



# Keeping it reel...

Ken Kessler | Feb 5, 2020



*Is there an open-reel tape revival, asks Ken Kessler*

If, in 1999, you were told that vinyl would enjoy such a massive revival that in 2019 HMV would be opening a flagship store in Birmingham stocking 25,000 records, and that turntables and LPs would appear in mainstream TV ads for watches and life insurance, you'd have laughed in disbelief. But then you would have paused, because both records and turntables were never entirely out of production.

If you were also told that a film called Guardians Of The Galaxy would inspire a generation too young to have experienced them to think that cassettes were cool, you'd have had the same reaction, and thought, hmmm, OK. But reel-to-reel tape? Never in a bazillion years.





## NEW VIKING STEREO-COMPACT IS THE PERFECT MEMORY FOR YOUR HOME MUSIC SYSTEM



### AVAILABLE IN TWO MODELS:

**STEREO-COMPACT ESQ**—half-track erase and recording heads and short-gap quarter-track play models.

**STEREO-COMPACT RMQ**—Quarter-track recording model with exclusive wide-gap recording head and short-gap play heads.

Both models play  $\frac{1}{4}$  and/or  $\frac{1}{2}$  track stereo tapes.

Viking neatly combines its famous 85 tape deck with the superb RA72 recording amplifiers to give you a stereo unit unequalled for performance and quality.

The "STEREO-COMPACT" enables you to make stereo tapes from records . . . AM/FM broadcasts . . . and live program material with recording fidelity to satisfy the most demanding and simplicity of operation to delight even a beginner.

This package is designed for installation in wall or furniture, mounts in a  $12\frac{1}{2}$ " square cutout.

Best of all, the Viking "STEREO-COMPACT" is yours at a surprisingly low price. Get complete information . . . visit your authorized Viking dealer or write Viking of Minneapolis.



**OF MINNEAPOLIS, INC.**  
9600 Aldrich Avenue So., Minneapolis 20, Minnesota

*Sold exclusively through quality high-fidelity dealers.*

## Bachelor Of Arts

Reel-to-reel tape, unlike LP or cassette (let's leave CD out of this discussion, because it's currently in a state of flux), was never a popular, let alone populist format. Pre-recorded open-reel tapes always cost more than the





## NEW VIKING STEREO-COMPACT IS THE PERFECT MEMORY FOR YOUR HOME MUSIC SYSTEM



### AVAILABLE IN TWO MODELS:

**STEREO-COMPACT ESQ**—half-track erase and recording heads and short-gap quarter-track play models.

**STEREO-COMPACT RMQ**—Quarter-track recording model with exclusive wide-gap recording head and short-gap play heads.

Both models play  $\frac{1}{4}$  and/or  $\frac{1}{2}$  track stereo tapes.

Viking neatly combines its famous 85 tape deck with the superb RA72 recording amplifiers to give you a stereo unit unequalled for performance and quality.

The "STEREO-COMPACT" enables you to make stereo tapes from records . . . AM/FM broadcasts . . . and live program material with recording fidelity to satisfy the most demanding and simplicity of operation to delight even a beginner.

This package is designed for installation in wall or furniture, mounts in a  $12\frac{1}{2}$ " square cutout.

Best of all, the Viking "STEREO-COMPACT" is yours at a surprisingly low price. Get complete information . . . visit your authorized Viking dealer or write Viking of Minneapolis.



**OF MINNEAPOLIS, INC.**  
9600 Aldrich Avenue So., Minneapolis 20, Minnesota

*Sold exclusively through quality high-fidelity dealers.*

## Bachelor Of Arts

Reel-to-reel tape, unlike LP or cassette (let's leave CD out of this discussion, because it's currently in a state of flux), was never a popular, let alone populist format. Pre-recorded open-reel tapes always cost more than the



equivalent vinyl LP, and tape decks, aside from cheap portables for dictation usage, were always expensive. At any time between the end of WWII, when open-reel tape left Germany and was rendered commercially viable by Ampex and others in the USA, and the mid-1980s when machine and blank tape production started to decline, it was either the province of professionals for studio or field use, or of high-end audiophiles.

