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MERIDIAN 602 CD TRANSPORT

John Atkinson



CD transport with full remote control of functions via supplied 209 handset. S/PDIF data outputs: 2 optical (via Toslink connectors), 1 coaxial (via RCA socket). Meridian 600/6000 in/out communications: via 2 optical (Toslink) or 1 DIN socket. Dimensions: 12.8" (325mm) W by 3.9" (100mm) H by 12.6" (320mm) D. Weight: 14 lbs (6.4kg). Serial number of unit tested: 100141. Price: \$2750, including handset. Approximate number of dealers: 50. Manufacturer: Boothroyd/Stuart Ltd., 13 Clifton Road, Huntingdon, Cambs. PE18 7EJ, England. North American Distributor: Meridian America Inc., 14120-K Sullyfield Circle, Chantilly, VA 22021. Tel: (703) 818-3028. Fax: (703) 830-7625.

"I don't like Mondays!" sang Bob Geldof some years back, and I'm beginning to hate Mondays too. No, not for the obvious reason. You see, Monday is "hate-mail" day. Every day I get letters from *Stereophile's* readers. But for some reason known only to the mavens (or should that be Clavens?) of the US Postal Service, the ones pointing out my stupidity, dishonesty, and sheer incompetence as a human being arrive on Mondays.

For example: "Bits are bits, and it is therefore dishonest for *Stereophile's* writers to continue to insist that they can hear any differences between CD players or digital processors!" recently wrote an angry reader, canceling his subscription. (They *always* tell me they're going to cancel their subscription.) "Yeah, right!" thought I, having just sat through a comparative audition of, would you believe, digital data interconnects in Robert Harley's listening room. Some of the differences I heard were *not* trivial. They might even be audible in a blind listening test.

I wished I could have uprooted that complacent Monday-morning digiphile, sat him down in Bob's system's sweet spot, and declaimed something along the lines of, "You can't tell me you don't hear *that*!" At which he would have broken down, said "You're right!", admitted the hitherto uncorrected error of his ways, bought a complete set of *Stereophile* back issues, and gone on to lead a full, productive life instead

of conspiring with the Postal Service to destroy the equanimity of my Monday mornings. Instead, I respond to such critics with pleasant letters, littered with references and well-supported arguments, all of which I know will have *no* effect on the recipients' opinions.

It was with joy at the synchronicity, therefore, that on the following Tuesday I read the "Letters" section of the April 1991 issue of the English magazine *Hi-Fi News & Record Review*! In a lengthy letter, respected UK designer Stan Curtis angrily dismissed the claims of engineers (who should know better) that it is a fact that a digital one is a one and a digital zero is a zero and ever more shall be so. Stated Stan succinctly, "This 'fact' belongs in a different category from the 'fact' that if you punch a brick wall you invariably hurt your hand," and he warmed to his theme by pointing out that once the CD's information has been read and error-corrected to produce digital data, this bit stream is totally unprotected from further degradation or corruption.

And one of the obvious ways in which to corrupt the data is to fool around with its timing, a process called "jitter." As I showed with the computer simulations in my recent "Jitter, bits, & sound quality" article,² varying the

¹ As you read this, it is exactly *five years* since I gave up the editorship of that hallowed organ to take over the helm of the good ship *Stereophile*. Time sure flies when you're having fun!

² *Stereophile* Vol.13 No.12, December 1990, p.179.

word-to-word timing of the data fed to the DAC by as little as 1ns—a nanosecond, or a *billionth* of a second—reduces the resolution of what would otherwise be 16-bit data to 15 bits! The greater the jitter, the lower the resolution of a CD playback system—and it will come as no surprise, I am sure, to learn that jitter of at least 1ns is not only possible, it is *common*.

"Bits are bits?" say you.

"Ha!" say I.

Having got *that* out of my system, let me tell you about Meridian's 602 CD transport. Now the very *existence* of the component category "CD transports" seems to irritate my Monday-morning moaners. But it has surprised me that despite the proliferation of standalone D/A processors, only a relatively few companies have squared the circle by introducing CD "turntables." In this and other recent issues of the magazine, our reviewers have auditioned transports from Arcam, Wadia, Esoteric, and Proceed, while a Krell MD-1 has just arrived as I string these words together on the computer monitor. But as Meridian had sent a 602 transport to accompany their D6000 active digital loudspeaker (which Robert Harley will be reviewing shortly), I decided to spend some time with it and report on how I got on.

