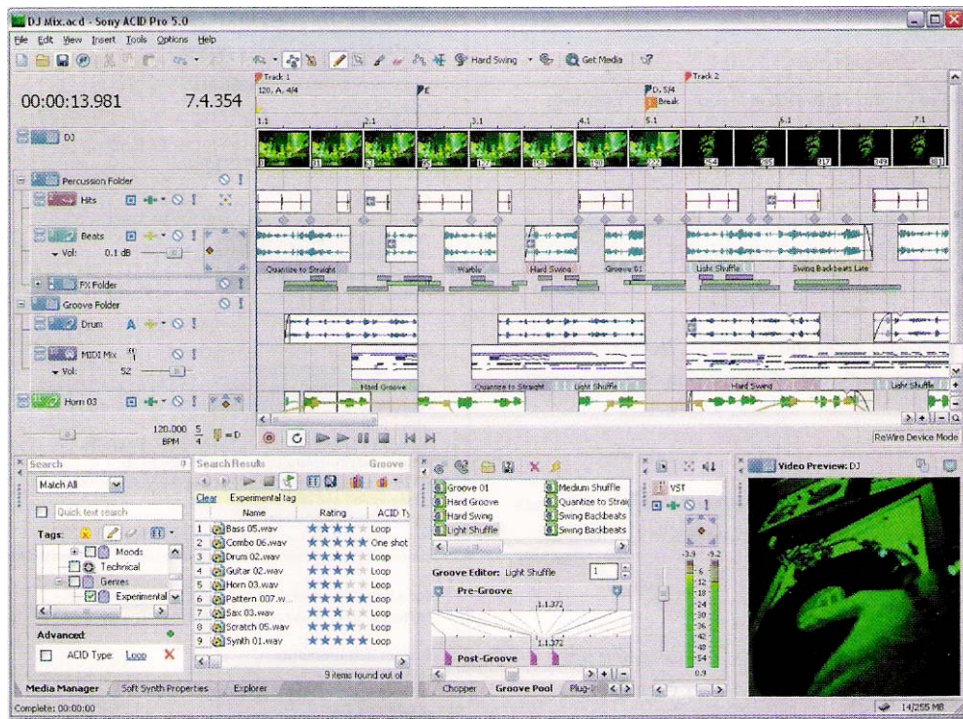


Name \_\_\_\_\_

# Guide to ACID Pro 5.0

Professional Loop-Based Music Creation Software

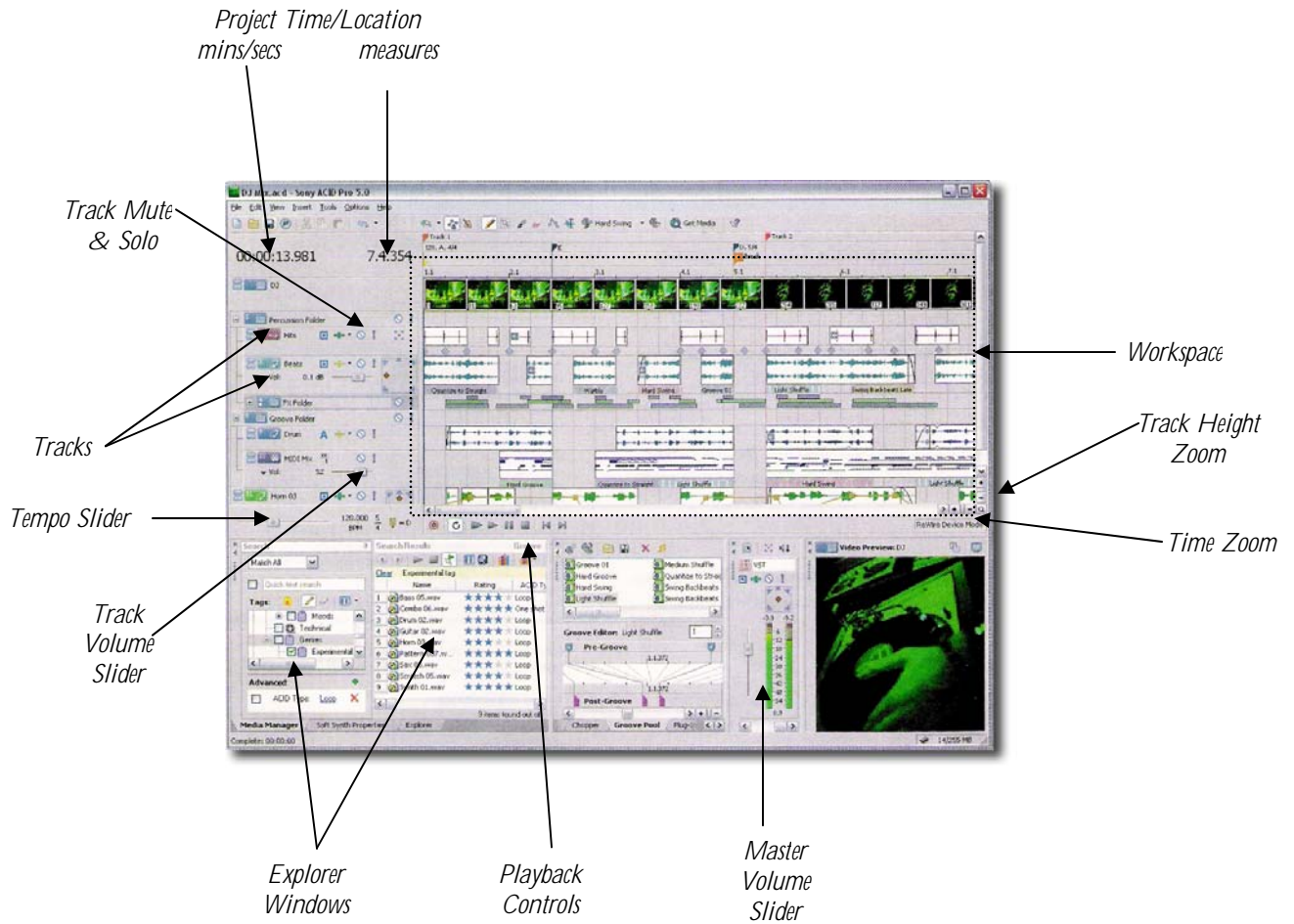


Compiled/Created by Mark Gowman  
East Rochester High School



# Table of Contents

About ACID Pro 5.0.....	4
Basic Terms to Know.....	4
The Basics... I Want To .....	5
Sampling and Creating Loops with the BeatMapper Wizard .....	9
Creating a Loop from an Audio CD.....	11
Building Loops from Scratch .....	12
Where to Find Loops.....	13
Final Project Requirements.....	15
ACID Loop Log.....	16



# ACID Pro 5.0

## Professional Loop-Based Music Creation Software

ACID Pro is a program used to electronically compose and create digital music recordings. It is simple enough that you can start using it within about 3 minutes, but it is powerful enough that it is used by professional music producers. It uses loops—short musical recordings designed to be repeated—to layer in different sounds. Some loops are simple rhythms and some are complex beats, while others are short recordings of entire ensembles. The loops are available in a variety of styles: rock, jazz, hip-hop, dance, latin, world/ethnic, and even classical. Most loops are four or eight beats long. Some are “one-shots”, meaning they are just a single sound, while others are up to 32 beats long. There are thousands of existing loops available on the ER server, and it is also possible to create your own loops from existing CD recordings. An unlimited number of tracks and loops can be used in any project. One of ACID’s best features is its file format, which allows the user to change a track’s speed or pitch without affecting the other.

## Basic Terms to Know

- **Loop.** A segment of music, often four beats long, that repeats itself in a music-building program such as ACID.
- **Workspace.** The area of the screen in which sound is entered. It is divided into tracks.
- **Track:** A musical layer, consisting of a single loop or sound.
- **Measure (Bar).** A unit of measuring music; in modern popular music it is usually 4 beats long.
- **Time Signature.** The number of beats per measure.
- **“Sound Bit”.** My name for a single sound, such as a bass note, cymbal crash, snap, clap, drum hit, etc. that is often used to build a beat or loop
- **Structure.** The organization of a piece of music into verses, introductions, etc.
- **Keyboard vs. Synthesizer.** In this class, “keyboard” will refer to the computer keyboard. The musical keyboard (that looks like a piano) will be called a “synthesizer”.
- **Tempo.** The speed of music.
- **Volume.** The loudness of music.
- **Explorer.** The window(s) shown at the bottom left corner of the screen in which you locate files.
- **Render.** Save as an audio file.
- **Pan.** Left and right stereo channels.

