

InfoSOSA™ Series

IS731 Series Startup Guide

DMC Co., Ltd https://www.dush.co.jp/english/

Introduction

Thank you for purchasing DMC products.

This manual describes the features of the InfoSOSA IS731 Series, provides a tutorial, as well as explains functions unique to the InfoSOSA IS731 Series.

The InfoSOSA IS731 Series is referred to as both InfoSOSA and IS731 Series.

Target audience

- ✓ For those considering the IS731 Series.
- ✓ For those new to the IS731 Series.
- ✓ For those checking features of the IS731 Series.

Target Version

This manual describes the following versions of InfoSOSA.

Some operations may differ depending on the version.

Please refer to "InfoSOSA ReleaseNote" for details.

InfoSOSA Builder	2.7.1
IS7 Runtime	2.7.1

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1.

1.1 InfoSOSA Summary

InfoSOSA is an operator interface for the microcontroller.

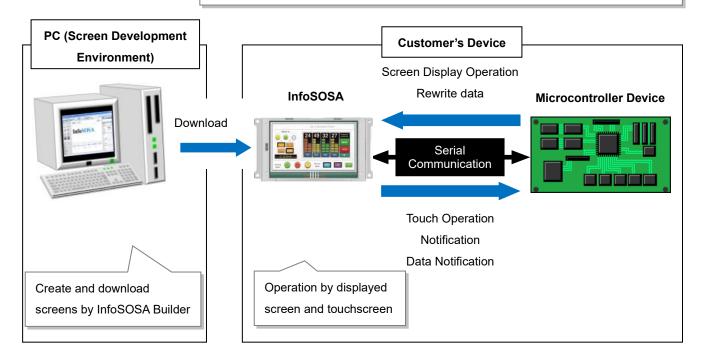
InfoSOSA and the microcontroller can be connected by using a single serial cable with no complicated wiring involved.

Also there is no complex screen processing to be done on the microcontroller since all processing will be done by InfoSOSA when displaying the screen. In addition, all screens displayed will be stored in the memory of InfoSOSA, so you will not have to prepare another memory for storing the screen on the microcontroller.

By sending simple commands to InfoSOSA from the microcontroller, you will be able to operate the screens stored in the InfoSOSA and read/write memories.

These operations can also be performed from the touchscreen of InfoSOSA.

Screens stored in InfoSOSA can be created and downloaded by using the InfoSOSA Builder.





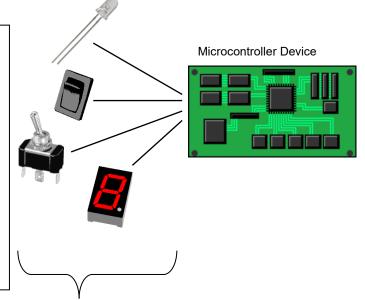
1.2 Benefits of Installing InfoSOSA

Generally microcontroller device and its operation display units have the following problems such as:

- Poor expressiveness of the display
- Microcontroller does not provide specifications to satisfy operations of high-performance display
- Takes considerable effort to draw programs to display device and is not easy to fix
- Since space of operation display panel is limited, only limit number of parts can be placed
- Wiring tends to become complicated
- Responding flexibly, such as adding of parts, is difficult

But with the InfoSOSA ...

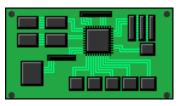
- High brightness and high-definition LCD and touchscreen realizes rich expressiveness and reliable operability even on small units
- All drawing on screen is processed by display. Microcontroller only sends simple commands keeping stress to minimum.
- All screens are stored in memory of display device. No need for memory to save screen on microcontroller.
- Abundant parts and screens allow design and layout to be done freely.
- Choose from RS-232C, RS-422, and RS-485 for communication with the microcontroller. Complicated wiring is not required.
- Screen-making can be done simply and easily with dedicated development tool.
- Created screens can be tested beforehand by simulator. Debugging is possible without interfering actual operation.
- Screens stored on the display can be easily changed. Rewriting of screens takes only a few seconds to minutes, corresponding to speedy specification change.



InfoSOSA

Microcontroller Device





1.3 **Reference Documents**

The IS731 Series includes the following documents. Refer to the manual that meets your purpose.

IS731 Series Startup Guide (this manual)

Refers to this document.

This is a manual for IS731 Series users.

Provides explanations on the features of the InfoSOSA IS731 Series, functions unique to the InfoSOSA IS731 Series, as well as a tutorial.

Target audience

- ✓ For those considering the IS731 Series.
- ✓ For those new to the IS731 Series.
- ✓ For those checking features of the IS731 Series.

InfoSOSA Reference Manual

This manual describes InfoSOSA functions and specifications.

Target audience

- \checkmark For those checking details of InfoSOSA functions and specifications.
- ✓ For those checking communication specifications between InfoSOSA and microcontroller devices.

InfoSOSA Builder Operation Manual

This describess how to operate the InfoSOSA Builder.

Target audience

- ✓ For those setting up and operating InfoSOSA Builder.
- ✓ For those interested in convenient InfoSOSA Builder uses.

Host Communication Tester Manual

This manual describes host communication operations.

* Host Communication Tester is software for communicating with the InfoSOSA with a PC instead of a microcontroller device.

Target audience

- ✓ For those testing communication with InfoSOSA without a microcontroller device.
- ✓ For those debugging the microcontroller device and checking communication commands.
- ✓ For those setting up and operating the host communication tester.

InfoSOSA ReleaseNote

Differences depending on the version of InfoSOSA are described.

Target audience

✓ For InfoSOSA users who are considering upgrading to a newer version.

1.4 About InfoSOSA Builder

The InfoSOSA Builder is a software for creating screens to be displayed on the InfoSOSA unit.

Arrangements of parts and operation setting can be done with easy mouse operations such as "drag-and-drop" and selecting from pull-down menus. There are no complicated operations and you do not need to write program source for the setting.

InfoSOSA Builder is composed of the following screens.

🔚 InfoSOSA Builder 2.5.5.1 - P	oject1		
File (F) Project (P) Edit	E) Display (V) System Settings(S) Download(D) Simulation (T) Help (H)		-(6)
🗄 🗎 🚔 🖬 🏲 🗶 😭	👗 🐚 😤 🔊 😢 🗰 🏥 8Dot 🔹 📋 String Resource Set: 未設定 🔹		
🕼 Toolbax	Screen Edtor Image Resource String Resources Global Memory SubRoutine	Base Screen Pop-up Screen	
Ritten	Screen Settings Delete Redraw Redraw	(9AS00001((1)))	
Button Bu	1	EAS0001 Property All Control Type Base	
Bur, 5025 Bur, 5027 Bur, 5028 Bur, 5029 Bur, 5028 Bur, 5029 Bur, 5030 Bur, 5031		Maragement ID Base Corted ID BAS00001 Daplay Nomal Corment Image: Corted ID Layout Image: Corted ID H. Pos. 0 V. Pos. 0 Widh 320 Height 240	
		Left Margin Pight Margin	
Btn_0032 Btn_0033	۲	Top Margin	
Switch	Add Copy Delete Action Settings Property	Bottom Margin Color —	
Lamp	No. Memory ID Type Size Initial Value Coment Digest	Character	
Label		Background	
Time Display Controls Frame		Transparency	
Simple Graph		String -	
Bar Meter		String	
PictureBox			
Figure Table Controls	۲ III F	H. Position	
- salo controns		Ur ent project data size: 901,756 / 20,971,520 bytes .:	
		unent project data size: 901,750 / 20,971,520 bytes	

1 Drawing Area	Area mainly for creating screens, consisting of multiple tabs. We will be using the "Screen Editor" tab for this demo. Please refer to the "Reference Manual" or the "Operation Manual" for details of other tabs and how to operate them.
(2) Toolbox Area	Parts that can be used for creating a screen are categorized. You can arrange the parts in the drawing area by a simple "drag-and-drop".
(4) Property Area	Property of the parts selected in the "Screen Editor" is displayed. Variety of settings such as layout, size, and color of the parts can be set.
(5) Screen List Area	The names of the screens being created are displayed. Click on the name of the screen you want to work on.
6 Menu Toolbar Area	Call of setting screen and other operations such as saving and creating files can be done here.

1.5 Install InfoSOSA Builder

This chapter describes the installation of the InfoSOSA Builder.

1.5.1 System Requirements

InfoSOSA Builder can run on a PC that satisfies the following conditions. Make sure the PC you will be installing with the Builder satisfies the system requirements below.

Items	Contents
OS Microsoft® Windows® 10 (64 Bit)	
	or
	Microsoft® Windows® 11 (64 Bit)
Framework/	Microsoft® .NET Framework 3.5
Runtime	Microsoft® .NET Framework 4.7
	Microsoft® Visual C++ 2015 Runtime
Processor	1GHz or faster
RAM	4GB or more
	(Recommended: 8GB or more)
HDD	Empty space 850MB or more (Recommend:1GB or more)
Display	1024×768 dots or more, True Color (32bit) prefer
USB Port	For downloading project (screen data)
Serial port*	For downloading project (screen data)

* Communication error may occur according to the output signal level of the serial port (COM) of the PC you will be using. Please use the USB-serial conversion cable if this is the case.

* There is no warranty associated with operating in a virtual environment.

1.5.2 Start Installation

S Caution €

Please make sure that there is enough free space (more than 850MB) in your PC's hard disk before the installation.



Please install with Administrator privileges.

O Caution

Installation occurs for all users.



In case of builder version upgrade, please uninstall the builder on PC in advance.

- 1. Please execute "software\builder\InfoSOSABuilder*.*.*.exe " in the download data.
- 2. A dialog for specifying the extraction destination is displayed. Click the [...] button, specify the extraction destination (desktop, etc.), and click the [Extract] button.

27-Zip self-extracting archive	×
Extract to:	
Extract	Cancel

- 3. The "InfoSOSA Builder *. *. *. *" Folder is created in the extraction destination specified in 2. above.
- 4. Execute "Setup.exe" in the generated folder "InfoSOSABuilder *. *. *. *".

1.5.3 Install .NET Framework

To run InfoSOSA Builder, Microsoft® .NET Framework 3.5 or.NET Framework 4 is required. If the PC you are using does not have it installed, before installing InfoSOSA Builder install .NET Framework.

When the InfoSOSA Builder installation screen is displayed, run Install InfoSOSA Builder.

.NET Framework 4.7 comes standard. If .NET Framework 3.5 is not installed, when the installer for the builder starts up a dialog box as shown below will appear. Select [Install this feature] to install .NET Framework 3.5.

