

DR 4500A Truline 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 **SET UP** key—

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

Selecting Group Prompts

Press **SET UP** 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 **FUNC** 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.

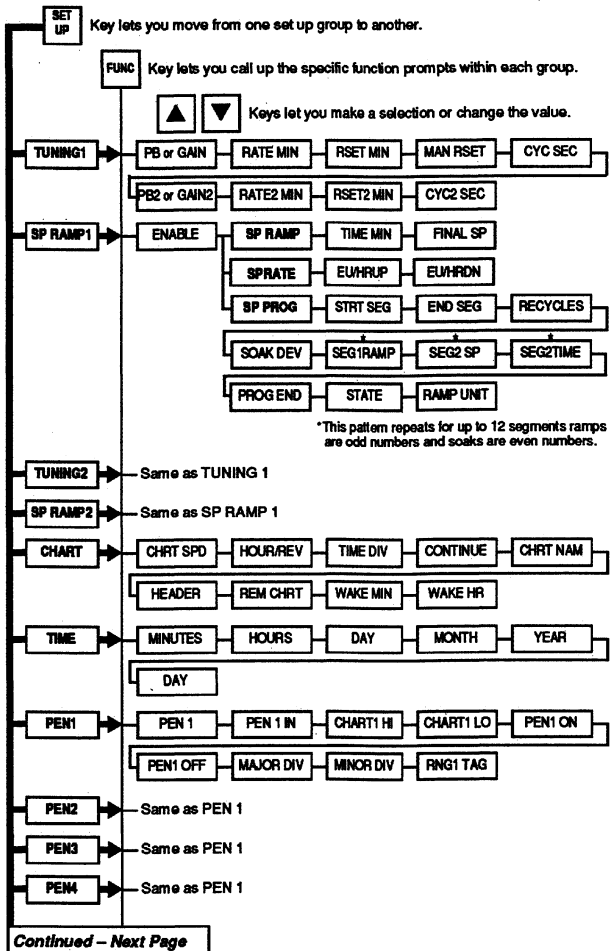
**To change value more quickly, hold in one key and press the other.
Adjustment moves one digit to the left with each press.

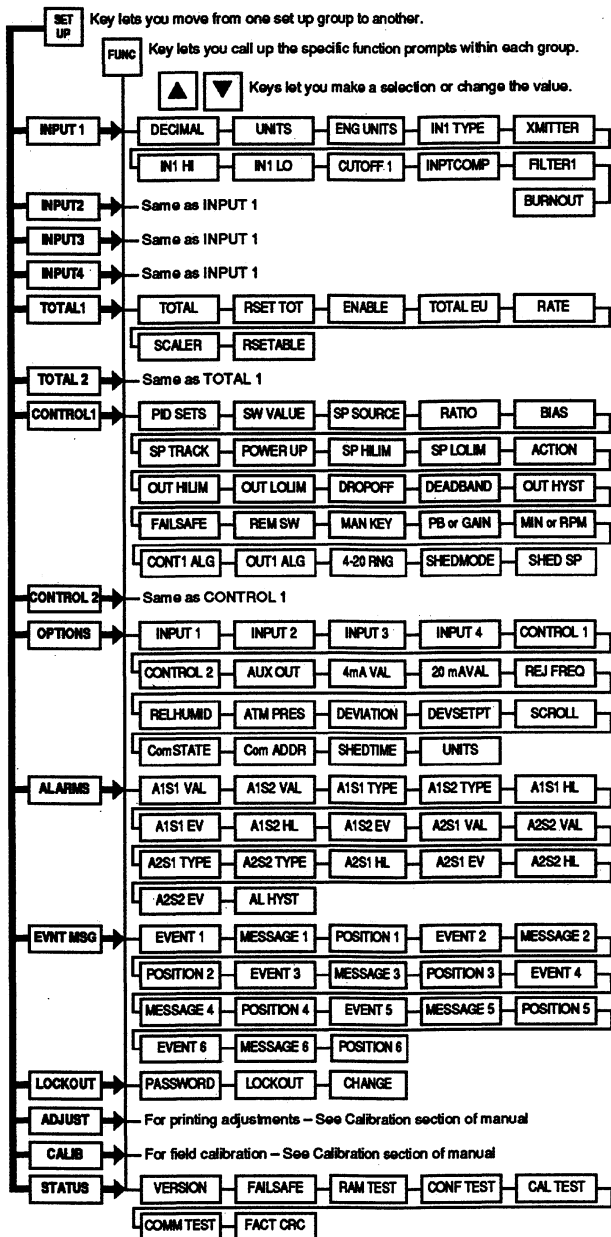
3. Press **RUN HOLD** key if you want to recall original value or selection.

