Instructions

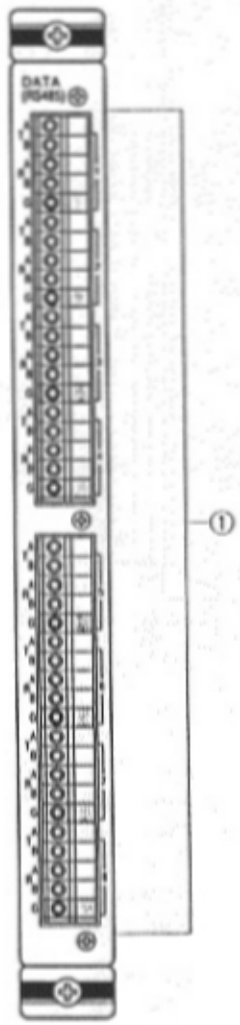
Data Board
WV-PB5548

Panasonic®

Before attempting to connect or operate this product, please read these instructions completely

Caution

When handling this board, hold only by circuit board edges. Otherwise components on the board may be damaged by static electricity.

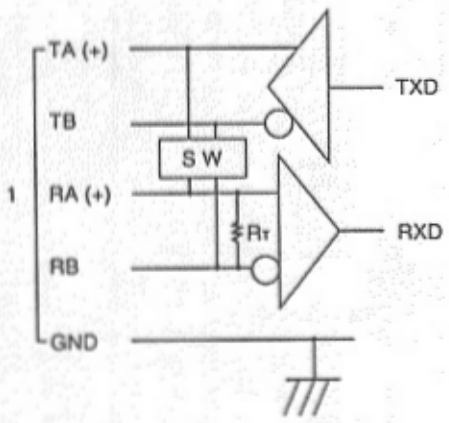


PREFACE

The WV-PB5548 Data Board is used to transmit/receive only control data between the Matrix Switcher and the camera site.

APPEARANCE

1. **Data Connector (TA/TB/RA/RB/GND, 1 - 8)**
   These connectors are used to transmit/receive control data to/from the camera site. Use data grade cable, suitable for RS-485 (shielded, twisted pairs). Cable length may be extended up to 1,200 m (4,000 ft).

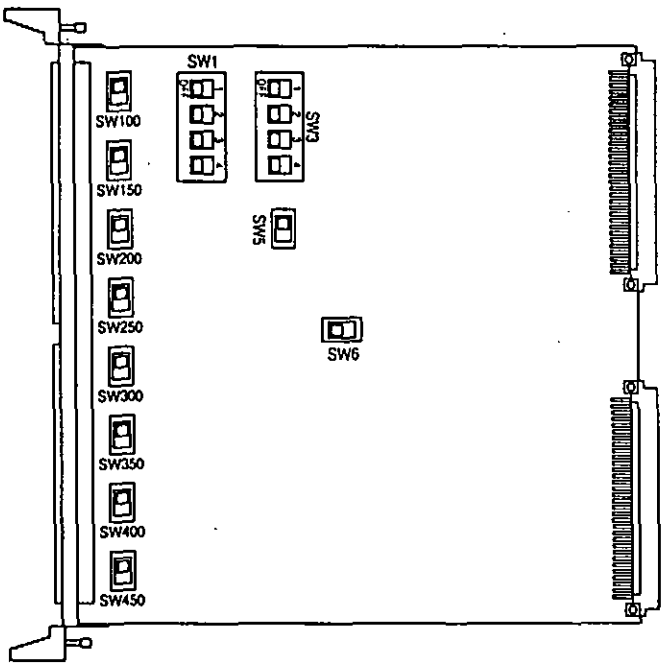


RT: Termination Resistor, 150Ω 1/2W
SW: Selection Switch, Full Duplex/ Half Duplex
GND: Ground; Connected to each channel and common ground.

BOARD SETTING

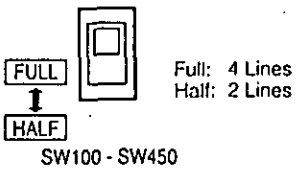
Before installing this board, the following settings should be made by qualified service personnel or system installers.

1. Set switches (SW1) on the board to meet the data board number as shown in the following table.
   Initially, board number 1 is selected at the factory.