🍚 🕫 Windows Features	×
An app on your PC needs the following Windows feature: .NET Framework 3.5 (includes .NET 2.0 and 3.0)	
Sinstall this feature	
Skip this installation Your apps might not work correctly without this feature.	
Tell me more about this feature	
Cano	:el

* As the .NET Framework installer uses Windows Update, an Internet connection is required.

1.5.4 Install InfoSOSA Builder

1. When you start installing, you will see a dialog as below. Please click "Next".



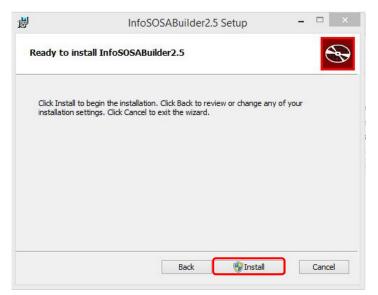
2. Check the license agreement, select the [I accept the terms in the License Agreement] check box and click [Next].

	License	agreement	^
Seedswa the right (hereinaf condition referred	to use the supplie to use the supplie ter referred to as s contained in this	following license ag er referred to as "v ed software only if "you") consents to s license agreemen ent") and the li agreement.	ve") will grant the customer all terms and nt (hereinafter

3. Specify the destination and click [Next].

le l		InfoSOSA	Builder2.5	Setup	-		×
Destination Click Next t		lefault folder o	or click Change	to choose anot	ner.	¢	Ð
Install InfoS(DSABuilder 2.5 t	o:					
C:\Seedswa	re\InfoSOSABu	ilder2.5\					
Change							
						Cance	
			Back	Next		Cance	21

4. Click [Install].



5. Installation will start.

J	InfoSOSABuilder2.5 Setup – 🗆 📄
Installing Info	osOsABuilder2.5
Please wait while	the Setup Wizard installs InfoSOSABuilder2.5.
Status: Up	dating component registration
	Back Next Cancel

6. Installation is complete.

谩	InfoSOSABuilder2.5 Setup	×
Ð	Completed the InfoSOSABuild Setup Wizard	ler2.5
	Click the Finish button to exit the Setup Wize	ard.
	Back Finish	Cancel
		DSABuilder DSABuilder
After installation is c	complete, a shortcut	will appear on your desktop.

1.5.5 Install Microsoft Visual C++ 2015 Runtime

If you get an error that "mfc140u.dll" is not found, follow the steps below to install "Microsoft Visual C++ 2015 Redistributable Package".

1. Access Microsoft's download page.

https://learn.microsoft.com/en-us/cpp/windows/latest-supported-vc-redist?view=msvc-170

2. Download both "X86" and "X64" of Microsoft Visual C++ 2015 Runtime.

X86	https://aka.ms/vs/17/release/vc_redist.x86.exe
X64	https://aka.ms/vs/17/release/vc_redist.x64.exe

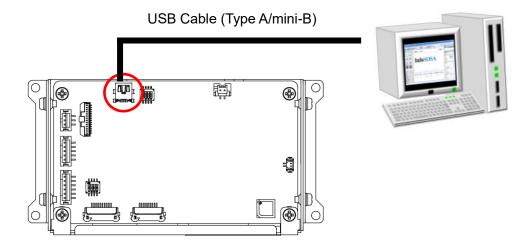
3. Execute the downloaded "VC_redist.x64.exe" and "VC_redist.x86.exe" respectively to install.

1.6 **PC Connection**

To download a project (screen data), connect the PC and InfoSOSA.

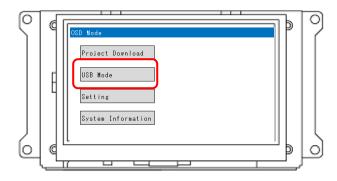
1.6.1 USB Cable Connection

Connect the USB cable (Type A/mini-B) to the PC's USB port (Type A) and InfoSOSA USB device port (mini-B).



Installation of USB device driver

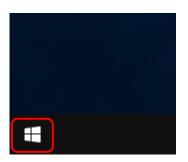
On first connection, you need to install the USB device driver. With the PC and InfoSOSA connected, turn on InfoSOSA. Then touch the "USB Mode" button.



Touch the "USB Mode" button.

Open Device Manager on your PC.

1. Right click on the start menu.



2. Click [Device Manager].

Apps and Features
Power Options
Event Viewer
System
Device Manager
Network Connections
Disk Management
Computer Management
Windows PowerShell
Windows PowerShell (Admin)
Windows PowerShell (Admin) ———— Task Manager
Task Manager
Task Manager Settings
Task Manager Settings File Explorer
Task Manager Settings File Explorer Search

3. From [Other devices], right-click [InfoSOSA IS7] or [IS7 COMPOSITE COM].

着 Device Manager		×
File Action View Help		
🗢 🔿 📰 😰 📷 晃		
 Win10ENG Batteries Computer Disk drives Display adapters DVD/CD-ROM drives Floppy disk drives Floppy drive controllers Floppy drive controllers Floppy drive controllers Floppy drive controllers Mice and other pointing devices Monitors Monitors Metwork adapters Network adapters Print queues Print queues Software devices Software devices System devices 		

4. Click [Update Driver Software].

🗂 Device Manager		81 <u>–</u> 72	\times
File Action View He	elp		
(=			
 Win10ENG Batteries Computer Disk drives Display adapters 			
 > PVD/CD-ROM d > Floppy disk driv Floppy drive cor TDE ATA/ATAPI c 	es htrollers		
 Keyboards Mice and other Monitors Retwork adapte S' Other devices 	pointing devices rs		
InfoSOS/ > Print queues	, Update Driver Software		
> Processors > Software dev	Disable Uninstall		
> 🤹 Storage cont > 🏣 System devi	Scan for hardware changes		
	Properties		

5. Click [Browse my computer for driver software].

÷	Update Driver Software - InfoSOSA IS7	×
	How do you want to search for driver software?	
	→ Search automatically for updated driver software Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.	
	→ Browse my computer for driver software Locate and install driver software manually.	
	Car	ncel

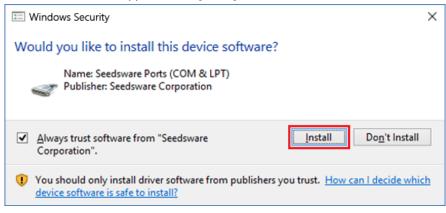
6. Click [Browse], and then specify the drive where the development kit disk is inserted, or specify the folder where the device driver is saved.

		×	
←	Update Driver Software – InfoSOSA IS7		
	Browse for driver software on your computer		
	Search for driver software in this location: Browse Include subfolders		
	→ Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.		
	Next Cance	el	

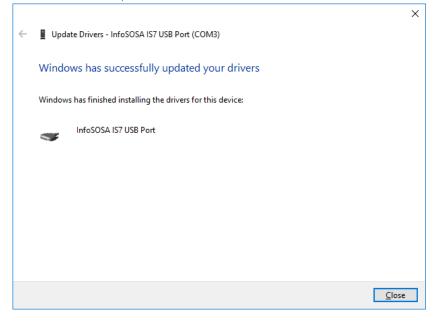
7. Select the [Include subfolders] check box and click [Next].

		X
←	Update Driver Software – InfoSOSA IS7	
	Browse for driver software on your computer	
	Search for driver software in this location:	
	CA Browse	
	Include subfolders	
	→ Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
	Next Cance	I

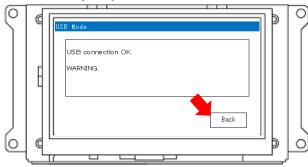
8. If the screen below appears, click [Install].



9. Installation is complete.



10. Touch the [Back] button.



After installation has completed, return to the menu screen with [Back] button.

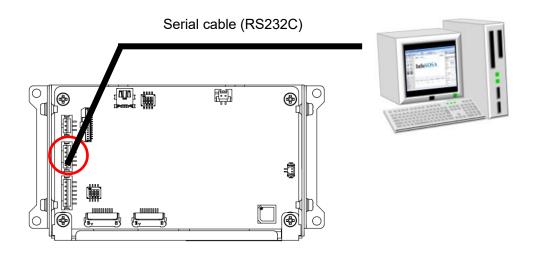
11. Turn off the power supply.

1.6.2 Serial Cable Connection

By using the serial cable to connect with the computer, you can download the project.

Connect the PC's serial port and InfoSOSA serial interface (SIO1).

* You cannot download from the SIO2 serial interface.



For operations on the Builder application, please refer to the "InfoSOSA Builder Operation Manual".

***CAUTION**

In Ver2.5, the project execution application is not updated when downloading (SIO / LAN). If you are using InfoSOSA Builder Ver2.5, the first download must be done by download (USB). (After Ver2.6, the project execution application is updated even with download (SIO).)

Tutorial 1.7

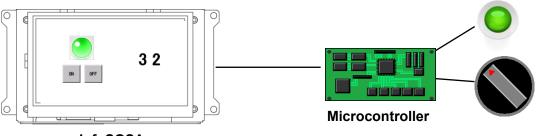
Summary

Steps on using the IS731 Series to create the following system are provided.

- Touch the ON/OFF button on the LCD screen (InfoSOSA) to turn a lamp on the screen on or off.

- Touch the ON/OFF button on the LCD screen (InfoSOSA) to turn the LED on the microcontroller on or off.

- Run operations on the microcontroller volume to change values on the LCD screen (InfoSOSA).



InfoSOSA

Development Flow

No.	Items	Contents
1	Microcontroller specifications and	Create program operations on the microcontroller.
	implementation	
2	Create InfoSOSA project	In the builder application create the file that stores
		the screens and communication settings.
3	Create the InfoSOSA screens	Draw the buttons and set up operations in the
		builder application.
4	InfoSOSA Communication Settings	Set up the communication settings with the
		microcontroller.
5	Save the InfoSOSA project	Save the settings.
6	Checking operations with InfoSOSA	Check operations on the PC.
	Simulator	
7	Download to InfoSOSA	Transfer project (screen data) to InfoSOSA.
8	Connect the microcontroller and	Connect the microcontroller and InfoSOSA.
	InfoSOSA	
9	Operation Check	Test if it operates as specified.

1.7.1 Microcontroller specifications and implementation

Create and implement microcontroller program specifications. This tutorial uses the following specifications.

Memory

The following two memories are defined

Memory ID	Туре	Value range	Contents
GM_LED01	Boolean	0 or 1	LED status
GM_VOL01	Byte	0 to 100	Volume status

In Builder, users can create InfoSOSA memory. You can notify the microcontroller of the memory value to run a microcontroller process, or send commands from the microcontroller to change the memory value which in turn changes the InfoSOSA display.

LED Specifications

Operation Overview

When InfoSOSA receives communication commands such as those below, turn the microcontroller LED on or off.

