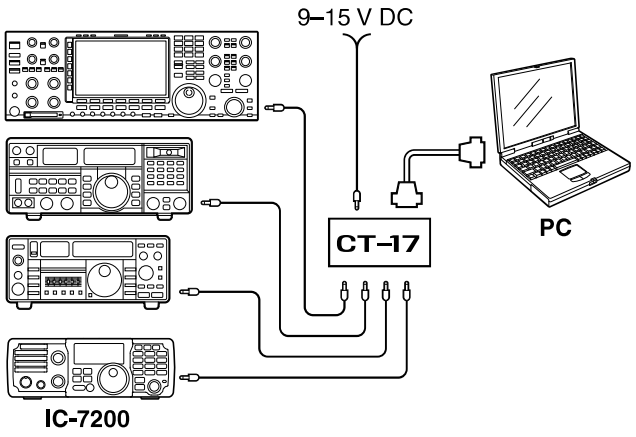
■ Remote jack (CI-V) information

◇ CI-V connection example

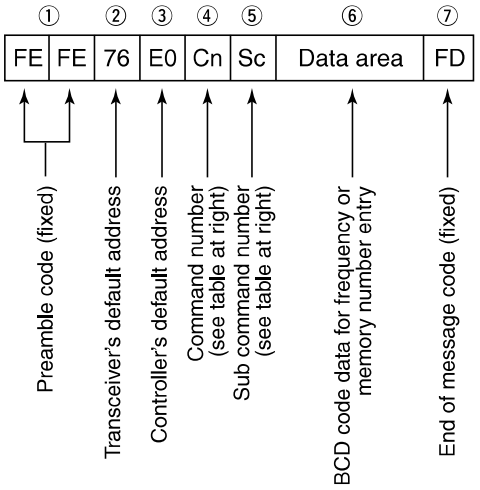
The transceiver can be connected through an optional CT-17 CI-V LEVEL CONVERTER to a personal computer equipped with an RS-232C port. The Icom Communication interface-V (CI-V) controls the following functions of the transceiver.
Up to four Icom CI-V transceivers or receivers can be connected to a personal computer equipped with an RS-232C port. See pgs. 81, 82 for setting the CI-V condition using set mode.



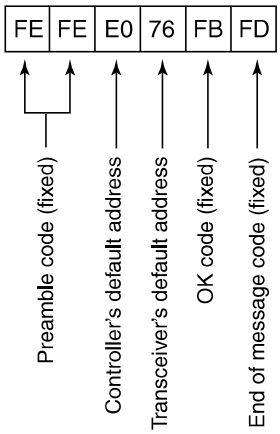
◇ Data format

The CI-V system can be operated using the following data formats. Data formats differ according to command numbers. A data area is added for some commands.

