

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Exposure				
Image Brightness			01 64 00	
	01 64 01 F6	-10		
	01 64 01 F7	-9		
	01 64 01 F8	-8		
	01 64 01 F9	-7		
	01 64 01 FA	-6		
	01 64 01 FB	-5		
	01 64 01 FC	-4		
	01 64 01 FD	-3		
	01 64 01 FE	-2		
	01 64 01 FF	-1		
	01 64 01 00	0		
	01 64 01 01	+1		
	01 64 01 02	+2		
	01 64 01 03	+3		
	01 64 01 04	+4		
	01 64 01 05	+5		
	01 64 01 06	+6		
	01 64 01 07	+7		
	01 64 01 08	+8		
	01 64 01 09	+9		
	01 64 01 0A	+10		
Color				
White Balance			01 65 00	
	01 65 01 00	White Balance AUTO		
	01 65 01 02	White Balance Manual		
Perform WB				
	01 65 01 10			
R Gain (WB=Manual)			01 04 00	
	01 04 02 d0 d1	-64..+63 (0xFFC0..0x003F), -191..+63 (0xFF41..0x003F) d0,d1: -100..+100 (0xFF9C..0x0064)		
B Gain (WB=Manual)			01 05 00	
	01 05 02 d0 d1	-64..+63 (0xFFC0..0x003F), -191..+63 (0xFF41..0x003F) d0,d1: -100..+100 (0xFF9C..0x0064)		
Color Mode			01 6D 00	
	01 6D 01 00	Black/White		
	01 6D 01 01	Presentation		
	01 6D 01 02	Natural		
	01 6D 01 03	Video Conference		
	01 6D 01 04	Manual		
Gamma Normal Mode			01 68 00	
	01 68 01 d0	Gamma Level for Normal Mode (0x00..0x03)		

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Color <i>continued</i>				
		d0: 0x00..0x03		
Saturation			01 6E 00	
	01 6E 01 d0	0% to 150% in steps of 1% (0x00..0x96) in MANUAL		
		d0: 0 %...150% (0x00..0x96)		
Pos/Neg			01 54 00	
	01 54 01 00	Positiv On		
	01 54 01 01	Negativ On		
Output Control				
Detail			01 53 00	
	01 53 01 00	Off		
	01 53 01 02	Medium		
	01 53 01 03	High		
Main Resolution			01 51 00	
	01 51 04 00 00 00 00	Auto		
	01 51 04 00 00 3C 16	720p/60 (1280x720)		
	01 51 04 00 00 1E 18	1080p/30 (1920x1080)		
	01 51 04 00 00 3C 18	1080p/60		
Test Resolution DVI			01 A8 00	
	01 A8 04 d0 d1 d2 d3	Test Resolution for 10 seconds d0 d1 d2 d3: Resolutions (see above)		
Freeze On/Off			01 56 00	
	01 56 01 00	Freeze Off		
	01 56 01 01	Freeze On		
	01 56 01 02	Freeze Toggle		
Preset Control				
Recall Preset			01 40 00	
	01 40 01 00	Power On Preset		
Power Control				
Mains-On			01 36 00	
	01 36 01 00	Mains-On Standby		
	01 36 01 01	Mains-On Power-On		
Auto-Power-Off Time			01 37 00	
	01 37 01 FF	Off		
	01 37 01 1E	30min until Auto-Power-Off		
	01 37 01 3C	1h until Auto-Power-Off		
	01 37 01 78	2h until Auto-Power-Off		
	01 37 01 B4	3h until Auto-Power-Off		
	01 37 01 F0	4h until Auto-Power-Off		
PowerOn Preset			01 34 00	
	01 34 01 00	PowerOn Preset Off		

