BILL'S HOME TECH
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Digitizing Old Photos & Movies

Saving your family's photos, home movies, and voices — explained in plain English, one step at a time

A plain-English guide to rescuing your memories

Go slow — and never risk your only original

Written for you by Bill — Bill's Home Tech

(330) 200-8042 · BillsHomeTech.com

For phones, scanners, and tape converters · facts current November 2026

What's Inside

This is your guide to turning a lifetime of photos, slides, home movies, and tapes into digital copies that will last. Read it in any order and at your own pace — there is no test, and you can't fall behind. Keep it nearby and reach for whatever you need. Every method comes with what it actually does *for you*, and slow step-by-step directions anyone can follow. Above all, one promise runs through every page: we will protect your *originals* — the one-of-a-kind photos and tapes — every step of the way.

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PART 1

Why Now & The Lay of the Land

What this project really is, why the time to do it is now, and the two honest paths through it — doing it yourself or sending it out. Start here.

CHAPTER 1

A Note from Bill

Hello, and welcome. Whoever is holding this book right now — this is for **you**. Maybe there's a shoebox of photographs in the closet, a stack of slides in the basement, a drawer of home-movie tapes you haven't been able to watch in twenty years. Maybe your parents left boxes of them and you're the keeper now. Wherever you're starting from, you've come to the right place, and I'm glad you're here.

I'm Bill. Helping folks feel at home with their technology is what I do every day, and I wrote this book the same way I'd sit at your kitchen table and go through a box of pictures with you: patiently, in plain English, with no rushing and no fancy words. If I ever use a term you don't know, I'll stop and explain it right then — you won't have to look anything up.

Why this project matters more than most

Of all the things I help people with, this one touches the heart the most. We are not talking about a phone or an email account here. We are talking about the only photograph of your mother as a girl. The only recording of your father's voice. The home movie of a wedding, a first birthday, a Christmas morning that will never come again. These are **irreplaceable** — there is no second copy anywhere in the world — and that is exactly why we're going to be so careful with them.

The one promise that runs through this whole book

Here is the most important sentence in these pages, so I'll say it plainly and come back to it often: **we never put your only original at risk.** Not for speed, not for convenience, not ever. A scan or a copy can always be done again. A photograph fed into a machine that chews it up, or a tape mailed in a flimsy envelope and lost, is gone for good. Every method in this book is chosen and described with that promise in mind.

STAY SAFE

Read this before you touch a single photo or tape

The goal is not just to make digital copies — it is to make digital copies *while keeping every original safe*. Handle photos by the edges with clean, dry hands. Never force a tape that resists. Never throw an original away after scanning it; a digital copy is a second home for a memory, not a replacement for the first. When in doubt, stop and ask.

This book is yours — read it any way you like

You do not have to read these pages in order, and there is no test at the end. Start on page one, or flip to the part that matches what's in your box — printed photos, slides, tapes, film reels, or records. Fold the corners, underline things, scribble in the margins. It's a reference, not a race, and you cannot fall behind.

And I'm only a phone call away

This book will carry you a long way on your own. But if you ever get stuck — or if you have something especially precious or fragile and you'd simply feel better having a hand — you are never stuck alone. Call me at **(330) 200-8042** and we'll work it out together, with no judgment and no rushing. There is no such thing as a silly question. The only bad question is the one you talked yourself out of asking.

— Bill

CHAPTER 2

Why the Time to Do This Is Now

If there's one thing I'd gently press on you, it's this: don't wait. I'm not saying that to rush you, and I'm certainly not selling anything. I'm saying it because the materials themselves are on a clock, and it's a quieter clock than most people realize.

Tapes and film don't last forever

Magnetic tape — the brown ribbon inside a VHS cassette or a camcorder tape — is not permanent. Over the years the signal on it fades, the tape can grow sticky or brittle, and mold can take hold in a damp basement. The picture gets grainier and the color washes out a little more with each passing year. The same is true of old film reels, which can curl, shrink, or develop a vinegar smell as they age. None of this happens overnight — but it is always happening.

> HEADS UP
>
> **The machines are vanishing, too**
>
> It's not only the tapes. The **VCRs** and camcorders needed to play them are no longer made, and working ones are getting harder to find and repair. A tape you can't play is a memory you can't reach. Digitizing now — while players still exist and the tape still holds a picture — is how you beat both clocks at once.

Photos fade and get lost

Printed photographs fade in sunlight, yellow with age, and stick together in humidity. But the bigger danger is simpler: a box of photos in one place can be lost in one flood, one fire, one move, one leaky roof. Spread across family members as digital copies, those same photos become almost impossible to lose entirely. That's the quiet magic of digitizing — it turns a single fragile copy into many sturdy ones.

What "digitizing" actually means

"Digitizing" is a big word for a simple idea: making a **digital copy** of something that exists only in physical form. A digital copy is just a file on a computer, a phone, or the internet — the same kind of file as a photo you take with your phone today. Once a memory is a file, it can be copied endlessly, shared in seconds, backed up in three places, and watched or viewed on any modern screen. The physical original stays safely in its box; the *file* is what does all the traveling.

WHAT THIS DOES FOR YOU

What this does for you

Digitizing turns a closet full of fragile, fading, hard-to-share memories into something you can actually enjoy and pass on: photos the whole family can see tonight, home movies that play on the television with a tap, and a collection that can survive long after the shoebox doesn't. It's one of the most loving projects you'll ever do.

CHAPTER 3

The Two Paths: Doing It Yourself vs. a Service

There are two honest ways to get your memories digitized, and neither is wrong. The right choice depends on how much you have, how much time you'd enjoy spending, and how comfortable you feel with the gadgets. Let me lay both out plainly so you can pick.

Path one: doing it yourself at home

You buy or borrow the equipment — a scanner for photos, a capture device for tapes — and you do the work at your own kitchen table, at your own pace. It costs less per item, it keeps your originals in your own hands the whole time, and many folks find it genuinely enjoyable, like going through the boxes one more time with purpose.

Path two: sending it to a service

A **digitizing service** is a company you mail your photos, tapes, or reels to; they do all the work with professional machines and send back both your originals and the digital copies. It costs more, and it means your originals travel — but it saves you the time, the equipment, and the learning, and it's often the only practical way to handle film reels or a very large collection.

Your options	The honest trade-off
Doing it yourself	Lower cost per item · originals never leave home · you set the pace · a bit of learning and time.
Using a service	Higher cost · originals travel by mail · professional results · hands-off · best for reels and big piles.
A mix of both	Very common and sensible: scan the photos yourself, send the tapes and reels out. You don't have to choose just one.

TIP

You don't have to pick one path for everything

Most families do a sensible mix. Printed photos are easy and satisfying to scan yourself at home. Tapes and film reels, which need special players and skill, are often worth sending out. There's no rule that says it all has to go one way. We'll help you decide format by format as we go.

A gentle word on cost

Prices change constantly and vary a great deal, so I won't quote you exact figures that would be out of date by the time you read this. As a rough idea only: a home photo scanner is a one-time purchase in the range of a nice dinner out to a few hundred dollars; services typically charge *per item* or *per tape*, plus shipping. Always get the current price in writing before you commit, whichever path you choose.

CHAPTER 4

Taking Stock: What's in Your Boxes

Before you buy anything or mail anything, spend a pleasant afternoon simply *sorting*. Knowing what you have — and roughly how much of it — makes every later decision easier and stops you from buying the wrong gadget. Lay it all out on a big table and group it by type.

The main kinds of things you'll find

If you see this…	It's probably…
Printed photos	The familiar paper prints — in albums, envelopes, frames, or loose in boxes.
Slides	Small squares (usually in cardboard or plastic mounts) you'd hold up to the light or show on a projector.
Negatives	Strips of orange-brown or black film, where light and dark look reversed. The source your prints came from.
VHS tapes	The big rectangular cassettes that played in a VCR.
Camcorder tapes	Smaller cassettes — Hi8, Video8, VHS-C, or MiniDV — from a handheld video camera.
Film reels	Round reels of movie film — 8mm, Super 8, or 16mm — from before video cameras.
Audio tapes	Cassette tapes, microcassettes, or reel-to-reel — music, voices, answering-machine messages.
Records	Vinyl LPs and 45s — the black discs played on a turntable.

TIP

Label as you sort — your future self will thank you

As you group things, jot a note on each pile or envelope: whose it is, roughly when, what the occasion was. "Mom & Dad's wedding, 1961" written now is worth its weight in gold later, when you're naming the files. The people who know these dates won't always be around to ask, so capture what you know while you can.

Count roughly, and set a reasonable first goal

You don't need an exact count, just a sense of scale: a few dozen photos, or a few thousand? Five tapes, or fifty? This tells you whether a job is an afternoon or a winter project, and whether a service might be worth it. And here's a kindness to yourself: **start**

with the most precious or most fragile items first. If you only ever finish one box, let it be the one that matters most.

