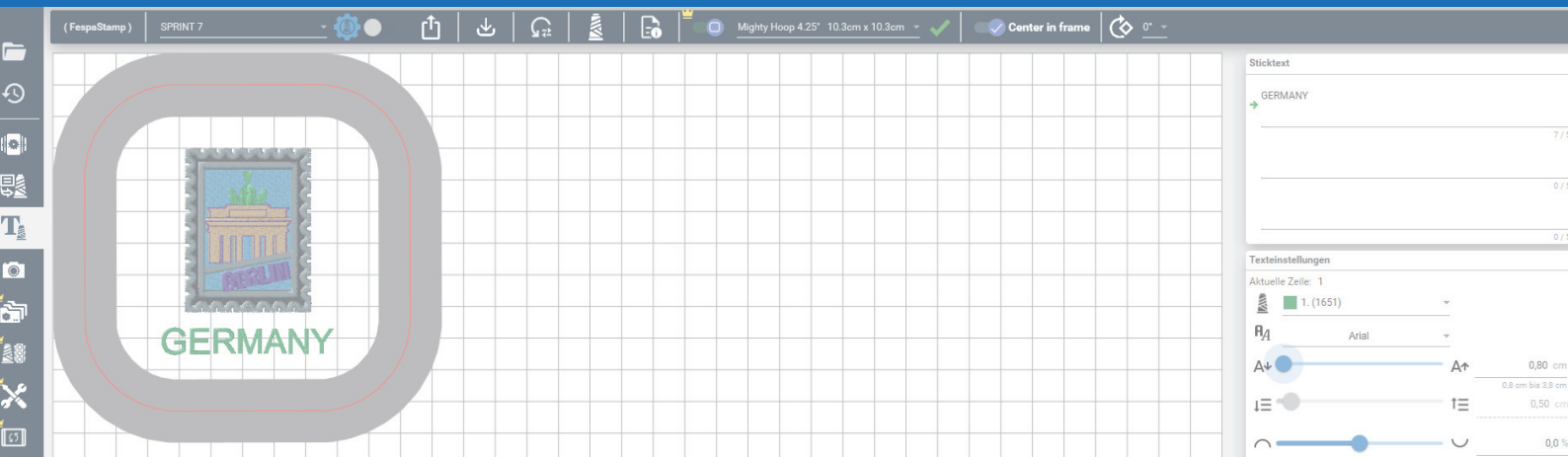




ZSK TERMINAL User Guide

From Getting Started to Expert Workflows



Welcome to ZSK Terminal

Congratulations on choosing ZSK – one of the most trusted names in industrial embroidery. The ZSK Terminal is your central hub for everything from loading a design to managing a full production floor. Whether you're stitching your very first sample or running a multi-machine operation, this guide is here to help you make the most of your software.

We've organized this guide by how deeply you want to dive in:

- **Chapter 1 – Getting Started:** Perfect if you're new. Connect your machine, load a design, and press Start.
- **Chapter 2 – Everyday Production:** For daily use – manage designs, match colors, adjust parameters.
- **Chapter 3 – Advanced Workflow:** Unlock automation, scheduling, and multi-machine coordination.
- **Chapter 4 – Expert & Customization:** Configuration files, cost formulas, and integration possibilities.

Feel free to jump straight to the chapter that matches your experience. Each chapter builds on the one before, but they're designed to work on their own too.

Tip

Look for colored boxes like this one throughout the guide. They contain practical tips and warnings that will save you time and prevent common mistakes.

Supported Languages

ZSK Terminal supports seven languages out of the box: English (default), German, Spanish, French, Italian, Portuguese, and Romanian. You can change the language in the Settings dialog at any time.

Chapter 1 – Getting Started

What you'll learn in this chapter

- How to launch ZSK Terminal and navigate the main interface
- How to add and connect your embroidery machine
- How to open your first embroidery design
- How to send a design to the machine and start stitching

1.1 Launching ZSK Terminal

When you open ZSK Terminal, you'll see the main window with a navigation bar on the left side. This bar is your menu – it gives you access to every module in the application. The most important modules for getting started are the Converter (for opening designs) and the Machine Configuration.