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Power Control <i>continued</i>				
	01 34 01 03	PowerOn Preset Default		
Power On/Off			01 30 00	
	01 30 01 00	Power Off		
	01 30 01 01	Power On (PowerOn Preset)		
	01 30 01 02	Power Toggle		
Misc. Command				
Digital Zoom			01 29 00	
	01 29 01 02	Digital Zoom 4x		
	01 29 01 03	Digital Zoom 10x		
Keylock On/Off			01 80 00	
	01 80 01 00	Keylock Off		
	01 80 01 01	Keylock On		
	01 80 01 02	Keylock Toggle		
Recall Default Settings			01 8F 00	
	01 8F 01 00			
Capture Area Shift			01 F2 00	
	01 F2 01 00	Off		
	01 F2 01 01	On		
	01 F2 01 02	Toggle		
OSD				
Language			01 CC 00	
	01 CC 01 00	English		
	01 CC 01 01	German		
Ethernet				
DHCP On/Off			01 70 00	
	01 70 01 00	DHCP off		
	01 70 01 01	DHCP on		
IP Address			01 71 00	
	01 71 04 d0 d1 d2 d3	IP Address in hex (0x00 to 0xFF for each octet) d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
Subnet Mask			01 72 00	
	01 72 04 d0 d1 d2 d3	Subnet Mask in hex (0x00 to 0xFF for each octet) d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
Gateway IP			01 73 00	
	01 73 04 d0 d1 d2 d3	Gateway IP Address in hex (0x00 to 0xFF for each octet) d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
Nameserver IP			01 3A 00	
	01 3A 04 d0 d1 d2 d3	Nameserver IP Address in hex (0x00 to 0xFF for each octet) d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
Network			01 5E 00	

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Ethernet <i>continued</i>				
	01 5E 0D d0 .. d12	For setting network settings in one command.		
		d0: 00=DHCP Off, 1=DHCP On d1 d2 d3 d4: IP Address d5 d6 d7 d8: Subnet Mask d9 d10 d11 d12: Gateway IP		
WLAN				
Mode			01 E1 00	
	01 E1 01 00	Off		
	01 E1 01 01	Infrastructure		
	01 E1 01 02	Access Point		
Channel			01 E2 00	
	01 E2 01 00	1		
	01 E2 01 01	6		
	01 E2 01 02	11		
	01 E2 01 03	36		
	01 E2 01 04	40		
	01 E2 01 05	44		
SSID Auto			01 E3 00	
	01 E3 01 00	Off		
	01 E3 01 01	On		
SSID			01 E4 00	
	01 E4 ab d0 .. dn	ab: Length, max 20 Bytes d0 .. dn: String		was 17 bytes up to V1.42e
WLAN DHCP			01 E5 00	
	01 E5 01 00	DHCP off		
	01 E5 01 01	DHCP on		
	01 E5 01 02	DHCP toggle		
WLAN IP Address			01 E6 00	
	01 E6 04 d0 d1 d2 d3	IP Address in hex (0x00 to 0xFF for each octet) d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
WLAN Subnet Mask			01 E7 00	
	01 E7 04 d0 d1 d2 d3	Subnet Mask in hex (0x00 to 0xFF for each octet) d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
WLAN Gateway IP			01 E8 00	
	01 E8 04 d0 d1 d2 d3	Gateway IP Address in hex (0x00 to 0xFF for each octet) d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
WLAN Nameserver IP			01 E9 00	
	01 E9 04 d0 d1 d2 d3	Nameserver IP Address in hex (0x00 to 0xFF for each octet) d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
Encryption			01 EE 00	
	01 EE 01 00	Off		
	01 EE 01 01	WEP		

