BONGSHIN LOADCELL Co., Ltd. Digital Indicator BS Series

Serial Driver

Supported version

V1.4.8.17 or higher



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Refer to this section to check the addresses which can communicate with an external device.



1. System configuration

The system configuration of TOP and "BONGSHIN LOADCELL Digital Indicator BS Series" is as follows.

Series	Model	Communication method	System setting	Cable
Digital Indicator	BS-7220 BS-7300 BS-7300XL BS-5200 BS-5205 BS-3520 BS-105 BS-205 BS-270 BS-32	RS–232C RS-422/485	<u>3. TOP</u> communication <u>setting</u> <u>4. External device</u> <u>setting</u>	<u>5. Cable table</u>

■ Connectable configuration

• 1 : 1 (RS-232C/422/485)



• 1 : N (RS-422/485)

₩₽₽Ŗ	BBBBB Bassa Bas T S	10 10 10 10 10 10 10 10 10 10 10 10 10 1	•••	8886 94646 9 11 12 12	188 1888 1888 1888 1888

% In Stream mode, only 1:1 communication is possible.



2. External device selection

■ Select a TOP model and a port, and then select an external device.

PLC select [C	OM1]				
Filter : [All]		\sim	:	Search :	
Vandan		Madal		Mode	el Ovendor
A&D	^		Indicator BS Series		
SEHWA CNM			Indicator bo benes		
SHINHAN Electronics					
BONGSHIN LOADCELL	-				
FANUC Co., Ltd.					
MINEBEA Co., 1 td.					
Azbil Corporation					
Ehmoanet					
CeDeSus Automation A	linese				
CodeSys Automation A	wance				
Ophir Optronics Solutio	ns Lta.				
SERVOMEX					
PLC Setting[Digit	tal Indicator	BS Series]			
Alias Name	PLC1				
Alias Name Interface	: PLC1	~		_	
Alias Name Interface Protocol String Save Mode	: PLC1 : Serial : Dedicated	✓ ✓ Change		C	omm Manual
Alias Name Interface Protocol String Save Mode	: PLC1 : Serial : Dedicated : First LH HL	Change		C	omm Manual
Alias Name Interface Protocol String Save Mode	:: Serial :: Dedicated :: First LH HL CY	Change		C	omm Manual
Alias Name Interface Protocol String Save Mode	Serial Se	Change	nd)	C	omm Manual
Alias Name Interface Protocol String Save Mode USe Redundan Operate Condition : [Change Condition : [Serial Serial Dedicated First LH HL CY TimeOut Condition	Change	nd)		omm Manual
Alias Name Interface Protocol String Save Mode	Serial Dedicated First LH HL Cy TimeOut Condition	Change	nd)	C	Edit
Alias Name Interface Protocol String Save Mode Use Redundan Operate Condition : Change Condition : Primary Option Timeout	Serial Dedicated First LH HL CY ND Condition 300	Change	nd)	C (Edit
Alias Name Interface Protocol String Save Mode Use Redundan Operate Condition : Change Condition : Primary Option Timeout Send Wait	Serial Serial Dedicated First LH HL CY AND Condition S00 0 C C C C C C C C C C C C C C C C C	Change	nd)	C (Edit
Alias Name Interface Protocol String Save Mode Use Redundan Operate Condition : Change Condition : Primary Option Timeout Send Wait Retry	Serial Serial Serial Serial First LH HL CY AND Condition	Change	nd)	C (Edit
Alias Name Interface Protocol String Save Mode	:: PIC1 :: Serial : Serial : Dedicated :: First LH HL Cy AND	Change	nd)		Edit
Alias Name Interface Protocol String Save Mode Use Redundan Operate Condition : Change Condition : Timeout Send Wait Retry Model Mode	Serial Serial Dedicated First LH HL Cy AND TimeOut Condition 300 S S BS-105/205 Stream	Change	nd)		Edit
Alias Name Interface Protocol String Save Mode Use Redundan Operate Condition : Change Condition : Primary Option Timeout Send Wait Retry Model Mode Device ID	Serial Serial Dedicated First LH HL Cy AND TimeOut Condition 300 S S Stream 0 N Stream 0 N Stream 0 N Stream 0 N Stream 0 N Stream 0 N Stream 0 Stream	Change	nd)		Edit
Alias Name Interface Protocol String Save Mode	Serial Serial Dedicated First LH HL Cy AND Condition 300 S S Stream 0 Stream 0 Stream	Change Change S (Secc msec msec]	nd)		Edit
Alias Name Interface Protocol String Save Mode Use Redundan Operate Condition : Change Condition : Primary Option Timeout Send Wait Retry Mode Device ID	Serial Serial Dedicated First LH HL Cy TimeOut Condition S S Solution S Stream O S	Change Change S (Secc msec msec]	nd)		Edit
Alias Name Interface Protocol String Save Mode	:: Serial : Dedicated :: First LH HL (y AND	Change Change S (Secce msec msec]	nd)		Edit