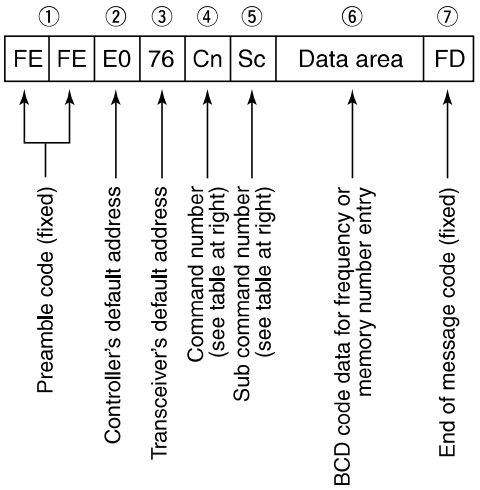
CONTROLLER TO IC-7200



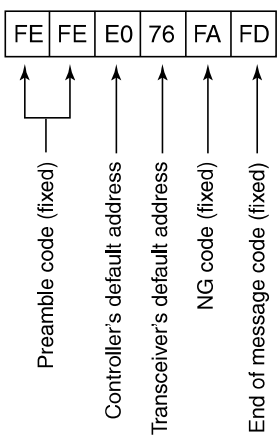
OK MESSAGE TO CONTROLLER



IC-7200 TO CONTROLLER



NG MESSAGE TO CONTROLLER



◇ Command table

Command	Sub command	Description
00	—	Send frequency data. (for transceive operation)
01	00	Select LSB mode (for transceive operation)
	01	Select USB mode (for transceive operation)
	02	Select AM mode (for transceive operation)
	03	Select CW mode (for transceive operation)
	04	Select RTTY mode (for transceive operation)
	07	Select CW-R mode (for transceive operation)
	08	Select RTTY-R mode (for transceive operation)
02	—	Read band edge frequencies
03	—	Read operating frequency
04	—	Read operating mode
05	—	Set operating frequency
06	00	Select LSB mode
	01	Select USB mode
	02	Select AM mode
	03	Select CW mode
	04	Select RTTY mode
	07	Select CW-R mode
	08	Select RTTY-R mode
07	—	Select VFO mode
	00	Select VFO A
	01	Select VFO B
	A0	Equalize VFO A and VFO B
	B0	Exchange VFO A and VFO B
08	—	Select memory mode
	0001–0201*	Select memory channel *P1=0200, P2=0201
09	—	Memory write
0A	—	Memory to VFO
0B	—	Memory clear
0E	00	Scan stop
	01	Programmed/memory scan start
	02	Programmed scan start
	22	Memory scan start
	D0	Set scan resume OFF
	D3	Set scan resume ON
0F	00	Turn the split function OFF
	01	Turn the split function ON
10	00	Select 10 Hz (or 1 Hz) tuning step
	01	Select 100 Hz tuning step
	02	Select 1 kHz tuning step
	03	Select 5 kHz tuning step
	04	Select 9 kHz tuning step
	05	Select 10 kHz tuning step
11	—	Set/read attenuator. (0=OFF, 20=ON (20 dB))
13	00	Announce with voice synthesizer
	01	(00=all data 01=frequency and
	02	S-meter; 02=receive mode)

Command	Sub command	Description
14	01	[AF] level setting (0=max. CCW to 255=max. CW)
	02	[RF] level setting (0=max. CCW to 255=11 o'clock)
	03	[SQL] level setting (0=11 o'clock to 255=max. CW)
	06	NR level setting (0=0% to 255=100%)
	07	Inside [PBT] setting (0= max. CCW, 128=center, 255=max. CW)
	08	Outside [PBT] setting (0= max. CCW, 128=center, 255=max. CW)
	09	CW Pitch setting (0=300 Hz to 255=900 Hz (5 Hz steps))
	0A	RF power setting (0=minimum to 255=100%)
	0B	MIC gain setting (0=0% to 255=100%)
	0C	Key speed level setting (0=6 wpm to 255=60 wpm)
	0D	[MNF] setting (0=max. CCW, 128=center, 255=max. CW)
	0E	COMP level setting (0=0 to 255=10)
	0F	Break-IN delay setting (0=2.0 d to 255=13.0 d)
	12	NB level setting (0=0% to 255=100%)
	16	VOX gain setting (0=0% to 255=100%)
	17	Anti VOX gain setting (0=0% to 255=100%)
15	01	Read squelch condition
	02	Read S-meter level
	11	Read RF power meter
	12	Read SWR meter
	13	Read ALC meter
16	02	Preamp (0=OFF, 1=ON)
	12	AGC selection (0=OFF, 1=Fast, 2=Slow.)
	22	Noise blanker (0=OFF, 1=ON)
	40	Noise reduction (0=OFF, 1=ON)
	41	Auto notch (0=OFF, 1=ON)
	44	Speech compressor (0=OFF, 1=ON)
	46	VOX function (0=OFF, 1=ON)
	47	Break-IN function (0=OFF, 1=semi BK-IN, 2=full BK-IN)
	48	Manual notch (0=OFF, 1=ON)
	4F	Twin peak filter (0=OFF, 1=ON)
	50	Dial lock function (0=OFF, 1=ON)
19	00	Read the transceiver ID
1A	00	Set/read memory contents An additional code, 0001–0201 (0200=P1, 0201=P2), must be added to specify the memory channel.
	01	Set/read band stacking register contents (see p. 91 for details)
	02	Set/read the selected filter width (SSB, CW, RTTY: 0=50 Hz to 40/31=3600/2700 Hz; AM: 0=200 Hz to 39=8 kHz)
	0301	Set/read RF power setting (0=minimum to 255=100%)
	0302	Set/read MIC gain setting (0=0% to 255=100%)

