

Brother

**SOTI Connect Printer Management
Setup Guide**

Version 1.0

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1. Introduction

This Software User's Guide is intended for IT administrators who want to manage Brother printers with SOTI Connect.

SOTI Connect is an Internet of Things Framework (IOTF), a flexible, extensible system for managing devices in an Internet of Things (IoT) network. Device administrators can use the system to remotely query device state, update the software on devices, configure, reboot, and perform other actions permitted by the device manufacturer.

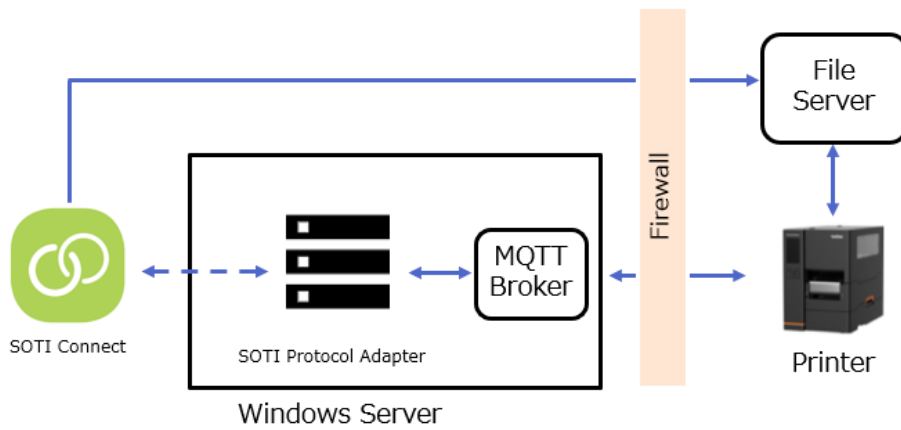
SOTI Connect does not require devices to support a specific management or communication protocol. If you need to use SOTI Connect to manage a new device with a different protocol, SOTI can create a Protocol Adapter and a Protocol Definition for the new device, so you can manage the device without upgrading the core system.

The system generates the Management User Interface (UI) from the device's XML description.

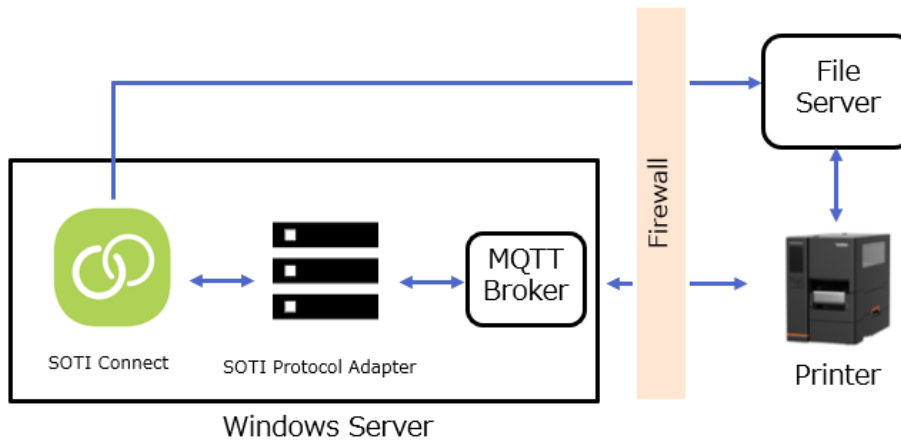
1.1 System Configuration

There are two types of SOTI Connect system configurations: Cloud-Based and On-Premise-Based

