VT / generation 27 — User manual

Library: `src/lib2/vt/27/`
Edition: 2026-11-18, source/document review (documentation only)
Qualification: Exact accepted Chapter 01 v2b donor; owner 22/22 PB-2000C emulator witness for that program only. No universal consumer/physical/AI-1000 proof.

What this member does

Chapter 01 v2b-donated viewer extending VT26 with application-owned `:v` and `:e` semantic requests and fixed help text.

Public interfaces

Entry point or group	Inputs, outputs and behavior
`VT_BIND_RAM / VT_BIND_RO / VT_BIND_ROM / VT_BIND_RSEL`	`$10/$11` points to a 1,920-byte document; kind 0 writable RAM, 2 read-only RAM, 1 ROM, 3 selectable-ROM.
`VT_VIEW / VT_OPEN / VT_OPEN_AT`	Open/reset or resume viewport; OPEN_AT accepts `$8` 1..24 or returns `$0=10`.
`VT_GET_CHAR / VT_CLEAR / VT_WRITE`	Read a bound document byte; clear/write only eligible writable RAM kind; method-specific `$0` status.
`VT_EXPORT`	24 x (80 text bytes + CRLF) = 1,968 bytes to caller-provided sink; no UART ownership.
`VT_TX_ERROR / VT_CONFIG / VT_INIT`	Diagnostics / stub configuration behavior; API.md lists exact return status.
`VT26_PUTC / VT26_LCD_PUTZ / VT26_LCD_ROM32 / VT26_GFX_PUTC`	Renderer helpers using LCD and inverse glyph path.
`:v / :e events`	`$0=6` `:v` caller action (not ordinary ROM kind 1); `$0=7` `:e` eligible writable RAM action request. Viewer does not implement register view or delete data.

How to integrate

Include the exact three files. Bind a document and `CAL VT_VIEW`; dispatch `$0` semantic events, including `$0=6/7` as application requests. Implement any erase confirmation, register view or serial transaction in the client, then optionally `CAL VT_OPEN`.

Composition sketch (not an independently assembled client):

```
        LDW     $10,MY_DOC_BASE
        CAL     VT_BIND_RAM
        CAL     VT_VIEW          ; event $0: 0 Q, 6 :v, 7 :e, 8 :t
```

Environment, dependencies and memory

Caller manages same 1,920-byte document, VT scratch, K540/SYS540/LCD and callbacks `VT_SEND_CAP`, `VT_TX_DETAIL`, `VT_OUTBYTE`, `VT_HOST_RAM`; no internal UART or application data deletion. Non-reentrant.

Limits and evidence

`:h` currently lists some commands even in modes that deny them. `VT_BIND_RSEL` has not been independently donor-tested; full register/bank/hardware/AI-1000 behavior unqualified. Renderer includes DejaVu-derived bitmap code requiring license/attribution review.

This documentation does not introduce a new build or runtime PASS. Source equivalence, native assembler parity, emulator execution and physical-machine evidence remain distinct.

Actual source and further reference

- This exact member folder in Google Drive
- Source modules: `vt27.inc`, `vt26_lcd.inc`, `export.inc`.
- Further contracts/source notes: API.md, API.json, README.md, VT27_USER_GUIDE.pdf. These may include dated donor paths or older acceptance statements.
- For a new consumer, pin exact source files and hashes, verify full include closure, inspect register/bank/resource conflicts and test the resulting application on each claimed target.

Praeteritum ad futurum servamus.