

Reviews from the French Magazine ON mag Edition 2018/6 By Pierre Stemmelin



# Lyngdorf TDAI-3400

The TDAI-3400 is the new high-end integrated stereo, from the Danish brand Lyngdorf. It produces 2 x 200 watts under 8 ohms and up to 2 x 400 watts under 4 ohms. It integrates a highly efficient acoustic optimisation system. Its digital and analogue connections, as well as its network connections, provide the maximum possibilities. Yet it is not an audiophile monster. It still has a discreet appearance, while being extremely convivial and civilised to use.

The Lyngdorf TDAI-3400 is the big brother of the TDAI- 2170, which we tested in 2015, and which was given our ON-topaudio label Award.

Unveiled at ISE 2018, it has more than twice the power. Whereas the TDAI-2170 produces 2 x 85 watts, the TDAI-3400 rises to 2 x 200 watts under 8 ohms. Despite this enhancement, the price is still proportionate and reasonable, as are the device's dimensions. The TDAI-3400 is only half a centimetre taller than the TDAI-2170, and weighs only 200 grams more. The exterior of the device has been altered very little too. The large volume control is on the right, endless stroke-type, with hyper movement, well oiled and solid, and very agreeable to handle. It still has the very convenient small rotary push button in the centre, which lets you select the source and enter all the menu settings. In the centre there are a USB Host socket, a microphone input for the RoomPerfect calibration system, and a headphone mini-jack.

Just above, there is a smoked plexi-glass window, which is also new. This is not a display (that is to the left, still big and readable). This new window hides Wi-Fi antennas and Bluetooth. Finally, the Lyngdorf TDAI-3400 comes with a simple yet highly functional remote control, complete and with good ergonomics.



### Connectivity and network links with options ready for anything... or almost

As for the connections, it is better to start with what is not there. The Lyngdorf TDAI-3400 has no Phono input, neither as standard nor optional, and its Bluetooth connection is only on the remote control. Apart from these two points, we didn't really find anything else missing. Its basic equipment includes analogue inputs on RCA and digital audio on USB, AES/EBU, and coaxial and optical bases. Added to this are the Wi-Fi and Ethernet links, and in particular two optional modules are available: one with three inputs and one HDMI output, compatible with 4K video and ARC; and the other with additional analogue audio inputs on RCA and XLR jacks.

Digital outputs and analogue preamp on RCA and XLR also come as standard, as well as an SD card reader, Trigger, and an RS-232 port for integration professionals.

# A simple, yet efficient and ultra-stable network approach, combined with very advanced acoustic parameter settings

As far as network functions are concerned, Lyngdorf made these simple, practical and proficient, rather than trying to be complicated. The control app, available on iOS and Android, has only a very basic DLNA player and an equally basic vTuner engine for web radios. On the other hand, the TDAI-3400 is compatible with Spotify Connect, AirPlay or Roon Ready. It is better to use these direct reading modes, the Roon system (paying licence) being particularly interesting, user-friendly and ergonomic, to ensure the playback of your files stored on the local network, whether they be in standard resolution or Hi-res.

It should also be noted that, during our tests of the Lyngdord TDAI-3400 over several weeks, this amp proved to have a particularly stable network connection, without any bugs or disconnection, and always responding very quickly, which is relatively rare. We never had to relaunch it to find Spotify, AirPlay or Roon.

In addition, the Lyngdorf TDAI-3400 is controllable in IP from a web browser. The functions of the iOS and Android app are located on this interface, although with many possible additional settings, including all the device's menus. It is possible to rename the sources, start the RoomPerfect acoustic calibration system, add measuring points, deactivate or activate it, change its mode (Focus or Global), set the default or maximum volumes, choose between several pre-set parametric equaliser curves, or set new ones yourself, activate pre-amp outputs in subwoofer mode, etc. The available functions are worthy of those found on some upscale Home Cinéma processors. These are almost never seen on a Hi-Fi device.

#### A very sober construction, almost medical or military

As we have already mentioned, the Lyngdorf TDAI-3400 is, relatively sober and discreet on the outside. And we note the same sobriety when we look under its cover. The construction is extremely professional and meticulous. One gets the impression that this is more a military or medical quality measuring device than one of Hi-Fi electronics.