FROM BILL

Don't let the size of the pile stop you

The most common reason these boxes sit in closets for decades is that the whole thing feels too big to start. So don't start with the whole thing — start with one envelope. Scan ten photos. You'll be amazed how good it feels, and how quickly a little bit a day adds up. If the pile truly is overwhelming, that's a fine reason to call me; we'll make a plan together.

CHAPTER 5

Handling Your Originals with Care

Because your originals are irreplaceable, a few minutes on how to handle them safely is time very well spent. None of this is fussy or hard — it's just common-sense care, the kind a museum would use, scaled down to your kitchen table.

Clean hands, clean surface, good light

- **Wash and dry your hands** before handling photos, slides, or negatives — the oils on skin leave marks that are hard to remove. Thin cotton gloves are a nice touch for slides and negatives but aren't essential for ordinary prints.
- **Hold photos by the edges.** Never touch the front surface of a print, slide, or negative with a fingertip.
- **Work on a clean, soft, dry surface** — a clean towel or a sheet of paper — away from food, drinks, and pets.
- **Dust gently** with a soft, dry brush or a puff of air. Never rub a photo with a cloth, and never use water or household cleaners on it.

Don't force anything that resists

If a photo is stuck to an album page or to another photo, **do not pull it free** — you can tear it. You can usually scan it right through the album page, or set it aside for a professional. If a tape squeaks, grinds, or resists when you try to play it, stop at once (we'll cover what to do in the tapes chapters). Forcing is how irreplaceable things get destroyed, and there is always a gentler way.

STAY SAFE

The golden rule of handling

If getting a copy of something would mean risking the original — peeling a stuck photo, forcing a brittle tape, trimming a slide to fit — **stop.** The copy can wait or be done another way. The original cannot be replaced. When those two ever seem to be in conflict, the original always wins.

Where to keep originals before and after

Store originals somewhere **cool, dry, and dark** — a closet shelf inside the living space is far better than a hot attic or a damp basement, which are the two worst places. Keep them flat, out of direct sun, and away from pipes that could leak. And remember: once you've made a

digital copy, the original doesn't become junk. Keep it. The digital copy is a safety net for the original, not a reason to throw it away.

GOOD TO KNOW

A quick word on what we'll cover next

With your boxes sorted and your handling habits in place, you're ready for the how-to. Part 2 tackles printed photos, Part 3 slides and negatives, Part 4 home-movie tapes and film reels, and Part 5 audio. Parts 6 through 8 cover choosing a service, organizing, backing up, and sharing. Jump to whatever matches your box — each part stands on its own.

PART 2

Digitizing Your Printed Photos

The shoebox of prints is the easiest place to start and the most satisfying. Here's every way to do it — your phone, a flatbed scanner, a fast photo scanner — plus how to think about quality without the jargon.

CHAPTER 6

The Easiest Start: Scanning Photos with Your Phone

If you have a smartphone, you already own a surprisingly good photo scanner — and a free one at that. For a box of ordinary prints, scanning with your phone is the quickest way to begin, and it keeps every photo flat on your own table the whole time. Let me show you the best way to do it.

Why not just snap a picture of the photo?

You could simply take a photo of your photo — and for a quick share, that's fine. But held at an angle, a plain snapshot comes out crooked, with glare from the light and your own shadow across it. A proper **scanning app** fixes all of that automatically: it straightens the photo, trims away the background, and removes the shiny glare. The result looks like a real scan, not a hasty phone picture.

Google's PhotoScan — a free, glare-beating app

PhotoScan is a free app from Google, made for exactly this job, and it works on both iPhones and Android phones. Its clever trick is removing the glare — the bright reflection that spoils a photo of a glossy print. You download it once from your phone's app store (search "PhotoScan by Google Photos"), and it's yours to keep.

How to scan a photo with PhotoScan

1. Lay the printed photo flat on a table with a plain, contrasting background behind it (a dark table under a light photo works well). Have good, even light, but avoid a single harsh lamp that casts glare.
2. Open PhotoScan and hold your phone flat above the photo so the whole photo fits inside the frame on your screen.
3. Tap the round **shutter** button. The app shows four dots, one near each corner.
4. Slowly move your phone so the white circle on screen hovers over each of the four dots in turn. This takes the photo from several angles so the app can erase the glare.
5. The app stitches them together into one clean, straight, glare-free scan. Repeat for the next photo.

GOOD TO KNOW

A faster mode, if there's no glare

If you're scanning matte (non-shiny) photos in soft, even light, PhotoScan lets you turn **glare removal off** in its settings. Then each scan is a single tap with no need to move the phone over the dots — much quicker for a big pile. Turn it back on for glossy prints where reflections are a problem.

Your phone's built-in scanner

Your phone may also have a scanner built right in, no extra app needed. On an **iPhone**, the Notes app (and the Files app) can scan — open a note, tap the camera or paperclip, and choose **Scan Documents**; it works for photos too. On many **Android** phones, the Google Photos app or Google Drive has a scan option. These are handy, though for glossy prints the dedicated PhotoScan app usually does a better job on glare.

TIP

Where your scans go, and how to find them

Scans from PhotoScan are saved into your phone's photo library (and into Google Photos if you use it), right alongside the pictures you take yourself. You'll find them in your usual Photos app. We'll cover organizing, naming, and — most importantly — backing them up in Part 7. For now, just get them scanned.

CHAPTER 7

Flatbed Scanners: The Gold Standard at Home

A **flatbed scanner** is the familiar flat box with a glass top and a hinged lid — the kind that's often built into an all-in-one printer. You lay the photo face-down on the glass, close the lid, and the scanner's light moves across underneath to capture it. For the best quality from a printed photo at home, a flatbed is hard to beat.

Why a flatbed gives the best result

- The photo lies perfectly flat against the glass, so there's no curl, no angle, and no glare.
- The light is even and controlled, capturing true colors and fine detail.
- You can scan at a high quality setting, pulling out detail you can't get from a phone.
- Many homes already have one, built into a printer — so it may cost you nothing to start.

How to scan a photo on a flatbed

1. Gently clean the glass with a soft, dry, lint-free cloth so dust doesn't show up in the scan.
2. Lay the photo **face-down** on the glass, lined up neatly with a corner or the marked edge.
3. Close the lid gently to hold the photo flat.
4. On the computer, open the scanner's program (or on an all-in-one, use the buttons on the printer). Choose **Photo** as the type, and set the quality — we'll talk about that setting, called DPI, in the next chapter but one.
5. Press **Scan** or **Preview**. Check how it looks, then **Save**, giving the file a clear name.

> **TIP**
>
> **Scan several small photos at once**
>
> If your photos are small, you can lay three or four on the glass at the same time, scan them together, and then save each one separately (many scanner programs will even split them for you automatically). This speeds up a big box considerably without lowering the quality of any single photo.

HEADS UP

A flatbed is careful, but slower

The trade-off with a flatbed is speed: one scan at a time, each taking several seconds. For a few hundred treasured photos that's fine and even pleasant. For many thousands, you'll want the faster photo scanner in the next chapter, or a service. There's no shame in matching the tool to the size of the job.

CHAPTER 8

Fast Photo Scanners for Big Collections

If your box holds not dozens but thousands of prints, there's a kind of scanner built for exactly that: a **sheet-fed photo scanner**. Instead of lifting a lid for each photo, you load a small stack and the machine pulls them through one after another, scanning both the front and sometimes the back, startlingly fast.

How these differ from a flatbed

Feature	What it means for you
Speed	Scans a photo per second or two, feeding a stack automatically — ideal for thousands of prints.
Handling	Pulls photos through rollers rather than resting them on glass. Very gentle on normal prints, but not for fragile or stuck-together ones.
Extras	Many straighten, brighten, and remove red-eye automatically, and can capture any notes written on the back.
Best for	Large collections of ordinary, sturdy prints you want done quickly.

HEADS UP

Never feed a fragile or precious one-of-a-kind print through rollers

A sheet-fed scanner is wonderful for a sturdy stack, but the rollers that make it fast can crease, scratch, or jam on a photo that is torn, curled, very old, brittle, or stuck to another. For anything fragile or irreplaceable, use the flatbed (previous chapter) or your phone instead — flat on the glass, nothing pulling on it. Sort the fragile ones out *before* you start feeding.

Should you buy one?

These machines cost more than an ordinary printer, so they make sense when you have a truly large collection. A few families buy one together and pass it around; others find a service cheaper than buying a machine for a one-time job. If you're only doing a few hundred photos, a flatbed or your phone will serve you well and save the expense.

TIP

Borrow before you buy

Some public libraries lend scanners or have a free "memory lab" with photo and tape equipment you can use on the spot. It's worth a phone call to your local branch before spending a penny — you may find everything you need is a few minutes away and free. Here in Portage County, I'm happy to point you toward what's available.