Good to Know

ZSK Terminal uses a modular architecture. Each feature area (designs, machines, production) is a separate module you can navigate to from the left sidebar. You'll see module icons light up based on your license.

1.2 Adding Your First Machine

Before you can stitch anything, ZSK Terminal needs to know about your machine. The software supports two machine types:

- **Manual Machines:** Machines manually set up
- **PoolBox Machines:** Machines automatically setup with poolbox thread management.

Step-by-Step: Add a Machine

1. Open the Machine Configuration dialog from the Settings menu.
2. Click "Add New Machine" to create a new machine entry.
3. Enter a recognizable name in the Manual Name field (e.g., "Production Floor – Machine A").
4. Set the number of needles your machine supports.
5. Specify the machine model from the dropdown list.
6. Set the output directory where the Terminal will write embroidery files for the machine.
7. Click "Ok". Your machine now appears in the machine list.

Tip

Give your machines descriptive names. When you're running multiple machines, "ZSK Sprint 7 – Bay 3" is much easier to find than "Machine_002".

Watch Out

Make sure the output directory is accessible by your machine's file system. If your machine reads from a network share or USB path, configure that path here. The Terminal writes embroidery files to this folder for the machine to pick up.

1.3 Opening a Design

The Converter module is where you open, preview, and prepare embroidery designs. ZSK Terminal supports a wide range of industry-standard embroidery file formats:

Format	Description
TC	ZSK's native format – recommended for best quality
PES	Brother/Babylock format
DST	Tajima format – widely used in production

Step-by-Step: Open a Design File

1. Use the menu or simply drag and drop your embroidery file into the Converter window.
2. The design preview appears, showing the stitch paths and color sequence.

Tip

The drag-and-drop feature works throughout the Terminal. You can drop files into the Converter, the Design Stock, or the Analyzer – wherever you see a file area.

1.4 Sending a Design to the Machine

Once your design is loaded in the Converter, you're ready to send it to your machine:

1. Make sure your target machine is selected in the machine dropdown.
2. Click "Send to Machine" to transfer the embroidery data.
3. The Terminal writes the file to your machine's output directory in the appropriate format.

Watch Out

Always verify the needle/thread assignment before stitching. If the colors on screen don't match your thread cones, check the Thread cone definition module (covered in Chapter 2).

1.5 Previewing Designs

The Preview module gives you a detailed look at your embroidery before committing to production:

- View the complete stitch path with all color layers overlaid.
- Export the preview as TC, PES, or DST format directly from the preview window.
- Use the zoom and pan controls to inspect small details of the design.

Before you move on – did you...?

- Launch ZSK Terminal and identify the main navigation sidebar
- Add at least one machine (Manual or PoolBox) with a descriptive name
- Open a sample embroidery file in the Converter module
- Preview the design and step through the color sequences
- Send the design to your machine successfully

Chapter 2 – Everyday Production

What you'll learn in this chapter

- How to organize designs in the Design Stock and Projects
- How to match thread colors using the Thread cone definition
- How to use the Analyzer to inspect designs before production
- How to estimate production costs with the Cost Estimator
- How to rotate and transform designs
- How to create text and monogram designs with EasyText
- How to handle common error scenarios

2.1 Design Stock – Your Design Library

The Design Stock module is your personal design library within ZSK Terminal. Think of it as a display catalogue.

Managing Your Design Stock

1. Navigate to the Design Stock module from the sidebar.
2. Drag and drop embroidery files into the window to import them into your stock.
3. Click “Open My Design Stock Folder” to see the files in your system’s file explorer.
4. Use the search and filter bar to quickly find designs by name.

Tip

Keep your Design Stock organized from day one. Create subfolders for clients, projects, or seasons. It’s much easier to maintain structure than to reorganize later.

