

PC3000 Generator

User Guide — version 1.0.205

A program for generating clear HTML reports from a list of files recovered with the PC-3000 Data Extractor, together with a set of tools supporting verification, repair, and preparing data to hand over to the client.

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Loading data (CSV and TXT)

The program works with two kinds of input files, both exported directly from PC-3000 Data Extractor:

- CSV file — the full list of files on the partition (name, size, dates, attributes). Exported via right-click on the partition → Export file list.
- TXT file (optional) — a report of damaged files, generated via right-click on the partition → Generate report on marked files and folders. The program matches the paths from the TXT file against the CSV and marks those files as damaged.

i The CSV must be exported with Data Extractor's default settings, with the following columns selected: Full Name, Size, Attributes. If any of them is missing, the program will clearly say so.

You can load multiple partitions at once (the „Add partition“ button) — each with its own CSV file and optional TXT. The report will merge them into a single structure.

i The program automatically detects and tolerates a situation where the CSV and the TXT were exported in a different context (e.g. one from Root level, the other from a specific folder) — the paths are normalized so they match correctly despite the difference in prefix.

i Next to the „Source files“ heading there's a „?“ button with a built-in, step-by-step visual guide (separately for CSV and TXT) — showing exactly which options to select in PC-3000 when exporting.

Alternative: choosing a folder instead of a CSV

Instead of uploading a CSV, you can also point directly to a folder on disk (the „Choose folder“ button) — useful e.g. when working with files already exported/copied elsewhere, without access to PC-3000 itself.

Folder with damaged files

If PC-3000 Data Extractor saves damaged files into a separate, specially named folder (typically something like !Problemik), you can enter that name in the „Damaged files folder name“ field — the program will recognize those files by their path and mark them as damaged in the report, even without a TXT file.

Structure preview and navigation

Once data is loaded, the Generator tab shows a preview of the folder structure — exactly as it will appear in the final report.

- Clicking a folder drills into it, showing only its direct contents (subfolders + files), the same way the final HTML report behaves.
- The breadcrumb trail above the table lets you jump back to any higher level with one click.
- The search box switches the view to a flat list of matching files from all subfolders of the current location — handy for quickly finding a specific file without clicking through the whole tree.

File name and case name

The resulting report file name and the „Case name” (shown in the report title and in the subfolder name used for thumbnails) can use tokens that the program substitutes automatically:

{F}	folder / case name
{D}	date
{T}	time
{N}	total number of files
{B}	number of damaged files
{L}	lab name
{C}	your own custom text (set separately)

A live preview shows exactly how the file name and case name will look once the tokens are substituted, before the report is generated.

RAW mode

This option applies when PC-3000 was unable to read the normal folder and file structure, so the data was recovered by scanning the disk directly (RAW).

The „This is a RAW scan result” checkbox

When checked, the generated report shows a visible warning for the client, explaining that files may be incomplete, misinterpreted, or have generated (not original) names.

Selecting specific folders

Once RAW mode is enabled, checkboxes appear next to every folder in the tree on the left:

- No folder selected — the whole report is treated as a RAW result, the warning shows up everywhere. Useful when the entire case is a single RAW scan.
- Specific folders selected — the warning only shows up while browsing those folders (and their subfolders) in the report. Useful when part of the data was recovered normally and another part only after a RAW scan.
- Checking a folder automatically checks all of its subfolders — if needed, you can then manually uncheck a single subfolder to exclude it from the warning.

Warning text

The default warning text is ready-made and already translated into all 14 report languages. You can fully override it with your own text in the field below the checkbox — in that case, the same custom text will show up regardless of the language the recipient picks in the report.

OK/Damaged statistics and percentages

The „Show OK/Damaged statistics” checkbox controls whether the report visually distinguishes healthy files from damaged ones at all:

- Enabled (default) — a status column in the file table, row coloring (green/red/orange), and file-count badges next to folders in the tree.

- Disabled — the status column disappears, row colors become neutral, and folders in the tree only show the total file count without a good/bad breakdown.

Separately, you can set what the damaged/healthy percentage shown at the top of the report is based on:

- Count — percentage based on the number of files.
- Size — percentage based on total file size.
- Better % — the program automatically picks whichever method (count or size) gives the more favorable result.