Of course, they weren't called 'audiophiles' back in the beginning, but any image of a 'hi-fi enthusiast' during the third quarter of the 20th century, especially in glossy gents' lifestyle magazines like Esquire or Playboy, always featured a reel-to-reel deck in the photo shoot of the hip 'bachelor pad'. They didn't just look cool, for they suggested a music lover with the patience, taste and initiative to employ the fiddliest format of all.



If there is a reel-to-reel revival currently underway it will never match the undeniable success of vinyl, or even the possibly-ephemeral rebirth of



compact cassettes. Each of the three resuscitated formats has a unique audience, and each is based on special conditions relevant to the technology and the culture.

For the LP, it's the ubiquity of new and used vinyl and affordable turntables, while the LPs themselves are evocative of an era. For cassettes, it's much the same, with the added bonus of the ability to record in analogue. Cassette's appeal is based almost entirely on the charm of making 'mix tapes' for friends and loved ones.

Reel-to-reel? It has one, and only one reason for revivification and that is its sound quality. To my ears it is superior to any other format available to consumers. This seemingly hyperbolic claim may strike you as Kessler having a weird senior moment, but others, of far greater gravitas than I, share the same pro-tape affliction.







## Going Global

One reason for this superiority is that the production of commercial tapes involves less damage to the original signal – copying in real time from production master to the tapes that find their way into the hands of the consumer – than all of the stages in producing an LP, even a Mobile Fidelity One-Step release. And RIAA equalisation vs. NAB or CCIR? One might posit that the former does more manipulation of the signal than the latter.



It can be demonstrated subjectively thanks to a few labels – Opus 3 and Chasing The Dragon in particular – which offer brand-new recordings in reel-to-reel formats, as well as others, such as STS, and The Tape Project, which releases classic albums on reel-to-reel, duplicated from the original masters. Chasing The Dragon goes so far as to issue its releases on pre-



recorded cassette, LP and CD, as well as both 7½ and 15ips reel-to-reel tapes.

This means that one can perform side-by-side demonstrations, and the only listeners who will disagree about tape's supremacy are those who have invested heavily in LPs, CDs or cassettes. Or have impaired hearing. This, however, will remain a moot topic, and I have had disagreements with disciples of vinyl who stop just short of fingers-in-their-ears and cries of 'Na-na-na-na-na-na-l'm-not-listening.' But that's the point: they are not listening. As for the reel-to-reel devotees, I could, but won't to protect their privacy, name not a few top speaker and amp designers who concur with the open-reel brigade, their 'golden ears' being all they need to inspire them to dust off their decks.



So how is the revival manifesting itself? What leads this writer to believe that the format has more than a few cranky adherents? The evidence is



wide-ranging, but I must first reiterate and emphasise: it will only ever be a niche revival, barely a cult, because – unlike LPs or cassettes – neither the hardware nor the playback material are easy-to-source. But the signs of the tape re-awakening are global.

## Hot-Rodding

EAR-Yoshino's Tim de Paravicini is the go-to guy for reel-to-reel tape deck hot-rodding. His handiwork has benefited all of you because his clients include some of the most important studios and musicians in the world. Recently, he has helped, among others, Mobile Fidelity in its mastering of One-Step LPs, and he's always working on some A-listers' high-speed Studer or other pro deck. It was Tim's use of a revered Denon DH-610S open-reel deck at hi-fi shows that reignited my interest in the format, causing me to overhaul my aged Revox G36s.



Two years ago, at the high-end event in Tokyo [*HFN* Feb '18], Tim told me to drop by to hear stacked LS3/5A loudspeakers, which he distributes in Japan (but that's another story...). He demonstrated them with a pristine copy of the US pre-recorded 7½ips open-reel tape of The Beatles' Sgt Pepper's Lonely Hearts Club Band on Capitol, brought in by a show visitor.



