

THE LASER BEAM

HOW TO APPROACH THIS PACKET

BDG packets are designed with a cumulative pace of development in mind. They start with very rudimentary concepts and build upon them step by step. Because of this, you want to make sure you maximize each module and its respective submodules before moving on to the next one. Here are some things to keep in mind as you work your way through this lesson pack.

It's important to approach every rep with a great quality of sound. Whether this means creating contrast between your accent and tap heights when the exercise calls for it, checking for uniformity between your left and right hands, or any other technique related concept, the more you can strive for quality reps as you practice, the better your performance will eventually be. As a bass drummer it can be easy to disregard this because our music is not as dense or complex in terms of technique. Fight this tendency and make sure all of your reps are played with confidence and intent.

Additionally, don't be hasty in getting to the faster tempos. Being impatient will only cause you to create incorrect muscle memory when it comes to developing your rhythms and sound. Check your underlying rhythms by using the provided play-along tracks or by setting the respective subdivision on your metronome.

Happy Practicing!

Chapter 1 - PARTIAL TIMING

- Exercise 1-A:** 16th Note Accent Grid
 - MP3 Folder - "1-A 16th Note Accent Grid"
 - Tempos: 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150

- Exercise 1-B:** Two Hand Independence Grid A
 - MP3 Folder - "1-B Two Hand A"
 - Tempos: 90, 100, 110, 120, 130, 140, 150, 160, 170, 175, 180, 185, 190, 195, 200, 205, 210

- Challenge 1-B:** Two Hand Independence Grid B
 - MP3 Folder - "1-B Two Hand B"
 - Tempos: 100, 110, 120, 130, 140, 150, 160, 170, 180

- Challenge 1-B:** Two Hand Independence Grid C
 - MP3 Folder - "1-B Two Hand C"
 - Tempos: 100, 110, 120, 130, 140, 150, 160, 170, 180

- Challenge 1-B:** Two Hand Independence Grid D
 - MP3 Folder - "1-B Two Hand D"
 - Tempos: 100, 110, 120, 130, 140, 150, 160, 170, 180

- Exercise 1-C:** Partial Isolation Grid
 - MP3 Folder - "1-C Partial Isolation Grid"
 - Tempos: 90, 100, 110, 120, 130, 140, 150, 160, 170, 175, 180, 185, 190, 195, 200, 205, 210

Chapter 2 - RUDIMENTAL PRIMERS

- Exercise 2-A:** The Standard Laser Beam
 - MP3 Folder - "2-A Laser Beam A"
 - Tempos: 90, 100, 110, 120, 130, 140, 150, 160, 170, 175, 180, 185, 190, 195, 200, 205, 210

- Exercise 2-B:** The Staggered Laser Beam
 - MP3 Folder - "2-B Laser Beam B"
 - Tempos: 90, 100, 110, 120, 130, 140, 150, 160, 170, 175, 180, 185, 190, 195, 200, 205, 210

- Exercise 2-C:** The Turnaround Laser Beam
 - MP3 Folder - "2-C Laser Beam C"
 - Tempos: 90, 100, 110, 120, 130, 140, 150, 160, 170, 175, 180, 185, 190, 195, 200, 205, 210

Chapter 3 - RUDIMENTAL ETUDES

- Exercise 3-A:** Etude A
 - MP3 Folder - "3-A Etude A"
 - Tempos: 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210

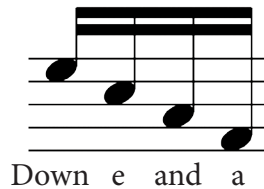
- Exercise 3-B:** The Staggered Laser Beam
 - MP3 Folder - "3-B Etude B"
 - Tempos: 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210

- Exercise 3-C:** The Turnaround Laser Beam
 - MP3 Folder - "3-C Etude C"
 - Tempos: 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210

- Exercise 3-D:** The Turnaround Laser Beam
 - MP3 Folder - "3-D Etude D"
 - Tempos: 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210

