ICOM

CI-V REFERENCE GUIDE

VHF/UHF TRANSCEIVER

ID-52A PLUS
ID-52E PLUS

Icom Inc.

TABLE OF CONTENTS

REMOTE CONTROL 2

Remote control (CI-V) information 2
◇ CI-V data setting..... 2
◇ Connecting to a PC 2
◇ Data format..... 4
◇ Command table 4
◇ Command formats..... 6
• Operating frequency 6
• Operating mode 6
• Offset frequency setting..... 6
• AF gain level setting 6
• Squelch level setting..... 6
• RF power setting 6
• MIC gain (External) setting 6
• VOX gain setting..... 6
• Repeater tone/tone squelch frequency setting 7
• DTCS code and polarity setting..... 7
• Digital code squelch setting..... 7
• DV MY call sign setting..... 7
• DV TX call signs setting (24 characters)..... 7
• DV TX message setting 8
• DV RX call sign data..... 8
• DV RX message 9
• DV RX Status setting..... 9
• GPS/D-PRS data..... 9
• GPS/D-PRS message 12
• DV TX data 12
• DV RX data (transceive)..... 12
• MY position data 12
• Manually input position data 12

REMOTE CONTROL

Remote control (CI-V) information

◇CI-V data setting

To control the transceiver, first set the following items on the MENU screen.
ⓘRefer to the Advanced manual for each menu item's details.

[MENU] > SET > Function > **CI-V**

The Icom Communications Interface V (CI-V) is used for remote control.
Set its CI-V address, CI-V Baud Rate (SP Jack)*, and CI-V transceive function*.

* You need to select the baud rate in "CI-V Baud Rate (SP Jack)," when you remotely control the transceiver through the [SP] jack.
When "CI-V Transceive" is set to "ON," the same change as your transceiver is automatically set on other connected transceivers or receivers, and vice versa.
ⓘSee page 3 about how to connect a PC to the [SP] jack, through the CT-17 (discontinued product).

[MENU] > SET > Function > **USB Connect**

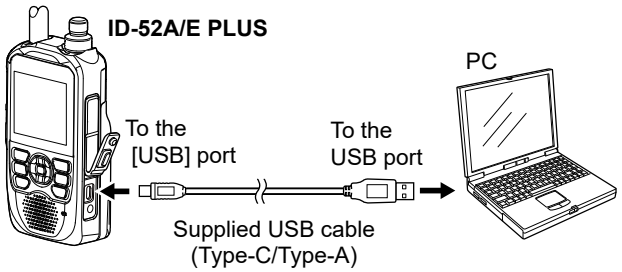
Before connecting the USB cable to the PC, set "USB Connect" to "Serialport" (default).

[MENU] > SET > Function > **USB Serialport Function**

Before connecting the USB cable to the PC, set "USB Serialport Function" to "CI-V (Echo Back ON)" or "CI-V (Echo Back OFF)."

◇Connecting to a PC

The transceiver's operating frequency, mode, VFO, and memory selection, can be remotely controlled using a PC.
Connect the transceiver to a PC with a USB cable.
ⓘUse a proper cable according to your PC's USB port and make the connection as short as possible.
The transceiver may not be recognized by the controller, depending on the USB cable length.
Type-C ↔ Type-A: Supplied USB cable
Type-C ↔ Type-C: User supplied
ⓘWhen connecting to a USB port on your PC with the USB driver installed, USB is named as "ID-52PLUS Serial Port."
If it is recognized correctly, "USB COM" will be displayed on the transceiver.



To use the USB cable between the transceiver and a PC, you must first install a USB driver.
The latest USB driver and installation guide can be downloaded from the Icom website.

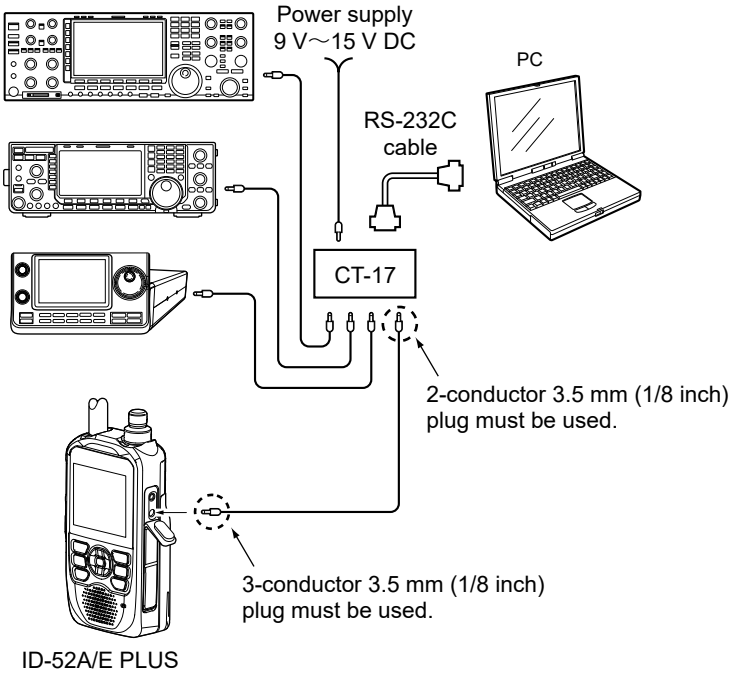
Carefully read the guide, before installing the driver.
https://www.icomjapan.com/support/

