



# PF4 Wolfprot documentation

Firmware version 1.20a

Klaus, November 3, 2020

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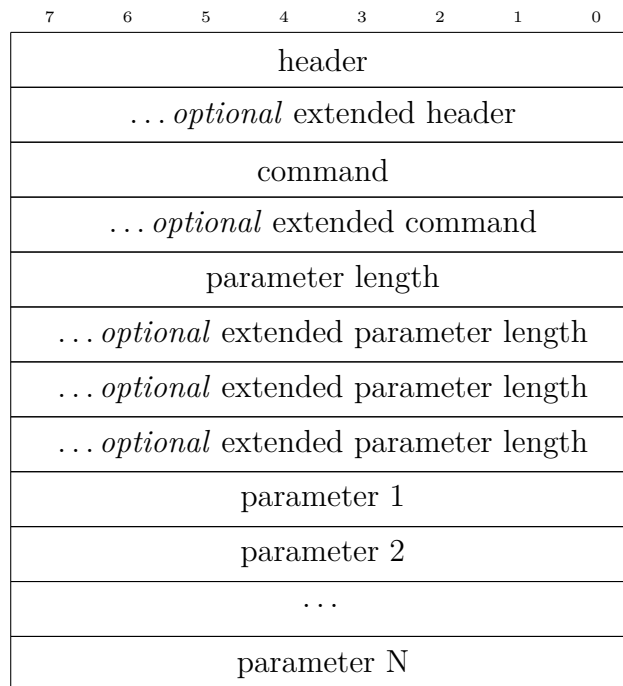
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# 1 Packet structure

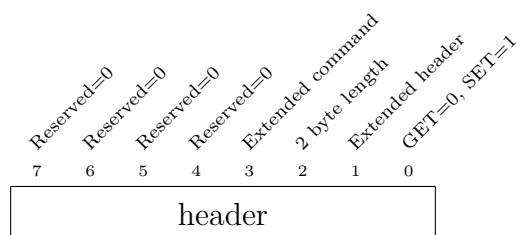
## 1.1 Command packet structure

A command packet basically consists of a header, a command, the parameter length and the parameters. Optionally, the header, the command and the parameter length can be extended to two bytes. Additionally, the parameter length can be extended to four bytes.

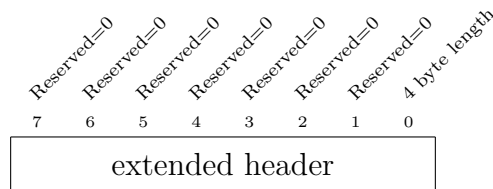


### 1.1.1 Header

The header consists of flags defining the structure of the packet.



The extended header contains the flag for a four byte parameter length.



Header flag	Description
GET / SET	Defines if the sender wants to set or get a value
Extended header	Set to 1 if the additional byte for the header is used
2 byte length	Set to 1 if the parameter length exceeds 255
Extended command	Set to 1 if a 2 byte command is used
4 byte length	Set to 1 if the parameter length exceeds 65535

### 1.1.2 Command

Wolfprot commands consist of one or two bytes. In case of a two byte command the corresponding bit (extended command) in the header needs to be set.

### 1.1.3 Parameter length

Parameter length defines the number of parameter bytes. It consists of one byte i.e. the packet can contain 0 (0x00) to 255 (0xFF) parameter bytes.

If the parameter length exceeds 255 bytes, two bytes can be used for parameter length by setting the corresponding bit in header, leading to an available range of 0 to 65535 (0x0000 - 0xFFFF).

In case 65535 parameter bytes are not enough, the extended header has to be enabled and the 4 byte length bit needs to be set for the maximum range of parameter bytes - from 0 (0x00000000) to 2147483647 (0x07FFFFFFF) - wolfprot supports.

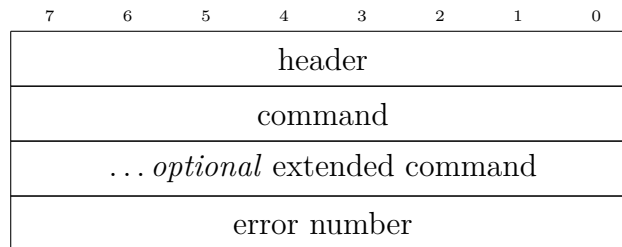
### 1.1.4 Parameters

Parameters contain the request or reply the host sets or gets. For most commands these parameters are standardized (refer to command types). However, some commands (type SPECIAL) can not be standardized and differ in their implementation.

## 1.2 Reply packet structure

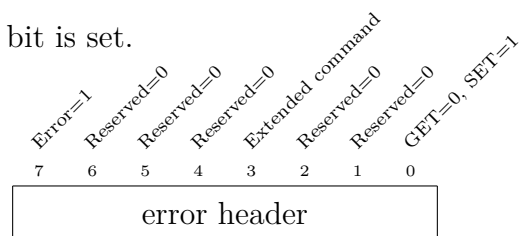
In principle, the structure of reply packets is identical to the command packet structure. If no error occurs, the header (including extended header), and the command (including extended command) is the same as of the received command packet. However, the

number of parameters in the reply packet can require a 2 or 4 byte parameter length and therefore the corresponding header bits can differ to ones of the command packet. In case of an error the reply consists of a header with an error flag, the command and an error number.



### 1.2.1 Error header

If an error occurs the error bit is set.



