

# MONITOUCH

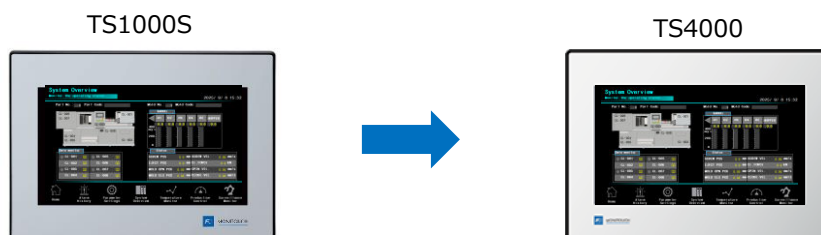
## Technical Information

November 2025

Theme	<b>Replacement of TS1000S with TS4000 Series</b>		
Models	TS4000 series	No. TI-M-0904a	1/8

### 1. Overview

This document describes the procedure and precautions when converting the screen program from the TS1000S to the TS4000 series.



### 2. Replacement Models

The recommended replacement models for the TS1000S are as follows.

TS1000S	Display size	Resolution		TS4000	Display size	Resolution
TS1100Si	10.2" wide	WVGA (800 x 480)	->	TS4100i	10.1" wide	WSVGA (1024 x 600)
TS1070Si	7.0" wide	WVGA (800 x 480)	->	TS4070i	7.0" wide	WVGA (800 x 480)
TS1070S	7.0" wide	WVGA (800 x 480)				

When replacing the TS1100Si with the TS4010i, panel cutout adjustment is required.

(Unit: mm)

TS1000S	Dimensions (WxHxD)	Panel cutout (WxH)		TS4000	Dimensions (WxHxD)	Panel cutout (WxH)
TS1100Si	266.8 x 206.8 x 38.0	257.0 x 199.0	->	TS4100i	263.8 x 191.8 x 38.0	254.0 x 184.0
TS1070S(i)	198.8 x 141.8 x 38.0	189.0 x 134.0	->	TS4070i	198.8 x 141.8 x 38.0	189.0 x 134.0

Red: reduced

### 3. Hardware Differences

#### 3.1 PLC communication port

The shapes of the PLC communication ports on the TS4000 are the same as those on the TS1000S.

Existing cables used with the TS1000S can be used with the TS4000.

#### 3.2 Memory capacity

The TS4000 has larger FROM and SRAM capacities than the TS1000S.

However, SRAM capacity may be insufficient because there is a difference in capacity calculations between the TS1000S and TS4000. If the used capacity exceeds the limit, a warning dialog will appear during conversion.

For details, refer to "Screen program conversion procedure 8" on P. 5.

	TS1000S	->	TS4000
FROM	26MB		128MB
SRAM	128KB		230KB

#### 3.3 Storage

The TS4000 supports USB flash drive only, the same as the TS1000S.

	TS1000S	->	TS4000
Storage	USB flash drive: maximum 32GB		USB flash drive: maximum 2TB (Built-in storage (recipe only): 128MB)

#### 3.4 Waterproof gasket

The models of the optional waterproof gaskets are different for each.

	TS1000S	->	TS4000
Waterproof gasket	TS1100S-WP		TS4100-WP
	TS1070S-WP		TS4070-WP

#### 3.5 Replacement battery

Replacement battery is available for the TS4000.

The commercially available CR2032 used for the TS1000S cannot be used on the TS4000.

	TS1000S	->	TS4000
Replacement battery	CR2032 (commercially available)		TS-BT

## 4. About the TS4000 series

### 4.1 Functions not supported by the TS4000 series

The TS1000S screen program with "PictBridge" selected as the printer model cannot be converted to the TS4000.

To convert the screen program for the TS4000 series, change the printer model in advance. (Unsupported functions are also detected during conversion.)