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
WLAN <i>continued</i>				
	01 EE 01 02	WPA/WPA2		
Password			01 ED 00	
	01 ED ab d0 .. dn	ab: Length, max 20 Bytes d0 .. dn: String		was 17 bytes up to V1.42e
Password Accesspoint			01 EF 00	
	01 EF ab d0 .. dn	ab: Length, max 20 Bytes d0 .. dn: String		was 17 bytes up to V1.42e
WLAN Activate			01 EA 00	
	01 EA 01 00			
Security				
Ethernet Mode		(RS232 and USB only)	01 74 00	
	01 74 01 00	Off		
	01 74 01 01	Image Only		
	01 74 01 02	Control Only		
	01 74 01 03	Image and Control		
	01 74 01 04	FW Update Only		
	01 74 01 05	Image and FW Update		
	01 74 01 06	Control and FW Update		
	01 74 01 07	Image, Control and FW Update		
	01 74 01 08	Auth		
Device Info				
FW Check			01 0C 00	
Description			01 1A 00	
	01 1A ab d0 .. dn	ab: length, max. 255 Bytes d0 .. dn: String		
Firmware Update				
Firmware Upload Erase Flash			01 B0 00	
	01 B0 01 00	Flash1 (uC,FPGA,NIOS)		
Firmware Upload Data Start			01 B1 00	
	01 B1 04 d0 d1 d2 d3	Length of firmware data		
		d0 d1 d2 d3: 0x00000000..0xFFFFFFFF		
Firmware Upload Data			01 B2 00	
	05 B2 ab cd d0 .. dn	ab cd: Length of bytes of long data block in hex USB max Length = 508 (512-4) ETH max Length = 1440 d0 .. dn: Data		
	01 B2 ab d0 .. dn	ab: Length of bytes of long data block in hex RS232 max Length = 253 (256-3) d0 .. dn: Data		
Firmware Upload Data Stop			01 B3 00	

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Firmware Update <i>continued</i>				
	01 B3 01 00			
Firmware Downgrade			01 B4 00	
	01 B4 01 00	Command must be issued before uploading old firmware		
Firmware Update Start		Firmware from WV Webpage	01 0E 00	
	01 0E 01 00			
Extra Menu				
Menu Lock			01 97 00	
	01 97 01 00	Off		
	01 97 01 01	On		
Hostname			01 49 00	
	01 49 ab d0 .. dn	ab: Length, max 20 Bytes d0 .. dn: String		was 17 bytes up to V1.42e
Factory Reset			01 9F 00	
	01 9F 01 00	Factory Reset (inc memories, xml files)		
Zoom Control				
Zoom			01 20 00	
	01 20 01 11	Start Zoom Wide		
	01 20 01 12	Start Zoom Tele		
	01 20 02 d0 d1	Set zoom position absolutely d0 d1: 0x0000..0x0FFF (Wide..Tele)		
	01 20 03 ab d0 d1	ab: Direction (0x01 Zoom Wide, 0x02 Zoom Tele) d0, d1: Speed (0x01 .. 0x0f, 0x00 Stop)		
Focus Control				
Focus			01 21 00	
	01 21 01 11	Start Focus Far		
	01 21 01 12	Start Focus Near		
	01 21 02 d0 d1	Set Focus Position Absolutely d0 d1: 0x0000..0x0FFF (Far..Near)		
	01 21 03 ab d0 d1	ab: Direction (0x01 Focus Far, 0x02 Focus Near) d0, d1: Speed (0x0001 .. 0x000F, 0x0000 Stop)		
Auto Focus			01 31 00	
	01 31 01 00	AF Off		
	01 31 01 01	AF On		
	01 31 01 02	AF Toggle		
Light Control				
Light, Lightbox On/Off			01 A0 00	
	01 A0 01 00	Light Off, LB Off		
	01 A0 01 01	Light On, LB Off		

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Light Control <i>continued</i>				
	01 A0 01 12	Light Toggle (Light On/Off)		
Unit Menu Control				
Menu On/Off			01 98 00	
	01 98 01 00	Menu Off		
	01 98 01 03	Standard Menu On		
	01 98 01 04	Extra Menu On		
Menu Control			01 99 00	
	01 99 01 02	Function Up		
	01 99 01 08	Function Down		
	01 99 01 04	Data Left		
	01 99 01 06	Data Right		
	01 99 01 05	Enter		
	01 99 01 10	Help		
Authentication				
Login			01 D4 00	
	01 D4 24 d0 .. dn	MD5 (SessionID, Username, Password, IP) + Username + IP Strings are padded with 0's MD5=16Bytes,Username=16Bytes,IP=4Bytes Padding for calculateing MD5: SessionID=4Bytes,Username=16Bytes,Password=10Bytes,IP=4Bytes		
SIP Login				
	01 1D 01 00	Single IP Authentication Request	01 1D 01 01	Device busy
			01 1D 08 d0..dn	Auth Request
				d0..d2: Color 1 (RGB)
				d3..d5: Color 2 (RGB)
				d6: Pattern (number)
				d7: Timeout (max sequence time)
	01 1D 01 01	SIP Logout	01 1D 00	
Logout			01 D5 00	
	01 D5 01 00			