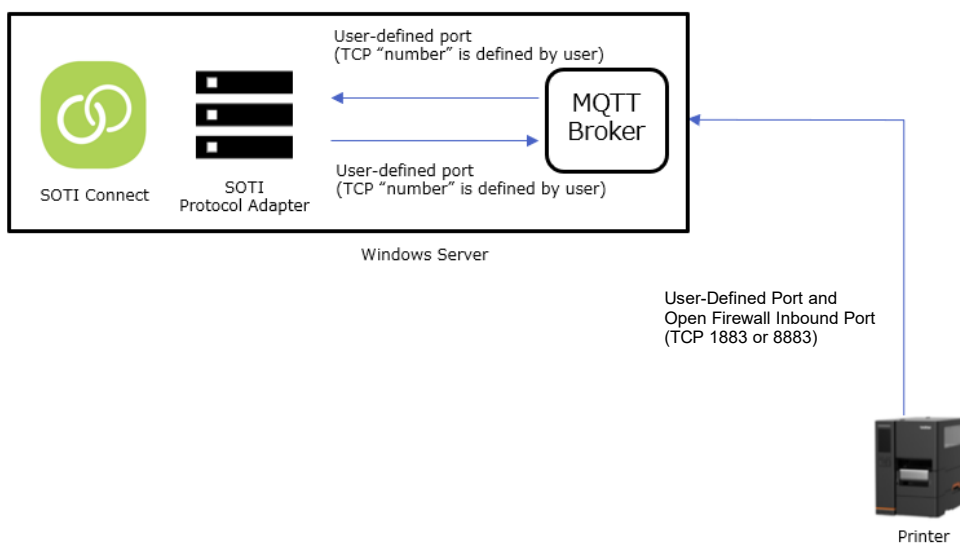
Cloud-Based



On-Premise-Based



1.2 Network Configuration



1.3 Definition of Terms

Term	Description
MDM (Mobile Device Management)	A management system for mobile devices, including smartphones or peripheral equipment.
SOTI Connect	An IoT solution that provides complete lifecycle management of IoT devices within an organization.
SOTI Protocol Adapter	Software provided by SOTI to connect SOTI Connect and the printer via MQTT broker.
MQTT (Message Queuing Telemetry Transport)	A lightweight, publish-subscribe network protocol that transports messages between devices.
MQTT Broker	Software running on a computer (running on-site or in the cloud; acts as a post office).
HiveMQ	An MQTT broker: a messaging platform for efficient, reliable data movement to and from connected IoT devices and enterprise systems.

1.4 Supported Printers

Model	Supported Firmware Version	Supported Interface
TJ-4420TN TJ-4520TN TJ-4620TN TJ-4422TN TJ-4522TN	B1.17.S22 or later	Wired LAN Wireless LAN

1.5 What Brother Provides

Item	Explanation
Software User's Guide	This document
Brother Printer Management Tool (BPM)	Printer setup tool for Windows for TJ-44/45/46 printers, as listed in section 1.4 Use version 1.0.0.40 or later

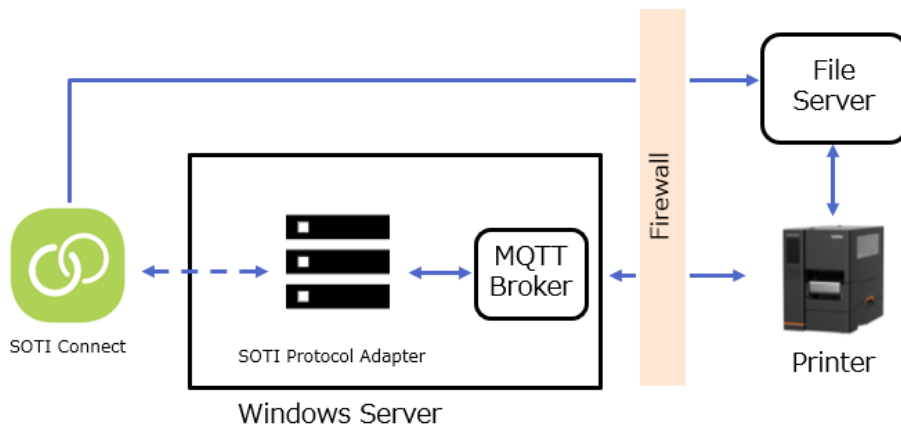
2. Install the SOTI Protocol Adapter and MQTT Broker

Install SOTI Protocol Adapter and an MQTT Broker, such as HiveMQ.

