

Aphex 1788 Remote Controlled Mic Pre-Amp



(Editor's Note: This may be the toughest review I have ever had a part in. Because, to be very plainspoken, I have never used a single piece of gear that made this much difference in the overall sound of a system, and it will be hard to write about it without sounding like an Aphex shill. So please understand going in that Aphex did not write the review or influence it. They got the same fact check opportunity as any other company, but nothing else. We even returned the gear in just 72 hours—far less time than we usually take. No money or gear changed hands, and at this point, Aphex is not even an FOH advertiser. Now that that is out of the way...)

If someone says the word "Aphex," your first response will likely be, "Aural Exciter," right? Yes, that piece is the thing most of us associate with the Sun Valley, Calif. company, but if there is a shred of justice out there in the big wide world, that exchange will soon go like this: "Aphex?" "1788." Marvin Caesar, Aphex president, has been bending ears for a while now about the effects of long mic lines and splitters on a system in terms of both loading and degradation of sound quality. He has been an evangelist for the idea of mic-pre's that live as close to the source as possible to overcome the problem. (BTW, that is the same approach the Yamaha PM1 D, the DiGiCo

D5 and the digitally controlled Showconsole use, given the fact that the pre's are separate from the control surface anyway.) Like many of you, we listened with interest until we realized that what he was proposing meant not using the beloved pre's in our favorite consoles, which is the point at which most

for the MON (Aux) output. The optional digital module consists of a 15-pin D-Sub for the AES, a TDIF D-sub and a Toslink for the ADAT, and two BNCs for word clock in and out. The control connectors are MIDI In, Thru and Out, RS-232, RS-422 In and RS-422 Link Out. While these control

units is the same as controlling one of the old units. The totally new software is PC and MAC compatible.)

It is all solid and well built.

The only complaint would be the aforementioned crowding on the back panel—pulling a single XLR connector after everything was plugged in was a bit of a challenge for those of us with stubby fingers.

From left to right on the front panel are eight LED ladders for monitoring headroom, with a numbered push-button under each for activating control of that channel. Surrounding the meters are indicators for Input Gain (switchable to FOH and MON output levels), mute, phantom power, -26 dB pad, 70 Hz LoCut, polarity reverse and the limiter (one of the unit's coolest and most useful features). Next to the channel buttons is a switch that allows you to choose multiple channels to control at the same time. (Note that when adjusting gain on multiple channels, the changes are relative. In other words if there was a 6dB difference in the channels to begin with, that difference will remain as gain is raised or lowered.) Surrounding the single gain knob are switches to choose between gain stages (input and output for both FOH and MON) and the switches for the options mentioned earlier

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of our eyes glaze over and we start thinking of possible reasons he could be wrong. Well, he's right.

The Gear

The Aphex 1788 is a pretty neat piece of gear. In two rack spaces, you get eight channels of mic pre's complete with a splitter. Stock, the units provide separate analog outs for FOH and MON, and the optional digital out provides simultaneous digital streams in TDIF, AES/EBU and ADAT LightPipe formats. Note that all three digital outs are active at the same time. Recording resolution can be as high as 96 kHz in the AES/EBU stream and 48 kHz with the others. The crowded back panel has a mic input XLR and FOH (Main) output XLR for each channel, and a 25-pin D-sub (Tascam format

connections are computer-type RS422 and 232 connectors, Aphex provides a cool little serial/XLR adapter that allows you to run the RS-422 remote signal over a couple of unused snake channels. Control of multiple units is made by daisy-chaining via the RS-422 from unit to unit. Aphex provided a hardware remote for this review, but as setup time on our gig was limited, we opted not to use it. I had the advantage of a short tutorial at Aphex prior to the gig, and Paul would have been approaching the system cold. So we decided that I would control the units from MON, rather than having Paul control them from FOH. (Aphex says that when many units are linked together via serial control, the system can be sluggish. Aphex has developed a new control system that uses LAN technology over CAT5. The speed of controlling 16

(phantom power, etc.) Next is the control section, which switches between local control and remote via MIDI, a laptop or the optional remote unit.

