

INTRODUCTION TO MAKING YOUR OWN CD

For the Talented but Inexperienced Musician

YOU'RE READY TO RECORD IF...

- **You've got a clear *purpose***—to make a demo (short), calling card (longer), document of work done, a new take on an old idea, something never before attempted, etc. See “Choosing your repertoire” for more thoughts on the matter.
- **You're *prepared***—you know your music—understand it, have had some coaching on it, have performed it at least once, feel like you have mastered it.
- **You've got *time to participate in the process***—even if your producer *supervises* the recording you'll need to participate—you're the boss, and while you've hired the best producer and engineer you could find, they work for you. **
- **And, last but not least--You've got the *money UPFRONT***—you've earned it, borrowed it, gotten a grant, robbed a bank, but you've got your funding locked up. For an idea of how much you'll need, see below. Here's a summary of the process.

SUMMARY

PRE-PRODUCTION

- Rehearse carefully before-hand (not on recording days, but during the weeks before recording)
- Perform your recording repertoire as often as possible in the preceding months (tape the performances and listen with the group)

PRODUCTION

- Play your best in your four-six recording sessions (try not to do other work on the days you record, farm out the kids)

POST-PRODUCTION

- Listen to the session tapes and either choose takes and edit (a classical CD) or EQ and mix (a non-classical CD) to get a first edit. This process can take anywhere from three or four days in the studio to a few weeks. Then, after living with that first edit for a few weeks you go back into the studio and fine-tune it. If everyone's happy, the engineer makes a master CD that's used for duplication. Sometimes the producer does this step and the artists only hear the first and second edit CDs.
- Work with your designer on the CD booklet content and layout. It will include cover art, notes, track lists, translations/texts if appropriate, bios and acknowledgments.
- Plan your CD release events and promotion, or liaison w. record company.

FOR THE PARSIMONIOUS

Making a professional recording is collaboration between experts; performers, engineer, producer, and CD production company. If you skimp on any link in the process, the recording may not sound or look as good as it could. It's easy to make a good, inexpensive recording at home, editing it yourself on computer, designing your CD booklet and label, printing it on a laser printer and releasing it on CDBaby. However, if you decide to make a professional recording, then why don't you commit to spending the funds to make sure it's a great one?

** If this is your first time recording you may feel totally inexperienced and unable to be anyone's boss and that's natural. But why don't you take this occasion to learn as much as possible from the producer and engineer, they won't mind questions and you'll be able to make increasingly better informed decisions.

CHOOSING YOUR REPERTOIRE

Many have compared producing a recording to producing a child. At least you don't have to send your recording to college, but it often takes 6 months to a year from conception to christening. Make sure you really want to do this.

THE TWO BEST REASONS TO RECORD SOMETHING

You're very good at a certain repertoire and/or really love it. Either of those can be THE reason to record something. Whatever other reasons you have, one of those two should also be operative.

SUPPORTING REASONS

No one else has done before in this particular way

The repertoire is newly discovered

The music is so wonderful that every new recording just adds to its glory (Bach?)

You need a recording to take your career to a different level (tenure, a degree project)

BAD REASONS TO RECORD SOMETHING

Everyone who does what you do is supposed to have a recording of this

Your advisor/spouse/mother/coach loves this music

It's newly discovered and you want to be the first to record it, even though it's not great

It's time to record something, why not this?

You want to be famous

NOTE: COPYRIGHT, ETC.

Some repertoires require permission—from the publisher, composer, arranger etc.

Make sure you've gotten that permission BEFORE you start recording. Costs vary, some are standard, some are minimal. Bad idea to go ahead without permission—people have had their CDs pulled from the stores for violating copyright.

WHY DO YOU NEED A PRODUCER?

People do put out good recordings without a producer; usually the engineer takes over some of the score-reading function but that puts a lot of trust in your engineer, and if you're relatively inexperienced and want your recording to sound as good as, or better than, those of your colleagues, you will want to have more control over the process. The engineer's main job is to monitor the sound as you're recording and make sure it's not too loud or soft, it's balanced, there are no electronic buzzes or hums, etc. Some engineers also read music well enough to give you feedback about how you're playing, but it does distract them from their primary job. I've spent a lot of time (and my clients' money) trying to fix recordings where the engineer/producer missed something important. And remember, even though he may be trying to save you money by suggesting it, an engineer may not be the best judge of his ability to do both jobs.