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Exposure				
Image Brightness	00 64 00			
			00 64 01 F6	-10
			00 64 01 F7	-9
			00 64 01 F8	-8
			00 64 01 F9	-7
			00 64 01 FA	-6
			00 64 01 FB	-5
			00 64 01 FC	-4
			00 64 01 FD	-3
			00 64 01 FE	-2
			00 64 01 FF	-1
			00 64 01 00	0
			00 64 01 01	+1
			00 64 01 02	+2
			00 64 01 03	+3
			00 64 01 04	+4
			00 64 01 05	+5
			00 64 01 06	+6
			00 64 01 07	+7
			00 64 01 08	+8
			00 64 01 09	+9
			00 64 01 0A	+10
Color				
White Balance	00 65 00			
			00 65 01 00	Auto
			00 65 01 02	Manual
R Gain (WB=Manual)	00 04 00			
			00 04 02 d0 d1	
				d0,d1: -100..+100 (0xFF9C..0x0064)
B Gain (WB=Manual)	00 05 00			
			00 05 02 d0 d1	
				d0,d1: -100..+100 (0xFF9C..0x0064)
Color Mode	00 6D 00			
			00 6D 01 00	Black/White
			00 6D 01 01	Presentation
			00 6D 01 02	Natural
			00 6D 01 03	Video Conference
			00 6D 01 04	Manual
Gamma Normal Mode	00 68 00			
			00 68 01 d0	d0: Gamma Curves
				d0: 0x00..0x03
Saturation	00 6E 00			

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Color <i>continued</i>				
			00 6E 01 d0	d0: Saturation in percent
				d0: 0 %...150% (0x00..0x96)
Pos/Neg/Blue	00 54 00			
			00 54 01 00	Pos
			00 54 01 01	Neg
Output Control				
Detail	00 53 00			
			00 53 01 00	Off
			00 53 01 02	Medium
			00 53 01 03	High
Main Resolution	00 51 00		00 51 04 d0 d1 d2 d3	d0: Not Used d1: Mode (00=Auto) d2: Frequency (00=N/A,Frequency in Hex, eg 3C=60Hz) d3: Resolution
			00 51 04 00 00 00 00	Auto
			00 51 04 00 00 3C 16	720p/60 (1280x720)
			00 51 04 00 00 1E 18	1080p/30 (1920x1080)
			00 51 04 00 00 3C 18	1080p/60 (1920x1080)
Freeze	00 56 00			
			00 56 01 00	Off
			00 56 01 01	On
Power Control				
Power On Preset	00 34 00			
			00 34 01 00	Off
			00 34 01 03	Default
Display Logo	00 35 00			
			00 35 01 00	Off
			00 35 01 01	On
Mains-On	00 36 00			
			00 36 01 00	Standby
			00 36 01 01	Power-On
Auto-Power-Off Time	00 37 00			
			00 37 01 FF	Off
			00 37 01 1E	30min until Auto-Power-Off
			00 37 01 3C	1h until Auto-Power-Off
			00 37 01 78	2h until Auto-Power-Off
			00 37 01 B4	3h until Auto-Power-Off
			00 37 01 F0	4h until Auto-Power-Off
Power	00 30 00			
			00 30 01 00	Off
			00 30 01 01	On

