MD720UIS
Software integration document

	**Product**	MD720UIS		
	FW Support	1.1.2124.0		
	Version	2024-10	**Level**	First Release

This document outlines the control command set supported by the camera, which is designed for integration by third-party software developers. Below, you will find a comprehensive list of instructions available for use. Developers are encouraged to refer to this list when building or updating their software to ensure compatibility and functionality. Should you have any inquiries or require further assistance, please do not hesitate to contact our Field Application Engineer mail to : AVerSupport_10@aver.com

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Contents

CGI Command

Format to control camera using CGI :

http://camera ip/cgi , (Ex: http://192.168.1.100/cgi-bin?OnePush=Y)

CGI List for Video Transmission						
CGI item name	URL	Command	Parameter Name	Parameter value	Description	
Get JPEG	/snapshot				1280x720 jpg	
Get RTSP stream	rtsp://ip/*rtsp_url*				Default RTSP url: live_st1 rtsp://ip/live_st1	
CGI List for Camera Control						
CGI item name	URL	Command	Parameter Name	Parameter value	Description	
Up Start	/cgi-bin?SetPtzf=	1,0,1				
Up End	/cgi-bin?SetPtzf=	1,0,2				
Down Start	/cgi-bin?SetPtzf=	1,1,1				
Down End	/cgi-bin?SetPtzf=	1,1,2				
Left Start	/cgi-bin?SetPtzf=	0,1,1				
Left End	/cgi-bin?SetPtzf=	0,1,2				
Right Start	/cgi-bin?SetPtzf=	0,0,1				

Right End	**/cgi-bin?SetPtzf=**	**0,0,2**			
Zoom_In Start	**/cgi-bin?SetPtzf=**	**2,0,1**			
Zoom_In End	**/cgi-bin?SetPtzf=**	**2,0,2**			
Zoom_Out Start	**/cgi-bin?SetPtzf=**	**2,1,1**			
Zoom_Out End	**/cgi-bin?SetPtzf=**	**2,1,2**			
Load Preset	**/cgi-bin?ActPreset=**	**0,N**			**N : preset position**
Set Preset	**/cgi-bin?ActPreset=**	**1,N**			**N : preset position**
Cancel Preset	**/cgi-bin?ActPreset=**	**2,N**			**N : preset position**
Preset Speed	**/cgi-bin?Set=**	**preset_speed,3,N**	**value**	**1 ~ 6**	**N : value**
	/cgi-bin?Get=	**preset_speed,3**			***preset_speed,3=N***
Preset Accuracy	**/cgi-bin?Set=**	**preset_accuracy,3,N**	**value**	**0 ~ 1**	**off : N = 0 ; ON : N = 1**
	/cgi-bin?Get=	**preset_accuracy,3**			***preset_accuracy,3=N***
Pan Speed	**/cgi-bin?Set=**	**ptz_p_spd,3,N**	**value**	**1 ~ 24**	**N : value**
	/cgi-bin?Get=	**ptz_p_spd,3**			***ptz_p_spd,3=N***
Tilt Speed	**/cgi-bin?Set=**	**ptz_t_spd,**	**value**	**1 ~ 24**	**N : value**

		3,N			
	/cgi-bin?Get=	ptz_t_spd,3			*ptz_t_spd,3=N*
One Click	/cgi-bin?Set=	ptz_oneclick_x,3,N1&ptz_oneclick_y,3,N2&ptz_one_click_spd,3,N3		ptz_one_click_spd 1~24	N1, N2 = X, Y coordinates (1080P, 0,0 at top left) N3=moving speed
CGI List for Various Settings					
Exposure Value	/cgi-bin?Set=	img_expo_expo,3,N	value	1 ~ 9	N : value
	/cgi-bin?Get=	img_expo_expo,3			*img_expo_expo,3=N*
Saturation	/cgi-bin?Set=	img_saturation,3,N	value	0 ~ 10	N : value
	/cgi-bin?Get=	img_saturation,3			*img_saturation,3=N*
Contrast	/cgi-bin?Set=	img_contrast,3,N	value	0 ~ 4	N : value
	/cgi-bin?Get=	img_contrast,3			*img_contrast,3=N*
White Balance	/cgi-bin?Set=	img_wb_comp_mode,3,N	value	0 ~ 4	N : value
	/cgi-bin?Get=	img_wb_comp_mode,3			*img_wb_comp_mode,3=N*
R Gain	/cgi-bin?Set=	img_wb_cr,	value	0 ~ 255	N : value