SIMPLY PUT, the producer's job is to help the artistic director or solo artist get the musical results she wants. That means working together throughout the entire process, from consulting about repertoire and schedule, acting as liaison with the venue and support personnel, planning the sessions, giving feedback during the sessions, supervising editing/mixing, acting as liaison with the record label or CD mastering house (depending if you license the CD to a label or put it out on your own).

SOME ARTISTS WANT A PRODUCER to keep the session moving and the atmosphere positive, to encourage—'That's good, now do it again.' Others want a producer to act as a critical ear, to

listen for tuning and ensemble problems. Talk it over with your designated producer and make sure that person has the required background (i.e. a good enough ear, a sunny personality) to be the kind of producer you need.

IN MY VIEW, during the sessions the buck stops with the producer—if issues come up she deals, if emergencies arise she copes. In session, the producer's job is to keep everyone as comfortable and productive as possible, tactfully addressing tuning and ensemble problems, occasionally broaching difficult subjects like "This piece really isn't working, shall we put it off until tomorrow or cut it from the recording?" She's responsible for keeping the sessions running on time, stopping when performers are tired, calling for breaks when they're starting to sound worn out, making a bad joke when everyone needs a laugh.

WHEN GIVING FEEDBACK a good producer tries to distinguish between a fact and an opinion. For example, 'There's an engineering problem here, you need to step back from the mic or you'll be too loud,' is a fact. In contrast, 'You know, I hear what you're trying to do, but I'd suggest doing it this other way,' is an opinion. When in doubt, the performer or artistic director can always come back and listen to the take to make an informed decision.

NOTE: Making a recording can be hard—for whatever reason musicians may find themselves not playing their best and feelings can run high. Under pressure, the most levelheaded person may suddenly start acting like two-year-old. A good producer knows how to defuse a sticky situation. Find one you like and trust who seems honest, experienced and stable.

CHOOSING AN ENGINEER

Generally, the producer will know a few good engineers she's worked with on music of this type before. It can be a good idea to go with one of them because your producer trusts him to deliver good results. Ask to hear recordings that engineer has made, talk to him on the phone and find out how much recording of this type he's done before. Engineers specialize just like the rest of us; an engineer who does sound enhancement or records live concerts is not necessarily the right person to make you a CD. One who records orchestras may not be best for your chamber ensemble. But don't skimp--when you hire a cheap engineer you get what you pay for—more expense down the pike.

RECORDING BASICS

HOW DOES A GOOD CLASSICAL RECORDING DIFFER FROM A GOOD NON-CLASSICAL (STUDIO) RECORDING?

A WELL-ENGINEERED *classical* recording is all about creating a warm, vibrant, consistent live-concert sound—it's meant to reproduce the perfect concert experience--instruments and singers sound the same from take to take, they're generally in the same position in the image throughout the CD (you know how you're positioned on stage in a concert? A good recording positions you the same way aurally so a listener can almost see you spread out on stage), nothing is too loud or soft, the amount of space between the tracks is similar and sounds the same, the background ambiance in the hall doesn't have sudden noises, hums or tweets. It sounds like common sense, but getting a consistent recording is not so easy. Most classical recordings are done in a resonant space like a church or concert hall.

A WELL-ENGINEERED *non-classical* recording is usually done in a recording studio and its

primary goal is to make each track sound as fantastic as possible according to the vision of the artistic director and producer. After performers finish their sessions, the engineer does a lot of work on each person's individual sound, and then makes a mix of all the players to create each track of a CD. Therefore, during the recording people aren't positioned like a concert, (they aren't even necessarily in the studio at the same time) so since the final image is created electronically, performers move position and instruments may sound different from piece to piece. In order to be able to work on each instrument separately, players who do record at the same time are 'isolated'—either by playing in different rooms or by being separated with foam walls or wooden baffles between their chairs. Players listen to each other with earphones. Since the studio has no windows you don't have to worry about background noises, but in order to get that isolation or separation, a studio is not usually resonant, but artificially dampened. If you don't use earphones, you may find that you miss the warmth of a resonant space to play against. It may be harder to sound good; you find yourself working more. If you want to duplicate the experience, make some music in a practice room or lecture room and notice how ungrateful the space is. If you do use earphones, you may find it uncomfortable or distracting not to hear yourself and your colleagues live.

