

Adobe® Audition® 2.0

Making the theme session

Adobe Audition 2.0 is a comprehensive digital audio production system that provides everything you need to record, edit and mix professional-sounding audio. To prove it, Adobe teamed up with Grammy Award-winning engineer, mixer and producer Charles Dye to produce, track and mix an original song by the up-and-coming South Florida band eL using Adobe Audition 1.5 and an early version of Adobe Audition 2.0. The result, a song titled “Honesty,” is the new Adobe Audition 2.0 theme session.

The theme session opens automatically the first time you launch Adobe Audition 2.0. You can load the session at any time by choosing File > Open Session. Navigate to the Adobe Audition 2.0 program folder, open the Audition Theme folder, and then select the file Audition-theme.ses.

The song was tracked at the prestigious Hit Factory Criteria in Miami – birthplace of such classics as James Brown’s “I Got You (I Feel Good)” and the Eagles’ “Hotel California.” Overdubs and edits were done at Charles Dye’s studio The Gate, and Charles mixed the session at Adobe’s Seattle studios.

This document takes you through the making of the theme session, from tracking to editing to mixing. It describes what went into each step, and how Charles used Adobe Audition to create a polished, professional mix.

The creative team

Charles Dye (www.charlesdye.com) is well known in the recording industry, having worked on multiple platinum and Grammy-winning albums. He has recorded and mixed hits for artists such as Ricky Martin, Sammy Hagar, Julio Iglesias, Jon Bon Jovi, Aerosmith, Gloria Estefan and many others. In 2001 Charles won a Latin Grammy Award for Best Engineered Album for his work on Thalia’s *Arrasando*. He is recognized as a trailblazer in “in the box” engineering, relying exclusively on plug-ins for all signal processing while mixing.

The musical talent behind the theme song is the South Florida band eL (www.elband.com). For over six years, eL has been playing original melodic rock with a Brit-pop influence. The four-piece band includes Jeremy Clark (lead vocals/rhythm guitar), Chris Wood (lead guitar), Bradley Dickinson (bass guitar), and Rob Nieminen (drums). eL’s catchy songs and tight, creative performances are winning national and international audiences.

Tracking at Hit Factory Criteria

Tracking was done in one 16-hour session at Hit Factory Criteria’s famed Studio C, the actual studio where “Hotel California” was recorded. Studio C boasts a vintage Neve 8078 console and a dream list of microphones and outboard gear. The group spent the first few hours setting up drums and amps, placing microphones, patching cables and adjusting levels. The band set up in the main live room, while bass and guitar cabinets were placed in individual isolation rooms.

The recording setup mimicked a traditional tape-based system with Adobe Audition 1.5 installed on a digital audio workstation (DAW) acting as the tape machine. Input channels on the split-console Neve were routed to post-fader output buses, and outputs from the DAW were then routed back into the tape returns of the Neve. This setup allowed Charles to use the Neve console’s channel EQ and channel fader to control the sound sent to the DAW. Adobe Audition 1.5 was installed on an HP AMD64 PC with SATA HDDs and 2GB RAM. An RME Fireface 800, RME ADI-8 and Apogee Rosetta 800 were used for 24 tracks of A/D conversion.

The following track setup was used during the session:

Track No.	Track Label	Microphone	Microphone Preamp	Analog to Digital Converter
Track 01	Kick Drum (Inside)	Sennheiser 421	Neve8078	Apogee Rosetta
Track 02	Kick Drum (Outside)	Neumann U47fet	Neve8078	Apogee Rosetta
Track 03	Snare Drum (Top)	Shure SM-57	Neve8078	Apogee Rosetta
Track 04	Snare Drum (Bottom)	AKG C452	Neve8078	Apogee Rosetta
Track 05	Hi-Hat	AKG C452	Neve8078	Apogee Rosetta
Track 06	Floor Tom	Sennheiser 421	Neve8078	Apogee Rosetta
Track 07	Rack Tom	Sennheiser 421	Neve8078	Apogee Rosetta
Track 08	Drum OH (Left)	AKG C24 (cap1)	Neve8078*	RME AD8
Track 09	Drum OH (Right)	AKG C24 (cap2)	Neve8078*	RME AD8
Track 10	Ride Cymbal	AKG C452	Neve8078	RME AD8
Track 11	Room 1 (Left)	Neumann U47	Neve8078	RME AD8
Track 12	Room 1 (Right)	Neumann U47	Neve8078	RME AD8
Track 13	Room 2 (Left)	In Ceiling B&K 4003	Neve8078	RME AD8
Track 14	Room 2 (Right)	In Ceiling B&K 4003	Neve8078	RME AD8
Track 15	Bass Cabinet	Sennheiser 421	Neve8078	RME AD8
Track 16	Bass DI	Avalon U5	Neve8078**	RME Fireface
Track 17	Jeremy Guitar 1	Shure SM57	Neve8078	RME Rireface
Track 18	Jeremy Guitar 2	Beyer M260	Neve8078	RME Rireface
Track 19	Woody Guitar 1	Shure SM57	Neve8078	RME Rireface
Track 20	Woody Guitar 2	Royer R121	Neve8078	RME Rireface
Track 21	Lead Vocals	AKG C12	Neve8078	RME Rireface

*Insert Effects for Drum OH: GML EQ

**Insert effects for Bass DI: LA2A1 – Tube-tech MEQ5-LA2A-Pultec EQP1A

Recording began with the entire band performing complete takes of the song, with the goal of capturing the best drum and bass tracks possible. With those foundation tracks laid, attention turned to recording punch ins to clean up specific areas of a track, and to guitar overdubs – additional guitar segments used to fatten up the sound. At the end of the recording session, 80 tracks had been captured in Adobe Audition.

