

Digital TV recorders

NEED TO KNOW

Digital TV recorders receive and record digital TV. They are also known as personal video recorders (PVRs).

Of course, you can record digital TV on a VCR or DVD recorder. But there are three main advantages to PVRs: it's easy to set them to record; you can pause TV; and the best models let you watch one digital channel while recording another.

EASY RECORDING

Recording TV couldn't be easier. You simply select the show you want from an on-screen TV guide and press record.

Recordings are stored inside the PVR. A typical model stores around 40 hours at a time. (You can record over shows you don't want to keep.)

To transfer a programme to tape or DVD, you can hook up a VCR or DVD recorder. Some machines even have a built-in DVD recorder (see 'Built-in DVD recorders', p56).

PAUSING TV

If you're watching TV and the phone rings, press pause and the PVR will start recording. Later, you can pick up where you left off – the PVR continues recording while you watch, so you don't miss a thing.

WATCH AND RECORD

Some PVRs let you record one digital channel while watching another. That's something you can't do with a digital TV receiver and VCR.



BEST BUYS

The Best Buy for you depends on what kind of digital TV you want: satellite (Sky channels) or through your aerial (Freeview channels). Have a look at 'The digital TV revolution', p10, for more about the different types of TV.

The only PVR for digital cable is Telewest's TVdrive – the first PVR that can receive and record high-definition television. We haven't tested it here because it was released just shortly before we went to press. For more about this interesting development, see 'Should you wait for high-definition TV?', p57.

All PVRs on test provide recorded pictures and sound that are every bit as good as a live broadcast – the Best Buys stand out because they're easier to use and have more features.

FOR SKY CHANNELS

The Sky+ boxes are much easier to use than any Freeview PVR. For example, only Sky's PVRs can automatically capture all the episodes of a programme throughout its run. If the schedule changes, the PVR adjusts recording times.

Sky updates the boxes' TV guide constantly. So if a programme is brought forward at the last minute, you won't miss the opening minutes.

Another handy feature is that you can record two programmes simultaneously while watching a third channel. The only Freeview PVR that can do this is the Humax (5).

The Sky+ 160 (1) stores about 80 hours of TV. It's £199 to both new and existing customers. Installation is free for new customers and for existing customers with a multi-room

SUBTITLES

About one in seven people in the UK has a hearing problem. All the PVRs display subtitles but not all the PVRs can actually record them.

Disappointingly, the Daewoo (6), Bush (7), Goodmans (8) and Sony (9) all lack this facility.

Goodmans and Daewoo say that their next PVR ranges – which are out later this year – will record subtitles.



subscription (to watch different channels on different TVs). If you already have a single-room subscription, installation costs £60.

The standard Sky+ (2) is almost identical – the only difference is that it stores about 40 hours of TV. It's £89 to new customers and installation is free. Existing customers pay £199 for the box and £60 for installation.

You can purchase the boxes directly from Sky (go to www.sky.com or phone 0870 5800 874). Basic monthly subscriptions for both boxes start at £10; the cost increases as you order more channels.

FOR FREEVIEW CHANNELS

The two Sagem models are almost identical. Both come with a rich array of features. Like the Sky PVRs, they'll record subtitles and let you watch one digital channel while recording another. And they let you edit recordings

(to snip out the adverts, say) – that's something that even the Sky+ boxes can't do.

The more expensive **Sagem (3)** is £199 from John Lewis and comes with a photo-card reader. You slot in a digital camera's memory card, store pictures on the hard drive and display them on your TV. It stores 7,000 or so snaps at the same time as around 37 hours of TV.

The other **Sagem (4)** is £180 from Argos. It doesn't store digital photos but it does offer a slot for a Top-Up TV card – in fact, it's the only Best Buy PVR to do so. Top-Up TV offers an optional 11 extra channels; there's a connection fee of £20 and a monthly subscription of £8.

Both Sagem's are great machines but they lag behind the Sky boxes in three ways: the remote controls are cluttered; the on-screen TV guide is less convenient to use; and recording programmes back-to-back is a pain.

The TV guide displays information about only one channel at a time – so you can't compare it at a glance with what's on the other side. Other PVRs can show at least four channels at once.

Recording programmes back-to-back is awkward because they don't always start at the time given in the TV guide. The Sagem's allow for this by starting to record a little early and finishing a little late. But problems arise if you want to record one channel from, say, 7pm to 8pm and another from 8pm to 9pm. There's no room for buffering, so the Sagem's won't let you record both programmes.

(The Sky+ boxes don't suffer from this last problem because their TV guides are almost always bang up to date. And, in any case, they can record two channels at once.)

A FUTURE FREEVIEW BEST BUY?

The Humax (5) has some great features that other Freeview PVRs lack. There are a couple of glitches that stop it being a Best Buy but Humax plans to fix these soon.

First, the good points. It's the only Freeview model that lets you record two programmes simultaneously while playing back a third. Unlike our Best Buys, it has an aerial output, so it will work with old TVs that don't have Scart sockets (see p59 for more about Scart sockets). And it stores twice as much TV as most PVRs.

But then there are the irksome glitches. The Humax takes an age to load its TV guide every time you switch it on, even if you've left it on standby. Also, it doesn't automatically pad recordings by starting slightly early and finishing a few minutes late; if a broadcast runs earlier or later than planned, you could easily miss part of your favourite show.

Humax plans to solve these problems by May. If you're feeling brave, buy now – Humax will broadcast a fix over the air and the machines should update themselves automatically. But our advice is to wait – we'll let you know as soon as we've seen proof that the updates work.

The Humax is currently on sale for £230 from Currys, Dixons and Comet.