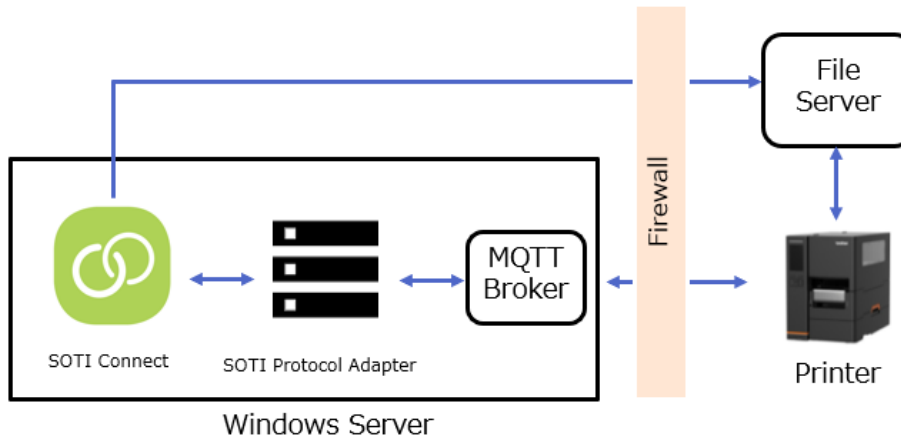
Record the following information for setting up the printer:

- IP Address of the Windows server where the MQTT broker is installed
- MQTT Tenant ID
- Certificate file (if needed)

Cloud-Based Installation



On-Premise-Based Installation



3. Set Up Your Brother Printer

3.1 Verify Printer Network Settings

Your printer must be connected to a network.

For more information on setting up your printer, see your model's *User's Guide* on the Brother support website at support.brother.com.

3.2 Connect with HiveMQ or other MQTT Broker (HiveMQ)

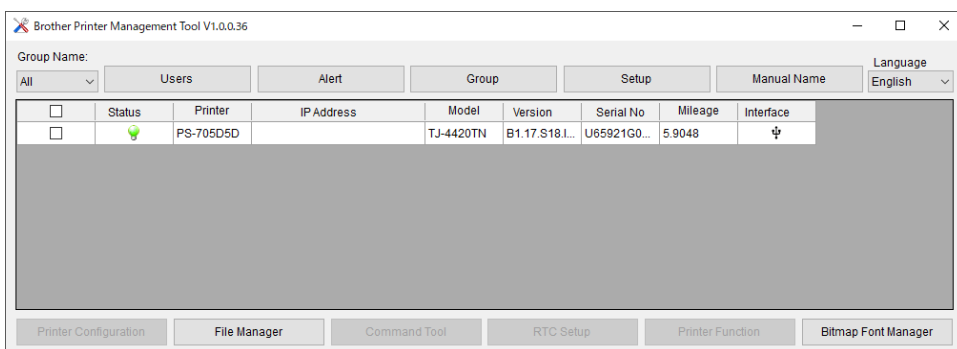
Do one of the following:

To set your printer up using the Brother Printer Management Tool (BPM), see [3.3 Set up using the BPM](#).

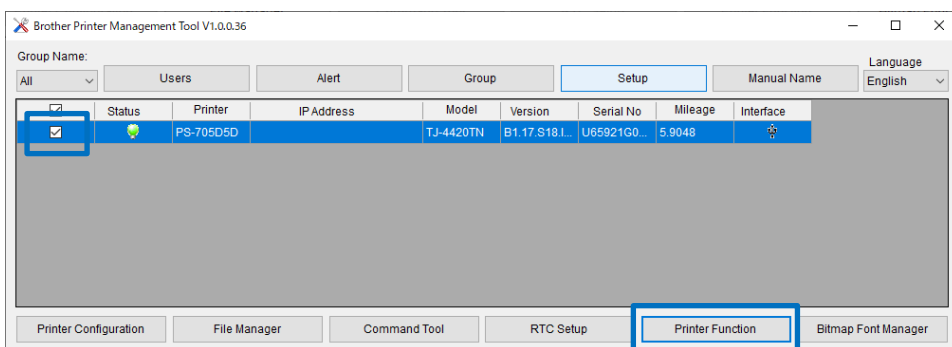
To set your printer up using the printer's Embedded Web Server (EWS), see [3.4 Set up using Embedded Web Server \(EWS\)](#).

