

DR 4500A Classic Circular Chart Recorder With or Without Control

Configuration Prompts

Getting Started

Apply power—


- Recorder runs four diagnostic tests:
 - Lower display sequentially shows—
 - "RAM" (RAM test)
 - "CFG" (configuration test)
 - "CAL" (calibration test)
 - Upper display shows "PASSED" or "FAILED" for each test.
- All individual segments of displays light.
- Recorder displays "TEST DONE."
- Recorder goes into operating mode.

Putting Recorder into Configuration Mode

Press  key—

- Upper display shows "SETUP."
- Lower display shows first group title in prompt hierarchy.

Selecting Group Prompts

Press  key successively* to sequentially display group title prompts. Stop at desired group prompt.

*Hold in key to scroll group prompts.

Configuring Group Parameters

1. Press  key successively* to sequentially display function prompts of group in lower display. Stop at desired function prompt.


- Upper display shows current value or selection of function.

*Hold in key to scroll function prompts.

2. Press  or  keys** to change value or selection of function.

**To change value more quickly, hold in one key and press the other.

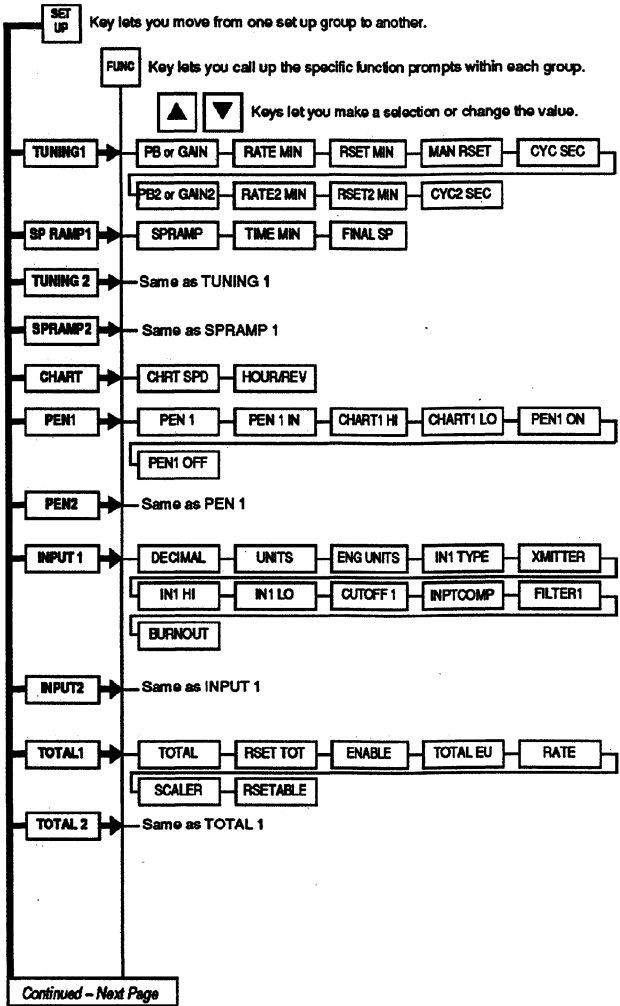
Adjustment moves one digit to the left with each press.

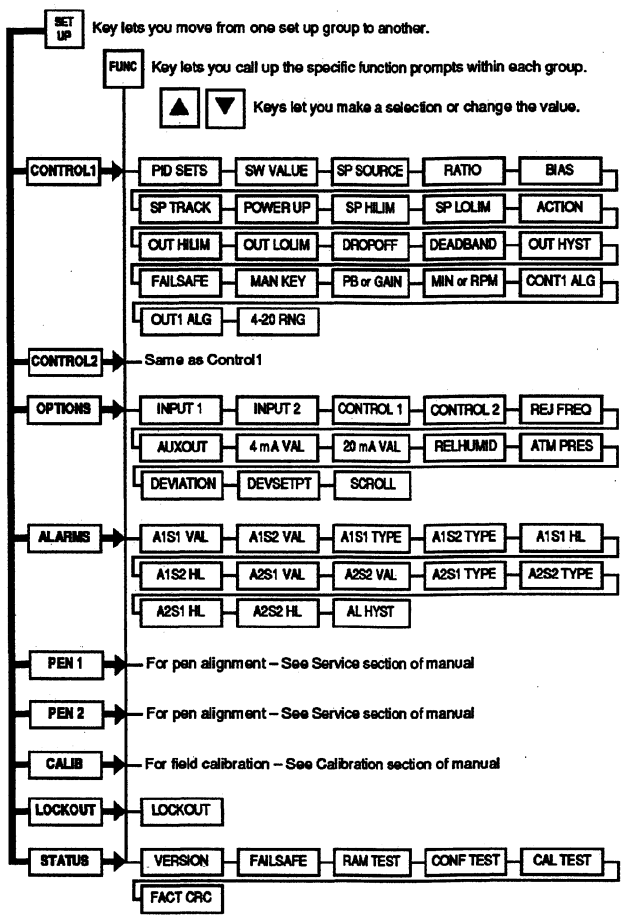
3. Press  key if you want to recall original value or selection.