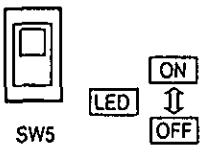


BOARD NO.	SW1 SETTING
1	1 2 3 4 OFF
2	1 2 3 4 OFF
3	1 2 3 4 OFF
4	1 2 3 4 OFF
5	1 2 3 4 OFF
6	1 2 3 4 OFF
7	1 2 3 4 OFF
8	1 2 3 4 OFF

2. Set switches (SW100/SW150/SW200/SW250/SW300/SW350/SW400/SW450) on the board to choose the communication lines as either Full Duplex (FULL) or Half Duplex (HALF).
   Initially, Full Duplex(FULL) positions are selected at the factory.



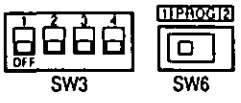
3. Set switch (SW5) on the board to choose the LED indicator as either "ON" or "OFF" mode. The indicator displays that the control data are activated normally on the board.
   Initially, "ON" position is selected at the factory.



4. Confirm switches (SW3/SW6) on the board are set to the following positions.

Note

These switches are used only for factory test.
Always keep these switches in these positions in the field.



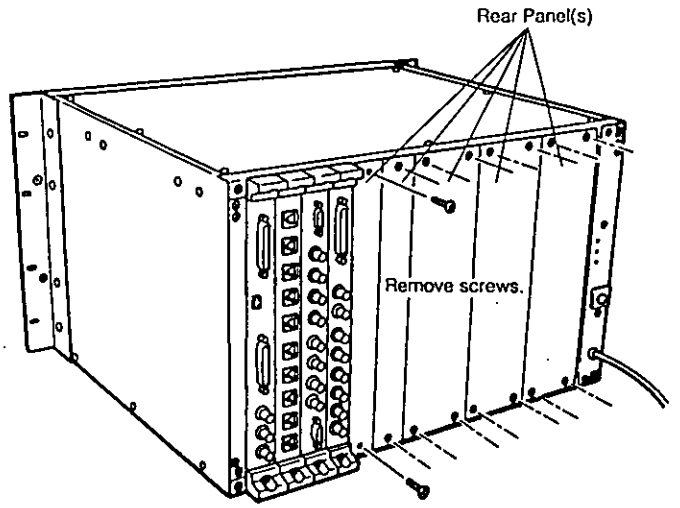
INSTALLATION

Caution

Before installing this board be sure to turn off the Power Switch of the Matrix Switcher.

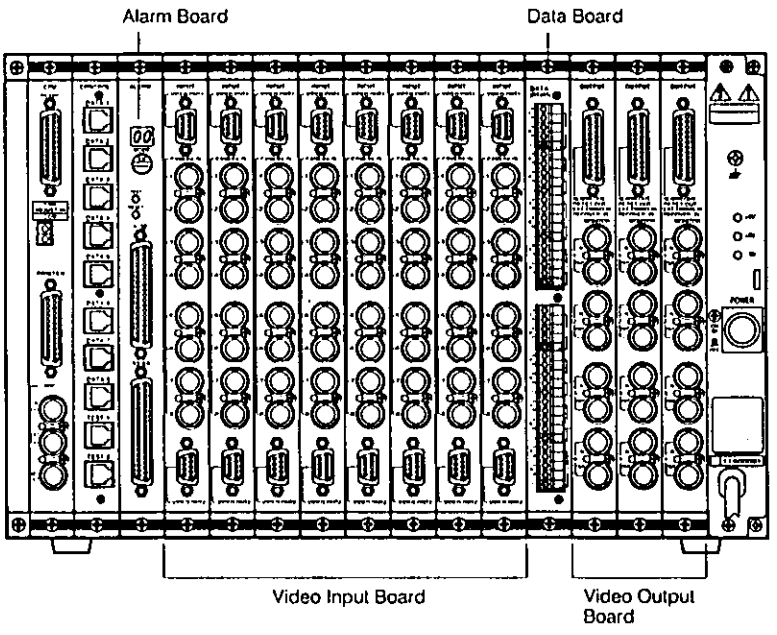
The following installation should be made by qualified service personnel or system installers.

1. Remove the screws from the rear panel(s) of the Matrix Switcher.
2. Remove the rear panel(s).
3. Place the Data Board into the desired position in the rear of Matrix Switcher by sliding it inside the board guides.