2.2 Projects – Detailed Design Management

While Design Stock gives you quick browsing, the Projects module provides rich metadata management for your designs:

- Assign tags, descriptions, and notes to each design.
- Switch between List and Tiles view for different workflows.
- Track creation and modification dates automatically.
- Filter your library by metadata to find exactly what you need.

The Projects is especially useful when you have hundreds or thousands of designs and need structured access.

2.3 Thread cone definition – Thread Color Matching

The Thread cone definition is one of the most important tools for production quality. It lets you map the colors in your embroidery design to the actual thread cones loaded on your machine.

How Cone Matching Works

1. Open a design in the Converter, then launch the Thread cone definition.
2. You'll see three panels: the original design colors (top), your new assignments (center), and the machine's available cones (bottom).
3. Select a thread manufacturer from the dropdown (e.g., Gunold, Madeira, or your custom threads).
4. For each color in the design, choose the best matching cone from the manufacturer's palette.
5. Use the search field to filter colors by name or number.

ZSK Terminal offers several automatic matching methods to speed up the process:

Matching Method	How It Works
Cross-Table Matching	Uses predefined tables to map between thread manufacturers
LAB-Based (from Manufacturer)	Calculates the closest color match using LAB color space from the selected manufacturer
LAB-Based (from Machine)	Matches against the specific cones loaded on your machine
Reset to Original	Reverts all changes back to the design's original color definitions

Good to Know

LAB-based matching uses perceptual color distance, which means it finds colors that look similar to the human eye – not just numerically close. This typically gives better results than simple RGB matching.

Watch Out

Advanced Cone Matching (cross-table, LAB-based) requires the appropriate license. If the matching buttons are grayed out, contact your ZSK dealer about the Advanced Cone Matching license.

You can also lock specific cone assignments to prevent them from being changed during automatic matching. This is useful when a customer requires a specific thread brand and color number.

2.4 Analyzer – Design Intelligence

The Analyzer module lets you inspect embroidery files in depth before committing to production. It's your quality-control checkpoint.

What the Analyzer Shows You

- **Stitch Count:** Total stitches, jump stitches, and stitches per color sequence.
- **Dimensions:** Width, height, and total area of the design in millimeters.
- **Cone Usage:** Which thread colors are used and how much of each.
- **Run Time Estimate:** How long the design will take based on your machine's RPM setting.
- **Cost Estimate:** Approximate production cost per piece.

Analyzing Files

1. Navigate to the Analyzer module from the sidebar.
2. Drag and drop a file, choose a file, or choose an entire folder for batch analysis.
3. Wait for processing – a progress indicator shows the analysis status.
4. Review the results in the data table. Click any row for details.
5. Use the time span filter to focus on recent files or older ones.

The Analyzer supports several filter options:

Filter	Description
All	Show all analyzed files without filtering
Last X Days	Only files analyzed in the last X days
Older than X Days	Files analyzed more than X days ago
Last X Months	Recent monthly filter
Older than X Months	Historical monthly filter

Reports and Export

You can generate professional reports from your analysis data:

- Print a full analysis report directly to any connected printer.
- Export the report as a file for sharing with colleagues or clients.
- Export a dedicated color report showing thread usage details.
- Select your preferred printer in the Analyzer Settings and save it as default.

2.5 Cost Estimator – Know Your Numbers

The Cost Estimator calculates production costs based on your specific setup. It considers the following factors:

Parameter	What You Set
Textile Template	The type of garment (t-shirt, cap, jacket, etc.) with base pricing
Machine	Which machine you'll use, including its RPM (600–2500) and hourly cost
Thread	Thread type and price per meter
Thread Usage	Consumption rate (how much thread per stitch)
Quantity	Number of garments to produce
Embroidery File Price	Per-design digitizing cost
Extra Materials	Additional costs per job or per garment (backing, stabilizer, etc.)

The estimator calculates total cost including material, machine time, thread consumption, and fixed costs. You can configure your currency symbol (EUR, USD, etc.) in the settings. Export the cost breakdown as a report to share with clients for quoting.