Sett	ings	Contents				
ТОР	Model	Check the display and process of TOP t	Check the display and process of TOP to select the touch model.			
External device	Vendor	Select the vendor of the external device to be connected to TOP. Select BONGSHIN LOADCELL.				
	PLC	Select an external device to connect to	Select an external device to connect to TOP.			
		Model Interface Protocol				
		Digital Indicator BS Series Serial Dedicated				
		Please check the system configuration in Chapter 1 to see if the external device you want connect is a model whose system can be configured.				



3. TOP communication setting

The communication can be set in TOP Design Studio or TOP main menu. The communication should be set in the same way as that of the external device.

3.1 Communication setting in TOP Design Studio

(1) Communication interface setting

 $\blacksquare [Project] \rightarrow [Property] \rightarrow [TOP Setting] \rightarrow [HMI Setup] \rightarrow [Use HMI Setup Check] \rightarrow [Edit] \rightarrow [Serial]$



Items	TOP External device		Remarks
Signal Level (port)	RS-232C / RS-422 / RS-485	RS-232C / RS-422 / RS-485	
Baud Rate	1152		
Data Bit	8		
Stop Bit	1		
Parity Bit	Nor	ne.	

* The above settings are examples recommended by the company.

Items	Description
Signal Level	Select the serial communication method between the TOP and an external device.
Baud Rate	Select the serial communication speed between the TOP and an external device.
Data Bit	Select the serial communication data bit between the TOP and an external device.
Stop Bit	Select the serial communication stop bit between the TOP and an external device.
Parity Bit	Select the serial communication parity bit check method between the TOP and an external device.



(2) Communication option setting

■ [Project] → [Property] → [PLC Settings > COM > PLC1: Digital Indicator BS Series]

Set the communication options in TOP Design Studio.

Project Option		×
Change HMI[H] Add PI	LC [A] TIT Change PLC[C] X Delete PLC[D]	
 TOP Setting SYS : RD1520X Option Module Setting FieldBus (0) RFID (0) Ovice Setting Device Setting COM1 (1) PLC1 : Digital Indicator BS COM2 (0) 	PLC Setting[Digital Indicator BS Series] Alias Name : PLC1 Interface : Serial Protocol : Dedicated String Save Mode : First LH HL Change Use Redundancy	Comm Manual
Wireless (0) USBDevice (0)	Operate Condition : AND Change Condition : TimeOut Condition Edit	
	Primary Option Timeout 300 msec Send Wait 0 msec Retry 5 msec	
	Model BS-105/205 Mode Stream Device ID 0	
< >>		Apply Close

Items	Settings	Remarks
Interface	Select "Serial".	Refer to "2. External
Protocol	Select the communication protocol between the TOP and an external device.	device selection".
TimeOut (ms)	Set the time for the TOP to wait for a response from an external device.	
SendWait (ms)	Set the waiting time between TOP's receiving a response from an external device and	
	sending the next	
Retry	Set the number of retries in case of communication failure.	
Model	Select the model of the external device.	
Mode	Select the communication method of the external device.	*Note 1)
Device ID	Enter the equipment number of the external device.	