Even if there are some similarities, the topology of the circuits, compared to its little brother, the Lyngdorf TDAI-2170, has been completely reworked. The switch-mode power supply deck is considerably larger, in particular with the use of four large capacitors, each with a value of 1500  $\mu$ F



at 200 V. The digital high frequency switching amplification section uses eight OptiMos transistors from Infineon with a maximum capacity of 59 A (!), 100 V and 94 W. This is a proprietary assembly of Lyngdorf, which, we should recall, has been a pioneer for decades in the development of digital amplification in the HiFi field.

We note too that great care has been taken in screening this power section from duly selected components. We also note the two Analogue Devices Sharc processors of 32/40-bit floating point type (ADSP-21487 and ADSP-21489), which ensure the machine's intelligence.

Finally, the chassis is like the rest of the product, very sober and solid. All in metal, it has a quite thick facade (13 mm) and nonmagnetic sides (8 mm), as well as a cover lined with a bitumen plate, whilst at the same time avoiding useless aesthetic flourishes.

## The inclusion also of RoomPerfect, with more power, impact and accuracy

Although it offers an impressive array of features and setting options, the Lyngdorf TDAI-3400 is an extremely user-friendly device. We received the most complete "Full Option" version. We had it at home for several weeks. The whole family, even the less technically minded members who normally don't want to be bothered with such things, immediately adapted to it.

The RoomPerfect acoustic calibration was however naturally carried out by me, the family technophile. The system is exactly the same as on the Lyngdorf TDAI-2170. We will therefore not go over it in detail. However we should emphasise that we found the procedure very enjoyable once again. Have fun moving the measuring microphone supplied around the whole room until the Lyngdorf amp tells you that it know its acoustics and that of your speakers to over 99%, its quite amusing. The procedure is also very effective, even more so if the speakers are fixed to the back walls or in the corners, since RoomPerfect only acts on the response curve and not on the audio signal phase sent to the speakers.

This time, improvements made by RoomPerfect with the Lyngdorf TDAI-3400 were a little less spectacular than when testing the TDAI-2170. This is normal though, as we have only recently adjusted the installation of our HiFi system, and there was less correction needed. The Lyngdorf TDAI-3400 has only subtly reworked what was required. It notably erased the hump in the low spectrum, around 80 Hz, and the dip just below, two defects that correspond to the acoustic characteristics of our listening room. The register recorded has gained in tenure without losing in strength. On the contrary, it has become clearer, better cut, with better impact and more depth.

Upgrading the range with the Lyngdorf TDAI-3400, compared to the TDAI-2170, is not just about available power. The Lyngdorf TDAI-3400 is also a bit sharper, and more precisely defined at the high end of the spectrum. On some speakers, we shouldn't hesitate to use their "Soft" equalisation mode. This amp goes further in terms of transparency. Once RoomPerfect calibration is complete, the stereo image also has a rare realism with an excellent relief, very good staging of plans, instruments and singers, both in width and depth. The acoustics of a concert hall, a hushed studio, a Jazz club, a Hip Hop scene, etc. are very well differentiated and highlighted.



Moreover, in terms of power, the Lyngdorf TDAI-3400 is certainly not a device that likes to continuously and demonstratively show off its muscles, which can be impressive at first, but tiring in the long run. Its power is not a handicap at low range, as, we repeat, it knows how to handle musical subtleties. This is an asset when it comes to setting up in towers, feeding difficult high-consumption speakers, reproducing large orchestral masses, or music with saturated sound. This amp stays strong when it is at full stretch, with superb ease. It keeps control, separating out each melodic line or rhythm.

#### In conclusion

The Lyngdorf TDAI-3400's built-in stereo amp may not be as exceptional as its little brother TDAI-2170 within its price range. It competes with exceptional models such as the Micromega M-One M100 and M150, or outstanding ones such as the McIntosh MA252. But it is an undeniable success. A very versatile device, both for its functions and its enhancement options, and for its ability to feed almost all types of speakers. It is a champion in terms of user approval. Whatever style of music one listens to, at low, medium or high volume, it never disappoints, and doesn't impose its personality. It is wholeheartedly very agreeable to live with.