Remote control (CI-V) information

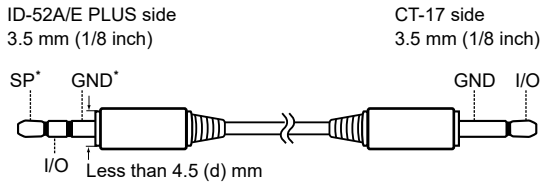
◇ Connecting to a PC

TIP: CI-V connection example
The transceiver can be connected through an optional CT-17 CI-V LEVEL CONVERTER (discontinued product) to a PC equipped with an RS-232C port.
ⓘRemote operation through the [SP] jack is not guaranteed.

See the CT-17 instruction manual for details of remotely controlling transceivers and receivers.



Connections



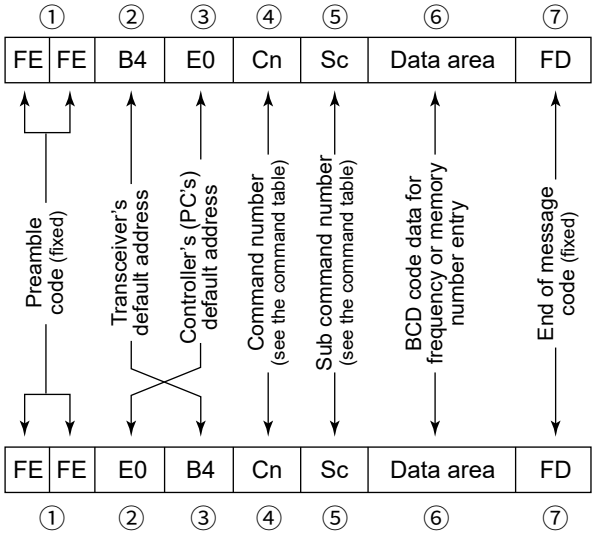
To hear the receive audio, connect SP* and GND* to the speaker.

Remote control (CI-V) information

◇Data format

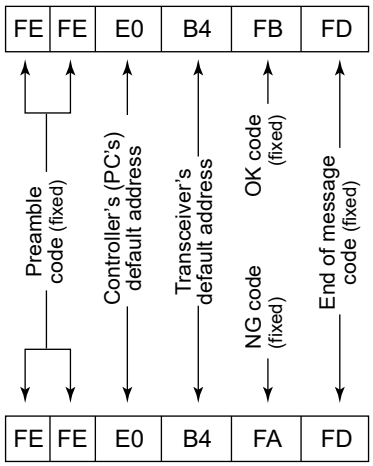
The CI-V system can be written using the following data formats. Data formats differ according to command numbers. A data area or sub command is added for some commands.

Controller to ID-52A/E PLUS



ID-52A/E PLUS to controller

OK message to controller



NG message to controller

◇Command table

Command	Sub	Data	TM	Description
00		See p. 6	*4	Send operating frequency for transceive
01		See p. 6	*4	Send operating mode for transceive
03		See p. 6	*4	Read operating frequency
04		See p. 6		Read operating mode
05		See p. 6	*4	Send operating frequency
06		See p. 6	*4	Send operating mode
07			*4	Select the VFO mode
	D0			Select the A band Dualwatch: Set the MAIN band as the A band Single watch: Select the A band
	D1			Select the B band Dualwatch: Set the MAIN band as the B band Single watch: Select the B band
0C		See p. 6		Read offset frequency*1
0D		See p. 6	*4	Set offset frequency
0F				Read duplex setting (10=OFF, 11=DUP–, 12=DUP+)
	10			Set Simplex
	11		*4	Set Duplex –
	12		*4	Set Duplex +
11*		00/10/30	*4	Send/read Attenuator (00=OFF, 10=10 dB (375 ~ 479 MHz), 30=30 dB (108 ~ 374.995 MHz)

Command	Sub	Data	TM	Description
14*	01	See p. 6		Send/read the audio level
	03	See p. 6	*4	Send/read the squelch level
	0A	See p. 6	*4	Send/read the RF power setting
	0B	See p. 6		Send/read MIC gain (External)
	16	See p. 6		Send/read the VOX gain
15	01	00/01		Read noise or S-meter squelch status (00=Close, 01=Open)
	02	00 00 ~ 02 55	*4	Read S-meter level (00 00=S0, 01 70=S9)
	05	00/01		Read various squelch function's (including the tone squelch) status (00=Close, 01=Open)
	11	00 00 ~ 02 55	*4	Read the Po Meter Level (00 25=S-Low, 00 76=Low1, 01 28=Low2, 01 79= Mid, 02 30=High)
16*	42	00/01	*4	Send/read the Repeater tone (00=OFF, 01=ON)
	43	00 ~ 02	*4	Send/read the Tone squelch (00=OFF, 01=TSQL, 02=TSQL-R)
	46	00/01		Send/read the VOX function (00=OFF, 01=ON)
	4B	00 ~ 02	*4	Send/read the DTCS function (00=OFF, 01=DTCS, 02=DTCS-R)