Command	Sub command	Description
1A	0303	Set/read Key speed level setting (0=6 wpm to 255=60 wpm)
	0304	Set/read CW Pitch setting (0=300 Hz to 120=900 Hz; 5 Hz steps)
	0305	Set/read CW side tone setting (0=0% to 255=100%)
	0306	Set/read CW side tone level limit (0=OFF, 1=ON)
	0307	Set/read Twin peak filter (0=OFF, 1=ON)
	0308	Set/read RTTY mark frequency (0=1275 Hz, 1=1615 Hz, 2=2125 Hz)
	0309	Set/read RTTY shift width (0=170 Hz, 1=200 Hz, 2=425 Hz, 3=850 Hz)
	0310	Set/read RTTY keying polarity (0=Normal, 1=Reverse)
	0311	Set/read LCD brightness (0=OFF, 1=Dark, 2=Bright)
	0312	Set/read confirmation beep (0=OFF, 1=ON)
	0313	Set/read band edge beep (0=OFF, 1=ON)
	0314	Set/read beep gain (0=0% to 255=100%)
	0315	Set/read beep gain limit (0=OFF, 1=ON)
	0316	Set/read [RF/SQL] control set (0=Auto, 1=SQL, 2=RF+SQL)
	0317	Set/read meter peak hold (0=OFF, 1=ON)
	0318	Set/read quick split set (0=OFF, 1=ON)
	0319	Set/read split lock set (0=OFF, 1=ON)
	0320	Set/read transmit frequency monitor with [RIT] key set (0=OFF, 1=ON)
	0321	Set/read tuner auto start set (0=OFF, 1=ON)
	0322	Set/read PTT tune start set (0=OFF, 1=ON)
	0323	Set/read MOD input connector during DATA OFF (0=MIC, 1=ACC, 2=MIC+ACC, 3=USB)
	0324	Set/read MOD input connector during DATA ON (0=MIC, 1=ACC, 2=MIC+ACC, 3=USB)
	0325	Set/read MOD input gain from USB (0=0% to 255=100%)
	0326	Set/read speech level (0=0% to 255=100%)
	0327	Set/read speech language (0=English, 1=Japanese)
	0328	Set/read speech speed (0=Slow, 1=Fast)
	0329	Set/read S-level speech (0=OFF, 1=ON)
	0330	Set/read speech capability with [MODE] key operation (0=OFF, 1=ON)
	0331	Set/read scan speed set (0=Slow, 1=Fast)
	0332	Set/read scan resume set (0=OFF, 1=ON)

Command	Sub command	Description
1A	0333	Set/read main dial auto TS (0=OFF, 1=Low, 2=High)
	0334	Set/read 1/4 dial speed set (0=OFF, 1=ON)
	0335	Set/read mic. UP/DOWN speed (0=Low, 1=High)
	0336	Set/read SSB/CW synchronous tuning function (0=OFF, 1=ON)
	0337	Set/read CW carrier point set (0=LSB, 1=USB)
	0338	Set/read break-in set (0=OFF, 1=semi BK-IN, 2=full BK-IN)
	0339	Set/read break-in delay time set (20=2.0 d to 130=13.0 d)
	0340	Set/read CW keyer dot/dash ratio (28=1:1:2.8 to 45=1:1:4.5)
	0341	Set/read CW paddle polarity (0=Normal, 1=Reverse)
	0342	Set/read CW keyer type (0=Straight, 1=Bug-key, 2=ELEC Key)
	0343	Set/read MIC UP/DOWN keyer (HM-36) set (0=OFF, 1=ON)
	0344	Set/read SSB mode selectability (0=OFF: inhibition, 1=ON: selectable)
	0345	Set/read CW mode selectability (0=OFF: inhibition, 1=ON: selectable)
	0346	Set/read RTTY mode selectability (0=OFF: inhibition, 1=ON: selectable)
	0347	Set/read AM mode selectability (0=OFF: inhibition, 1=ON: selectable)
	0348	Set/read CI-V transceive set (0=OFF, 1=ON)
	0349	Set/read reference frequency set (0=0% to 255=100%)
	0350	Set/read noise blanker level set (0=0% to 255=100%)
	0351	Set/read noise blanker width set (0=0% to 255=100%)
	0352	Set/read NR level set (0=0 to 15=15)
	0353	Set/read VOX gain set (0=0% to 255=100%)
	0354	Set/read Anti-VOX gain set (0=0%, 255=100%)
	0355	Set/read VOX delay set (0=0.0 sec. to 20=2.0 sec.)
	0356	Set/read speech compressor level (0=0 to 10=10)
	04	Send/read DATA mode with filter set (see next page for detail)
	05	Set/read DSP filter shape (0=Sharp, 1=Soft)
	06	Set/read manual notch width (0=Wide, 1=Mid., 2=Nar.)
1C	00	Set/read the transceiver's condition (0=Rx, 1=Tx)
	01	Set/read antenna tuner condition (0=OFF, 1=ON, 2=Start tuning or while tuning)

◇ Band stacking register

To send or read the desired band stacking register's contents, a combination of the frequency band and the register codes ("01" is fixed as the register code) as follows are used.
For example, when sending/reading the contents in the 21 MHz band, the code "0701" is used.

• Frequency band codes

CODE	BAND	FREQUENCY RANGE
01	1.8 MHz	1.800000 – 1.999999
02	3.5 MHz	3.400000 – 4.099999
03	7 MHz	6.900000 – 7.499999
04	10 MHz	9.900000 – 10.499999
05	14 MHz	13.900000 – 14.499999
06	18 MHz	17.900000 – 18.499999
07	21 MHz	20.900000 – 21.499999
08	24 MHz	24.400000 – 25.099999
09	28 MHz	28.000000 – 29.999999
10	50 MHz	50.000000 – 54.000000
11	General	Other than above

◇ Data mode with filter width setting

The following data sequence is used when sending or reading the data mode with filter width setting.