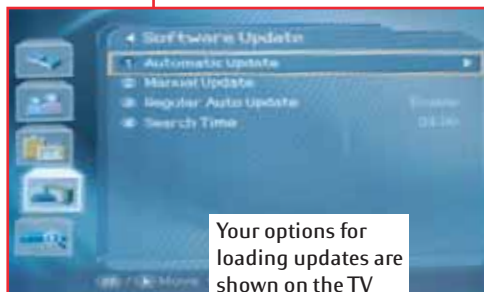


KEEP YOUR DIGITAL TV RECORDER UP TO DATE

Technology gets obsolete at a terrifying rate these days. Happily, you can keep PVRs and set-top boxes up to date longer.

All PVRs use software which tells them how to work. And manufacturers update it by broadcasting new instructions alongside digital TV signals. Updates could improve the speed of your on-screen TV guide, for example.

New models download updates automatically (an exception is the Sagem ITD 68 set-top box, p59). For older models, you may need to manually set it to pick up updates – check www.dtg.org.uk/retailer and the manufacturers' website to see when updates are due.



Your options for loading updates are shown on the TV

Built-in DVD recorders

The Sony (9) and Panasonic (10) are the first machines to combine Freeview TV reception, a hard drive and DVD recorder.

They make great DVD recorders. In fact, they're good enough to be Best Buy DVD recorders – see next month's article for more details.

So if you're mainly after a DVD recorder and see the PVR as a bonus, they're a good choice.

However, if you're mainly after a PVR, they're not quite as attractive.

COMPLEXITY

Neither machine is a Best Buy PVR because they can't record one digital channel while you watch another.

And the Panasonic (10) is the only PVR that can't pause live TV.

What's more, you lose the main selling point of PVRs: simplicity.

Some people find the array of options overwhelming. For example, the Sony has a 123-page manual

and a hugely complex remote. The Panasonic has a daunting menu system and also suffers from a rather complicated remote.

The Sony is £500 from Woolworths. After the briefest of spells in the shops, the Panasonic is now available only online.



BEST
BUY

4 Sagem

Should you wait for high-definition TV?

High-definition TV (HDTV) is the next big thing. We've seen early examples and the pictures are much more convincing than normal TV.

However, none of the PVRs in this test handles HDTV. If you want to try it soon, our advice is to buy a new PVR when you switch – not now.

Be warned, though: high-definition channels will be expensive at first. And you'll need an HD-ready TV.

THE NEW CHANNELS

The only PVR that can receive and record HDTV is the TVdrive, which works with Telewest's nascent high-definition cable channels. You hire the TVdrive for £10 to £15 a month, on top of the normal £16 to £28 monthly subscription. The more channels you want to watch,

the more you pay. So far, none of the programmes is actually high definition but it will arrive later this year.

Sky has plans to launch subscription-only HDTV soon, along with a new PVR. Word has it that it could happen imminently but there have been no official announcements so far.

There are no finalised plans for high-definition Freeview channels. So if you don't want to pay a subscription, you may as well buy a PVR now.

HD ready

Look for this logo on high-definition TVs

USING THE TABLE

We tested all available PVRs.

Specification

Price For Best Buys, we give the cheapest high-street price. For others, we give a guide price. For models available only online, the price is in *italics*. **Works with** The PVRs on test work with either Sky (satellite) or Freeview (through your normal aerial). None works with NTL or Telewest (cable).

Capacity Our estimation of the number of hours of TV that each model will store. Manufacturers' estimates are sometimes more generous. **TV guide** You use the TV guide to see what's on and

select what you want to record. This column shows for how many days the guide displays listings.

Features

Record/watch Models with a ✓ let you watch one digital channel while recording another. **Record subtitles** Models with a ✓ let you record subtitles. **Editing** PVRs with a ✓ can edit recordings.

Performance

Ease of use How easy it is to set up, program and play the PVR. For combination models, we've also considered how easy it is to use the DVD recorder. **Picture A ★** means the recording is as good as the original TV broadcast. For combination products, the second score is for the DVD recorder. **Sound A ★** means it is as good as the original TV broadcast.

SCORE

Ignores price and is based on:

Features	30%
Ease of use	30%
Picture	20%
Sound	20%

KEY

★ ☆ ○ ● ●
Best —————> Worst
■ Best Buy

WHICH? EXTRA

Want to wait a bit before you buy your PVR? When you're ready, go to www.which.co.uk/pvrs to check out the latest prices and best places to buy.

Digital TV recorders

NORMAL

	Price (£)	Works with	Capacity (hours)	TV guide (days)	Record/watch	Record subtitles	Editing	Ease of use	Picture	Sound	Score (%)
1 Sky+160	199 ^a	Sky ^b	80	7	✓	✓		★	★	★	96
2 Sky+	89 ^a	Sky ^b	40	7	✓	✓		★	★	★	93
3 Sagem PVR6680T	199	Freeview	40	7	✓	✓	✓	○	★	★	82
4 Sagem PVR7280T	180	Freeview	40	7	✓	✓	✓	○	★	★	82
5 Humax PVR9200T	230	Freeview	80	8	✓	✓	✓	●	★	★	75
6 Daewoo DSD9520	130	Freeview	40	8				○	★	★	72
7 Bush IDPVR801B	130	Freeview	40	8				○	★	★	70
8 Goodmans GHDD1782DVBT	126	Freeview	40	8				○	★	★	70

WITH BUILT-IN DVD-RECORDER

9 Sony RDR-HXD710	500	Freeview	80	8		✓ ^c	✓	○	★/☆	★/★	77
10 Panasonic DMR-EH60D	465	Freeview	100	8		✓	✓	○	★/★	★/☆	72

a Plus subscription from £10 per month b These don't pick up Sky's subscription-free Freesat channels c Records subtitles only on the DVD recorder