*(Asterisk) Send/read data

Remote control (CI-V) information

◇ Command table

Command	Sub	Data	TM	Description
16*	59	00		Send/read SUB band OFF
		01		Send/read SUB band ON
	5B	00 ~ 02		Send/read the DSQL (Digital Call Sign squelch)/CSQL (Digital Code squelch) setting (DV mode only) (00=OFF, 01=DSQL, 02=CSQL)
	5C	00 ~ 02		Send/read the GPS TX mode (00=OFF, 01=D-PRS, 02=NMEA)
	5D	00 ~ 09	*4	Send/read the Tone squelch function (00=OFF, 01=TONE, 02=TSQL, 03=DTCS, 04=TSQL-R, 05=DTCS-R, 06=DTCS (T), 07=TONE (T)/DTCS (R), 08=DTCS (T)/TSQL (R), 09=TONE (T)/TSQL (R))
18	00			Turn OFF the transceiver
	01*2			Turn ON the transceiver
19	00			Read the transceiver ID
1B*	00	See p. 7	*4	Send/read the Repeater tone frequency
	01	See p. 7	*4	Send/read the TSQL tone frequency
	02	See p. 7	*4	Send/read the DTCS code and polarity
	07	See p. 7		Send/read the CSQL code (DV mode)
1C*	00	00/01		Send/read the transceiver's status (00=RX, 01=TX)
1F*	00	See p. 7		Send/read the My Call Sign setting
	01	See p. 7		Send/read the DV TX Callsign setting
	02	See p. 8		Send/read the DV TX Message setting
20 00	00*	00/01*3		Send/read the Auto DV RX Call signs output (00=OFF, 01=ON)
	01	See p. 8		Output DV RX Call signs for transceive
	02	See p. 8		Read Auto DV RX Call signs
01	00*	00/01*3		Send/read the Auto DV RX message output (00=OFF, 01=ON)
	01	See p. 9		Output DV RX message for transceive
	02	See p. 9		Read Auto DV RX message
02	00*	00/01*3		Send/read the Auto DV RX status output (00=OFF, 01=ON)
	01	See p. 9		Output DV RX status for transceive
	02	See p. 9		Read Auto DV RX status
20 03	00*	00/01		Send/read the Auto DV RX GPS/D-PRS data output (00=OFF, 01=ON)
	01	See p. 9 and 11		Output DV RX GPS/D-PRS data for transceive
	02	See p. 9 and 11		Read DV RX GPS/D-PRS data for transceive
04	00*	00/01		Send/read Auto DV RX GPS/D-PRS message output (00=OFF, 01=ON)
	01	See p. 12		Output DV RX D-PRS message for transceive
	02	See p. 12		Read Auto DV RX D-PRS message status
22 00		See p. 12		Set the DV TX data (Up to 30 byte)
01	00	00/01		Set the Auto DV RX data output (00=OFF, 01=ON)
	01	See p. 12		Set the DV RX data for transceive (Up to 30 byte)
	02*	00/01		Send/read DV data TX setting (00=PTT, 01=Auto)
	03*	00/01		Send/read DV fast data setting (00=OFF, 01=ON)
	04*	00/01		Send/read GPS Data Speed setting (00=Slow, 01=Fast)
	05*	00 ~ 10		Send/read TX Delay (PTT) setting (00=OFF, 01=1 sec. ~ 10=10 sec.)
23 00		See p. 12		Read the position status
	01*	00/01/03		Send/read the internal GPS OFF (00=OFF, 01=Internal GPS, 03=Manual)
	02*	See p. 12		Send/read the manually input position data
24 00	00*	00/01		Send/read TX output power setting (00=OFF, 01=ON)
	01	00/01		Set the TX output power for transceive (00=OFF, 01=ON)

*(Asterisk) Send/read data

*1 Less than 100 Hz is omitted.

*2 When sending the power ON command (18 01) using the [SP] jack (p. 3), the command "FE" must be sent before the basic format. The following is the approximate number of needed repetitions.
- •4800bps: 15 "FE"s
- •9600bps: 30 "FE"s
- •19200bps: 60 "FE"s

Example: When operating with 4800 bps

	①			②	③		④		⑤		⑦	
F	**E**	F	E	F	E	B	4	E	0	1	8	0	1	F	D

×15

① Preamble code (fixed) ② Transceiver's default address
③ Controller's default address ④ Command number
⑤ Sub command number ⑦ End of message code (fixed)

*3 Output setting is automatically set to OFF after turning OFF the transceiver.

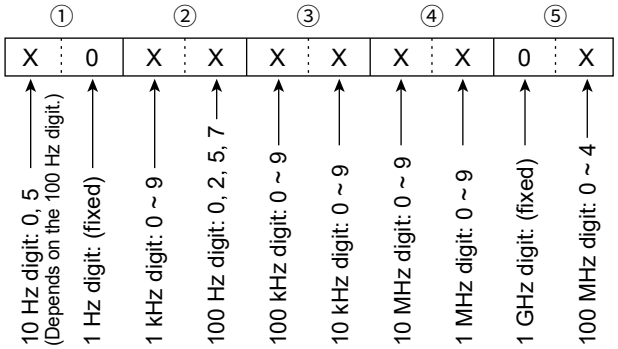
*4 Cannot be set in the Terminal mode (TM).