*Note 1) Stream: Select when the indicator data output setting is "Always send".

Command: Select when the indicator data output setting is "Transfer when data is requested".



3.2. Communication setting in TOP

* This is a setting method when "Use HMI Setup" in the setting items in "3.1 TOP Design Studio" is not checked.

■ Touch the top of the TOP screen and drag it down. Touch "EXIT" in the pop-up window to go to the main screen.



(1) Communication interface setting

■ [Control Panel] → [Serial]

	õ		Control Panel	rial	×	
Run	System	Dev	i Serial Port: Signal Level ® RS-232C © RS-4	COM1 122(4) O RS-485(2)		
	PLC	Security Da	Baud Rate:	115200	-	
Viewer		• • •	Data Bit: Stop Bit:	8	- -	
	Ethernet	Serial	Parity Bit:	None		
Screen shot	Diagnost ic	File Manager	Auto Search	Loopback Test		
	[System]			Apply Cance		

TOPRX - TOPRX0800S

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Items	ТОР	External device	Remarks
Signal Level (port)	RS-232C / RS-422 / RS-485	RS-232C / RS-422 / RS-485	
Baud Rate	1152		
Data Bit	8		
Stop Bit	1		
Parity Bit	Nor	ne.	

* The above settings are setting examples recommended by the company.

Items	Description
Signal Level	Select the serial communication method between the TOP and an external device.
Baud Rate	Select the serial communication speed between the TOP and an external device.
Data Bit	Select the serial communication data bit between the TOP and an external device.
Stop Bit	Select the serial communication stop bit between the TOP and an external device.
Parity Bit	Select the serial communication parity bit check method between the TOP and an external device.



(2) Communication option setting

 $\blacksquare [Control Panel] \rightarrow [PLC]$

	õ		PLC	×	
	🔯 Syste	Driver(COM1)	PLC1(Digital Indicator BS Series)		
Run				J	
		Interface	Serial		
MAG		Protocol	Dedicated		
-1	PLC	Timeout	300 🖨 msec		
VNC		Send Wait	0 🖨 msec		
Viewer	1 (m)	Retry	5		
	Ethernet	Model	BS-105/205 -		
		Mode	Strea -		
Screen	e met	Device IE	0		
shot	1mm				
	Diagnostic				
		[
	LSystem	Diagnostic	Apply	Cancel	
	·,				
	RUUS		n91_10	3-31 04-16-13 PM	
		_			
Items	Settings			Remarks	
Interface	Select "Serial".			Refer to "2. External	
Protocol	Select the communication protocol between the TOP and an external device.			device selection .	
SandWait (ms)	Set the time for the IOP to wait for a response from an external device.				
Senavvait (ms)	sending the new	time between TOPS	receiving a response from an external device and		
Retry	Set the number of retries in case of communication failure				
Model	Select the mode	l of the external dev			
Mode	Select the comm	nunication method o	of the external device.	*Note 1)	
Device ID	Enter the equipr	ment number of the	external device.		

*Note 1) Stream: Select when the indicator data output setting is "Always send".

Command: Select when the indicator data output setting is "Transfer when data is requested".



3.3 Communication diagnostics

■ Check the interface setting status between the TOP and an external device.

- Touch the top of the TOP screen and drag it down. Touch "EXIT" in the pop-up window to go to the main screen.
- Check if the COM port settings you want to use in [Control Panel > Serial] are the same as those of the external device.
- Diagnosis of whether the port communication is normal or not
- Touch "Communication diagnostics" in [Control Panel > PLC].

ОК	Communication setting normal
Time Out Error	Communication setting abnormal
	- Check the communication settings of the communication cable, TOP and external device.