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Misc. Command				
Digital Zoom Mode	00 29 00			
			00 29 01 00	Off
			00 29 01 01	2x
			00 29 01 02	4x
			00 29 01 03	10x
Keylock	00 80 00			
			00 80 01 00	Off
			00 80 01 01	On
Capture Area Shift Status	00 F2 00			
			00 F2 01 00	Off
			00 F2 01 01	On
OSD				
Language	00 CC 00			
			00 CC 01 00	English
			00 CC 01 01	German
Ethernet				
DHCP	00 70 00			
			00 70 01 00	Off
			00 70 01 01	On
IP Address	00 71 00			
			00 71 04 d0 d1 d2 d3	
				d0 d1 d2 d3: IP Address in hex (0x00 to 0xFF for each packet)
Subnet Mask	00 72 00			
			00 72 04 d0 d1 d2 d3	
				d0 d1 d2 d3: Subnet Mask in hex (0x00 to 0xFF for each packet)
Gateway IP	00 73 00			
			00 73 04 d0 d1 d2 d3	
				d0 d1 d2 d3: Gateway IP Address in hex (0x00 to 0xFF for each packet)
Nameserver IP	00 3A 00			
			00 3A 04 d0 d1 d2 d3	
				d0 d1 d2 d3: Nameserver IP Address in hex (0x00 to 0xFF for each packet)
MAC	00 69 00			
			00 69 11 d0 .. dn	MAC Address d0 .. dn: String Example: "00:0C:92:BC:61:2B"
DHCP State	00 6F 00			
			00 6F 01 00	Off
			00 6F 01 01	Failed

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Ethernet				<i>continued</i>
			00 6F 01 02	Trying
			00 6F 01 03	Ok
			00 6F 01 04	Unknown
WLAN				
WLAN DHCP	00 E5 00			
			00 E5 01 00	Off
			00 E5 01 01	On
WLAN IP Address	00 E6 00			
			00 E6 04 d0 d1 d2 d3	
				d0 d1 d2 d3: IP Address in hex (0x00 to 0xFF for each packet)
WLAN Subnet Mask	00 E7 00			
			00 E7 04 d0 d1 d2 d3	
				d0 d1 d2 d3: Subnet Mask in hex (0x00 to 0xFF for each packet)
WLAN Gateway IP	00 E8 00			
			00 E8 04 d0 d1 d2 d3	
				d0 d1 d2 d3: Gateway IP Address in hex (0x00 to 0xFF for each packet)
WLAN Nameserver IP	00 E9 00			
			00 E9 04 d0 d1 d2 d3	
				d0 d1 d2 d3: Nameserver IP Address in hex (0x00 to 0xFF for each packet)
WLAN MAC	00 EB 00			
			00 EB 11 d0 .. dn	MAC Address d0 .. dn: String Example: "00:0C:92:BC:61:2B"
WLAN DHCP State	00 EC 00			
			00 EC 01 00	Off
			00 EC 01 01	Failed
			00 EC 01 02	Trying
			00 EC 01 03	Ok
			00 EC 01 04	Unknown
Channel	00 E2 00			
			00 E2 01 00	1
			00 E2 01 01	6
			00 E2 01 02	11
			00 E2 01 03	36
			00 E2 01 04	40
			00 E2 01 05	44
SSID	00 E4 00			
			00 E4 ab d0 .. dn	ab: Length, max 25 Bytes d0 .. dn: String

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
WLAN <i>continued</i>				
SSID Auto	00 E3 00			
			00 E3 01 00	Off
			00 E3 01 01	On
Encryption	00 EE 00			
			00 EE 01 00	Off
			00 EE 01 01	WEP
			00 EE 01 02	WPA/WPA2
Password	00 ED 00			
			00 ED ab d0 .. dn	ab: Length, max 17 Bytes d0 .. dn: String "*****"
Password Accesspoint	00 EF 00			
			00 ED ab d0 .. dn	ab: Length, max 17 Bytes d0 .. dn: String, Plaintext
Mode	00 E1 00			
			00 E1 01 00	Off
			00 E1 01 01	Infrastructure
			00 E1 01 02	Access point
Security				
Ethernet Mode	00 74 00			
			00 74 01 d0	d0: Data Bit0: IMG 0=Image Blocked,1=Image Allowed Bit1: CTRL 0=Control Blocked,1=Control Allowed Bit2: FW 0=Firmware Update Blocked,1=Firmware Upload Allowed Bit3: AUTH 0=Authentication Off,1=Authentication On
Device Info				
Model	00 11 00			
			00 11 ab d0 .. dn	ab: Length, max 255 Bytes d0 .. dn: String"VZ9P","VZ9P-3","VZ-C12-II","VZ-C12-3","VZ-C32","EYE-12","SCB-12","VZ-C32-3","VZ-P18","VZ-P38","VZ3","VZ-3neo","VZ-8neo","vCam"
Model Display	00 3F 00			
			00 3F ab d0 .. dn	ab: Length, max 255 Bytes d0 .. dn: String"VZ-9plus-3"
Serialnumber	00 12 00			
			00 12 04 d0 d1 d2 d3	d0 d1 d2 d3: 0x00000000..0xFFFFFFFF
Version	00 13 00			
			00 13 ab d0 .. dn	ab: Length d0 .. dn: StringExample: "V1.10a"
RC Features	00 16 00			

