

# CH Precision I1 integrated amplifier

by Alan Sircom



Let's talk terms, and their inappropriateness at times. The I1 by Swiss electronics superstar CH Precision is – by the standard definitions of our industry – an integrated amplifier. To define a product as flexible and as powerful (in several senses) as the I1 in this way is like defining a surface-to-air missile as a 'firework'. The more accurate definition of the I1 would be something closer to 'a modular audio platform utilising a wealth of different daughter boards for operational optimisation plugged into a custom motherboard that includes an on-board amplifier component for high-performance single-box audio use.' OK, maybe 'integrated amplifier' rolls off the tongue a little easier.

CH Precision uses the same chassis and design for its source components, preamplifiers, power supplies, and the

one-case-does-all integrated I1. They all have the dual-dial single control, the distinctive left-hand panel curve and the magnetised-to-the-side remote handset. In fact, you can only tell them apart from the rear panel configuration and the subtle logo on the front screen. Otherwise they are functionally identical to one another, and even weight is no useful indicator, as they all fall into the 'substantial' class. This makes for a very consistent equipment stand if you start stacking them atop one another: in fact, the CH Precision devices all have removable threaded rod-like feet running through the four corners of the device, which could allow for stacking... though at least one pundit thinks make the CH Precision amps sound better when they are removed.

The I1 platform (I still can't bring myself to thinking of it as an integrated amp) is best described by its rear panel. The ▶

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- ▶ basic layout has a set of large Argento speaker terminals at the extreme left and right of the panel, a central panel with IEC power inlet, switch, and fuse, a digital input HD board with AES/EBU, S/PDIF, Toslink and CH-Link HD for connection to CD Precision’s D1 CD/SACD digital front-end, and an analogue line input with RCA and XLR inputs. The rest in this basic guise is all a series of blanking plates. Additional modules include a USB Class 1.0 and 2.0 streaming input board, an Ethernet streaming input, and a current-mode MC phono input, itself with a full spread of EQ curves and also a Sync I/O board that allows the I1 to be enslaved to an external clock such as CH Precision’s T1 Time Reference using a coaxial cable. All connected to a motherboard layout with 2x 100W power amp stage. We went with a model that included all the options.

Depending on input, the platform operates in the digital domain at 384kHz/352.8kHz from input to that Class A driver with Class B follower power amp stage, complete with CH’s own ExactBias biasing system. This is not like most integrated amplifiers, but more akin to a Vitus design – a power amplifier with benefits! The amplifier itself features a fully shielded 1kVA power transformer and has something in the region of 100,000µF of reservoir capacitance on tap. And yet, thanks to some extremely high-grade diodes in the bridge rectifier stage, it sounds deceptively fast like a small integrated design.

The modules are key to the story, though. It’s best to think of each one as a small version of some of CH Precision’s separate components (because actually that’s what they are). So, the digital input board works to 24bit, 192kHz/DSD64 precision on its standard inputs, or up to 32bit, 768kHz/DSD128 on the CH Link that you would use with a CH Precision D1 disc transport. The MC board allows up to two different turntable inputs (balanced or single-ended) and can cope with any load the right side of 100mΩ, with adjustable gain. And so on, all fed through a volume control that moves in precise 0.5dB steps from -100dB to +18dB.

The only real problem with all of this is describing it without making it sound bewildering. But it’s like a bespoke suit; it’s effectively made for you, and once complete fits you perfectly for longer than anything ‘off-the-peg’. Its flexibility is not a weakness or a sign of indecision on the part of the manufacturer; it’s a conscious programme to make sure you have an amplifier designed specifically for you.

An interesting aside is the connectivity of the streamer board. Unlike most on-board devices in this category, there is no provision for wireless connectivity as standard. Instead, the Ethernet connection is designed to attach to a wireless router (maybe via a network switch), with devices like a NAS drive also hanging off that external network. This is, I feel, a better way of isolating the potential ingress of radio frequency interference, especially if you use a *cordon sanitaire* of some description between network and audio systems. Of course, this means less of an ad hoc approach to networking, which goes some way against the ‘Plug ‘n’ Play’ notions held by many companies, but if you are going to do a job, do it properly.

To this end, CH has also chosen to go down the Android route in its app design. There are good reasons for this, but I can’t help but feel this laudable one-sided approach will disenfranchise some who are seemingly wedded to Apple’s products. There are people who simply don’t ‘get’ Android, many of whom are in the target demographic for a very high-end device like the I1, and having that option denied them might make them skip over what is an excellent device at the short-list stage. I would hope that is not the case and those reading this review would rather explore the world beyond the iDevice in order to sample the many joys of the CH Precision I1, than simply turn the page, but human nature is what it is!

The app itself is extremely stable and robust. Like all such systems, there is a learning curve, but it’s more ‘gentle sweeping curve’ than ‘sheer cliff-face’ and you quickly come to a point where it is intuitive in use. Like Linn’s Kinsky app, it’s more about creating on-the-fly playlists than instant playing gratification, but I find myself preferring this option more and more. The CH app’s great advantage is it can control almost every aspect of the I1 in use, from input settings to naming: although this can be performed on the knob-within-a-knob front panel selector, things get a lot easier from the comfort of a chair. It’s other great advantage is it scans through music about as fast as the device to which it is connected: we used it with a Melco N1Z streaming storage server system (with built-in alliteration control!) which is itself one of the fastest moving digital devices around, and the CH Control app positively whipped through the back-catalogue.

