Steuerbefehle für Conference Controller VIS-DCP2000

1. Network communication

Default IP address：192.168.10.100

Port number：10166

2. The numbers in parentheses after each name indicate the length occupied by the parameter. The unit is byte.

3. XX YY respectively represent one byte and one X, Y represents 4 bits

4. When the ID is 0xFFF, it is a broadcast command, and all units can receive it.

5. Network communication: PC as TCP/IP client.

6. The default conference host server IP address: 192.168.10.100

7. Port number: 10166

8. Gateway 192.168.10.1

9. Subnet mask: 255.255.255.0

10. Hardware MAC: 0x00,0x08,0xDC,0x00,0x11, 0x22

11. If there is no special requirement, the information returned by the host is the information sent by the PC. Special additional notes.

12. The maximum buffer of the host receiving the PC is 200 bytes, and the PC data packet cannot be sent too fast or too large.

Enter meeting mode command

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
PC software enters conference mode		PC receives command to reply to PC	FE 00 00 01 FC
Enters conference mode	00 06 00 00 00 01 FC FC		FE 00 00 01 FC

PC software first connection protocol and communication heartbeat packet

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
PC software online query (sent to controller regularly)	00 06 00 00 0E 00 FC FC	If not received in 15s, the PC is not online	FE 00 0E 00 FC

Processor parameter settings

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
Conference mode, MAX speaker	00 06 00 01 00 XY FC FC	X：Conference mode Y：MAX speaker Wireless processor: X=0, 1, 2, 3 (0: Override, 1: Open, 2: Voice, 3: Apply) Y=0, 1, 2 (representing the number of speakers 1, 2, 4) The Voice mode is special: Y=0 or 1 means the number of speakers is 2, and Y=2 or 4 means the number of speakers is 4 Wired processor: X=0, 1, 2, 3 (0: Override, 1: Open, 2: Voice, 3: Apply) Y=0, 1, 2, 3 (representing the number of speakers 1, 2, 4, 6) The Voice mode is special: no matter what the value of Y is, the number of speakers is fixed at 6	FE 01 00 XY FC
Line input	00 06 00 01 11 YY FC FC	YY (0-41): 0=0dB, 1 to 40= -1dB, -2dB, -3dB to -40dB, 41=mute	FE 01 11 YY FC
Line output	00 06 00 01 41 YY FC FC	YY (0-41): 0=0dB, 1 to 40= -1dB, -2dB, -3dB to -40dB, 41=mute	FE 01 41 YY FC

Unit headphone volume	00 06 00 01 F1 YY FC FC	YY (0-41): 0=0dB, 1 to 40= -1dB, -2dB, -3dB to -40dB, 41=mute	FE 01 F1 YY FC
Turn off the built-in speaker	00 06 00 00 0D 00 FC FC		FE 00 0D 00 FC
Turn on the built-in speaker	00 06 00 00 0D 01 FC FC		FE 00 0D 01 FC
Scan unit	00 06 00 05 00 01 FC FC		
Exit scan unit	00 06 00 05 00 02 FC FC		
Total number of units after scanning units		PC receives command	FE 05 X1 YY FC
Total number of chairman units after scanning unit		PC receives command	FE 05 X2 YY FC
Total number of delegate units after scanning unit		PC receives command	FE 05 X3 YY FC
Total number of interpreter desks after scanning unit		PC receives command	FE 05 X4 YY FC

About check-in orders

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
PC software enters check-in mode		PC receives command	FE 00 00 03 FC
		PC receives command（Chairman initiates check-in function，Number of check-in x”3E8”）	FE 03 32 E8 FC

		PC receives command（ Chairman close check-in ）	FE 03 01 00 FC
Enter check-in and set number of check-in（Back to ID）	00 06 00 03 X2 YY FC FC	XYY ： Number of check-ins	FE 03 X2 YY FC
Supplementary check-in	00 06 00 03 X5 YY FC FC	XYY：ID	FE 03 05 YY FC
Check in ID		PC receives command XYY：ID	FE 03 X3 YY FC
End check - in	00 06 00 03 01 00 FC FC		FE 03 01 00 FC

Voting orders

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
PC software enter voting		PC receives command	FE 00 00 02 FC
		PC receives command（ The chairman initiates the vote that the last time is valid and does not need supplementary check-in ）	FE 02 03 00 FC
		PC receives command（ The chairman initiates the vote，default 3 key voting）	FE 02 00 00 FC
		PC receives command(The chairman initiates the vote，entry vote order）	FE 02 02 00 FC
		PC receives command（The chairman end the vote，Withdraw from voting order	FE 02 01 00 FC