■ Communication diagnostics sheet

- If there is a problem with the communication connection with an external terminal, please check the settings in the sheet below.

Items	Conte	ents	Ch	eck	Remarks
System	How to connect the sy	stem	OK	NG	1 Custom configuration
configuration	Connection cable name	e	OK	NG	<u>1. system configuration</u>
ТОР	Version information		OK	NG	
	Port in use		OK	NG	
	Driver name		OK	NG	
	Other detailed settings		OK	NG	
	Relative prefix	Project setting	OK	NG	
		Communication	OK	NC	2. External device selection
		diagnostics	ŬK	NG	3. Communication setting
	Serial Parameter	Transmission	OK	NC	
		Speed	ÜK	NG	
		Data Bit	OK	NG	
		Stop Bit	OK	NG	
		Parity Bit	OK	NG	
External device	CPU name	OK	NG		
	Communication port n	OK	NG		
	Protocol (mode)		OK	NG	
	Setup Prefix		OK	NG	
	Other detailed settings		OK	NG	4. External device setting
	Serial Parameter	Transmission	OK	NG	4. External device setting
		Speed	ÜK	NG	
		Data Bit	OK	NG	
		Stop Bit	OK	NG	
		Parity Bit	OK	NG	
	Check address range				6. Supported addresses
			OK	NG	(For details, please refer to the PLC
					vendor's manual.)



4. External device setting

Set the RS-232C/422/485 interface by referring to the manual of the external device.

The setting method differs depending on the model. Please refer to the manual provided by BONGSHIN LOADCELL Co., Ltd. for setting.

Transmission mode^{*Note 1}): Select 1 of "Always Send" (Stream mode) or "Send when data is requested" (Command mode).

Transmission Speed: 115200 bps Data Bit: 8

Stop Bit: 1

Parity Bit: None

*Note 1) If there is no setting item, set TOP to Stream mode.



5. Cable table

We introduce the cable diagram for normal communication between TOP and the corresponding device. The cable table below may differ depending on the indicator model. For details, refeer to the manual provided by BONGSHIN LOADCELL Co., Ltd.

ТОР				Externa	l device
Pin	Signal	Pin	Cable connection	Cignal name	Pin
arrangement*Note 1)	name	number		Signal name	arrangement*Note 1)
15	CD	1			15
00)	RD	2		TXD	$(\circ \circ)$
	SD	3		RXD	
6 9	DTR	4			6 9
Based on	SG	5			Based on
communication	DSR	6			communication
cable connector	RTS	7		GND	cable connector
front,	CTS	8			front,
D-SUB 9 Pin male		٥			D-SUB 9 Pin male
(male, convex)		9			(male, convex)

■ RS-232C (1:1 connection)

*Note 1) The pin arrangement is as seen from the connecting side of the cable connection connector.

■ **RS-422** (1:1 connection)

TC	OP			Extern	al device
Pin	Signal	Pin	Cable connection	Cignal name	
arrangement*Note 1)	name	number		Signal name	
1 5	RDA(+)	1		TXD+	
$\left(\circ \circ \right)$		2		TXD-	
		3		RXD+	
6 9	RDB(-)	4		RXD-	
Based on	SG	5			
communication	SDA(+)	6			
cable connector		7			
front,		8			
D-SUB 9 Pin male (male, convex)	SDB(-)	9			

*Note 1) The pin arrangement is as seen from the connecting side of the cable connection connector.

■ **RS-485** (1:1 connection)

TC	ТОР			External device	
Pin	Signal	Pin	Cable connection	Cignal name	
arrangement*Note 1)	name	number		Signal name	
1 5	RDA(+)	1	├ - ₱	TRX+	
$\left(\circ \circ \right)$		2		TRX-	
		3			
6 9	RDB(-)	4	┝─┼─╇		
Based on	SG	5			
communication	SDA(+)	6	↓		
cable connector		7			
front,		8			
D-SUB 9 Pin male (male, convex)	SDB(-)	9			

*Note 1) The pin arrangement is as seen from the connecting side of the cable connection connector.



