



Technomate TM-5200D USB

Features

Receiver: Technomate TM-5200D USB
Price: £69
No LNB inputs: 1
LNB loopthrough: Yes
DiSEqC: Level 1.0, 1.1, 1.2, USALS
No. channels: 10,000
Hard drive: Via USB
CAM: No
Common interface: None
Selectable FEC: No
Symbol rate range: 1000-45000
Teletext: Decoded and re-inserted
EPG support: DVB 7-day
Timer: 8-event, unlimited time
UHF modulator tuning: Channels 21-69
Software upgrade: RS232 or USB download
AV outputs: YPbPr, TV Scart (Composite, RGB), VCR Scart (Composite), composite video, stereo audio, optical digital audio
Supplier: Technomate Ltd, Unit 11, Nobel Road, Edmonton N18 3BH

What it lacks in looks and PVR flexibility, Technomate's sub-£70 FTA receiver makes up for in its excellent performance

Hot on the heels of the TM-6900 high-definition receiver, Technomate's TM-5200D USB brings PVR capabilities and even a flavour of HD to budget standard-definition reception. For under £70, the TM-5200D not only provides a free-to-air receiver that's easy to use and set up, but it has a blind search to keep up to date with the broadcasting changes, and hardware and software built in to add hard disc recording.

Build

The TM-5200D USB does not have the 'full-width' style of its older brothers. This receiver is in the same casing as the (very popular) TM-1000 and TM-1500. To be honest, the front panel looks a little dated now but it's far from unattractive. The (simple green fluorescent) display is in a

shiny chromed ring, with three buttons and a fold-down flap concealing – well not a great deal, really.

This is a free-to-air receiver so there's no card slot here, nor common interface slot, so you can't add a CAM for pay-TV – but, actually, you can. You can add a programmable card reader internally and Technomate says that the TM-5200D will auto-detect it so you can effectively upgrade later to a CAM receiver.

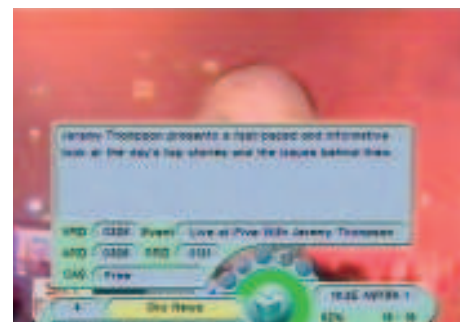
The only item lurking under the front panel flap is the USB 2.0 connector. That's very handy when using this for updating the receiver's software, or even playing MP3 files or displaying digital photos on your TV, through the TM-5200D. But if you want to permanently make use of the TM-5200D's recording capabilities, then this is the last place you want to connect a memory stick or hard drive. Like the



The TM-5200's menu layout is simple and easy to navigate, with all of the options laid out in clear English



With memory for 10,000 channels, it's fortunate there are many ways to organise them, and a handy A-Z shortcut on the remote



Attractive onscreen graphics tell you everything you need to know about the channel – and even what's on if the data is present

'Picture quality via component video is arguably as good as you'll ever get from SD channels'



TM-6900, the TM-5200D needs a USB socket at the rear as well.

There is room there, although the receiver's diminutive size means the back panel is quite packed. There is just one LNB input but this is DiSEqC 1.0 and DiSEqC 1.1-compatible so you can connect up to 16 LNBs/dishes here. Of course, the TM-5200D will also drive a DiSEqC 1.2 or USALS motorised mount so the choice of satellites to receive from, is really limited only by your antenna.

There are Scart sockets for both the TV and VCR (or DVD recorder) and the TV socket can output both composite and RGB video signals. Separate composite video output is also provided and so (unusually) are YPbPr component video signals, for connection to an HD ready TV.

One slight restriction is that you cannot watch component video and RGB at the same time (although they use different socketry), for instance, if you're using a DVD recorder with RGB input.

You can watch via a UHF distribution system on other TVs around the home, as the TM-5200D has a standard UHF modulator. There are also stereo analogue audio outputs and a Dolby-compatible optical S/PDIF digital audio connector.

The TM-5200D's remote control is bit plasticky but comfortable enough and well laid out, without too many buttons but some useful shortcuts. The placing of buttons for Menu, Exit and the like is always a personal matter, but this handset has a fairly all-pleasing approach.