		）	
Voting setting	00 06 00 02 03 XY FC FC	X 0：Last time is valid. 1First time is valid. Y 0：Don’t need check-in 1：Need check-in	FE 02 03 XY FC
Voting mode setting（ 3 key voting）	00 06 00 02 00 00 FC FC		FE 02 00 00 FC
Set up election mode	00 06 00 02 00 01 FC FC		FE 02 00 01 FC
Setting rating mode	00 06 00 02 00 02 FC FC		FE 02 00 02 FC
Enter the vote, don't vote before	00 06 00 02 02 00 FC FC		FE 02 02 00 FC
View the voting results (Withdrawal of vote first order)	00 06 00 02 07 00 FC FC		FE 02 07 00 FC
Withdraw vote into meeting mode (Withdrawal of vote second order)	00 06 00 02 01 00 FC FC		FE 02 01 00 FC
Processor returns voting results for an ID		In the process of voting, the processor computer returns the voting result and the voting ID to the PC, and the PC counts the number of people voting. X：The four high of voting ID ； YY：The lower eight of the voting ID； Z： 0x00，no voting；0x01， Agree / first candidate / first	FE 12 XZ YY FC

		0x02 ， Abstaining / second candidates / second 0x03，Objection / third candidate / third 0x04 ， Fourth candidates / fourth 0x05，Fifth candidate / Fifth	
Processor returns final result of voting		Z：voting mode Z=5(5key voting valid) Z=4(5key voting valid) Z=3 Z=2 Z=1 XYY：Result of voting	FE 13 XZ YY FC

Conference module control orders

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
Microphone open		Orders received by PC（XYY：ID）	FE 11 X0 YY FC
Microphone close		Orders received by PC（XYY：ID）	FE 11 X1 YY FC
An ID microphone is waiting		Orders received by PC	FE 11 X2 YY FC
An ID microphone is cancelling waiting		Orders received by PC	FE 11 X3 YY FC
The chairman closes all microphone order		Orders received by PC	FE 11 XB YY FC
Open an ID microphone	00 06 00 11 X0 YY FC FC	XYY：ID	FE 11 X0 YY FC
Close an ID microphone	00 06 00 11 X1 YY FC FC	XYY：ID	FE 11 X1 YY FC
An ID enters waiting	00 06 00 11 XD YY FC FC	XYY：ID	FE 11 XD YY FC
An ID cancels the wait	00 06 00 11 XE YY FC FC	XYY：ID	FE 11 XE YY FC
Agree Waiting ID to open the microphone	00 06 00 11 X2 YY FC FC	XYY：ID	FE 11 X0 YY FC
Cancel Waiting ID	00 06 00 11 X3 YY FC FC	XYY：ID	FE 11 X3 YY FC

Mute	00 06 00 11 F9 FF FC FC		FE 11 F9 FF FC
Disable the mute function	00 06 00 11 FA FF FC FC		FE 11 FA FF FC
Disable an ID (unit in standby mode)	00 06 00 0C X0 YY FC FC	XYY：ID	FE 0C X0 YY FC
Enable an ID	00 06 00 0C X1 YY FC FC		FE 0C X1 YY FC
Disable the speaking function of an ID	00 06 00 0C X2 YY FC FC	XYY:ID	FE 0C X2 YY FC
Enable the speaking function of an ID	00 06 00 0C X3 YY FC FC		FE 0C X3 YY FC
Disable the voting function of an ID	00 06 00 0C X4 YY FC FC	XYY:ID	FE 0C X4 YY FC
Enable the voting function of an ID	00 06 00 0C X5 YY FC FC		FE 0C X5 YY FC
Disable the check-in function of an ID	00 06 00 0C X6 YY FC FC	XYY:ID XYY:FFF For broadcasting	FE 0C X6 YY FC
Enable the check-in function of an ID	00 06 00 0C X7 YY FC FC		FE 0C X7 YY FC
Disabling a Chairman ID from initiating the voting function	00 06 00 0C X8 YY FC FC	XYY：ID XYY:FFF For broadcasting	FE 0C X8 YY FC
Enable a Chairman ID to initiate the voting function	00 06 00 0C X9 YY FC FC	XYY:FFF For broadcasting	FE 0C X9 YY FC
Disabling a chairman ID from initiating a check-in function	00 06 00 0C XA YY FC FC	XYY:FFF For broadcasting XYY：ID	FE 0C XA YY FC
Enable an ID to initiate a check-in function	00 06 00 0C XB YY FC FC	XYY:FFF For broadcasting XYY：ID	FE 0C XB YY FC
Inquiry All unit MIC state (MIC ON/MIC Waiting)	00 06 00 00 X6 YY FC FC	XYY:FFF For broadcasting, All MIC status XYY: ID	XYY=FFF 00+04+ MICONID1(16bit)+MICONID2(16bit)+MICONID3(16bit)+MICONID4(16bit)+MICONID5(16bit)+MICONID6(16bit)+MICONID7(16bit)+MICONID8(16bit)+WaitID1(16bit)+WaitID2(16bit)+WaitID3(16bit)+WaitID4(16