■ **RS-485** (1:1 connection)

TOP				External device
Din orrangement	Signal	Cable connection	Signal	
Pin analigement	name		name	
	+ ·		TRX+	
0			TRX-	
DO I SG	SG			
10 -				
005 +				
U				
	l			

■ RS-422	(1:N connection) - Refer to 1:1	connection to	connect in the	following way.
----------	---------------------------------	---------------	----------------	----------------

TOP	Cable connection and signal	External device	Cable connection and signal	External device
Signal name	direction	Signal name	direction	Signal name
RDA(+)		TXD+		TXD+
RDB(-)		TXD-		TXD-
SDA(+)		RXD+		RXD+
SDB(-)		RXD-		RXD-

■ RS-485 (1:N connection) – Refer to 1:1 connection to connect in the following way.

TOP	Cable connection and signal	External device	Cable connection and signal	External device
Signal name	direction	Signal name	direction	Signal name
RDA(+)	•	TRX+		TRX+
RDB(-)	- •	TRX-		TRX-
SDA(+)				
SDB(-)				



6. Supported addresses

The devices available in TOP are as follows:

The device range (address) may differ depending on the CPU module series/type. The TOP series supports the maximum address range used by the external device series. Please refer to each CPU module user manual and be take caution to not deviate from the address range supported by the device you want to use.

BS-7220/7300/7300XL

Address	Data	Bit	Word	Size	Read/Write	Remarks
D	Weight	D0.00~D0.31	D0~D0	32 bit		
STATUS	Measurement status	STATUS0~STATUS2	STATUS	16 bit		*Note 1)

*Note 1) Measurement status when each bit is ON.

Bit	Status
0	Stable
1	Unstable
2	Peak
3~15	Reserved

BS-205/105

Address	Data	Bit	Word	Size	Read/Write	Remarks
D	Weight	D0.00~D0.31	D0~D0	32 bit	Read	
HOLD_ON	Hold on	HOLD_ON	HOLD_ON	-	Write	*Note 1)
HOLD_OFF	Hold off	HOLD_FF	HOLD_OFF	-	Write	*Note 2)

*Note 1) Address for sending commands to perform special functions.

*Note 2) Available only in Command mode.

BS-5200/5205

Address	Data	Bit	Word	Size	Read/Write	Remarks
D	Weight	D0.00 ~ D0.31	D0~D0	32 bit	Read	
STATUS	Measurement status	STATUSO ~ STATUS2	STATUS	16 bit	Read	*Note 1)
GS/NT	Measurement status	GS/NT0 ~ GS/NT1	GS/NT	16 bit	Read	*Note 2)
UNIT	Unit	-	UNIT	2 letters	Read	*Note 3)

*Note 1) Measurement status when each bit is ON.

Bit	Status
0	Stable
1	Unstable
2	Over load
3~15	Reserved

*Note 2) Measurement status when each bit is ON.

Bit	Status
0	Gross weight
1	Net weight
2~15	Reserved

*Note 3) String data



BS-3520

Address	Data	Bit	Word	Size	Read/Write	Remarks
D	Weight	D0.00 ~ D0.31	D0~D0	32 bit	Read	
STATUS	Judgment	STATUSO ~ STATUS2	STATUS	16 bit	Read	*Note 1)
LO	Low Limit Value	-	LO	32 bit	Read/Write	
HI	High Limit Value	-	Н	32 bit	Read/Write	
RY1	RY1	-	RY1	32 bit	Read/Write	*Note 2)
RY2	RY2	-	RY2	32 bit	Read/Write	
RY3	RY3	-	RY3	32 bit	Read/Write	
ZERO	Zero action	ZERO	ZERO	-	Write	
HOLD_ON	Hold on	HOLD_ON	HOLD_ON	-	Write	*Note 3) *Note 4)
HOLD_OFF	Hold off	HOLD_OFF	HOLD_OFF	-	Write	11010 4)

*Note 1) Judgment when each bit is ON.