Example notification command (turn ON)

{STX}00e10000028**PA04**,BAS00001.BTN00001.PRESS,**GM_LED01=1**{CR}0BC6{ETX}

Example notification command (turn OFF)

{STX}00e20000028PA04,BAS00001.BTN00002.PRESS,GM_LED01=0{CR}0BC7{ETX}

Communication command specifications

Data	Contents	
PA04	Indicates a notification command.	
GM_LED01=1	Indicates the value in memory ID "GM_LED01" is 1.	
GM_LED01=0	Indicates the value in memory ID "GM_LED01" is 0.	

For more information or of other locations, please refer to the separate "Reference Manual".

Switch specifications

Operation Overview

Monitors the value of the microcontroller volume every 200 ms and when the value changes, sends a communication command to InfoSOSA as follows.

Example property setting command

```
{STX}00C000001FPA01,@GLBMEM.GM_VOL01.VALUE,50{CR}0A08{ETX}
```

Communication command specifications

Contents
Indicates a property setting command.
Indicates the setting target.
(Property for value of Global Memory GM_VOL01)
Indicates the setup value.

For more information or of other locations, please refer to the separate "Reference Manual".

Communication specifications

InfoSOSA serial communication specifications are as follows.

Items	Value
Communication Speed	19200bps
Parity Bit	None
Flow Control	None

1.7.2 Create InfoSOSA project

Using InfoSOSA Builder, create a project. Before proceeding, install InfoSOSA Builder. Please refer to <u>1.5 Install InfoSOSA Builder</u> for installation.

NOTE

About Projects

A project is the file that saves screens created with InfoSOSA Builder and saves communication settings with the host.

Start the InfoSOSA Builder

	SA Builder 2.5						Constanting (D)			(#) [e	2 ((()
) Simulation (T)				
1 😅	Trobex	ar a	- 1	7 (* 🏢	SDot 8Dot	· 🗆	String Resource Se	No Settings		Popup Screen	
		-									
	R.										
	•										
									EA500001		
									Property		
									AI		
									Control Type	Ease	
									Management		
									Control ID	BA500001	
									Display	Normal	
									Connert		
									Levout		
									H. Pos.	¢.	
									V. Pos.	0	
									Wah	320	
									Height	240	
									Left Margin		
									Right Mergin		
									Top Margin Bottom Margin		
									Battom Mergit		
									Oolor		
									Owneter		_
									Backgound		
									Transparency		
									Shine		

Start up the InfoSOSA Builder by clicking the icon on the desktop, or from the Windows Start menu click [Seedsware] - [InfoSOSA Builder*.*]. * "*.*" is the version number.

When you start the Builder, a screen as shown to the left will appear.

Create a New Project



Click "Create New Project" from the "File" menu in the upper left of the Builder.

Series:	IS7 -	IS731-4WQ(480 x 272)
Model:	IS731-4WQ -	IS731-4WQ(480 x 272)
No. of Colors:	65536 -	
Serial:	RS232 RS422/485 v	
	Multilingual	
Selected Product:	IS731-4WQ(480 x 272)	Default Window Size: 480 × 272
Builder Model:	IS731-4WQ	
Project Name:	Project 1	
Location:	C:\	Browse

A dialog box as shown to the left will appear. Select the product to be used.

After selecting, enter the project name, click [Create] and create a new project.

* Project will be created in the location selected in "Save As".



You can set the project name and location.

🖒 🥁 🖬 🛅 🗙 🖆				
📲 Toebox	Screen Editor Intege Resource Dating Resources Global Memory SubRadine	Dase Screen g	anap Somen	
۴	SownSettings Deles	IASSOUTING.	*)	
uton i				
Duttor				
		84500001		
- T		Property		
Ba (0022 Bar (0023		N		
		Control Type	Save .	
		Nangement 10	Exce	
IN OLD BUILDES		Cartol D	EA500001	
		Deploy	Normal	
¥ ¥		Connet		
		Layout		-
	· · · · · · · · · · · · · · · · · · ·	H Pas	0	
10.0028 Bir (0.29		V. Pos.	0	
		Wah	320	
		Height	240	
te 0000 Bb 0001		Left Margin		
whic Keypad	Add Cary Delete Action Settings Property *	Right Margin		
nenc Azypad 10	• • · · · · · · · · · · · · · · · · · ·	Top Margin		
ny Jel	x	Bottom Wargin		
e Display Controls	No. Menoy ID Type Sax Hital Value Coment Digest	Cabr		
sve				
iple Graph Meter		Character		
		Background		
s.refin:		Tenerror		

A screen as shown to the left will appear when a new project is created.

1.7.3 Create an InfoSOSA screen

Set up parts and memory.

Set up Global Memory

Create InfoSOSA memory.

Memory is something that saves a value in the InfoSOSA.

Create Memory

creen Ed	itor Image Res	ource Strin	g Resource:	Global Memory	heet Key Setting Sub Routin	ne
General	Group Setting					
No.	Memory ID	Туре	Size	Initial Value	Comment	Digest

Select the [Global Memory] tab.

No.	Memory ID	Туре	Size	Initial Value	Comment	Diges
		.,,,,,,,	2100			0.600

Sc	een Edi	tor Image Res	ource St	ing Resources	Global Memory	Sheet Key Setting	SubRoutine	
G	eneral	Group Setting						
٢	No.	Memory ID	Туре	Size	Initial Value	Comment		Digest
	0001	GME00001	Bool	-	0			

Click [Add].

The memory is created.

NOTE

Memory Type

Global Memory, whose value is always accessible and saved while the power is on. Screen Memory, whose value is only accessible when specific screens are displayed. When displaying a different screen, its value is initialized.

Property Settings

No	Memory ID	Type	Size	Initial Value	Comment	Digest
0001	GME00001	Bool	-	0		

Select memory, then click [Property].

Advanced Properties Dialog Memory ID: GME00001 Bool Type: • Initial Value: 0 Underflow: Retention Overflow: Min. Value: 0 Retention Max. Value: 1 Comment: String Type String Length: 10 Array Queue Type CH: 1 ▼ Size: 10 Timer Type Loop Count: 0 Time Up Value: 0.1 Timer Status: Stop (Infinite Loop when Loop Count is 0) Action Settings OK Cancel

Change the properties as per the table.

Property	Value	Property description
Memory ID	GM_LED01	ID that identifies memory.
Туре	Boolean	Memory Type
Initial value	0	Initial value at power on

Create second memory

Follow the same procedure to create another memory. Set the properties of the second memory as follows.

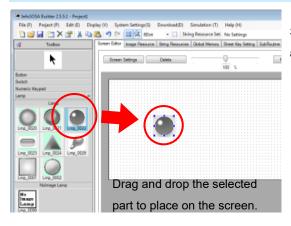
Property	Value	Property description
Memory ID	GM_VOL01	ID that identifies memory.
Туре	Byte	Memory Type
Initial value	0	Initial value at power on
Min. Value	0	Minimum value in the memory.
Max. Value	100	Maximum value in the memory.
Underflow	Retention	Operation when a value less than the
		minimum value is set in the memory.
Overflow	Retention	Operation when a value greater than
		the maximum value is set in the
		memory.

After setup, the list is as follows.

reen Edit	tor Image Res	ource Strin	g Resources	Global Memory	Sheet Key Setting	SubRoutine			
General	eneral Group Setting								
No.	Memory ID	Туре	Size	Initial Value	Comment	Digest			
0001	GME00001	Bool	-	0					
0002	GM_VOL01	Byte	-	0		0,Retention,100,Retention			

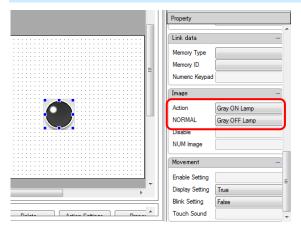
Set up Lamp

Arrangement of the Lamp



Select "Lamp" from the Toolbox at the left of the Builder and drag and drop "LMP_00022" on to the screen.

Change the Lamp image



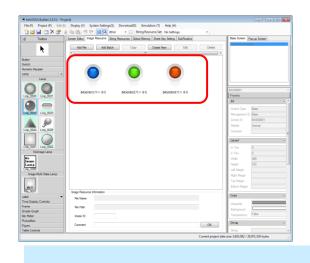
While the placed lamp is selected and active, set the "Image" in the Property area at the right side of the Builder.

Set the "NORMAL" and "Action" and change the image of the lamp of the images can be changed.

"Action" will set the image of the lamp when it is ON and "NORMAL" will set the image of the lamp when it is OFF. In this tutorial, set up as follows.

- Action: Green ON
- NORMAL: Green OFF

The image of bit map parts can be changed as above.



By importing the image file to the Image Resources, you can create a lamp image that is included in the default images.

Lamp Link Setting

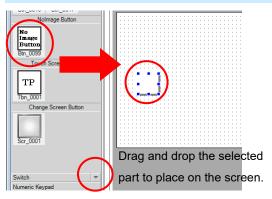
Link data		-
Memory Type	Global Memory	
Memory ID	GM_LED01	
Numeric Keypa	E E E E E E E E E E E E E E E E E E E	

Create an association between the lamp and Global Memory. With the link setting, the Normal image is displayed when the associated Global Memory value is 0, and the Action image is displayed when the value is 1.

- In this tutorial, set up as follows.
- Memory Type: Global Memory
- Memory ID: GM_LED01

Set up Button

Arrangement of the Button



Select "Button" from the Toolbox at the left side of the Builder and drag and drop "Btn_0099" on to the screen. If you cannot see it, scroll down with $\mathbf{\nabla}$.

Change Color of Button

	Property	
	Layout	- ^
	H. Pos. 144	
	V. Pos. 112	
	Width 48	
·····	Height 48	
····	Left Margin 0	
	Right Margin 0	
	Top Margin 0	
	Bottom Margin 0	Ξ
	Color	-
	Character	-1
	Background	=J
	Transparency Toise	

While the placed button is selected and active, set the "color" in the Property area at the right side of the Builder.

Click the "Background" under "Color" to display the color pallet as below and change the color of the button.



NoImage parts color can be changed as above.

Change Text on the Button

String -					
String	ON				
H. Position	Center				
V. Position	Center				
Size	16				

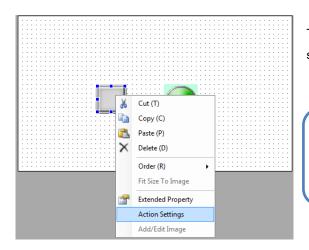
By changing the String property, you can display text on the button.

In this tutorial, set up as follows.

String: ON

Action Settings(1)

Set the action of the button so that the lamp on the screen turns on when the button is pressed.



To set the action, right-click on the button placed on the screen and click "Action Settings".

