

Table 1: Summary of *JR3* DSP Data locations

	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07
0x00	ch0time	ch0data			ch1time	ch1data		
0x08	ch2time	ch2data			ch3time	ch3data		
0x38	chEtime	chEdata			chFtime	chFdata		
0x40	'C '	'o '	'p '	'y '	'r '	'i '	'g '	'h '
0x48	't '	' ' '	'J '	'R '	'3 '	' ' '	' ' '	'l '
0x50	'n '	'c '	' ' '	'1 '	'g '	'g '	'4 '	0
0x58								
0x60	shunt fx	shunt fy	shunt fz	shunt mx	shunt my	shunt mz		
0x68	def fs fx	def fs fy	def fs fz	def fs mx	def fs my	def fs mz		load env #
0x70	min fs fx	min fs fy	min fs fz	min fs mx	min fs my	min fs mz		xForm #
0x78	max fs fx	max fs fy	max fs fz	max fs mx	max fs my	max fs mz		peak addr
0x80	fs fx	fs fy	fs fz	fs mx	fs my	fs mz	fs v1	fs v2
0x88	ofs fx	ofs fy	ofs fz	ofs mx	ofs my	ofs mz	ofs #	vect axes
0x90	f0 fx	f0 fy	f0 fz	f0 mx	f0 my	f0 mz	f0 v1	f0 v2
0x98	f1 fx	f1 fy	f1 fz	f1 mx	f1 my	f1 mz	f1 v1	f1 v2
0xa0	f2 fx	f2 fy	f2 fz	f2 mx	f2 my	f2 mz	f2 v1	f2 v2
0xa8	f3 fx	f3 fy	f3 fz	f3 mx	f3 my	f3 mz	f3 v1	f3 v2
0xb0	f4 fx	f4 fy	f4 fz	f4 mx	f4 my	f4 mz	f4 v1	f4 v2
0xb8	f5 fx	f5 fy	f5 fz	f5 mx	f5 my	f5 mz	f5 v1	f5 v2
0xc0	f6 fx	f6 fy	f6 fz	f6 mx	f6 my	f6 mz	f6 v1	f6 v2
0xc8	rate fx	rate fy	rate fz	rate mx	rate my	rate mz	rate v1	rate v2
0xd0	min fx	min fy	min fz	min mx	min my	min mz	min v1	min v2
0xd8	max fx	max fy	max fz	max mx	max my	max mz	max v1	max v2
0xe0	near sat	sat	rate addr	rate div	rate count	comm 2	comm 1	comm 0
0xe8	count 1	count 2	count 3	count 4	count 5	count 6	errors	count x
0xf0	warning	error	threshold	crc	rom ver #	ver no	ver day	ver year
0xf8	serial	model	cal day	cal year	units	bits	chans	thickness

0x100-0x1ff - Load envelope table (threshold monitoring), 16 entries

0x200-0x2ff - Transform table (translations and rotations), 16 entries

Description of table entries, see text for full description and missing entries:

ch0time, ch0data	time last data for channel 0 was received, last data received for raw channel 0
shunt fx,...	shunt reading for fx channel
def fs fx,...	sensor default full scale
min fs fx,...	min full scale, at which the data will not have the lsb zero filled
max fs fx,...	max full scale, at which the data will not have the lsb truncated
fs fx,...	full scale value for fx, when fx = 16384 this is the equivalent engineering units
load env #	number of currently active load envelope
xForm #	number of the transform currently in use
peak addr	addr of the data used in finding the maxima and minima
ofs fx,...	current offset value for fx
ofs #	number of the offset currently in use
vect axes	bit map for the axes which are being used for calculating the vectors
f0 fx,f0 fy,...	decoupled, unfiltered data
f1 fx,...	fx from filter 1
rate fx,...	rate calculation for fx
min fx,...., max fx,...	minimum peak (valley) value for fx, maximum peak value for fx
near sat, sat	raw value which sets near sat bit in warning word, and sat bit in the error word
rate addr	address of data used for calculating the rate data
rate div	rate divisor, the number of samples between rate calculations
rate count	this counter counts up to rate div, and then the rates are calculated
comm2,...	command word 2, 1 and 0. Area used to send commands to JR3 DSP
count1,...	counter for filter #1, 1 count = 1 filter iteration
errors	a count of data reception errors
warning, error, threshold	warning word, error word, threshold monitoring word (load envelopes)
rom ver no	version no. of data stored in sensor EEPROM
ver no, ver day	software version # that the JR3 DSP is running, JR3 DSP software release date
serial, model	sensor serial number, and sensor model number
cal day	last calibration date of the sensor
units	engineering units of full scale, 0 is lbs, in-lbs and in*1000, 1 is Newtons, ...
bits	number of bits in sensor ADC
chans	bit map of channels the sensor is capable of sending
thickness	the thickness of the sensor