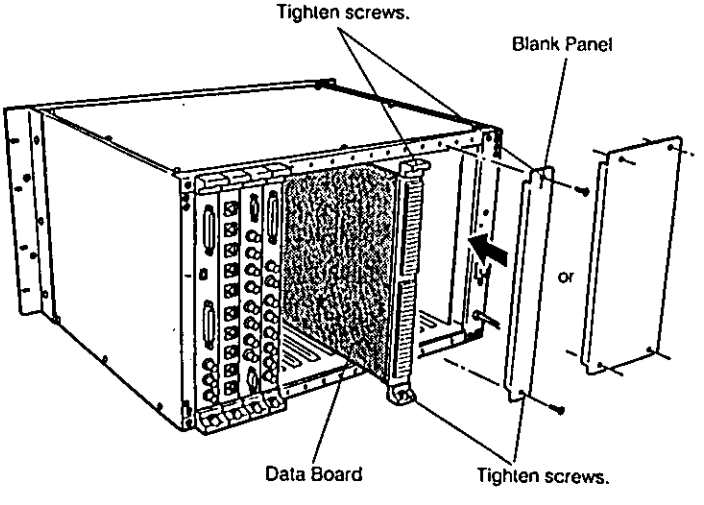


Note

Each slot is identical, so the board can installed in any slot.
However it is recommended to install the board as shown below for an orderly installation.



4. Make sure to push in the Data Board until it is seated firmly.
5. Secure the Data Board by tightening the two screws on the board.
6. Close off open spaces on the rear of the Matrix Switcher by using WV-Q63 Blank Panels (Optional) or supplied rear panel(s).
   (Refer to the instructions for WV-Q63)

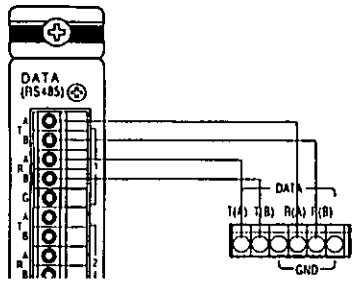


Note

Refer to the Operating Instructions of WJ-SX550A for further details.

CONNECTIONS

Connect the Data Board and the Camera Controller by specified data cable.
Basically, connect shown right.



Then the following settings should be made by using the Setup Menu.

Set Up | System | RS-485

RS-485
Site Communication

Board Addr. 1

Daisy Off

Camera ID Number		F/H Duplex	Delay Time	Baud Rate	Wait Time	Data Bit	Parity Check	Stop Bit
#1	02	Full	Off	19200	Off	8	None	1
#2	04	Half	Off	9600	Off	8	None	1
#3	06	Full	100	19200	Off	8	None	1
#4		Full	Off	19200	Off	8	None	1
#5	10	Full	Off	1200	Off	8	None	1
#6		Full	Off	19200	Off	8	None	1
#7		Full	Off	19200	Off	8	None	1
#8		Full	Off	19200	Off	8	None	1

