# Amplitude Q&A with Harmonix Music Systems

(answers provided by Alex Rigopulos, co-founder and CEO of Harmonix Music Systems, and one of the principal designers of *Frequency*<sup>TM</sup> and *Amplitude*)

## **GENERAL**

# Q: Please provide background on yourself and Harmonix Music Systems.

A: My own background is in music and computers. I was at MIT for seven years, first studying composition as an undergrad, and then moving on to the computer music group at the MIT Media Lab. It was there that I met Eran Egozy, a brilliant computer scientist and also an accomplished musician, with whom I co-founded Harmonix in 1995.

Our original motivation for starting the company had nothing to do with video games. Rather, we both saw a problem in the world that we wanted to solve, which was this: Playing music feels *incredibly good*, but very few people ever get to experience this, because learning to play an instrument is so damned difficult. So, we started Harmonix to invent new ways for non-musicians to have access to the unique pleasure that comes from making music.

We spent our first few years building interactive music experiences of various kinds, not games. Then, Parappa, Beatmania, DDR, etc. appeared in Japan in the late 90's. We saw enormous potential in rhythm-action gameplay as a means to bring music-making to a mass audience, and we decided to devote ourselves to pushing the music gaming genre to the next level. So, we dreamt up a design and built a prototype and showed it to Sony back in spring of 2000. They "got it", and we started building *Frequency* for PlayStation®2.

# Q; Please describe the concept behind *Frequency*?

A: Well, the basic concept was to create an action game that, on one level, was all about the adrenaline and intensity of live music performance but that, on another level, was all about the adrenaline and intensity of competing to win. As I said, much of the inspiration for this basic idea came from the early Japanese music games. But we really wanted to make the musical dimension of our experience much deeper, which is what led us to focus the gameplay on the act of building songs, note-by-note and track-by-track. As for the visual design concept of the multi-sided tunnel as a musical surface, that was born from the pipe dreams of Greg LoPiccolo, the project director of *Frequency*. The design was pretty experimental, so naturally the details evolved quite a bit as we tried out a lot of ideas. But we never deviated from the original vision.

# Q: What makes Amplitude different from Frequency?

A: Amplitude's visual design was given a dramatic overhaul. The visuals in Frequency got the job done, and they were pretty stylish in a retro kind of way. For Amplitude, we really wanted to push the visual experience over the top and make the graphics a stunning a part of the experience for the music and gameplay, and I think our art team really pulled it off. We've opened up the tunnel, unraveling it into a multi-lane highway, thereby revealing a world outside. The surrounding game environments are gorgeous and tightly synchronized with the music and gameplay, and the effect is quite hypnotic. We've also changed the visual design of the player UI to make the game look much more like a shooter, so that it will be easier to comprehend at first glance. As for basic gameplay, Amplitude is pretty similar to Frequency, but with integrated online play, which is a fricking party.

# Q: How does multi-player gameplay work in Amplitude?

A: A player can interact with other players in a number of ways. First they can enter Multiplayer Mode. In Multiplayer mode, you can compete with up to three other people (total of four players). It's analogous to a landgrab. The player who activates more parts of the song (bass, vocals, drums, etc) than the other players will have the highest score, and thus be the winner. You can either activate the tracks manually or by using powerups, like the autoblaster. Multiplayer mode can be fun and fiercely competitive as well as having it's own exclusive powerups designed specifically to mess up the other players.

Secondly, you can collaborate with up to three other players to create your own remix of a song. You can work together in real-time, or work on your own and share your work with other players.

And last, but not least is perhaps the best kept secret of the game, Duel Mode, in which players go head-to-head in a Deliverance-esque dueling banjos competition where one player will improvise a pattern and the other player needs to repeat it exactly. They'll have access to all the instruments that they played in the song like guitars, drums, turntable and vocals. We're play testing this right now and people just can't seem to put it down. I think it's going to be one of the most talked about features of the game.

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## Q: Please describe the character customization feature in *Amplitude*.

A: In *Frequency*, the FreQ's were 2D. In *Amplitude*, they're 3D, so there's a heck of a lot more we can do with them. They're much more customizable (different shapes, outfits, gear, etc.), so the player has a lot of freedom to tailor his FreQ in very comical ways. We had a lot of fun with this. We've also animated them and better integrated them into the game experience.

