TELEMETERING SYSTEM | MODEL **DAST-20**

BEFORE USE ....

Thank you for choosing us. Before use, check specifications on the unit label.

If you have any problems or questions with the product, please contact our sales office or representatives.

GENERAL

- Small-scale telemetering system
- Lightning arrester protecting telecommunication circuit standard
- Approved of Technical Requirements Compliance Approval by Japan Approvals Institute for Telecommunications Equipment
- Isolation between telecom. circuit, I/O and power
- Easy-to-handle plug-in construction for each component: Communication Module, Modem Module, Lightning Arrester
- Self-diagnosis
- Monitor LED provided for contact I/O module

INSTALLATION

- Operation temperature: -5 to +50°C
- Operation humidity: 30 to 90% RH, non-condensing

Install the unit inside a building. Keep it from water, corrosive gas, dust particles or vibration.

■ MOUNTING REQUIREMENT [mm (inch)]
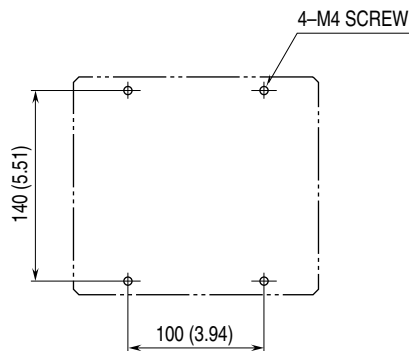
CHECKING

1) Terminal wiring

2) Power supply voltage: Check the voltage across the terminals 7 – 8 with a multimeter.

3) Input signal: Check the input signal within 0 – 100% of F.S.

4) Output signal: Check that load resistance meets the described specification.

LIGHTING PROTECTION

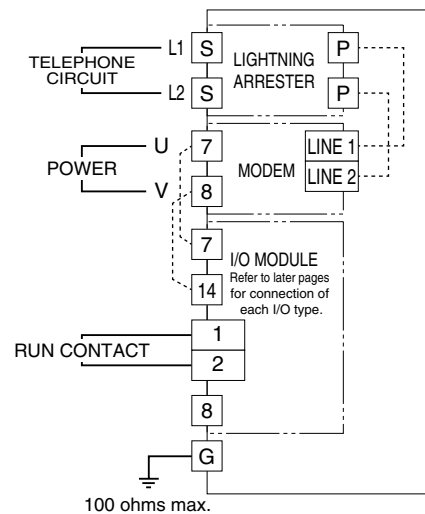In order to product the unit from lighting surges entering through power supply cables, use of proper lighting arresters are recommended. Please contact us.

TERMINAL CONNECTIONS

■ 50 bps TYPE (Transmission Rate Code: 1)

100 ohms max.

■ 300 bps TYPE (Transmission Rate Code: 2)
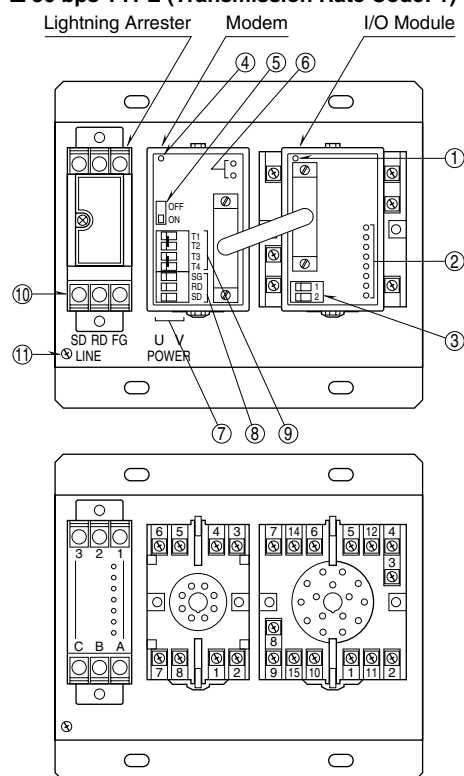