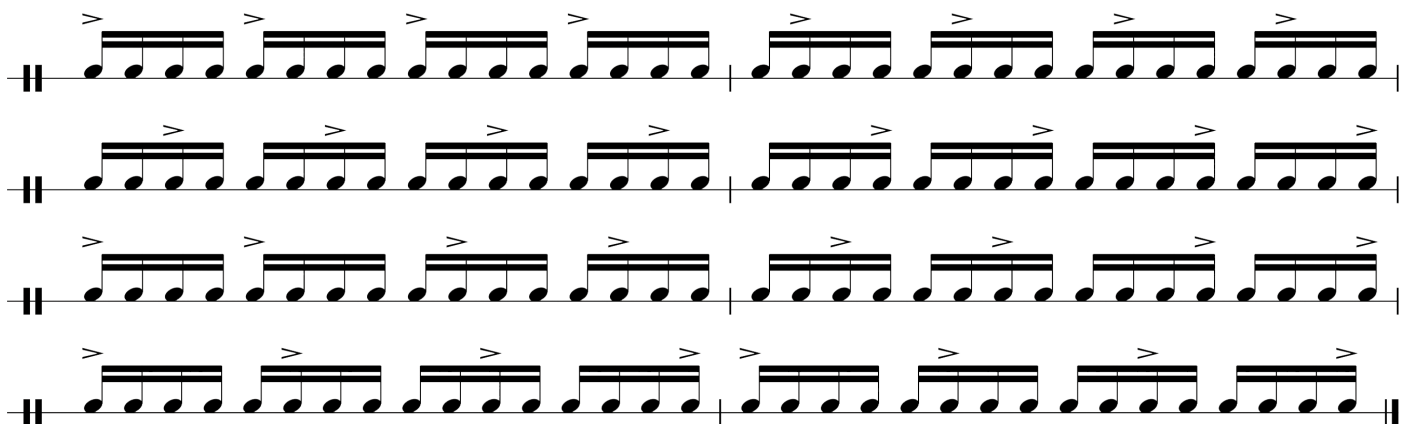
1 PARTIAL TIMING

Your very first task is to learn where each of these partials lies within the musical grid. Since we're dealing with 16th notes, there are only 4 different placements we need to learn: The downbeat, the "e", the "and", and the "a." The next few exercises will help you develop accurate partial placement independently before you meet with the rest of your bassline



EXERCISE 1-A: 16th Note Accent Grid

Tempo: 90-150 bpm



As you work this grid, your primary goal is to establish a strong relationship between all four partials to the downbeat. This exercise accomplishes that goal by placing an accent the first partial in the first bar and then moving it onto the next partial gradually. As you rehearse this grid, however, you must use a metronome and you must mark time. In order to help you visualize how this will benefit you, I've taken two beats out of the second bar of the grid and presented them in two different ways below.



Image (A) represents playing through the exercise as its written with the landing of your feet as you mark time indicated by the notes under the line. **Image (B)** is of the same two beats, but I've removed the notes without an accent and connected the remaining note to the feet. This phrase that we're left with represents the **relationship** you should be building by *acknowledging the "rhythm" that is being played between your feet and the accent*. It's important to think of your feet as an additional instrument here. Imagine yourself playing a drumset; the exercise itself on would be played on the snare, and the marking of your feet would be "played" on the kick drum. In this chunk, the accent is placed on the "E" of every beat and as such, the rhythm being created between the feet and the accent is "1 E (+)(a) 2 E (+)(a)", or "KICK SNARE (+)(a) KICK SNARE (+)(a)" (notes in the parantheses are silent). Let's take at the four possible relationships on the next page.

Accent on Downbeat

Accent on "E"

Accent on "AND"

Accent on "A"

These four images are your key to establishing the correct relationship between every partial and the downbeat. As you play through **Exercise 1-A** you have to hear through all of the low tap notes and listen for the spacing created between the “kick drum” of the exercise (your feet) and the “snare drum” of the exercise (the accented partial). Mastering this exercise happens when you can actively feel ALL FOUR of the relationships being created throughout the entire exercise at all of the relevant tempos.

