Epson CaptureOne

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Computer requirements
CPU Pentium 4 1.2 GHz or more
Memory 256MB or more above minimum OS system requirements
Windows version 2000 Professional SP4
XP Home Edition/ Professional SP2
Vista (32-bit, 64-bit) Home Basic/ Home Premium/ Ultimate/ Business

Scanning specifications
Single pass Scans both sides of check, reads MICR, endorses, performs franking in same pass.
Processing speed 30 dpm or 60 dpm, depending on model
Scanner type CIS (contact image scanner)
Resolution 200 x 200 dpi, 120 x 120 dpi, 100 x 100 dpi
Graduation Gray scale: 256 levels
Black and white: 2 values
Data formats Gray scale: TIFF, JPEG, BMP, RAW
Black and white: TIFF (CCITT Group 4), BMP
Scanning area 3.94" (W) x 9.25" (L) (maximum)
[100 x 235 mm (maximum)]
* = fixed
Scanning speed 19.69 "/s [500 mm/s]
Font recognition OCR A and OCR B

Paper specifications
Type Normal, single-ply only
Size (H x L) 2.68 - 4.72" x 4.72 - 9.25"
[68 - 120 mm x 120 - 235 mm]
Thickness 0.003 - 0.008" [0.075 - 0.2 mm]
Weight 16 - 32 lb [60 - 120 g/m²]
ASF capacity Holds up to 100 sheets
Main pocket capacity Holds up to 100 sheets
Sub pocket capacity Holds up to 50 sheets
Installation Must be horizontal (within a tilt of ± 5°)
**MICR specifications**
Magnetic character types  
E13B, CMC7

**Electronic endorsement**
Can paste recorded image data on the back image of a check.

**Reliability**
Franking cartridge life  
18,000 in Epson standard print pattern
Scanner life span  
1 million sheets
MTBF:  
180,000 hours
MCBF:  
2,470,000 cycles

**Electrical Characteristics**
Power supply  
Adapter C supplied with CaptureOne
Supply voltage  
24 V ± 10%
Current consumption  
Operation: 1.0 A, approximate
Standby: 0.2 A, approximate

**Safety**
EMI  
FCC/ICES-003 Class A
Safety standards  
UL60950-1/
CSA C22.2 No. 60950-1
( Tested using the Epson Adapter C.)

**Environmental Conditions**
Temperature  
Operating: 50 to 104°F [10 to 40°C]
Storage: –4 to 140°F [–20 to 60°C]
( ≤20 hours at –4 or 140°F)
Humidity (no condensation)  
Operating: 20 to 80% RH
Storage: 5 to 85% RH

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**DIP Switches**
Two fixed DIP switches are located on the main board inside the bottom cover of the CaptureOne.

<table>
<thead>
<tr>
<th>SW</th>
<th>Function</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Internal use. Do not change.</td>
<td>—</td>
<td>Fixed to OFF</td>
</tr>
<tr>
<td>2</td>
<td>Internal use. Do not change.</td>
<td>Fixed to ON</td>
<td>—</td>
</tr>
</tbody>
</table>

**Lights and Switches**

**LEDs**

- **POWER**
  On when CaptureOne power is on.
- **ERROR**
  Off when CaptureOne is online.
  On when scanner is offline (and when scanner cover or franker cover are open)
  Flashes during an error or while waiting for document removal. (See “Error LED Codes” below.)
- **DOCUMENT**
  On when the scanner is ready to process documents in the ASF or during document processing.
  Flashes when the scanner is waiting for document insertion.

**Switches**

- **POWER**
  Turns the CaptureOne on or off.
  A power switch cover is available to prevent accidental turn off. If installed and a failure occurs, unplug scanner immediately.

**Loading Checks**

1. Fully extend the pocket guide. Extend the ASF guide fully, if needed. See the illustration below.
**Ejecting Checks**

1. When the checks are ejected, remove them.

**Installing the Franking Cartridge**

1. Open the franker cover by pulling the lever forward.

2. Remove any used franking cartridge, if any has been installed, by holding the knob at the top of the cartridge, as shown below.

3. Carefully insert the new franking cartridge from the top, and push it firmly but gently until it clicks into place.

4. Close the franker cover until it clicks into place.

**Single Pass Check Flow**

The CaptureOne can perform 4 actions on a document in a single pass: scanning the image of both the face and back, reading magnetic characters, and franking.

1. Insert a document into the feeder section.
2. The scanner scans the images of the face and back.
3. The scanner reads the magnetic characters on the document.
4. The franking section prints a pattern.
5. The document is fed to the outlet.
Cleaning the Scanner Glass

Clean the scanner glass if it gets dirty from ink or paper dust, or at least once every 6 months or 100,000 passes.

1. Open the scanner cover as shown below.

2. Lightly wipe the glass areas shown in the picture below with a soft dry cloth.

**CAUTION:** To prevent spots or stains, do not use synthetic detergent, benzine, water, or other liquids to clean. Never apply any liquid directly to the scanner glass.