CHAPTER 9

Understanding Quality & DPI in Plain English

Somewhere in every scanner's settings is a number called **DPI**, and it's the one setting worth understanding. Don't let it intimidate you — it's a simple idea, and once you know it, you'll make good choices without a second thought.

What DPI means

DPI stands for **dots per inch**. It's simply how much detail the scanner captures: how many tiny dots it records for every inch of your photo. A higher number means more detail and a sharper, larger digital copy — but also a bigger file that takes up more room and scans more slowly. The whole trick is choosing a number that's high enough to capture your memory beautifully without being needlessly huge.

The numbers that matter — a simple cheat-sheet

What you're scanning	A good DPI to choose
Ordinary prints (4x6, 5x7)	300 to 600 DPI. 600 is a lovely choice that captures real detail and lets you print it larger later.
Small or wallet-sized prints	600 DPI or a bit higher, since there's less to work with and you want every bit of it.
A damaged photo you hope to repair	Higher — around 1200 DPI — to give a repair the most detail to work with.
Slides and negatives	Much higher — 2400 to 4800 DPI — because the original is tiny and you're enlarging it greatly (more in Part 3).

GOOD TO KNOW

Why 600 DPI is the sweet spot for most prints

For everyday printed photos, 600 DPI is the setting most experts land on. It captures far more detail than your eye needs for viewing on a screen, and enough that you could reprint the photo larger than the original one day. Going higher rarely helps an ordinary print and just makes giant files — save the very high numbers for slides and film.

A word on file types — JPEG is fine

Your scanner will ask what kind of file to save. For photos, **JPEG** (you'll see it written ".jpg") is the sensible, universal choice — every phone, computer, and website understands it, and the files are a reasonable size. There are fancier formats that keep a touch more detail (such

as TIFF), but for family photos JPEG at a good quality setting is perfectly lovely and far easier to live with.

TIP

When in doubt, scan a little higher — but only once

If you're unsure, it's better to scan a treasured photo slightly higher than you think you need, because you only want to handle each original once. You can always make a smaller copy later from a high-quality scan, but you can't add detail back to one scanned too low without fetching the original out again. Capture it well the first time.

CHAPTER 10

Touching Up Old Photos — Gently

Once a photo is scanned, you can brighten a faded one, straighten a crooked scan, or trim away a white border — all without ever touching the original again. A light touch is the secret here: the goal is to help the photo look its best, not to make it look artificial.

Simple fixes anyone can do

Your phone and computer already have gentle editing tools built in. In your **Photos** app, open a scan and look for **Edit**. From there you can:

- **Straighten and crop** — level a slightly tilted scan, and trim off any background or white border caught around the edges.
- **Brighten** — lift a photo that scanned too dark, or calm one that's too bright.
- **Adjust color** — warm up a faded, yellowed photo a little, or cool down one with an odd color cast.
- **Remove dust spots** — some apps can touch out small specks and scratches with a tap.

STAY SAFE

Always edit a copy, never your only scan

Here's the digital version of protecting your original: before you start editing, **duplicate the scan** so you're working on a copy. Most Photos apps let you undo, but making a copy first means your clean, untouched scan is always safe no matter what you try. The same principle, all the way down: never change the only copy of anything irreplaceable.

Automatic restoration — the modern helper

Some apps and online services now offer to **restore** old photos automatically — sharpening a blurry face, repairing a crack, even adding natural color to a black-and-white photo. These can be wonderful. Just go in with open eyes: the result is the computer's best *guess*, not the true original, so keep your honest, unrestored scan as well. A restored photo is a lovely bonus, not a replacement for the real thing.

FROM BILL

Don't feel you must fix everything

A little fading and a soft, warm tone are part of what makes an old photo feel like an old photo. You don't have to scrub every one to a shine. Scan it faithfully, make a gentle fix or two if it helps, and move on. The memory matters more than the polish — and if a cherished photo is badly damaged and you'd like a careful hand, that's a fine thing to call me about.

PART 3

Slides, Negatives & Film

Those little mounted slides and strips of orange film hold some of your sharpest, most colorful memories — and they need a slightly different approach than paper prints. Here's how to free them.

CHAPTER 11

Understanding Slides & Negatives

Slides and negatives puzzle a lot of people, so let's demystify them before we scan them. They are not prints — they're the *film* itself, and that changes how we handle and capture them. The good news: the picture quality locked inside them is often superb, better than the paper prints that came from them.

What each one is

This…	Is this
A slide	A single small picture, usually in a square cardboard or plastic mount about two inches across. The colors look correct when you hold it up to a light. Grandparents showed these on a projector and a screen.
A negative	A strip of film, often orange-brown, where light and dark are reversed and colors look strange. This is the original the photo lab printed your paper photos from — one negative per photo.

Both work the same way for us: light has to shine *through* them to reveal the picture, unlike a paper print, where light bounces *off* it. That one fact explains why they need a different kind of scanner — one that shines a light from behind the film.

GOOD TO KNOW

Why slides and negatives are worth the extra effort

Because they're the original film, slides and negatives hold more detail and richer color than the prints made from them — and often they're pictures that were never printed at all. A box of slides can be a hidden treasure: whole vacations and holidays that exist nowhere else. They're well worth the slightly fussier scanning.

Handle them even more gently than prints

Film scratches easily and shows every fingerprint, so handle slides by their mounts and negatives by their very edges only — cotton gloves are a real help here. Keep them dust-free and never try to clean the film surface with water or a rough cloth. A soft puff of air is all a dusty slide should ever get.

CHAPTER 12

Dedicated Slide & Negative Scanners

The simplest way to digitize slides and negatives at home is a **dedicated slide and film scanner** — a small countertop gadget made for just this job. You pop a slide or a strip of negatives into a little tray, it shines a light through from behind, and it shows you the picture — right-side-out, colors corrected — on a small screen or on your computer.

How they work, in plain terms

1. You load a slide (or a strip of negatives) into the tray that came with the scanner.
2. Slide the tray into the machine. A light behind the film shines through it.
3. The scanner captures the picture and — cleverly — flips a negative's reversed colors back to normal automatically, so you see a proper photo.
4. You tap **Save** (or **Capture**). Many of these have their own screen and save onto a memory card, so you don't even need a computer.
5. Move the tray along to the next slide or frame and repeat.

WHAT THIS DOES FOR YOU

What this does for you

A dedicated scanner turns a box of slides you can't see — because nobody owns a projector anymore — into photos you can view, share, and print tonight. For many families it's the only practical way to rescue hundreds of vacation and holiday slides that would otherwise stay locked away in the dark forever.

What to look for when choosing one

- **The formats it accepts** — make sure it handles what you have: 35mm slides, 35mm negatives, and (if you have them) the smaller 110 or 126 sizes.
- **A built-in screen** — handy for seeing each picture as you go, and for scanning without a computer.
- **Good resolution** — because you're greatly enlarging a tiny original, you want a high DPI here (see the next chapter).
- **Easy trays** — the faster and simpler the loading tray, the less tedious a big box becomes.

TIP

These are a one-time expense worth sharing

A decent slide scanner is a modest, one-time purchase, and once your slides are done it just sits in a drawer. This makes it a perfect thing to split with siblings or cousins, or to borrow from a library's memory lab. One machine can rescue an entire extended family's slides over a few months of passing it around.

CHAPTER 13

Flatbeds with a Film Adapter, & DPI for Film

If you'd rather have one machine that does both prints and film, some **flatbed scanners** come with a **film adapter** — a special lid with a light in it, plus holders for slides and negatives. These give excellent quality and save you owning two gadgets, though they're a bit slower than a dedicated slide scanner.

How a film-capable flatbed works

Instead of the normal lid, you fit the film holders onto the glass and use the lid that has a light built into it. That light shines down through the film while the scanner reads it from below — the same "light through, not off" idea. The scanner's program has a setting for **film** or **transparency**; choose it, and it handles the rest, including flipping negatives to look correct.

HEADS UP

A plain flatbed without the light won't do film

This only works on flatbeds that specifically include a **transparency unit** (the lid with the light) and film holders. A regular flatbed or printer-scanner, with just a plain white lid, can't shine light through film, so slides and negatives come out dark and useless on it. Check the box or the model's details for "film" or "transparency" before counting on it for slides.

DPI for film: aim high

Remember from Part 2 that DPI is how much detail the scanner captures. With slides and negatives, you're enlarging something tiny — a slide is only a couple of inches across — into a full-size photo, so you need a *much* higher DPI than for a paper print to keep it sharp.

For film, choose…	A good DPI
35mm slides and negatives	2400 to 4800 DPI. Higher captures more of the fine detail packed into the small frame.
If you'll only view on a screen	2400 DPI is plenty and keeps file sizes sensible.
If you may print large one day	Lean toward the higher end, 3600 to 4800 DPI, to give yourself room.