Lab data

This section lets you place your company's details in the report header: name, address, phone, email, website, a Google Maps link, and a logo. You can also disable this section entirely with the „Generate without lab data” option, if the report should be neutral.

i The logo should be uploaded as an image file (max. 500 KB) — the program automatically fits its size in the report header according to the „Logo (px)” setting.

Report title and appearance

The HTML report title (default: „Recovered Data Report”) also supports the tokens described earlier ({F}, {D}, {N}, etc.).

The Report Appearance section

- Color themes — ready-made 22-color sets, one click.
- Visual style (shapes) — 5 sets of element shapes/roundedness.
- Report layout — different arrangements of elements on the page.
- Colors — full, manual control over every individual color (including the „uncertain” color used for files needing review).
- Font, folder tree width, and font sizes of individual elements (lab name, tree, statistics, header) — configurable independently.

The live preview on the right side of the screen shows the effect of changes immediately, without needing to generate a full report.

Generating the HTML report

The „Generate HTML report” button creates the final, self-contained HTML file — it needs no internet connection or any extra files to open and view, and can be sent by email or saved to a USB drive.

The save folder can be configured in three ways: ask for a folder every time you generate, always use the same fixed folder, or save next to the source CSV file. Optionally, the report can be saved straight away as a ZIP file instead of a plain folder — smaller and more convenient to send as a single file.

i The generated report includes a language switcher (14 languages for the recipient to choose from) regardless of which language it was created in. The visibility of the generation date and of the language flags in the report can each be toggled independently in the appearance settings.

The Tools tab — introduction

The Tools tab (formerly „Scanner“) gathers a set of independent functions for working directly on files on disk — scanning, verification, repair, and data preparation. Unlike the Generator, these tools usually modify or copy files (moving them, creating copies with a corrected extension, etc.), so each one describes exactly what it will do to the originals.

HEX/Text scanner and Signature verification — one combined pass

These two mechanisms run together in a single scanning pass — it's enough for either one to be enabled, and the scan time doesn't increase from running both at once.

HEX / Text scanner

Scans the content of every file byte-by-byte, looking for a given pattern:

- HEX pattern — a byte sequence written in hexadecimal, e.g. FF D8 FF (a JPEG header).
- Text pattern — searched for as UTF-8 bytes. Useful when, in PC-3000, skipped/unreadable sectors were filled with your own readable text pattern (e.g. UNREADABLESECTOR) — the program searches file contents for that pattern and marks matching files as damaged.

You can filter the scan by file extension (empty field = scan everything) and optionally move the found files to a separate, chosen folder — the subfolder structure is preserved.

i The „Generate HTML report after scanning“ option automatically starts building the report right after the scan finishes, without needing to manually switch to the Generator tab.

i A scan can be safely interrupted and resumed later — the program automatically detects an interrupted scan and asks whether to continue from where it left off.

Statistics summary after completion

Once scanning finishes (of any kind — pattern, signatures, or both at once), a summary window appears with figures: how many files were scanned, how many had a bad header, the duration, average speed, and the estimated number of healthy files. The summary can be exported to a TXT file — handy as a ready-made attachment to hand over together with the recovered data.

Signature verification

Checks whether the actual content (header) of each file really matches its extension — detects files with the wrong extension or a damaged/unusual header.

The signature database contains hundreds of entries for the most popular formats and can be extended with your own entries (Add / Edit / Delete buttons), with the option to restore the default state at any time.

Files with a bad signature can be automatically moved to a chosen folder, preserving the subfolder structure.

Detect invalid data

Independent of the above, a separate scanning pass. Detects characteristic patterns that some drive models (e.g. the Rosewood series) use to fill sectors they couldn't read, instead of real data.

Works with its own set of patterns (added manually in HEX format) and its own, separate destination folder for found files — independent of the HEX/Text scanner above.

i Optionally, a pattern can be restricted so it only counts when it ends exactly on a 512-byte sector boundary — exactly how drives physically work, which significantly reduces false positives.