### 1.2.2 Error numbers

TIMEOUT	0x01
INVALID COMMAND	0x02
INVALID PARAMETER	0x03
INVALID LENGTH	0x04
FIFO FULL	0x05
FIRMWARE UPDATE ERROR	0x06
ACCESS DENIED	0x07
AUTHENTICATION REQUIRED	0x08
BUSY	0x09

## 2 Command types

### 2.1 STRING

Request or reply consists of ASCII encoded byte array without NULL termination. The length of the string is read from the parameter length. As an example, consider a



fictitious GET command 0x1234:

Request:

7	6	5	4	3	2	1	0	
0x08								} header: (GET + EXT_CMD)
0x12								} command: upper command byte
0x34								} extended command: lower command byte
0x00								} parameter length

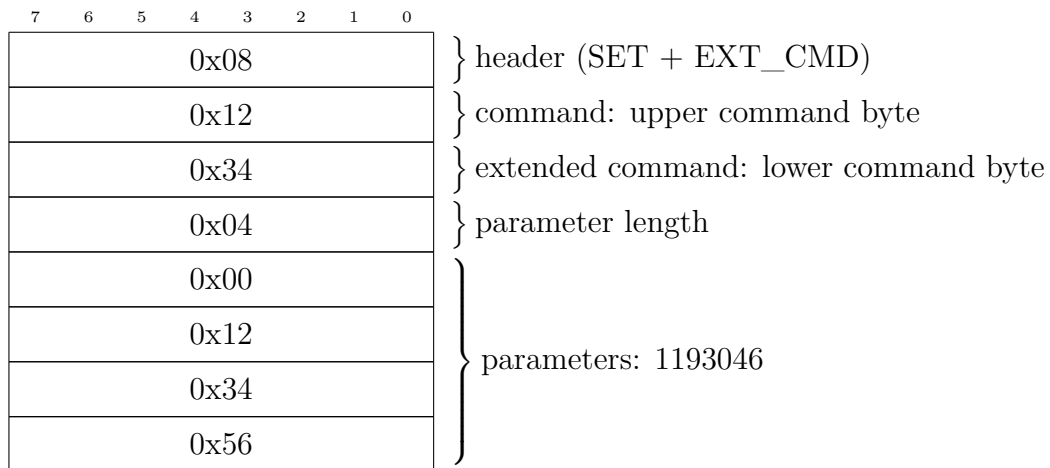
Reply:

7	6	5	4	3	2	1	0	
0x08								} header: (GET + EXT_CMD)
0x12								} command: upper command byte
0x34								} extended command: lower command byte
0x04								} parameter length
0x41								} parameter 1: 'A'
0x42								} parameter 2: 'B'
0x43								} parameter 3: 'C'
0x44								} parameter 4: 'D'

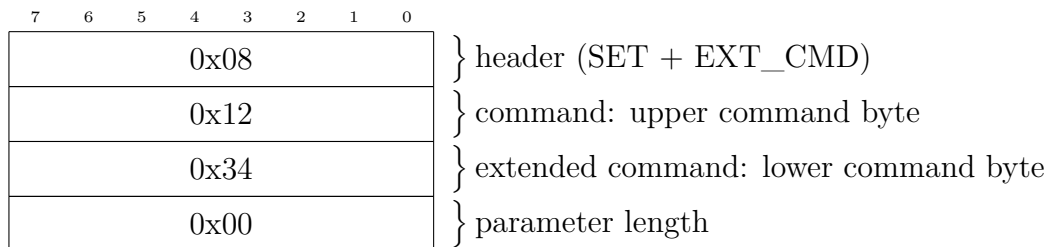
## 2.2 INT

Request or reply consists of 4 bytes **signed** integer (MSB first). Therefore the parameter length of the packet, which contains the parameter is always 4. As an example, consider a fictitious SET command 0x1234, used to set the number 1193046:

Request:



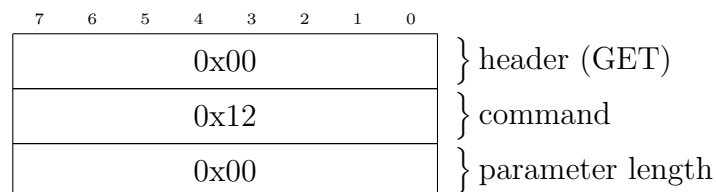
Reply:



## 2.3 IP

Request or reply consists of 4 bytes (MSB first). Therefore the parameter length of the packet, which contains the parameter is always 4. As an example, consider a fictitious GET command 0x12, used to get the IP address 192.168.0.1:

Request:



Reply:

7	6	5	4	3	2	1	0	
0x00								} header (GET)
0x12								} command
0x04								} parameter length
0xC0								} parameter 1: 192
0xA8								} parameter 2: 168
0x00								} parameter 3: 0
0x01								} parameter 4: 1

## 2.4 LIST

Request or reply consists of a 1 byte parameter. The meaning of the parameters are defined in the documentation of each command. As an example, consider a fictitious GET command 0x12:

Request:

7	6	5	4	3	2	1	0	
0x00								} header (GET)
0x12								} command
0x00								} parameter length

Reply:

7	6	5	4	3	2	1	0	
0x00								} header (GET)
0x12								} command
0x01								} parameter length
0x05								

## 2.5 BOOL

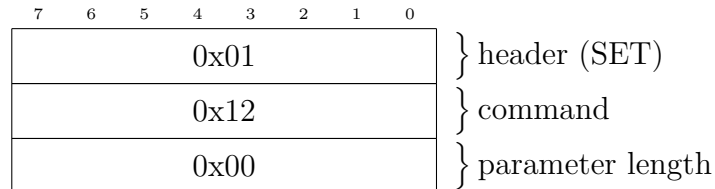
Request or reply consists of a 1 byte parameter. The following parameters are used:

FALSE	0x00
TRUE	0x01
TOGGLE	0x02

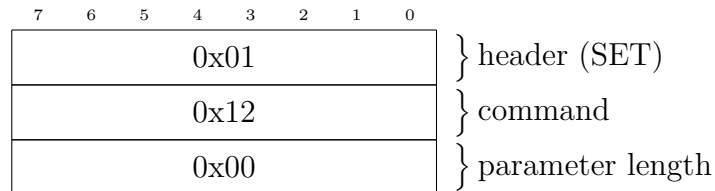
## 2.6 TRIGGER

Commands of type TRIGGER are intended to trigger actions. Therefore the access is always *write only* (WO) i.e. these commands are always SET commands. As an example, consider a fictitious command 0x12:

Request:



Reply:



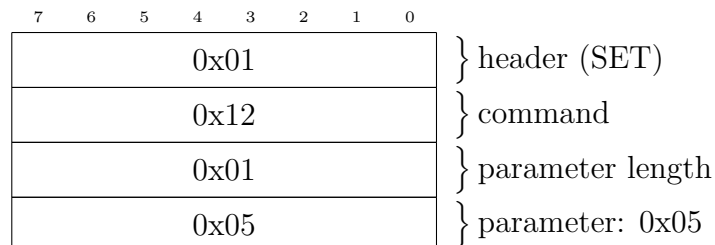
## 2.7 TRIGGER\_INDEXED

Commands of type TRIGGER\_INDEXED are intended to trigger actions, which require an argument. For example, triggering the one-push autofocus on one area of the the video window requires the area number the focus shall be adjusted to.

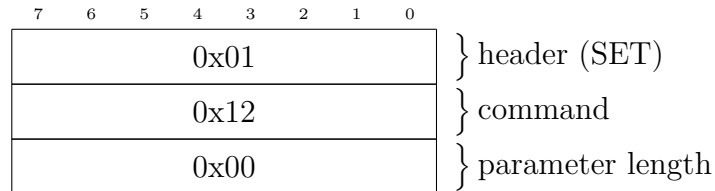
Access is always *write only* (WO) i.e. these commands are always SET commands. Request contains 1 byte used as an index.

The definition for the index can be found in the documentation of each command. As an example, consider a fictitious command 0x12, triggering action with index 5:

Request:



Reply:



## 2.8 SPECIAL

Request or reply differ in implementation and are described in the documentation of each command.

## 2.9 LEGACY

Legacy commands are intended to accomplish backward compatibility. Note that only a basic subset of PF1 commands is supported.

The supported commands are listed in section 'LEGACY COMMANDS'.

Refer to documentation of PF1 wolfprot commands <sup>1</sup> for further information.

---

<sup>1</sup>Serial (RS232), LAN and USB Wolfprot Protocol API of PF1 devices:  
[https://www.wolfvision.com/wolf/protocol\\_command\\_wolfvision.zip](https://www.wolfvision.com/wolf/protocol_command_wolfvision.zip)

## 3 Commands

### 3.1 DEVICE INFO & DESCRIPTION

#### 3.1.1 MODELNAME

<b>Value</b>	0x4000	
<b>Description</b>	Modelname of the device (e.g. "VZ8-UHD")	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	STRING	

#### 3.1.2 DISPLAYNAME

<b>Value</b>	0x4001	
<b>Description</b>	Displayname of the device (e.g. "VZ-8.UHD")	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	STRING	

#### 3.1.3 ADJ SERIALNUMBER

<b>Value</b>	0x4002	
<b>Description</b>	Serial number of the device.	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	INT	

**3.1.4 VERSION**

<b>Value</b>	0x4003	
<b>Description</b>	Firmware version (e.g. "V1.00a")	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	STRING	

**3.1.5 BUILDNUMBER**

<b>Value</b>	0x4004	
<b>Description</b>	Buildnumber of firmware (e.g. "20200101120000")	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	STRING	

**3.1.6 HOSTNAME**

<b>Value</b>	0x4005	
<b>Description</b>	Hostname of the device	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	STRING	

**3.1.7 DEVICE DESCRIPTION**

<b>Value</b>	0x4006	
<b>Description</b>	Description of the device	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	STRING	

**3.1.8 UPDATE START**

<b>Value</b>	0x4008	
<b>Description</b>	Initiate a system update.	
	Request	File size as 4 byte integer value
	Reply	-
<b>Access</b>	Admin	WO
	User	WO
	None	WO
	Standby access	yes
<b>Type</b>	SPECIAL	

**3.1.9 UPDATE DATA**

<b>Value</b>	0x4009	
<b>Description</b>	Upload update file data.	
	Request	Data chunks of update file with chunk size < 1MiB
	Reply	-
<b>Access</b>	Admin	WO
	User	WO
	None	WO
	Standby access	yes
<b>Type</b>	SPECIAL	

**3.1.10 UPDATE END**

<b>Value</b>	0x400A	
<b>Description</b>	Finalize system update.	
	Request	-
	Reply	-
<b>Access</b>	Admin	WO
	User	WO
	None	WO
	Standby access	yes
<b>Type</b>	SPECIAL	



**3.1.11 LOGIN LEVEL**

<b>Value</b>	0x400B		
<b>Description</b>	Set or get login level.		
	<b>Set</b>		
	Request	1 byte for login level, followed by password if login level is set to ADMIN	
	Reply	-	
	<b>Get</b>		
	Request	-	
	Reply	1 byte login level	
<b>Access</b>	Admin		RW
	User		RW
	None		RW
	Standby access		yes
<b>Type</b>	SPECIAL		
<b>Parameters</b>	NONE	0x00	None
	USER	0x01	User
	ADMIN	0x02	Admin

**3.1.12 USB UPDATE AVAILABLE**

<b>Value</b>	0x400D		
<b>Description</b>	Check if an update is available on connected USB memory device		
<b>Access</b>	Admin		RO
	User		RO
	None		RO
	Standby access		yes
<b>Type</b>	BOOL		