Tip

Set up your machine's RPM and hourly rate accurately in the Analyzer Settings. This makes all time and cost estimates much more reliable. A machine running at 1000 RPM costs very differently from one at 800 RPM.

2.6 Design Transformation

ZSK Terminal includes tools to transform designs before sending them to the machine:

- **Rotation:** Rotate the design in 90-degree increments. Useful when the garment orientation differs from the digitized direction.
- **Frame Fitting:** The Terminal validates whether your design fits within the selected embroidery frame and warns you if it exceeds the stitchable area.

2.7 EasyText – Text & Monogram Creation

EasyText lets you create text-based embroidery designs directly in the Terminal – without needing external digitizing software.

EasyText Capabilities

- Create up to 3 text lines simultaneously in a single design.
- Each text line supports up to 50 characters.
- Maximum embroidery area: 2268 × 2268 mm (approximately 89 × 89 inches).
- Choose from installed embroidery fonts with the Font Chooser.
- Adjust text size, position, line spacing, and alignment.
- Assign needle/color definitions for each text element.
- Save or send the text design directly to a machine.

Tip

EasyText is perfect for personalization workflows. If you're adding names to uniforms or monograms to towels, you can create and send designs in seconds without leaving the Terminal.

2.8 Common Errors and What to Do

Situation	What to Do
Design exceeds frame size	Use a larger frame, or reduce the design dimensions before sending.
Colors don't match thread cones	Open the Thread cone definition and reassign colors before sending.

Before you move on – did you...?

- Import at least one design into your Design Stock
- Open the Thread cone definition and match at least one color manually
- Try automatic cone matching (LAB-based or cross-table)
- Run the Analyzer on a design file and review the stitch count and cost estimate
- Use the Cost Estimator to calculate a production quote
- Rotate a design using the transformation tools
- Create a simple text design with EasyText

Chapter 3 – Advanced Workflow

What you'll learn in this chapter

- How to use Machine Matching for automated order-to-machine assignment
- How to manage a production schedule with the Production Planner
- How to handle batch processing and multi-file workflows
- How to schedule machine maintenance
- How to use the Monogram/Push mode for personalization runs
- How to create and print labels with ZPL printers

3.1 Machine Matching – Smart Order Routing

When you're running multiple machines, manually deciding which machine gets which order becomes a bottleneck. The Machine Matching module automates this process.

How Machine Matching Works

Machine Matching has three sub-views:

- **Queue:** Shows incoming design files waiting to be assigned to a machine.
- **Machine Config:** Displays each machine's capabilities, available cones, and current workload. Access quickly with Ctrl+P.
- **List:** Shows the complete assignment history and current queue status.

Tip

Machine Matching considers cone availability when making assignments. A machine that already has the right colors threaded will be preferred over one that needs a cone change. Keep your machine cone definitions up to date for the best results.

Good to Know

You can also manually send designs from the Converter to Machine Matching using the "Send to Machine Matching" button. This is useful for priority orders that need special handling.

3.2 Production Planner – Visual Scheduling

The Production Planner gives you a bird's-eye view of your entire production schedule. It's a timeline-based scheduling tool that shows which machine is doing what, and when.

Board Layout

- Each machine gets a horizontal lane on the timeline.
- Orders appear as colored blocks, scaled to their estimated run time.
- The current time is marked with a vertical indicator so you can see what's running now.

Working with the Production Planner

1. Navigate to the Production Planner module from the sidebar.
2. Import orders from files.
3. Assign orders to machines using the assignment feature.
4. Track progress in real time as machines complete orders.
5. View finished orders in the completed orders list.

Production Planner Database

The Production Planner maintains a local database that tracks:

- Orders and sub-orders (individual color sequences within an order).
- Machine-to-order assignments with status tracking.
- Efficiency metrics for each machine.
- Cone inventory per machine.
- Machine capacity and current utilization.

Export and Reporting

The Production Planner includes an export manager for generating reports on order progress, machine utilization, and production efficiency. Use these reports to identify bottlenecks and optimize your workflow.