3.3 Set up using the BPM

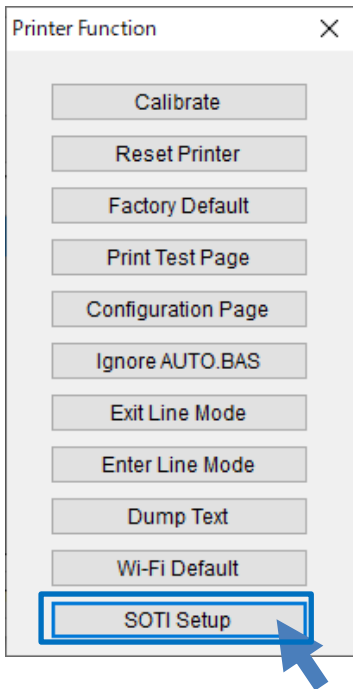
1. Open the BPM.



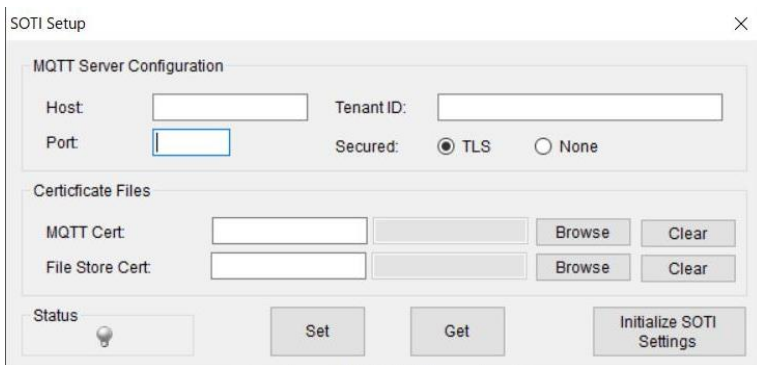
2. Select the printer or printers you want, and then click **Printer Function**.



3. Click **SOTI Setup**.



4. Fill in the SOTI Setup fields.



a. The **Host**, **Port**, and **Tenant ID** fields are required.

Select a **Secured** radio button based on your server's security settings.

If needed, click the **Browse** button to upload the certification file.

Setting	Value	Description
Host	-	IP Address of the Windows server where the MQTT broker is installed
Tenant ID	-	Identifier of the SOTI Protocol Adapter Leave blank if you have only one SOTI Protocol Adapter on your Windows Server.
Port	1883 or 8883	-
Secured	None or TLS	-
MQTT Cert	-	Use to enable highly secured communication between the Windows Server and the printer.
File Store Cert	-	Use to enable the highly secured communication between the file server and the printer. SOTI Connect will send the files (for example, firmware files) to the printer via the file server.

b. Click the **Set** button to save your settings. The printer restarts.

 **Note**

- When you register the printer on SOTI Connect, click the **Get** button.
If the printer is successfully connected to the SOTI, the status icon on SOTI Setup window will light in green.
- To clear the SOTI settings, click the **Initialize SOTI settings** button.

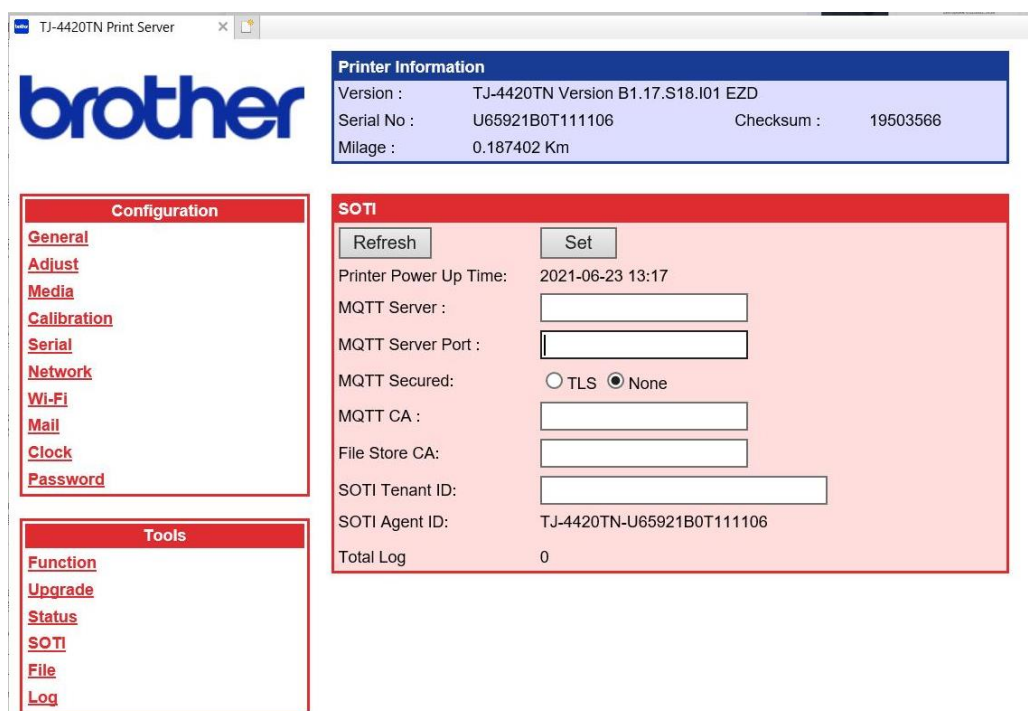
3.4 Set up Using Embedded Web Server (EWS)