## INVESTIGATION

## Keeping it reel... Page 2

What came out of the Falcon LS3/5As, music which I must have heard 200 times and in every format imaginable (including the Apple USB stick), was staggering, the best I had ever heard. It ranked with my first exposure to Apogees, to Decca cartridges, to Tignanello. Confused, stunned, I dragged in Allen Sides of Ocean Way Studios, a seasoned, thoughtful, not-prone-to-hyperbole recording engineer, as well as a loudspeaker manufacturer. He came, he listened, he shook his head, also rendered speechless by the sound. But I wasn't in any position to judge – was it the tape – or the LS3/5A speakers?





Upon returning to the UK, I found that I, luckily, had an excellent copy of the tape used. Frantically, I got one of my tape decks up and running. I even stacked two pairs of LS3/5As to replicate the conditions. It slaughtered my original vinyl copies, as well as the remastered anniversary LP, and any other editions in analogue or digital. Then I dug out my open-reel copy of Aretha Gold – a mere 3¾ips copy, well-worn. It, too, embarrassed every other format. Ditto for Roy Orbison's Greatest Hits.

Now the rumblings about the format, the earlier clues were making sense. For some years, there had been exhibitors displaying rebuilt, tweaked Technics and TEAC machines at US shows, services performed for clients who supplied the machines, as well as selling refurbished examples. Various exhibitors of amps and speakers, such as Joseph Audio, were using open-reel instead of LP or CD.

### **New To The Block**

Joseph actually took it a stage further. The company co-exhibits with valve electronics manufacturer Doshi Audio, which produces the ultimate device for the tape addict: an external, no-holds-barred tape preamp that takes the signal straight off the heads. Joseph and Doshi weren't alone. Here a

[REVIEWS](#)[NEWS](#)[VINTAGE](#)[FEATURES](#)[AWARDS](#)[HI-FI SHOW](#)[SUBSCRIBE](#)

the place.

But these are seasoned industry pros, with their own engineers to keep their machines up-and-running sweet. So, it is my duty at this stage to discourage you from even considering the acquisition of a reel-to-reel deck, however much your passion for music begs the use of the finest format you can employ. Or afford. Of the two problems that face both the enthusiast rediscovering open-reel and the newcomer – sourcing tapes and sourcing machines – it is the latter which is the bigger issue.





To the best of my knowledge, only one firm makes brand-new decks. Ballfinger from Germany produces a studio-type range, with the basic unit starting at €8945 before VAT. Expect to pay around €10,000-15,000 for a deck fully kitted out to your desired specification; the consolation is that the machines are truly superb.

REVIEWS NEWS VINTAGE FEATURES AWARDS HI-FI SHOW SUBSCRIBE

will be made for it by Balminger. As for other makes, there are rumours of past manufacturers considering re-joining the fold, but I'm not optimistic. Case in point: there is still no sign of the gorgeous Revox deck seen in computer renderings a few years ago.

## On The Up

Most users, then, must turn to secondhand tape decks, and eBay is awash with them. The problem is that most are 30-years-old or more, while the most desirable are the pro and semi-pro machines which will have a lot more miles on them than the average Akai 4000DS or Sony TC377. Unless you get lucky and know the supplier, the odds are that any deck you buy today will need a full service.



Clearly, this is no deterrent to those seduced by the sound. In keeping with the primary theme of this Investigation – has reel-to-reel made a comeback? – I turn to that bellwether of the obsolete: eBay. I have observed the prices of even well-worn machines climb with the near-vertical trajectory of vintage Rolex wristwatches.



REVIEWS NEWS VINTAGE FEATURES AWARDS HI-FI SHOW SUBSCRIBE

made machines from Sony (eg, the TC577), assorted Akais, TEAC's non-studio models and the like have gone from around starting bids of £100 to £300 or more. These are mainly limited to ¼-track playback and speeds of 3¾ and 7½ips, while spool size is limited to 7in. The more desirable middle models, which can handle 10in spools (eg, TEAC's X-10) start at £500, while the top-end units from these brands, which may also offer 15ips, have passed the £1000 mark.