Watch Out

The Production Planner database is stored locally. Make sure your backup routine includes the Terminal's data directory.

3.3 Batch Processing

Good to Know

Maintenance supports multiple lubrication types: Oil, Grease, and Gel. Each can have different intervals based on your machine manufacturer's recommendations.

Watch Out

Toast notifications require Windows 10 or later. On older systems, the notification toggle will be grayed out. Check the "Is Toast Possible" indicator in the Maintenance settings.

ZSK Terminal supports batch workflows in several modules:

- **Analyzer Batch:** Drop an entire folder of embroidery files into the Analyzer to process them all at once. Great for auditing a client's file collection.

Tip

For large batch jobs, use the folder analysis feature in the Analyzer first to check for potential issues (oversized designs, excessive jump stitches) before sending files to production.

3.4 Maintenance Scheduling

The Maintenance module helps you keep your machines in top condition with scheduled maintenance tracking.

Maintenance Features

- **Weekly Dashboard:** See all upcoming maintenance tasks for the current week at a glance.
- **Full Dashboard:** Overview of all machines and their maintenance status.
- **Logs:** Complete history of all maintenance performed, with signee tracking.
- **Log Configuration:** Define which maintenance types to track (lubrication, needle changes, belt adjustments, cleaning).
- **Appointments:** Schedule specific maintenance events with due dates.
- **Shift Management:** Define your working shifts so the system calculates maintenance windows correctly.

Setting Up Maintenance

1. Open the Maintenance module from the sidebar.
2. Add signees (the technicians who perform maintenance) with their names and password.
3. Configure maintenance event types and their default intervals (e.g., "Oil lubrication every 200 hours").
4. Set your working hours (Monday–Friday, 8 AM–4 PM, etc.).
5. The system calculates when each maintenance task is due and sends Windows toast notifications as reminders.

3.5 Monogram / Push Mode

Monogram Mode (also called Push Mode) is designed for high-volume workflows on PoolBox machines. Instead of loading one design at a time, the machine processes garments in sequence.

1. The machine processes each garment.
2. Use the Reset function to clear the configuration, Reload to refresh, or Cleanup to remove cached data.

3.6 Label Printing

ZSK Terminal integrates with label printers, including Zebra ZPL-compatible printers, for printing production labels. The Create Label feature lets you design and print labels directly from the Terminal, which is useful for tagging finished garments with order information, care instructions, or tracking barcodes.

Before you move on – did you...?

- Assign at least one order through Machine Matching
- Open the Production Planner and explore the timeline view
- Run a batch analysis on a folder of embroidery files
- Add at least one maintenance signee and schedule a maintenance event
- Enable toast notifications for maintenance reminders (if supported)
- Understand how Monogram/Push Mode works for personalization

Chapter 4 – Expert & Customization

What you'll learn in this chapter

- How to customize the Analyzer's cost calculation formulas
- How to create custom cone matching tables
- How to manage custom cone data
- How to work with advanced export settings
- How to use keyboard shortcuts efficiently

4.1 Advanced Cost Configuration

The Analyzer Settings module gives you full control over how costs are calculated. This is where you move from “good-enough estimates” to precise production costing.

Configurable Cost Parameters

Setting Category	What You Can Configure
Corporation	Company name and details for reports
Materials	Backing, stabilizer, and other material costs
Threads	Thread name, price per meter, and color code per thread type
Thread Usages	Thread consumption rates for different stitch types
Machines	Machine name, RPM (600–2500), and cost per hour
Areas	Embroidery area definitions for different garment zones
Textile Templates	Garment types with base pricing, sizes, and overhead
Stitch Angle	Default stitch angle for analysis (default: 90°)
Linear Interpolation	Enable/disable interpolation for smoother stitch analysis

Tip

Create multiple textile templates for your most common garment types. When quoting a new order, you can simply select the right template instead of entering values from scratch.

