At last! Musical Fidelity has finally got around to unifying the ‘appearance’ of its components, which means that the new ‘budget’ A3.5 series looks almost identical to the A5 series and also to the mighty kW series. Indeed, it would be very easy to mistake the A3.5 CD player for a kW DM25 transport. Which is fine by me, because I think this ‘look’ is the best ever: it’s classy, practical and means you can ‘mix n’ match’ between series if you want.

*(The X-Series and Small X-Series are the exceptions!)*

**A3.5 Integrated Amplifier**

Musical Fidelity says the A3.5 is a dual mono amplifier, and certainly the amplifier is completely dual mono after the initial voltage step-down, including separate bridge rectifiers (package style) and storage capacitors ($2 \times 10,000\mu F / 64V$ per channel). However, the single, very large toroidal transformer that does the voltage step-down has only a single primary winding, with the energy generated by this being transferred to two sets of secondary windings. If an amplifier that uses a single transformer can be called ‘dual mono’, what words are left to describe an amplifier that uses two completely separate power transformers, one for each channel?

 Dominating the front panel is the ‘spoked’ motor-driven volume control, alongside which is a circular infra-red receiving window. Arrayed along its lower edge, from left to right, are pushbuttons for: Power, Tape Monitor, CD, Tuner, Aux1, Aux2, HT Direct and Tape. Each one has a single associated LED above it except the power button, which has two, one to indicate when the power is on, and the other to indicate when the muting circuit (available only from the remote) has been activated. I wondered why Antony Michaelson spaced all these buttons on 35mm centres except for the power button, which is on a 49mm centre... but maybe I’m the only one with a symmetry phobia!

 The only button that requires any explanation is ‘Home Theatre Direct.’ Any source component connected to the equivalent input on the rear panel bypasses the volume control and is sent directly to the A3.5’s power amplifier section. This means you should never connect any component that does not have its own volume control to the HT Direct terminal. This circuit means you can easily integrate the A3.5 and whatever speakers are connected to it into a multi-channel home theatre set-up, yet keep your two-channel high-end system at the same time. Very useful indeed!

 The rear panel has gold-plated unbalanced RCA sockets for all source.
components, plus an extra set that functions as a 'pre-out', which Musical Fidelity suggests allows the A3.5 to operate as one of two amplifiers in a bi-amped system. This sensible suggestion is just one of several useful uses for it. The colour-coded banana-capable multi-way speaker terminals are located at opposite ends of the panel, in 'identical twin' orientation (that is, the negative terminal is to the left of the positive terminal for both connections).

A3.5 CD Player
The A3.5 combines 24-bit, 96kHz upsampling delta-sigma dual-differential digital-to-analogue converters with a low-jitter clock and multiple power supplies. Unlike many high-end CD players, it's possible to operate Musical Fidelity's A3.5 CD player entirely from the front panel (i.e., you aren't forced to use the infra-red remote control), except for the special play functions (programming, A-B repeat, etc). The buttons at the bottom of the panel are (left to right): Power; Drawer Open/Close; Play/Pause; Stop; Previous Track; and Next Track.

The remote gives access to all the special play functions, including A-B repeat, Track Repeat, Disc Repeat, Program Repeat, Shuffle Repeat, Track Shuffle, Track Programming (up to 25 tracks can be pre-programmed), and Intro Scan. I was pleased to see Musical Fidelity hasn't 'crippled' the machine in any way for marketing purposes: believe it or not, many high-end manufacturers deliberately restrict access to special play functions by providing a remote that doesn't have the necessary buttons, even though the functions are built into the machine itself! Last, but far from least, the front panel display can be dimmed for late night use or turned off for ultimate fidelity (and a longer display life!).

Performance
My first evening with this Musical Fidelity pair commenced with two of my favourite recordings, Bach's Goldberg Variations. The first Goldberg is the one the 23-year-old Canadian pianist Glenn Gould recorded in just four days in a disused church on 30th Street, New York, in June 1955. It's the recording I play to anyone who says they don't like Bach, because Gould delivers both the whimsical nature of the work, as well as its glorious freedom, all the while rendering many of the variations with the catchiness of a modern pop tune, yet at the end, the underlying (quite strict!) musical hierarchy will have sunk up on you, making you reel in amazement at the genius of the mind that constructed it. The second Goldberg is the one a Canadian pianist recorded in 1981, just one year before his death. This reading is measured, introspective, fantastically emotional and, as you've probably guessed, also performed by Glenn Gould. I marvelled not only at the music, and the playing, but at the way this Musical Fidelity combo delivered the joy of the music-making while at the same time perfectly capturing the eccentricities of Gould's playing (his penchant for tuning his own pianos, his annoying yet endearing habit of accompanying himself with vocalise, to name but two) and the 'voicing' of his pianos. (Sony released a special 3-CD set, titled 'A Sense of Wonder' [Sony Legacy 087703-1S3K87703] that contains both versions. See if you can recognise which of the Goldbergs the psychotic Dr Hannibal Lecter listens to in the movie Silence of the Lambs.)

The power available from the A3.5 was at once understated, yet overwhelming, from organ pedal notes on Jean Guillou's arrangement of Mussorgsky's Pictures at an Exhibition (Dorian 90117) to the bass drum on Cosmos Old Friend (Columbia CKS3146). Tellingly, the A3.5 had no difficulty delivering tiny, subtle, high-frequency embellishments from high-pitched percussion (triangle) with perfect clarity, while at the same time kettledrums were creating an acoustic storm against a background of double-bass as in Mahler's 9th Symphony (EMI Classic). This ability to 'not muddy the waters' was also obvious when I listened to the male chorus on John Rutter's Requiem (Reference RR-57), because I could hear the voices of the individuals as clearly as I could hear the whole, without having to concentrate on it. I have not
had this experience before with such an economically-priced amp. Indeed I was so surprised at this revelatory discovery that I connected a different CD player and relistened, to learn that it was the A3.5 CD player that was delivering the most magic here, although the MF amp was clearly not inhibiting the delivery of this truly superior performance in any way.