Change location: [View] -> [Hardware Setting] -> Right-click [Printer] -> [Connection Device Selection]

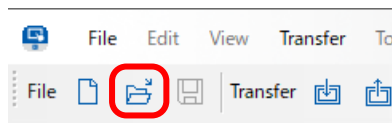
### 4.2 Applicable configuration software for the TS4000 series

Smart Editor Ver. 1.1.0.0 and later

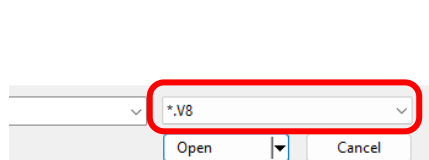
### 4.3 Screen program conversion procedure

The screen program can be converted from TS1000 to TS4000 using Smart Editor.

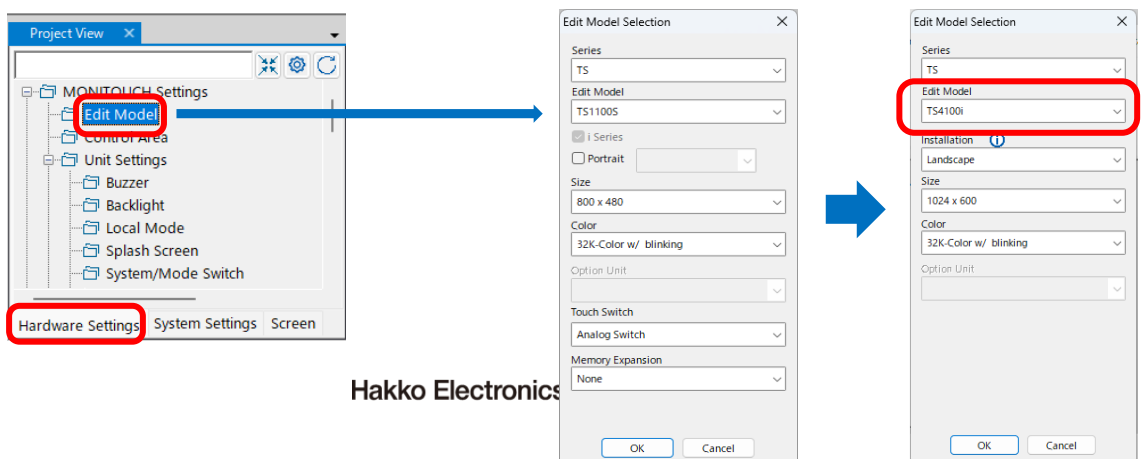
- 1 Start Smart Editor and click [Open] icon or [Open] in the [File] menu.  
The screen program file can also be opened by dragging it onto Smart Editor.  
When using this method, proceed to step 4.



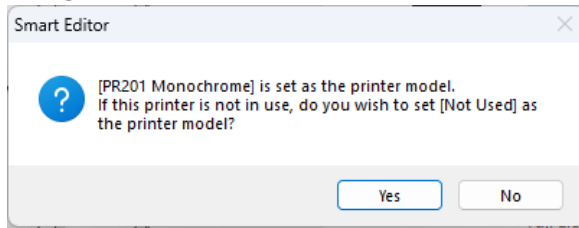
- 2 Change the file extension to [.V8] in the [Open] dialog.



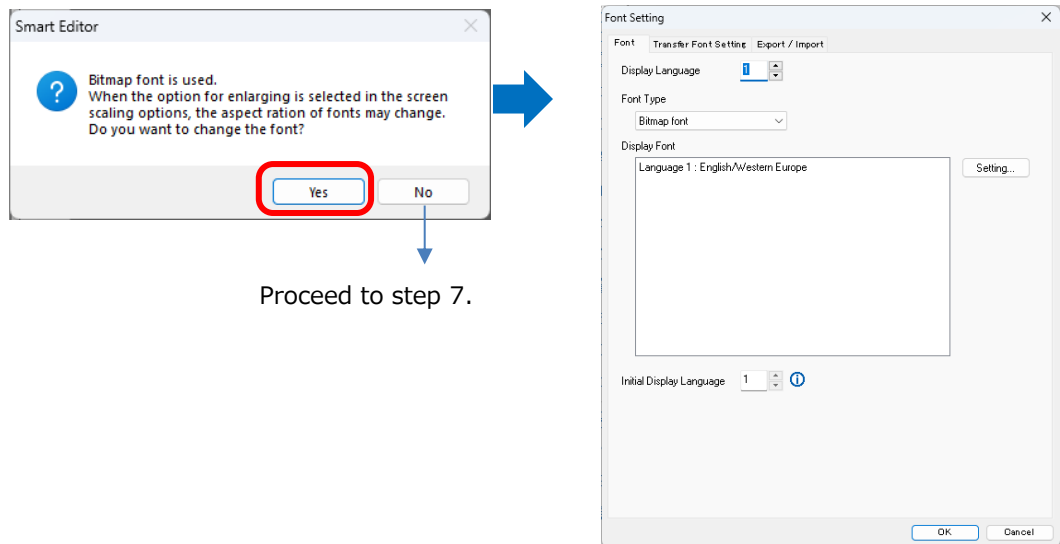
- 3 Select the TS1000S screen program file and click [Open].  
The TS1000 screen program is opened.
- 4 Project View -> [Hardware Settings] tab -> [MONITOUCH Settings] -> Click [Edit Model] to change the model. Select the TS4000 series model and click [OK].