Remote control (CI-V) information

◇Command formats

• Operating frequency

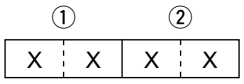
Command: 00, 03, 05



ⓘWhen the 100 Hz digit is 2 or 7, the 10 Hz digit is fixed to 5 and is fixed to 0 otherwise.

• Operating mode

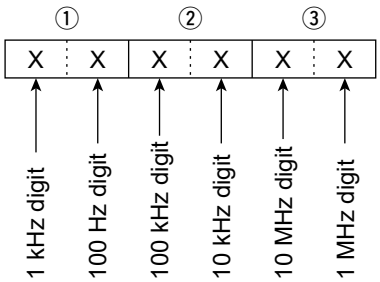
Command: 01, 04, 06



Receive mode	①Operating mode	②Filter setting
FM	05	01
FM-N	05	02
DV	17	01
AM	02	01
AM-N	02	02

• Offset frequency setting

Command: 0C, 0D



• AF gain level setting

Command: 14 01

VOL0	VOL1	VOL2	VOL3
00 00 ~ 00 05	00 06 ~ 00 12	00 13 ~ 00 18	00 19 ~ 00 25
VOL4	**VOL5**	**VOL6**	**VOL7**
00 26 ~ 00 31	00 32 ~ 00 37	00 38 ~ 00 44	00 45 ~ 00 50
VOL8	**VOL9**	**VOL10**	**VOL11**
00 51 ~ 00 57	00 58 ~ 00 63	00 64 ~ 00 69	00 70 ~ 00 76
VOL12	**VOL13**	**VOL14**	**VOL15**
00 77 ~ 00 82	00 83 ~ 00 89	00 90 ~ 00 95	00 96 ~ 01 01
VOL16	**VOL17**	**VOL18**	**VOL19**
01 02 ~ 01 08	01 09 ~ 01 14	01 15 ~ 01 21	01 22 ~ 01 27
VOL20	**VOL21**	**VOL22**	**VOL23**
01 28 ~ 01 33	01 34 ~ 01 40	01 41 ~ 01 46	01 47 ~ 01 53
VOL24	**VOL25**	**VOL26**	**VOL27**
01 54 ~ 01 59	01 60 ~ 01 65	01 66 ~ 01 72	01 73 ~ 01 78
VOL28	**VOL29**	**VOL30**	**VOL31**
01 79 ~ 01 85	01 86 ~ 01 91	01 92 ~ 01 97	01 98 ~ 02 04
VOL32	**VOL33**	**VOL34**	**VOL35**
02 05 ~ 02 10	02 11 ~ 02 17	02 18 ~ 02 23	02 24 ~ 02 29
VOL36	**VOL37**	**VOL38**	**VOL39**
02 30 ~ 02 36	02 37 ~ 02 42	02 43 ~ 02 49	02 50 ~ 02 55

• Squelch level setting

Command: 14 03

OPEN*	AUTO	LEVEL1	LEVEL2
00 00 ~ 00 22	00 23 ~ 00 46	00 47 ~ 00 69	00 70 ~ 00 92
LEVEL3	**LEVEL4**	**LEVEL5**	**LEVEL6**
00 93 ~ 01 15	01 16 ~ 01 39	01 40 ~ 01 62	01 63 ~ 01 85
LEVEL7	**LEVEL8**	**LEVEL9**	
01 86 ~ 02 08	02 09 ~ 02 32	02 33 ~ 02 55	

*Except the DV mode.

• RF power setting

Command: 14 0A

S-Low	Low1	Low2	Mid
00 00 ~ 00 50	00 51 ~ 01 01	01 02 ~ 01 53	01 54 ~ 02 04
High			
02 05 ~ 02 55			

• MIC gain (External) setting

Command: 14 0B

1	2	3	4
00 00 ~ 00 63	00 64 ~ 01 27	01 28 ~ 01 91	01 92 ~ 02 55

• VOX gain setting

Command: 14 16

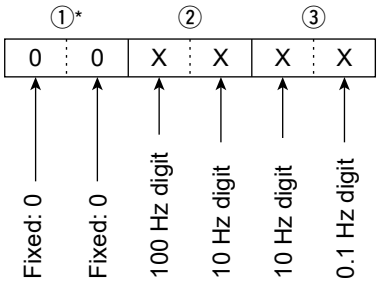
OFF	1	2	3
00 00 ~ 00 22	00 23 ~ 00 46	00 47 ~ 00 69	00 70 ~ 00 92
4	**5**	**6**	**7**
00 93 ~ 01 15	01 16 ~ 01 39	01 40 ~ 01 62	01 63 ~ 01 85
8	**9**	**10**	
01 86 ~ 02 08	02 09 ~ 02 32	02 33 ~ 02 55	

Remote control (CI-V) information

◇ Command formats

• Repeater tone/tone squelch frequency setting

Command: 1B 00, 1B 01

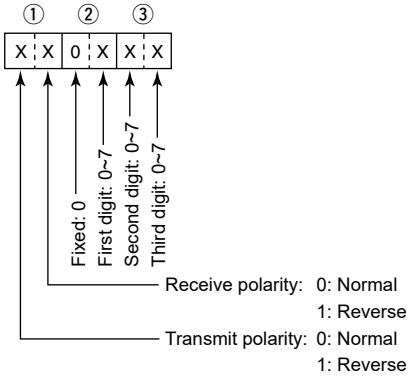


*No input required when setting the frequency.