Overdubs and edits

When recording was complete at the Hit Factory, the team moved to The Gate to work on vocals, more overdubs and to start editing. Before recording the vocal tracks, Charles created a rough mix in Adobe Audition from the tracks recorded at Hit Factory Criteria by selectively muting tracks he didn't need and making rough adjustments to the levels on the ones he did. Jeremy sang and played lead guitar along with the rough mix for 6 separate vocal takes.

A master vocal track was compiled from the 6 individual vocal tracks. This involved taking entire lines, single words and even single syllables to make one great delivery out of six really good ones. As portions of each source track were copied to the master track, cross fades were added between the clips to smooth out the transition and eliminate clicks and pops.

For the guitar overdubs, Charles used a number of different techniques to get the sound he and the band were after. Some of his approaches were traditional, and some -- like placing the guitar amps in the bathroom and miking the shower door -- were just for fun.



Photographs from the recording sessions.

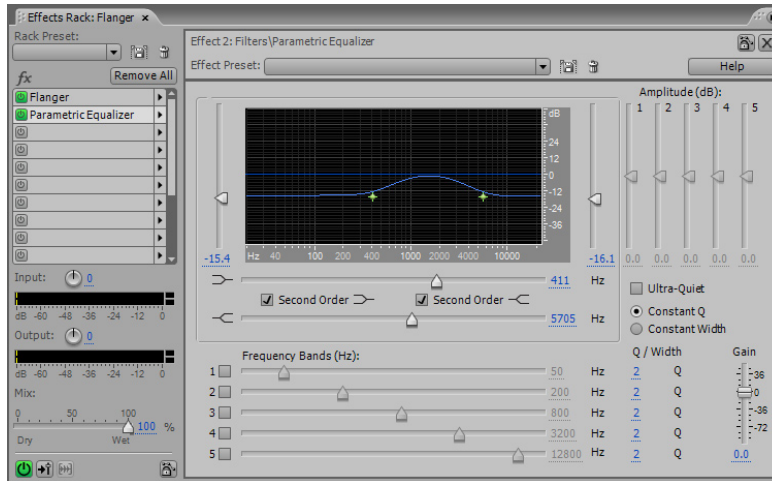
A. Drums set up in Studio C's live room. **B.** Positioning microphones. **C.** Charles Dye at the Neve 8078 in Studio C. **D.** Lead singer Jeremy Clark recording vocal overdubs with Charles. **E.** Chris Wood after a successful guitar overdub.

Mixing with Adobe Audition 2.0

Several weeks after the tracking session, Charles arrived at Adobe's Seattle office to mix the session using an early version of Adobe Audition 2.0. He started by arranging his Adobe Audition workspace. Using a dual-monitor set up, Charles displayed the main multitrack timeline panel on one monitor and the Mixer panel on the other, allowing him to move easily between the two panels. He organized the multitrack session by arranging individual tracks sequentially from top to bottom based on their start time. He then grouped tracks together - drum tracks together, guitar tracks together, etc. - and assigned colors and labels to each. Charles also trimmed down the clips in each track to only those portions that were needed, so that background noise picked up by the microphones wasn't heard in the session.

Mixing began with the drum tracks, specifically the kick drum. Charles' approach was deliberate and precise. He listened to the kick drum track by itself and in combination with other tracks, applying and tweaking EQ and compression effects until he had the precise sound he wanted. From there he moved on to the remaining drum tracks - taking the same exacting approach - followed by the bass and guitar tracks.

