

The DCC 130 - Digital Compact Cassette

Optical output

The DCC130 has a digital SP/DIF output. Most consumer portable digital equipment produced since the early 1990's conforms to the SP/DIF standard, and the DCC130 is no exception. The output plug provided is a full-sized optical Toslink connector. The fact that the plug is a full-sized Toslink is significant, since even the latest Minidisc and DAT portables lack this important feature. This digital output allows easy connection to other digital audio equipment without the need for any kind of adapter. By comparison, Sony's first Minidisc recorder, the MZ-1 (also released in 1992), had an SP/DIF optical output which used an optical miniplug, which required a special adapter or a special type of cable before it could be used with other digital equipment. This made Philips the first to provide such a feature on a portable.

Plays regular analog and digital DCC tapes

This was the main selling point used by Philips to sell the DCC in 1992. With the DCC format, the user was able to

slowly upgrade to a new digital format, without the necessity of leaving an older format behind altogether. Both analog tapes and digital tapes could be played back on the DCC130, and any other DCC equipment. When analog tapes are played back in the DCC130, a frequency range of 20 Hz - 18 kHz can be heard, with a dynamic range exceeding 90dB.

Although the ability to play analog tapes back in the DCC130 is a nice feature, in hindsight the public didn't really care too much if DCC equipment was "backwards compatible". Anyone who could afford the DCC130's hefty price tag was generally not concerned about playing back analog cassettes anyway. Therefore, this "advantage" went virtually unnoticed by most consumers.

Sturdy construction

The DCC130 is built like a tank. The exterior feels like it is made of cast iron. It is heavy as a brick, and will very likely last forever. I have never seen a DCC130 fail. This reliability is also seen in many of Philips other first-generation DCC equipment, such as the [DCC900](#). However, like the analog-tape compatibility feature, the general public couldn't care less if the portable they are buying will last 100 years.

Backlit display on main unit

The DCC130 has a very nice LCD display, which has a green backlight when plugged into an AC power source. The display makes it very easy to see the LCD screen. This backlight is invaluable when it comes to editing between the DCC130 and another DCC deck. The DCC130 can be used to play digital tapes and edit them on a recording deck.

Optical output usage is limited

Digital decks like the DCC130 are valuable in that they have onboard DA and AD converters. This digital conversion is necessary to encode digital information onto tape, and to decode it later. Obviously the DCC130 has no need to convert analog signals to digital; only the other way around. It is perhaps for this reason that Philips implemented the DA conversion in the way that they did. The SP/DIF optical output, perhaps the best feature of the DCC130, is limited in its use. It will only operate when the DCC130 is plugged into an AC power source, thereby meaning that in order to use it, the unit must no longer be "portable". Also perhaps the worst part is that the digital output will ONLY work when a digital DCC tape is being played. It will NOT work when playing analog tapes and therefore cannot be used as an A/D converter. If Philips had implemented the DCC130 so that it could convert

analog tapes into digital output, the DCC130 would have sold out very quickly indeed. Yet another marketing opportunity missed by Philips.

Limited battery life

Since the DCC130 is supposed to be a "portable" unit, one would expect battery life that would make it "portable" for all practical purposes. However, the manual says that the DCC130 will attain a maximum 2.5 hours' battery life, and in "real world" usage the battery life falls to something less than 2 hours. Pretty disappointing for a "portable", given that at the time the DCC130 was new, Aiwa cassette walkmans were being sold with a play time of approximately 14 hours on a single charge. In addition, the DCC130 uses a special Philips battery pack and cannot use regular AA or AAA batteries. Combine this with the fact that the DCC130 is very awkward to recharge (explained later), and you have a portable digital tape player with some serious limitations. The user is truly limited to the use of the included battery pack with its short life. Most early digital recorders fell victim to this problem of high power consumption. A later attempt was made by Marantz with the PMD601 professional digital recorder to become more "portable" by increasing the size so that it could accommodate 6 "C" cells; however this made it far too big to be of interest to any "average" consumer.

Recharging requires a recharging stand

The DCC130 cannot recharge its batteries while inside the main unit. To recharge the battery, the user must remove the battery pack from the unit and lock it into a special recharging stand. The recharging stand itself is quite large. Now the unit becomes much less portable: In order to take the DCC130 on a trip and use it for a few days, one must haul around the DCC130, the recharging stand, and the mains cable.

Plugging into AC power

Of course, the entire point of the DCC130 was that Philips needed a "portable" DCC unit. In 1992, Sony had launched its "portable" Minidisc recorder, the MZ-1. And although the MZ-1 was larger than most paperback books and weight in at a weight that made it hard to think of as "portable", it was still more portable than the early DCC component decks. The DCC130 was supposed to bridge the void left by the lack of a portable recording DCC until the later-generation DCC portables (still in development) could be ready.

The DCC130 however was a disappointment as a portable. Running the DCC130 on AC (mains) power requires the most complicated setup I have ever seen on a

piece of consumer equipment. The DCC130 itself is not designed to accept an AC adapter; instead it relies on the battery charging stand as an AC/DC transformer.

Therefore, this is the sequence one must follow in order to connect the DCC130 to an AC power source:

DCC130 adapter cable Charger stand AC
power cord AC power source

If the average consumer can really follow the above chain and enjoy doing this every time, he/she is really ready for the world of pro equipment. Philips, on the other hand, could have thought of a simpler approach, considering the DCC130 was meant to be a "consumer" portable.

The headphones/remote

The DCC130 came with a remote integrated into the headphones. The remote controls tape play, direction and volume. It also incorporates an LED to let the user know it is operating, and this light is helpful in the way it flashes during track access times. The problem is, this remote is integrated into the headphone cord. If the user wants to use other headphones, this remote cannot be used anymore. This is a bad design since normally in a consumer situation, the headphones will need to be replaced after a year or so, and many people do prefer to buy better headphones for their portables anyway.

Without the remote, the DCC130 is difficult to operate as a "portable". This headphone design is typical of early high-end portable audio devices. Within a few years all electronics manufacturers had redesigned the inline remotes so that there was a headphone plug on the remote itself, which allowed the user to either change headphones or choose not to use the remote if it wasn't needed.

This unit is "portable"?

The DCC130 is very big and heavy. Although it comes with a carry case, it would seem to be embarrassing to be seen carrying this monster around in public. The DCC130 is bigger than a portable CD player. The carry case makes it awkward to change tapes or even access needed tape functions such as "play" and "stop". Although the DCC130 was designed as a "portable", it is perhaps best described as "luggable". Indeed, the [DCC170](#), a recording portable DCC produced a few years later, is smaller and lighter than the play-only DCC130.