

Recording Magazine, July 2005 Central Station



By Darwin Grosse

In most professional studios you'll find several speakers sitting on the mixer bridge, offering the engineers and producers critical listening options over a wide range of monitors. This kind of flexibility used to be too expensive for the average home studio, but with the recent availability of excellent (and affordable) studio monitors by the likes of Mackie, KRK, and Tannoy, many of us can now afford to get in the multiple-monitor game.

Once you have more than one set of monitors, you will need a mechanism for switching between them. While recording consoles often provide monitor switching, this comes with the cost of having a big mixer, and also running your signal through a mixer (when the most pristine signal is available directly from your DAW outputs).

PreSonus rides in to the rescue. The Central Station provides multiple inputs, switched to several outputs, and features an ultra-clean signal path and a super-convenient remote control.

What it is

The Central Station is a single-space rackmount line-level audio routing system, allowing any one of five stereo inputs to be routed to any of three monitor outputs. Two stereo analog inputs are balanced 1/4" TRS jacks, the third stereo analog input has RCA inputs, with trim control for level matching of input signals. The Central Station also accommodates two digital inputs via S/PDIF or Toslink, with D/A conversion up to 24-Bit/192 kHz. Additionally, a cue system provides a routing for an alternate set of outputs, such as a headphone mix for overdubbing musicians.

A talkback system is provided to communicate with players (or back to your DAW), as well as some exceptional metering and dual headphone connections. With all of

these features, you might expect the unit to be a user-interface mess. But PreSonus has done a masterful job of panel layout, making this one of the cleanest (and coolest-looking) devices in my rack.

The main function of the Central Station is to switch between input signals and monitor outputs. Brightly lit switches indicate both the currently selected input as well as the current monitor set, along with single-button options for monitor muting, dimming and mono monitoring. Despite all of these switches, the analog signal path is passive, meaning that no amplifiers are used between the inputs and outputs. As a result, distortion and noise are nonexistent, leaving you with a clean and focused sound.

Remote

If the Central Station is all about clarity, the optional CSR-1 remote is about convenience. The remote features a master level control, audio routing selectors and remote talkback control (with a built-in mic). The dim, mute and mono switches are also provided, duplicating those on the main unit. The remote connects to the Central Station with an included DB9 connector cable, with an adequate 10-foot length.

One oddity of the CSR-1 is that it disables the front panel volume control when activated. This isn't too big of a deal, since you are probably either using the remote or the front panel. However, it did get me thinking, and it turns out that when the CSR-1 is in use, the audio signal must travel all the way to the remote and back. I guess if you are planning to maintain a purely passive signal path, this is an alternative; however, it also provides an argument against using the remote.

Setting up

So, how difficult is it to set up the Central Station? It couldn't be easier. Perhaps the most important thing to realize is that all of the connectors (except for the aux input and digital I/O) are based on 1/4 TRS balanced connectors, so you might need some adapter cables on hand. The use of balanced 1/4 jacks is a good compromise between the physical stability of XLR jacks and the smaller size of 1/4 connections. Everything wired up cleanly, and the jacks provided a tight cinch to the input and output jacks.

Once you have your monitors connected, it is time to set the individual levels. The Central Station provides front-panel trim pots to adjust the level of each monitor in the system and left and right monitors have separate adjustments. By carefully monitoring an input while switching between speakers, it was easy to get each of the monitor systems to work at a balanced volume level.

In use

In use, the Central Station shines. The passive audio path is ultra-clean, while the digital inputs (and their converters) are crystalline. The switching matrix provides a hefty chunk whenever you change inputs or outputs, lending to the feel of a quality piece of gear. The dual headphone outputs (mounted on the front panel) provide a satisfyingly high level of clean amplification, and are able to drive my headphones as loud as I can stand. The headphone outs can be switched from the cue or main input selections, which makes it easy to create monitor mixes for artists while keeping a separate control room master mix.

The cue system is quite powerful, but is also a straightforward implementation. The cue output section allows you to select any of the inputs, and route them to the cue output. This is handy for a recording space that has a separate control and studio room, and can also be used for performing quick dubs. Since I'm working in a single-room studio, I primarily use the cue system (in combination with the headphone system) for creating musician monitors, with the added benefit of having a talkback system to communicate through the headphones.

Remote and metering in use

Perhaps the best part of the Central Station, in my studio, is the CSR-1 Remote Unit. This little box, tucked neatly next to my DAW keyboard, provides input switching, speaker switching, and local talkback control. The only negative I find is the lack of cue system control since I can't adjust any cue settings from the remote, I have to reach for the main unit whenever I am working with another musician.

An unexpected benefit comes from the Central Station's metering. This 30-segment display proves to be the best meters I have in my studio, and are key for keeping in touch with the levels, noise floor and dynamics of the music. It is especially useful in mixing situations, where I am able to use it to eyeball my compressor use to maintain an appropriate dynamic range.

All in All

PreSonus seems to have selected the right combination of features and functions to make the Central Station useful for almost any studio. For one-person project studios, the convenience of the remote's functionality, combined with the detailed metering and excellent sound, make it an excellent choice. For studios with separated studio and control rooms, the cue monitoring system and built-in talkback system will provide the necessary tools for interacting with the artists.

Perhaps the strongest statement a reviewer can make is the personal recommendation: When a product is so good that he recommends it to his friends and colleagues. The Central Station has certainly done that. Three of my colleagues

have purchased the Central Station on my strongest suggestion, and are absolutely ecstatic. That's cash-money. Off-the-shelf retail. So, do you think I like it?



As an optional extra the Central Station's remote control unit has to be one of the most necessary options you'll come across because though the main box works beautifully, it's never going to be very convenient to use even if it's sitting on the desk top. The remote duplicates the most often used features and is designed to sit to the left of your computer keyboard, so first thing you come to as you reach across is the monitor level and next to that the talkback. Above the level pot are the speaker select switches and furthest away the least used, the input select buttons for the main bus. The Cue bus isn't duplicated here.

The action of the controls is exactly the same, it's just the positioning that's so much more handy, and the great thing with the two units is that you don't have a messy nest of cables on your work surface, just the single thick remote cable.

The Central Station plus remote is the perfect answer for any small studio that wants to lose or side-line its mixing desk.