Setup

The TM-5200D is supplied pre-programmed with more than 3,200 channels across 23 satellites, so the few thousand that apply to your situation are there on tap (according to the language you select), for a near-instant setup without any searching, once the means of accessing the satellites has been established.

If you do want to search for channels on particular satellites, then the TM-5200D is also adept at this. First, the antenna setup is defined, either by selecting the DiSEqC switching arrangements for each satellite to be received, or by setup of a motorised dish. USALS setup is particularly simple – with the satellite positions calculated for you when you enter the site's longitude and latitude – and (unusually and usefully) has electronic limits on east and west dish movement. Setting up a DiSEqC 1.2 motor is a bit more involved but simple to master and maintain with coarse and fine dish movement, system reset and recalculate functions.

When you have your satellites in your sights, the TM-5200D can scan them in a number of ways. The normal scan can search for all channels, free-to-air channels only, or just TV channels, and the network search can be switched on or off. Searching the 72 transponders in the receiver's database on Astra 19.2°E, for all channels, took the TM-5200D about 2 minutes 45 seconds – a very good speed by today's standards.

The advanced search will scan an individual transponder, with the frequency, polarity and symbol rate either entered via the handset or taken from the stored database (FEC is automatically detected). The PID search performs a similar function but allows for specific PIDs to be set or automatically detected.

There's also a 'Fast Scan' specifically for the Dutch networks, Canal Digitaal and TV Vlaanderen, which can renumber the whole channel list with the Dutch channels at the start.

Finally, there is the blind search. This searches through the frequencies, MHz by MHz, to find any transmissions. The process is very slow (compared to a 'normal' database scan) so the TM-5200D offers a few refinements to cut down the waiting. The frequencies and the polarity searched can be limited. The symbol rates can be coarsely scanned or in detail, or limited to above or below 7500 or

The Opposition

Fortec Star Lifetime Classic

■ Similar price but with no blind search, no recording or component output and rather unfriendly to use



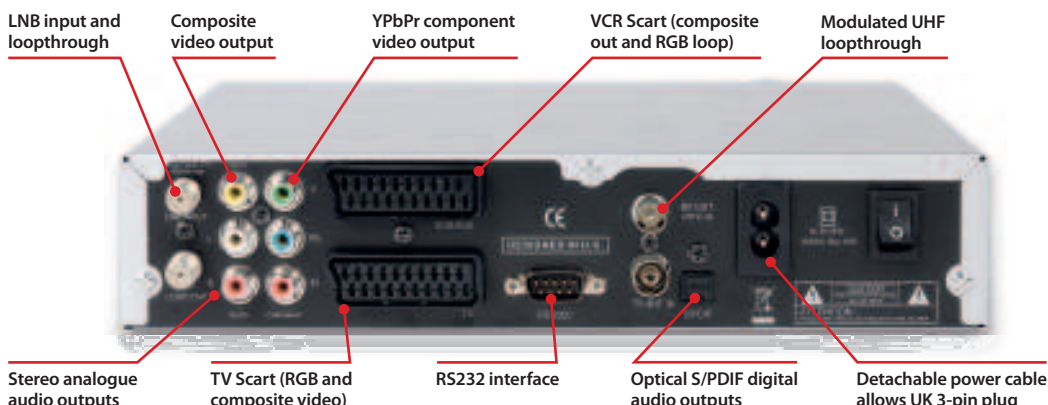
Manhattan Plaza XT-F

■ Same price and also fast, simple to set up and use, with a good blind search and SCR but no component output, no USB nor recording provision



Televe's KIT800

■ With an 80cm dish kit included for the same price, simple to use and good performance but far less featured and sophisticated



Rating

PLUS

- Easy and fast to set up
- Flexible blind search
- Large channel capacity

MINUS

- USB connection only on front panel
- Very limited PVR functionality

BUILD	★★★★★★★★★
SETUP	★★★★★★★★★
SEARCHING	★★★★★★★★★
NAVIGATION	★★★★★★★★★
PERFORMANCE	★★★★★★★★★
FEATURES	★★★★★★★★★
VALUE	★★★★★★★★★

WHAT **satellite** AND DIGITAL TV Verdict **92%**



below 3500 to trap or avoid programme feeds, and the signals found can be limited to TV or FTA only.

