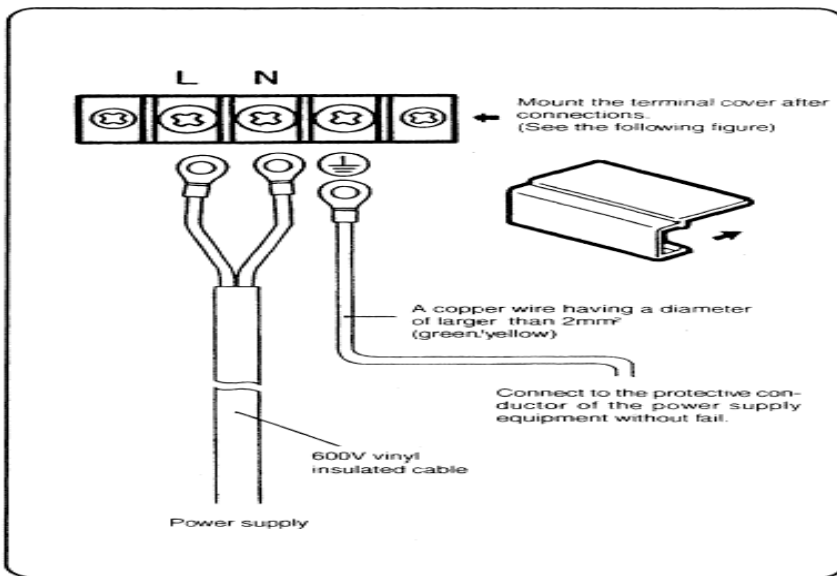


Basic Manual for RD200, RD2800 Series Recorder

1 Back Terminal connection

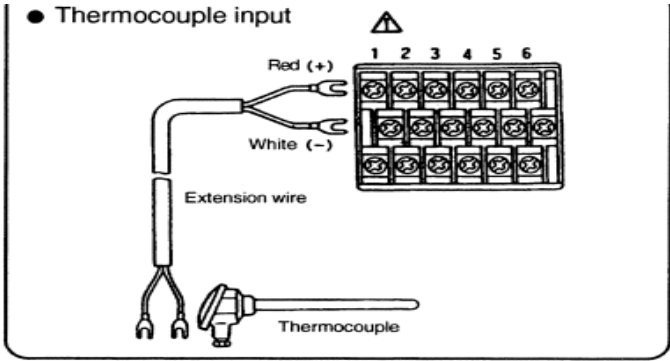
Power Supply



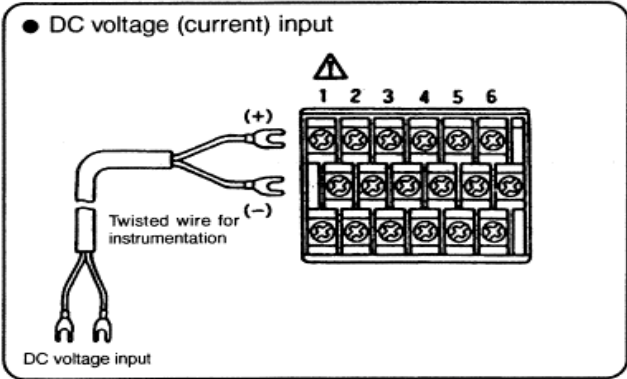
2. Sensor Connection Thermocouple

● Thermocouple input



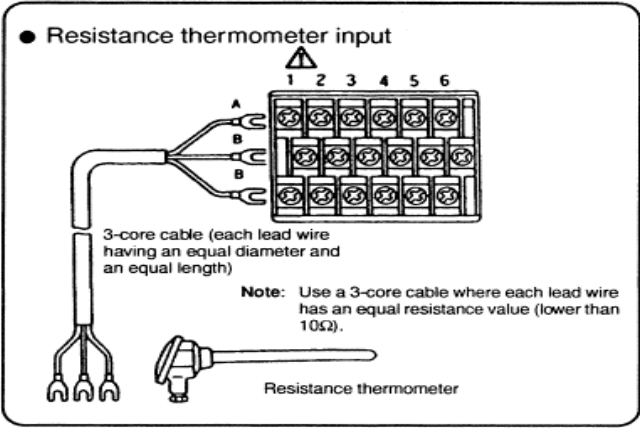


DC Voltage and Current**



***4/20mA connect 250ohm resistor to the terminal.

RTD (PT100ohm)