Bit	Status
0	L: RY1(LO) Relay action
1	O: RY2(OK) Relay action
2	H: RY3(HI) Relay action
3	A: RY1(LO), RY2(OK) Relay action
4	B: RY2(OK), RY3(HI) Relay action
5	C: RY1(LO), RY3(HI) Relay action
6	F: RY1(LO), RY2(OK), RY3(HI) Relay action
7	N: RY1(LO), RY2(OK), RY3(HI) Relay OFF or No relay mode
8~15	Reserved

*Note 2) Float-type data

*Note 3) Address for sending commands to perform special functions.

*Note 4) Available only in Command mode.

BS-270/32

Address	Data	Bit	Word	Size	Read/Write	Remarks
D	Weight	D0.00 ~ D0.31	D0~D0	32 bit	Read	
STATUS	Measurement status	STATUSO ~ STATUS2	STATUS	16 bit	Read	*Note 1)
GS/NT	Measurement status	GS/NT0 ~ GS/NT1	GS/NT	16 bit	Read	*Note 2)
UNIT	Unit	-	UNIT	2 letters	Read	*Note 3)

*Note 1) Measurement status when each bit is ON.

Bit	Status
0	Stable
1	Unstable
2	Over load
3~15	Reserved

*Note 2) Measurement status when each bit is ON.

Bit	Status
0	Gross weight
1	Net weight
2~15	Reserved

*Note 3) String data.



X Method to send commands to perform special functions

Addresses for sending special function performance commands are write-only and can be used by registering the object's action to turn on or off bits of that address, or to enter any value.

Ex) Send a hold setting command by pressing a square object.

- 1. After registering the square object, set "Condition" in "Effects and Actions" to [Event > Touch Down].
- 2. Set the Action to [Bit > HOLD_ON Address Input > ON].
- (Set the maximum number of runs to 1, set the cycle, and set the delay to zero.)
- 3. Send the hold setting command to the indicator by pressing the square object in TOP.