## The Basics... I want to

- **Create a new document**
    - Double-click the desktop icon or go to Start Menu\Programs\Acid Pro 5\Acid Pro 5
  
  - **Save my work**
    - Press the "Save" icon or CTRL + S and save to your personal student folder:
      - My Computer
        - Students on Kyle (H)
          - *mgowman* (Your folder will be named with your first initial and last name)
            - Music (You will need to create this folder)
    - *Note: What you see on the screen is actually a series of links to the audio files on the server. If you have ACID at home and e-mail a project to yourself, it will not work as all of the sound files are at school.*
- 
- **Get to the instruction kits**
  - Find the Explorer windows in the bottom left corner of the screen
  - Double-click on the following folders and subfolders
    - My Computer
      - Public on "Kyle" (J) Drive
        - Gowman
          - 8<sup>th</sup> Grade Music
            - ACID
- 
- **Get to the available loops**
  - Find the Explorer windows in the bottom left corner of the screen
  - Double-click on the following folders and subfolders
    - My Computer
      - Public on "Kyle" (J) Drive
        - gowman
          - Loops for Acid
  - *From here you can explore the various folders containing loops*
- 
- **Preview loops**
  - Single-click an any file showing in the right Explorer window
    - Note: Specific file information is provided at the bottom of the screen while any file is being previewed
- 
- **Insert loops as new tracks**
  - Double-click an any file showing in the right Explorer window

- **Insert sound (“paint”) on the workspace**
  - After inserting a new track, be sure the draw (pencil) tool at the top of the screen is highlighted.
  - Click and hold where you want the loop to begin
  - Drag to where you want the loop to stop and release the mouse button
- **Change the volume of my entire work**
  - Use the Master Volume sliders on the bottom right part of your screen.
- **Change the speed of my entire work**
  - Use the tempo slider at the middle left of the screen. (Default is 120 b.p.m.)
- **Change the time signature of my entire work**
  - Click on the 4/4 next to the tempo slider. (Default is 4/4.)
- **Zoom—Increase/decrease the amount of time I can see** (so that you can work in smaller time increments [like ¼ beat instead of 8 beats] or get a broader picture of the entire work)
  - Use the left and right +/- buttons in the bottom right corner of the workspace.
- **Increase/decrease the height of each track** (so that you can see more tracks or better see the waveform of each track)
  - Use the up and down +/- buttons in the bottom right corner of the workspace.
- **Playback my work**
  - Use the playback controls in the middle of the screen. There are a few shortcuts:
    - Play (from current point): Space Bar
      - Pressing the space bar again will stop play and return the cursor to the starting point
      - Pressing return will stop play and set the current position as the new starting point
    - Play (from beginning): Shift + Space Bar
    - Cursor to beginning: Home; Cursor to end of work: End
- **Loop playback**
  - Select the length you want looped by dragging and adjusting the bar with yellow triangles (loop region) at the top of the workspace to fit.
  - Press “L” on your keyboard, turning the bar blue. The playback is now looped. (This can also be accomplished by right-clicking on the loop-region bar)
- **Save my work as an audio file**
  - Under the File menu, select “Render As”

- Name your file. It may be saved as mp3, wav, wma, aiff, RealAudio, QuickTime, and other less common file types
  - If you wish to save a specific section of your work as an audio file, set the loop region bar to the section you want before choosing "Render As".
  - When in the "Render As" screen, check the box marked "Render loop region only".
- **Save my work to CD**
  - See your music teacher.