***Make sure all terminals are tightly connected.

3. Date, time, Year (Clock Setting) (See manual under Time setting)

3A. Push **SHIFT + CLOCK** key at same time
You will see Display-Original set at factory time)

C . 1 . 9 9 8 [] 0 1 . 0 1 [] [] 0 0 : 0 0

Year

Month

Date

Time

3B. Push **SET** key

You will see cursor under first digit of the month
Use Arrow key to move cursor

3C. Change each digit to todays month, date, and time

Example July 4, 2007 at 4:15PM

C . 2 . 0 0 7 0 7 . 0 4 1 6 : 1 5

3D. Push **ENTRY** Key

4. Input (Range) Setting (See manual under Range/printing range)

4A. Choose Input and range close to your input type

1) Voltage input

No.	Input type	Measuring range	Remarks
01	DC (mV)	-13.80 to 13.80 mV	For current input, see Item 15.2.
02		-27.60 to 27.60 mV	
03		-69.00 to 69.00 mV	
04		-200.0 to 200.0 mV	
05		-500.0 to 500.0 mV	
06	DC (V)	-2.00 to 2.00 V	
07		-5.00 to 5.00 V	
08		-10.00 to 10.00 V	
09		-20.00 to 20.00 V	
10		-50.00 to 50.00 V	

No.	Input type	Measuring range	
		°C	°F
40	W-WRe26	0 to 2315	32 to 4200
41	WRe5-WRe26	0 to 2315	32 to 4200
43	PtRh40-PtRh20	0 to 1888	32 to 3400
44	NiMo-Ni	-50.0 to 290.0	32.0 to 550.0
45		-50.0 to 600.0	32 to 1110
46		50 to 1310	32 to 2350
47	CR-AuFe	0.0 to 280.0K	0.0 to 300.0K
48	Platinel II	0.0 to 350.0	-140.0 to 660.0
49		0.0 to 650.0	-140 to 1200
50		0 to 1390	-140 to 2530
51	U	-200.0 to 250.0	-320.0 to 480.0
52		-200.0 to 500.0	-320.0 to 930.0
53		-200.0 to 600.0	-320 to 1110
54	L	-200.0 to 250.0	-320.0 to 480.0
55		-200.0 to 500.0	-320.0 to 930.0
56		-200 to 900	-320 to 1650

2) Thermocouple input (*1)

No.	Input type	Measuring range	
		°C	°F
21	K	-200.0 to 300.0	-320.0 to 570.0
22		-200.0 to 600.0	-320 to 1110
23	E	-200 to 1370	-320 to 2490
24		-200.0 to 200.0	-320.0 to 390.0
25	J	-200.0 to 350.0	-320.0 to 660.0
26		-200 to 900	-320 to 1650
27	T	-200.0 to 250.0	-320.0 to 480.0
28		-200.0 to 500.0	-320.0 to 930.0
29	R	-200 to 1200	-320 to 2190
30		-200.0 to 250.0	-320.0 to 480.0
31	S	-200.0 to 400.0	-320.0 to 750.0
32		0 to 1200	32 to 2190
33	B	0 to 1760	32 to 3200
34		0 to 1300	32 to 2370
35	N	0 to 1760	32 to 3200
36		0 to 1820	32 to 3300
37	N	-200.0 to 400.0	-320.0 to 750.0
38		-200.0 to 750.0	-320 to 1380
39	N	-200 to 1300	-320 to 2370

3) Resistance thermometer input (*2)

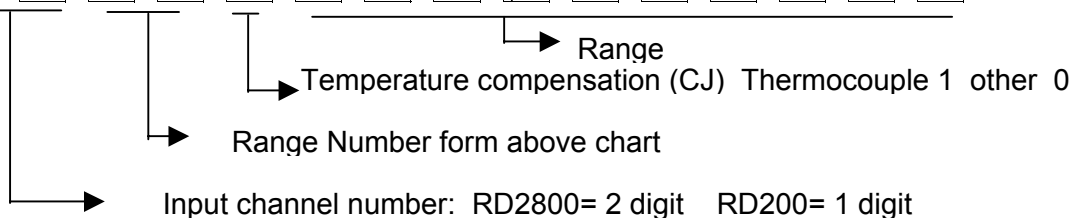
No.	Input type	Measuring range	
		°C	°F
70	Pt100 (JIS'97)	-140.0 to 150.0	-220.0 to 300.0
71		-200.0 to 300.0	-320.0 to 550.0
72		-200.0 to 850.0	-320 to 1560
73	Pt100 (QPt100 JIS'89)	-140.0 to 150.0	-220.0 to 300.0
74		-200.0 to 300.0	-320.0 to 550.0
75	JPt100	-200.0 to 649.0	-320 to 1200
76		-140.0 to 150.0	-220.0 to 300.0
77	Pt50	-200.0 to 300.0	-320.0 to 550.0
78		-200.0 to 649.0	-320 to 1200
79	Pt-Co	-200.0 to 649.0	-320 to 1200
80		4.0 to 374.0K	4.0 to 374.0K