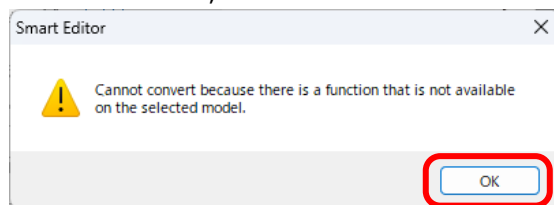
- If "PR201 Monochrome" is set as the printer model, the following confirmation dialog box will appear. When the printer is not being used, click [Yes]. When the printer is being used, click [No].



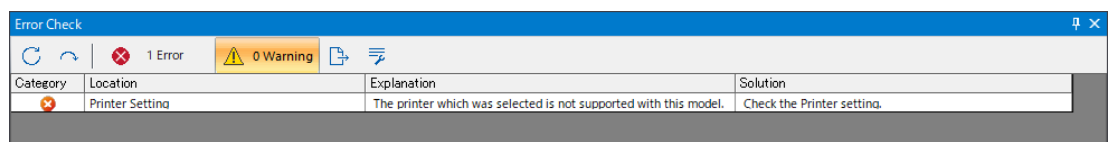
- If the bitmap font is being used in the TS1100Si screen program, the following dialog will appear. When "Enlarge to fit resolution" is selected in "The method of screen scaling" in step 9, the aspect ratio of the fonts may change. To change the font, click [Yes]. Click [No] to proceed with conversion without changing the font.



- If there are any functions which are not available on the TS4000 series, the following dialog will appear. Click [OK] to confirm the unsupported functions and settings in the [Error Check] window. After confirming the [Solution], **close the file without saving the screen program.** Repeat steps 1 to 3 to open the TS1000S screen program, delete functions that cannot be used, and then convert to the TS4000 series.

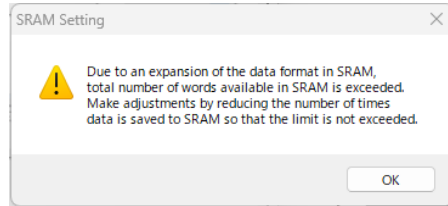


After the dialog box shown on the left appears, do not overwrite the screen program.



- 8 If the total number of words available in SRAM is exceeded in converting to the TS4000 series, the following dialog will appear.

After conversion, reduce the number of times data is saved to SRAM.

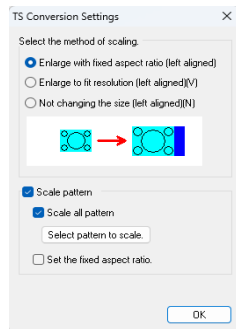


Areas using SRAM

- Storage area for memo pad
- Non-volatile memory (\$L/\$LD)
- Storage of alarm server
- Storage of logging server
- Operation log storage point

- 9 The following dialog will appear.

Select the method of the screen scaling and the pattern scaling.