Refer to the Advanced manual for the tone frequency list.

• DTCS code and polarity setting

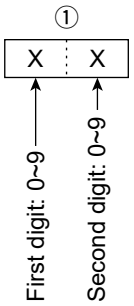
Command: 1B 02



Refer to the Advanced manual for the DTCS code list.

• Digital code squelch setting

Command: 1B 07

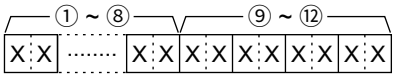


• DV MY call sign setting

Command: 1F 00

Set your own call sign and note of up to 12 characters.

See “Character’s code of the call sign.”



① ~ ⑧: Your own call sign setting (8 characters)

⑨ ~ ⑫: Note setting (4 characters)

ⓘ In Terminal mode, the settings for “My Call Sign (TM)” are sent or read.

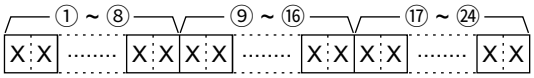
• DV TX call signs setting (24 characters or 8 characters)

Command: 1F 01

Set “UR,” “R1,” and “R2” call signs of 8 characters (fixed), or only the “UR” call sign.

See “Character’s code of the call sign.”

When setting “UR,” “R1,” and “R2” call signs

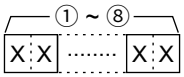


① ~ ⑧: UR (Destination) call sign setting (8 characters)

⑨ ~ ⑯: R1 (Access/Area repeater) call sign setting (8 characters)

⑰ ~ ㉔: R2 (Link/Gateway repeater) call sign setting (8 characters)

When setting only the “UR” call sign



① ~ ⑧: UR (Destination) call sign setting (8 characters)

Character’s code of the call sign

Character	ASCII code
0 ~ 9	30 ~ 39
A ~ Z	41 ~ 5A
(Space)	20
/	2F

Remote control (CI-V) information

◇ Command formats

• DV TX message setting

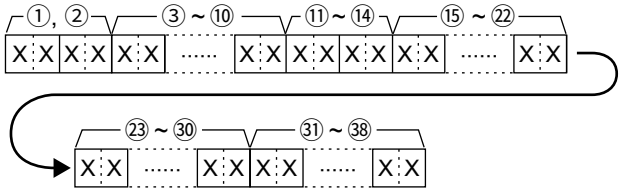
Command: 1F 02
Set the transmit message of up to 20 characters.
See “Codes for character entries.”
“FF” stops sending or reading messages.

Codes for character entries

Character	ASCII code	Character	ASCII code
A ~ Z	41 ~ 5A	a ~ z	61 ~ 7A
0 ~ 9	30 ~ 39	Space	20
!	21	#	23
$	24	%	25
&	26	\	5C
?	3F	“	22
’	27	`	60
^	5E	+	2B
–	2D	*	2A
/	2F	.	2E
,	2C	:	3A
;	3B	=	3D
<	3C	>	3E
(	28	)	29
[	5B	]	5D
{	7B	}	7D
¦	7C	_	5F
¯	7E	@	40

• DV RX call sign data

Command: 20 00 01, 00 02



①: Header flag data (First byte)

Data		Description
bit7	(0: Fixed)	—
bit6	(0: Fixed)	—
bit5	(0: Fixed)	—
bit4	0/1	0=Voice, 1=Data
bit3	0/1	0=Direct, 1=Through repeater
bit2	0/1	0=No Break-in, 1=Break-in
bit1	0/1	0=Data, 1=Control
bit0	0/1	0=Normal, 1=EMR

②: Header flag data (Second byte)

Data			Description
bit2	**bit1**	**bit0**	
1	1	1	Repeater control
1	1	0	Send auto acknowledge
1	0	1	(Not used)
1	0	0	Request to re-transmit
0	1	1	Send acknowledge
0	1	0	Receive no reply
0	0	1	Repeater disabled
0	0	0	NULL

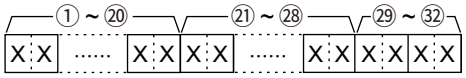
③ ~ ⑩: Call sign of the caller station
(8 characters, fixed)
⑪ ~ ⑭: Note of the caller station
(4 characters, fixed)
⑮ ~ ㉒: Call sign of the called station
(8 characters, fixed)
㉓ ~ ㉚: Call sign of the access/area repeater (R1)
(8 characters, fixed)
㉛ ~ ㊳: Call sign of the link/gateway repeater (R2)
(8 characters, fixed)
See “Codes for character entries.”
ⓘFF: When no call sign is received since the transceiver power was turned ON.