Embedded Web Server (EWS) allows you to configure your printer using a web browser.

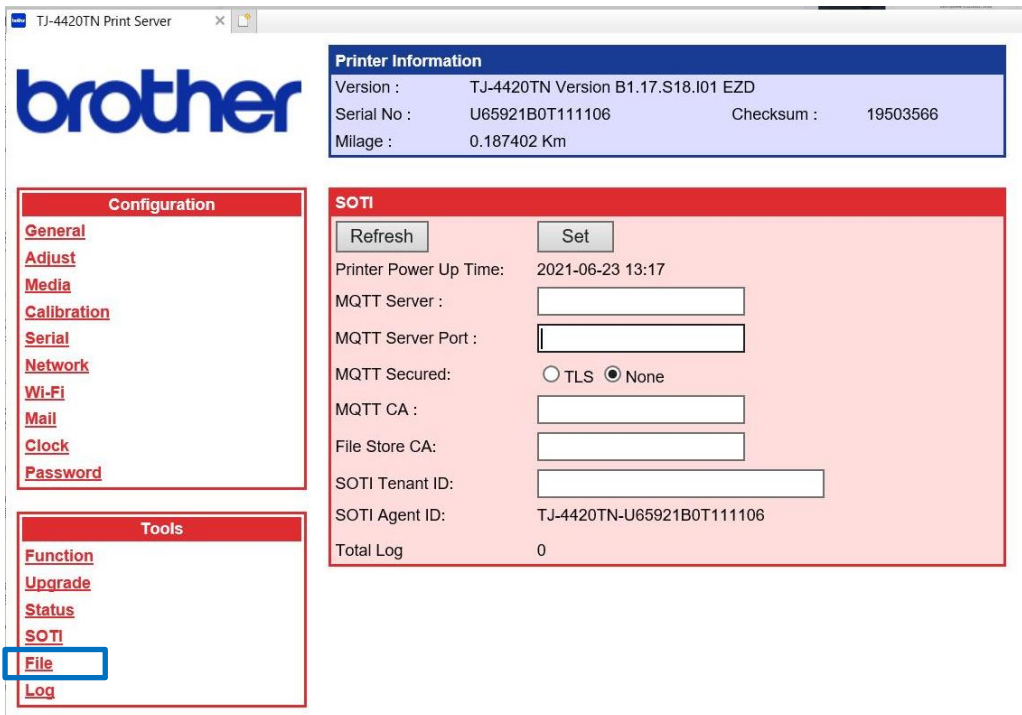
1. Type `http://printer_IP_address` in your web browser's address bar, where `printer_IP_address` is the printer's IP address or the print server name.

For example, if the printer's IP address is 192.168.1.2, type: `http://192.168.1.2`

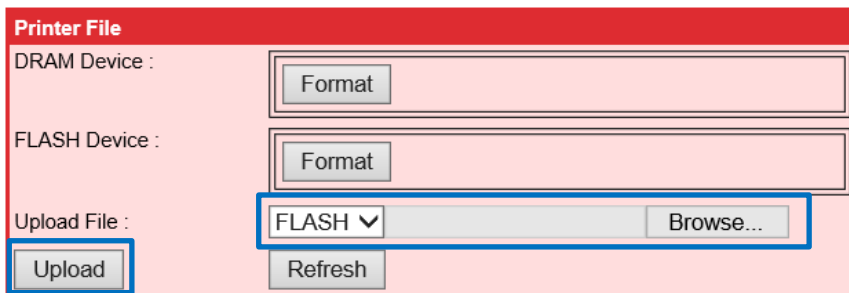
For more information on accessing EWS, go to support.brother.com.