**3.1.13 USB UPDATE START**

<b>Value</b>	0x400E		
<b>Description</b>	Start system update from USB memory device		
<b>Access</b>	Admin		WO
	User		-
	None		-
	Standby access		yes
<b>Type</b>	TRIGGER		

**3.1.14 HTTP UPDATE STATE**

<b>Value</b>	0x400F		
<b>Description</b>	State of internet system update		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	LIST		
<b>Parameters</b>	IDLE	0x00	Idle
	FAILED	0x01	Failed
	NOCONNECT	0x02	Not connected to server
	CHECKING	0x03	Checking if a system update is available
	UPTODATE	0x04	Installed version is up to date
	OUTOFDATE	0x05	Installed version is out of date
	DOWNLOADING	0x06	Downloading system update from server
	UPDATING	0x07	Updating

**3.1.15 HTTP UPDATE VERSION**

<b>Value</b>	0x4010		
<b>Description</b>	Version of update file on server		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	STRING		

**3.1.16 HTTP UPDATE PROGRESS**

<b>Value</b>	0x4011		
<b>Description</b>	Internet system update progress in percent		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	INT		

**3.1.17 HTTP UPDATE CHECK**

<b>Value</b>	0x4012		
<b>Description</b>	Check if a system update is available on server		
<b>Access</b>	Admin	WO	
	User	-	
	None	-	
	Standby access	yes	
<b>Type</b>	TRIGGER		

**3.1.18 HTTP UPDATE START**

<b>Value</b>	0x4013		
<b>Description</b>	Start internet system update		
<b>Access</b>	Admin	WO	
	User	-	
	None	-	
	Standby access	yes	
<b>Type</b>	TRIGGER		

**3.1.19 HTTP UPDATE CANCEL**

<b>Value</b>	0x4014		
<b>Description</b>	Cancel internet system update		
<b>Access</b>	Admin	WO	
	User	-	
	None	-	
	Standby access	yes	
<b>Type</b>	TRIGGER		

**3.1.20 ADJ MODEL**

<b>Value</b>	0x4016		
<b>Description</b>	Model code of device		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	VZ8_UHD	0x00	VZ-8.UHD

**3.1.21 FACTORY RESET**

<b>Value</b>	0x4018		
<b>Description</b>	Reset device to factory settings		
<b>Access</b>	Admin	WO	
	User	-	
	None	-	
	Standby access	yes	
<b>Type</b>	TRIGGER		

**3.1.22 SYSTEM UPDATE STAGE**

<b>Value</b>	0x401D		
<b>Description</b>	Stage of system update		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	LIST		
<b>Parameters</b>	IDLE	0x00	Idle
	UPLOAD	0x01	Uploading
	PROGRAMMING	0x02	Programming
	FINISHED	0x03	Finished
	FAILED	0x04	Failed

**3.1.23 SYSTEM UPDATE PROGRESS**

<b>Value</b>	0x401E		
<b>Description</b>	System update progress in percent		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	INT		

**3.1.24 FEATURES**

<b>Value</b>	0x4021	
<b>Description</b>	Get supported features.	
	Request	-
	Reply	8 bytes containing supported features
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	SPECIAL	

## 3.2 BASIC STATUS & CONTROL

### 3.2.1 POWER

<b>Value</b>	0x4100		
<b>Description</b>	Power status		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	yes	
<b>Type</b>	BOOL		

### 3.2.2 USB MOUNT

<b>Value</b>	0x4103		
<b>Description</b>	Status of USB memory device		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	LIST		
<b>Parameters</b>	UNMOUNTED	0x00	USB memory device not mounted
	MOUNTED	0x01	USB memory device mounted

### 3.2.3 LIGHT

<b>Value</b>	0x4104		
<b>Description</b>	Status of light (On/Off)		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	BOOL		

**3.2.4 FREEZE**

<b>Value</b>	0x4105		
<b>Description</b>	Status of image freeze		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	BOOL		

**3.2.5 SOURCE**

<b>Value</b>	0x4106		
<b>Description</b>	Select(ed) source		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	VZ	0x00	Live view
	MEM	0x01	Internal memory
	USB	0x02	USB memory device
	EXT1	0x03	HDMI input 1
	EXT2	0x04	HDMI input 2

**3.2.6 HDMI IN 1 5V STATUS**

<b>Value</b>	0x4107		
<b>Description</b>	5V present at HDMI input 1		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	BOOL		

**3.2.7 HDMI IN 2 5V STATUS**

<b>Value</b>	0x4108	
<b>Description</b>	5V present at HDMI input 2	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

**3.2.8 RECORDING START**

<b>Value</b>	0x4109	
<b>Description</b>	Start recording	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.9 RECORDING PAUSE**

<b>Value</b>	0x410A	
<b>Description</b>	Pause recording	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.10 RECORDING STOP**

<b>Value</b>	0x410B	
<b>Description</b>	Stop recording	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	



**3.2.11 RECALL PRESET A3**

<b>Value</b>	0x410C	
<b>Description</b>	Recall preset for A3 paper size on working surface	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.12 RECALL PRESET A4**

<b>Value</b>	0x410D	
<b>Description</b>	Recall preset for A4 paper size on working surface	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.13 RECALL PRESET A5**

<b>Value</b>	0x410E	
<b>Description</b>	Recall preset for A5 paper size on working surface	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.14 SIDEBYSIDE**

<b>Value</b>	0x410F	
<b>Description</b>	Start side by side view on HDMI output In live view a snapshot and live view is shown. Otherwise the current source and live view is shown.* /	
<b>Access</b>	Admin	RW
	User	RW
	None	-
	Standby access	no
<b>Type</b>	BOOL	

**3.2.15 RECALL PRESET**

<b>Value</b>	0x4111	
<b>Description</b>	Recall preset - index starts with zero	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER_INDEXED	