Rectangle Property			×
PREVIEW	Shape Text Effect & Acti	on	
	No. Condition	Effect	Action
HOLD	1 Touch Down	None	[PLC 1:HOLD ON: 1:DEC]=ON group:0
ON			
	🛧 Up [U] 🛛 🖶 Down [O]		🕂 Add [A] 🖉 Modify [M] 🗶 Delete [D]
	Condition Effect Action	n	
	Max Excute Count : 1 + (0=	∞) Interval: 0 🔷 (100m	s) Delay Time : 0 🗘 (100ms) 🕂
TD . 1			
ID:1 SEQ:0 x ⋅ 176 A x ⋅ 131 A			
Width : 64 + Height : 62 +	Bit 🞯 🔍	୍ରତ୍ତ ଡିନ୍ ଡିନ୍	
Security Level : 0			Puise time : 10 (100ms)
Create Security Log			
Ignore GlobalLock			
If Security level is low then			
✓ Visible InterLock Icon			
Visible Pemission Icon			
Display on top when changed			
Memo :			
Heno.			
			OK Cancel
Rectangle Property			×
Rectangle Property PREVIEW	Shape Text Effect & Acti	on	×
Rectangle Property PREVIEW	Shape Text Effect & Acti	on Effect	Action
Rectangle Property PREVIEW	Shape Text Effect & Acti No Condition 1 Touch Down	on Effect None	Action [PLC1:HOLD_ON: 1:DEC]=ON group:0
Rectangle Property PREVIEW HOLD ON	Shape Text Effect & Acti No Condition 1 Touch Down	ON Effect None	Action [PLC1:HOLD_ON: 1:DEC]=ON group:0
Rectangle Property PREVIEW HOLD ON	Shape Text Effect & Acti No Condition 1 Touch Down	ON Effect None	Action [PLC1:HOLD_ON:1:DEC]=ON group:0
Rectangle Property PREVIEW HOLD ON	Shape Text Effect & Acti No Condition 1 Touch Down	on Effect None	Action [PLC1:HOLD_ON:1:DEC]=ON group:0
Rectangle Property PREVIEW HOLD ON	Shape Text Effect & Acti No Condition 1 Touch Down Up [1] Down [0]	on Effect None	Action [PLC1:HOLD_ON:1:DEC]=ON group:0 → Add [A] Modify [M] X Delete [D]
Rectangle Property PREVIEW HOLD ON	Shape Text Effect & Action No Condition 1 Touch Down Pup U Down (2) Condition Effect Action	on Effect None	Action [PLC1:HOLD_ON: 1:DEC] =ON group:0
Rectangle Property PREVIEW HOLD ON	Shape Text Effect & Action No Condition 1 1 Touch Down 1 Down [Q] Condition Effect Action Condition Condition Effect Action Condition Condition Operator[Q] : AND	on Effect None	Action [PLC1:HOLD_ON: 1:DEC] = ON group:0
ID : 1 SEQ : 0	Shape Text Effect & Acti No Condition 1 Touch Down Up U Down (2) Condition Effect Action Condition Operator [2] : AND Event Confirm	n	Action [PLC1:HOLD_ON:1:DEC]=ON group:0 Add [∆]
ID: 1 SEQ: 0 x: 176 Property FREVIEW HOLD ON	Shape Text Effect & Acti No Condition 1 Touch Down Up U D Down (2) Condition Effect Action Condition Operator (2) : AND Event Confirm Event Confirm	n Reason	Action PLC1:HOLD_ON: 1:DEC]=ON group:0 Add [A]
ID: 1 SEQ: 0 X: 176 Y: 131 Width: 64 Height: 62	Shape Text Effect & Acti No Condition 1 Touch Down Up U Down (Q) Condition Effect Action Condition Operator (Q) : AND Event Confirm Event Type : Tou	n Reason	Action [PLC1:HOLD_ON:1:DEC]=ON group:0 → Add [A] ▲ Modify [M] × Delete [D] + × Key : ESC → [au +] → → →
ID: 1 SEQ: 0 X: 176 Y: 131 Width: 64 Height: 62 Image: Security Level: 0 Image: Security Level:	Shape Text Effect & Acti No Condition 1 Touch Down Condition Effect Action Condition Operator[0] : AND Event Confirm Event Type : Tou Event	on Effect None	Action [PLC1:HOLD_ON:1:DEC]=ON group:0 ▲ Add (A) ▲ Modify [M] ★ Delete [D] ★ Add (A) ▲ Modify [M] ★ Delete [D] ★ Add (A) ▲ Modify [M] ★ Delete [D]
ID:1 SEQ:0 X:176 Y:131 Width:64 Height:62 Security Level:0 0	Shape Text Effect & Acti No Condition 1 Touch Down Up [1] Down [2] Condition Operator [2] : AND Condition Operator [2] : AND Event Confirm Event Type : Tou Event	on Effect None None n None Input I Result	Action [PLC1:HOLD_ON: 1:DEC]=ON group:0