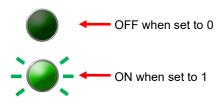
NOTE

What is an "Action"?
 [Action] refers to the operation of parts on the screen.

	Dialog										
ID:	BTN00001										
Event:	Press			-							
- Action Re	utine		_					_	_		
Ad	1	Edt		Delete	•	•	Сору	Cut		Paste	
Add To		Edit		Delete	•	•	Сору	Cut		Paste Paste to Bloc	

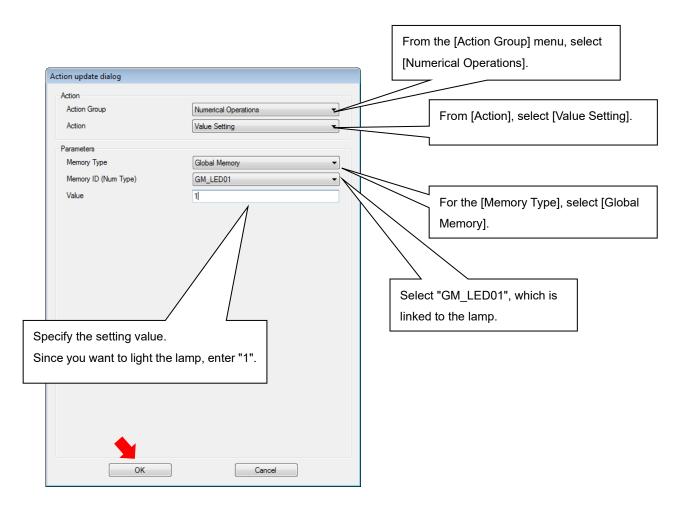
Select "Add" on the bottom left of the "Action Setting Dialog" and open "Add Action Dialog".

Action update dialog		The following items can be set with "Add Action Dialog".
Action Group	Numerical Operations	
Action	Value Setting 🔻	(1) Action
Parameters Memory Type Memory ID (Num Type) Value	Global Memory GM_LED01 II 2	 Action Group > Select the category of action you want to use. Action > Select the action you want to use. ② Parameters > Set on which screen, to which part you want to set the
		action to, and to what value. Items such as "Screen ID", "Parts ID" and "Setting Value" can be set. However, items that can be set will vary according to the action that you choose.
ОК	Cancel	



This time we will set the action "Turn on lamp." When 0 is set to the linked memory of the lamp, it turns OFF. When 1 is set to the linked memory, it turns ON.

The action setting to make the lamp light is as shown below:



Action Settings (2)

Set up a notification operation that sends the memory value to the microcontroller (host) when a button is pressed.

Action Settings	s Dialog
ID:	BTN00001
Event:	Press
- Action R	
Valu	e Setting(GM_LED01 = 1)
Ad	
Add To	Block Paste to Block
	OK Cancel
	OK Cancel

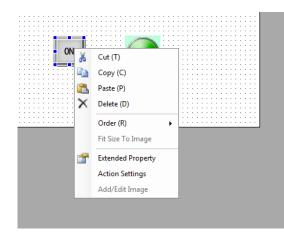
At the bottom left of the dialog box select [Add] and open [Add Action Dialog].

The action setting to notify the microcontroller (host) of the memory value is as shown below:

		From the [Action Group] menu, select
Add Action Dialog		
Add Action Dialog Action Action Group Action Parameters Value 1 Memory Type Value 2 Memory Type Value 2 Memory Type Value 2 Memory Type Value 3 Memory Type Value 3 Memory Type Value 4 Memory Type Value 5 Memory Type Value 5 Memory Type Value 5 Memory Type Value 6 Memory Type Value 6 Memory Type	H/W Actions Notify value to Host Global Memory GM_LED01	[H/W Actions]. From [Action], select [Notify value to Host]. For the [Memory Type], select [Global Memory]. Select "GM_LED01" for the lamp status.
ОК	Cancel	

Create second button

Create a button to turn off the lamp.



Right-click the ON button, select [Copy] from the shortcut menu, then right-click again and select [Paste].

The ON button is copied and you only have to set the changes.

Change the display text to "OFF"

String	-	Γ
String	OFF	
H. Position	Center	
V. Position	Center	
Size	16	

String Property OFF

String: OFF

Change the action to turn the lamp off

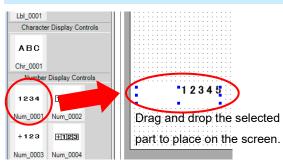
Advanced Properties Dialog	
General	
Control Type Button Display Normal	
Control ID BTN00002 Comment	
Standard Property Extended Property Action	
Event: Press	
Add Edt Delete V Copy Cot Prate	
Add To Block Paste to Block	
OK	

While the action to turn on the lamp is selected, at the bottom left of the dialog box select [Edit] and open [Action update dialog].

I	A sting undete distant	
	Action update dialog	
	Action	
	Action Group	Numerical Operations
	Action	Value Setting
	Parameters	
	Memory Type	Global Memory 🔹
	Memory ID (Num Type)	GM_LED01 ▼
	Value	
As	the lamp will be turned of	f, change
the	e value to 0.	
	ОК	Cancel

Set up Number Display Controls

Draw a Numeric Display



Select "Label" from the Toolbox at the left of the Builder and drag and drop "Num_0001" on to the screen.

Numeric Display Link Setting

Link data		-
Memory Type	Global Memory	
Memory ID	GM_VOL01	
Numeric Keypad		

Create an association between the Number Display Controls and Global Memory. When link is set, the associated Global Memory value is displayed.

In this tutorial, set up as follows.

- Memory Type: Global Memory
- Memory ID: GM_VOL01

Edit the display digits for the Numeric Display

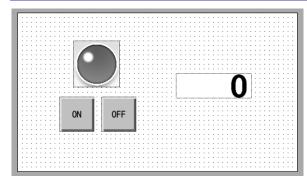
Data		-
Value	0	
Display Digit	3	

Set up the number of digits to display.

In this tutorial, set up as follows.

• Display Digit: 3

Adjust the position and size of each part

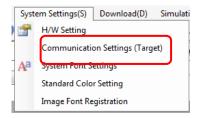


Use the mouse to adjust the position and size of parts.

You can change the size of a part by dragging the edge of the part.

1.7.4 InfoSOSA Communication Settings

Sets up InfoSOSA and microcontroller communication settings. Set to match communication specifications on the microcontroller.



From the menu bar select [System Settings] -[Communication Settings (Target)].

Communication Settings	Host	RS485	
Communication Mode:	InfoSOSA Protocol	Address:	0
Device:	RS232	Re-Send Count	0
Communication Speed:	19200	Re-Send Interval (Unit:10msec)	0
Character Bit:	8	*	
Stop Bit:	1	v l	
Parity Bit:	None	•	
Flow Control:	None	-/	

In the [SIO1] tab, set the following.

Communication Protocol: Host Communication Mode: InfoSOSA Protocol Communication Speed: 19200bps Parity Bit: None Flow Control: None

Communication on the SIO1 port runs using these settings.

Notify Event to Host	SI01 -	Respond Monitoring Time:	1
Notification Method:	Immediate Notification -	Retry Count:	3
		Netry Courte.	5
Send String to Host	No Communication 🔻		
<u> </u>			

In the [Communication by Action] tab, set the following.

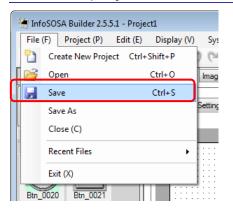
Notify Event to Host: SIO1 Notification Method: Immediate Notification

When the [Notify value to Host] action is executed, a transmission is sent on the SIO1 port.

1.7.5 Save the InfoSOSA project

Saving Project

Save the project



Saving Project

Click "File" in the upper left of the Builder and select "Save" to save the project. You can also save with the "save button" in the tool bar.



*When saving the project with a different name, click "Save As".

1.7.6 Check operations with InfoSOSA Simulator

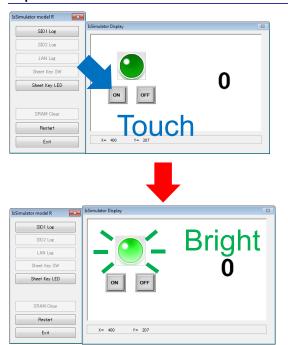
With the simulator, check the operation of the project you have created.

Start Up the Simulator

load(D)	Simulation (T) Help (H)	
🔲 St	Simulation Start F5	
irces Glo	Simulation Setting	oRoutine
)
	100 %	ί

You can use the PC to check operations of the project you created.

To start up the simulator, click "Simulation" and choose "Simulation Start" from the menu.



Operation Check with Simulator

The screen created is displayed on the simulator.

Check if the action set actually works by clicking the button displayed on the simulator.

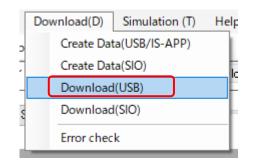
If the action is set correctly, the lamp will light up. If the lamp lights, simulation is complete.

Next, to check communication with the microcontroller, download the screens to the InfoSOSA unit.

1.7.7 Download to InfoSOSA

Download the project you created to InfoSOSA.

Download



Download (transfer) screens to the InfoSOSA unit. To transfer screens, from the [Download] menu, select [Download (USB)].

USB Download
Select Data
Select Project to download
Current Project
Set
Cancel

Select the [Current Project] check box, and click [Set].

Data Creation Dialog				
Download Data Model: User Version:	IS731-4WQ			
Total Data Size:	1.0.0	0 Byte		
Saving Destination				Browse
Open data folder	after saving		Save	Close

Create download data. Click [Save]. To change the save location of download data, click [Browse] and edit the destination folder.

lodel	Serial	Status	Backup	Download	Progress
		t the device to th powe cted device will be	r.		

InfoSOSA connection wait screen. Connect your PC and the InfoSOSA with a USB Cable (Type A/mini-B). Please refer to <u>1.6.1 USB Cable Connection</u> for

connecting with the PC.

USB Cable (Type A/mini-B)

After connecting to the PC, turn ON the power of InfoSOSA.

Model	Serial	Status	Backup	ownload	Progress
IS731-4WQ	1611L00011	Idle	None	Start	
			_	Refresh	Close

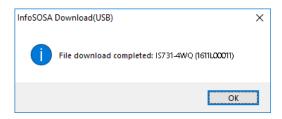
The connected InfoSOSA is displayed. Click the [Start Download] button.

Transfer Settings	×
Project	
Download Data:	
C.¥Seedsware¥Download¥Project1_1.0.0	Reference
Transfer Option	
Backup project data on device ※Backup will consume space on the device	
Backup will not be available depending on the Project Size	
🗹 Retain previous Backup Files	
Church Download	Consel
Start Download	Cancel

Click the [Start Download] button.