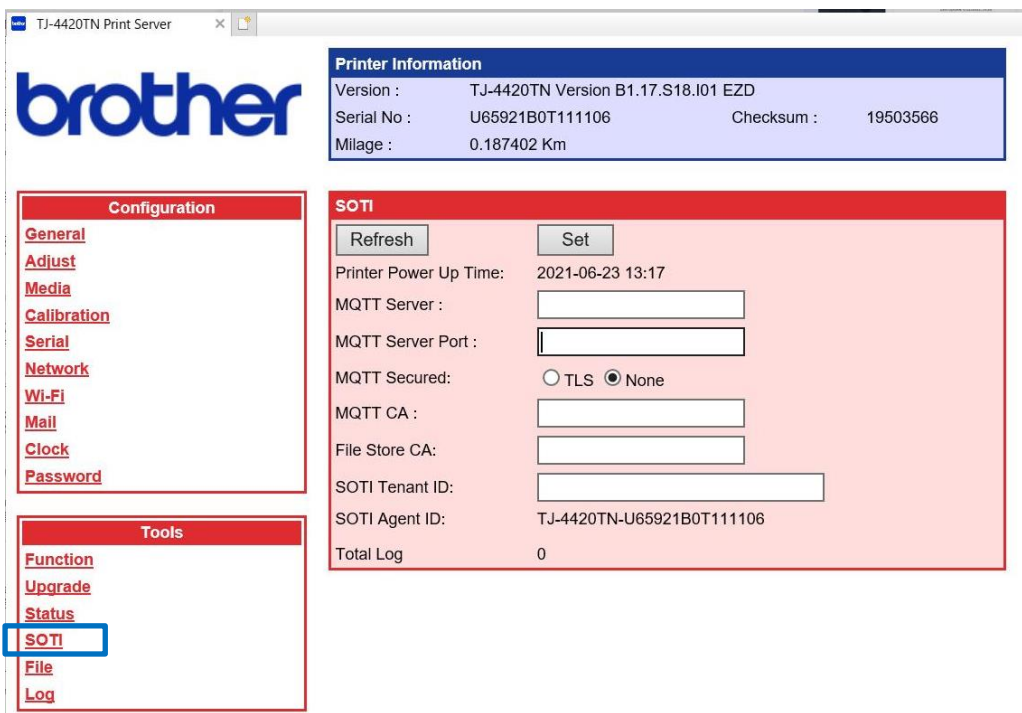
2. In the **Tools** menu, click **File** to upload the certificate file to the printer (if needed).



3. Click the **Upload File** drop-down list, and then select **FLASH**. Browse to the certificate file you want, and then click **Brows**.



4. In the **Tools** menu, click **SOTI** to configure the necessary settings.



5. Click the **Set** button to save your settings. The printer restarts.

 **Note**

When the printer is successfully connected to SOTI, 'SOTI connected' will appear in the **Total Log** field.

SOTI

Printer Power Up Time: 2021-06-23 13:17

MQTT Server :

MQTT Server Port :

MQTT Secured: TLS None

MQTT CA :

File Store CA:

SOTI Tenant ID:

SOTI Agent ID: TJ-4420TN-U65921B0T111106

4. Managing Brother Printers with SOTI Connect

4.1 Printer Settings

	Settings	Description
1	Device Details	Approval Date Description Id Last Update Device Type Protocol Adapter Member of Groups Protocol Instance
2	Device Information	Manufacturer Model Serial Number TPH Resolution DRAM Flash Memory Free DRAM Free Flash Memory Version Wi-Fi Version Bluetooth Version Host Name FQDN
3	Printer Statistics	Printer Mileage TPH Odometer TPH Serial Number TPH Cleaning Total Label Count Printer Cutter Counter Cutter Counter Cutter Serial Number Ribbon Remaining Last Power On Time