GOOD TO KNOW

Why film needs such big numbers

It comes down to size. A 4x6 print scanned at 600 DPI already has plenty of dots because the print is large. A 35mm slide is less than two inches wide, so to end up with a photo the same size on screen, the scanner must pack far more dots into each inch of the original. That's why 3000-plus DPI is normal for film and overkill for a paper print.

CHAPTER 14

Slides & Negatives: Yourself or a Service?

Slides and negatives are the format where the most people decide to use a service — and for good reason. Let me give you the honest comparison so you can choose with your eyes open.

The case for doing it yourself

- Your originals never leave your home — a real comfort with irreplaceable film.
- The gadget is a modest one-time cost and can be shared or borrowed.
- You control the quality and can re-scan a favorite at a higher setting.
- Many folks enjoy seeing each long-forgotten slide appear on the little screen.

The case for a service

- Slides and negatives are fiddly and slow to scan well; a service has fast professional machines and does hundreds at a time.
- If you have thousands of slides, doing them yourself can take many months.
- Professionals get consistent color and dust removal that's hard to match at home.
- For badly faded, moldy, or stuck film, a professional may rescue what a home scanner can't.

TIP

A sensible middle path

Scan your **top one or two trays** of favorite slides yourself first — the ones you can't wait to see — then decide whether the remaining hundreds are worth sending to a service. You get the joy and the instant results of the best ones, and an honest feel for how long the whole box would take before you commit either way.

STAY SAFE

If you do mail film, protect it like gold

Film is even more fragile than prints and even harder to replace. If you send slides or negatives to a service, we'll cover exactly how to protect them in the mail in Part 6 — including never sending your *only* copy of anything without understanding the risk. Read that part before you pack a single box.

PART 4

Home Movies: Tapes & Film Reels

VHS tapes, camcorder cassettes, and old film reels hold moving pictures and voices you can't get any other way — and they're the most urgent to rescue. Here's how, step by careful step.

CHAPTER 15

Knowing Your Tapes & Reels

Home movies come in more shapes than photos do, and knowing which you have decides how you'll digitize them. Let's name the common ones so you can tell what's in your drawer. Hold each tape up — the size and any writing on it usually give it away.

If it looks like…	It's probably
VHS	The big rectangular cassette, about the size of a thick paperback, that played in a VCR under the television.
VHS-C	A smaller version of VHS used in some camcorders; it fits into a special adapter to play in a normal VCR.
Video8 / Hi8	Small cassettes (about the size of a matchbook made fat) from handheld 8mm camcorders of the 1990s.
MiniDV	A very small cassette from later digital camcorders. The picture is already digital, but still trapped on tape.
8mm / Super 8 film	Not tape at all — actual movie film wound on a round reel, from before video cameras. No sound on many.
16mm film	A wider movie film on larger reels, older and often from more formal or professional filming.

HEADS UP

Tapes are the most urgent thing in your whole collection

Of everything we've discussed, magnetic tapes are the most time-sensitive. The picture fades year by year, mold grows in damp storage, and the players are disappearing. If you do nothing else from this book, prioritize your home-movie tapes. A faded photo is still a photo; a tape that's too far gone, or has no player left to run it, is simply silence.

Two ways forward, same as before

As with photos, you can digitize tapes yourself with a capture device and a working player, or send them to a service. Tapes lean a little more toward services than photos do, because the home setup takes some patience and depends on owning a working VCR or camcorder. We'll cover both; the next chapters walk through the do-it-yourself method, and Part 6 covers services.

CHAPTER 16

The DIY Setup: Capturing VHS at Home

Digitizing a VHS tape yourself is very doable, and here's the whole idea in one sentence: you **play** the tape on a VCR, and a small **capture device** carries the picture and sound into your computer, where you save it as a video file. Let's gather what you need.

What you'll need

Item	What it's for
A working VCR	To play the VHS tape. These are no longer made, so a borrowed, thrifted, or stored one is usual. It must play cleanly.
A video capture device	A small box or stick (often USB) that plugs into the VCR's output and into your computer. It does the actual converting.
The right cables	Usually the three colored RCA plugs — yellow (picture), red and white (sound) — or an S-Video cable for slightly better picture.
A computer	With capture software to record the incoming video and save the file. Some devices include their own software.

How it all connects

1. Plug the cables into the **OUT** sockets on the back of the VCR — yellow, red, and white into the matching colored holes (or an S-Video cable plus the red and white for sound).
2. Plug the other end into the **capture device**.
3. Plug the capture device into a USB socket on your computer.
4. Install the capture device's software if it came with any, or use a free recording program (such as OBS Studio, or QuickTime on a Mac). The device's instructions name what to use.
5. Put the tape in the VCR, press Play, and start recording on the computer. You'll see the video appear on the screen as it plays.

GOOD TO KNOW

Tapes record in real time — be patient

Here's the one thing to make peace with: a tape digitizes at **normal playing speed**. A two-hour tape takes two hours to capture, because the computer is watching it play, start to finish. There's no fast-forward. Put on the kettle, let it run, and check in now and then. This real-time patience is the main reason some folks prefer a service for a big stack of tapes.

TIP

Borrow the gear before buying

A working VCR and a capture device are a classic thing to borrow rather than buy for a one-time job. Ask family, check a library memory lab, or ask around. If you'd like, I can help you source a working player and the right capture device, or set the whole thing up at your kitchen table so all you have to do is press Play.

CHAPTER 17

Camcorder Tapes: Hi8, Video8, VHS-C & MiniDV

If your home movies came from a handheld camcorder, the tapes are smaller than VHS, and the simplest path is often the camcorder itself. Here's how each type is usually handled.

Use the camcorder as the player

If you still have the original **camcorder** and it still works, it's your best player. Most camcorders have the same yellow-red-white (or S-Video) output sockets, so you connect the camcorder to the capture device exactly as you would a VCR in the previous chapter, press Play on the camcorder, and record on the computer. The camcorder plays the tape; the capture device does the converting.

Tape type	How to play and capture it
VHS-C	Pop it into its VHS-C adapter (a cassette-shaped shell) and it plays in a normal VCR, then capture as usual.
Video8 / Hi8	Play it in the original 8mm camcorder (or a compatible one) and capture through the colored cables.
MiniDV	Already digital. Play it in the MiniDV camcorder; many connect by a FireWire or USB cable that transfers the video more directly.

HEADS UP

A dead camcorder is the usual stumbling block

The catch with camcorder tapes is finding a working player, since these cameras are long out of production and their batteries and belts fail with age. If your old camcorder is dead, a compatible one can sometimes be borrowed or found — but this is the point where many people sensibly turn to a service, which keeps working players of every kind on hand.

MiniDV is a special, happier case

MiniDV tapes are already *digital* — the picture was recorded as computer data, not as a fading analog signal. That means a MiniDV transfer can be a near-perfect copy with no quality lost, if you can play the tape. It also means these tapes have aged a little better. If you have MiniDV and a working camcorder, you're in luck; it's one of the cleaner transfers you can do.

CHAPTER 18

The Capture, Step by Step — and Common Snags

Let's walk through an actual capture session from start to finish, so you know what to expect and what the little hiccups mean. Once you've done one tape, the rest feel easy.

A full capture, start to finish

1. Connect everything as in the last two chapters, and open your capture software.
2. Insert the tape and press Play for a moment to confirm you see the picture and hear the sound on your computer screen. Adjust the software's input if the screen is blank.
3. Rewind the tape to the very beginning.
4. Press **Record** in the software, then press Play on the VCR or camcorder. Let it run.
5. When the tape ends (or the home movie does), press Stop in the software, then Stop on the player.
6. **Save** the recording as a video file, giving it a clear name like "Christmas 1988." MP4 is the friendly, universal file type to choose.
7. Make a quick note of what's on it, eject the tape, and move to the next.

Common snags and what they mean

If you see…	It usually means
Blank screen, no picture	Usually a wrong cable socket or the wrong input chosen in the software. Re-check the colored plugs and the input setting.
Picture rolls or is snowy	Often the tape or the VCR's heads are dirty, or the tape is worn. Try a different tape to tell which.
Sound but no picture (or vice versa)	A loose or wrong-colored cable — yellow is picture, red and white are sound.
Tape squeals or won't play	Stop immediately — the tape may be damaged. Don't force it; this is a job for a professional.

STAY SAFE

If a tape resists, stop — don't sacrifice it

A tape that squeaks, grinds, or jams may be sticky with age or growing mold, and forcing it through a VCR can snap it or smear the picture off forever. Eject gently and set it aside. These difficult tapes are exactly what professional services (and their specialized equipment) are for. One irreplaceable tape is never worth risking to save a mailing fee.

CHAPTER 19

No Computer? Standalone Converters

If plugging cables into a computer sounds like more than you'd enjoy, there's a friendlier option: a **standalone converter**. These are little boxes that take the video straight from a VCR or camcorder and save it onto a memory card or a USB stick — no computer, no software, just a couple of buttons.