Aodel	Serial	Status	Backup	Download	Progress
IS731-4WQ	1611L00011	Downloading[F:]	None	Cancel	

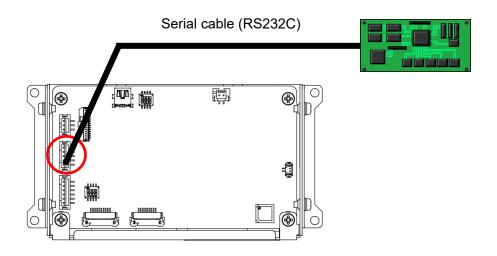
Download is executed.



Download is completed.

1.7.8 Connect the microcontroller and InfoSOSA

Connect to the microcontroller with a serial cable (RS232C). Connect the microcontroller serial port and InfoSOSA SIO1 port.

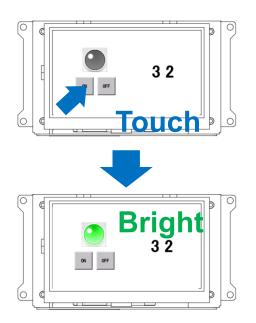


1.7.9 Operation Check

Connect InfoSOSA to the microcontroller and test if they operate as specified.

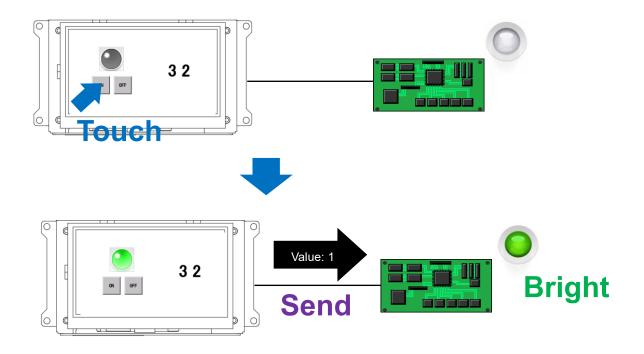
Touch a button on the screen to turn a lamp on the screen on or off

Touch the ON/OFF button on the LCD screen (InfoSOSA) to turn a lamp on the screen on or off. Without communication, InfoSOSA uses an action to change the value in its memory GM_LED01 (inside InfoSOSA). As there is a change in value of memory GM_LED01, the lamp associated with the link setting turns on.



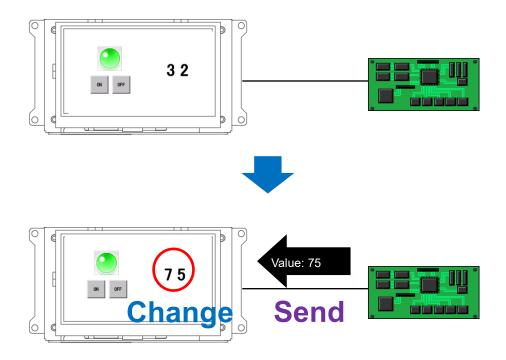
Touch the button on the screen to turn the LED on or off

Touch the ON/OFF button on the LCD screen (InfoSOSA) to turn the LED on the microcontroller on or off. When the button is pressed, InfoSOSA uses communication to send the value of memory GM_LED 01 to the microcontroller. The microcontroller analyzes the notification command from InfoSOSA, and turns the LED either on or off.



Run operations on the microcontroller volume to change values on the screen

Run operations on the microcontroller volume and values change on the LCD screen (InfoSOSA). The microcontroller uses communication to send a command to write a value to InfoSOSA memory GM_VOL01. As there is a change in value of memory GM_VOL01, the number display control associated with the link setting is also changed.



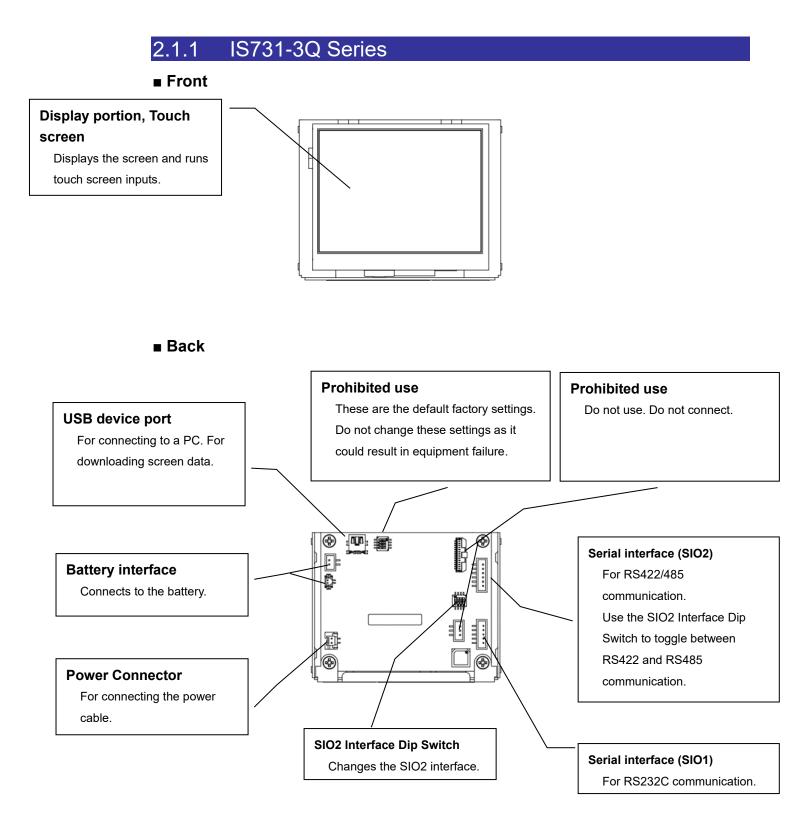
2. IS731 Series Function Details

Chapter Contents

2.1	Part Name and Function	47
2.2	Operation Mode	53
2.3	Download Tool	55
2.4	Project backup	59
2.5	OSD mode details	62
2.6	Troubleshooting	70

2.1 Part Name and Function

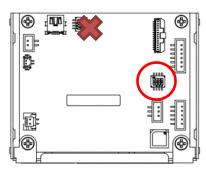
Descriptions of part names and functions on the IS731 Series



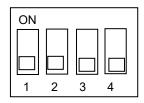
SIO2 Interface Dip Switch

When changing the SIO2 Interface Dip Switch, set up the change dip switch.

* There are multiple DIP switches. Be careful not to change other switches.

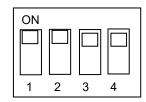


RS422

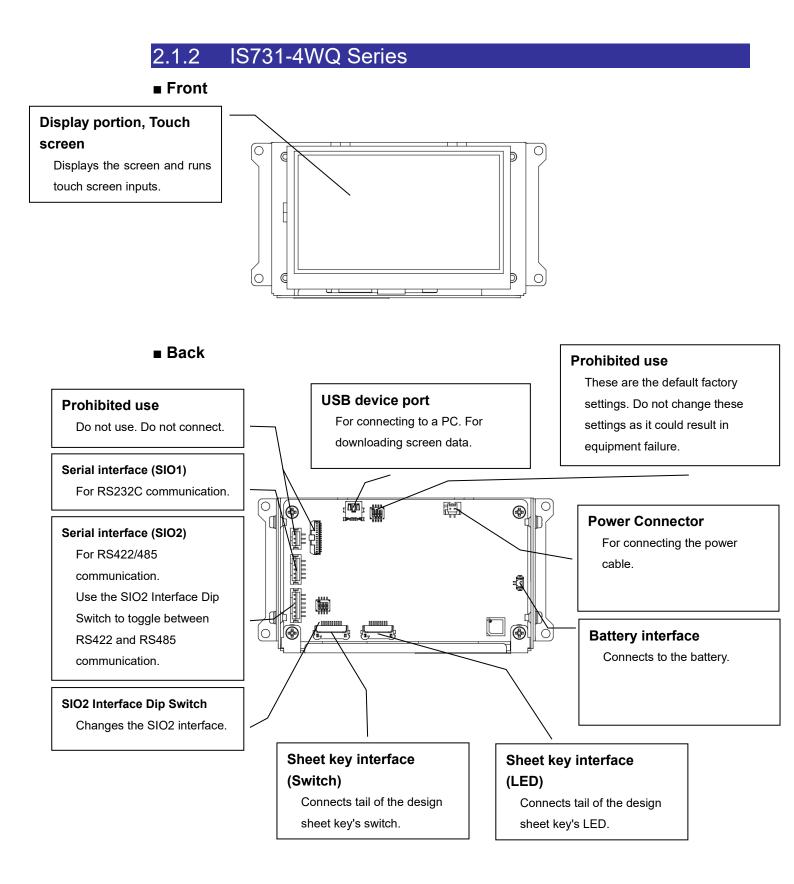


To set RS422, set dip switches 2 to 4 to OFF. When dip switch 1 is ON, enables termination resistance; when OFF, there is no termination resistance.

RS485



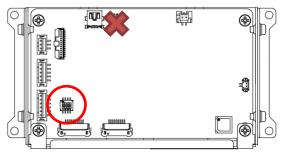
To set RS485, set dip switches 2 to 4 to ON. When dip switch 1 is ON, enables termination resistance; when OFF, there is no termination resistance.



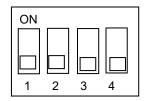
SIO2 Interface Dip Switch

When changing the SIO2 Interface Dip Switch, set up the change dip switch.

* There are multiple DIP switches. Be careful not to change other switches.