**3.2.16 STORE PRESET**

<b>Value</b>	0x4112	
<b>Description</b>	Store the current status in a preset. 3 presets are supported, therefore the index has to be 0x00, 0x01 or 0x02	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER_INDEXED	

**3.2.17 STREAM STATUS ACTIVE**

<b>Value</b>	0x4113	
<b>Description</b>	Device is streaming	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

**3.2.18 STREAM STATUS CLIENTS**

<b>Value</b>	0x4114	
<b>Description</b>	Number of clients receiving the stream	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	INT	

**3.2.19 RECORD STATUS STATE**

<b>Value</b>	0x4115		
<b>Description</b>	Recording status		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	IDLE	0x00	Idle
	RECORDING	0x01	Recording
	PAUSED	0x02	Recording paused
	SYNCING	0x03	Syncing

**3.2.20 RECORD STATUS DURATION**

<b>Value</b>	0x4116		
<b>Description</b>	Duration of recording in ms		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	INT		

**3.2.21 GET PICTURE**

<b>Value</b>	0x4117		
<b>Description</b>	Get live picture.		
	Command packet	1 byte for picture format	
	Reply	1 byte for picture format followed by start indicator 0x00 and the picture data. Therefore the size of the picture data is the command length from header subtracted by 2.	
<b>Access</b>	Admin	RO	
	User	RO	
	None	-	
	Standby access	no	
<b>Type</b>	SPECIAL		
<b>Parameters</b>	JPEG_FHD	0x01	JPEG encoded 1080p

**3.2.22 RECALL PRESET POWER ON**

<b>Value</b>	0x4118	
<b>Description</b>	Recall power-on preset	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.23 RECALL PRESET DEFAULT**

<b>Value</b>	0x4119	
<b>Description</b>	Recall default preset	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.24 SNAPSHOT**

<b>Value</b>	0x4120	
<b>Description</b>	Take a snapshot	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.25 STORE PRESET POWER ON**

<b>Value</b>	0x4121	
<b>Description</b>	Store current settings in power-on preset	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.26 IMAGE VIEWER PREV**

<b>Value</b>	0x4123	
<b>Description</b>	Select previous image	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.27 IMAGE VIEWER NEXT**

<b>Value</b>	0x4124	
<b>Description</b>	Select next image	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.28 IMAGE VIEWER FIRST**

<b>Value</b>	0x4125	
<b>Description</b>	Select first image	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.29 IMAGE VIEWER LAST**

<b>Value</b>	0x4126	
<b>Description</b>	Select last image	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.2.30 IMAGE VIEWER SELECT**

<b>Value</b>	0x4127	
<b>Description</b>	Show selected image	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

### 3.3 IMAGE RELATED

#### 3.3.1 BRIGHTNESS

<b>Value</b>	0x4200		
<b>Description</b>	Brightness from -10 to +10		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	INT		

#### 3.3.2 SHUTTER MODE

<b>Value</b>	0x4201		
<b>Description</b>	Mode for shutter		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	AUTO	0x00	Automatic
	MANUAL	0x01	Manual

#### 3.3.3 SHUTTER STEP

<b>Value</b>	0x4202		
<b>Description</b>	Shutter step		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	1_60	0x00	$\frac{1}{60} s$
	1_100	0x01	$\frac{1}{100} s$
	1_120	0x02	$\frac{1}{120} s$
	1_250	0x03	$\frac{1}{250} s$
	1_500	0x04	$\frac{1}{500} s$
	1_1000	0x05	$\frac{1}{1000} s$
	1_2000	0x06	$\frac{1}{2000} s$
	1_3000	0x07	$\frac{1}{3000} s$

**3.3.4 WHITEBALANCE MODE**

<b>Value</b>	0x4203		
<b>Description</b>	White balance mode		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	AUTO	0x00	Automatic
	MANUAL	0x01	Manual

**3.3.5 WHITEBALANCE RED**

<b>Value</b>	0x4204		
<b>Description</b>	Whitebalance value for red from -100 to +100		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	INT		

**3.3.6 WHITEBALANCE BLUE**

<b>Value</b>	0x4205		
<b>Description</b>	Whitebalance value for blue from -100 to +100		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	INT		



**3.3.7 COLOR MODE**

<b>Value</b>	0x4206		
<b>Description</b>	Color mode		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	SRGB	0x00	sRGB
	PRESENTATION	0x01	Presentation
	DLP	0x02	DLP
	WEBCONF	0x03	Webconference
	BLACKWHITE	0x04	Black & White
	MANUAL	0x05	Manual

**3.3.8 GAMMA MODE**

<b>Value</b>	0x4207		
<b>Description</b>	Gamma mode		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	1_55	0x00	WPP description
	1_80	0x01	WPP description
	2_05	0x02	WPP description
	2_20	0x03	WPP description

**3.3.9 SATURATION**

<b>Value</b>	0x4208		
<b>Description</b>	Saturation value from 0 to 150		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	INT		

**3.3.10 DETAIL MODE**

<b>Value</b>	0x4209		
<b>Description</b>	Detail mode		
<b>Access</b>	Admin		RW
	User		RW
	None		RO
	Standby access		no
<b>Type</b>	LIST		
<b>Parameters</b>	HIGH	0x00	High
	MED	0x01	Medium
	LOW	0x02	Low
	OFF	0x03	Off

**3.3.11 DIGITAL ZOOM**

<b>Value</b>	0x420A		
<b>Description</b>	Digital zoom (On/Off)		
<b>Access</b>	Admin		RW
	User		RO
	None		RO
	Standby access		no
<b>Type</b>	BOOL		