## Manipulating Individual Tracks

- **Delete a track I have already inserted**
  - Highlight the track by clicking on the track number (in the box next to the track name. Press the Delete key.
- **Delete part of a track**
  - Highlight the eraser tool. Click on points you wish to have deleted.
- **Make a track louder or softer**
  - Use the slider that is underneath the track name. You can make a track softer down to silence or up to 12 decibels (dB) louder.
- **Split a track**
  - Place the cursor exactly where you want the split to be. Press "S".
- **Make a track fade in or out**
  - By placing the arrow/pencil at the top left or top right corner of the "painted" region of the track, a 2-pointed arrow attached to a quarter-circle will appear.
  - Click and drag into the track as far as you want the fade to last. Right-click on the fade to select the fade type.
- **Change the volume within a track**
  - Want a track to get louder or softer at a specific point?
    - Press SHIFT + V while the track is highlighted (or right-click to Insert/Remove Envelope; Volume).

- A blue line will appear
  - Double-click at specific places to insert points
  - Click and drag any point to change the volume between two points
  
- **Change the pan within a track**
  - *Note: Pan refers to left and right within a stereo recording. When stereo was first invented, some instruments/vocals/sounds would be put in the right channel while others were put in the left. In many recordings from the 60's and 70's, it is possible to turn off one speaker and lose the vocals, drums, etc. In modern music production, recording engineers make a specific track "lean" (20%-30%) to one side or the other, which separates the sounds slightly for the listener. Harder pans (all left or all right) are used for special effects, such as having the sound pass from one side to the other at a specific point in the work. With ACID Pro, it is possible to set up a work using not only stereo, but 5.1 surround sound. That, however, is much more advanced.*
  
  - Press SHIFT + P while the track is highlighted (or right-click to Insert/Remove Envelope; Pan).
    - A red line will appear
    - Click and drag the line up or down to change the pan of the entire track OR
    - Double-click at specific places to insert points
      - Click and drag any point to change the pan between two points
  
- **Remove the volume/pan inserts**
  - Press SHIFT + V (volume) or SHIFT + P (pan) with the track highlighted, and it will disappear.
  
- **Change the pitch of a track**
  - Double-click on the track number. The "Track Properties" window will open.
  - Use the Pitch Shift arrows to move the pitch up or down. It moves by semitones (half-steps), meaning that up two will be a whole step (like Do to Re). Thirteen semitones will be an octave.

# Sampling and Creating Loops

## *With the Beatmapper Wizard*

*Follow the steps below to create loops from the classic hip-hop hit "It Takes Two" by MC Rob Base and DJ E-Z Rock.*

Mr. Gowman's ACID Remix file is found here:

J:\gowman\8th Grade Music\ACID\Sampling - It Takes Two\It Takes Two Remix  
(ACD file, not ACD-BAK)

1. After you have listened to my simple beat remix of this song in, start a new ACID document.
2. Take a few minutes to work with the loops I have created from this song found in the same folder. After working with my loops, you are going to create your own.

\*\*\*\*\*

1. Start another new ACID document.
  - a. In the Explorer window, navigate to your folder where the file is located (J:\gowman\8th Grade Music\ACID\Sampling - It Takes Two\It Takes Two Remix)
  - b. Double-click the file to open it.
  - c. The Beatmapper Wizard will open.
2. Beatmapper Pages
  - a. BEATMAPPER
    1. Check YES to use the Beatmapper on this file
    2. Check the box for "Automatically start the Beatmapper for long files."
    3. Click NEXT.
  - b. STEP 1
    1. The Beatmapper will automatically detect the first sound, but this is not necessarily the first beat.
    2. Use the space bar for start and stop in this section (you can also use it for playback in ACID). Pressing ENTER to stop the music instead of the space bar will move the start to a new location. Using the space bar will return to the previous position.
    3. Press SPACE to play the track through the introduction ("You're about to...") until the beat starts. Press ENTER to stop playback at the first beat.
    4. Use your mouse to position the start *exactly* where the beat begins.
      - a. If you need to get a larger or smaller view of the sound waves, press the + or - buttons next to the track.