What it is

The 602 is superficially identical to the Meridian 208 CD player/preamplifier that I reviewed last December in that it is an attractively proportioned, black-finished unit with a glass face. A single row of vertical gold pushbuttons rather than the 208's double row of acrylic buttons distinguishes the new unit, however, and instead of the 208's rather clunky 7-segment green LED display, the 602 has a green alphanumeric display which forms real words as opposed to altered numbers. (Perversely, these are rather harder to see from across the room than the 208's primitive runes.)

Front-panel controls are rudimentary, consisting of Open, Play, Stop, Pause, Next, and Prev, but this is because the unit is intended to be mainly used with the supplied 209 full-function remote control. This handsome flat black unit, with a clearly laid-out array of buttons, also operates the 208 CD player/preamplifier and 206B CD player. The 209's Display button cycles the 602 through modes in which it displays Track and Index number; Track number plus elapsed time for the entire disc; Track number plus elapsed time for the current track; Track number plus remaining time for the entire disc; and display blanked. Two addi-

tional red LEDs indicate data error and disc pre-emphasis. Two idiosyncrasies are: 1) the remote's Fast Forward and Reverse Scan buttons mute the output while in operation—something that probably bothers reviewers more than audiophiles in general; and 2) it is not intuitive how to access index points. (You have to first press "*" on the remote.)

The unit's rear sports an IEC AC socket/switch module. As with other Meridian components, the 602 is intended to be left powered at all times, a "standby" button on the 209 putting the unit into a sleeping mode with the display off (apart from a single green dot) but the sonically important circuitry warmed up and ready for action. The AC switch on the rear is only intended to be used if the owner is going on vacation, for example. Two optical data outputs are provided, via standard Toslink jacks, paralleled by a coaxial output on a gold-plated RCA jack. Communication sockets are also provided—DIN and Toslink optical—to allow the 602 to serve as the source for (and be controlled by the remote control for) the Meridian D600/600B and D6000 active loudspeaker systems.

As with other Meridian 200 and 600 series players and transports, the Philips transport mechanism is mounted on the sliding tray, the user actually placing the disc on the motor spindle rather than on a separate carrier. Care must be taken with this, as there is only a limited clearance between the disc in place and the top of the front-panel slot; if the disc is not correctly positioned, it can jam between the front of the sliding tray and the panel, to the consternation of the audiophile. But this is a rare occurrence, happening only once while I used the unit: when I started to place the disc in the tray, a static discharge triggered the 602's door-close mechanism. (Though I keep a humidifier running in my listening room, the Southwest is still so dry in the Winter and early Spring that you have to remember to discharge yourself by touching something metal each time *before* you operate the system.) The advantage of Meridian's layout, however, is that once the disc is inside the machine, it is completely acoustically sealed against airborne vibration.

How it sounds

I used the 602 for my last three months of music listening, as well as it being the main CD data source for my recent reviews of the KEF RI072 and Wilson WATT 3/Puppy loudspeakers. I fed its output to the outrageously expensive Stax DAC-X1t processor, first via an inexpensive plastic-fiber Toslink data link, then by a variety of coaxial cables. Meridian clearly states in the 602 manual that the optical connections are to be preferred, because of the lowered possibility for RF interference. Nevertheless, after extensive comparisons, I preferred the better of the coaxial connections, in the form of the Mod Squad's Wonderlink. Which is what I used thereafter.

So, how does the 602 sound?

If you rank digital components on how close they approach the analog experience (and reality, the two not being disparate), the 602 is up there with the best. The soundstage was wide and deep, with individual instruments within

that soundstage preserving their tonal individuality as the recorded level maxes out. This, for me, is where many digital source components fall down, the individual sounds melding into a mash of high-frequency partials at high levels, as though all the spaces in the spectrum were being filled with intermodulation products.

Low-frequency extension also seemed excellent, recorded organ having the appropriately full authority. A current favorite organ album of mine is the 1980 Telarc featuring Michael Murray at the Methuen instrument (CD-80049). The purity and clarity of this early digital recording's lower treble are very dependent on the digital playback system. With the disc in the 602, the doubling of the bass lines with the organ's 32' and 16' registers on the cycle-of-fourths passage in Bach's G-Minor Fantasia came over with full effect, contrasting the way in which an additional treble stop is added to the mix during each circular motion. If I had to pick just one aspect of its performance that mandates the 602's recommendation, it would have to be how it extends the subjective bass response of your system.