**3.3.12 NOISE REDUCTION**

<b>Value</b>	0x420B		
<b>Description</b>	Noise reduction		
<b>Access</b>	Admin		RW
	User		RW
	None		RO
	Standby access		no
<b>Type</b>	LIST		
<b>Parameters</b>	OFF	0x00	Off
	LOW	0x01	Low
	MED	0x02	Medium
	HIGH	0x03	High

**3.3.13 AUTOFOCUS**

<b>Value</b>	0x420C	
<b>Description</b>	Permanent autofocus	
<b>Access</b>	Admin	RW
	User	RW
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

**3.3.14 ONEPUSH AUTOFOCUS**

<b>Value</b>	0x420D										
<b>Description</b>	<p>Trigger the One-Push-Autofocus The live image is divided into 9 focus fields:</p> <table border="1" style="margin-left: 20px;"> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>7</td> <td>8</td> <td>9</td> </tr> </table> <p>The index can either be 0 (to focus on the whole image) or 1 - 9 to focus on one of the fields. When One-Push-Autofocus is triggered permanent AF is turned off.</p>		1	2	3	4	5	6	7	8	9
1	2	3									
4	5	6									
7	8	9									
<b>Access</b>	Admin	RW									
	User	RW									
	None	RO									
	Standby access	no									
<b>Type</b>	TRIGGER_INDEXED										

**3.3.15 ONEPUSH WHITEBALANCE**

<b>Value</b>	0x420E	
<b>Description</b>	<p>Trigger the One-Push-Whitebalance Select the optimal whitebalance based on the current image.</p>	
<b>Access</b>	Admin	RW
	User	RW
	None	RO
	Standby access	no
<b>Type</b>	TRIGGER	

**3.3.16 ZOOM**

<b>Value</b>	0x420F		
<b>Description</b>	Zoom control		
	Depending on the length of the command a set command is divided into three types.		
	<b>Set 1</b>	Start zoom	
	Request	1 byte for direction (START_WIDE / START_TELE)	
	Reply	-	
	<b>Set 2</b>	Set zoom position with maximum speed	
	Request	2 bytes for position in range 0x0000 to 0x0FFF	
	Reply	-	
	<b>Set 3</b>	Start zoom with given speed	
	Request	1 byte for direction (WIDE / TELE) followed by 2 bytes for speed in range 0x0000 to 0x000F	
	Reply	-	
	<b>Get</b>		
Request	-		
Reply	2 bytes for position in range 0x0000 to 0x0FFF		
<b>Access</b>	Admin		RW
	User		RW
	None		RO
	Standby access		no
<b>Type</b>	SPECIAL		
<b>Parameters</b>	WIDE	0x01	Wide
	TELE	0x02	Tele
	START_WIDE	0x11	Start wide
	START_TELE	0x12	Start tele

**3.3.17 FOCUS**

<b>Value</b>	0x4210		
<b>Description</b>	Focus control		
	Depending on the length of the command a set command is divided into three types.		
	<b>Set 1</b>	Start focus	
	Request	1 byte for direction (START_FAR / START_NEAR)	
	Reply	-	
	<b>Set 2</b>	Set focus position with maximum speed	
	Request	2 bytes for position in range 0x0000 to 0x0FFF	
	Reply	-	
	<b>Set 3</b>	Start focus with given speed	
	Request	1 byte for direction (FAR / NEAR) followed by 2 bytes for speed in range 0x0000 to 0x000F	
	Reply	-	
	<b>Get</b>		
Request	-		
Reply	2 bytes for position in range 0x0000 to 0x0FFF		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	SPECIAL		
<b>Parameters</b>	FAR	0x01	Far
	NEAR	0x02	Near
	START_FAR	0x11	Start far
	START_NEAR	0x12	Start near

## 3.4 NETWORK RELATED

### 3.4.1 LAN0 DHCP

<b>Value</b>	0x4300	
<b>Description</b>	Configured DHCP client on network interface 0 (On/Off)	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	BOOL	

### 3.4.2 LAN0 IP

<b>Value</b>	0x4301	
<b>Description</b>	Configured IP address of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

### 3.4.3 LAN0 NETMASK

<b>Value</b>	0x4302	
<b>Description</b>	Configured subnet mask of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

### 3.4.4 LAN0 GATEWAY

<b>Value</b>	0x4303	
<b>Description</b>	Configured gateway of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

**3.4.5 LAN0 NAMESERVER1**

<b>Value</b>	0x4304	
<b>Description</b>	Configured first DNS server of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

**3.4.6 LAN0 NAMESERVER2**

<b>Value</b>	0x4305	
<b>Description</b>	Configured second DNS server of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

**3.4.7 LAN0 STATUS DHCP**

<b>Value</b>	0x4306	
<b>Description</b>	Actual DHCP client status on network interface 0 (On/Off)	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	BOOL	

**3.4.8 LAN0 STATUS IP**

<b>Value</b>	0x4307	
<b>Description</b>	Actual IP address of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

**3.4.9 LAN0 STATUS NETMASK**

<b>Value</b>	0x4308	
<b>Description</b>	Actual subnet mask of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

**3.4.10 LAN0 STATUS GATEWAY**

<b>Value</b>	0x4309	
<b>Description</b>	Actual gateway of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

**3.4.11 LAN0 STATUS NAMESERVER1**

<b>Value</b>	0x430A	
<b>Description</b>	Actual first DNS server of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	

**3.4.12 LAN0 STATUS NAMESERVER2**

<b>Value</b>	0x430B	
<b>Description</b>	Actual first DNS server of network interface 0	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	IP	



**3.4.13 LAN0 STATUS MAC**

<b>Value</b>	0x430C	
<b>Description</b>	MAC address of network interface 0 (ASCII encoded: "00:00:00:00:00:00")	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	yes
<b>Type</b>	STRING	