When Daisy Mode is "on" only #1 will be available

F1:-- F2:-- F3:DEL F4:Pop Up

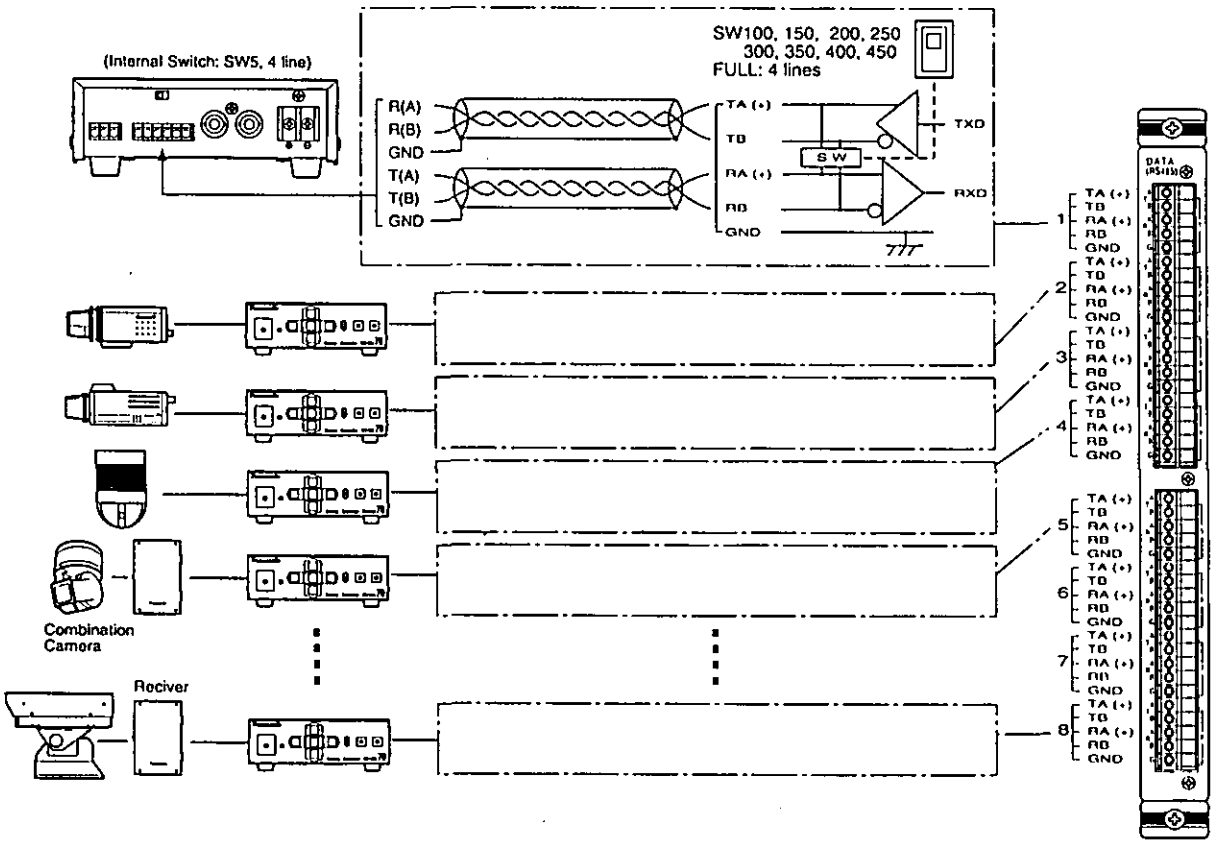
- Camera Controller

```
** Communication **
Unit Number    1
Baud Rate      19200
Data Bit       8
Parity Check   None
Stop Bit       1
Xon/Xoff       Not Use
Wait Time      Off
Delay Time     Off
Alarm Data     Off
Return
```

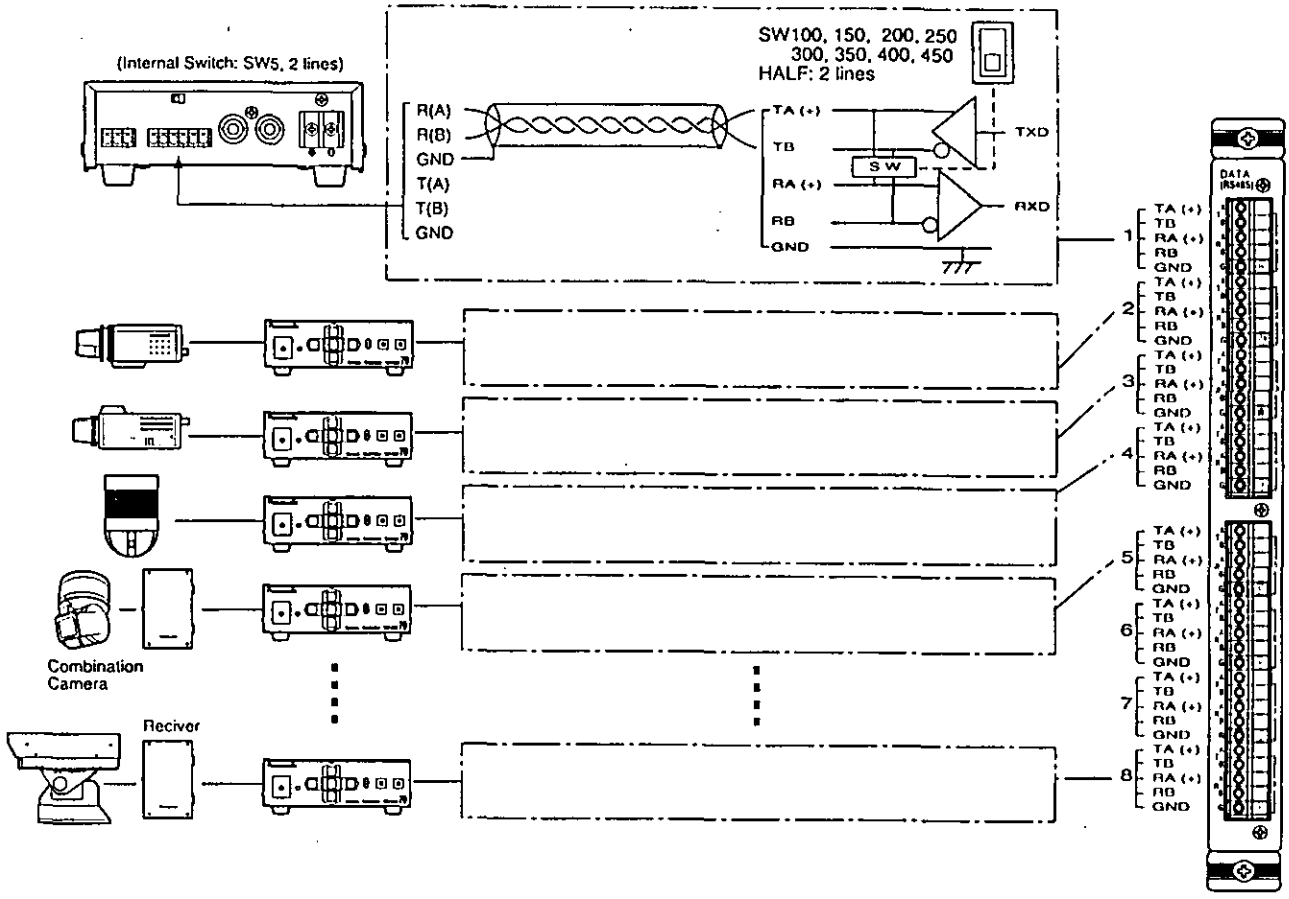
■ Direct Connection between the Data Board and Camera Controllers