	Settings	Description
4	TPH Care	TPH Care Support TPH Care Enable Unhealthy Dot Quantity Unhealthy Dot Quantity Warning Threshold
5	System Control	Display Language System LCD Brightness "Paper Low" Warning Threshold "Ribbon Low" Warning Threshold System Menu Lock Enabled System Menu Password "My Favorite" Menu Lock Enabled System Date Format System Time Format System Date System Time
6	Serial Port Settings	Serial Port Baud Rate Serial Port Data Bits Serial Port Parity Serial Port Stop Bits
7	MQTT Information	MQTT Server Address MQTT Port MQTT Device Name MQTT Device ID
8	Network Settings	Wired LAN Print Data Port Automatically Obtain Wired LAN IP Address Wired LAN IPv4 Address Wired LAN Subnet Mask Wired LAN Gateway Primary DNS Server Wired LAN IP Address Wired LAN Secondary DNS Address Wired LAN MAC Address Wired LAN Ethernet Speed

	Settings	Description
9	Wi-Fi settings	Wi-Fi Print Data Port Automatically Obtain Wireless LAN IP Address Wireless LAN IPv4 Address Wireless LAN Subnet Mask Wireless LAN Gateway Primary DNS Server Wireless LAN IP Address Wi-Fi Second DNS Wireless LAN SSID Wireless LAN Security Mode Wireless LAN WEP Key Index Wireless LAN WEP Key Wireless LAN EAP Mode Wireless LAN CA Certificate Filename Wireless LAN Client Certificate Filename Wireless LAN Private Key Filename Wireless LAN EAP Username Wireless LAN MAC Address
9	Bluetooth Settings	Bluetooth Connection Name Bluetooth PIN Bluetooth Mode Bluetooth MAC Address
10	Installed Modules	Wi-Fi Bluetooth Cutter
11	Media Settings	Print Speed Darkness Paper Width Paper Height Print Direction Print Mode Offset Shift X Shift Y Reference X Reference Y Code Page Country Code

	Settings	Description
12	Sensor Settings	Media Sensor Type Gap Size Black Line Size Threshold Detection Maximum Sensor Detection Length Minimum Paper Length Maximum Paper Length
13	Device Flag History	FLAG

Supported actions

Action	Explanation
Print Test Page	Print a test page.
Factory Reset	Reset all printer settings to the factory settings.
Reboot	Reboot the printer.

4.2 Printer Status Display/Error Log

Error	Solution
Print Head Open	Close the print head mechanism, making sure it locks into place.
Paper Jam	Remove the paper jammed inside the print mechanism.
Paper Out	Install the paper roll.
Ribbon Jam	Remove the ribbon jammed inside the print mechanism.
Ribbon Out	Install the ribbon roll.
Cutter Error	Clean the cutter unit and make sure the cutter is installed correctly.
Power Error	Reduce the print speed or check the power supply.
TPH Broken	Make sure the Thermal Print Head (TPH) cable is connected to the TPH correctly.
TPH Overheat	Stop the operation to cool down the printer.
Motor Overheat	Stop the operation to cool down the printer.
Rewinder Jam	Make sure that no foreign material is stuck on the media rewinder.
Out of Memory	Delete unnecessary files in the printer's FLASH/DRAM.

Alert	Explanation
Cancel Print Queue	Print job has been cancelled.
Printer Pause	Print job has been paused.
Printer Resume	Print job has been resumed.
File Download Complete	File download has completed.
File Download Host Not Found	Cannot find the host to download.
File Download File Not Found	Cannot find the file to download.
File Download Abort	File download timeout or error.
Firmware Upgrade Completed	Firmware upgrade completed.
Firmware Upgrade Timeout	Firmware upgrade timeout.

4.3 Items that can be sent to the printer via the SOTI file store function

Setting	File extension	Comment
Firmware	EZD/EZS	
AUTOBAS	BAS	
FBPL printing file	TXT	
FBPL configuration file	TXT/PRN/SPL	

This manual describes setting up a Brother printer for use with SOTI. For instructions and troubleshooting specifically on SOTI, refer to the SOTI resources at <https://www.soti.net/products/soti-connect/>.

Help page:

<https://www.soti.net/soticonnect/v1.1/en/index.html>

For more information about setting up HiveMQ as MQTT, contact your local Brother dealer.