**3.4.14 LAN0 APPLY SET**

<b>Value</b>	0x430D	
<b>Description</b>	Immediately apply settings to network interface 0	
<b>Access</b>	Admin	WO
	User	-
	None	-
	Standby access	yes
<b>Type</b>	TRIGGER_INDEXED	

## 3.5 MISC SYSTEM SETTING

### 3.5.1 RESOLUTION

<b>Value</b>	0x4400		
<b>Description</b>	Configured resolution of HDMI output		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	AUTO	0x00	Automatically select resolution
	4K60_444	0x01	4k@60Hz (4:4:4)
	4K60_420	0x02	4k@60Hz (4:2:0)
	4K30_444	0x03	4k@30Hz (4:4:4)
	1080P60_444	0x04	1080p@60Hz (4:4:4)
	720P60_444	0x05	720p@60Hz (4:4:4)

### 3.5.2 CURRENT RESOLUTION

<b>Value</b>	0x4401		
<b>Description</b>	Actual resolution of HDMI output		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	AUTO	0x00	Automatically select resolution
	4K60_444	0x01	4k@60Hz (4:4:4)
	4K60_420	0x02	4k@60Hz (4:2:0)
	4K30_444	0x03	4k@30Hz (4:4:4)
	1080P60_444	0x04	1080p@60Hz (4:4:4)
	720P60_444	0x05	720p@60Hz (4:4:4)

**3.5.3 HDCP**

<b>Value</b>	0x4402	
<b>Description</b>	HDCP protection of HDMI in- and output	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

**3.5.4 ADMIN PASSWORD**

<b>Value</b>	0x4406	
<b>Description</b>	Password for login level admin	
<b>Access</b>	Admin	RW
	User	-
	None	-
	Standby access	no
<b>Type</b>	STRING	

**3.5.5 AUTOERASE MEM**

<b>Value</b>	0x4407	
<b>Description</b>	Automatically clear all images at power down and up	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

**3.5.6 STREAM SERVICE**

<b>Value</b>	0x4408	
<b>Description</b>	Network stream (On/Off)	
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

**3.5.7 STREAM FORMAT**

<b>Value</b>	0x4409		
<b>Description</b>	Network stream format		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	JPEG	0x00	JPEG
	H264	0x01	H.264

**3.5.8 STREAM RESOLUTION**

<b>Value</b>	0x440A		
<b>Description</b>	Resolution of network stream		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	FHD	0x00	1080p
	UHD	0x01	4k

**3.5.9 RECORD SERVICE**

<b>Value</b>	0x440B		
<b>Description</b>	Recording feature (On/Off)		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	BOOL		

**3.5.10 POWER ON PRESET**

<b>Value</b>	0x440C		
<b>Description</b>	Preset loaded at power on		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	BOOL		
<b>Parameters</b>	DEFAULT	0x00	Default
	CUSTOM	0x01	Custom

**3.5.11 MAINS ON ACTION**

<b>Value</b>	0x440D		
<b>Description</b>	Action after device is connected to mains supply		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	POWER_ON	0x00	Switch power on
	STANDBY	0x01	Standby mode

**3.5.12 AUTO POWER OFF**

<b>Value</b>	0x440E		
<b>Description</b>	Power down after inactivity		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	OFF	0x00	Off
	30MIN	0x01	Power off after 30min inactivity
	60MIN	0x02	Power off after 60min inactivity

**3.5.13 ARM STANDBY CONTROL**

<b>Value</b>	0x440F		
<b>Description</b>	Power up/down controlled by arm		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	BOOL		
<b>Parameters</b>	OFF	0x00	Off
	ON	0x01	On

**3.5.14 STANDBY MODE**

<b>Value</b>	0x4410		
<b>Description</b>	Standby mode		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	LIST		
<b>Parameters</b>	STANDBY	0x00	Standby
	DEEP_WOL	0x01	Deep standby but Wake-On-LAN is enabled
	DEEP	0x02	Deep standby
	HDMI_PASS_THRU	0x03	Standby but HDMI inputs are passed to output

**3.5.15 NTP ENABLE**

<b>Value</b>	0x4411		
<b>Description</b>	Sync time via Network Time Protocol		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	BOOL		

**3.5.16 NTP URL**

<b>Value</b>	0x4412		
<b>Description</b>	URL of NTP server		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	STRING		

**3.5.17 IR CODE**

<b>Value</b>	0x4413		
<b>Description</b>	IR code of remote		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	1	0x00	IR code 1
	2	0x01	IR code 2
	3	0x02	IR code 3
	4	0x03	IR code 4
	5	0x04	IR code 5
	6	0x05	IR code 6
	7	0x06	IR code 7
	8	0x07	IR code 8
	9	0x08	IR code 9

**3.5.18 TIME**

<b>Value</b>	0x4414	
<b>Description</b>	Set or get current time.	
	<b>Set</b>	
	Request	ASCII encoded byte array: "HH:MM:SS"
	Reply	-
	<b>Get</b>	
	Request	-
	Reply	ASCII encoded byte array: "HH:MM:SS"
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	SPECIAL	

**3.5.19 DATE**

<b>Value</b>	0x4415	
<b>Description</b>	Set or get current date.	
	<b>Set</b>	
	Request	ASCII encoded byte array: "YYYY-MM-DD"
	Reply	-
	<b>Get</b>	
	Request	-
	Reply	ASCII encoded byte array: "YYYY-MM-DD"
<b>Access</b>	Admin	RW
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	SPECIAL	



**3.5.20 STREAM TRANSPORT**

<b>Value</b>	0x4416		
<b>Description</b>	Network stream transport mode		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LIST		
<b>Parameters</b>	UNICAST	0x00	Unicast*/
	MULTICAST	0x01	Multicast