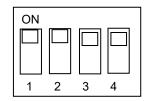


RS422

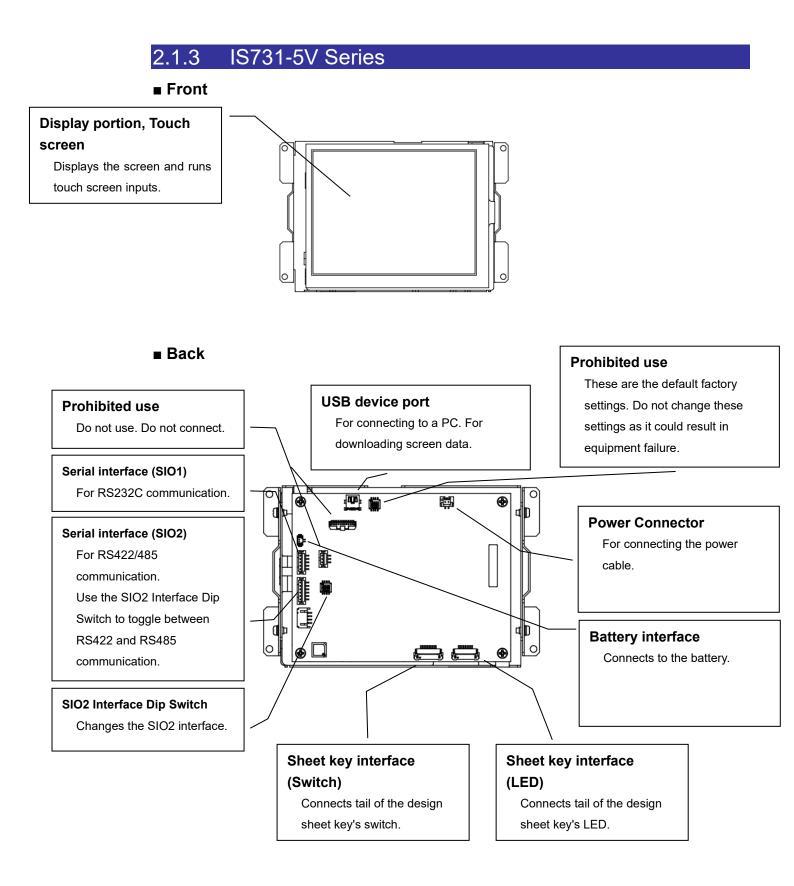


To set RS422, set dip switches 2 to 4 to OFF. When dip switch 1 is ON, enables termination resistance; when OFF, there is no termination resistance.

RS485



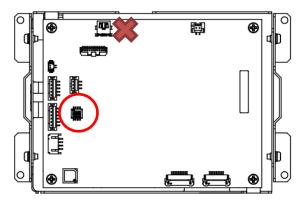
To set RS485, set dip switches 2 to 4 to ON. When dip switch 1 is ON, enables termination resistance; when OFF, there is no termination resistance.



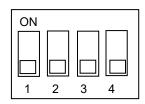
SIO2 Interface Dip Switch

When changing the SIO2 Interface Dip Switch, set up the change dip switch.

* There are multiple DIP switches. Be careful not to change other switches.

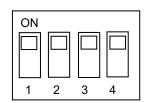


RS422



To set RS422, set dip switches 2 to 4 to OFF. When dip switch 1 is ON, enables termination resistance; when OFF, there is no termination resistance.

RS485



To set RS485, set dip switches 2 to 4 to ON. When dip switch 1 is ON, enables termination resistance; when OFF, there is no termination resistance.

2.2 **Operation Mode**

The IS731 Series includes the following operation modes. Change to suit your application.

2.2.1 Normal mode

Mode that runs the project (screen) created in Builder. Turn on the power and typically you enter normal mode. Downloading a project via a serial cable is run in normal mode.



2.2.2 OSD mode

Mode for downloading a project (screen data) via an USB cable, changing the backlight brightness, and so on.

The following directions describe how to start up in OSD mode.

- Power ON while connected to PC with USB Cable
- Run Action [Restart in OSD mode]
- Run the host communication command RS03 (Restart in OSD mode)

Please refer to <u>1.6.1 USB Cable Connection</u> for connecting with the PC. Please refer to the separate "Reference Manual" for actions and host communication commands.

13	OSD Mode	1916
	Project Domnload	
١.	USB Mode	18
12	Setting	
	System Information	18
	Concession in the second second	- 63 I C

The following functions are in OSD mode. For more information, refer to <u>2.5 OSD mode details</u>.

Items	Contents
Project Download	Function for connecting with InfoSOSA Builder and downloading
	a project.
USB Mode	Function for connecting InfoSOSA to the PC as a storage device.
Communication Settings	Edit the communication settings on the microcontroller board.
LCD Settings	Change the backlight brightness and auto-off time.
RTC Setting	Changes the time setting.
Touch Screen Calibration	Calibrate the touch screen.
Display System Version	Displays the system software version.
Display Model Name	Displays the unit's model name.
Display Serial No.	Displays the unit's serial number.

2.3 Download Tool

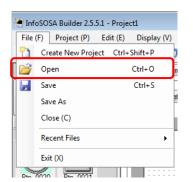
In addition to InfoSOSA Builder, the IS731 Series includes its own download tool.

2.3.1 Download Tool

The Download Tool is for transferring download data already prepared on Builder. As this tool does not allow you to edit, it is most suitable for downloading in large numbers for a mass-produced product after the project (screen data) is complete.

2.3.2 Create Download Data

To use the download tool, you need to prepare the download data beforehand in Builder.



Open the project for which you want to create the download data.



From the [Download] menu, select [Create Data(USB/IS-APP)].

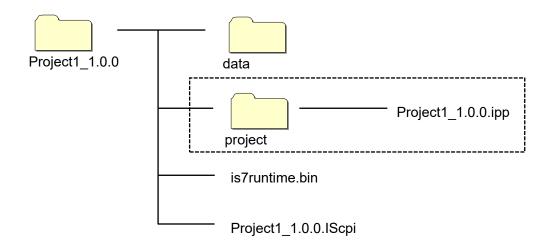
Data Creation Dialog			
Download Data Model:	IS731-4WQ		
User Version: Total Data Size:	1.0.0	0 Byte	
Saving Destination			Browse
Open data folder	after saving		Save Close

Click [Save]. To change the save location of download data, click [Browse] and edit the destination folder.

InfoSOSA Builder	X
Project saved.	
ОК	

After the data is created, the save destination folder opens.

The download data is structured as follows. All files are necessary for download, so save all folders. * If you do not perform the project backup described later, you do not need the "project" folder.



2.3.3 Download

The download tool is installed at the same time you install the Builder. In the installation folder, run the file "InfoSOSAUsbDL.exe".

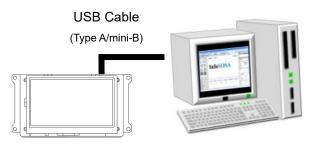
- * The default installation folder is "C:\Seedsware\InfoSOSABuilder*.*".
- * "*.*" is the version number.

Run InfoSOSAUsbDL.exe to display the following screen.

Model	Serial	Status	Backup	Download	Progress
			out op		
	0	t the device to th	- DO	an the	
		powe	r.		
	Conne	cted device will be	displayed on t	the list.	
			0	Refresh	Close
			l	morroari	0,000

Create the InfoSOSA waiting to connect screen Connect your PC and the InfoSOSA with a USB Cable (Type A/mini-B).

Please refer to 1.6.1 USB Cable Connection for connecting with the PC.



After connecting to the PC, turn ON the power of InfoSOSA.

Model	Serial	Status	Backup	Download	Progress
IS731-4WQ	1611L00011	Idle	None	Start	
				Refresh	Close

The connected InfoSOSA is displayed. Click the [Start] button.

ransfer Settings	×
Project	
Download Data:	
	Reference
Transfer Option	
Backup project data on device %Backup will consume space on the device	
Backup will not be available depending on the Project Size	
🖂 Retain previous Backup Files	
Start Download	Cancel

Click the [Browse] button and select the management file (extension .IScpi) for the download data that was previously prepared.

Project	
Download Data:	
C:¥Seedsware¥Download¥Project1_1.0.0	Reference
Backup project data on device	

Click the [Start] button.

Aodel	Serial	Status	Backup	Download	Progress		Download is executed.
IS731-4WQ	1611L00011	Downloading[F:]	None	Cancel			
•-							
				Refresh	Close	_	

InfoSOSA Download(USB)		Х
1	File download completed: IS731-4WQ (1611L00011)	
	ОК	

Download is completed.

2.4 Project backup

The IS731 Series has a function for backing up the project onto the unit.

2.4.1 Project backup

On downloading to InfoSOSA, project backup saves to the unit the project file created in Builder. Backing up the project onto the unit makes it possible for you to extract and edit the project.

2.4.2 Backup process

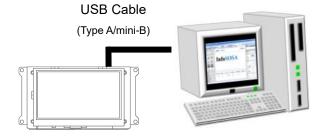
In the download Transfer Options, if the [Backup project data] check box is selected, on download a backup is saved on the InfoSOSA unit.

Backup will consume space on the device.
 Backup may not be possible, depending on the screen data size.

Transfer Settings	×
Project	
Download Data:	
C:¥Seedsware¥Download¥Project1_1.0.0	Reference
Transfer Option	
☑ Backup project data on device ※Backup will consume space on the device	
Backup will not be available depending on the Project Size	
Retain previous Backup Files	
Start Download	Cancel

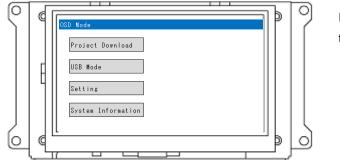
2.4.3 Extraction process

You can extract the project backed up to the unit with the following steps.

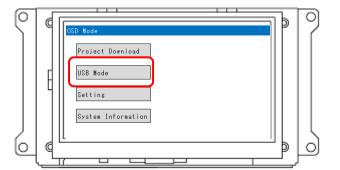


Connect a USB Cable (Type A/mini-B) between your PC and the InfoSOSA unit with the project backup. Please refer to <u>1.6.1 USB Cable Connection</u> for connecting with the PC.

After connecting, turn ON the power of InfoSOSA.

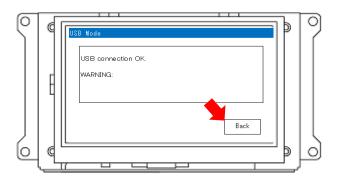


If you turn on the power when connected to the PC, the unit starts up in OSD mode.



名前 data project is7_runtime.bin Project1_1.0.0.IScpi Touch the [USB Mode] button.

You can use the PC to check the data saved on InfoSOSA. The backed up project is saved in the "project" folder. Use Explorer to copy the file.



***CAUTION**

While connected to the PC, disconnecting the USB cable or turning off the power could damage the data.

Follow the instructions below when disconnecting from the PC.

On the PC, run [Safely Remove Hardware]Touch the [Back] button.

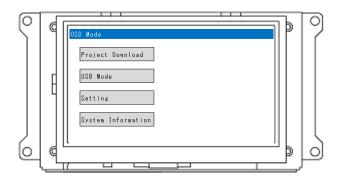
For more information, please refer to <u>2.5.3</u> <u>Detachment process</u>.

2.5 **OSD mode details**

Details on OSD mode functions are outlined here.

2.5.1 Function Table

The menu screen displays when you start OSD mode. Please refer to 2.2.2 OSD mode on the startup method.



Items	Contents
Project Download	Standby function for downloading project (screen data).
	Starting the download is run from the builder.
USB Mode	Function for connecting InfoSOSA to the PC as storage.
Setting	Function for changing settings on the InfoSOSA unit.
System Information	Function for checking information on the InfoSOSA unit.

2.5.2 Project Download

Standby function for downloading project (screen data). Starting the download is run from the builder.