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Device Info				<i>continued</i>
			00 16 08 d0 d1 d2 d3 d4 d5 d6 d7	8 Bytes: to specify the available functions on the remote control
				d0: Byte0
				Bit7:Zoom
				Bit4:Focus
				Bit3:AF
				Bit2:Power
				Bit1:Light
				d1: Byte1
				Bit6:WB
				Bit2:Freeze
				d2: Byte2
				d3: Byte3
				Bit7:Capture Area Shift
				d4: Byte4
				d5: Byte5
				Bit7:Not Used (FWUpdate)
				d6: Byte6:
				d7: Byte7:
Resolution Table	00 17 00			Table of Resolutions available for single picture transfer
			04 17 ab cd d0 .. dn	ab cd: Length, max 65535 Bytes d0 .. dn:n*72Byte:Name (64Bytes), Width (2Bytes), Height (2Bytes), ID (4Bytes) Example: "Name, 64 byte padded with spaces", 0x0500, 0x03C0, 0x00000001
Buildnumber	00 1C 00			
			00 1C 0E d0 .. dn	d0 .. dn: String Example: "20091028140601"
Description	00 1A 00			
			00 1A ab d0 .. dn	ab: Length, max. 255 bytes d0 .. dn: String
Firmware Update				
Firmware Server Version	00 0F 00			
			00 0F ab d0 .. dn	ab: Length d0 .. dn: String Example: "V1.10a" "-----" in case of no connection
Firmware Update Status	00 0D 00			
			00 0D 01 00	Checking
			00 0D 01 01	No Connection
			00 0D 01 02	Out Of Date
			00 0D 01 03	Up To Date
Firmware Upload Erase Flash	00 B0 00			

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Firmware Update <i>continued</i>				
			00 B0 01 d0	100% to 0% firmware to be erased. State of firmware erasing, counts from 100 down to 00% = Flash erased
				d0: 0x64..0x00
Extra Menu				
Hostname	00 49 00			
			00 49 ab d0 .. dn	ab: Length, max 17 Bytes d0 .. dn: String
Zoom Control				
Zoom Position	00 20 00			
			00 20 02 d0 d1	d0 d1: Position
				d0 d1: 0x0000..0x0FFF (Wide..Tele)
Focus Control				
Focus Position	00 21 00			
			00 21 02 d0 d1	d0 d1: Position
				d0 d1: 0x0000..0x0FFF (Far..Near)
AF	00 31 00			
			00 31 01 00	Off
			00 31 01 01	On
Light Control				
Light	00 A0 00			
			00 A0 01 00	Off
			00 A0 01 01	Light On, LB Off
VZ Menu Control				
Menu	00 98 00			
			00 98 01 00	Off
			00 98 01 01	Standard Menu
			00 98 01 02	Extra Menu
Picture Transfer				
Picture Header	00 B8 05 d0 d1 d2 d3 d4		00 B8 14 d0 .. dn	
		d0: ModeByte		
		d1,d2,d3,d4: Resolution		
Get Picture Block2 (V1: ETH only. V2: ETH and USB)	00 BA 16 d0 .. dn			