It’s also worth mentioning the front panel interface. Or rather the excellent front panel display with the occasionally ▶

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- ▶ frustrating twin dial combined volume control, source selector, menu access and controller. This is excellent as it makes an extremely clear and large display of the I1's status. This is frustrating because the two concentric dials take some time to master and in the early stages might result in some random swearing as you end up locked in a sub-menu. On balance, I'd prefer this to a panel festooned in tiny buttons that might get used once in a decade.

Because they have distribution links in many places, the CH Precision I1 is an obvious partner with Wilson Benesch loudspeakers, but it also got an airing with a number of loudspeakers and the character of the amplifier shines through throughout.

I want to look to this amplifier without calling upon CH Precision's bigger hitters in the amp stakes; specifically the A1 power amplifier we tested in issue 120 and the L1 preamp and M1 mono amp combination we tested more recently in issue 159. But I can't; much of what makes these

outstanding amplifiers sound so good also applies to the I1; not so much 'trickle down' as 'rushes down in a torrent'. So many of the properties of CH Precision's separates amplifiers make it to the I1, it almost makes you question whether the bigger options are worth the extra. And like all top-notch audio brands, that voice is heard right up until you hear the big guns, and it then falls silent.

The same core sound of 'impressive understatement' remains uppermost. The amplifier is not the kind that draws attention to itself and doesn't even draw attention to the sound it makes; there is just a gradual dawning that you are listening to something really natural and well-designed. It's more a drawn-out 'aha!' than an 'eureka!' in listening; a slow and gradual seduction that becomes increasingly impossible to resist.

You also begin to discover (pretty soon into the listening, in fact) that the 'Precision' part of the name 'CH Precision' isn't just there for show. It is an extremely precise and accurate performer. Music played here is tautly controlled, yet with more ▶

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▶ than enough dynamic punch and energy. Although this is the kind of presentation that lends itself to torch song singers and 1950s jazz, the CH Precision I1 is so good at portraying these well-recorded works that it makes it almost academic in discussing them at length. Far better to point to something with more textures and layers, like *The Race for Space* by Public Service Broadcasting [Test Card]. This clever slice of ambient music blends samples of speech from the 1960s with an almost Mogwai-like aesthetic. It can either sound like boring chill-out music or make you want to join Trump's Space Force, and here that precision and dynamism made me reach for my space helmet! Flipping through the different sources from different card inputs also made clear another aspect of the 'Precision' part of the name: consistency. There was no functional tonal change as you moved through the inputs, whether analogue or digital. This is not something you normally notice, but once heard, you become aware of its absence in other devices. If accuracy is king, then consistency is the power behind the throne.

In a way, the CH Precision sound is inherently Swiss (hardly surprising; apparently the people from CH Precision, Nagra, and Soudation are all pretty tight with one another) and the CH Precision sits comfortably in the centre of that firmament. They seem to be on a continuum from the delightful and slightly lush-sounding Nagra to the detailed and almost surgical precision of the Soudation. CH Precision finds a middle way, one that keeps music as attractive as possible, yet also keeps it precise, detailed, and accurate. It's a bit of a high-wire act, and the CH Precision walks it perfectly.

The criticisms of the I1 hold even after listening. It's a necessarily complex device (in terms of selection criteria and installation) that is best used with an Android tablet. And, let's not shy away from it... in its full specification the I1 is one of the most expensive integrated amplifiers on the market right now. While it more than justifies its place (and its price) in that highest of high-end firmaments, those with pre-gnashed teeth will play judge, jury, and executioner without ever having listened to it on the basis of price alone.

Those suitably well-heeled to consider the CH Precision I1 without the price tag being an issue are also well equipped to assess its performance in a more level-headed manner, and they will come away extremely taken by the I1. It's an amplifier of rare grace and musical elegance, yet with a drive, dynamism,

## TECHNICAL SPECIFICATIONS

**Type:** modular integrated amplifier

**Inputs (as standard):** 1× AES/EBU, 1× BNC S/PDIF, 1× Toslink, 1× CH link

**Inputs (optional):** XLR balanced and RCA single-ended inputs, MC phono input (analogue) RJ45 Ethernet, USB Audio Class 1.0 and 2.0 (digital)

**Power output:** 2× 100W RMS (8Ω), 2× 175 W RMS (4Ω), Adjustable feedback levels

**Amplifier Class:** Pure Class A driver with Class AB follower

**Volume control:** 118dB range in 0.5dB steps

**Digital audio precision:** up to 34-bit, 768kHz and native DSD to 5.6448MHz/1=bit

**Display:** 480 × 272pixel, 24bit RGB AMOLED

**Dimensions (W×H×D):** 44 × 13.3 × 44cm

**Weight:** 43kg

**Price:** £29,500 (as tested)

**Manufactured by:** CH Precision

**URL:** [ch-precision.com](http://ch-precision.com)

**Distributed in the UK by:** Wilson Benesch

**URL:** [ch-precision-hifi.co.uk](http://ch-precision-hifi.co.uk)

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and force not normally associated with terms like 'grace'. That makes for a beguiling combination of performance parameters, and ones that don't get forgotten quickly.

The CH Precision I1 has a tough job to do. It needs to be awesome enough to justify its price and position both in the CH Precision line-up and against the rarified air of some of the best ever integrated amplifiers in the price-no-object class. But it also has to be good enough to showcase what the bigger fish in the CH Precision pond are capable of, but not so good as to outshine those bigger fish. Of these tasks, only the last is a realistic goal, because the separates CH Precision components are an order of magnitude better than both the I1 and any of its rivals. But the I1 does all the other tasks, too. This is one of the best integrated amplifiers (and I still hate that term for this design) you can buy. +