it's a mechanical transducer you're asking it basically to

41:58

to produce 20 to 20,000 Cycles you know that's a wide range for a single

42:04

transducer think of a speaker you know how many full range speakers are there there's a few you know but they're very

42:11

very few and far between they're usually 8 inches in diameter and they don't really produce low base so if you want

42:16

to produce the full 20 to 20 kilohertz Spectrum um doing it with a single transducer like a cutterhead is is

42:24

difficult I bet um another thing I wanted to ask and here

Reissues vs originals

42:29

you have to be honest because you're part of it I'll be honest see since we are living what I called a

42:37

new analog age the current reissues do you think they are better than the

42:45

originals clearly not in every case but in most cases what do you

42:50

think yes I would have to say they are um I'm not saying all of them um but

42:55

there's you know I can name the guys you know Bernie grundman um uh Ryan

43:03

Smith um you know and myself and who am I leaving out there's a couple of other

43:08

people that are doing some very very good work on audio file releases and and and yeah I think they they blow the

43:15

originals away yeah because from I for one thing the equipment has improved the equipment

43:21

is better than it was in in those days and I know my system is because it was custom built it's all it's Class A solid

43:29

state transformerless from tape head to cutterhead and um I don't think anybody else has that but there are a lot of

43:36

systems that have been really tweaked up to sound a lot better than the old systems back in the 70s and uh you know

43:43

and if you get an engineer who's not too heavy-handed or know how knows how to properly twist the knobs I think you're

43:49

going to wind up with a release that sounds better than the original exactly oh Chris Chris bman forgot Chris he does

43:55

great work true he's a friend personal friend no also because correct me if I'm

44:01

wrong I mean back in the days let's say 60s 70s for example Jazz recordings uh

44:08

they had to cut off a lot of frequencies because people had let's say crappy playback systems exactly so that's

44:16

exactly right so that's also now we're benefiting of all this technology and we can put back a lot of the missing

44:22

Spectrum right that was probably over by the late 60s though but yeah you in the

44:27

50s for sure there were heavy limitations on what you could put on the record and and not have it skip or

44:33

distort or you know in playback perfect thank

Old vs new vinyl manufacturing

44:39

you a difficult question what is missing today in in the record production in

44:45

general what do you think compared to your experience to the

44:51

past I don't find much missing uh what kinds of things were you thinking I

44:56

don't know know I mean if you need to give me a prompt here

45:02

um in relation to the the manufacturing process let's say let's restrain a

45:07

little bit not the music okay the manufacturing process like for example pressing it seems

45:14

prehistoric don't you think we we should update that technology there well you

45:20

know there's been a lot of improvements in that too that people aren't aware of um the V compound

45:27

the vinyl compound that we're using today is way better I think than what

45:32

was around in the 60s um and it was a transitional thing where

45:39

there were some problems in in the United States they required that lead be

45:46

removed from Vinyl you would say lead why would there be lead in vinyl it's a

45:51

lubricant it was to allow the Stamper and the record to separate you know when you open the press it wouldn't stick you

45:58

know and uh it also allowed the vinyl to flow you know from because it flows from

46:03

the puck or whatever you want to call it in the center biscuit uh to the outside and so that ate it okay so I think it

46:11

was around 1990 1995 somewhere in there the

46:18

uh Environmental Protection Agency said hey you can't put lead in vinyl anymore so for years I'd say about a fiveyear

46:26

period there there were some problems because they were trying all kinds of different other materials to to

46:33

correct that to to to be able to have that advantage of the lead without it

46:38

actually being lead and so um they finally got that all straightened out and that's that's really improved things

46:46

um Stampers used to be nickel as they are today but then they would plate them

46:52

with an additional layer of chrome which made them last longer you know and that

46:58

degraded the S quality and so yeah so the so these uh these uh

47:03

\$600 Originals that this guy's selling they're all made with chrome Stampers so they're automatically missing some some

47:11

detail there so there's a lot of things like that and they're making new record

47:16

presses which are sort of clones of the old ones there's a company making copies

47:22

of the smt which is my favorite press which was made in Nashville USA and then

47:28

also the um TX Alpha presses that were made in U Sweden I think and so there's

47:35

kind of new clones coming online so it is kind of nice to have new stuff uh rather than having to keep fixing the

47:42

old stuff no of course of course okay I don't want to take too

47:49

much time I just want to know if there's something besides these fantastic

Cohearent Records

47:54

releases that we have from coherent audio trying to put this in in the

48:01

picture thank you for putting those up no they're fantastic they they Auto

48:07

promote themselves tell us if there's something else com up well we're talking we're

48:12

talking to two or three artists right now um well three actually um about doing our next project there's a couple

48:20

of interesting problems first of all you have to find an artist who's not signed to a label um if they're going to be the

48:26

lead artist you know like um we had to put you know Gerald Clayton Curtis on

48:31

both albums courtesy a blue note because you know he had had to get permission because he's a sid man on it and that's

48:38

okay but I I couldn't do a Gerald Clayton album if I wanted to you know as as the lead artist because he signed to

48:43

blue note and so you have to find artists that aren't signed to a major label and you have to find an artist who

48:50

can find the time to get into the studio to do the record because a lot of them are touring a lot and on both records um

48:58

you know we started talking Anthony agreed to do the record um that we did in June in January so it took six months

49:05

to get those four guys with their schedules in the studio and uh and it

49:11

was the same thing we had to wait to get Gerald for Kristen's record because he had been out on the on the road in

49:17

Europe with with Charles Lloyd as a matter of fact we recorded the album two days after he got back from Europe so

49:25

yeah well again congratulations on that we hope the other many others are coming

49:30

up by the way I want to make a shout out to another Italian there's a guy in uh

49:36

in Italy in bologna I think you pronounce it yeah exactly bolog Roberto

49:42

borellini is his name and he is one of the few guys in the world rebuilding nyman cutterheads and he just rebuilt

49:48

one for me and it's wonderful so I want to thank him and and I want to let people in The Cutting industry who maybe

49:54

don't know about him that the guy to go to well that's like half half an hour of

50:01

train from me so I'll I'll try and go and visit him thank you sharing yeah that would be great he's a great guy so

50:08

very great very easy to communicate with and um you know it was just it was it was a wonderful experience dealing with

50:15

him fantastic thanks thank you again well and thank you especially for your

50:21

time really Kevin thank you much you're most welcome well we've touched on so many

50:26

things that have not been asked that I'd like to see out there so uh I'll leave that up to you to to get your video out

50:33

to people but yeah no I'm I'm very happy to do this thank you thank another one down

50:39

the road I'm happy to do that too absolutely we're in for it thank you

50:44

again Kevin you're most welcome bye bye ciao bye thank you

50:50

again well guys if you're enjoying my videos and you're enjoying my Channel please consider to subscribe by click

50:56

clicking the black and white logo here below also don't forget to click the notification Bell so you'll never miss

51:01