100 ohms max.
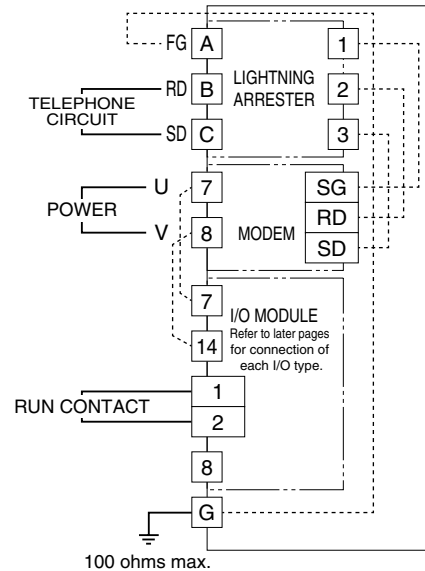
Remark 1 : Broken line connections are already done at factory. Do not remove those cables already wired when wiring to power supply (Terminals 7 – 8 of the Modem) and ground terminals (G).
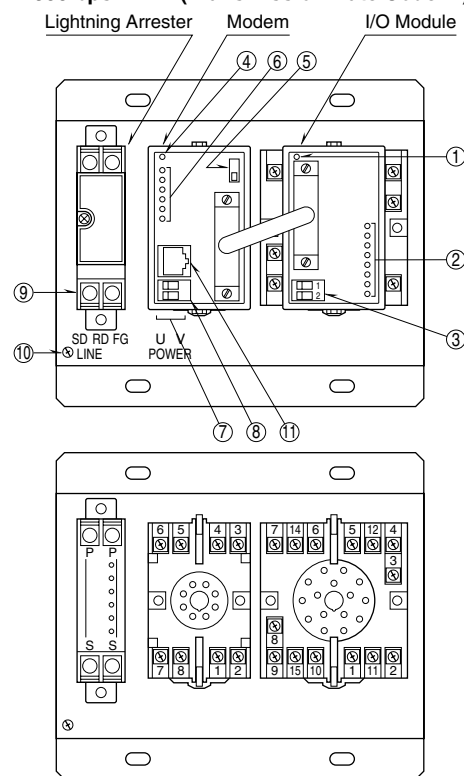
Remark 2 : Be sure to ground (100 ohms or less) for 50 bps type which emploies the earth-return method.

FRONT PANEL CONFIGURATION & TERMINAL ASSIGNMENT

■ **50 bps TYPE (Transmission Rate Code: 1)**

Lightning Arrester   Modem   I/O Module

■ **300 bps TYPE (Transmission Rate Code: 2)**

Lightning Arrester   Modem   I/O Module

| No.	DESCRIPTION	EXPLANATION
1	RUN LED	Red LED ON at normal status; OFF at anomaly detected by self. diagnosis; blinks when there is anomaly in telecom. circuit.
2	Contact I/O Monitor LEDs	Red LED ON with contact ON; provided only for contact I/O types.
3	RUN Contact Output Terminals	Relay opens when an anomaly is detected.
4	Power Indicator LED	Red LED ON at normal status; OFF when the voltage level drops.
5	Circuit Test SW	Normally OFF; turned ON when testing only.
6	Circuit Status Indicator LEDs	Red LED; SD blinks during sending; RD blinks during receiving.
7	Power Terminals	Refer to the Terminal Connection.
8	SG, RD, SD Terminals	Connected with the lightning arrester. (factory connected)
9	Circuit Test Terminals (T1 – T2, T3 – T4)	Normally shorted with a jumper. Circuit connection is broken when it is removed (opened).
10	Circuit Connection Terminals	Refer to the Terminal Connection.
11	Grounding Terminal	Refer to the Terminal Connection.

| No.	DESCRIPTION	EXPLANATION
1	RUN LED	Red LED ON at normal status; OFF at anomaly detected by self. diagnosis; blinks when there is anomaly in telecom. circuit.
2	Contact I/O Monitor LEDs	Red LED ON with contact ON; provided only for contact I/O types.
3	RUN Contact Output Terminals	Relay opens when an anomaly is detected.
4	Power Indicator LED	Red LED ON at normal status; OFF when the voltage level drops.
5	Master/Local Switch	Designating the Master and Local Stations (factory set)
6	Circuit Status Indicator LEDs	Red LED; turn ON according to the status of telecom. circuit.
7	Power Terminals	Refer to the Terminal Connection.
8	Modem Circuit Terminals	Connected with the lightning arrester. (factory connected)
9	Circuit Connection Terminals	Refer to the Terminal Connection.
10	Grounding Terminal	Refer to the Terminal Connection.
11	Modem Circuit Connector	Not used.