How a standalone converter works

1. Connect the VCR or camcorder to the converter box with the colored cables, just as before.
2. Insert a memory card or USB stick into the converter.
3. Press the converter's **Record** button, then press Play on the VCR or camcorder.
4. The box records the video onto the card or stick as it plays — in real time, as always.
5. Press Stop when done. Your home movie is now a file on the card, ready to copy to a computer or watch on a television.

WHAT THIS DOES FOR YOU

What this does for you

A standalone converter removes the part that trips most people up — the computer and the software. If you're comfortable pressing Play and Record but not fiddling with programs, this is the gentlest way to digitize your own tapes at home while keeping them in your own hands the entire time.

TIP

Still a real-time job

Like every tape method, a standalone converter works at normal playing speed — a two-hour tape takes two hours. The box just spares you the computer. Quality varies between models, so read recent reviews before buying, and test one tape before you commit to a big stack.

CHAPTER 20

Film Reels: 8mm, Super 8 & 16mm

Film reels are the oldest home movies — actual strips of film wound on round reels, from before video cameras existed. They're beautiful, often irreplaceable, and they're the format I most often steer people toward a service for. Here's why, and what your options are.

Why film is different

Unlike tape, film has no electrical signal to capture — it's a long strip of tiny photographs that create the illusion of motion when run past a light quickly. To digitize it well, each frame is lit and photographed, which takes specialized equipment. Old film can also be brittle, shrunken, or stuck together, and a home projector can scratch or even burn a fragile reel. This is delicate work.

Your realistic options

Option	The honest truth
A home reel converter	Countertop gadgets exist that feed the film through and capture it frame by frame. They work for sturdy reels but are slow and fussy, and not gentle enough for fragile film.
A digitizing service	The usual and safest choice. Professionals use proper frame-by-frame scanners, handle fragile film safely, and can often rescue reels a home gadget couldn't.
Never a home projector plus a camera	Pointing a camera at a projector screen gives a poor, flickery result and risks the film in a hot projector. Please don't.

STAY SAFE

For most film reels, a service is the loving choice

I rarely push people toward services, but with old film reels I usually do. The film is fragile, the equipment to do it well is costly and specialized, and the risk of a home projector damaging an irreplaceable reel is real. Sending reels to a reputable service (Part 6 shows you how to choose and protect them) is, more often than not, the right call.

GOOD TO KNOW

A note on sound

Most 8mm and early Super 8 film is **silent** — there was never any sound recorded. Some later Super 8 had a thin magnetic sound strip. If your reels have sound, make sure any service you choose can capture it, as not all do. Either way, don't be surprised or disappointed if a reel turns out to be silent; that's simply how it was filmed.

PART 5

Sounds & Voices: Audio

A voice on an old cassette, a record you grew up with, a message saved on an answering machine — sound is where memory hits hardest. Here's how to rescue the things you can hear.

CHAPTER 21

Cassette Tapes & Microcassettes

Audio cassettes hold some of the most moving memories of all — a loved one singing, a child learning to talk, a message that ends "call me back." The method mirrors video tapes: you **play** the cassette and **capture** the sound into a computer or a converter. Here's the gentle way.

What you'll need

Item	What it's for
A cassette player	A working tape deck or portable player. As with VCRs, these are no longer common, so a borrowed or thrifted one is usual.
A way to capture	Either a cassette-to-USB player (a tape player with a USB cable built in) or a cable from the player's headphone socket into a computer.
Recording software	A free audio program (such as Audacity) to record and save the sound as a file. Some USB players include their own.

The simplest path: a cassette-to-USB player

The easiest tool is a **cassette-to-USB player** — a tape player with a USB cord built in and simple software included. You put in the tape, plug the USB cord into your computer, open the included program, press Record, then press Play on the deck. The sound records onto the computer as it plays. When the tape ends, you stop and save the file (**MP3** is the friendly, universal choice for audio).

GOOD TO KNOW

Microcassettes need their own little player

Those tiny **microcassettes** from old answering machines and handheld dictation recorders won't fit a normal cassette deck — they need a microcassette player. If you don't have the original recorder, these are a common thing to hand to a service, which keeps the right little players on hand.

STAY SAFE

Same rule: if the tape resists, stop

An old cassette can go brittle or get tangled in a worn player. If it squeals, slows, or the tape starts to spill out, stop and gently wind it back in by hand with a pencil in the hub. A snapped tape of someone's voice is a heartbreak worth avoiding — when in doubt, let a professional handle a fragile one.

CHAPTER 22

Vinyl Records

If you have vinyl records — the big black discs, or the small 45s — you can digitize those too, turning a record you can no longer play into music files for your phone. The approach is the same family as everything else: play it, and capture the sound.

Two ways to do it

Option	How it works
A USB turntable	A record player with a USB cord built in. Plug it into a computer, open the included software, press Record, and play the record. The simplest route by far.
Your existing stereo	If you have a turntable and amplifier already, you can run a cable from the amplifier's output into a computer and record the same way. Fiddlier, but uses what you own.

How to capture a record

1. Set the record playing on the USB turntable, with the software open on your computer.
2. Press **Record** in the software, then lower the needle onto the record.
3. Let the whole side play through. The software records it as one long piece.
4. At the end, press Stop. You can split it into separate songs in the software, or leave it as one recording of the whole side.
5. **Save** each as an MP3 file, naming it by album and song.

TIP

Clean the record first — gently

A quick, gentle clean before recording makes a real difference: a soft anti-static brush, or a barely-damp microfiber cloth wiped *with* the grooves (around the circle), not across them. Let it dry fully before playing. A cleaner record means fewer pops and crackles in your recording — though a little crackle is part of vinyl's charm, and nothing to fret over.

CHAPTER 23

Voice Recordings & Answering-Machine Messages

Of all the things people ask me to help save, a recorded **voice** is the one that brings the most tears — and the most gratitude. A saved voicemail from someone no longer here, a message on an old answering-machine tape, a cassette of a grandparent telling stories. These deserve special care, so let's give them some.

Saving a voicemail or phone message

If the voice you treasure is a **voicemail** on your phone, don't leave it sitting in the phone, where it could be deleted automatically or lost if the phone fails. Most phones let you **save or share** a voicemail: open the voicemail, look for a Share or Save option, and send it to yourself by email or save it into your files. That turns a fragile phone message into a proper file you can back up like anything else.

HEADS UP

Voicemails can vanish on their own — act soon

Phone companies often delete saved voicemails after a set time, and a lost or broken phone takes its voicemails with it. If there's a voice you can't bear to lose sitting in your phone right now, saving it out is the single most urgent thing in this whole book. Please don't put it off — it can be gone through no fault of your own.

Answering-machine and dictation tapes

Old answering machines usually used **microcassettes** (covered a couple of chapters back). Capture them the same way as any cassette, using the right little player. These tapes are often decades old and brittle, so handle them with extra gentleness, and consider a service for any that feel fragile or that hold something truly irreplaceable.

FROM BILL

This is the one I'd help with in a heartbeat

If there's a voice recording you're frightened of losing — a voicemail, a cassette, a message — and you're not sure how to save it safely, please just call me at (330) 200-8042. I will treat it like the treasure it is, and we'll get a safe copy made together before anything can happen to it. No one should lose a loved one's voice over a technical hiccup.

CHAPTER 24

Cleaning Up & Saving Your Audio

Once your sound is a file, a little gentle tidying can make it nicer to listen to — though, as with photos, a light touch is best. And saving it in the right way makes sure it plays everywhere and lasts.

Gentle clean-up

- **Trim the silence** at the start and end so the recording begins right at the sound.
- **Even out the volume** if a recording is too quiet to hear comfortably — most audio programs have a simple "amplify" or "normalize" button.
- **Reduce hiss** with a noise-reduction tool if there's a steady background hum, but go gently — too much makes voices sound underwater.
- **Split into tracks** if you recorded a whole record or a long tape, so each song or section is its own file.

STAY SAFE

Keep the untouched original recording

Just like with photos, save your raw, unedited capture first and do your tidying on a copy. If a clean-up goes too far and the voice sounds odd, you'll be glad to still have the honest original. A little hiss on grandma's voice is far better than a cleaned-up version where she doesn't sound quite like herself.

The right way to save audio

For everyday listening and sharing, **MP3** is the universal choice — small files that play on every phone and computer. If a recording is especially precious and you want the very best quality kept, you can also save a **WAV** file, which keeps every bit of the sound but makes much larger files. For most families, well-made MP3s are perfect, and far easier to store and back up.

WHAT THIS DOES FOR YOU

What this does for you

A saved, backed-up audio file means a beloved voice or a favorite record is now safe, shareable, and playable forever — on your phone in the car, at a family gathering, sent to a grandchild across the country. Sound carries memory in a way nothing else does, and you've just made it permanent.