EXERCISE 1-B: Two Hand Independence Grid A

Tempo: 90-210 bpm

Once you’ve mastered **Exercise 1-A**, it’s time to start strengthening your feel for the partials by removing some of the notes that help you stay on the musical grid. **Exercise 1-B** will look familiar because it’s essentially all of our relationships from the images above. We will be reinforcing these by placing them solely in your hands. This grid will require some two-hand dexterity, so start at a tempo that’s comfortable for you and work your way up from there. First, put the downbeat (bottom line) on the left hand and the moving note (top line) on the right hand, then switch hands.

Whereas in **Exercise 1-A** you could only listen into the “rhythm” between the downbeat and the different partials through your feet and the accent, this workout puts that rhythm completely in your hands. With this in mind, you can really start to hone in the spacing between the partials and the downbeat.

Additionally, start to become wary of the prep on the moving hand. Take the first four bars as an example. We can see that although we’re starting on a different partial every time, the space from note to note on each bar is a full quarter note. Think about how you would play a normal bar of quarter notes, and try to apply the same relaxed approach and prep to every partial. Thinking about this now will make it easier to avoid abrupt timing as you proceed through this lesson pack.

Lastly, ensure that you’re still playing accurate rhythms by checking your playing against the musical grid. You can do this either by setting up a 16th note subdivision on your metronome or by playing along to the **Exercise 1-A** playalong tracks. This will make you absolutely certain that you’re creating correct rhythms and muscle memory.

CHALLENGE 1-B: More Two-Hand Independence Grids

Tempo: 100-180 bpm

You've worked on partial timing in relation to the downbeat because its the easiest partial to follow with a metronome, but can you do it with the stationary hand on something *other* than the downbeat? With your feet still marking time to the metronome, try these exercises which place the stationary hand (bottom line) on the "e", "and", and "a". This will improve your timing and help you build more relationships between all of the partials. Remember to switch hands!

Two Hand Independence Grid B



Two Hand Independence Grid B consists of four staves of music in 4/4 time. The first staff starts with a 4/4 time signature. The first two measures of each staff contain quarter notes, and the last two measures contain eighth notes. The notes are: Staff 1: G4, A4, B4, C5; Staff 2: D5, E5, F5, G5; Staff 3: A4, B4, C5, D5; Staff 4: E5, F5, G5, A5.

Two Hand Independence Grid C



Two Hand Independence Grid C consists of four staves of music in 4/4 time. The first staff starts with a 4/4 time signature. The first two measures of each staff contain quarter notes, and the last two measures contain eighth notes. The notes are: Staff 1: G4, A4, B4, C5; Staff 2: D5, E5, F5, G5; Staff 3: A4, B4, C5, D5; Staff 4: E5, F5, G5, A5.

Two Hand Independence Grid D



Two Hand Independence Grid D consists of four staves of music in 4/4 time. The first staff starts with a 4/4 time signature. The first two measures of each staff contain quarter notes, and the last two measures contain eighth notes. The notes are: Staff 1: G4, A4, B4, C5; Staff 2: D5, E5, F5, G5; Staff 3: A4, B4, C5, D5; Staff 4: E5, F5, G5, A5.

EXERCISE 1-C: Partial Isolation Grid

Tempo: 90-200 bpm

At this point, you've spent a lot of time anchoring each of the four sixteenth note partials to the downbeat, either by actually playing the downbeat or through accents among taps. We're going to remove all the training wheels and focus on perfecting this timing using only your feet and the metronome to develop the correct placement of all four partials.

Your goal is now to recall all of the important relationships and muscle memory in the hands that you've developed thus far. There are several different musical concepts you have at your disposal to get this exercise right.

Firstly, remember the rhythms you were creating in relationship to the downbeat and the spacing of each partial to your feet. Keep thinking of your stomps on the ground as another instrument and use them as a valuable source of time.