The Digital section lets you choose internal or external word clock and digital output sampling rate. You get a built-in headphone amp with a volume control a button for switching between channels, and finally, you get controls for the built in test tones (one at -20dBfs and another at 0dBfs)-a lifesaver for set-up and troubleshooting. Holding both test tone buttons down along with Channel 7 selector button turns the Gain knob to turn into an Adjust control for dialing in the brightness of the LEDs from merely visible to truly retina-burning (very nice for outdoor gigs).

The Gig

The ideal set-up method is to completely bypass the mic pre's on your console-a sticky subject to be sure. Mics go from the 1788 and split to FOH and MON, where they enter the console-ideally-via the line inputs. Input gain is set on the 1788. Here is where the limiter comes into play. Apex has figured out a way to put the limiter in front of the mic pre, which allows you to run your inputs significantly hotter than you might otherwise, especially if you are using the digital outs for recording. No more running your inputs at 10dB down to avoid digital clipping on loud transients. The patented limiter lets you get a big, full signal without having to worry about overload.

Another feature that sets the 1788 apart from other remote systems is that there are no glitches, pops or zipper noise as the gain is adjusted. Adjusting the gain is as easy and painless as turning the gain pot on your traditional preamp. Like I said, that is the ideal set-up method. For our gig with the 1788s, we were

unable, in the heat of battle, to bypass the console pre's. The Allen & Heath GL4 we were using at FOH uses 1/4 inch ins for its line inputs, and we didn't have 24 XLR-to-1/4-inch adapters. (Given our results, it is hard to believe that had we actually gone line-in, it might have sounded even better.)

The monitor console was a road-worn Soundcraft Series 800B, and for

recording the gig we used an Alesis HD24, running from the 1788's LightPipe out directly into the recorder. We ran into a small problem when we could not get one of the 1788s (we were using three units) to send data to the recorder. After spending some time trying to figure out why and confirming that the other two units were sending good signal to the recorder, we opted to record from two units only with everything except vocals and keys, which could be overdubbed later.

I was at MON and Paul was at FOH as the band hit the stage. In very short order, Paul came over to me at monitor world to tell me how amazing his system sounded. After I was sure all the mixes were together and the band was happy, I stepped out to Front of House and was nothing short of stunned. I have mixed on this system before, and Paul has put together a very nice sounding rig. It may not be shiny and new, but it is very well tuned (courtesy of Showco's Howard Page) and well maintained, and generally sounds very good. But with the addition of the 1788s, it sounded like a totally different and much better system. Open and clear, with the kind of air the kind of air that we all strive for and



mostly fail to achieve.

Drums-especially the snare and cymbals-punched through the mix without being strident. Acoustic guitars lost that piezo "quack" and came through with the richness you would expect using a good condenser mic in a studio. The fiddle (it was a country band) was a revelation for Paul, who mixes this band regularly and says that the instrument's built-in pickup often "sounds like crap." Again, it sounded like it was being recorded with a good mic. Vocals were particularly good. The band's four singers all used standard issue Shure SM58s-a good mic that we all use all the time, but hardly the latest and greatest thing out there. I have become something of a condenser slut in the past couple of years and now own six condenser mics (five AKG C900s and one Audix VX10). Paul said he thought the 1788 made the 58s sound like Neumann U47s. I don't know if I'll go that far, but they sounded better than my C900s (which I like a lot) and at least as good as the VX10. So how impressed were we? I called Marvin at Apex on Monday after the gig and told him he was officially on my "shitlist, as I am now spoiled

for life and there is no way my budget has a rack of 1788s in it. Paul, on the other hand, who does this for a living, is getting ready to upgrade to a more "rider-able" house console and move the Allen & Heath to monitor duties. He was impressed enough with the sonic difference that he is considering buying 24 channels of 1788s instead of a new console. We were, in short, totally blown away.

What it is: Eight-channel remote controlled mic pre
Who it's for: System owners with high sonic requirements and deep pockets
Pros: Stunning sound. Relatively easy to use. Makes recording gigs a snap
Cons: Very expensive
How much: SRP \$4,995 per eight channels plus \$995 for the A/D and \$1495 for the hardware remote, PC software free

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