4.2 Custom Cone Matching Tables

If you regularly work with specific thread manufacturers or have established internal color-matching standards, you can create custom cross-table matching definitions.

1. Open the Custom Cross Table Manager from Settings menu.
2. Define mappings between thread brands (e.g., “Gunold 1005 equals Madeira 1120”).

3. Save your custom table. It will appear alongside the built-in tables when using cross-table matching.
4. Use custom tables for consistent color matching across your entire production.

Custom Cone Data

The Custom Cone Data Manager lets you define entirely new thread entries that aren't in the built-in color libraries. This is useful for specialty threads, custom-dyed colors, or thread brands not yet in the ZSK database. You can define RGB and thread weight.

4.3 Advanced Export Options

The Advanced Export Service provides control over how designs are exported. Beyond basic format selection (TC, PES, DST), it handles optimization parameters and format-specific options.

Good to Know

To be confirmed: the exact list of advanced export options may vary based on your license level and software version. Check the Export dialog for the full list of available options.

4.4 Keyboard Shortcuts

ZSK Terminal supports keyboard shortcuts for faster navigation. Each module can register its own shortcuts through the KeyBindingsStore:

Shortcut	Action
Ctrl+O	Open a design file
Ctrl+S	Save the current design
Ctrl+P	Open Machine Configuration (in Machine Matching)
Ctrl+Q	Quit the application

Good to Know

To be confirmed: additional module-specific shortcuts may be available.

4.5 File System Monitoring

ZSK Terminal uses a file system watcher to detect changes in configured directories. This powers features like live updates in the Design Stock when you add files externally.

4.6 PhotoStitch – Photo to Embroidery

The PhotoStitch module converts photographs into embroidery designs. This advanced feature provides control over the conversion process:

Parameter	Range
Brightness	-50 to +50
Contrast	-100 to +100
Gamma	0.1 to 2.0
Max Width	1 to 1000 mm
AutoMagic	Toggle for automatic optimization

Adjust these parameters to control how your photo translates into stitches. The preview updates in real time so you can find the right balance before committing. Export the result as a standard embroidery file for production.

Tip

Start with AutoMagic enabled. It automatically adjusts brightness and contrast for a good baseline. Then fine-tune manually if needed. Photos with high contrast and clear subjects convert best.

Before you move on – did you...?

- Review and customize the Analyzer's cost parameters for your business
- Create at least one custom textile template for your most common garment
- Try the main keyboard shortcuts (Ctrl+O, Ctrl+S, Ctrl+P)
- Experiment with PhotoStitch using a sample photo

Chapter 5 – Troubleshooting & FAQ

What you'll learn in this chapter

- Solutions to common problems you might encounter
- Answers to frequently asked questions
- Where to get additional support

5.1 Troubleshooting Guide

Design File Issues

Problem	Solution
File won't open in the Converter	1. Check the file extension – it must be a supported embroidery format. 2. The file may be corrupted. Try opening it in another embroidery viewer. 3. Try converting the file to TC format first.
Design looks different than expected	The original file format may have limited color information (e.g., DST files don't embed thread colors).

Production Planner Issues

Problem	Solution
Orders don't appear on the board	1. Make sure orders are imported, not just analyzed. 2. Check that machines are assigned in the board. 3. Verify the database path is accessible.
Timeline seems misaligned	Ensure your system clock is accurate, as the "current time" indicator depends on it.

Maintenance Module Issues

Problem	Solution
No toast notifications appearing	1. Check that "Is Toast Active" is enabled in Maintenance settings. 2. Verify your system supports notifications (Windows 10+). 3. Check Windows notification settings for ZSK Terminal.
Maintenance log entries missing	Verify the maintenance data path in settings. Maintenance data is stored locally, so changing the path without migrating data will hide previous entries.

5.2 Frequently Asked Questions

General

Q: Which embroidery file formats does ZSK Terminal support?

A: ZSK Terminal supports TC (native ZSK format), PES, and DST. TC format is recommended for the best quality and full feature support.