PART 6

Doing It Yourself vs. a Service

The honest, no-pressure comparison — what a mail-in service is really like, how to pick a trustworthy one, and above all how to protect your irreplaceable originals when they have to travel.

CHAPTER 25

The Honest Comparison

We've touched on this format by format; now let's lay it all out in one place so you can make a clear-eyed decision for your own collection. There's no single right answer — only the right answer for you.

Side by side

	Doing it yourself	Using a service
Cost	Lower per item; buy or borrow gear once	Higher; usually per item or per tape, plus shipping
Your originals	Never leave your home	Travel by mail (the main worry)
Time & effort	Yours to spend; tapes run in real time	Hands-off; they do the work
Quality	Good, especially for photos	Often best, with professional machines
Best for	Photos, modest piles, keeping control	Film reels, big collections, fragile media

My honest rule of thumb

After years of helping folks with this, here's the simple guidance I give most people: **scan printed photos yourself** — it's easy, satisfying, and keeps them home. **Send film reels to a service** — they're fragile and need special gear. For **tapes**, it comes down to how many you have and whether you have a working player: a few with a player, do them yourself; a big stack or no player, lean toward a service. And the most precious irreplaceable item of all? Consider having a hand with it either way.

TIP

You can always start yourself and switch

You're not locked in. Many people scan their photos at home, get a taste of the work, and then happily send the tapes and reels out once they see how long those take. Starting yourself costs little and teaches you exactly what you'd be paying a service to save you. There's wisdom in trying one box before deciding the rest.

CHAPTER 26

What a Mail-In Service Is Actually Like

If you've never used a digitizing service, the idea of mailing off your memories can feel nerve-racking. Let me walk you through how these services usually work, so it feels familiar rather than frightening. The big, established ones have done this for millions of items.

The usual steps

1. You order online or buy a kit. Many services send you a sturdy box with a prepaid shipping label and a list to fill in.
2. You pack your photos, tapes, or reels into the box (we'll cover packing safely in two chapters), number them against the list, and seal it.
3. You drop it off or have it picked up, using the prepaid, trackable label.
4. The service digitizes everything — typically over a few weeks — and often lets you track its progress online.
5. They send back your **originals** along with your digital copies — usually as a download, a USB stick, a DVD, or files in an online account.

GOOD TO KNOW

Roughly what to expect on price and time

Services usually charge *per item* (per photo, per tape, per reel, per foot of film), plus options for how you get the results. Turnaround is commonly a few weeks, longer in busy seasons. Prices change often and vary widely, so I won't quote figures that would mislead you — always get the current, all-in price (including the return shipping and the digital copies) before you send anything.

How you'll get your digital copies back

Think ahead about the **delivery** you want. A download or an online account is handy but means you must then save and back up the files yourself (Part 7). A USB stick or hard drive is a physical copy in your hand. DVDs are falling out of use as computers stop including DVD drives, so I'd lean toward a USB drive or download over discs these days. Whatever you choose, the moment those copies arrive, backing them up becomes your next job.

CHAPTER 27

Choosing a Service You Can Trust

Your memories are irreplaceable, so the one thing that matters most in a service is **trust**. A low price means nothing if a box of your family's only photos goes missing. Here's how to choose a reputable one with confidence.

What to look for

- **A long track record and real reviews.** Favor established companies that have handled millions of items over a brand-new outfit with no history. Read recent reviews, good and bad.
- **Your originals returned.** A good service always sends your originals back. Be wary of anyone who is vague about returning them.
- **Tracking the whole way.** They should track your box in, through their process, and back out to you. Knowing where your memories are at each step is a real comfort.
- **Work done in-house, in-country.** Ask whether they digitize on their own premises or ship your originals elsewhere. Fewer hands and fewer miles mean less risk.
- **Clear, all-in pricing.** The full cost — digitizing, the copies, and return shipping — in writing before you commit, with no surprise add-ons.

SCAM ALERT

Watch for too-good-to-be-true and vanishing outfits

Be cautious of a service whose price is dramatically below everyone else's, that has no phone number or real address, or that only appeared online recently with glowing reviews and no history. With something irreplaceable, the cheapest option is a false economy if there's any doubt about whether your box comes back. Spend a little more for peace of mind, and never send to an outfit you can't clearly identify and reach.

FROM BILL

Ask me, or ask your library, for a steer

If you'd like a second opinion on whether a service looks reputable, I'm glad to look it over with you — a quick call to (330) 200-8042 before you mail anything can save a lot of worry. Your local library's memory lab staff can often point you to services other families have used happily, too. You don't have to judge it all alone.

CHAPTER 28

Protecting Irreplaceable Originals in the Mail

This chapter is the heart of using a service safely, so read it carefully. When your one-of-a-kind memories have to travel, a little care in how you send them is the difference between peace of mind and a sleepless week.

Before you pack a single thing

- **Make a list** of everything in the box — number each item and note what it is. If anything ever goes missing, you'll know exactly what.
- **Photograph the contents** with your phone before sealing, as a record of what you sent and its condition.
- **Never send your only copy of a one-of-a-kind item carelessly.** If you can make even a rough home scan or phone photo of the most precious few items first, do — so that even in the worst case, the image survives.

Packing to survive the journey

1. Wrap photos and film in acid-free tissue or clean paper; keep tapes in their cases.
2. Pad the box well on all sides with bubble wrap or crumpled paper so nothing shifts or gets crushed.
3. Use a sturdy box — the service's own kit box is designed for this; if using your own, make it strong and not too big.
4. Seal it well and use the **trackable, insured** shipping the service provides, or add insurance yourself.
5. Keep your drop-off receipt and the tracking number until your originals are safely back in your hands.

STAY SAFE

Send in batches, not everything at once

Here's a quiet trick that halves your risk: don't mail your entire life's collection in one box. Send a **batch**, wait for it to come safely home, and only then send the next. It takes a little longer, but it means no single lost package could ever take everything. Spread the risk the same way you'll soon spread your backups.

HEADS UP

The only truly safe original is one that never had to travel

Everything in this chapter reduces risk, but mailing is never zero risk. That's the honest reason I steer people toward doing photos at home and only mailing what genuinely needs it — fragile film, big stacks you can't manage. The less your irreplaceable originals travel, the safer they are. When something is beyond price, that calculus should always win.

CHAPTER 29

Local Help, Libraries & a Hand from Bill

Mailing isn't your only alternative to doing it all yourself. There may be help much closer to home — and, in Portage County, there's me. Let's cover the local options, which many people overlook.

Library memory labs

Many public libraries now have a free **memory lab** — a quiet room with photo scanners, slide scanners, and tape converters you can use on the spot, often with a staff member to help you get started. Your originals never leave the building, it costs nothing, and you learn the gear with a friendly hand nearby. It's one of the best-kept secrets in this whole subject. A quick phone call to your branch is well worth it.

Having me help, right here at home

Here in **Portage County, Ohio**, you don't have to mail your memories anywhere or master the gadgets alone. I can bring the equipment to your kitchen table and set it all up, scan your most precious items *with* you so they never leave your home, help you sort a service for the film reels, or simply sit beside you and get you going so you can carry on yourself. Your originals stay in your hands the whole time.

FROM BILL

Local means your memories never leave your sight

The nicest thing about getting help locally — from a library or from me — is that your irreplaceable originals never go into the mail at all. For the items you'd worry about most, that peace of mind is worth a great deal. If you're in or near Portage County and you'd like a patient hand with any part of this, call me at (330) 200-8042 and we'll make a plan that keeps everything safe and close to home.

GOOD TO KNOW

Whatever you choose, back it up next

However your memories get digitized — your phone, a scanner, a service, a library, or my help — the moment you have digital copies, the single most important thing left to do is **back them up**. That's what Part 7 is all about, and it's the step that makes all this effort truly last. Don't stop before you've done it.

PART 7

Organizing & Protecting Your Memories

Digitizing is only half the job. Now we name, date, and tidy your files so you can find them — and, most important of all, back them up so they can never be lost again. This is the part that makes it last.

CHAPTER 30

Naming & Dating Your Files

A thousand scans named "scan001, scan002" is a haystack you'll never search. A little care with names and dates now turns your collection into something you — and your grandchildren — can actually find your way around. It needn't be fancy; it just needs to be consistent.

A simple naming habit that works

The friendliest way to name a file is **date first, then what it is**, like this:

`1961-06 Mom and Dad Wedding`

Why date first? Because when files are named this way, your computer naturally lines them up **in time order** — oldest to newest — which is exactly how you'll want to browse your family's story. Write the year first, then the month if you know it, then a few plain words about who or what. If you only know the decade, "1960s" is far better than nothing.