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Picture Transfer				<i>continued</i>
		d0: Flags (from Picture Header) d1: Mode Byte (from Picture Header) d2 d3 d4 d5: Offset from image start (V1:JPG: in bytes,BMP:in lines.V2: in bytes) d6 d7 d8 d9: Block length (in bytes) d10 d11: Width (from Picture Header) d12 d13: Height (from Picture Header) d14 d15 d16 d17: Total Size (DMA Size from Picture Header) d18 d19: Memory Page (from Picture Header) d20 d21: Out Offset (from Picture Header)	02 01 BA ab cd ef gh d0 .. dn	ab cd ef gh: Length d0 .. dn: Data
Authentication				
SessionID (ETH only)	00 D3 00			
			00 D3 04 d0 d1 d2 d3	Session ID Randomnumber
				d0 d1 d2 d3: 0x00000000..0xFFFFFFFF
Block Inquiry				
Positions	00 10 01 02			
		Byte3=Blocknumber	00 10 11 02 d0 .. dn	0x02: Blocknumber
				d0..dn: Data, same as blk# 0C but only 17 bytes length
Positions2	00 10 01 0D			
		Byte3=Blocknumber	00 10 81 0D d0 .. dn	0x0D: Blocknumber
				d0..dn: Data
				d0,1: Zoom Position
				d2,3: Digital Zoom Position
				d4,5: Focus Position
				d6,7: Iris Position
				d8,9: Mirror Position
				d10,11: Mirror X Position (not used)
				d12,13: Mirror Y Position (not used)
				d14,15: Light Focus Position (not used)
				d16,17: Vergence
				d18...d127: Not Used
Flags and Unit Information	00 10 01 03			
		Byte3=Blocknumber	00 10 18 03 d0 .. dn	0x03: Blocknumber
				d0..dn: Data, same as blk# 0B but only 24 bytes length
Flags and Unit Information2	00 10 01 0B			
		Byte3=Blocknumber	00 10 81 0B d0 .. dn	0x0B: Blocknumber
				d0..dn: Data
				d0:

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Block Inquiry				<i>continued</i>
				Bit7: Power, 0=Off,1=On
				Bit5: Light Box, 0=Disabled,1=Enabled
				Bit4: Slide Box, 0=Disabled,1=Enabled
				Bit3: Auto Focus, 0=Off,1=On
				Bit2: Auto Iris, 0=Off,1=On
				Bit1: Text Enhancer, 0=Off,1=On
				Bit0: Extern/Intern 1=Extern,0=Intern
				d1:
				Bit7: Freeze, 0=Off,1=On
				Bit6: Image, 0=Off,1=On
				Bit5: Show All/View, 0=Off,1=On
				Bit4: Keylock, 0=Off,1=On
				Bit3: Lamp Blown, 0=Ok,1=Blown
				Bit2: Lamp2 Blown, 0=Ok,1=Blown
				Bit1: Lamp1 Blown, 0=Ok,1=Blown
				Bit0: OSD Menu, 0=Off,1=On
				d2:
				Bit7,6,5,4: Color Mode,
				0=Black/White,1=Presentation,2=Natural,3=Manual
				Bit3,2: Pos/Neg/Blue, 0=Positive,1=Negative,2=Blue
				Bit1,0: Image Turn, 0=Off,1=-90,2=180,3=+90
				d3:
				Bit7,6: Macro
				Bit5,4,3,2: Arm
				Bit1: Capture Area Shift
				Bit0: Not Used
				d4:
				Bit7: Not Used
				Bit6: Not Used
				Bit5: Not Used
				Bit4: Not Used
				Bit3: FrameNumber Bit3 (1..9)
				Bit2: FrameNumber Bit2
				Bit1: FrameNumber Bit1
				Bit0: FrameNumber Bit0
				d5: Ethernet Mode
				d6: Resolution DVI Legacy
				d7: Resolution RGB Legacy
				d8,9,10,11: Serialnumber
				d12,13,14,15,16,17,18: Version
				d19:
				Bit7: Memory Page Bit3 (0=Live, 1..9=Memory 1..9)
				Bit6: Memory Page Bit2
				Bit5: Memory Page Bit1