I/O TERMINAL CONNECTION

Connect I/O cables as shown in the following figures according to I/O types.

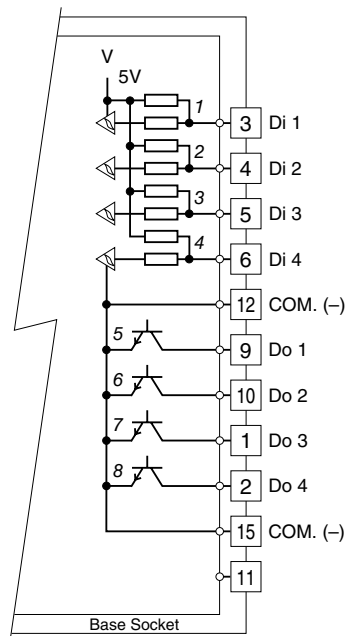### ■ MASTER: CONTACT OUTPUT
DAST-20-❑MC81-K
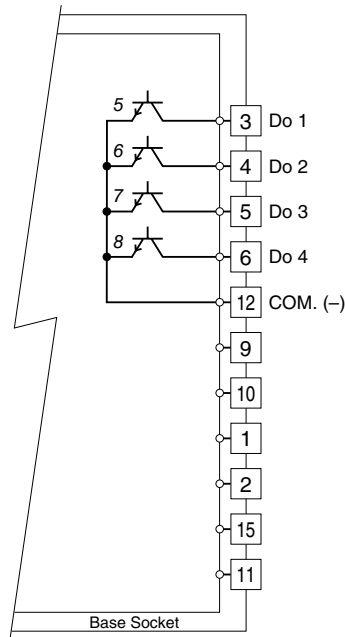
Italic numbers indicate LED No. on the front panel.

■ LOCAL: CONTACT INPUT
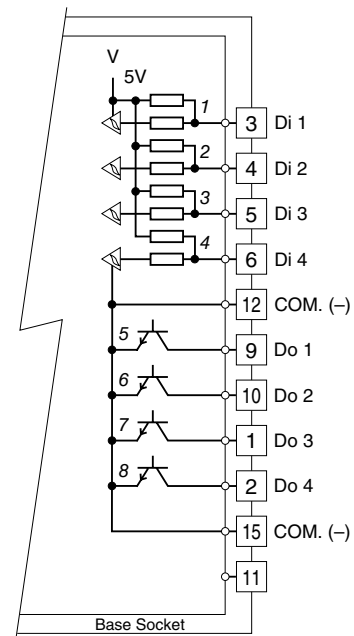### DAST-20-❑SA41-K
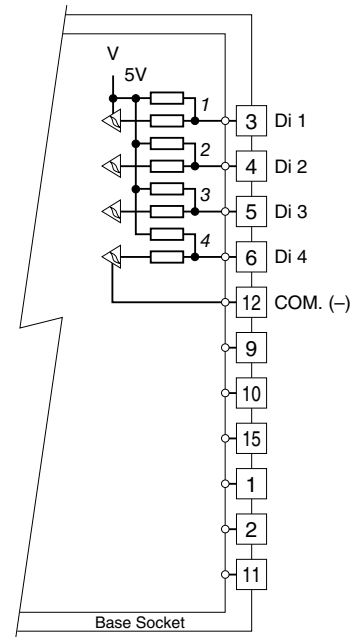
Italic numbers indicate LED No. on the front panel.