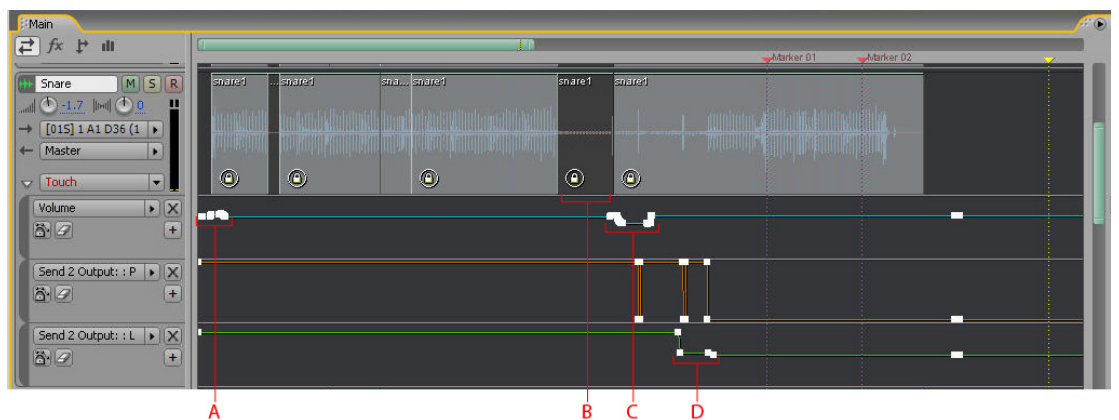
Charles relied on built-in effects in Adobe Audition 2.0, such as the Delay and Channel Mixer effects, as well as on third-party VST effects. He often cycled through the available effect presets until he got a sound that was close to the one he wanted, then he used the effect parameters to make fine adjustments. The Effects Rack in the Adobe Audition 2.0 Multitrack View gave Charles an easy way to apply, reorder and optimize effects. When Charles was satisfied with the effects on a track, he froze it. Freezing a track conserves processing power, which gave Charles improved system performance for the rest of his work on the session. If Charles wanted to edit a frozen track at any time, he simply defrosted the track with the click of a button.



Effect parameters displayed in the Effects Rack. In this shot the Parametric Equalizer effect is applied to the Flinger bus. Both lead vocal and vocal double tracks were routed to bus.

Mixing the vocal tracks involved blending lead vocals, doubles (separate takes of lead vocal passages used to create additional depth), harmonies and background harmonies. To make sure the background vocals didn't overpower the lead vocals, Charles used EQ to cut frequencies that were prominent in the lead vocals from the background vocals. During this process, Charles was also conscious of the lyrics, creating a balance between musicality and poeticism.

Charles used parameter automation to make fine adjustments to the sound of each track. For example, Charles used track automation to raise the level of a snare fill at the beginning of the song and then fade it as other tracks were introduced. He took the same approach with the background vocals. Using automation, Charles could make and record adjustments to a track in real time as it played back. He could also fine-tune parameters by adjusting the edit points on a track envelope.



Snare drum track showing automation lanes for the volume parameter. In this shot you can also see automation for send pan and level parameters. **A.** The snare drum fades in then out at the beginning of the session **B.** Dark gray indicates a section of the track that is muted **C.** More volume adjustments. **D.** Decreasing send level.

Adobe Audition 2.0 System Requirements

- Intel® Pentium® III, IV, Centrino (or other SSE-enabled processor)
- Microsoft Windows XP Professional or Windows XP Home Edition with Service Pack 2
- 256 MB RAM (512 MB required for video, 1 GB or more recommended)
- 700 MB of available hard disk space (5.5 GB recommended for installing optional audio clips)
- 1024 x 768 display (1280 X 1024 recommended)
- Sound card with DirectSound or ASIO drivers (multitrack ASIO sound card recommended)
- CD-ROM drive (DVD-ROM drive recommended for installing optional audio clips)
- CD-RW drive for audio CD creation
- Speakers or headphones recommended
- Internet or phone connection required for product activation and Internet-related services

With the basic track adjustments made, Charles moved on to special effects like delay, reverb and flanging. He applied these effects by setting up buses and then routing tracks to the buses using sends. For example, Charles created a bus with a slap-back effect. He then routed lead vocal and vocal double tracks to the bus via sends. Vocal, guitar, snare and kick drum tracks were all routed to a bus with a large, natural-sounding reverb effect. A gated reverb was added to another bus to give a special effect sound. The revamped Mixer panel in Adobe Audition 2.0 gave Charles flexibility in routing tracks. For example, the lead vocal track was routed to multiple buses, and the bus with the slap-back effect was then routed to another bus with a gated reverb effect.



Mixer panel showing several tracks and buses. The Mixer panel shows all of the settings at a glance, including pan and level settings, which effects are applied, and where the track or bus is routed.

The final session contained 37 audio tracks and 5 buses. The version of the session you'll find in Adobe Audition 2.0 was submixed to save space and to ensure playback on less powerful machines, but you'll see many of the original elements Charles called upon in creating his signature sound. When you check out the session in Adobe Audition, be sure to dig into the automation lanes, the effect choices and the routings Charles used to get the polished mix he is famous for.

About Adobe Production Studio Premium

Adobe Audition 2.0 is the audio-editing component of Adobe Production Studio Premium software. Adobe Production Studio Premium offers a complete and highly integrated environment for all your post-production work, from initial concept through final delivery. Adobe Production Studio Premium includes Adobe After Effects® 7.0 Professional Edition, Adobe Premiere® Pro 2.0, Adobe Photoshop® CS2, Adobe Audition® 2.0, Adobe Encore™ DVD 2.0, Adobe Illustrator® CS2, Adobe Dynamic Link, Adobe Bridge. To learn more about Adobe Production Studio Premium, visit www.adobe.com.

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