File content analysis

A separate, further step after pattern/signature scanning — checks the actual integrity of the internal structure and (for images) the visual content itself, for a wide range of formats:

- Images (JPG, PNG, BMP, GIF, WebP, TIFF) — pixel and data-stream analysis detects solid colors, black frames, and horizontal bands of damage, even if the file technically opens.
- Office documents (DOCX, XLSX, XLSM, PPTX, DOC, XLS, XLK, PPT) — verification of internal structure and checksums.
- PDF — structure verification.
- Archives (ZIP, RAR) — checking whether decompression is possible.
- RAW photos (CR2, NEF, ARW, DNG) and video (MP4, MOV, M4V).

The result splits files into three groups: healthy, clearly damaged (red), and „needs review“ — uncertain cases (orange) that open correctly but look suspicious (e.g. a large solid-color area) and are worth checking manually.

The sensitivity threshold for detecting solid/dark images can be tuned with a slider — a higher threshold means fewer false positives on naturally solid-colored photos (sky, snow), but risks missing weaker damage.

Suspicious and damaged files can be automatically moved into two separate, independently configured folders.

Restore extensions

Checks the content of files with no extension (plus any additionally specified extensions, e.g. the generic .chk produced by CHKDSK) against the entire signature database, and creates a copy of the file with the correct, recognized extension — in the same folder, next to the original.

i The original file is left completely untouched. If the content matches several different types at once, one copy is created for each matching type.

Restore names from metadata

Generates a new, readable file name based on the title, author, and creation date stored in the document's properties (supported formats: DOCX, XLSX).

i This is not recovering the original file name from before the disk was damaged — none of these formats store the name under which the file was saved on disk. It's about generating a new, meaningful name instead of an impersonal sector number.

A copy with the new name is created next to the original, which remains untouched. Support for PDF and older DOC/XLS formats is planned for a future development stage.

Merge copies (remove DE-AD)

A feature for when the same file/module was recovered several times (e.g. from different copies/areas of the disk), and each copy has different unreadable fragments filled by PC-3000 with the characteristic DE-AD pattern.

The program compares the given copies (minimum 2, more can be supplied as optional copies) and, wherever at least one of the copies has valid data at a given spot, assembles them into a single, as-complete-as-possible file.

The result is saved as a new file with a „_repaired” suffix next to the first copy — all originals remain untouched. If a spot is damaged in all of the supplied copies at once, the DE-AD pattern remains there (with the option to zero out those bytes afterwards).

Optional checksum recalculation

After merging, the program can calculate and offer to write the correct checksum for the file.

i The checksum mechanism was only verified for one specific drive family — for other brands/series, it's always worth verifying the result directly in PC-3000 before relying on it.

Generate photo thumbnails

Creates scaled-down previews of photos (JPG, PNG, BMP, GIF, WebP) while preserving the original folder structure — useful e.g. for sending the client a quick preview of recovered photos without sending the full, large files. Originals remain untouched.

Two run modes are available:

- Generate thumbnails — just the images in a folder, ready to be zipped up and sent on their own.
- Thumbnails + HTML report — the full structure of all files (not just photos) with thumbnail previews built into an interactive HTML report — a ready-to-hand-over package for the client.

Thumbnails can be generated for all photos, or only for a chosen percentage of files from each folder — useful with a very large number of photos, to give a sample without waiting for everything to process. The „Healthy files only” option lets you skip files already marked as damaged, saving time on large datasets.

Detecting damaged thumbnails

While generating, the program additionally analyzes the generated thumbnail itself for visible damage (solid color, black frame, a damaged band across part of the image) — such files are flagged in the report as „needs review”, even though the thumbnail itself was generated successfully.

i The base folder for thumbnail reports can be set once, permanently (a field in Tools) — the program then skips the folder-picker dialog on every generation, and the subfolder is named automatically after the „Case name” field from the Generator.

The Settings tab

This tab gathers settings related to the program's own appearance and behavior (not the report), plus configuration management:

- Export / import settings — saving the entire configuration (colors, lab data, custom signatures, etc.) to a file and loading it on another workstation.
- Reset — restoring all program settings to their default state.
- Check for updates — manually checking whether a newer version of the program is available.