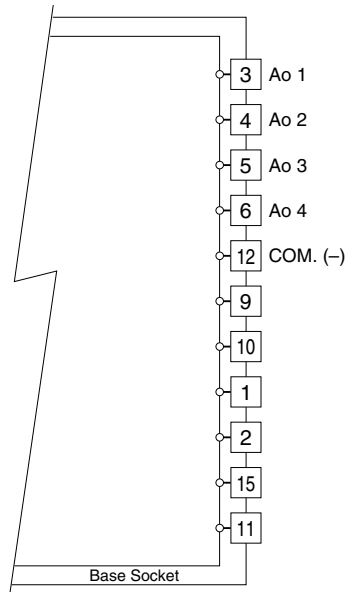### ■ MASTER: CONTACT I/O
DAST-20-❑ME5-K

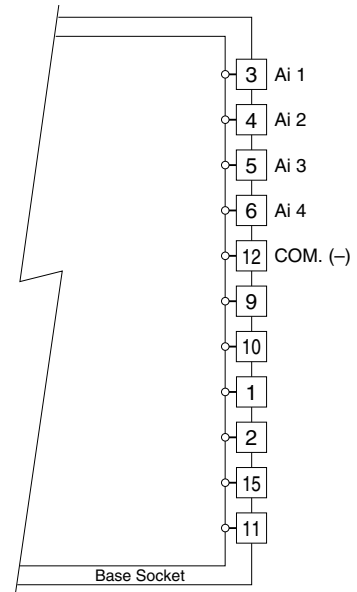Italic numbers indicate LED No. on the front panel.

■ LOCAL: CONTACT I/O
DAST-20-❑SE5-K

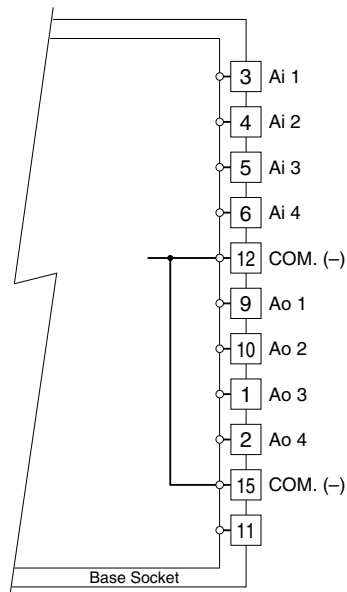Italic numbers indicate LED No. on the front panel.

■ **MASTER: ANALOG OUTPUT**
   DAST-20-❏MM4-K

Terminal	Label
3	Ao 1
4	Ao 2
5	Ao 3
6	Ao 4
12	COM. (−)
9	
10	
1	
2	
15	
11	

Base Socket

■ **LOCAL: ANALOG INPUT**
   DAST-20-❏SG4-K

Terminal	Label
3	Ai 1
4	Ai 2
5	Ai 3
6	Ai 4
12	COM. (−)
9	
10	
1	
2	
15	
11	

Base Socket

■ **MASTER: ANALOG I/O**
   DAST-20-❏MR3-K

Terminal	Label
3	Ai 1
4	Ai 2
5	Ai 3
6	Ai 4
12	COM. (−)
9	Ao 1
10	Ao 2
1	Ao 3
2	Ao 4
15	COM. (−)
11	

Base Socket

■ **MASTER: ANALOG I/O**
   DAST-20-❏SR3-K

Terminal	Label
3	Ai 1
4	Ai 2
5	Ai 3
6	Ai 4
12	COM. (−)
9	Ao 1
10	Ao 2
1	Ao 3
2	Ao 4
15	COM. (−)
11	

Base Socket
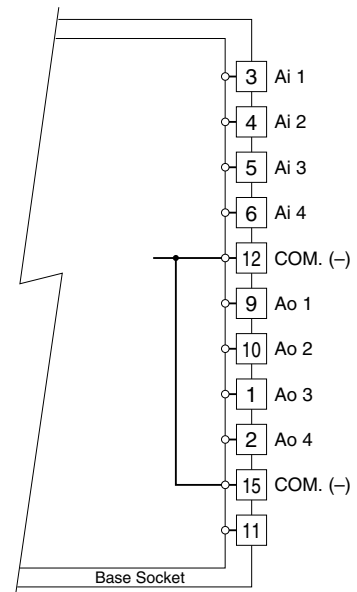
■ MASTER: CONTACT & ANALOG OUTPUT
DAST-20-❑MS6-K

