



Meet the Family

Although VT100 must be the most widely recognised terminal name in the world, Digital's involvement in video terminals didn't start or end there. Here is a brief trip through 25 years of innovation. Later terminals can emulate earlier ones, back to the VT52.

These descriptions are too brief in places, mainly because I only have access to a few of these terminals. If anyone can flesh out any facts here or knows of any other terminals, please contact me.

VT05



The **VT05** was the first video terminal manufactured by Digital, introduced in 1970. This was not much more than a video teletype, receiving and transmitting at rates up to 300 baud. It displayed uppercase ASCII characters on 20 rows by 72 columns. It had a very simple set of cursor controls, supporting direct cursor addressing, home, erase line and erase screen. The character display

could be superimposed on a video display from another source, such as CCTV or a video player. This photo makes it appear more compact than it actually is; you need a deep desk to hold its 19" by 30" footprint.

VT52

Introduced in September 1975. This terminal was controlled by a proprietary set of escape codes, before ANSI X3.64 standardised them. The VT52 was the last terminal on which you could balance all your computer manuals, sandwiches and coffee; all later terminals had sloped tops to discourage people from blocking vents. There was an optional electrolytic ("wet") copier which fitted inside the case, and an optional printer board.



The **VT50** was an uppercase-only subset of the VT52 with only 12 lines. The **VT55** has a primitive graphics capability, somewhat misleadingly referred to as "waveform graphics". It allows the drawing of primitive line or bar graphs. The **VT62** has inverse video mode.

VT100



Digital's first ANSI-compliant terminal, introduced in August 1978. The VT100 was more of an architecture than a simple terminal. There are two display formats: 80 columns by 24 lines and 132 columns by 14 lines. A separate advanced video option



was required to display 24 lines in 132-column mode; this was standard on the **VT102** and **VT131**.

VT101 & VT102

Cost reduced, unexpandable VT100s. The VT102 has the advanced video option; the VT101 doesn't.

VT105

VT100 with the same [graphics capability](#) as the VT55.

VT110

VT100 with a terminal multiplexer in the box.

VT125

Introduced in July 1981. Graphics produced as a separate display from the text.

VT131 & VT132

VT100s with block mode capability.

The [VT103](#) is not really a terminal; it is a computer with an LSI-11/23 in a VT100 box.

Firsts: ANSI-compliance, host-controllable LEDs.

Lasts: Host-controllable LEDs (shame!), interlaced video.

VT200 Series



Introduced in 1983. There is no VT200 as such; the **VT220** is a text terminal, while the **VT240** and **VT241** are graphics terminals, supporting Digital's ReGIS graphics and Tektronix vector graphics. The VT240 and VT241 have the same system box; only the monitors are different, the VT240 is black and white and the VT241 is colour. This was the first series to introduce 8-bit communications. They also supported Digital's Multinational Character Set.

Firsts: 8-bit characters, multinational character set, user-definable keys, downloadable soft font.

Lasts: 20mA port (a dying teletype standard).

VT300 Series

Introduced in 1987. The **VT320** text terminal added to the VT220's multinational capability by supporting ISO Latin-1. The graphics terminals in this series are the **VT330** (monochrome), **VT340** and **VT340+** (both colour), but they may have been introduced later, because they have some features which make them more like the VT420. The VT340+ has a larger palette available than the VT340.

Firsts: ISO Latin-1, full terminal state reports, 25th status line, Slot-in ROM card (on VT330 and VT340).



VT420

Introduced in 1990. This terminal solved perhaps the biggest usability problem I had with all earlier terminals, by allowing me to fit up to 50 lines on the screen. It also supported two sessions, either one through each communication port, or by multiplexing two sessions on one line with a suitable terminal server. From a software point of view, it allowed the creation of windows on the screen by supporting rectangle operations and left and right margins for the first time. It felt more flimsy though: I preferred the earlier LK201 keyboard to the LK401 which came with this terminal, and the power switch felt like it would snap off every time I touched it.

VT500 Series

This series was launched in September 1993 with the **VT510**, a single-session monochrome text terminal and rounded-out in August 1994 by the **VT520**, a multi-session monochrome text terminal, and **VT525**, a multi-session colour text terminal. The VT500 Series terminals are still available today, from [Boundless Technologies](#). As well as emulating earlier VTs, these also emulate other popular ASCII terminals, such as Wyse and TeleVideo.



Firsts: ASCII terminal emulation, clock, calculator (yawn).

Reintroduced feature: Host-controllable LEDs (yay!)

VT LAN40

In February 1995, Digital announced the VT LAN40, a colour windowing network terminal. This device was a diskless PC, containing Windows 3.1 in ROM, and supporting up to eight terminal sessions over LAT, DECnet, TCP/IP or serial line, using TD/SMP. The system box and mouse had a suggested list price of \$890. It connected to standard PC keyboards and monitors.

End of the line

On 30 August 1995, Digital announced the sale of their text terminals business to SunRiver Data Systems, who changed their name to [Boundless Technologies](#) in August 1996.

Picture credits: The photos of the VT05, VT52 and VT100 come from the [DIGITAL Computing Timeline](#). The VT220 and VT320 are from my collection. The photo of the VT510 is from Boundless' Text Terminals page.

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http://vt100.net/vt_history