			bit)+WaitID5(16bit)+ WaitID6(16bit)+WaitI D7(16bit)+WaitID8(16 bit)+FC+FC MICONID (bit15-bit12)=1 chairman MIC ON (bit15-bit12)=0 Delegate XYY=ID FE 80 X1 YY FC(MIC ON) FE 80 X2 YY FC(MIC waiting) FE 80 X0 YY FC(MIC OFF)
Record start/stop	00 06 00 28 XZ YY FC FC	**Z=1 start record** **Z=0 stop record**	
All delegate MIC OFF	00 06 00 11 XB YY FC FC	**XYY=FFF**	
All MIC OFF	00 06 00 11 X1 YY FC FC	**XYY=FFF**	FE 11 X1 YY FC
Time	00 06 00 0E XZ YY FC FC	**Z=1;** X=0;year=2016+YY X=1;month=YY X=2;date=YY X=3;day=YY X=4;hour=YY X=5;minute=YY X=6:second=YY	

Camera tracking orders

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
Camera protocol	00 06 00 01 13 0X FC FC	X=1 SAMSUNG X=2 VISCA X=3 PELCO_D X=4 CUSTOM	FE 01 13 0X FC

		(Central control)	
Select camera number (Camera map)	00 06 00 01 04 0X FC FC	X=1-16(Hex)	FE 01 04 0X FC
Camera address setting (Camera map)	00 06 00 01 14 XY FC FC	XY=Camera address (Hex)	FE 01 14 XY FC
Camera video channel (Camera map)	00 06 00 01 24 XY FC FC	XY=The camera corresponds to the access matrix channel(Hex)	FE 01 24 XY FC
Start setting preset (Start set)	00 06 00 01 03 01 FC FC		FE 01 03 01 FC
Select camera (Now setting: 0x)	00 06 00 01 06 0X FC FC	X：camera number 1-16(Hex)	FE 01 06 0X FC
Microphone preset setting	00 06 00 01 X2 XY FC FC	XXY：ID A certain ID preset XXY:=FFF Full view	FE 01 X2 XY FC
Exit preset setting	00 06 00 01 03 02 FC FC		FE 01 03 02 FC
Camera Tracking On/Off	00 06 00 29 FZ FF FC FC	Z=1 Tracking ON Z=0 Tracking OFF	FE 29 FZ FF FC

IC card orders

IC card information upload command:

Frame header (16bit)+ID (16bit)+UID (8 bytes)+0xFCFC

Frame header: 00 03

ID: Unit ID

UID: IC card serial number

0xFCFC: End

For example: 00 03 00 01 79 84 4E 4F FC FC

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
Turn off IC card service	00 06 00 00 07 00 FC FC		FE 00 07 00 FC
Turn on IC upload service	00 06 00 00 07 01 FC FC		FE 00 07 01 FC
Cancel "one unit uploaded IC card data successfully"	00 06 00 21 X0 YY FC FC	XYY:ID	No response
Response to "one unit uploaded IC card data successfully"	00 06 00 19 X0 YY FC FC	XYY:ID	No response

		XYY unit IC card unplugged	FE 21 X0 YY FC
		XYY unit IC card recognized and authenticated (reconnect)	FE 19 X0 YY FC

Online status orders

Protocol function	PC sent to processor	Protocol parameter description	Processor back to PC
Get machine online status	00 06 00 2A XZ YY FC FC	XYY:ID Z:0	00 +16 +11 +00 +ID（high 8bit）+ID（low 8bit）+16byte+FC+FC
Get wireless unit power	00 06 00 2B XZ YY FC FC	XYY:Start ID Z:0	00 +16 +12 +00 +ID（high 8bit）+ID（low 8bit）+16byte+FC+FC 00 +16 +13 +00 +ID（high 8bit）+ID（low 8bit）+16byte+FC+FC