**3.5.21 STREAM MULTICAST IP**

<b>Value</b>	0x4417		
<b>Description</b>	Destination IP of multicast stream		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	IP		

**3.5.22 STREAM MULTICAST PORT**

<b>Value</b>	0x4418		
<b>Description</b>	Base port number for transport of multicast stream		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	INT		

**3.5.23 STREAM MULTICAST TTL**

<b>Value</b>	0x4419		
<b>Description</b>	TTL of multicast stream		
<b>Access</b>	Admin	RW	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	INT		

**3.5.24 SECURITY MODE STATUS**

<b>Value</b>	0x441A	
<b>Description</b>	Actual security mode status	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

**3.5.25 PRIVACY MODE**

<b>Value</b>	0x4433	
<b>Description</b>	Privacy mode	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

**3.5.26 SECURITY MODE APPLY**

<b>Value</b>	0x4434	
<b>Description</b>	Apply configured security mode (triggers reboot)	
<b>Access</b>	Admin	WO
	User	-
	None	-
	Standby access	no
<b>Type</b>	TRIGGER	

**3.5.27 SECURITY MODE**

<b>Value</b>	0x4435	
<b>Description</b>	Set security mode	
<b>Access</b>	Admin	RO
	User	RO
	None	RO
	Standby access	no
<b>Type</b>	BOOL	

## 3.6 LEGACY COMMANDS

### 3.6.1 LEGACY BLOCK

<b>Value</b>	0x10		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	FLAGS_AND_UNIT2	0x0B	-
	POSITIONS2	0x0D	-

### 3.6.2 LEGACY MODELNAME

<b>Value</b>	0x11		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	LEGACY		

### 3.6.3 LEGACY VERSION

<b>Value</b>	0x13		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	yes	
<b>Type</b>	LEGACY		

**3.6.4 LEGACY ZOOM**

<b>Value</b>	0x20	
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1	
<b>Access</b>	Admin	RW
	User	RW
	None	RO
	Standby access	no
<b>Type</b>	LEGACY	

**3.6.5 LEGACY FOCUS**

<b>Value</b>	0x21	
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1	
<b>Access</b>	Admin	RW
	User	RW
	None	RO
	Standby access	no
<b>Type</b>	LEGACY	

**3.6.6 LEGACY STOP ALL**

<b>Value</b>	0x2F	
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1	
<b>Access</b>	Admin	WO
	User	WO
	None	-
	Standby access	no
<b>Type</b>	LEGACY	

**3.6.7 LEGACY POWER**

<b>Value</b>	0x30	
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1	
<b>Access</b>	Admin	RW
	User	RW
	None	RO
	Standby access	yes
<b>Type</b>	LEGACY	

**3.6.8 LEGACY AUTOFOCUS**

<b>Value</b>	0x31		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	ONEPUSH	0x10	-

**3.6.9 LEGACY RECALL PRESET**

<b>Value</b>	0x40		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	WO	
	User	WO	
	None	-	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	0	0x00	-
	1	0x01	-
	2	0x02	-
	3	0x03	-
	DEFAULT	0x04	-

**3.6.10 LEGACY STORE PRESET**

<b>Value</b>	0x41		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	WO	
	User	WO	
	None	-	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	0	0x00	-
	1	0x01	-
	2	0x02	-
	3	0x03	-

**3.6.11 LEGACY FREEZE**

<b>Value</b>	0x56		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LEGACY		

**3.6.12 LEGACY PIP**

<b>Value</b>	0x5D		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RW	
	User	RW	
	None	-	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	OFF	0x00	-
	ON	0x01	-
	TOGGLE	0x02	-

**3.6.13 LEGACY EXT INT**

<b>Value</b>	0x57		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	OFF	0x00	-
	ON	0x01	-
	TOGGLE	0x02	-
	2_ON	0x03	-

**3.6.14 LEGACY COLOR MODE**

<b>Value</b>	0x6D		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	BW	0x00	-
	PRESENTATION	0x01	-
	NATURAL	0x02	-
	VIDEOCONF	0x03	-
	MAN	0x04	-
	BW_TOGGLE	0x05	-
	DLP	0x06	-

**3.6.15 LEGACY ETHERNET MODE**

<b>Value</b>	0x74		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RO	
	User	RO	
	None	RO	
	Standby access	no	
<b>Type</b>	LEGACY		

**3.6.16 LEGACY SNAPSHOT**

<b>Value</b>	0x95		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	WO	
	User	WO	
	None	-	
	Standby access	no	
<b>Type</b>	LEGACY		

**3.6.17 LEGACY MENUCTRL**

<b>Value</b>	0x99		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	WO	
	User	WO	
	None	-	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	LEFT	0x04	-
	ENTER	0x05	-
	RIGHT	0x06	-

**3.6.18 LEGACY SOURCE**

<b>Value</b>	0x9E		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	VZ	0x00	-
	MEM	0x01	-
	USB	0x02	-
	EXT	0x03	-
	EXT2	0x04	-

**3.6.19 LEGACY LIGHT**

<b>Value</b>	0xA0		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RW	
	User	RW	
	None	RO	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	LB_ON_L_OFF	0x02	-
	SB_ON	0x03	-
	SEQ_TOGGLE	0x10	-
	OFF_LB_TOGGLE	0x11	-
	TOGGLE	0x12	-



**3.6.20 LEGACY RECORDING**

<b>Value</b>	0x0301		
<b>Description</b>	Legacy command - refer to Wolfprot documentation of PF1		
<b>Access</b>	Admin	RW	
	User	RW	
	None	-	
	Standby access	no	
<b>Type</b>	LEGACY		
<b>Parameters</b>	STOP	0x00	-
	START	0x01	-
	PAUSE	0x02	-