In this type of connection there is one control cable directly connecting each Data Connector to the WV-RM70 Camera Controller. Refer to the connections and settings shown below.

- **4 Line (Full Duplex) Connection**



• 2 Line (Half Duplex) Connection



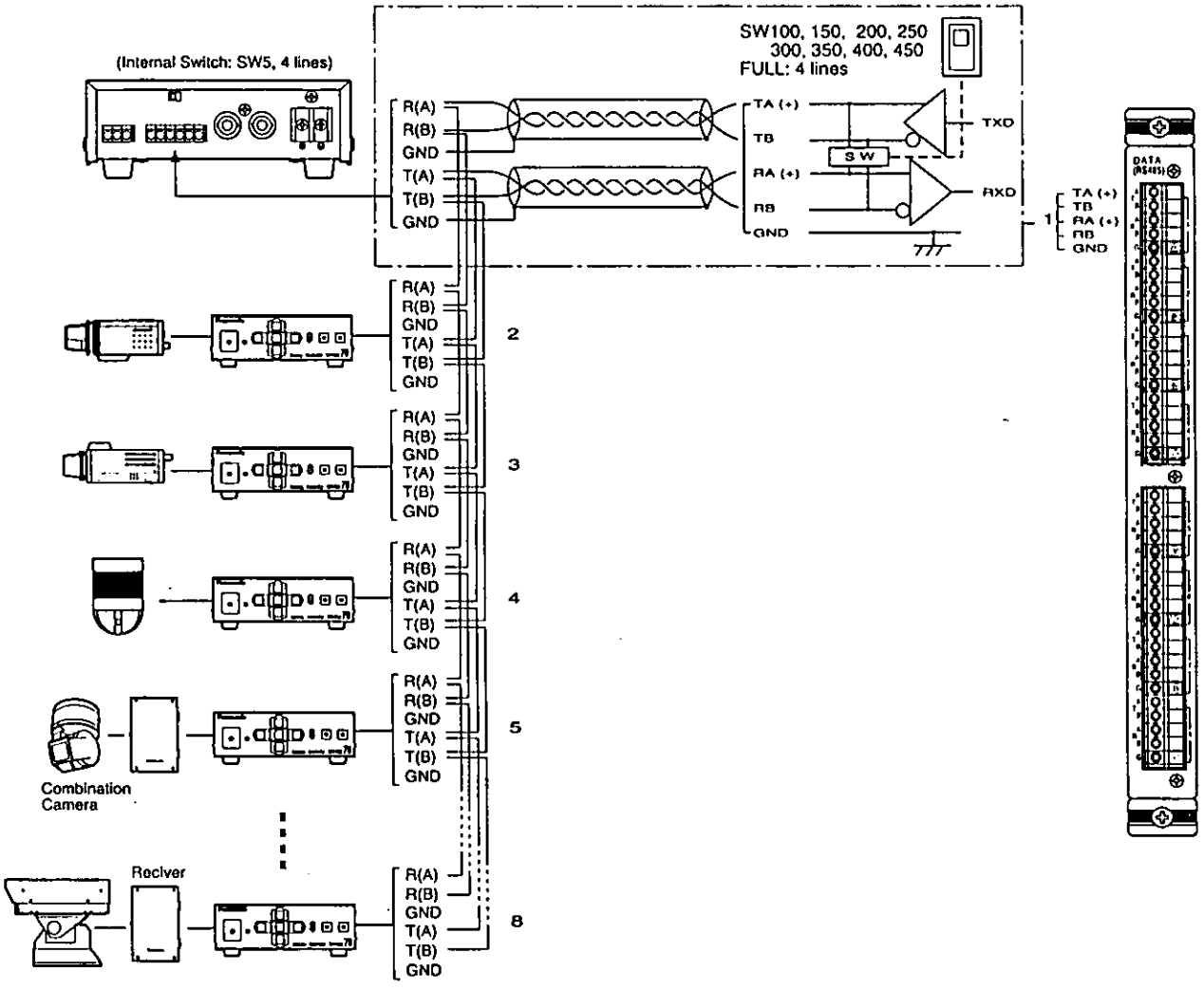
Set the same Communication Parameters on the Setup Menus of the Matrix Switcher and Camera Controller.