3. If the scanner glass is smeared with grease, oil, ink, etc., wipe the glass with a cloth lightly dipped in alcohol.

4. Close the scanner cover firmly until it clicks into place.

Cleaning the MICR Unit

Dirt or dust on the MICR unit can increase errors in reading magnetic characters. Clean the MICR unit every 6 months or 100,000 passes. Use the TM-S1000 Utility in the Utility & Documents CD or your application to clean the MICR unit. Use PRESAT Brand (KIC) “CHECK READER CLEANING CARD” or an equivalent commercial cleaning sheet.

**Note:** For cleaning steps, see the TM-S1000 Utility User’s Manual. Do not use sticky cleaning sheets. They may cause a jam or machine failure. Dispose of used cleaning sheets properly. Do not reuse.

Clearing a Paper Jam

Open the scanner cover or franker cover to remove the jammed paper. See the illustration below.

Transporting the Scanner

Follow the steps below to transport the scanner.

1. Turn off the scanner.
2. Confirm that the **POWER LED** is off.
3. Remove the power supply connector.
4. Store the pocket guide and the ASF guide inside the scanner.
5. Pack the scanner upright.

Self-test

The self-test checks the following printer functions:

- Model name
- Serial number
- Control firmware version
- DIP switch settings
- Presence of franking cartridge


Scanner Dimensions and Weight

6.93 x 13.98 x 6.30” (H x W x D) [176 x 355 x 160 mm]
8.82 lb [4 kg]
### Error and Information Codes

#### Status messages

<table>
<thead>
<tr>
<th>DOCUMENT LED (Green)</th>
<th>Cause and Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting for paper insertion</td>
<td>The scanner is waiting for a check to be inserted. Insert paper for scanning.</td>
</tr>
<tr>
<td>160 ms intervals</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ERROR LED (Orange)</th>
<th>Cause and Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting for paper removal</td>
<td>This occurs when paper is sensed by the paper length, middle, franking, or ejection sensor during initialization of the scanner. Remove paper from pocket.</td>
</tr>
<tr>
<td>160 ms intervals</td>
<td></td>
</tr>
</tbody>
</table>

#### Recoverable errors

<table>
<thead>
<tr>
<th>ERROR LED (Orange)</th>
<th>Cause and Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanism position error</td>
<td>This occurs when the ASF hopper, franking, or pocket switch board sensor detects an error during initialization of the scanner. The scanner can recover from this error if an instruction is sent from the driver or if the scanner is turned off, the error is cleared, and the scanner is turned back on.</td>
</tr>
<tr>
<td>Approx. 320 ms</td>
<td></td>
</tr>
</tbody>
</table>

| Paper jam error | One of 5 things has happened: 1. Paper has been detected during initialization. 2. The paper length, middle, franking, or ejection sensor detected a paper-feed error. 3. The ASF failed to feed paper. 4. The check was too short or too long. 5. The cover was open during check feeding. Remove the jammed paper, be sure the cover is closed, and send an instruction from the driver or turn the scanner off and back on again. |
| 320 ms intervals | |

| Document read error | For this error to occur, the user must select that this error stop reading under any of the following circumstances: 1. Double-feeding was detected. 2. Incorrect check paper insertion was detected. 3. The scanner detected external noise. After the cause of the error is fixed, the scanner can recover from the error if it receives an instruction from the driver, if the scanner is turned off and back on, or if the franker cover is opened and the check is removed. |
| 320 ms intervals | |

#### Unrecoverable errors

<table>
<thead>
<tr>
<th>ERROR LED (Orange)</th>
<th>Cause and Required Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU execution error</td>
<td>The CPU is trying to execute an order to an invalid address. Turn off power as soon as possible.</td>
</tr>
<tr>
<td>Approx. 320 ms</td>
<td></td>
</tr>
</tbody>
</table>

| Read/write or Memory overwrite error | A read/write check did not end normally or an error occurred during a memory overwrite. Turn off power as soon as possible. |
| Approx. 5120 ms | |

<table>
<thead>
<tr>
<th>ERROR LED (Orange)</th>
<th>Cause and Required Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>High voltage error</td>
<td>Power supply voltage is too high. Turn off power as soon as possible.</td>
</tr>
<tr>
<td>Low voltage error</td>
<td>Power supply voltage is too low. Turn off power as soon as possible.</td>
</tr>
<tr>
<td>Communication device error</td>
<td>An error has occurred with a communication device. Turn off power as soon as possible.</td>
</tr>
<tr>
<td>Drive circuit error</td>
<td>An image scanner error has occurred. Turn off power as soon as possible.</td>
</tr>
</tbody>
</table>

#### Sensors

The scanner has 7 paper sensors, 2 cover open sensors, and 5 other sensors.

- A ASF sensor
- B Paper length sensor
- C Middle sensor
- D Franking sensor
- E Eject sensor
- F Main pocket nearly full sensor
- G Sub pocket nearly full sensor
- H Scanner cover open sensor
- I Franker cover open sensor
- J Franking cartridge sensor
- K Franking cartridge position sensor
- L Pocket switch board sensor
- M Hopper position sensor
- N Paper thickness sensor
Related Documentation

Epson TM-S1000 Service Manual
Epson TM-S1000 Parts Price List
Epson TM-S1000 Specification
Epson TM-S1000 Technical Reference Guide
Epson Franking Cartridge EFC-01 Specification