SO THAT'S THE TRADE OFF: Studio engineers can add ANY kind of resonant background AFTER you finish, you can sound like you're in Westminster Abbey, Carnegie Hall, anywhere, but you'll be recording in a dry space where it's not so easy to play well. And resonant spaces have their headaches—even in a lonely church surrounded by open fields there may be crickets, airplanes, grass cutters, motorcycles, school kids, whatever. Some studios have big enough rooms that they can provide the best of both worlds, a resonant or semi-resonant space that's a controlled environment—that can be the best of both worlds.

HOW TO RECORD--STEREO PAIR VS. MULTI-TRACK?

Reflecting this difference in aesthetic, classical and non-classical recordings are usually miked differently. Engineers specialize in one of two recording methods—classical music generally gets recorded with one stereo-pair of mics, non-classical (pop, folk, world) gets recorded multi-track with many mics in a studio. Which is best for your project?

DIFFERENCE BETWEEN STEREO-PAIR AND MULTI-TRACK MIKING

MOST CLASSICAL RECORDING is done in a resonant space. There's usually a main microphone stand that consists of two stereo mics placed in a figure-eight configuration, and some individual mics around the hall or near particular instrument that might need special balancing, like a harpsichord. Sometimes the engineer keeps the mics the same between pieces, but often he'll keep the main mic the same and move the smaller, individual mics around. It helps to do all the pieces with the same scoring together, if possible, so the mics don't have to move. (That doesn't always work, but it's a good goal.) A good engineer will remember where he put the mic for each instrument and will return it to the same place when that instrument is used again. You'll record a bunch of full and partial takes of each song, and make a patchwork for your final edit.

STUDIO ENGINEERS usually have mics only on the individual instruments, not the whole room, and the mix is created after the music is recorded. An engineer's job is to get a good sound on each individual person during the recording and EQ it later (fine-tuning timbre, high and low partials, distance from mic, pitch, rhythm, everything), so it often takes less time to record and

more time to mix. Often there will be a single take of each song, and each musician goes over his part until every note is perfect.

WHICH RECORDING METHOD TO CHOOSE: If possible, I suggest recording in a resonant space--you play better in one. It can be distracting to use earphones and be separated from the other musicians.

WHAT TO LOOK FOR IN A RECORDING VENUE

RESONANT SPACES—Halls, churches, etc.

BASICS--a quiet, good sounding room to play, with a nearby, separate smaller room for the engineer & score reader, and a third place for relaxation with chairs, couches that permits food. You'll also need access to bathrooms.

EACH ROOM HAS ITS OWN SOUND, some favor high instruments and some low, some resonate on a G or C, some sound warm, etc. If you like a place, ASK YOUR PRODUCER and/or Engineer to come listen to it. Don't just rent it without consultation.

ISSUES

- **PLACEMENT** 1) Distance from a main road, highway, or rush hour artery. 2) distance from where you live—is it more than 40 minutes from you? If so, consider staying in a nearby motel—long drives are quite draining on recording days.
- **HISTORY** Has it been recorded in before? If not, why not, maybe it's noisy or a bad-sounding room, or is it just expensive? Find out. If it's been recorded in before, get the names of the musicians, call them and ask them about their experiences, listen to their CDs. You'll find out useful things like, 'it's quiet until 4:45 and then all hell breaks loose for 2 hours' or 'when it rains the flight patterns change and planes come over every 5 minutes' or 'the church secretary is a sweetie but the sexton is totally uncooperative.'
- **COST** Venues cost anything from free or \$50 per session to \$1500 for the week. If it's prohibitive, maybe you can play for services if it's a church, given them a benefit concert, play for a Christmas party. Maybe one of your group members is a parishioner or an employee.