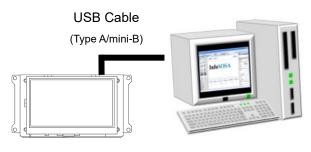
* You can also start download from the menu screen. When downloading starts, it automatically changes to this screen.

0	¢	Project Download	9
	E	Connected to InfoSOSA-Builder. NOTE:	
	e	Back	

2.5.3 USB Mode

Function for connecting InfoSOSA to the PC as a storage device. Use when you want to extract the backup project.

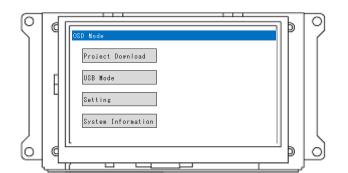
Connection method



Connect a USB Cable (Type A/mini-B) between your PC and the InfoSOSA unit.

Please refer to <u>1.6.1 USB Cable Connection</u> for connecting with the PC.

After connecting, turn ON the power of InfoSOSA.



Project Download USB Mode Setting

System Information

If you turn on the power when connected to the PC, the unit starts up in OSD mode.



O

C



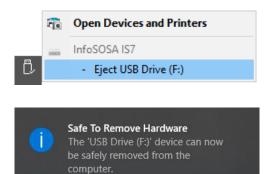
The InfoSOSA is recognized as a storage device.

* Although it is recognized as "F drive" here, the drive name varies depending on your environment.

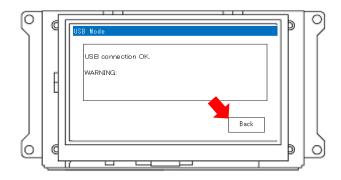
Detachment process

***CAUTION**

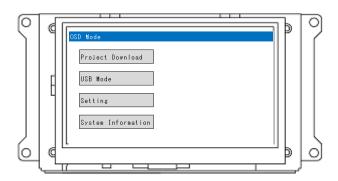
While connected to the PC, disconnecting the USB cable or turning off the power could damage the data. Follow the instructions below when disconnecting from the PC.



For the InfoSOSA recognized as a storage device, run [Safely Remove Hardware].



After detachment is complete, touch the [Back] button.

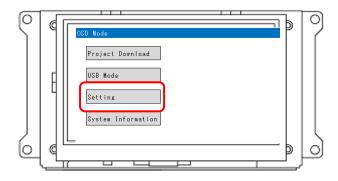


Detach the USB cable or turn the power off only after checking the menu screen is displayed.

2.5.4 Setting

Function for changing settings on the InfoSOSA unit. From the menu screen, touch the [Setting] button.

* If you run project download, values are updated with the settings from the project.



Items	Contents
SIO1	Change the SIO1 port settings.
SIO2	Change the SIO2 port settings.
LCD	Change the backlight brightness and auto-off time settings.
RTC	Sets up the clock on the InfoSOSA unit.
T/P Calibration	Runs touch screen calibration.

SIO1

You can change the SIO1 port settings. This setting is retained even when the power is turned off.

Items	Contents	
Baud Rate	Setting for the communication speed. Select from the following. 9600, 19200, 38400, 57600, or 115200 bps	
Char Bit	Setting for character bits. Fixed to 8.	
Stop Bit	Setting for the stop bit. Fixed to 1.	
Parity	Setting for the parity bit. Select from the following. None, Odd, or Even.	
Flow Ctrl	Setting for the flow control. None or RTS-CTS.	

SIO2

You can change the SIO2 port settings. This setting is retained even when the power is turned off. Touch the [RS485/RS422] button to check the setting for the [SIO2 Interface Dip Switch].

Items	Contents
Baud Rate	Setting for the communication speed (bps). Select from the following. 9600, 19200, 38400, 57600, or 115200 bps
Char Bit	Setting for character bits. Fixed to 8.
Stop Bit	Setting for the stop bit. Fixed to 1.
Parity	Setting for the parity bit. Select from the following. None, Odd, or Even.
RS485 Addr	Unique ID for the InfoSOSA unit. Select from the following. 1 to 31 * Enabled only when the [SIO2 Interface Dip Switch] is RS485.

LCD

You can change the LCD backlight setting. This setting is retained even when the power is turned off.

Items	Contents	
Brightness	Setting for brightness of the backlight. Select from the following.	
	1 (dark) to 8 (bright)	
Auto Off Time	Setting for the time that elapses before the backlight is turned of	
	Select from the following.	
	0 to 1440 (minutes)	
	* If you set a value of 0, the backlight auto off function is disabled.	
	* The backlight auto off function works only in normal mode.	

RTC

You can set the real-time clock.

This setting is saved only when the battery is connected. The battery is sold separately. If the battery is not connected during powering on, the clock is reset to January 1, 2000, 00:00:00

Valid Range
January 1, 2000, 00:00:00 to December 31, 2037, 23:59:59

* If the time goes outside the valid range, its behavior is unknown. Use the clock within the valid range.

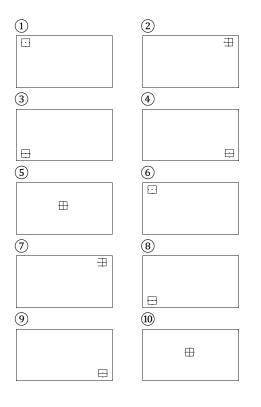
T/P Calibration

Runs touch screen calibration. This setting is retained even when the power is turned off.

Implementation procedure

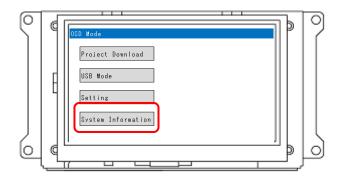
Run calibration with a touch pen.

Touch the center of the cross for 1 second or more until you hear a confirmation beep. The mark moves as shown in the following order. Touch the cross at every position. If the operation does not complete within a specified period of time, it will fail. There are two beeps if the operation failed. Run calibration again.



2.5.5 System Information

Function for checking information on the InfoSOSA unit. From the menu screen, touch [System Information] button.



The following information is displayed.

Items	Contents
System Version	It is displayed in the form of "A / B".
	A: System software version (OSD mode version)
	B: Project execution application (Runtime version)
	* B is displayed when the system software version is 2.6.2.1 or
	later.
	* If a "project execution application" that does not support version
	display is installed, will be displayed.
Model	Displays the InfoSOSA model name.
Serial	Displays the InfoSOSA serial number.

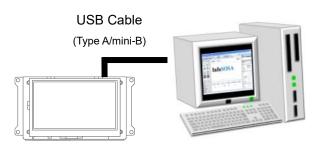
2.6 Troubleshooting

Describes how to resolve problems that may occur.

2.6.1 Unable to download (Cause1: Driver)

If InfoSOSA is not recognized correctly by the PC that executes the download, the download to InfoSOSA cannot be performed normally. Follow the steps below to confirm that InfoSOSA is properly recognized on your PC.

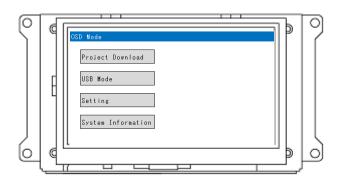
Operation check of USB device driver



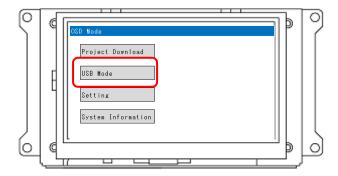
Connect a USB Cable (Type A/mini-B) between your PC and the InfoSOSA unit.

Please refer to 1.6.1 USB Cable Connection for connecting with the PC.

After connecting, turn ON the power of InfoSOSA.



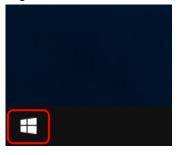
If you turn on the power when connected to the PC, the unit starts up in OSD mode.



Touch the [USB Mode] button.

Open Device Manager on your PC.

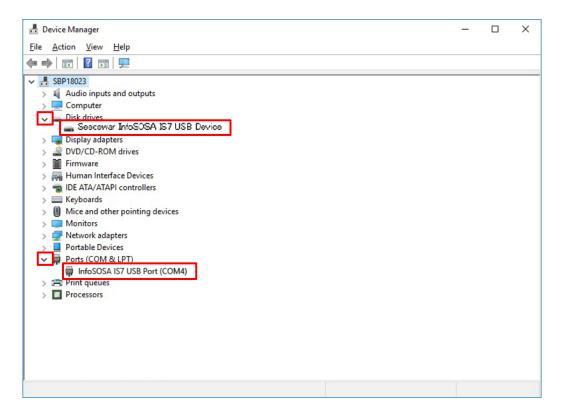
Right click on the start menu.



Click [Device Manager].

Apps and Features
Power Options
Event Viewer
System
Device Manager
Network Connections
Disk Management
Computer Management
Windows PowerShell
Windows PowerShell (Admin)
Task Manager
Settings
File Explorer
Search
Run
Shut down or sign out
Desktop

Check the following in Device Manager.



Expand the "Disk drives" tree and confirm that "Seedswar InfoSOSA IS7 USB Device" is displayed. Expand the "Ports (COM & LPT)" tree and confirm that "InfoSOSA IS7 USB Port (COM *)" is displayed.

If the above two devices are not displayed correctly, the download to InfoSOSA cannot be performed properly.

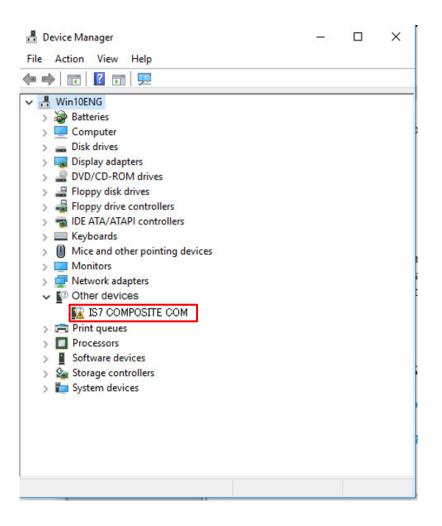
Check the solution on the next page.

Solutions when a device is not displayed normally

The action depends on the status of the device manager.