4. Press **FUNC** or **SET UP** keys to enter new value or selection of function.

Returning Recorder to Operating Mode

Press **LOWR DISP** 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		SPRAMP		ENABLE DISABL		
		TIME MIN		0 to 255 minutes		
		FINAL SP		0 to 100% of span		
		SPRATE		DISABL ENABLE		
		EU/HRUP		0 to 9999 in units per hour		
		EU/HRDN		0 to 9999 in units per hour		
		SP PROG		ENABLE DISABL		
		STRT SEG		1 to 11		
		END SEG		2 to 12		
		RECYCLES		0 to 99		
		SOAK DEV		0.0 to 99.0		
		SEG1RAMP*		0.00 to 99.59		
		SEG2SP*		0.0 to 500		
		SEG2TIME*		0.00 to 99.59		
		PROG END		LAST SP F SAFE		
		STATE		DISABL HOLD		
		RECOVERY		ENABLE DISABL		
	RAMPUNIT		TIME (hrs : min) EU/MIN EU/HR			
TUNING 2		Same as TUNING 1				
SP RAMP 2		Same as SP RAMP 1				

* Repeat for 12 segments

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			
		TIME DIV		8 to 24			
		CONTINUE		YES NO			
		CHRT NAM		XXXXXX (X = 0 to 9, A to Z, +, -, /, or blank)			
		HEADER		YES NO			
		REM CHART		NONE EXTSW1 EXTSW2 ALARM1 ALARM2 TIME SHED			
		WAKE MIN		0 to 59			
		WAKE HR		0 to 23			
		WAKE DAY		0 to 31			
		WAKE MON		0 to 12			
	TIME		MINUTES		1 to 59		
			HOURS		1 to 23		
			DAY		1 to 31		
			MONTH		1 to 12		
			YEAR		0 to 99		
			DAY		MONDAY TUESDAY WEDDAY THRDAY FRIDAY SATDAY SUNDAY		
PEN 1			PEN 1		ENABLE DISABLE		
		PEN 1 IN		INPUT 1 RH OUTPUT 1 OUTPUT 2 SETPNT 1 SETPNT 2 DGTL 1 DGTL 2			
		CHART1HI		-999.9 to 999			
		CHART1LO		-999.9 to 999			
		PEN 1 ON		0 to 100% of chart			
		PEN 1 OFF		0 to 100% of chart			
		MAJORDIV		2 to 10			
		MINORDIV		2 to 10			
		RNG1 TAG		XXXXX (X = 0 to 9, A to Z, +, -, /, or blank)			

Group Prompt 	Function Prompt 	Selection or Value  
PEN 2	(Same as for PEN 1, but for Input 2.)	
PEN 3	(Same as for PEN 1, but for Input 3.)	
PEN 4	(Same as for PEN 1, but for Input 4.)	
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	B TC E TCH (E T/C-high) E TCL (E T/C-low) J TCH (J T/C-high) J TCL (J T/C-low) K TCH (K T/C-high) K TCL (K T/C-low) NNMTC (NiNiMoly) NIC TC (Nicrosil-Nisil) RTC STC T TCH (T T/C-high) T TCL (T T/C-low) W TCH (W T/C-high) W TCL (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		B TC E TCH (E T/C-high) E TCL (E T/C-low) J TCH (J T/C-high) J TCL (J T/C-low) K TCH (K T/C-high) K TCL (K T/C-low) NNMTC (NiNiMoly) NIC TC (Nicrosil-Nisil) RTC STC T TCH (T T/C-high) T TCL (T T/C-low) W TCH (W T/C-high) W TCL (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	
		CUTOFF 1		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.)			
INPUT 3		(Same as for INPUT 1.)			
INPUT 4		(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.)		