## Desirable Designs

For the most coveted machines – various Revoxes, especially A77s, B77s

REVIEWS NEWS VINTAGE FEATURES AWARDS HI-FI SHOW SUBSCRIBE

as £5000. Enjoying the reel-to-reel limelight are the Technics machines such as the RS1500, which is among the most popular and desirable because the late examples handle both ½-track and ¼-track, and the three speeds of 3¾, 7½ and 15ips. Prices of these decks have shot up dramatically, from £500 to £1500 on average while the auto-reverse RS1700 adds another £200-£500.



Unless one has the space and the funds, at least two machines – ¼-track and ½-track, both with three-speeds – are required to accommodate the majority of tapes. I keep six decks to cover every possibility, and that's just for ¼in tapes. With a unit such as the Technics RS1500, one machine can accommodate pretty much every configuration of pre-recorded tape, but there is still the matter of equalisation. All vintage pre-recorded tapes seem



REVIEWS NEWS VINTAGE FEATURES AWARDS HI-FI SHOW SUBSCRIBE  
equalisation.



## Going Pro

This multitude of speeds and layouts has led to demand for professional machines like the various Otari models, which do everything that the Technics deck will do, as well as featuring switchable NAB/CCIR equalisation. Dominating the upper echelons of reel-to-reel, however, and owned by the most serious enthusiasts as well as the contemporary tape labels, are assorted Studer machines, especially those from the 800-series. Prices range from £1000 for well-used models or parts donors, to £5000 or more. Other popular pro machines likely to find their way to the secondhand sources are Sony, TEAC and Tascam units.

Given that a list of tape deck manufacturers that existed over the years would run to the low hundreds, or the many dozens at least, websites have sprung up providing support in the form of information as well as parts sourcing. Various brands have their devoted followings, and there are specialists who look after Uher, Ferrograph, Tandberg, Dokorder, Leever-Rich or any other make which strikes your fancy, however obscure. Me? I lie awake at night dreaming of a mint Crown 800...

[REVIEWS](#)[NEWS](#)[VINTAGE](#)[FEATURES](#)[AWARDS](#)[HI-FI SHOW](#)[SUBSCRIBE](#)[ARTICLE CONTENTS](#)[Page 1](#)[Page 2](#)

## Recommendations from intentX



Keep It Clean

Keep It Clean 11005 Switch...

**\$19.10**

Amazon.com



Keep It Clean

Keep It Clean 126008 Gree...

**\$7.50**

Amazon.com



Keep It Clean

Keep It Clean 10991 Switc...

**\$5.14** ~~\$19.32~~

Amazon.com



Keep It Clean

Keep It Clean (3156LEDUB...

**\$19.13** ~~\$49.24~~

Amazon.com

[Related](#)[Latest](#)[Reviews](#)[News](#)

Keeping it reel...



Room Treatments





REVIEWS

NEWS

VINTAGE

FEATURES

AWARDS

HI-FI SHOW

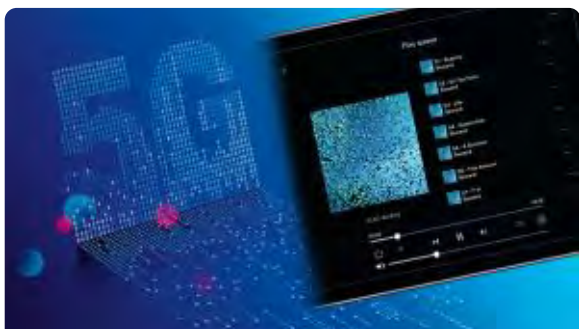
SUBSCRIBE



Vintage hi-fi: what's hot?



Know Your Transformers



Why 5G Matters For Hi-Fi



Streaming, simplified



Buying hi-fi on a budget



Get Your Sub Singing!



Jean-Michel Jarre



Valves: ready to roll?

