Configuration Parameters

Rev 4.2.1

	Scale Parameters		
1	Loadcell mv/v	3	4
2	Filter	9	18
3	Display update rate	1	200
4	Motion delay time	6	250
5	Motion band	6	250
6	Motion blanks disp.	0 (no)	1
7	Zero tracking delay	4	250
8	Zero tracking band	12	250
9	Push button zero %	100	100
10	Primary units type	1 (lb)	6(oz)
11	Decimal point	0	4
12	Count-by	1	100
13	Alternate units type	2 (kg)	6(oz)
14	Alt decimal point	1	4
15	Alternate count-by	5	100
16	Alt conversion factor	45,360	
17	Full Scale digits	10,000	120,000
18	Over Weight dd	10,200	120,200
19	Deadload calib factor		
20	Disab Power On Zero	1	1
21	Deadload Factor		
22	Wt. conversion fact.		
	I/O Port Parameters		
23	Serial port 1 mode	4(8N1)	6
24	Serial port 1 baud rate	1(9600)	6
25	Serial port 2 mode	4(8N1)	6
26	Serial port 2 baud rate	1(9600)	6
27	TX2 / Station ID - 0=contin, 255=sing sta	255 single station	255
28	tx2 Data Format	1	
	Print Parameters		
29	Printer port select	2-serial	2
30	Autoprint LF after CR	1 (yes)	1
31	End Of Print character	12(f f)	255
32	print label 32		16 char
33	print label 33		16 char
34	print label 34		16 char
84	Print labels 84, 85, 86, 87, 88, 89, and 90		30 Char each
35	print code 1		3 codes
36	print code 2		3 codes
37	print code 3		3 codes
38	print code 4		3 codes
39	TTL remote control	0 (no)	1
	Display, Battery, Watch-dog		
40	display intensity	10	15
41	battery installed	0 (no)	1
42	Enable watch dog	1 (yes)	1
	Fixed Setpoints		
43-50	Fixed Registers 43 - 50	0	
	Keyboard Events		
51	Power On Start fn.	0	255
52	PRINT key function	136	255
53	UNITS key function	127	255
54	GROSS/NET key fn.	128	255
55	TARE key function	129	255
56	ZERO key	130	255
57	F1 key function	138	255
58	F2 key function	139	255
	Parameter Functions		
59	Display Calibration Audit Number		
60	Calibrate Scale - deadload first		
61	Calibrate Scale - span first		
62	Calibrate Deadload Only		
63	Adjust Gain Calibration		
64	Configure Passwords		
65	Configure Print Formats		
66	Set Time and Date		
67	Dispaly Operation Parameters		
68	Print Operation Parameters		
69	Diagnostic Tests		
70	Reset Parameters to factory defaults.		
71	Configure Setpoint Monitors		
72	Function Editor		
73	Initialize Function Memory		
74	Configure Timers		
75	Enable Peak Detect	0 (no)	1 (on)
76	Single Step Functions	0 (off)	1 (on)
77	ID Auto-erase Flag	0 (no)	
78	Initialize ID memory		
79	Enab Multi-point Lin	0 (off)	1 (on)
80	Calibrate Multi-point Linearization		
81	Analog output span	10000	
82	Analog output offset	0	
83	Analog output register	0(disable)	

Serial Input Commands

Fxx<cr> execute scale basic function xx
Nxx<cr> select station numb xx (see param. 27)
RRxx<cr> register transmit, xx = reg. number
RTxx<cr> register transmit using RQ format
RQ<status><nnnn><cr> used in networks
RWxx<cr>nnnn<cr> write register, xx = reg. number, nnnn = data to write

S	return 'I' if event scan is on
I	set Qstatus flag on
X0	turn off continuous TX2 transmit
X1	read TX2 data (see parameter 28)
X2	turn on continuous TX2 transmit
<esc>	CLEAR key function (ascii 27)
<cr>	ENTER key function (ascii 13)
<ctrl I>	REVIEW / PRINT key (ascii 9)
<ctrl K>	CONTINUE / UNITS key (ascii 11)