WHEN TALKING TO A VENUE, DISCUSS THE DETAILS BEFORE YOU CONFIRM What does the venue need you to do? What do you need from the venue? Find out in advance, and then respect the needs of the venue—how do they want the space left, lights on or off, doors locked, trash, food in right places. Also, make sure to ask for what you'll need—can you put up signs asking for quiet, use the venue's long tables and chairs, move the altar, lock things up over night and during dinner break. Find out the venue schedule for your recording week—watch for one-time special masses, funerals, weddings, meetings, dances or other events in the space. **DON'T BE SHY.** It's better than being surprised.

AND THESE AS WELL--When do they open and close? Can you have a key? Do you have permission to turn off ANY POSSIBLE noisy piece of equipment --humidifiers/ dehumidifiers/ heat/ air conditioning / fans/ water heaters/ other if the engineer thinks it's important? Is there a maintenance guy always there or within easy call, with all the keys and the ability to turn off EVERY possible noisy piece of equipment in the place?

A STUDIO

Studios are places with a controlled aural environment, some kind of sound-proofing to keep outside noises to a minimum. Studios are all different--some have large, resonant rooms with wood and plaster, some are carpeted and the sound is dry, some have booths that separate performers who hear each other through earphones. There are many different approaches to close-miking, so bring your producer and discuss it with your engineer before you commit.

PLANNING YOUR RECORDING SCHEDULE

LENGTH

Everyone is different, but generally people have one 6-hr session per day with a 10-15 minute break every hour to hour and a half, or one 8-hour session per day w. dinner break—food brought from home or going out to a restaurant. Sometimes, if performers have the chance to rest between them, morning and evening sessions take place on one day. If this is your first time, you might find that too draining.

During a session, you don't spend every minute playing. Mics are moved, mini-rehearsals happen, musical ideas are discussed, the producer gives feedback, musicians tune, the engineer and producer have private talks on balance and timbre. Also, after every piece is finished, performers take a short break to nosh, move around, stretch, tune, space out and rest vocal chords and fingers. The producer tries to run a session so there's a good balance of work and rest.

DETAILS

The engineer and producer generally get in an hour or so early to set up, and stays a half hour to hour late to tear down. If you're using a piano or harpsichord, the tuner will come about an hour before session starts to tune, and will probably stay for the session, tuning and doing tech stuff between pieces. (Don't plan to be your own harpsichord or piano technician—very tiring.)

PROCESS

Most of the first day usually is spent on mic choice and placement, making sure the artist likes their own, and the group's sound. Sometimes an artist will bring in a favorite CD to give the engineer a sound ideal to work from. After that the artist may not listen to the takes as they record, though usually when starting a new piece, performers listen to a playback of the first take to make sure what's in their head is audible in the recording. Sometimes artists listen during break, or take home reference CDs at night to monitor how things are sounding. When there are disagreements during the recording session, the best way to resolve them is for everyone to come back and listen.

Engineers will either have a few pairs of earphones or stereo speakers in the control room; if an artist has a preference for speakers over earphones it's a good thing to tell the engineer in advance.

AMOUNT OF MUSIC RECORDED IN ONE DAY

ONE DEPRESSING RULE OF THUMB is that you get 2 minutes of music for each hour spent recording. However, that's an average; at times you'll record large sections, at other times you'll have to record short patches over and over. Occasionally a little in-session rehearsal helps ease a difficult passage. For a 55 minute CD (most CDs are between 50-70 minutes), I usually estimate 22-26 hours of recording time in four 6-hour sessions, one per day.

DOES THAT SEEM LIKE A LOT? It can be done in less time if everyone is really in shape and you're very familiar with the music. Usually we build in some extra time for things like the extra time it takes on the first day to choose and place the microphones, thunder storms, equipment glitches, unexpected harpsichord tuning, voices that need a rest, stuff

like that. Also, not everyone has to be at every session--some pieces have fewer people. But the artistic director will probably want to be there the whole time.