[REVIEWS](#)[NEWS](#)[VINTAGE](#)[FEATURES](#)[AWARDS](#)[HI-FI SHOW](#)[SUBSCRIBE](#)[Keeping it Simple](#)[Day the Music Died](#)[Quad to the Core](#)**Equipment Reviews**

[Integrated amplifiers](#)  
[Outboard DACs](#)  
[Disc Players](#)  
[Loudspeakers](#)  
[Turntables, Arms & Cartridges](#)  
[Pre/Power amplifiers](#)  
[Phono Preamplifiers](#)  
[Network Audio Players/Servers](#)  
[Headphones](#)  
[Cables](#)  
[Vintage](#)

**Music Reviews**

[Audiophile Vinyl](#)  
[Audiophile Digital](#)  
[Rock](#)  
[Jazz](#)  
[Classical](#)  
[Hi-Res Downloads](#)

**Awards**

[AVTech Media Awards](#)  
[EISA Awards](#)

**Latest News**

[News](#)

**Features**

[Show Reports](#)  
[Investigation](#)  
[Classical Companion](#)  
[Vinyl Release](#)  
[Vinyl Icons](#)  
[Classic Venues](#)  
[Meet the Producers](#)  
[Opinion](#)

**Back Issues**

[Print Back Issues](#)  
[Digital Back Issues](#)

**Resources**

[Contact Us](#)  
[About Us](#)  
[RSS Feed](#)  
[The UK Hi-Fi Show Live](#)  
[Magazine Locator](#)  
[Privacy](#)  
[Terms of Use](#)



REVIEWS

NEWS

VINTAGE

FEATURES

AWARDS

HI-FI SHOW

SUBSCRIBE

Special Offers

Manage Settings

## WHERE TECHNOLOGY BECOMES ENTERTAINMENT



© 2020 Hi-Fi News  
AVTech Media Ltd  
All rights reserved



## INVESTIGATION

## Keeping it reel... Page 2

What came out of the Falcon LS3/5As, music which I must have heard 200 times and in every format imaginable (including the Apple USB stick), was staggering, the best I had ever heard. It ranked with my first exposure to Apogees, to Decca cartridges, to Tignanello. Confused, stunned, I dragged in Allen Sides of Ocean Way Studios, a seasoned, thoughtful, not-prone-to-hyperbole recording engineer, as well as a loudspeaker manufacturer. He came, he listened, he shook his head, also rendered speechless by the sound. But I wasn't in any position to judge – was it the tape – or the LS3/5A speakers?





Upon returning to the UK, I found that I, luckily, had an excellent copy of the tape used. Frantically, I got one of my tape decks up and running. I even stacked two pairs of LS3/5As to replicate the conditions. It slaughtered my original vinyl copies, as well as the remastered anniversary LP, and any other editions in analogue or digital. Then I dug out my open-reel copy of Aretha Gold – a mere 3¾ips copy, well-worn. It, too, embarrassed every other format. Ditto for Roy Orbison's Greatest Hits.

Now the rumblings about the format, the earlier clues were making sense. For some years, there had been exhibitors displaying rebuilt, tweaked Technics and TEAC machines at US shows, services performed for clients who supplied the machines, as well as selling refurbished examples. Various exhibitors of amps and speakers, such as Joseph Audio, were using open-reel instead of LP or CD.

### **New To The Block**

Joseph actually took it a stage further. The company co-exhibits with valve electronics manufacturer Doshi Audio, which produces the ultimate device for the tape addict: an external, no-holds-barred tape preamp that takes the signal straight off the heads. Joseph and Doshi weren't alone. Here a

[REVIEWS](#)[NEWS](#)[VINTAGE](#)[FEATURES](#)[AWARDS](#)[HI-FI SHOW](#)[SUBSCRIBE](#)

the place.