## **ONLINE**

## Q: Please describe the online mode in *Amplitude*.

- As long as the player has a PlayStation 2 Network Adaptor, they'll be able to easily log into the *Amplitude* Network. They'll create a username and password, as well as a customizable 3-D avatar that will represent them. Once in, players will be able to chat, search for friends, search by song, game mode or difficulty. Any player can host a game, which lasts the length of the song. Games can be hosted with and without powerups to match your style of play. There will be a ladder ranking system so you can see how your skills rate in the world of *Amplitude*. You can create here, you can collaborate here, and you can compete here. *Amplitude* is very narrow-band tolerant, so both dial up and broadband players will be on an even playing field.
- **Q:** In the online mode, have you implemented any new single-player or multiplayer game modes and power-ups?
- A: There is also an entirely new game mode, called "Duel," which we're all pretty excited about. This mode is a showdown between two players, a sort of "duelling banjos" that merges creativity and competition. The way it works is that one player improvises musical phrases that the other player has to reproduce, and vice versa. The players trade riffs back and forth until one of them shows who's boss. It's a blast, and it also works online.

Also, in the regular game, there's one new power-up that I love: "Slo-mo," which momentarily slows down the gameplay to "bullet time", thus making it easier to play through the tough phrases. The musical result is really twisted.

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## **ONLINE(Continued)**

# Q: What is unique about the going online with *Amplitude*?

A: Going online will allow you to hook up with players all over the United States. In addition to all of the features I outlined above you'll also be able to upload your best remixes with the potential for them to be judged by Sony and potentially the artists themselves. You'll also be able to download special remixes that we post which will include contest winners and remixes created by some of the artists. You can't get that kind of action by not going online, so if you don't already own one, make sure you have a network adaptor by the time *Amplitude* is released.

#### Q: Please explain how the remix mode works in *Amplitude*.

A: When a player creates a remix, the data can be stored to his/her memory card. The data stored isn't audio data at all, but a performance of the samples used to play back the song. It's essentially a midi file – completely useless without a copy of *Amplitude* and a PlayStation 2. When someone has a remix that they feel really good about, we are giving them the option to upload it to our servers. Concurrently they will also be able to download remixes that we post and store them on their memory card for both playback and gameplay.

#### Q: How do you see the online environment in *Amplitude* will grow?

A: Making music is certainly gratifying as a solitary experience, but it takes on a whole new dimension when you're doing it with other people. We expect that most players will start out playing against each other competitively in *Amplitude*'s online game modes. But ideally, we hope that many of these players, once they've mastered the online game modes, will move on to the online remix modes, where they can use the new skills they've acquired to collaborate on creating original music together.

#### **MUSIC ROSTER**

# Q: Please describe the music roster in *Amplitude*.

A: The music mix this time around is still pretty eclectic, but it's also rather different from *Frequency*'s. *Frequency*'s music mix was focused mostly on electronica. *Amplitude* does have some electronica, but it's much more focused on rock and hip-hop. We've managed to round up a pretty kick-ass roster of artists for the game that include David Bowie, Blink 182, Pink, Run DMC, Weezer, Herbie Hancock and more.

Overall, it was important to us that we assemble an interesting and eclectic mix of music covering a wide range of styles. We also wanted a roster of artists that spanned from mainstream to obscure. The result is that there's one artist or another in the mix that's immediately appealing to just about anyone, and at the same time there's a lot of space for players to discover great new music in the game they'd never have listened to otherwise.

## Q: Please describe the music licensing process for *Amplitude*.

A: Harmonix collaborates closely with Sony Computer Entertainment America to select the tunes. In particular, Harmonix's music director, Josh Randall, and our producer at SCEA, Chuck Doud, are the guys who decide what music goes in the game, and Doud handles all of the actual licensing. *Frequency* and *Amplitude* required not just stereo recordings of the licensed tunes, but the original multitrack master recordings, which made the licensing process quite challenging compared to most games. But many of the artists we approached were very into the game. They saw it as a great way to let their fans get inside their music, and that helped a lot.

#### Q: What's your favorite track on *Amplitude*?

A: My favorite track, as it turns out, is a hidden secret song. So I can't tell you what it is. Have fun finding it. ©

## **OTHER**

- Q: Do you find that real-life musicians play better in *Amplitude* than non-musicians? Or worse?
- A: From what we've seen, a stoked gamer will beat the crap out of a stoked musician in *Amplitude*. Sure, being musical definitely helps, but to really excel at the game, you need to grasp the more advanced gameplay tactics. The best *Amplitude* player we know of (one of our playtesters, for whom we needed to add an extra digit to the score display...) isn't a musician.
- Q: Have you got any other music-based projects in the pipeline? Can you tell us anything about them?
- A: Yup, we sure do. Music-based games are the reason we exist, so we'll always have new music-based games in the pipeline. Unfortunately, though, I can't say anything about them yet...

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