Q: Can I use ZSK Terminal with non-ZSK embroidery machines?

A: ZSK Terminal is designed specifically for ZSK machines. While it can convert and export standard embroidery formats that other machines can read, the machine communication features (direct sending) are ZSK-specific.

Q: How do I change the application language?

A: Go to Settings and select your preferred language. ZSK Terminal supports English, German, Spanish, French, Italian, Portuguese, and Romanian. The application may need a restart for all translations to take effect.

Design & Production

Q: What is the maximum design size I can work with?

A: The EasyText module supports designs up to 2268 × 2268 mm. For imported designs, the maximum size depends on your machine's frame capacity. The Terminal will warn you if a design exceeds the selected frame.

Q: How accurate is the cost estimate?

A: Make sure your machine RPM, thread prices, and material costs are up to date in the Analyzer Settings. The system calculates run time based on stitch count and RPM, then applies your cost-per-hour rate.

Q: What is the difference between Design Stock and Projects?

A: Design Stock provides quick browsing with Table and Carousel views – great for finding and opening files. The Projects adds rich metadata (tags, descriptions, notes) for more organized long-term design management.

Thread & Color

Q: What thread manufacturers are supported in the Thread cone definition?

A: ZSK Terminal includes color libraries from major manufacturers such as Gunold and Madeira, among others. You can also create custom thread entries using the Custom Cone Data Manager for any thread brand.

Q: What is LAB-based color matching?

A: LAB (also known as CIELAB) is a color space that models human color perception. Unlike RGB, LAB-based matching finds colors that look similar to the human eye, even if their numerical values differ. This produces more natural-looking thread substitutions.

Advanced Features

Q: What is Monogram/Push Mode?

A: Monogram Mode is a workflow for PoolBox machines that automates high-volume personalization. The machine processes garments sequentially.

Q: Can I integrate ZSK Terminal with other software systems?

A: ZSK Terminal can exchange data through files (embroidery formats, reports) and monitors configured folders for new designs. The Production Planner has import/export capabilities for order data. For deeper integration needs, contact ZSK support.

Q: How do I back up my ZSK Terminal data?

A: Include these items in your backup routine: the Design Stock folder, Projects folder, Production Planner database, Maintenance data path, Analyzer Settings (including cost templates), and Machine configurations. All paths can be found in the respective module settings.

5.3 Getting Support

If you can't find the answer in this guide, here are your next steps:

- **ZSK Dealer:** Your first point of contact for hardware and software support, licensing, and upgrades.
- **ZSK Stickmaschinen Website:** Visit zsk.de for product information and contact details.
- **Software Updates:** ZSK Terminal includes an update service.

Tip

When contacting support, have this information ready: your ZSK Terminal version, your machine model and serial number, a description of the issue with any error messages, and the embroidery file you were working with (if applicable).

Appendix

A. Supported Embroidery File Formats

Format	Description
TC	ZSK native format – full feature support, recommended
PES	Brother/Babylock – widely used in home and semi-pro
DST	Tajima – industry standard, no embedded color info

B. Machine Types Reference

Type	Description
Manual	Single or multi-head machines. Configured with manual name, needle count, model, and output directory.
PoolBox	Machines with poolbox thread management. Supports monogram mode and shelf cone loading.

C. Maintenance Event Types

The Maintenance module tracks several event types based on your machine manufacturer's recommendations:

- **Lubrication:** Oil, Grease, and Gel types with configurable intervals.
- **Needle Maintenance:** Needle inspection, replacement, and timing adjustments.
- **Belt Adjustment:** Drive belt tension checks and replacements.
- **Cleaning:** Lint removal, thread path cleaning, and general machine cleaning.

D. Glossary

Term	Definition
Cone	A spool of thread loaded onto the machine
Converter	The ZSK Terminal module for opening and converting embroidery files
Design Stock	The file library module within ZSK Terminal
PoolBox	A carousel-based thread management system for multi-head machines
Projects	The metadata-rich design management module
TC Format	ZSK's native embroidery file format



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