In fact, this increase in low-bass authority is something I have noticed with each real improvement in digital replay. It has also been independently noted by other critics that lowering the jitter in a digital data stream results in subjectively improved bass resolution. Why this should be I have no idea, given that the most obvious measurable effects of increased jitter levels can be seen in the treble region.

Okay, given that I enjoyed the sound of the 602 in absolute terms, how did it compare with other respected transports?

My first comparison was with the data output of the Meridian 208. The family resemblance was strong. Both Meridian transports gave a musically satisfying sound, with a wealth of detail apparent. The sound of both was free from the treble clogging that I mentioned earlier. But the 602 scored higher marks for its more extended low frequencies, as well as for a slight edge regarding the palpability of individual instruments. On Amanda McBroom's "Dorothy" track on her *West of Oz* album (Sheffield Lab CD-15), the bass guitar is very prominent in the mix. Though its tonality was excellent via the 208, the presence-region edge that the engineers have added to its sound was better integrated with its upper-bass bloom when the CD was sitting in the 602. As good as I felt the 208 to be when used as a transport when I reviewed it last December, the 602 has stretched its performance envelope just that essential bit further.

My final comparison, and an obvious one, was with the Wadia WT-3200 that Robert Harley reviews elsewhere in this issue, again with both transports connected to the Stax with lengths of Mod Squad Wonderlink. (An RCA/BNC adaptor had to be used with the Wadia, of course.) Differences here were a little more incisive than between the 602 and 208, though the Wadia is undoubtedly a superb-sounding component. Whereas the Meridian could be said to produce a rather laid-back if highly detailed treble from the Stax, the Wadia moved the entire midrange region slightly forward. Details in the soundstage became more vividly exposed as a result, though recorded

digital problems, such as occasional modulation noise on early digital recordings, also sometimes made the sound a little sizzly. The Wadia's bass definition was superb, though it lacked the ultimate authority of the Meridian.

The English transport also scored slightly higher in the more three-dimensional manner in which the soundstage was reproduced. (Three-dimensional not only in the sense of width, depth, and height, but in the way individual instruments and voices acquired a solidity of their own within the overall soundstage.) One of my favorite Rachmaninoff Third Piano Concertos on CD, for example, is that from Ashkenazy with the Concertgebouw Orchestra under Bernard Haitink (London 417 239-2). Played on the Wadia transport, the sound was typically Decca—vivid in the highs, powerful in the lows. Via the Meridian, it softened a little in its treble impact but individual instruments became more, well, individual, as well as acquiring a more natural midrange tonality and a slightly deeper low bass. The stage was also a little wider and deeper. Toward the end of the first movement, the piano echoes the trumpet fanfare with a heavily pedaled attack/damp manner. Though the Wadia could hardly be faulted in its handling of this passage, the 602 enabled you to hear the "wall" of the hall that little bit more clearly in between the piano chords.

Of course, if you read RH's review of the Wadia, you'll realize that my use of its coaxial data output would not get this thoroughbred to give of its best. RH clearly felt—and, having heard the difference in his system, I agree with him—that using the Wadia's glass-fiber optical output enabled it to attain the highest possible sound quality. But as the only D/A processors currently available that can accept the glass-fiber-optic datastream are from Wadia and Audio Research, I felt it fair to use just its coaxial output for these comparisons.

Regarding the more mundane aspects of performance, the 602 sailed uneventfully through all the torture tracks on the Pierre Verany Test CD 2 until Track 36, which has a 2.5mm data dropout every revolution, and Track 50, which has two 3mm dropouts in succession. Once it dropped out on Track 43, which combines a 2.4mm dropout with minimum track pitch, but I couldn't get it to repeat this aberration. This is superb, almost flawless, error-correction!

What I think about it

These days, the essential question is whether you should buy a CD transport with conventional outputs in view of the apparent improvement the glass fiber-optic connection can give. The only answer I can give is, "It depends." This is an individual decision based on the rest of your system and the direction in which you want it to evolve. Certainly during the time I used the beautifully made and beautiful-looking Meridian 602, I couldn't find fault with the sound it wrought from the Stax processor. Even though its \$2750 price is more typically what you'd pay for a complete CD player, such as Meridian's own 208 or 206B, I heartily recommend it. It is obviously a Class A front-runner for use with processors that have conventional coaxial or Toslink optical-connected data inputs.