Remote control (CI-V) information

◇ Command formats

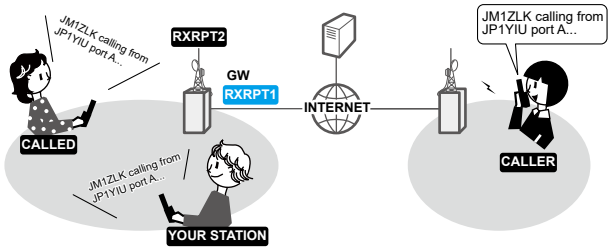
• DV RX message

Command: 20　01 01, 01 02



① ~ ⑳: Message (20 characters)
㉑ ~ ㉘: Call sign of the caller station (8 characters)
㉙ ~ ㉜: Note of the caller station (4 characters)
See “Codes for character entries.” (p. 8)
ⓘFF: When no call sign is received since the transceiver power was turned ON.

Example: When a Gateway call is received



CALLER: Caller’s call sign
CALLED: Called station call sign
RXRPT1: Call sign of the repeater that was accessed by the caller station
ⓘIf it was a call through a gateway and the internet, this item displays the gateway call sign of the repeater you received the call from.
RXRPT2: Call sign of the repeater you received the call from

• DV RX Status setting

Command: 20　02 01, 02 02

Data		Function	Description
bit7	0	(Fixed)	—
bit6	0/1	Receiving a voice call	While receiving a digital voice signal, select “1.” (Regardless of DSQL and CSQL setting)
bit5	0/1	Last call finisher	When the last call was finished by you, select “1.”
bit4	0/1	Receiving a signal	When the audio tone can be heard, select “1.”
bit3	0/1	Receiving a BK call	While receiving a BK call, select “1.”
bit2	0/1	Receiving a EMR call	While receiving a EMR call, select “1.”
bit1	0/1	Receiving a signal other than DV	When “DV” and “FM” are blinking, select “1.”
bit0	0/1	Packet loss status	While displaying packet loss, “1” is returned.

• GPS/D-PRS data

Command: 20 03　01 00, 01 01, 01 02, 01 03,
02 00, 02 01, 02 02, 02 03

Data number and description

Data number	Description
00	D-PRS — Position
01	D-PRS — Object
02	D-PRS — Item
03	D-PRS — Weather

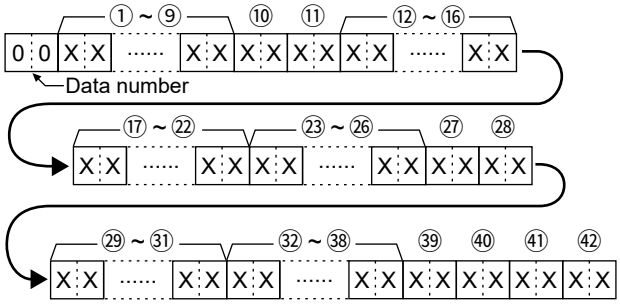
Remote control (CI-V) information

◇ Command formats

• GPS/D-PRS data

Position

Command: 20 03 01 00, 02 00



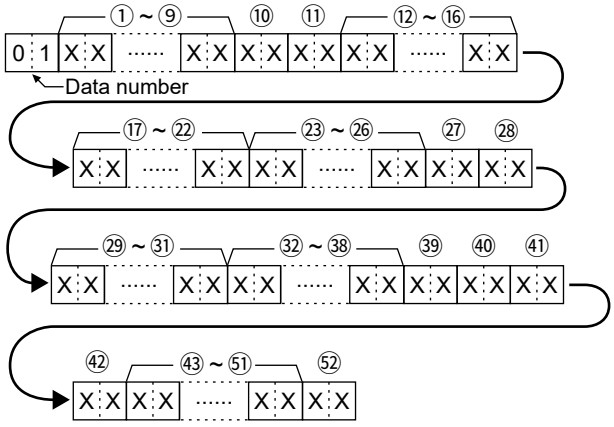
① ~ ⑨: Call sign/SSID
(9 ASCII characters (A ~ Z, 0 ~ 9, /, -, space))
⑩, ⑪: Symbol (2 ASCII characters (00h ~ EFh))
⑫ ~ ⑯: Latitude (dd°mm.mmm format)
⑰ ~ ㉒: Longitude (ddd°mm.mmm format)
㉓ ~ ㉖: Altitude (0.1 meter steps)
㉗, ㉘: Course (1 degree steps)
㉙ ~ ㉛: Speed (0.1 km/h steps)
㉜ ~ ㊳: Date (UTC: YYYYMMDDhhmmss)
(Y: Year, M: Month, D: Day,
h: Hour, m: Minute, s: Second)
㊴ ~ ㊷: See the table below.

	㊴ **Power**	㊵ **Height**	㊶ **Gain**	㊷ **Directivity**
Data	(W)	(m/ft)	(dB)	(deg)
00	0	3/10	0	Omni-direction
01	1	6/20	1	45° NE
02	4	12/40	2	90° E
03	9	24/80	3	135° SE
04	16	49/160	4	180° S
05	25	98/320	5	225° SW
06	36	195/640	6	270° W
07	49	390/1280	7	315° NW
08	64	780/2560	8	360° N
09	81	1561/5120	9	—

ⓘ The item, that is not contained the received data, is filled with “FF.”
ⓘ FF: No signal has been received since the power was turned ON.