4. Press  or  keys to enter new value or selection of function.

Returning Recorder to Operating Mode

Press  key to exit configuration mode.





Group Prompt	SET UP	Function Prompt	FUNC	Selection or Value	▲	▼
TUNING 1		PROP BAND or GAIN		0.1 to 1000		
		RATE MIN		0.00 to 10.0 minutes		
		RSET MIN or RSET RPM		0.02 to 50.00		
		MAN RSET		-100 to +100 (%OUTPUT)		
		CYC SEC		1 to 120 seconds		
		PROP BD2 or GAIN 2		0.1 to 1000		
		RATE2MIN		0.00 to 10.00 minutes		
		RSET2MIN or RSET2RPM		0.02 to 50.00		
		CYC2 SEC		1 to 120 seconds		
	SP RAMP 1		ENABLE DISABL			
		TIME MIN		0 to 255 minutes		
		FINAL SP		Within SP limits		
TUNING 2		Same as TUNING 1				
SP RAMP 2		Same as SP RAMP 1				

Group Prompt	SET UP	Function Prompt	FUNC	Selection or Value	▲	▼
CHART		CHRT SPD		X HR (selected) 8 HR 12 HR 24 HR 7 DAYS		
		HOUR/REV		6 to 744		
PEN 1		PEN 1		ENABLE DISABLE		
		PEN 1 IN		INPUT 1 RH OUTPUT SETPNT DGTL 1 DGTL 2		
		CHART1HI		-999.9 to 9999		
		CHART1LO		-999.9 to 9999		
		PEN 1 ON		0 to 100% of chart		
		PEN 1 OFF		0 to 100% of chart		
		PEN 2		(Same as for PEN 1, but for Input 2.)		

Group Prompt	SET UP	Function Prompt	FUNC	Selection or Value	▲	▼
INPUT 1		DECIMAL		None — XXXX 1 — XXX.X 2 — XX.XX 3 — X.XXX		
		UNITS		DEG F DEG C EU (Engineering Units)		
		ENG UNIT		XXXXX (X = 0 to 9, A to Z, +, -, /, or blank)		
		IN1 TYPE		BTC ETCH (E T/C-high) ETCL (E T/C-low) JTC H (J T/C-high) JTC L (J T/C-low) KTC H (K T/C-high) KTC L (K T/C-low) NNMTC (NiNiMoly) NIC TC (Nicrosil-Nisil) RTC STC TTC H (T T/C-high) TTC L (T T/C-low) WTC H (W T/C-high) WTC L (W T/C-low) 100PT (100 ohm platinum bulb) 500PT (500 ohm platinum bulb) 100RH (100 ohm RTD-low) 4-20 mA 0 to 10 mV 10-50m (10 to 50 mV) 0-5V 0-10V RADIAM		
XMITTER				BTC ETCH (E T/C-high) ETCL (E T/C-low) JTC H (J T/C-high) JTC L (J T/C-low) KTC H (K T/C-high) KTC L (K T/C-low) NNMTC (NiNiMoly) NIC TC (Nicrosil-Nisil) RTC STC TTC H (T T/C-high) TTC L (T T/C-low) WTC H (W T/C-high) WTC L (W T/C-low) 100PT (100 ohm platinum bulb) 500PT (500 ohm platinum bulb) 100RH (100 ohm RTD-low) LINEAR SQROOT (Square Root)		