5. Click NEXT.
- c. STEP 2
    1. The Beatmapper will estimate the length of one measure, listen carefully to see if it is *exactly* in time. If not, grab and drag the end(s) of the blue and yellow LOOP BAR above the track to adjust it.
      - a. Again, use the + or – buttons if you need to change your view.
    2. When you have it at the right length, click NEXT.
  - d. STEP 3
    1. In Step 3, Beatmapper loops each measure. Listen to each to see if you really have the measure length correct. Click ahead at least 10-12 to see if the click track still lines up with the music. If not, you may need to go back to Step 2.
      - a. Be sure that the metronome (click track) is checked ON.
    2. When it is correct, click NEXT.
  - e. STEP 4
    1. The “Finished!” window opens. Check all three boxes and click FINISH.
3. Creating Loops
    - a. You will be returned to the ACID workspace, with your new track in place. Click and drag to add music for this track.
      1. Your music will begin where you put the first downbeat, not at the first sound of the original song.
      2. Your project tempo will have changed to the speed of the original song.
    - b. Insert *only* the first four beats of music. You may need to use the + button in the bottom-right corner to increase your view.
    - c. Double-click on the blue and yellow LOOP BAR above the track.
      1. It may jump to fit the music you have entered. If not, drag the yellow ends of it so that it is the same size as your music.
    - d. On the tools menu, select RENDER TO NEW TRACK (Shortcut: CTRL+M)
    - e. Save the loop with the following settings:
      1. Your folder on the C drive (C:\Documents and Setting\YourName)
      2. File Name: Choose a name that you will remember, a name that describes the beat, or use numbers
      3. Save as: .WAV (This is uncompressed and offers the best sound quality.)
      4. Template: DEFAULT TEMPLATE
      5. Description: RENDER 44,100 HZ, 16 BIT, STEREO PCM WAVE FILE. (Default; do not change)
      6. Check RENDER LOOP REGION only
    - f. Click SAVE. You are returned to your project with your new loop inserted.

4. To make more loops or samples, extend the track from the original song (it should be track #1).
  - a. Click on that track's SOLO button (!) Move the loop region to select your loop and repeat steps d, e, and f.

## Creating a Loop from an Audio CD

*Note 1: You may only use sections of music that does not violate ERSD policy regarding profanity or other explicit or inappropriate content. In addition, while U.S Copyright Law allows you to use a small section of the music for personal use, it does not allow you to use the entire original work in your work. It also prohibits you from publishing any work (on a CD that is distributed to the public or via a website) that includes another work that is under copyright.*

*Note 2: Electronically produced music (hip-hop, dance, pop, etc.) is best for this. If there is any fluctuation in the speed of the song, it can be very difficult to get a good loop.*

To sample music from your own CD:

1. Log on
2. Start ACID
3. Start Windows Media Player (Start Menu\Programs)
4. Insert your CD
5. Copy one track from your CD
  - a. In Windows Media Player, select "Copy from CD"
  - b. Uncheck all tracks
  - c. Check just the track you wish to copy
  - d. Click "Copy"
6. Open track in ACID \*(see below)
7. Use BeatMapper
8. Insert BeatMapped track to ACID workspace
9. Pull out loops (see previous page)

\* Here's where your music is (find it in ACID Explorer):

- My Computer
  - Documents and Setting
    - YourName (1<sup>st</sup> initial, last name)
      - My Documents
        - My Music
          - Unknown Artist (with today's date and time)
            - Unknown Album (with today's date and time)
              - Track #



## Building Loops from Scratch

1. Use sounds from the SOUND BITS folders to create your beat.
2. Zoom in until you can see 1.1, 1.2, 1.3, 1.4, & 2.1 across the top of your screen (four beats)
  - a. There should be 16 boxes between 1.1 & 2.1; each box is  $\frac{1}{4}$  of a beat.
3. Set your loop region from 1.1 to 2.1 (four beats) and press "L" to turn on looping (your loop bar will turn blue)
4. The strongest beat of your loop should be beat 1 (1.1); it should have a strong bass note on it.
5. A rock/pop/hip-hop beat in its simplest form is: Beats 1 & 3 = Bass; Beats 2 & 4 = Snare



See that bling? That could be you, future beat producer!