Object

Command: 20 03 01 01, 02 01



① ~ ⑨: Call sign/SSID
(9 ASCII characters (A ~ Z, 0 ~ 9, /, -, space))
⑩, ⑪: Symbol (2 ASCII characters (00h ~ EFh))
⑫ ~ ⑯: Latitude (dd°mm.mmm format)
⑰ ~ ㉒: Longitude (ddd°mm.mmm format)
㉓ ~ ㉖: Altitude (0.1 meter steps)
㉗, ㉘: Course (1 degree steps)
㉙ ~ ㉛: Speed (0.1 km/h steps)
㉜ ~ ㊳: Date (UTC: YYYYMMDDhhmmss)
(Y: Year, M: Month, D: Day,
h: Hour, m: Minute, s: Second)
㊴ ~ ㊷: See the table below.

	㊴ **Power**	㊵ **Height**	㊶ **Gain**	㊷ **Directivity**
Data	(W)	(m/ft)	(dB)	(deg)
00	0	3/10	0	Omni-direction
01	1	6/20	1	45° NE
02	4	12/40	2	90° E
03	9	24/80	3	135° SE
04	16	49/160	4	180° S
05	25	98/320	5	225° SW
06	36	195/640	6	270° W
07	49	390/1280	7	315° NW
08	64	780/2560	8	360° N
09	81	1561/5120	9	—

㊸ ~ ㊶: Name
(9 ASCII characters (00h ~ EFh))
㊷: Type (01= Live, 00= Killed)

ⓘ The item, that is not contained the received data, is filled with “FF.”
ⓘ FF: No signal has been received since the power was turned ON.

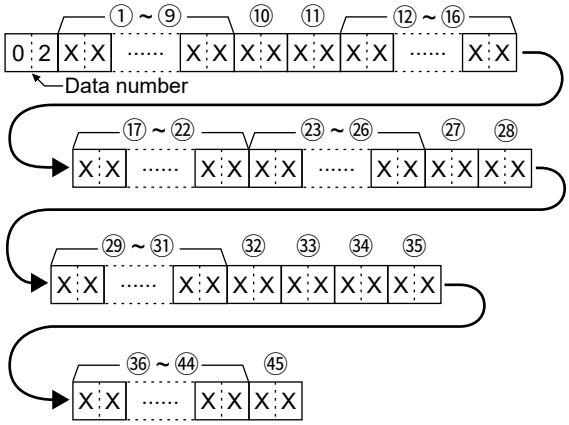
Remote control (CI-V) information

◇ Command formats

• GPS/D-PRS data

Item

Command: 20 03 01 02, 02 02



① ~ ⑨: Call sign/SSID
(9 ASCII characters (A ~ Z, 0 ~ 9, /, -, space))
⑩, ⑪: Symbol (2 ASCII characters (00h ~ EFh))
⑫ ~ ⑯: Latitude (dd°mm.mmm format)
⑰ ~ ㉒: Longitude (ddd°mm.mmm format)
㉓ ~ ㉖: Altitude (0.1 meter steps)
㉗, ㉘: Course (1 degree steps)
㉙ ~ ㉛: Speed (0.1 km/h steps)
㉜ ~ ㉟: See the table below.

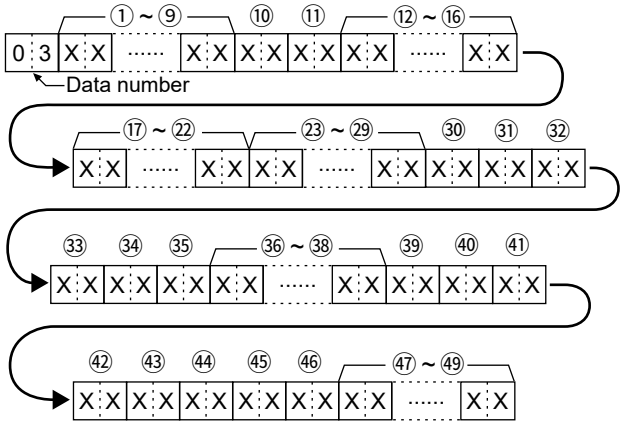
	㉜ **Power**	㉝ **Height**	㉞ **Gain**	㉟ **Directivity**
Data	(W)	(m/ft)	(dB)	(deg)
00	0	3/10	0	Omni-direction
01	1	6/20	1	45° NE
02	4	12/40	2	90° E
03	9	24/80	3	135° SE
04	16	49/160	4	180° S
05	25	98/320	5	225° SW
06	36	195/640	6	270° W
07	49	390/1280	7	315° NW
08	64	780/2560	8	360° N
09	81	1561/5120	9	—

㊱ ~ ㊹: Name
(9 ASCII characters (00h ~ EFh))
㊺: Type (01= Live, 00= Killed)

ⓘ The item, that is not contained the received data, is filled with “FF.”
ⓘ FF: No signal has been received since the power was turned ON.