Second, ensure that you are keeping the preps to all of the notes relaxed and open, giving yourself plenty of time to play every partial with a lot of velocity which will allow you to play proper full strokes throughout the entire exercise. Besides the hand speed change in every transition from the 4th partial to the 1st, you will not be playing any spaces less than a quarter note wide. As such, don't allow yourself to prep abruptly for any note in this exercise.

Finally, don't be afraid of using the play-along tracks to help you with this last exercise. Don't, however, use them as a crutch to support the fact that you simply don't know the timing at all. Instead, use them to confirm the accuracy of your timing, or to fix little inconsistencies in some of your partials. This is the last exercise you'll be working before you start applying all of your work practically, so make sure your placement here is solid before moving on!

END OF SECTION CHALLENGE



Up until this point, we've been very adamant in using our feet to build strong partial timing. As you may know, however, you won't always be marching or marking time while we play this rudiment. In fact, the laser beam is a bass drum rudiment usually reserved for solos or exposed bass drum passages. Because of this, it is in your best interest to be great at partial timing with and **WITHOUT** the feet. Once you've developed good timing while marking time, challenge yourself to rehearse without your feet and check that you're accurate without that last training wheel so that you're prepared to play laser beams at a halt or to body movement.

2 DEVELOP THE LASER

By this time, you've hopefully developed a great sense of timing and placement for a laser beam. Let's get to playing them. The next few pages have several laser beam patterns you can rehearse either with the play along tracks, or with a set of 4 or 5 bass drummers. Practice these at a wide range of tempos, and rehearse all the parts equally so that you can become proficient at splitting this rudiment on any drum you may play in your career.

EXERCISE 2-A: The Standard Laser Beam

Tempo: 100-210 bpm



The musical notation for Exercise 2-A is presented in six staves, each representing a different partial of a 5-drum set. The notation shows a sequence of eighth notes and sixteenth notes across 12 bars. The first and third partials play together in every bar, while the second and fourth partials play in alternating bars (2, 4, 8, 10). The fifth partial plays in every bar starting from the second bar.

The most common way you'll see a laser beam is in the two ways above with every beat of laser beam starting on the same drum, whether it be top or bottom. This primer will help you build up this rudiment by setting up an easy check pattern where the players on the first and third partial play together first to make sure they're perfectly in time in all of odd numbered bars. Once they've solidified this 8th note skeleton, the players on the second and fourth partial will take their turns filling in their partials one at a time in bars 2, 4, 8, and 10. Once both of the players are comfortable with their own partials, its time to complete the laser beam. If each individual player is focused on creating the correct spacing, bars 6 and 12 should come together perfectly.

If you're having this trouble taking this laser beam, try to recall back to the grids you've already worked on. Since the order of the partials is the same on every beat, we can tell that the spacing from note to note here is also a quarter note. Use that to your advantage. Once you find your first partial, simply maintain a quarter note hand speed and you should make it through the bar. Remember all of the relationships you've established with the feet and continue to manifest this within this exercise.

If there are only 4 bass drummers in your line, simply stop at the Exercise's half way point and start it over again on bar seven on your bottom bass drum.

EXERCISE 2-B: The Staggered Laser Beam

Tempo: 100-210 bpm

Another type of laser beam pattern you'll see fairly often is the staggered laser beam where it begins on either the top drum on one beat then starts one drum down on the next beat, or starts on the bottom drum on one beat then starts on the next drum up on the next beat. We can see that the hand speed timing between the partials on the drums is no longer a quarter note space due to the different starting point on every beat. Let's take a look at two counts of this pattern starting from the top and from the bottom.

Top and bottom play fairly simple parts regardless of where we start. They either play the downbeat on count 1 or the "a" of count 2. Everyone else, however, appears to have a more complex part. Bass 2 plays on the "e" of count 1 then on the downbeat of count 2. Bass 3 plays on the "and" of count 1 then the "e" of count 2. Bass 4 plays on the "a" of count 1 then on the "and" of count 2. You might notice a pattern here. For the middle three drums, the space between their partials is 3 sixteenth notes, or more simply, a dotted eighth note space. Knowing this, we can visualize the parts of drums 2, 3, and 4 into the following three bars.