<Method of scaling>

Example 1: TS1100Si\* (800x480) -> TS4100i (1024x600) Conversion

\* Project View -> [Hardware Settings] tab -> [MONITOUCH Settings] -> [Soft Function Switch Settings] -> when the [Display in the center with VGA size(640x480)] is unchecked

Item	When using the soft function switches on TS4000	When not using the soft function switches /displayed only when necessary on TS4000
Enlarge with fixed aspect ratio (left aligned)	<p>44 dots</p>	<p>24 dots</p>
Enlarge to fit resolution (left aligned)		
Not changing the size (left aligned)	<p>120 dots      144 dots</p>	<p>120 dots      224 dots</p>

Example 2: TS1100Si\* (800x480) -> TS4100i (1024x600) Conversion

\* Project View -> [Hardware Settings] tab -> [MONITOUCH Settings] -> [Soft Function Switch Settings] -> when the [Display in the center with VGA size(640x480)] is checked

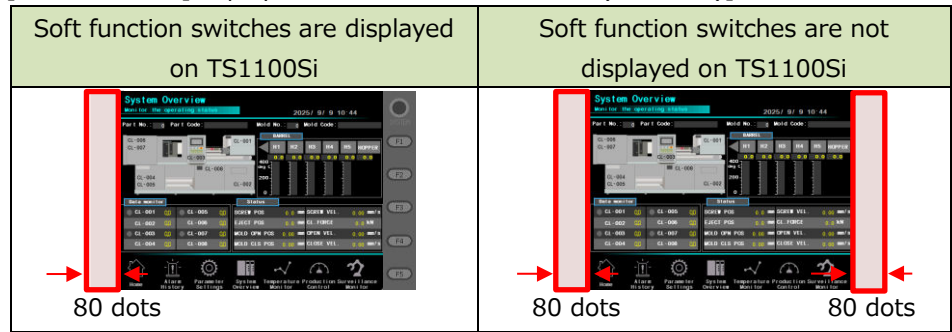
Soft function switches are displayed on TS1100Si	Soft function switches are not displayed on TS1100Si
<p>80 dots</p>	<p>80 dots      80 dots</p>



Item	When using the soft function switches on TS4000	When not using the soft function switches / displayed only when necessary on TS4000
Enlarge with fixed aspect ratio (left aligned)	<p>144 dots</p>	<p>224 dots</p>
Enlarge to fit resolution (left aligned)	<p>304 dots</p>	<p>384 dots</p>
Not changing the size (left aligned)	<p>120 dots      304 dots</p>	<p>120 dots      384 dots</p>

Example 3: TS1070S(i)\* (800x480) -> TS4070i (800x480) Conversion

\* Project View -> [Hardware Settings] tab -> [MONITOUCH Settings] -> [Soft Function Switch Settings] -> when the [Display in the center with VGA size(640x480)] is checked

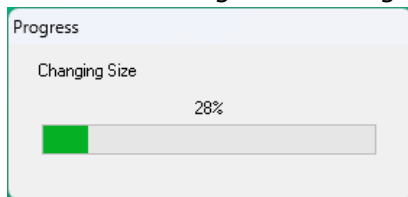


Item	When using the soft function switches on TS4000	When not using the soft function switches /displayed only when necessary on TS4000
Enlarge with fixed aspect ratio (left aligned)  Not changing the size (left aligned)	<p>80 dots</p>	<p>160 dots</p>
Enlarge to fit resolution (left aligned)	<p>80 dots</p>	<p>160 dots</p>

<Scale pattern>

Item	Description
Scale all pattern	Enlarge all patterns registered in the screen program.
Select pattern to scale	Select which patterns to enlarge.
Set the fixed aspect ratio	Checked: Enlarge while keeping the aspect ratio used in TS1000S. Unchecked: Enlarge to match the aspect ratio of the size specified in the method of screen scaling.

10 The size is changed according to the method of screen scaling selected in step 9.



- 11 The screen program file converted to the TS4000 series is displayed on Smart Editor. Name and save the file. (The file extension is [.V10].)
- 12 When scaling to fit the screen size, adjust the overall text size and layout.

The converted TS4000 screen program cannot be converted back to the TS1000S screen program. Confirm the operation with the TS4000 series unit before use.

## 5. Precautions

When scaling to fit the screen size, take note of the following point.

- About specifying coordinates

If coordinates are specified for the overlap display position or graphic parameters, adjust the coordinate positions.