Weather

Command: 20 03 01 03, 02 03



① ~ ⑨: Call sign/SSID
(9 ASCII characters (A ~ Z, 0 ~ 9, /, -, space))
⑩, ⑪: Symbol (2 ASCII characters (00h ~ EFh))
⑫ ~ ⑯: Latitude (dd°mm.mmm format)
⑰ ~ ㉒: Longitude (ddd°mm.mmm format)
㉓ ~ ㉙: Date (UTC: YYYYMMDDhhmmss)
(Y: Year, M: Month, D: Day,
h: Hour, m: Minute, s: Second)
㉚, ㉛: Wind direction (1 degree steps)
㉜, ㉝: Wind speed (0.1 m/s steps)
㉞, ㉟: Gust speed (0.1 m/s steps)
㊱ ~ ㊲: Temperature (0.1°C steps)
㊳: Temperature (00= + degree, 01= – degree)
㊴, ㊵: Rainfall (0.1 mm steps)
㊶, ㊷: Rainfall (24 hours) (0.1 mm steps)
㊸, ㊹: Rainfall (Midnight) (0.1 mm steps)
㊺, ㊻: Humidity (1% steps)
㊼ ~ ㊾: Barometric pressure (0.1 hPa steps)

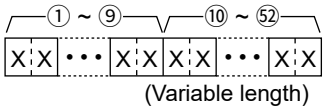
ⓘ The item, that is not contained the received data, is filled with “FF.”
ⓘ FF: No signal has been received since the power was turned ON.

Remote control (CI-V) information

◇ Command formats

• GPS/D-PRS message

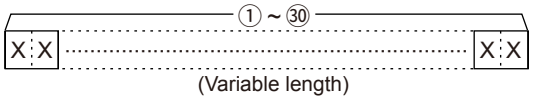
Command: 20 04 01, 04 02



① ~ ⑨: Call sign/SSID
(9 ASCII characters (A ~ Z, 0 ~ 9, /, -, space))
⑩ ~ ㊷: Message
(Up to 43 ASCII characters (00h ~ EFh))
ⓘ FF: No signal has been received since the power was turned ON.

• DV TX data

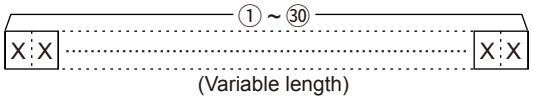
Command: 22 00



① ~ ㉚: TX data (Up to 30 Bytes)
ⓘ"FA" to "FF" are entered after converted to "FF 0A" to "FF 0F" automatically. Up to 60 bytes of data can be entered in this case.

• DV RX data (transceive)

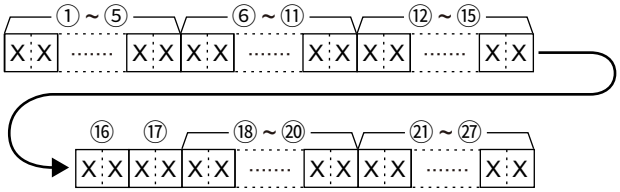
Command: 22 01 01



① ~ ㉚: RX data (Up to 30 Bytes)
ⓘ"FA" to "FF" are entered after converted to "FF 0A" to "FF 0F" automatically. Up to 60 bytes of data can be entered in this case.

• MY position data

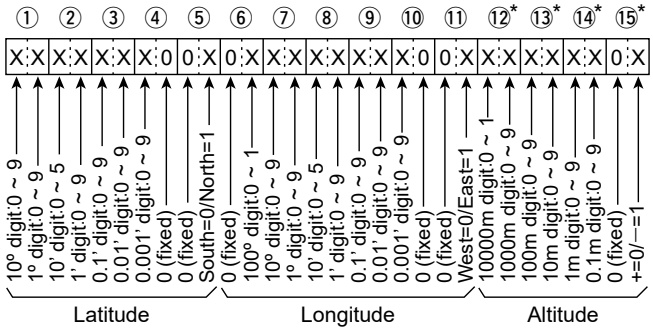
Command: 23 00



① ~ ⑤: Latitude (dd°mm.mmm format)
⑥ ~ ⑪: Longitude (ddd°mm.mmm format)
⑫ ~ ⑮: Altitude (0.1 meter steps)
⑯, ⑰: Course (1 degree steps)
⑱ ~ ⑳: Speed (0.1 km/h steps)
㉑ ~ ㉗: Date (UTC: YYYYMMDDhhmmss)
(Y: Year, M: Month, D: Day,
h: Hour, m: Minute, s: Second)

• Manually input position data

Command: 23 02



① ~ ⑤: Latitude (ddºmm.mmm format)
⑥ ~ ⑪: Longitude (ddd°mm.mmm format)
⑫ ~ ⑮: Altitude (0.1 meter steps)
*About the Altitude data:
On read: If the received Altitude data is invalid, these bytes are filled with "FF."
On write: If you set no Altitude data, fill these bytes with "FF."

How the World Communicates



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Icom Inc.
1-1-32 Kamiminami, Hirano-ku, Osaka 547-0003, Japan