Example:K thermocouple for 0/1000 F. Choose No. 22

4B. Push **SHIFT** + **RANGE** Key at same time

You will see Display of original factory setting

R . 0 1 : 0 7 0 0 . 0 0 5 . 0 0



4C. Push **SET** Key

You will see Curser under Channel number.

Use Arrow key to move curser

4CA. Example 1. setting of Thermocouple (K type 0 to 2000 F)

R . 0 1 : 2 2 1 0 [] 2 0 0 . 0 [] [] [] []

Thermocouple always 1
Push **SPAC** key to remove decimal

Now Push **ENTRY** key

Display will change to channel 02 and factory setting.

To change the input, repeat of step 1. (Repeat 4CA)

Always push **ENTRY** key after each channel program.

If all channel input is same as Channel 1, then, after programing

Channel 1 and push **ENTRY** key, perform **COPY**

4CB. Push **SHIFT + COPY** key at same time

Curser under referance channel: move curser by Arrow key

S . C 0 : P Y [] 0 1 = 0 2 . [] 1 2 [] []

Copied chnnel 1 setting to channel 2 to 12

Push: **Entry** Key

display goes back to:

R . 1 2 : 2 2 1 0 [] 2 0 0 . 0 [] [] [] []

Show last channel programed.

When all channel are programed: Push **SHIFT + END** key

***ENTRY Key only tos tore the change, Shift + End key to change the program and store.

4CD: Defult temperature is always degrees C. If Degrees F is needed:

Push **SHIFT + F** key for longer then 3 second

[] . d E G . C [] d E G . F [] [] d E G . C

Push **SET** Key

Youw will see curser under dEG.C

To change to Deg. F, Push Up/down Arrow key

[] . d E G . C [] d E G . F [] [] d E G . F


Push **ENTRY** key (no need to push **SHIFT + END** key)

Push **Display** key to go back to progam display.

4CAA. mV, Voltage and Current (4/20mA) input

(4/20mA input, make sure 250 ohm resister is connected to the terminal)

Push **SHIFT + RANGE** Key at same time


R . 0 1 : 0 7 0 0 . 0 0  5 . 0 0

This is DC voltage input

Example 4/20mA input

Push **Set** Key

You will see cursor under channel nummber, move cursor by Arrow key. 4/20mA with 250ohm Resister is 1-5V

R . 0 1 : 0 7 0 1 . 0 0  5 . 0 0

Range number form the chart -5 to 5 V

CJ is always 0 for voltage, current and RTD

Range of 1 to 5V only use

Push **ENTRY** Key

**After Entry key, Channel change to next channel number

**If not same input, then enter the input number and range (4CA)

**If all channel to be same input, perform Copy function as above. (4CB)

After all channel are program, Push **SHIFT + END** key

5. Scale (Min. and Max reading of input range) (see manual under Scale)

**Thermocouple Scale is noramly same as Range so no need to perform Scale programming.

5A. Example 4/20mA input with scale of 0 to 100

Push **SHIFT + SCALE** key at same time

(4/20mA was set as 1 to 5V)


You will see display:

S . 1  5

Push **SET** key

(You will see curser under 1)

Change to following, moving curser using Arrow key

S . 0  1 0 0

Push **ENTRY** Key

Channel number change to next channel

**If next channel is different then previous, perform change then push ENTRY

***If all cahnnel Scale to be same, Perform Copy (4CB) function


When all channela re programed, Push **SHIFT + END** key at same time.

6. Chart Speed

Factory set chart Speed is 20mm per hour

To change chart Speed: Push **SHIFT + CHART** key at same time

H **C** **S** **0** **0** **2** **0**

Push **SET** key  Chart Speed
You will see curser under chart speed
Example: change to 2 inches (50mm) per hour

H **C** **S** **0** **0** **5** **0**

Push Entry Key. This will store the change (no need to push END key

basic programming done, push recorder ON and start recording