Driver not installed

If "A IS7 COMPOSITE COM" is displayed in the " Other devices" tree



[Cause]

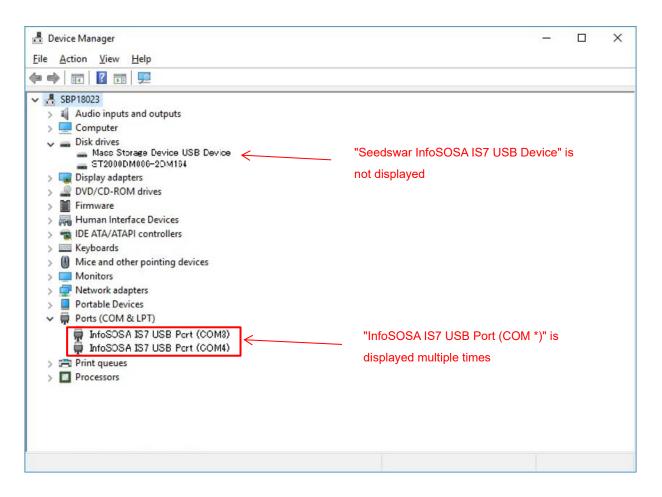
USB device driver is not installed.

[Solution]

Install the USB device driver according to "<u>1.6.1 USB Cable Connection -- Installation of USB</u> device driver"

Driver not recognized properly

If "Seedswar InfoSOSA IS7 USB Device" is not displayed in the "Disk drives" tree, or if "InfoSOSA IS7 USB Port (COM *)" is displayed multiple times in the "Port (COM & LPT)" tree



[Cause]

USB device driver is not recognized properly.

[Solution]

Reinstall the USB device driver according to the procedure on the next page.

Reinstall USB device driver

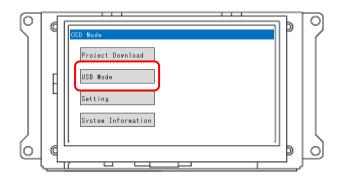
This section describes how to reinstall the USB driver when the IS731 USB driver is not operating properly.

First, connect the IS731 series unit and the PC with an USB cable (Type A/mini-B), then turn on the IS731 series unit.

USB Cable (Type A/mini-B)

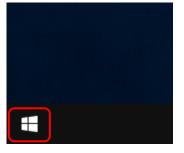


Then touch the "USB Mode" button.



Open Device Manager on your PC.

1. Right click on the start menu.



2. Click [Device Manager].

Apps and Features	
Power Options	
Event Viewer	
System	
Device Manager	
Network Connections	
Disk Management	
Computer Management	
Windows PowerShell	
Windows PowerShell (Admin)	
Windows Powershell (Admin) Task Manager	
Task Manager	
Task Manager Settings	
Task Manager Settings File Explorer	
Task Manager Settings File Explorer Search	
Task Manager Settings File Explorer Search Run	

3. From [Ports (COM and LPT)], right-click [InfoSOSA IS7 USB Port (COM*)].

* If there is more than one [InfoSOSA IS7 USB Port (COM *)], delete devices one by one according to the procedure of 3. to 5.

📇 Device Manager	-	×
<u>File Action View H</u> elp		
✓		
> 🔟 Audio inputs and outputs		
> 💻 Computer		
 Disk drives Mass Storage Device USB Device ST2000DM006-2DM164 		
> 🔙 Display adapters		
> 🧟 DVD/CD-ROM drives		
> 🎽 Firmware		
> 🙀 Human Interface Devices		
> 📷 IDE ATA/ATAPI controllers		
> 🧱 Keyboards		
> III Mice and other pointing devices		
> 🧾 Monitors		
> 🚽 Network adapters		
> 📃 Portable Devices		
V 🛱 Ports (COM & LPT)		
🙀 InfoSOSA IS7 USB Part (COM3)		
🏺 InfoSOSA IS7 USB Port (COM4)		
> 🛱 Print queues		
> Processors		

- 4. Click [Uninstall Device] or [Delete].
- 5. Check to [Delete the driver software for this device.] and click Uninstall.

Uninstall Device	×
InfoSOSA IS7 USB Port (COM4)	
Warning: You are about to uninstall this device from yo	ur system.
Delete the driver software for this device.	
Uninstall	Cancel

6. Touch the Back button with all [InfoSOSA IS7 USB Port (COM *)] uninstalled.



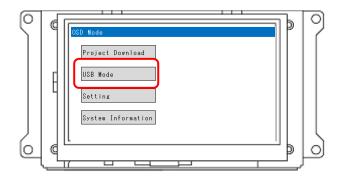
7. From the [Port (COM and LPT)] another [InfoSOSA IS7 USB Port (COM*)] will be displayed, right-click [InfoSOSA IS7 USB Port (COM*)].

8. Click [Uninstall Device] or [Delete] to uninstall.

Uninstallation is completed by the above operation. Continue to reinstall.

9. Connect the IS731 series unit and the PC with an USB cable (Type A/mini-B), then turn on the IS731 series unit again (OFF -> ON).

10. Touch the "USB Mode" button.



11. From [Other devices], right-click [InfoSOSA IS7] or [IS7 COMPOSITE COM].

File Action View Help Image: Computer Image: Computer Image: Computer Image: Computer		
✓ Win10ENG >		
 > Patteries > Computer > Disk drives > Display adapters > PDVD/CD-ROM drives > Ploppy disk drives > Floppy disk drives > IDE ATA/ATAPI controllers 		
 Keyboards Mice and other pointing devices Monitors Potwork adapters Other devices InfoSOSA IS7 Im Print queues Print queues Processors Software devices Storage controllers Tystem devices 		

12. Click [Update Driver Software].

13. Click [Browse my computer for driver software].

		×	
÷	Update Driver Software - InfoSOSA IS7		
	How do you want to search for driver software?		
	→ Search automatically for updated driver software Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.		
	→ Browse my computer for driver software Locate and install driver software manually.		
	Cance	I	

14. Click [Browse], and then specify the drive where the development kit disk is inserted, or specify the folder where the device driver is saved.

		×
←	Update Driver Software – InfoSOSA IS7	
	Browse for driver software on your computer	
	Search for driver software in this location:	
	G Browse	
	✓ Include subfolders	
	→ Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
	Next Cance	I

15. Select the [Include subfolders	check box and click [Next].
------------------	--------------------	-----------------------	--------

	×
←	
Browse for driver software on your computer	
Search for driver software in this location:	
CA Browse	
Include subfolders	
→ Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
Next Car	icel

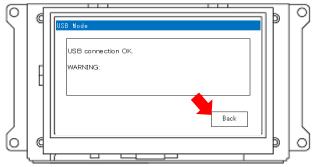
16. If the screen below appears, click [Install].

E Windows Security	\times
Would you like to install this device software?	
Name: Seedsware Ports (COM & LPT) Publisher: Seedsware Corporation	
✓ Always trust software from "Seedsware Corporation". ☑	
You should only install driver software from publishers you trust. How can I decide whit device software is safe to install?	<u>ch</u>

17. Installation is complete.

		\times
÷	Update Drivers - InfoSOSA IS7 USB Port (COM3)	
	Windows has successfully updated your drivers	
	Windows has finished installing the drivers for this device:	
	InfoSOSA IS7 USB Port	
	<u>C</u> lose	ו

18. Touch the [Back] button.



19. Wait until the menu screen is displayed.

0	ď		0
		OSD Mode	
		Project Download	
		USB Mode	
	4	Setting	
		System Information	
6			
C	Q.	P	0
	<u> </u>		

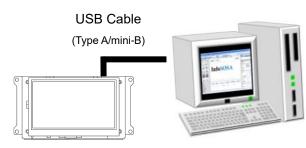
20. Turn off the power supply.

Reinstallation of the USB driver is completed.

2.6.2 Unable to download (Cause2: Damaged data)

In the middle of a download, turning off the power or disconnecting the cable could damage the data. If data is damaged, you may not be able to download anymore. If that happens, format the storage area.

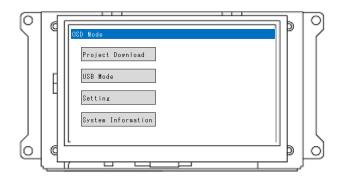
Formatting the storage area



Connect a USB Cable (Type A/mini-B) between your PC and the InfoSOSA unit.

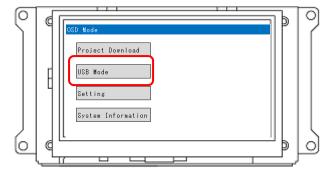
Please refer to 1.6.1 USB Cable Connection for connecting with the PC.

After connecting, turn ON the power of InfoSOSA.



If you turn on the power when connected to the PC, the unit starts up in OSD mode.







Start Explorer and right-click the InfoSOSA which was recognized as a storage device.

* Although it is recognized as "F drive" here, the drive name varies depending on your environment.

Include in library Pin to Start	>
Format	
Eject	
Cut	
Сору	
Create shortcut	
Rename	
Properties	

Select [Format].

Format USB Drive (F:)	\times
Capacity: 25.0 MB	~
Eile system FAT (Default) Allocation unit size 8192 bytes	~
Restore device defaults Volume label Format options Quick Format Start	

Set up the following, and click the [Start] button.

Items	Setting
File system	FAT
Allocation unit size	8192 bytes
Quick Format	Do not check

***CAUTION**

Formatting will erase the project file (including backup) that you may have downloaded to InfoSOSA.

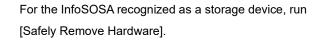
	1
Formatting USB Drive (F:) ×	
Capacity:	
25.0 MB ~	
<u>File system</u>	
FAT (Default) $$	
Allocation unit size	
8192 bytes \checkmark	
Restore <u>d</u> evice defaults	
Velore lebel	
Volume label	
E	
Format options	
Quick Format	
<u>S</u> tart Cancel	
	1
Formatting USB Drive (F:)	

Formatting.

***CAUTION**

Do not turn OFF the power of InfoSOSA in the middle of formatting.

Format is complete.

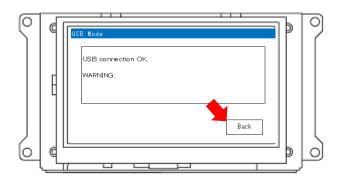


***CAUTION**

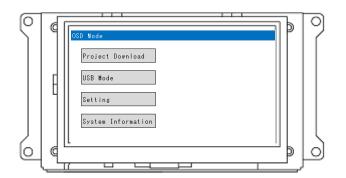
OK

It may take a few minutes for the safely remove hardware operation to complete. If you proceed before it is complete, it may result in corrupted data.

		Open Devices and Printers
	-	InfoSOSA IS7
Ċ,		- Eject USB Drive (F:)
Safe To Remove Hardware The 'USB Drive (F:)' device can now be safely removed from the		



Touch the [Back] button.



After checking the menu screen is displayed, run download again from InfoSOSA.

***CAUTION**

It may take a few minutes until the menu is displayed. If the power is turned OFF before the menu displays, it may result in corrupted data.

3. Others

Chapter Contents

3.1 Inquiries

If you have any questions, feel free to contact us.

By E-mail

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Europe, Middle East, Africa area



technical-global-eu@dush.co.jp



www.dush.co.jp/english/support/faq/

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