Group Prompt	SET UP	Function Prompt	FUNC	Selection or Value	▲	▼
INPUT 1 (continued)		IN1 HI		-999.9 to 9999		
		IN1 LO		-999.9 to 9999		
		CUTOFF1		0 to 100% of input range		
		INPTCOMP		-999.9 to 9999		
		FILTER 1		0 to 120 (seconds)		
		BURNOUT		NONE UP (Upscale) DOWN (Downscale)		
	INPUT 2		(Same as for INPUT 1.)			
TOTAL 1		TOTAL		En XXX (En =Exponent, base 10; XXX = Total EU)		
		RSET TOT		NO YES		
		TOTAL 1		ENABLE DISABLE		
		TOTAL EU		XXX (X = 0 to 9, A to Z, +, -, /, or blank)		
		RATE		SECOND MINUTE HOUR DAY MILLION/DAY		
		SCALER		1 10 100 1000 10000 100000 1E6 (=1 x 10 to sixth power)		
		RSETABLE		NO LOCAL EXTSW1 EXTSW2		
	TOTAL 2		(Same as for TOTAL 1 - except for INPUT 2.)			

Group Prompt	SET UP	Function Prompt	FUNC	Selection or Value	▲	▼
CONTROL 1		PID SETS		1 ONLY = One set 2KEYBD = Two sets, keyboard selectable 2PV SW = Two sets, PV automatic switchover 2SP SW = Two sets, SP automatic switchover		
		SW VALUE		Value in Engineering Units		
		SP SOURCE		1LOCAL = Local set point REMOTE = Remote set point 2LOCAL = Two local set points		
		RATIO		-20.00 to 20.00		
		BIAS		-999 to 9999 in engineering units		
		SP TRACK		NONE = No tracking RSP = Local set point tracks remote set point		
		POWER UP		MANUAL A LSP A RSP A MSP A MLSP		
		SP HILIM		0 to 100% of span in Engineering Units		
		SP LOLIM		0 to 100% of span in Engineering Units		
		ACTION		DIRECT REVRSE		
		OUTHILIM		-5.0 to 105% of output		
		OUTLOIM		-5.0 to 105% of output		
		DROPOFF		-5.0 to +105.0% of output		
		DEADBAND		-5.0 to 25.0%		
		OUT HYST		0.0 to 5.0% of PV span		
		FAILSAFE		Within the range of output limits		
		MAN KEY		ENABLE DISABL		
		PB or GAIN		PB PCT = Proportional band in percent GAIN		
		MIN or RPM		MIN = Minutes/repeat RPM = Repeats/minute		
		CONT1ALG		PIDA PIDB PD+MR ON-OFF		
		CONT2ALG		Same as CONTROL 1 ALG		
		OUT1ALG		TIME CURRENT POSITN TIME D CUR TI TI CUR		
		OUT2ALG		Same as OUTPUT 1ALG		
		4-20 RNG		50 PCT 100 PCT		

Group Prompt	SET UP	Function Prompt	FUNC	Selection or Value	▲	▼	
OPTIONS		INPUT 1 (2)		DISABL ENABLE			
		CONTROL 1		DISABL ENABLE			
		CONTROL 2		DISABL ENABLE			
		REJ FREQ		60 or 50 Hz			
		AUX OUT		DISABL IN1 IN2 PV1 DEV1 OUT1 SP1 PV2 DEV2 OUT2 SP2			
		4 mA VAL		Lowscale value to represent 4 mA			
		20 mA VAL		Highscale value to represent 20 mA			
		REL HUMID		YES NO			
		ATMPRES		590 to 800			
		DEVIATION		NONE SET PNT CHAN 1			
		DEV SETPT		-999.0 to 9999			
		SCROLL		NONE 1 second 2 second 3 second			
	ALARMS		A1S1 VAL		0.0 to 9999		
			A1S2 VAL		0.0 to 9999		
		A1S1TYPE		NONE IN1 IN2 RH DEV OUT DEV2 OUT2			
		A1S2TYPE		(same as for A1S1TYPE.)			