If you know…	Name it something like
Know the exact date	2019-07-04 Fourth of July Cookout
Know month and year	1988-12 Christmas Morning
Know only the year	1972 Summer at the Lake
Know only the decade	1950s Grandma and Grandpa Farm

TIP

Guessing a date is fine — write it with a question mark

Don't let not knowing the exact date stop you. An educated guess is far more useful than no date at all. If you're unsure, write it with a little question mark — "1965? Church Picnic" — so later you and your family know it's an estimate. The people who remember these dates won't always be here to ask, so capture your best guess while you can.

CHAPTER 31

Folders, Albums & Finding Things Later

With your files sensibly named, a little grouping makes the collection a pleasure to wander through. There are two gentle ways to organize, and you can use whichever suits how your mind works — or both.

Folders — like labeled boxes

On a computer, a **folder** is just a labeled container, exactly like a labeled shoebox. Make a few broad ones and tuck your files inside. Keep it simple — too many folders is as bad as none. A structure like this serves most families well:

- A big folder called **Family Memories** to hold everything.
- Inside it, a folder per **decade** (1950s, 1960s, 1970s…) or per **branch of the family**.
- Perhaps a few special folders — **Weddings**, **Home Movies**, **Grandma's Voice** — for things you'll want to find quickly.

Albums — grouping without moving anything

In a photo app (like Photos on a phone or computer, or Google Photos), an **album** is a collection you gather for viewing without actually moving the files around. You can put the same photo in several albums, and modern apps can even find all the photos of one person or place for you automatically. Albums are lovely for making a "Dad's 80th Birthday" collection to share, while your folders keep the master order underneath.

WHAT THIS DOES FOR YOU

What good organizing does for you

When your memories are named and grouped, you can answer a grandchild's "what was great-grandma like?" in thirty seconds instead of an afternoon of digging. You can pull together a slideshow for an anniversary, find every photo of the old house, or hand the whole tidy collection to the next generation with pride. Organizing is a gift to everyone who comes after you.

TIP

Don't let organizing stop you from scanning

Perfect organizing can wait; scanning the fading originals can't. If tidying feels like it's slowing you down, just get everything scanned into one big folder first, safe and backed up, and tidy at your leisure on a rainy afternoon. A messy, backed-up collection beats a beautifully organized one that you never finished because you fussed over folders.

CHAPTER 32

The Most Important Chapter: Backing Up (the 3-2-1 Rule)

If you read only one chapter in this entire book, let it be this one. Digitizing your memories is a wonderful thing — but a digital file in only *one* place is just as losable as the shoebox was. A computer can fail, a phone can be dropped in the lake, a service's download link can expire. The answer is to keep your memories in **more than one place**, and there's a simple, time-honored recipe for exactly how.

The 3-2-1 rule, in plain English

Professionals who guard data for a living follow a little rule called **3-2-1**. Don't let the numbers put you off — here's all they mean:

The number	What it means for you
3 copies	Keep at least three copies of your memories in total — the one you use, plus two backups. If one fails, you've still got two.
2 kinds of place	Keep them on two different kinds of storage — say, your computer and an external drive — so one type of failure can't take them all.
1 somewhere else	Keep at least one copy somewhere away from your home — up in the cloud, or on a drive at a relative's house — so a fire, flood, or theft can't take everything at once.

What that looks like for a real family

Here's 3-2-1 for an ordinary household, nothing technical about it:

1. **Copy one:** your memories on your computer or phone, where you enjoy them.
2. **Copy two:** the same memories on an **external hard drive** — a small box you plug in and copy everything to, then keep in a drawer.
3. **Copy three:** the same memories in the **cloud** (safe storage on the internet) or on a second drive kept at a family member's house — somewhere other than your home.

STAY SAFE

Three copies, or it isn't really safe yet

I'll be blunt because this matters so much: until your digitized memories exist in at least two or three separate places, the project isn't finished and your memories aren't truly safe. All that scanning, all that care — don't let it hang by the thread of a single device that could fail tomorrow. Backing up is not an extra; it's the whole point.

HEADS UP

"It syncs to the cloud" is not the same as a backup

Beware a false comfort: services that **sync** (keep your phone and the cloud matching) are handy, but they're not a true backup. If you delete a photo by accident — or something goes wrong — the deletion syncs too, and it's gone from both. A real backup is a separate copy that *doesn't* change when the original does. Keep at least one copy that sync can't reach.

CHAPTER 33

Cloud Backup, Made Simple

The **cloud** is a friendly word for storing a copy of your files on big, well-guarded computers on the internet, run by a trusted company. It's the easiest way to get that all-important copy "somewhere else," because the somewhere else is handled for you.

Why the cloud is so good for memories

- The copy is **away from your home** automatically, so a fire or flood can't reach it.
- You can get to your memories from any device, anywhere — handy for sharing with family.
- The companies that run it keep their own backups, so your copy is itself well protected.
- Once set up, it can back up **automatically**, with nothing for you to remember.

The main choices

Common, reputable cloud services for photos and files include **Google Photos**, **Apple iCloud**, **Microsoft OneDrive**, and **Dropbox**. Most give you a little space free and charge a modest monthly fee for more — and a lifetime of scans can need a fair bit of space, so expect a small ongoing cost. For many families it's a few dollars a month, which is a tiny price for memories that can never be lost.

HEADS UP

Remember the cloud password — and keep paying

Two gentle cautions. First, write down the **email and password** for your cloud account and keep them somewhere safe; losing access to the account is like losing the key to the vault. Second, if it's a paid plan, keep it paid — if the payment lapses, some services may eventually remove your files. The cloud is wonderful, but it's a copy you're renting, so tend to it. (This is exactly why 3-2-1 also keeps a drive in your own hands.)

TIP

Let me help you set it up once, properly

Cloud backup is the kind of thing that's fiddly to set up the first time and then runs itself for years. If you'd like it done right — the account made, the automatic backup turned on, the password safely written down — that's a perfect thing to have a hand with. Call me at (330) 200-8042 and we'll get it working so you never have to think about it again.

CHAPTER 34

External Drives: A Copy in Your Own Hands

An **external hard drive** is a small box — about the size of a deck of cards or a paperback — that plugs into your computer and holds a copy of everything. It's the down-to-earth partner to the cloud: a copy you can hold, that doesn't need the internet and doesn't cost a monthly fee.

How to use one

1. Buy an external drive with plenty of room — a lifetime of photos and home movies can be large, especially the videos, so err on the roomy side.
2. Plug it into your computer with the cable provided. It appears like a new folder or disk.
3. **Copy** your whole Family Memories folder onto it — drag it across, or use your computer's built-in backup tool to do it automatically.
4. Unplug it and keep it somewhere safe — ideally not right next to the computer, so one mishap can't claim both.
5. Every few months, plug it back in and copy over anything new. Make it a habit, like changing the smoke-alarm batteries.

TIP

Keep the spare drive somewhere else entirely

Here's how an external drive helps satisfy the "somewhere else" part of 3-2-1 without the cloud: buy two drives, keep one at home and one at a trusted family member's house, and swap them when you visit. Now a fire or theft at either house can't take all your memories. It's an old-fashioned trick, and a very good one.

HEADS UP

Drives don't last forever either — that's why we keep several

An external drive can fail with age or a bad drop, just like anything else — which is precisely why the 3-2-1 rule never relies on a single one. A drive plus the cloud plus your computer is sturdy because all three would have to fail at once, which almost never happens. No single copy is forever; the *set* of copies is what lasts.

CHAPTER 35

Sharing Your Memories with Family

Here's the joyful payoff for all your careful work: once your memories are digital and safely backed up, sharing them is wonderfully easy — and every share is also another copy out in the world, which makes them safer still. Let's spread the joy.

Easy ways to share

Way to share	What it's good for
A shared album	In Google Photos, Apple Photos, or similar, make an album and invite family to view (and add their own). Everyone sees the memories, and can save their favorites.
Email or messages	Send a handful of photos, a short video clip, or an audio recording straight to someone. Simple and personal.
A USB stick or drive	Copy a collection onto a stick and hand it to a relative. An easy, no-internet way to give a complete set — and another backup.
A digital photo frame	A frame that shows a slideshow of your scanned photos on a shelf. Many let family send new photos to it from afar.

Sharing is also safekeeping

There's a lovely bonus to sharing: every time you give a copy to a son, daughter, or cousin, you've created another backup in another place, held by someone who also treasures it. A family whose memories live on a dozen phones and drives across the country has made those memories nearly impossible to ever lose. Generosity and safety turn out to be the same act.

WHAT THIS DOES FOR YOU

What this does for you — and everyone after you

This is what the whole project has been for. Not files on a drive, but your grandchildren knowing their great-grandparents' faces, hearing the voices, seeing the home they grew up in. You've carried your family's story out of a fading shoebox and into hands that will carry it forward. That's a gift that outlasts all of us.

PART 8

Quick-Start, Cheat-Sheet & When to Call Bill

Everything boiled down to a quick plan for each kind of material, a tear-out cheat-sheet, a plain-English glossary, simple fixes — and an honest word about when to pick up the phone.