Scale Basic Instructions rev.4.2.1

Add	[200] [reg1][reg2][reg3]	reg1 = reg2 + reg3
Sub	[201] [reg1][reg2][reg3]	reg1 = reg2 - reg3
Mul	[202] [reg1][reg2][reg3]	reg1 = reg2 * reg3
Div	[203] [reg1][reg2][reg3]	reg1 = reg2 / reg3
Inc	[204] [reg]	reg = reg + 1
Dec	[205] [reg]	reg = reg - 1
Copy	[206] [reg1][reg2]	reg1 = reg2
Sign	[207] [reg]	status = reg (+/-/0)
Compare	[208][reg1][reg2]	status = sign (reg1-reg2)
Dp adjust	[212] [reg] [pos]	set decimal position for reg
Set	[209] [reg] [number]	reg = num (0 to 255)
Flag on	[210] [flag no.]	turn flag on (1...9)
Flag off	[211] [flag no.]	turn flag off. 0 = all off
Valid wt	[219]	wait for valid weight (hb44)
Set pt on	[220] [setpoint no.]	activate setpoint mon
Set pt off	[221] [setpoint no.]	0 = all off
Relay on	[222] [relay number]	10 for reg 10 indirect
Relay off	[223] [relay number]	0 = all off
Timer on	[224] [timer number]	turn on timer
Timer off	[225] [timer number]	0 turns off all timers
Keybd on	[226]	enable keyboard. (CLEAR key-
Keybd off	[227]	disable keyboard. enables)
All off	[229]	turn off all setpoints, relays, timers
Get key	[230]	get a keypress from the keybd
Get data	[231] [reg]	reg = keyboard entry
Get id	[234] [reg]	open ID in register
Index id	[217] [reg]	open ID record by mem position
Make id	[235] [reg]	open/make ID in register
Write id	[228]	write ID data to memory
Erase id	[236] [reg]	erase ID in register
Display	[218] [reg]	display register
Prompt	[232] [xx][xx]...[0]	disp message (max. 7)
Beep	[233] [nn]	sound beeper [nn] times
Error msg.	[239] [error no]	disp an error message
Txcom1	[237] [msg no]	tx com 1: page/label
Txcom2	[238] [msg no]	tx com 2: page/label
End if	[240]	end of if condition
If	[241] [condition]	if condition true do
If not	[242] [condition]	if condition not true do
Else	[251]	alternative to if statment
Gosub	[243] [function]	call a scale basic function
Goto	[244] [function]	goto a scale basic function
Loop1 / Next1	[245] / [246]	beginning / end of loop
Loop2 / Next2	[247] / [248]	loop 2 begin / end
Suspend	[249]	suspend until resume
Resume	[250]	resume from suspend
End	[255]	end of an SB function

Condition Codes

SetpointXX	1...15	True if Setpoint 1..15 ON
TimerX	41...45	true if Timer 1..5 ON
FlagX	51...59	true if Flag 1...9 ON
InputX	61...66	true if TTL input 1...6 idle
Zero	100	true if prev calc = 0
Positive	101	true if prev calc >= 0
Minus	102	true if prev calc < 0
Netmode	103	true if display in NET mode
Centerz	104	true if weight is at center of 0
Enterkey	105	true if lastkey = ENTER
Clearkey	106	true if lastkey = CLEAR
Motion	107	true if scale is in motion
Printable	108	true if wt is hb44 printable
Alt units	109	true if display in alt units mode
Qstatus	110	true if quiry = valid wt. or rx 'I'
Barcode	111	true if message received on Com1
Ktare	112	true if tare from keyboard
Wtare	113	true if tare from scale
Tx2ready	114	true if Com port 2 tx ready
Overload	115	true if overloaded parm 18

Error Codes

Err 0	Scale above zero (parameter 20).
Err 1	Keyboard error.
Err 2	Restart Trap.
Err 3	Watchdog Timeout.
Err 4	Battery Error.
Err 5	Earom memory error.
Err 5.1	Earom Timeout, unable to write.
Err 6	Ram memory error.
Err 7	The A/D converter is "locked up".
Err 8	not used
Err 9	Count-by error.
Err 10	not used
Err 11	not used
Err 12	Negative deadload.
Err 13	Printer busy error.
Err 14	Page Format line length error.
Err 15	The function selected is locked.
Err 16	Scale Basic Stack Overflow
Err 18	Scale Basic Instruction does not exist.
Err 20	Double weigh-in.
Err 21	ID not found
Err 22	Scale Basic Prompt error
Err 23	ID memory full
Error OL	Calibration error or scale is over-loaded.
Under	Calibration error or scale is under-loaded

Registers / Functions

No.	Name	Description
Registers		
1-16	Memory1..16	Memory Registers.
43-50	Fixed43..50	Fixed registers 43 - 50
55	Rate	Pulse rate on ttl input 6
57	Pulse	Pulse count on ttl input 6
61	Alt Gross	Gross weight in alternate units
62	Alt Tare	Tare weight in alternate units
63	Alt Net	Net weight in alternate units
64	Gross	Gross weight on the scale
65	Tare	Tare weight
66	Net	Net weight on the scale
67-73	Id1-Id6, Id	ID registers 1 thru 6, ID number
115	True	Used by Setpoints to scan condition codes.
116	False	
Relays and Timers		
1 - 9	Relay1...9	Relay output
1-5	Timer1..5	Timer events
Scale Basic Functions		
0	Null	Do not execute a function
1-15	UserXX	User Programmable func.
127	Units	Toggle primary / alternate units
128	Gross/net	Toggle Gross and Net modes
129	Tare	Execute the TARE function
130	Zero	Execute the ZERO function
131	Set gross	Switch to GROSS display mode
132	Set net	Switch to NET display mode
156	Peak gross	Switch to Peak Gross display
157	Peak net	Switch to Peak Net display
133-135 146	Print1, Print2 Print3, Print4	Print format pages 1, 2, 3, or 4
136	Printmode	Print page1in gross, page 2 in net
137	Update	Update wt. display & scan events
140	Open id	Get keybd entry ID from memory
141	Open new	Get keybd entry ID from memory or make new new if ID not found.
142	Close id	Write ID data to memory
147	Read first	Read first ID in memory
148	Read next	Read next ID. Positive = success
143	Peak clear	Set Peak weight register to 0
149	Pulse clear	Set Count register to 0
144	Tx data	Transmit TX2 data via com port 2
145	Update alt	Update alternate weight reg's
250	Resume	Used by Setpoints & Timers