

INSTRUCTION CODE CHART

("xx" indicates padding: any value is acceptable)

Instruction Name	Parameters				Instr. Code	Remarks
	MSD	(BCD)				
CAT On/Off	xx	xx	xx	xx	yy	yy: 00h=ON, 80h=OFF. Must be ON before any other commands sent. Disables tuning, mode and shift controls.
These functions affect the vfo that is active when the CAT System is turned on:						
Frequency Set	p1	p2	p3	p4	01h	p1-p4: eight packed BCD digits*
Mode Set	p1	xx	xx	xx	07h	p1: 00h=LSB, 01h=USB, 02h=CW, 82h=CWN, 08h=FM, 88h=FMN
Tx/Rx	xx	xx	xx	xx	yy	yy: 08h=Transmit, 88h=Receive
Split Direction	xx	xx	xx	xx	yy	yy: 09h=minus, 49h=plus, 88=simp.
Split Offset	p1	p2	p3	p4	F9h	p1-p4: eight packed BCD digits**
CTCSS Status	xx	xx	xx	xx	yy	yy: 0Ah=Enc/Dec, 4Ah=Enc, 8Ah=Off
CTCSS Tone Code	p1	xx	xx	xx	FAh	p1: see CTCSS Tone Chart, page 45
Full Duplex On/Off	xx	xx	xx	xx	yy	yy: 0Eh=ON, 8Eh=OFF
Full Dup Rx Mode	p1	xx	xx	xx	17h	p1: (same as for "Mode Set") instruction
Full Dup Tx Mode	p1	xx	xx	xx	27h	p1: (same as for "Mode Set") instruction
Full Dup Rx Freq.	p1	p2	p3	p4	1Eh	p1-p4: eight packed BCD digits*
Full Dup Tx Freq.	p1	p2	p3	p4	2Eh	p1-p4: eight packed BCD digits*
These commands require that the AQS On command be sent first						
AQS On/Off	xx	xx	xx	xx	yy	yy: 0Bh=ON, 8Bh=OFF
ID Callsign Set	p1	p2	p3	p4	05h	p1-p4: first 4 ASCII characters
	p5	p6	p7	p8	F5h	p5-p8: second 4 characters
Group Code Set	p1	p2	p3	xx	n4h	p1, p2 & high nybble of p3 hold 5-digit packed decimal code.
						n4h: Tone Mem (0-9) x 10h + 4
Callsign Mem Set	p1	p2	p3	p4	05h	p1-p4: first 4 ASCII characters
	p5	p6	p7	p8	n5h	p5-p8: second 4 characters
						n5h: Tone Mem (10-19) - 10h x 10h + 5.
CAC	xx	xx	xx	xx	0Dh	Transmit Channel Access Call (CAC)
Control Freq Set	p1	p2	p3	p4	02h	p1-p4: eight packed BCD digits*
Comm Freq Set	p1	p2	p3	p4	03h	p1-p4: eight packed BCD digits*
AQS Reset Function	xx	xx	xx	xx	8Dh	
Digital Squelch	xx	xx	xx	xx	yy	yy: 0Ch=ON, 8Ch=OFF
Send Dig. Message	p1	p2	p3	xx	16h	p1-p14: ASCII message (padded with spaces: 20h)
	p4	p5	p6	xx	26h	
	p7	p8	p9	p10	36h	mm: (message no. + 3) x 10h + 6
	p11	p12	p13	p14	mm	(see "Message Numbers: Sending" Table)
These commands cause the transceiver to return a Data Block						
Test Squelch Stat.	xx	xx	xx	xx	E7h	returns 00 if closed, 80h if open
Test S-meter	xx	xx	xx	xx	F7h	returns level between 30h and ADh

* see examples in the text

** your software must check to ensure parameters are within the current band

Commandes CAT