ID : 1 SEQ : 0 X : 176 Preview HOLD ON X : 176 Y : 131 V Width : 64 Height : 62 V Security Level : 0 V Create Security Log	Shape Text Effect & Acti No Condition 1 Touch Down Up [1] Down [2] Condition Operator[2] : AND Condition Operator[2] : AND Event Confirm Event Type : Tou Event	on Effect None None n Reason ch Result	Action [PLC1:HOLD_ON:1:DEC]=ON group:0 Add [A] Modify [M] X Delay : D (100ms) heck : Act once
ID : 1 SEQ : 0 X : 176 * Y : 131 * Width : 64 * Height : 62 * Security Level : 0 * Create Security Log Ignore GlobalLock If Security level is low then Hide Object	Shape Text Effect & Action No Condition 1 Touch Down Up U Down O Condition Operator O: AND Condition Operator O: AND Event Confirm Event Type : Tou Event	on Effect None None n Ch	Action [PLC1:HOLD_ON:1:DEC]=ON group:0
ID : 1 SEQ : 0 X : 176 - Y : 131 - Width : 64 - Height : 62 - Security Level : 0 - Create Security Log Ignore GlobalLock If Security level is low then Hide Object Visible InterLock Icon	Shape Text Effect & Action No Condition 1 Touch Down Up [1] Down [0] Condition Operator [0] : [AND Condition Operator [0] : [AND Event [] Confirm Event Type : [] Tou Event	on Effect None	Action [PLC1:HOLD_ON:1:DEC]=ON group:0 ▼ Add [Δ]
ID: 1 SEQ: 0 X: 176 X Y: 131 X Width: 64 X Height: 62 X Security Level: 0 Create Security Log Greate Security Log Greate Security Log Visible InterLock Icon Visible Pemission Icon	Shape Text Effect & Action No Condition 1 Touch Down Up U Down (2) Condition Effect Action Condition Operator (2) : AND Event Confirm Event Type : Tou Event	on Effect None	Action [PLC1:HOLD_ON:1:DEC]=ON group:0 → Add [Δ]
ID: 1 SEQ: 0 X: 176 Y: 131 Width: 64 Height: 62 Create Security Log Ignore GlobalLock If Security Level : 0 Create Security Log Ignore GlobalLock If Security Level is low then Hide Object Visible InterLock Icon Visible Pemission Icon Display on top when changed	Shape Text Effect & Acti No Condition 1 Touch Down Up U Down (2) Condition Effect Action Condition Operator [2] : AND Event Confirm Event Type : Tou Event	on Effect None	Action [PLC1:HOLD_ON: 1:DEC] = ON group:0 Add [A]
ID: 1 SEQ: 0 X: 176 C Y: 131 C X: 176 Y: 131 C Width: 64 Height: 62 C Security Level: 0 C Create Security Log Ignore GlobalLock If Security Level is low then Hide Object Visible InterLock Icon Visible Pemission Icon Display on top when changed	Shape Text Effect & Acti No Condition 1 Touch Down Up U Down (2) Condition Effect Action Condition Operator (2) : AND Event Confirm Event Type : Tou Event	on Effect None	Action [PLC1:HOLD_ON: 1:DEC] = ON group:0 Add [A]
ID: 1 SEQ: 0 X: 176 Y: 131 Width: 64 Height: 62 Security Level: 0 Create Security Log Greate Security Log	Shape Text Effect & Acti No Condition 1 Touch Down Condition Effect Action Condition Operator[0] : AND Event Confirm Event Type : Tou Event	on Effect None	Action [PLC1:HOLD_ON: 1:DEC] = ON group:0 Add [A]
ID : 1 SEQ : 0 X : 176 Y Y : 131 V Width : 64 Height : 62 V Create Security Level : 0 V Ignore GlobalLock If Security Level is low then Hide Object Visible InterLock Icon Visible Pemission Icon Display on top when changed	Shape Text Effect & Action 1 Condition 1 Touch Down Condition Effect Action Condition Operator[0] : AND Event Confirm Event Type : Tou Event	on Effect None None	Action [PLC1:HOLD_ON: 1:DEC] = ON group:0 ▼ Add [A]
ID : 1 SEQ : 0 X : 176 W Y : 131 W Width : 64 W Height : 62 W Security Level : 0 W Create Security Log Ignore GlobalLock If Security Level is low then Hide Object Visible Pemission Icon Visible Pemission Icon Display on top when changed	Shape Text Effect & Acti	on Effect None n Reason ch Result	Action [PLC1:HOLD_ON: 1:DEC]=ON group:0 ▲ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D] ★ Add [A] ▲ Modify [M] ★ Delete [D]