But these are seasoned industry pros, with their own engineers to keep their machines up-and-running sweet. So, it is my duty at this stage to discourage you from even considering the acquisition of a reel-to-reel deck, however much your passion for music begs the use of the finest format you can employ. Or afford. Of the two problems that face both the enthusiast rediscovering open-reel and the newcomer – sourcing tapes and sourcing machines – it is the latter which is the bigger issue.





To the best of my knowledge, only one firm makes brand-new decks. Ballfinger from Germany produces a studio-type range, with the basic unit starting at €8945 before VAT. Expect to pay around €10,000-15,000 for a deck fully kitted out to your desired specification; the consolation is that the machines are truly superb.



REVIEWS NEWS VINTAGE FEATURES AWARDS HI-FI SHOW SUBSCRIBE

will be made for it by Ballinger. As for other makes, there are rumours of past manufacturers considering re-joining the fold, but I'm not optimistic. Case in point: there is still no sign of the gorgeous Revox deck seen in computer renderings a few years ago.

## On The Up

Most users, then, must turn to secondhand tape decks, and eBay is awash with them. The problem is that most are 30-years-old or more, while the most desirable are the pro and semi-pro machines which will have a lot more miles on them than the average Akai 4000DS or Sony TC377. Unless you get lucky and know the supplier, the odds are that any deck you buy today will need a full service.



Clearly, this is no deterrent to those seduced by the sound. In keeping with the primary theme of this Investigation – has reel-to-reel made a comeback? – I turn to that bellwether of the obsolete: eBay. I have observed the prices of even well-worn machines climb with the near-vertical trajectory of vintage Rolex wristwatches.



REVIEWS NEWS VINTAGE FEATURES AWARDS HI-FI SHOW SUBSCRIBE

made machines from Sony (eg, the TC577), assorted Akais, TEAC's non-studio models and the like have gone from around starting bids of £100 to £300 or more. These are mainly limited to ¼-track playback and speeds of 3¾ and 7½ips, while spool size is limited to 7in. The more desirable middle models, which can handle 10in spools (eg, TEAC's X-10) start at £500, while the top-end units from these brands, which may also offer 15ips, have passed the £1000 mark.



## Desirable Designs

For the most coveted machines – various Revoxes, especially A77s, B77s

REVIEWS NEWS VINTAGE FEATURES AWARDS HI-FI SHOW SUBSCRIBE

as £5000. Enjoying the reel-to-reel limelight are the Technics machines such as the RS1500, which is among the most popular and desirable because the late examples handle both ½-track and ¼-track, and the three speeds of 3¾, 7½ and 15ips. Prices of these decks have shot up dramatically, from £500 to £1500 on average while the auto-reverse RS1700 adds another £200-£500.



Unless one has the space and the funds, at least two machines – ¼-track and ½-track, both with three-speeds – are required to accommodate the majority of tapes. I keep six decks to cover every possibility, and that's just for ¼in tapes. With a unit such as the Technics RS1500, one machine can accommodate pretty much every configuration of pre-recorded tape, but there is still the matter of equalisation. All vintage pre-recorded tapes seem



REVIEWS NEWS VINTAGE FEATURES AWARDS HI-FI SHOW SUBSCRIBE  
equalisation.



## Going Pro

This multitude of speeds and layouts has led to demand for professional machines like the various Otari models, which do everything that the Technics deck will do, as well as featuring switchable NAB/CCIR equalisation. Dominating the upper echelons of reel-to-reel, however, and owned by the most serious enthusiasts as well as the contemporary tape labels, are assorted Studer machines, especially those from the 800-series. Prices range from £1000 for well-used models or parts donors, to £5000 or more. Other popular pro machines likely to find their way to the secondhand sources are Sony, TEAC and Tascam units.

Given that a list of tape deck manufacturers that existed over the years would run to the low hundreds, or the many dozens at least, websites have sprung up providing support in the form of information as well as parts sourcing. Various brands have their devoted followings, and there are specialists who look after Uher, Ferrograph, Tandberg, Dokorder, Leever-Rich or any other make which strikes your fancy, however obscure. Me? I lie awake at night dreaming of a mint Crown 800...