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		
		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		
		REM SW		NONE TO MAN TO LSP TO SP2 TO DIR RN/HLD		
		MAN KEY		ENABLE DISABL		
		PB or GAIN		PB PCT = Proportional band in percent GAIN		
		MIN or RPM		MIN = Minutes/repeat RPM = Repeats/minute		
		CONTROL1ALG		PIDA PIDB PD+MR ON-OFF		
		OUTPUT1ALG		TIME CURRENT POSITN TIME D CUR TI TI CUR		
		4-20 RNG		50 PCT 100 PCT		
		SHEDMODE		LAST = same mode as before shed TO MAN = To manual mode, bumpless output FSAFE = To manual mode, failsafe output		
		SHED SP		TO LSP = To local set point TO CSP = To last computer set point		
	CONTROL 2		(Same as CONTROL 1.)			

Group Prompt	SET UP	Function Prompt	FUNC	Selection or Value	▲	▼	
OPTIONS		INPUT 1 (2, 3, 4)		DISABL ENABLE			
		CONTROL 1 (2)		DISABL ENABLE			
		REJ FREQ		60 or 50 Hz			
		AUX OUT		IN1 IN2 PV1 DEV1 OUT1 SP1 PV2 DEV2 OUT2 SP2 IN3 IN4			
		4 mA Val		Lowscale value to represent 4mA			
		20 mA Val		Highscale value to represent 20mA			
		REL HUMID		YES NO			
		ATM. PRES		590 to 800			
		DEVIATION		NONE SET PNT CHAN 1			
		DEV SET PT		-999.0 to 999			
		SCROLL		NONE 1 sec 2 sec 3 sec			
		ComSTATE		ENABLE DISABL			
		Com ADDR		0 to 99			
		SHEDTIME		0 to 255 (sample periods)			
		UNITS		PERCNT = Percent ENG = Engineering Units			
	ALARMS		A1S1 VAL		0.0 to 9999		
			A1S2 VAL		0.0 to 9999		
			A1S1TYPE		NONE IN1 IN2 IN3 IN4 RH DEV OUT DEV2 OUT2 SHED EV1 ON EV1 OFF EV2 ON EV2 OFF		
			A1S2TYPE		(same as for A1S1TYPE.)		

Group Prompt	SET UP	Function Prompt	FUNC	Selection or Value	▲	▼	
ALARMS (continued)		A1S1 H L		HI (High alarm) LO (Low alarm)			
		A1S1 EV		BEGIN END			
		A1S2 H L		HI (High alarm) LO (Low alarm)			
		A1S2 EV		BEGIN END			
		A2S1 VAL		0.0 to 9999			
		A2S2 VAL		0.0 to 9999			
		A2S1TYPE		(same as for A1S1TYPE.)			
		A2S2TYPE		(same as for A1S1TYPE.)			
		A2S1 H L		HI (High alarm) LO (Low alarm)			
		A2S1 EV		BEGIN END			
		A2S2 H L		HI (High alarm) LO (Low alarm)			
		A2S2 EV		BEGIN END			
		ALHYST		0.0 to 100.0 (% of span)			
	EVNT MSG		Event 1*		NONE EXTSW1 EXTSW2 ALARM 1 ALARM 2		
			MESSAGE 1*		XXXXXX (X = 0 to 9, A to Z, +, -, /, or blank)		
		POSITION 1*		0 to 100% of chart			
LOCKOUT		PASSWORD		Up to 4 characters			
		LOCKOUT		NONE CALIB +CONF MAX			
		CHANGE		Used if changing password			
CALIB		Used for field calibration					
ADJUST		Used for printing adjustments					
STATUS		VERSION		(Read-only; software version.)			
		FAILSAFE		(YES or NO) Read only			
		RAM TEST		(Read-only; PASS or FAIL)			
		CONFTEST					
		CAL TEST					
	**COMM TEST						
	FACT CRC						

* Repeat for 6 messages
** Communications only

Honeywell