3	Ao 1
4	Ao 2
5	Ao 3
6	Ao 4
12	COM. (−)
9	Do 1
10	Do 2
1	Do 3
2	Do 4
15	COM. (−)
11	

Base Socket
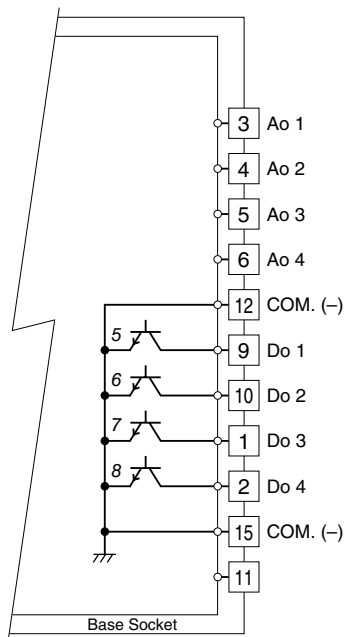
Italic numbers indicate LED No. on the front panel.

■ LOCAL: CONTACT & ANALOG INPUT
DAST-20-❑SS5-K

3	Ai 1
4	Ai 2
5	Ai 3
6	Ai 4
12	COM. (−)
11	
9	Di 1
10	Di 2
1	Di 3
2	Di 4
15	COM. (−)

Base Socket
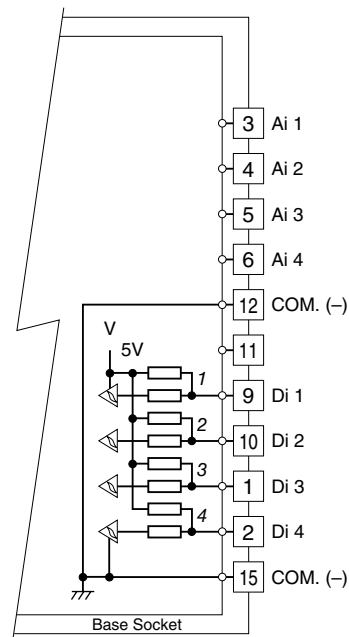
Italic numbers indicate LED No. on the front panel.

■ MASTER: CONTACT INPUT & ANALOG OUTPUT
DAST-20-❑MS8-K

3	Ao 1
4	Ao 2
5	Ao 3
6	Ao 4
12	COM. (−)
11	
9	Di 1
10	Di 2
1	Di 3
2	Di 4
15	COM. (−)

Base Socket
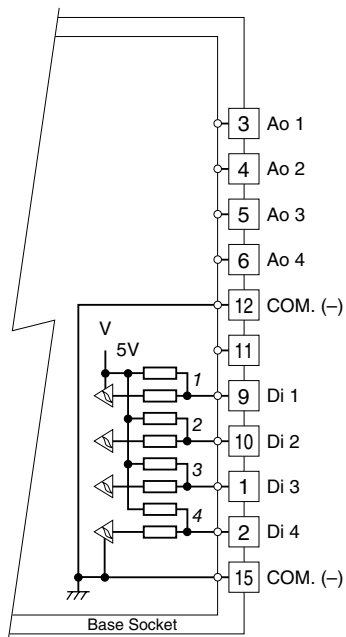
Italic numbers indicate LED No. on the front panel.

■ LOCAL: CONTACT OUTPUT & ANALOG INPUT
DAST-20-❑SS7-K

3	Ai 1
4	Ai 2
5	Ai 3
6	Ai 4
12	COM. (−)
9	Do 1
10	Do 2
1	Do 3
2	Do 4
15	COM. (−)
11	

Base Socket
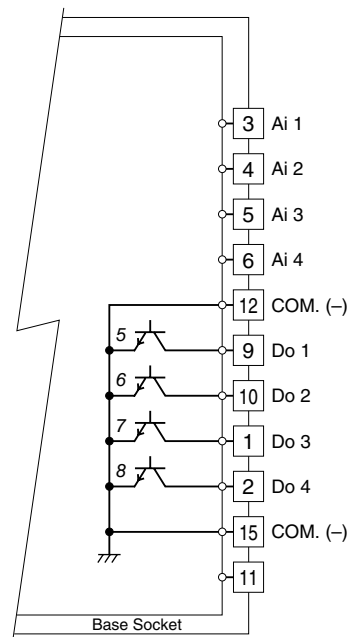
Italic numbers indicate LED No. on the front panel.