CHAPTER 36

Quick-Start by Material Type

Feeling ready but not sure where to begin? Find what's in your box below and follow the short plan. Each points you to the fuller chapters, but these are enough to get you moving today. Remember the two golden rules as you go: **start with the most precious**, and **back up as soon as you have copies**.

Printed photos

1. Grab your phone and the free **PhotoScan** app for a quick start, or a flatbed scanner for best quality (Part 2).
2. Scan at 600 DPI for prints; save as JPEG.
3. Name each by date and occasion, then back up (Part 7).

Slides & negatives

1. Use a dedicated slide/film scanner or a flatbed with a film adapter (Part 3).
2. Scan high — 2400 to 4800 DPI — because the original is tiny.
3. For a big box, scan your favorites, then consider a service for the rest.

VHS & camcorder tapes

1. Find a working player (VCR or the camcorder) and a USB capture device, or a standalone converter (Part 4).
2. Connect, press Record on the computer, press Play on the tape — it runs in real time.
3. Save as MP4. If you have no player or a big stack, lean toward a service.

Film reels (8mm, Super 8, 16mm)

1. For most people, choose a reputable service — film is fragile and needs special gear (Parts 4 and 6).
2. Protect originals in the mail; send in batches (Part 6).

Audio — cassettes, records, voices

1. Use a cassette-to-USB player or a USB turntable, with free recording software (Part 5).
2. Save a treasured voicemail out of your phone **today** — don't wait.
3. Save as MP3, then back up.

STAY SAFE

The one rule that beats all the others

Whatever you're digitizing: if making the copy would risk the irreplaceable original — forcing a tape, peeling a stuck photo, trusting a shaky service — stop and find a gentler way. Copies can always be redone. Originals cannot. When in doubt, protect the original and call for a hand.

CHAPTER 37

Your Digitizing Cheat-Sheet

Tear this page out, or fold its corner. The whole book, boiled down to what you need at a glance.

Which tool for which job

You have…	Easiest tool	Best quality
Printed photos	Phone (PhotoScan app)	Flatbed scanner at 600 DPI
A huge pile of prints	Fast sheet-fed scanner	Or a mail-in service
Slides & negatives	Dedicated slide scanner	Flatbed with film adapter, high DPI
VHS tapes	Standalone converter	Capture device + computer
Camcorder tapes	The camcorder + capture device	A service if no player
Film reels	A service (recommended)	A service
Cassettes	Cassette-to-USB player	Cassette-to-USB player
Records	USB turntable	USB turntable

Quality settings & file types

For…	Use
Printed photos	600 DPI · save as JPEG
Damaged photo for repair	1200 DPI · save as JPEG (or TIFF)
Slides & negatives	2400-4800 DPI · save as JPEG
Home movies / video	Save as MP4
Audio, music, voices	Save as MP3 (WAV for the very best)

Never forget

Rule	Why
Start with the most precious	If you finish only one box, make it that one
Never risk the only original	A copy can be redone; an original cannot
Handle by the edges, clean hands	Oils and scratches are forever
Back up in 3 places (3-2-1)	One copy is one mishap from gone
Cloud + a drive + your device	Three copies, two kinds, one away from home
Save a loved one's voicemail now	Phones delete them on their own

CHAPTER 38

A Plain-English Glossary

This subject has a vocabulary all its own, and the words can make simple things sound harder than they are. Here's a plain-English dictionary of the terms you'll meet. Keep it handy for the first few projects; soon you won't need it.

Word	What it means
Digitize	To make a digital copy — a computer file — of something physical like a photo or tape.
File	A single item of digital information: one photo, one video, one song.
DPI (dots per inch)	How much detail a scan captures. Higher means sharper and bigger. 600 for prints; thousands for film.
JPEG (.jpg)	The common, universal file type for photos.
MP4	The common, universal file type for video / home movies.
MP3	The common, universal file type for audio — music and voices.
TIFF / WAV	Higher-quality file types that keep more detail but make much larger files.
Flatbed scanner	A flat box with a glass top; you lay a photo on it to scan.
Slide / film scanner	A device that shines light through a slide or negative to capture it.
Capture device	A small box that carries video from a VCR or camcorder into a computer.
VCR	The machine that plays VHS tapes.
Camcorder	A handheld video camera; also the player for its own small tapes.
MiniDV	A small camcorder tape that was already digital — a cleaner transfer.
Negative	The strip of film your paper photos were printed from; colors look reversed.
The cloud	Safe storage of your files on trusted computers on the internet.
External hard drive	A small box you plug in to hold a copy of your files.
Backup	A separate, extra copy kept so nothing is lost if one copy fails.
3-2-1 rule	Three copies, on two kinds of storage, with one kept away from home.
Sync	Keeping two places matching automatically — handy, but not a true backup.
Album	A collection of photos gathered for viewing, without moving the files.

CHAPTER 39

When Something Won't Work: Simple Fixes

Now and then a step won't behave — a blank screen, a scan that looks wrong, a file you can't find. Before you worry, try these simple fixes, which sort out the great majority of everyday hiccups.

The usual suspects

If this happens…	Try this
Scan looks dusty or spotty	Clean the scanner glass (or the slide) with a soft, dry cloth or a puff of air, and scan again.
Capture screen is black	Check the colored cables are in the right sockets and the right input is chosen in the software.
Photo scanned crooked or dark	Re-align it on the glass; adjust brightness afterward in your Photos app — no need to re-handle later.
Negative colors look wrong	Make sure the scanner is set to "negative" (not "slide" or "print"), so it flips the colors correctly.
Can't find a saved file	Look in your Photos app, Downloads, or Documents folder; use your computer's search box and type part of the name.
Tape squeals or jams	Stop at once — don't force it. A sticky or brittle tape is a job for a professional.

TIP

The oldest fix in the book still works

If a program freezes or a device won't respond, close it fully and reopen it — or restart the whole computer. It sounds too simple, but "turn it off and on again" genuinely fixes most everyday glitches, and it never harms your files. It's the first thing I try on a call, and nine times in ten it's all that's needed.

FROM BILL

When the simple fixes don't do it, that's what I'm for

If you've tried the easy steps and something still won't work — or a precious item is involved and you don't want to risk experimenting — don't spend your afternoon wrestling with it. That's exactly the moment to call me at (330) 200-8042. A fresh pair of eyes often sorts it out in minutes, and your memories stay safe while we do.

CHAPTER 40

When to Call Bill

I built this book so you could do most of this yourself, at your own pace, with confidence. And you can. But part of doing a thing well is knowing when a task — especially one involving something irreplaceable — is worth handing to someone who does it every day, so you can spend your time enjoying the memories instead of worrying over them. Here's my honest take on when to pick up the phone.

Good reasons to call

- You have something **especially precious or fragile** — a loved one's only voicemail, a brittle tape, a one-of-a-kind photo — and you'd simply feel better having a careful hand.
- You'd like me to **set up the equipment** at your kitchen table and get you going, so your originals never leave home.
- You want help **choosing a reputable service** and packing your memories safely before they travel.
- You want your **backup done right the first time** — the cloud account, an external drive, the 3-2-1 plan — so you can stop worrying your memories could be lost.
- The pile feels **overwhelming** and you'd like a patient person to help you make a plan and get started.

What working with me is like

I'm Bill, and I run **Bill's Home Tech** right here in Portage County, Ohio. I've spent **30+ years** helping people feel at home with their technology, and I treat every call the way I'd want my own parents treated: patiently, in plain English, with no rushing, no jargon, and never, ever any eye-rolling. With your family's memories, I'm doubly careful — I know exactly what they're worth, and that there's no second copy. There is no such thing as a silly question with me.

How to reach me	
Call or text	(330) 200-8042
Book online	billshometech.com/book
Where I serve	Portage County, Ohio and nearby
What I can help with	Scanning with you at home, choosing & using gear, picking a service, and backing it all up safely

How to reach me	
What it costs	Fair, honest, and told to you up front — no surprises

FROM BILL

You're never a bother — that's the whole job

Some folks hesitate to call because they don't want to be a nuisance. Please don't feel that way. Helping you is not an interruption to my work — it *is* my work, and it's work I love. Whether it's saving a single cherished voicemail or digitizing a whole lifetime of boxes, I'm glad to help, and I'll treat every memory like my own family's. That's what I'm here for.

GOOD TO KNOW

If you reach my website, you may meet Sophie

When you visit billshometech.com, you might be greeted by **Sophie**, my friendly assistant on the site. She can answer quick questions and help you book a time with me. She's there to make reaching me easier — but a real person (me) always does the actual help, and always handles your memories.

Thank you for letting me be your guide through this. What you're doing — rescuing your family's photos, voices, and home movies before time takes them — is one of the most loving projects there is. Take it slow, protect those originals, back everything up, and enjoy seeing your people again. You're giving a gift to everyone who comes after you, and I'm proud of you for doing it.

— Bill