If you know how to play these three bars to your feet (written out below the barline) then you are prepared to play the part of any of the middle three drums regardless of whether the staggered laser beam starts at the bottom or at the top. This is simply because as long as you start on the correct partial and play a dotted eighth note space, you'll be correct. Don't listen in to the melodies created by the music. Instead, play the correct rhythm and spacing respective to your drum and the laser beam's starting point, and the overall rudiment should come across clearly from the bassline.

Keep all of this in mind as you rehearse all 5 parts in this exercise at all of the relevant tempos.

EXERCISE 2-C: The Turnaround Laser Beam

Tempo: 100-210 bpm

The last laser beam pattern that we'll be talking about is the turnaround pattern. It's called as such because it starts on one end of the drums, goes to the opposite end, and then comes back to the starting point. While this one is fairly straightforward for drums 1, 3, and 5, it can be difficult for the players on the upbeats because of the fast hand speed required in combination with the awkward placement of their partials. Let's pull a few beats from the exercise in order to see if we can simplify the difficult parts into something easily rehearsable.

On the image on the right, we can see the drum 2 plays on the "e" of 1, as well as on the "a" of count 2 while drum 4 plays on the "a" of count 1 and the "e" of count 2. The parts are exactly the same on the image on the right other than the drums being reversed. We're going to focus in on the turnaround of this laser beam where the partials arrive at one end of the drums and then head back to the either end. This happens in both images on the "a" of 1, the downbeat right on count 2, and the "e" of 2. Ignoring the downbeat to focus in on the upbeat parts, we can break the partials down into the following two bars.

You might notice that the spacing at both turnarounds is two 16th notes apart, or more simply, one 8th note space. So if you're a player on the upbeats, you know that if you can play two normal 8th notes at the tempo you're attempting the turnaround at, you can also play this split. You simply need to perfect the spacing of your "e"s and "a"s. The best way to approach this is by rehearsing the two bars above while marking time (feet notated under the barline). Pay special attention to the way the "a" and "e" are played tightly around the feet, and once you develop this relationship, approach the part within the exercise in the exact same way.

As with the two patterns before, continue to rehearse all five parts in this exercise at a lot of relevant tempos.

3 APPLY THE TIMING

We've honed your partial timing skills and taught you the correct way to approach the laser beam within the context of a bassline. It's time to start applying all of this information to a lot of different combinations of our laser beam patterns so you can develop your affinity and sight-reading ability for this rudiment. Try your hardest to develop your partials on your own before using the MP3s!

EXERCISE 3-A: Etude A

Tempo: 100-210 bpm



Exercise 3-A: Etude A is a 4-measure piece in 4/4 time. It consists of four staves of music. The first three staves each contain two measures of music, and the fourth staff contains two measures. The music is a continuous sequence of eighth notes, starting on a middle C and moving in a stepwise fashion across the staves. The final measure of the fourth staff ends with a double bar line and a fermata.

EXERCISE 3-B: Etude B

Tempo: 100-210 bpm



Exercise 3-B: Etude B is a 4-measure piece in 4/4 time. It consists of four staves of music. The first three staves each contain two measures of music, and the fourth staff contains two measures. The music is a continuous sequence of eighth notes, starting on a middle C and moving in a stepwise fashion across the staves. The final measure of the fourth staff ends with a double bar line and a fermata.

EXERCISE 3-C: Etude C

Tempo: 100-210 bpm



Musical notation for Exercise 3-C: Etude C, consisting of four staves of music. Each staff begins with a double bar line and a repeat sign. The notation features a sequence of eighth and sixteenth notes, with some measures containing beamed eighth notes. The piece concludes with a final measure containing a quarter note followed by a fermata.

EXERCISE 3-D: Etude D

Tempo: 100-210 bpm



Musical notation for Exercise 3-D: Etude D, consisting of four staves of music. Each staff begins with a double bar line and a repeat sign. The notation features a sequence of eighth and sixteenth notes, with some measures containing beamed eighth notes. The piece concludes with a final measure containing a quarter note followed by a fermata.