■ **MASTER: ANALOG & PULSE OUTPUT**
  DAST-20-❏MU4-K

3	Ao 1
4	Ao 2
5	Ao 3
6	Ao 4
12	COM. (−)
9	Po 1
10	Po 2
1	Po 3
2	Po 4
15	COM. (−)
11	

Base Socket
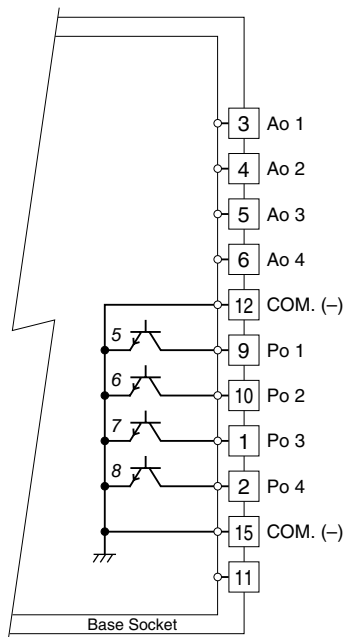
Italic numbers indicate LED No. on the front panel.

■ **LOCAL: ANALOG & PULSE INPUT**
  DAST-20-❏SP4-K

3	Ai 1
4	Ai 2
5	Ai 3
6	Ai 4
12	COM. (−)
11	
9	Pi 1
10	Pi 2
1	Pi 3
2	Pi 4
15	COM. (−)

V 5V

Base Socket
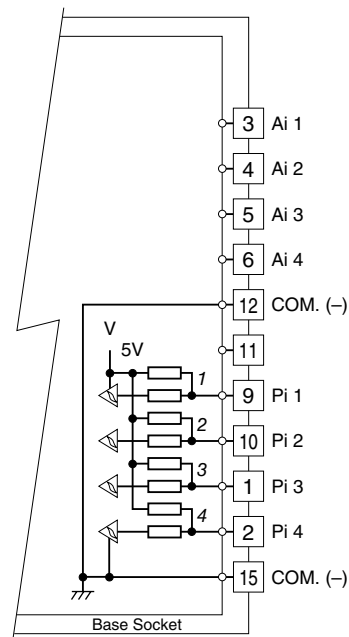
Italic numbers indicate LED No. on the front panel.

■ **MASTER: CONTACT, ANALOG & PULSE OUTPUT**
  DAST-20-❏MS4-K

3	Ao 1
4	Ao 2
5	Ao 3
6	Ao 4
12	COM. (−)
9	Po 1
10	Po 2
1	Do 3
2	Do 4
15	COM. (−)
11	

Base Socket
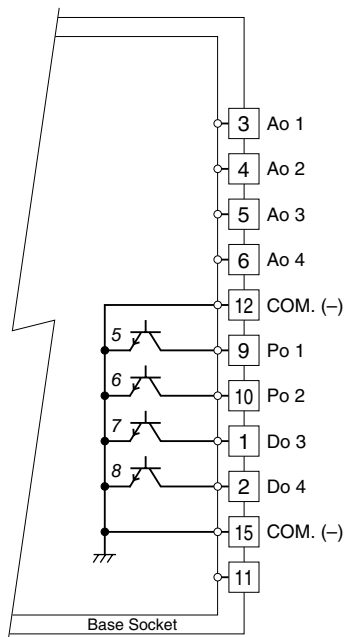
Italic numbers indicate LED No. on the front panel.

■ **LOCAL: CONTACT, ANALOG & PULSE INPUT**
  DAST-20-❏SS3-K

3	Ai 1
4	Ai 2
5	Ai 3
6	Ai 4
12	COM. (−)
11	
9	Pi 1
10	Pi 2
1	Di 3
2	Di 4
15	COM. (−)

V 5V

Base Socket

Italic numbers indicate LED No. on the front panel.