

LISA XModem Util — Public Beta

A native **Lisa Office System** application for transferring files between your Lisa and a modern computer over a serial cable, using the XMODEM protocol. No Workshop session, no floppy shuttling: open the tool from its desktop icon, choose Receive or Send from the menu, type a filename, and watch the blocks tick by in the window.

This is a public beta. It works on the author's machines (a Lisa 2/10 and a LisaFPGA, both under Office System 3.1 / Workshop 3.0) and has moved files in both directions reliably — but it has not yet seen other people's hardware, cables, or configurations. Please test it, break it, and tell me what you find. Suggestions for enhancements are just as welcome as bug reports.

What it does

- **Receive a File** (Apple-R) — XMODEM receive from the PC into a new file on the Lisa's hard disk
- **Send a File** (Apple-S) — XMODEM send from a Lisa file to the PC
- **List Files** (Apple-L) — list the boot volume's catalog in the window
- Transfer progress, block counts, and any error codes appear in the tool's scrolling text pane

Requirements

- Lisa Office System 3.x with a hard disk (ProFile, Widget, or emulator)
- A serial connection from the Lisa's **Serial B** port to the modern machine (null-modem cable, or a USB bridge on emulated hardware)
- A terminal program on the modern side that speaks XMODEM — Tera Term is what the beta was tested with

One-time setup on the Lisa (IMPORTANT)

The Office System will not hand a program the serial port unless the port is in the machine's configuration list. Before first use:

1. Open **Preferences** from the desktop
2. Choose **Connect Devices**
3. Set **Serial B Connector** to **Serial Cable**

This persists across reboots. If you skip it, the tool will politely print a `port OPEN` ecode in its window instead of transferring.

PC-side settings

- **9600 baud, 8 data bits, no parity, 1 stop bit, flow control NONE**
- XMODEM in **Checksum** mode (not CRC, not 1K)
- In Tera Term: `File / Transfer / XMODEM / Send (or Receive)`, and check **Binary** when receiving if you want byte-exact files
- If you use a USB-serial bridge, enable RTS and DTR

Using it

1. Double-click the tool. A window opens; the menu bar shows **XModem**
2. Choose **Receive a File ...** — a prompt appears in the window. Type the Lisa filename to create (e.g. `MYFILE.DATA`), press RETURN, then start the XMODEM **Send** on the PC
3. **Send a File ...** works the same way in reverse: type the Lisa filename to send, press RETURN, then start the XMODEM **Receive** on the PC
4. An empty filename (just RETURN) cancels the prompt, as does pulling any menu

Known limitations (beta)

- **Checksum mode only** — CRC and 1K-block XMODEM are not implemented yet
- **9600 baud fixed** in this build
- **Transfers block the tool's window** until they finish (the rest of the desktop stays responsive). A large file takes a few minutes
- XMODEM pads the final block to 128 bytes with character 26 (hex 1A); text files gain a small tail the Lisa-side consumer usually ignores
- **List Files** assumes the boot volume is the internal hard disk of a Lisa 2/10 (`-#12-`).

On a 2/5 the listing may miss; Receive and Send are unaffected

- Received files are plain data files. Turning PC text into a compilable Workshop `.TEXT` file requires page-formatting on the PC first (ask if you want the small Python helper that does this)

Ideas already on the list

CRC mode, selectable baud, background (non-blocking) transfers, a proper file-picker dialog, YMODEM batch. Tell me what would make it useful to you — that's what the beta is for.

Installing

Copy the tool from the distribution diskette (or diskette image) onto your hard disk the usual way — duplicate the icon and drag it to the disk. It is a document-less tool: just double-click it to open. It installs as tool number 202; if you somehow already have a tool 202, say so and I'll renumber a build for you.

Credits

This tool exists because of two people's generosity with knowledge:

- **Alex Anderson-McLeod (alexthecat123)** — his heavily commented [los_minesweeper](#) is a complete teaching course in ToolKit-less LOS application structure, and this tool is built on its patterns. The LisaFPGA and ESProFile hardware this was developed on are his work too
- **Tom Stepleton** — his [lisabbs](#) sources and his documentation pointers unlocked the Workshop serial layer and the `.TEXT` file format

Development was done with help from Claude (Anthropic), in the same spirit as the minesweeper project.

Feedback, bug reports, and enhancement ideas: reply on the LisaList2 thread or email me.

Tim O'Connor, August 2026