*Note: Now that a teacher has used the word "bling", it's officially dead.*

# Where to Find Loops

## J:\gowman\acid loops

The current folders are available to you:

1. ACID 4 Loop Sampler. Loops from a sampler disc sent with ACIDPro 4.
  - a. Subfolders: 54
  - b. Files: 785
  - c. Genres/styles: Too many to list
2. ACID 5 Loop Sampler. Much content is the same as in the folder above, but there is also quite a bit different.
  - a. Subfolders: 101
  - b. Files: 668
  - c. Genres/styles: Too many to list
3. Ambient Cinematic. Sound effects and “electronic tribal” sounds
  - a. Subfolders: 7
  - b. Files: 51
  - c. Genres/styles: Electronic; sound effects
4. American Piano
  - a. Subfolders: 5
  - b. Files: 356
  - c. Genres/styles: Blues, Country, Funk, Gospel, Stride
5. Dance
  - a. Subfolders: 5
  - b. Files: 109
  - c. Genres/styles: Dance, electronica, house, hip hop
6. Electronica
  - a. Subfolders: 5
  - b. Files: 109
  - c. Genres/styles: Electronica
7. Ethnicity
  - a. Subfolders: 53 in 6
  - b. Files: 323
  - c. Genres/styles: World Music (authentic/traditional)
8. Free Downloaded Loops (occasionally updated)
  - a. Subfolders: 8
  - b. Files: 45

- c. Genres/styles: Hip Hop
9. Hip-Hop. Set up in “packets”, with loops that work together
    - a. Subfolders: 12
    - b. Files: 43
    - c. Genres/styles: Hip Hop
  10. Rock. Organized by instrument.
    - a. Subfolders: 5
    - b. Files: 127
    - c. Genres/styles: Hip Hop
  11. Sample Loops 1. Large loop library, sampled from many styles.
    - a. Subfolders: 56
    - b. Files: 279
    - c. Genres/styles: Too many to list
  12. SAMPLED BEATS. Constantly updated collection of samples from popular music.
    - a. Subfolders: 13 (as of November 1, 2005)
    - b. Files: 57 (as of November 1, 2005)
    - c. Genres/styles: Mostly Hip Hop
  13. Sound Bits. Collection of single sounds from professional producers (used to create beats)
    - a. Subfolders: 2 (as of December 1, 2005)
    - b. Files: Unknown
    - c. Genres/styles: Hip Hop
  14. Student Beats. Collection of beats created by ER students.
    - a. Subfolders: 0
    - b. Files: Constantly updated
    - c. Genres/styles: Mostly Hip Hop
  15. The Vitale Organ. 1970's-style organ with loops grouped by chord type.
    - a. Subfolders: 5
    - b. Files: 35
    - c. Genres/styles: Organ
  16. Total Spanish Guitar. Spanish and Latin styles, grouped by style, meter, and chord
    - a. Subfolders: 4
    - b. Files: 232
    - c. Genres/styles: Rhumba, Flamenco, etc.
  17. World Pop.
    - a. Subfolders: 37
    - b. Files: 393
    - c. Genres/styles: Modern and popular world music styles

# Final Project: ACID Pro 5.0

## 8<sup>th</sup> Grade Music

### Project Requirements

- You must have a beat that you have created from sound bits as the main beat in your work (see below).
- You must include a second beat/loop that you created
- You must use at least four samples from a CD (or CD's) you have provided in your work.
- Before you begin you must determine the speed of your work.
- You must use all of the following techniques:
  1. Beat building (using "sound bits")
  2. Sampling (using BeatMapper)
  3. Track volume leveling/balancing (slider to the left of the track)
  4. Volume envelope (highlight track and press "V")
  5. Track pan envelope (highlight track and press "P")

**This is the proposed structure, found at J:/gowman/8<sup>th</sup> grade music/ACID/final project template (any change to this, see me):**

1. Introduction (at least 4 measures/16 beats)
2. Verse 1 (at least 8 measures/32 Beats)
3. Chorus (at least 4 measures/16 beats)
4. Verse 2 (at least 8 measures/32 Beats)
5. Chorus (at least 4 measures/16 beats) Variation?
6. Break/Change (at least 4 measures/16 beats + 4 measures/16 beats)
7. Chorus
8. Ending (Coda)



