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Block Inquiry				<i>continued</i>
				Bit4: Memory Page Bit0
				Bit3: Memory Zoom
				Bit2: Picture in Picture
				Bit1: MenuMode Bit1 (00=off, 01=standard, 10=extra, 11=view)
				Bit0: MenuMode Bit0
				d20:
				Bit7: State Bit1 (00=Live,01=Mem,10=USB,11=MemSinglePic)
				Bit6: State Bit0
				Bit5: Standby Mode (0=Normal,1=Deep)
				Bit4: 1x1, 1=On
				Bit3: USB or Mem, 1=On, 0=Live/Extern
				Bit2: Slide Show
				Bit1: Aspectratio Bit1 (00=4:3,01=16:9,10=16:10)
				Bit0: Aspectratio Bit0
				d21: HDTV Mask Position
				d22: Not Used
				d23: Status Number HB
				d24: Status Number LB
				d25:
				Bit7..2: Status Time
				Bit1..0: Status Level
				d26: Status Timestamp HB
				d27: Status Timestamp LB
				d28...d35: Status Substring (d35=0, if str > 7 d34='.')
				d36...d39: Resolution Main
				d40...d43: Resolution Aux
				d44:
				Bit7: Not Used
				Bit6: Not Used
				Bit5: Not Used
				Bit4: Not Used
				Bit3: Not Used
				Bit2: Streaming Active (1=Active,0=Inactive)
				Bit1: Streaming Off (0=Any,1=Off)
				Bit0: 2D/3D(0=2D,1=3D)
				d45...d48: Operating Hours
				d49...d52: Standby Hours
				d53...d56: Lamp1 Hours
				d57...d60: Lamp2 Hours
				d61...d64: Feature Pack Bits
				d61:
				Bit31: Feature Pack Valid (1=Enabled,0=Disabled)
				Bit24 - Bit30: Not Used
				d62:

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Block Inquiry				<i>continued</i>
				Bit16 - Bit23: Not Used
				d63:
				Bit7: Not Used
				Bit6: Not Used
				Bit5: Not Used
				Bit4: Not Used
				Bit3: Not Used
				Bit2: Not Used
				Bit1: Feature Demo
				Bit0: Feature vConnect
				d64:
				Bit7: Feature WLAN
				Bit6: Feature Streaming
				Bit5: Feature PiP
				Bit4: Feature IR Remote
				Bit3: Feature Internal Memory
				Bit2: Feature USB Host
				Bit1: Feature Fading
				Bit0: Feature 60FPS
				d65:
				Bit7: Recording Bit1 (0=Idle,1=Recording,3=Pause)
				Bit6: Recording Bit0
				Bit5: Video Playback Bit1 (0=Idle,1=Playing,3=Pause)
				Bit4: Video Playback Bit0
				Bit0..3: Source (0=Live,1=Mem,2=USB,3=Ext,4=Ext2,5=Net)
				d66:
				Bit7: Not Used
				Bit6: Not Used
				Bit5: Not Used
				Bit4: Not Used
				Bit3: Not Used
				Bit2: Not Used
				Bit1: Not Used
				Bit0: Mute
				d67...d127: Not Used
Menu Ethernet2	00 10 01 0C			
		Byte3=Blocknumber	00 10 81 0C d0 .. dn	0x0C: Blocknumber
				d0..dn: Data
				d0:
				Bit7..5: Not Used
				Bit4..1: Ethernet Mode
				Bit0: DHCP
				d1: Not Used (Streaming Reso in Blk 0x06)
				d2:

Function / Command Description	Command Packet	Comment	Reply Packet	Comment
Block Inquiry				<i>continued</i>
				Bit7..4: Streaming Framerate
				Bit3..0: Streaming Mode
				d3: Not Used
				d4..7: IP Address
				d8..11: Subnet IP Address
				d12..15: Gateway IP Address
				d16..19: Multicast IP Address
				d20,21: Multicast Port
				d22..d25: Streaming Resolution
				d26: Streaming Format
				d27..30: Nameserver IP Address