To find absolutely everything takes a while. A blind search of Astra 1, scanning all frequencies, polarities and symbol rates in detail took the TM-5200D a little under 16.5 minutes – that's a long time but extremely fast compared to the first blind search receivers of just a couple of years ago.

The TM-5200D also provides for scanning all the satellites one after another, whether it's a normal search or a blind search undertaken. This way, you can set it all up and go away and have a cup of tea while it finds everything for you to watch.

Navigation

The TM-5200D can store a colossal 10,000 channels – enough for the most ardent satellite searcher – and these are listed onscreen in their stored order, or by name, transponder or encryption. You can also choose to list the channels on all satellites or just one.

When the channels are listed by name, transponder or encryption, a side menu (of initial letter, transponder or encryption method) provides a quick means to get where you want to be, and all lists can be skipped through a page (12 channels) at a time.

The channels can be renamed, deleted, locked or passed over, and you can name and populate 16 favourite channels lists (eight are pre-named) to help organise the channels into manageable groups.

The EPG displays a grid of programmes for six channels, or a list of programmes on the currently selected channel, with details of the highlighted programme. A single button-press transfers the programme details to the event timer for recording (if memory or HDD is connected). Of course, you can also edit the event or set up the timer manually, and for this, the TM-5200D timer is particularly easy to operate.

Recording

The TM-5200D's USB 2.0 socket will connect either a high-capacity memory stick or a USB HDD for recording received programmes, and for MP3 music playback and photo slideshow. However, the TM-5200D is by no means a fully functioning PVR.

Connected memory can be formatted, you can record the current channel, recordings can be played back (but not until the recording has ended), and that's about it. There is no buffering of the live broadcast and you cannot effectively 'pause' a live channel (even starting a recording and immediately pressing Pause doesn't help as you can never view the paused-over material until the recording is ended).

There are not even 'transport controls' for playback (except pause) so you cannot fast-forward or rewind a recording.

Performance

The TM-5200D's pictures are excellent; bright and crisp with strong even colours, and very little video noise. This is especially true if the RGB output or – even better – the component video output is used. Although the TM-5200D cannot produce HD images, the picture quality via component video is arguably as good as you'll ever get from SD channels.

The sound is also good, with clear, noise-free audio from all channels.

The TM-5200D has a sensitive tuner that can produce glitch-free images from relatively weak signals and, of course, the performance on recorded programmes is as good as watching live.

Other features

There are three games built into the TM-5200D to occupy your time, and the receiver will both decode digital teletext and reinsert the pages into the PAL output for teletext TVs. A mosaic function will display two, four, six or nine thumbnails onscreen to select a channel.

Although there's no live PVR pause, the Pause button (when not viewing a playback) will freeze the picture and also enter the magnification function to hugely enlarge any section of the picture.

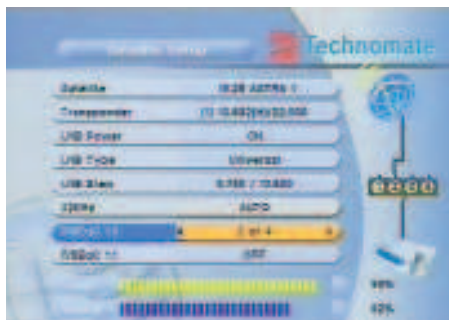
Verdict

The TM-5200D is an immensely capable receiver. It performs well, with good pictures even from weaker signals. The searching is fast, the navigation effective and the blind search nothing short of excellent.

It isn't fully PVR-ready – you can record to external memory, but its recording and playback facilities are far short of how we would define a true PVR.

But remember that this is a sub-£70 receiver we're talking about here and the ability just to record broadcasts to USB memory is a terrific bonus.

It's a useful bonus too, and so is the component video output. Both features add to what is already a very flexible, accomplished, and low-cost receiver ■ **Geoff Bains**



Useful onscreen graphics accompany the installation menus to make the setup process more intuitive



A simple MP3 player and JPEG file viewer are included for files on USB storage, which is very unusual on a budget receiver



The PVR features are unique at this price point, but they are very basic, with no live cache or fast-forward and rewind controls