EXPECT THINGS TO GO WRONG

EVERYONE HOPES for a good recording experience—you're on schedule, sound your best, everyone gets along. But 9 times out of 10, issues come up, such as---

PERSONAL ISSUES: Family emergencies and mini-emergencies, musicians get sick, singers lose their voices, hands cramp, instruments break.

UNEXPECTED NOISES: a microphone hears *everything*. Often your contact at a church or hall won't realize that the sounds *outside* the door can be a real problem and when you come to record you find a totally unexpected noise. Some common unwelcome sounds--

- **OUTDOORS:** thunderstorms, crickets, birds, parades, Hari Krishna, loudspeakers, street traffic, both normal and rush hour; airplane or helicopter traffic.
- **ELECTRONICS:** mics suddenly tune in a radio station, recording equipment malfunctions, cables hum,
- **VENUE PROBLEMS: Mechanical:** fans, heaters, coolers won't turn off or can't be found, lights hum, roofs leak in the rain. **Live:** maintenance men painting, mowing, plumbing, hammering or leaf-blowing, meetings, dances, classes, nursery kids playing.

Most of these problems are solvable, some by the producer (and engineer), some require deft rescheduling, massage, or a good hug. But not expecting things to go wrong is naïve.

HOW MUCH WILL IT COST? A SAMPLE BUDGET—24 hours of recording

PRE-PRODUCTION (optional)

Producer: consultation fee \$50/hr x 5 \$250

SESSION COSTS—in a church or hall

Engineer: 32 hours (8 hrs set-up & 24 hours recording) x \$80/hr \$2560

Producer: 32 hours x \$75/hr \$2400

Harpsichord/piano tuner: \$250/session x 4 (\$1000)

Space rental: \$100/day \$400

Session food (water, nuts, chips, fruit) \$25

Hard drive and/or CDs (each evening your engineer will give you \$200

a CD of the session takes to listen to. At the end of the session he will give you a back-up of the whole project on an external hard drive. (He will also keep a back-up).

You may not be paying your performers. If you do, or pay your guest players, standard session fees range from \$250/session and up.

POST PRODUCTION

If your producer does the edits: Listening and charting the first edit: ca. 25 hours x \$50/hr \$1250

MAKING A FIRST EDIT

Engineer: 4 6-hour days at \$80/hr	\$1920
Producer: 4 6-hour days at \$75/hr	\$1800
Producer: Listening and charting the second edit: Ca. 18 hours x	\$900

MAKING A SECOND EDIT

Engineer: 2 6-hour days at \$80/hr	\$960
Producer: 2 6-hour day	\$900

MASTERING A CD (YOU END UP WITH A CD MASTER TO MAKE DUPLICATES)

Engineer: 1 6-hour	\$480
Producer: 1 6-hour day at \$7	\$450
CD master:	\$50

Other possible expenses: FedEx of reference CDs or CD master.

DON'T FORGET

If you're putting out your own CD, you might pay a designer to create a CD booklet for \$300-\$1000. Then you'll take your design and your CD master to a CD duplication plant such as Disc Makers or Oasis which will give you your desired quantity of finished CDs. Standard cost for 1000 CDs with a four-panel CD booklet ranges from \$1.30-\$1.70/ CD (\$1300-\$1700).

HOW SHOULD YOU PREPARE YOURSELF TO RECORD?

You want to support your 1) endurance, 2) concentration, and 3) relaxation. Make sure you exercise regularly for a few weeks before the sessions. Bring along some salty snacks to the sessions—a little salt helps you focus. And get lots of rest before and during the sessions. You'll sound better.

REMEMBER,

You're the boss, but your producer and engineer probably have more experience than you do—if you want something special, are looking for a particular sound, want to record a particularly hard piece in a special way, ask their advice. And remember, before, during or after the sessions if you're not sure about something, be it the recording schedule, the way an instrument sounds in a particular take, the way the producer is running the sessions, please say something right away. If the producer or engineer disagrees with you, find out exactly why. You might decide to do it your way and learn from your mistakes or trust them to know best, but in any event, the responsibility for that decision will be clear.