1. The machine obtains commands online
00 +16 +11 +00 +ID（high 8bit）+ID（low 8bit）+16byte+FC+FC
(16byte represents the online unit, each bit represents the current machine online, low bit first, here ID represents the starting ID)
2. Wireless power acquisition command
00 +16+12 +00 +ID（high 8bit）+ID（low 8bit）+16byte+FC+FC
(16byte represents the power of 16 machines, the ID here is the starting ID)
3. Wireless signal strength acquisition command
00 +16 +13 +00 +ID（high 8bit）+ID（low 8bit）+16byte+FC+FC
(16byte represents the signal strength of 16 machines, the ID here is the starting ID)

Example 1

PC sent to processor: 00 06 00 2A 01 01 FC FC
Return Code: 00 16 11 00 00 01 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00 FC FC
0x03 converted to binary is 00000011, counting from the lower bit, which means microphones' ID 1 and 2 are online

Example 2

Calculation formula:
Battery power percentage: [(value(dec) * 8 - 1100) / (1791 - 1100) * 100]+%
Signal strength: 0/1/2/3/4 grid signal(4,value(dec) < 40 / 3,val > 45 and val < 50 / 2,val > 55

and val < 60 / 1,val > 65 and val < 70 / 0,val > 70 and val < 255)

PC sent to processor: 00 06 00 2B 00 01 FC FC
Return Code: 00 16 12 00 00 01 00 00 D2 00 00 00 00 00 00 00 00 00 00 00 00 00 FC FC
00 16 13 00 00 01 FF FF 11 FF FF FF FF FF FF FF FF FF FF FF FF FF FC FC
Battery power- 00 16 12 00 00 01 00 00 D2 00 00 00 00 00 00 00 00 00 00 00 00 00 FC FC
Signal strength- 00 16 13 00 00 01 FF FF 11 FF FF FF FF FF FF FF FF FF FF FF FF FF FC FC
the value 0xD2 = 210dec, 0x11 = 17dec.
Battery power percentage=[(210dec * 8 - 1100) / (1791 - 1100) * 100]+%≈84%
Signal strength=4 grid signal(because 17dec<40)

Short message orders (dot matrix, extended)

Protocol function	**PC sent to processor (The blank is that this command is sent to the PC by the processor)**	**Protocol parameter description**	**Processor back to PC**
Successfully sending character short message			FE 0D 04 05 FC
Successfully sending dot matrix short message			FE 0D 04 07 FC
Successfully sending dot matrix name			FE 0D 04 08 FC
Successfully sending dot matrix position			FE 0D 04 09 FC

Microphone name display orders

Example: Send the name "123456" to ID 0001 (use ASCII code for English, GBK code for Chinese, and Unicode for other languages): 00 0E 06 00 00 22 01 01 31 32 33 34 35 36 FC FC

00 0A 06 00 ZX YY MM NN 00 00 FC FC
XYY=ID, change the avatar and country individually; XYY=FFF, change the avatar and country globally, the name display will not be affected
00 0A 06 00 ZX YY MM NN FF FF FC FC
XYY=ID, do not display the name of the ID, only display the ID; XYY=FFF, modify the avatar and country globally, do not display the name at all
00 0A 06 00 ZX YY MM NN FF FE FC FC
XYY=ID, display the ID name; XYY=FFF, globally modify the avatar and country, display all names

06 xx (xx is the sequence number, the number of retransmissions, and the same ID number has a retransmission sequence number)
00 0E (total number of bytes, 2 bytes) 06 00 (sending name type, mainly 06) 00 01 (ID number, 2 bytes) 01 (default avatar serial number) 01 (default country serial number) 31 32 33 34 35 36

FC FC

00 01 (ID number, 2 bytes) 01 (default avatar serial number) 01 (default country serial number) 00 00 FC FC only changes the avatar or country serial number

00 0E FF FF (ID number, 2 bytes) 01 (default avatar serial number) 01 (default country serial number) 00 00 FC FC only changes the avatar or country serial number, but does not change the name display
00 0E FF FF (ID number, 2 bytes) 01 (default avatar serial number) 01 (default country serial number) FF FE FC FC changes all ID characters and displays the clear command