Parameters \ Models	Matrix Switcher WJ-SX550A		Camera Controller WV-RM70
	F/H Duplex : Full or Half		
Baud Rate	19200		19200
Data Bit	8		8
Parity Check	None	Fixed	None
Stop Bit	1		1
Wait time	Off		Off
Delay Time	Off		Off
			Xon/Xoff : Not use
			Alarm Data : On
	Daisy : Off		Unit Number : Not use

■ Indirect Connection between the Data Board and Camera Controllers ("Daisy-Chain" Type Wiring)

In this type of connection only one control cable directly connects between the Data Connector #1 and the Camera Controller #1. The rest of the Camera Controllers connect to Camera Controller #1 in a Daisy-Chain of connection. Refer to the connections and settings shown below.

- **4 Line (Full Duplex) Connection**



Set the Matrix Switcher and the Camera Controllers (up to 8) shown below.

Models / Parameters	Matrix Switcher WJ-SX550A .	Camera Controller WV-RM70
	F/H Duplex : Full	
Daisy : On	Camera In Number #1 - - -	Unit Number : 1
	Camera In Number #2 - - -	Unit Number : 2
	Camera In Number #3 - - -	Unit Number : 3
	Camera In Number #4 - - -	Unit Number : 4
	Camera In Number #5 - - -	Unit Number : 5
	Camera In Number #6 - - -	Unit Number : 6
	Camera In Number #7 - - -	Unit Number : 7
	Camera In Number #8 - - -	Unit Number : 8

Note

It is not available 2 Line (Half Duplex) connection in a Daisy-Chain.

Caution

It is only available an alarm data connected unit in a Daisy-Chain. Set the Mode Selection Switch on the one of Camera Controllers to the "NORMAL" position and the others are set to the "ALARM OFF" positions.

SPECIFICATIONS

Data Input/Output(1 - 8):	RS-485 (Full Duplex or Half Duplex, selectable inside the switch) [5-pin T(A), T(B), R(A), R(B), GND] X8 use with shield, twisted pairs data cable Transmitting Speed (Baud Rate); 1200 - 19200 bps
Max. Cable Length:	1,200 m (4,000 ft)
Max. Number Boards:	8 (Address 1 - 8, Total 1 - 64 Data Input/Output)
Dimensions:	24.5 (W) x 265 (H) x 260 (D) mm 15/16" (W) x 10-7/16" (H) x 10-1/4" (D)
Weight:	400g (0.9 lbs.)

Weight and dimensions indicated are approximate.
Specifications are subject to change without notice

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N0396-0 YWV8QA4196AN Printed in Japan
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