Also surprising was the airy, open nature of the highs, and particularly their fluidity, so they didn’t have an etched nature, but instead an enviable smoothness. I find that when trying to copy top-end performance at a lower cost, many designers fall into the trap of making the highs overly bright and a little steely. That certainly isn’t the case here!

Operationally, all the buttons, controls and remotes worked perfectly, except that the amplifier’s ‘Mute’ function does not de-activate when you touch the front-panel volume control, so you have to either use the remote to deactivate it, or switch the amplifier off, then back on again. I was perplexed as to why the Tape Monitor button is not located alongside the Tape source control (which would not only have been more ergonomic, but also would have allowed it to be labelled more simply ‘Monitor’ rather than ‘Tape Monitor’), and instead at the opposite end of the row of buttons, but I suspect this will remain one of life’s little mysteries.

**Conclusion**

Also destined to remain another of life’s little mysteries will no doubt be the secret as to how Musical Fidelity has managed to deliver such outstandingly good performance for such a small outlay. Yes, five grand is hardly peanuts, but in this case I wholeheartedly agree with Antony Michaelson’s comment that the A3.5 CD player is ‘the equal of some players costing 4 or 5 times more’. Its performance is simply fantastic: it’s easily the most stunning CD player I have heard this year. In saying this, I don’t want to underplay the performance of the A3.5 integrated, which is well above average for its class, but I’d have to say that if I were allowed to buy only one of these two components, I wouldn’t even hesitate in purchasing the A3.5 CD player: it’s easily the better value for money, delivering far, far more ‘bang for your buck’. But if you’re going to listen to the two as a duo before making such a Solomon-like decision, I’ll guarantee you won’t be able to stop at buying just one! **greg borrowman**

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Test Results
Musical Fidelity states its amplifier power output ratings based on the maximum output available when a single channel is driven into 8Ω at 1kHz, rather than the more usual industry standard, which gives the minimum power output when both channels are driven across the whole frequency range (20Hz to 20kHz). Australian Hi-Fi Test Laboratories found that its sample met Musical Fidelity’s 150 watt specification at 1kHz, when driven with a single channel into 8Ω and its 240 watt specification when driven into 4Ω. However, using the US FTC standard, the A3.5 would be rated at 120 watts per channel into 8Ω and 178 watts per channel into 4Ω, since these are the maximum output powers it will deliver at 20kHz (both channels driven). The 1kHz power output (both channels driven) was measured at 132 watts (8Ω) and 196 watts (4Ω). When Australian Hi-Fi Test Laboratories attempted to measure the A3.5’s continuous power output into 2Ω loads, the internal 4-amp rail fuses prevented this.

As you can see from the tabulated results in the table, the A3.5 integrated performed very well indeed, meeting or exceeding the specifications claimed for it by Musical Fidelity in every case. The frequency response is adequately extended, but not overly so, and the channel separation is excellent across the band, as was channel balance (0.01dB at 1kHz). The graph shows the frequency response was almost unaffected by a highly reactive simulated loudspeaker load, meaning the amplifier’s sound will not change when you upgrade your speakers! What little distortion there was (and there was less than 0.04% THD at rated output) was all low-order, with individual harmonics more than 90dB down, the sole exception being the third harmonic when driven into 4Ω load at rated output, which chimed in at –88dB (0.003%). The signal-to-noise ratio exceeded 100dB with A-weighting, and the amplifier’s damping factor was an excellent 142. Power consumption with no input signal was a measly 36 watts, so you can leave the A3.5 switched ‘on’ all the time without worrying about your electricity bill (though consumption rises to 439 watts when you’re playing it at full volume.)

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The performance of Musical Fidelity's A3.5 CD player was nothing short of exceptional. It's the first CD player Australian HI-FI Test Laboratories has ever tested with a noise floor lower than –140dB, which it combines with phenomenally low linearity error, such that there was absolutely no error whatsoever at –80.70dB and just 0.03dB at –90.31dB! Channel separation at 1kHz was better than 140dB, while THD at 0dB was only 0.009%. Indeed distortion was amazingly low irrespective of frequency or level. Take a look at the dithered –90.31 test signal in the graph: there's just the signal itself, at exactly the correct level, then no distortion components at all, then the noise floor of the test CD itself, at –125dB (higher than usual because of the dithering). Tested with the difficult twin-tone IMD test signal (19kHz and 20kHz), the two immediate sidebands at 18kHz and 21kHz are more than 100dB down, while the regenerated 1kHz signal is 98dB down! Look also on this graph at the superb suppression of the high-frequency out-of-band sampling products, up around 40kHz: all are more than 90dB down. The player's frequency response is incredibly flat between 5Hz and 10kHz, varying by only around 0.002dB. Above 10kHz, the response inexplicably rises 0.05dB on its way to 20kHz. This in itself is a minuscule rise, and is notable only for its unexpectedness. There were small errors in de-emphasis, but since no CDs these days are emphasised in the first place, it wouldn't matter in any case. The only area in which the A3.5 did not return exceptional performance concerned its group delay, where the figures measured by Australian HI-FI Test Laboratories were typical of high-end CD players using bitstream processing. More significantly, jitter, which has been proven to be the single biggest contributor to 'musicality' of CD players, was measured at just 25.9nS, which is a terrific result.

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Steve Holding