		3,N			
	/cgi-bin?Get=	img_wb_cr,3			*img_wb_cr,3=N*
B Gain	/cgi-bin?Set=	img_wb_cb,3,N	value	0 ~ 255	N : value
	/cgi-bin?Get=	img_wb_cb,3			*img_wb_cb,3=N*
Sharpness	/cgi-bin?Set=	img_sharpness,3,N	value	0 ~ 3	N : value
	/cgi-bin?Get=	img_sharpness,3			*img_sharpness,3=N*
Mirror	/cgi-bin?Set=	img_mirror,3,N	value	0 ~ 1	off : N = 0 ; ON : N = 1
	/cgi-bin?Get=	img_mirror,3			img_mirror,3=*N*
Flip	/cgi-bin?Set=	img_flip,3,N	value	0 ~ 1	off : N = 0 ; ON : N = 1
	/cgi-bin?Get=	img_flip,3			img_flip,3=*N*
Noise Filter	/cgi-bin?Set=	img_nr,3,N	value	0 ~ 3	N : value
	/cgi-bin?Get=	img_nr,3			img_nr,3=*N*
IR Cut Filter	/cgi-bin?Set=	img_ircut_filter,3,N	value	0 ~ 2	day : N = 0 ; night : N = 1 ; auto : N = 2
	/cgi-bin?Get=	img_ircut_filter,3			img_ircut_filter,3=*N*
IR Cut Filter Sensitivity	/cgi-bin?Set=	img_ircut_sensitivity,3,N	value	0 ~ 2	0 = Low, 1 = Middle, 2 = High
	/cgi-bin?Get=	img_ircut_sensitivity,3			*img_ircut_sensitivity,3=N*

Reboot	**/cgi-bin?OnePush=!**				
Factory Reset	**/cgi-bin?OnePush=d**				
Model Name	**/cgi-bin?GetString=**	**sys_name**			**sys_name=MD720UIS**
Serial Number	**/cgi-bin?GetSerialNumber=**				**- Reply example: serial_no=5100435000009**
FW Version	**/cgi-bin?GetString=**	**sys_fw_version**			**- Reply example: sys_fw_version=1.1.2001.0**
MCU FW Version	**/cgi-bin?GetString=**	**sys_mcu_fw_version**			**- Reply example: sys_mcu_fw_version=B001**
Lens FW Version	**/cgi-bin?GetString=**	**sys_lens_fw_version**			**- Reply example: sys_lens_fw_version=B001**
Audio FW Version	**/cgi-bin?GetString=**	**sys_audio_ver**			**- Reply example: sys_audio_ver=1.02**
Video FW Version	**/cgi-bin?GetString=**	**sys_video_ver**			**- Reply example: sys_video_ver=1.1.3001.0**
CGI List for Video Stream					
Video Stream Resolution	**/cgi-bin?Set=**	**vdo_net_stm_res,3,N**	**value**	**1 ~ 6**	**1 = 1920x1080; 2 = 1280x720; 3 = 960x540; 4 = 640x480; 5 = 640x360; 6 = 3840x2160**
Video Stream Framerate	**/cgi-bin?Set=**	**vdo_net_stm_fr,3,N**	**value**	**1 / 5 / 15 / 20 / 30**	**frames per second**

Video Stream Bitrate	**/cgi-bin?Set=**	**vdo_net_stm_bitrate,3,N**	**value**	**0 ~ 8**	**0 = 512 Kbps;** **1 = 1 Mbps;** **2 = 2 Mbps;** **3 = 4 Mbps;** **4 = 8 Mbps;** **5 = 16 Mbps;** **6 = 32 Mbps;** **8 = Auto;**
Video Stream I-VOP Interval (S)	**/cgi-bin?Set=**	**vdo_net_stm_intvl,3,N**	**value**	**1 ~ 10**	**I-VOP Interval in seconds**
Video Stream Rate Control	**/cgi-bin?Set=**	**vdo_net_stm_ratectrl,3,N**	**value**	**0 / 1**	**0: CBR;** **1: VBR**
Video Stream Encoding Type	**/cgi-bin?Set=**	**vdo_net_stm_codec,3,N**	**value**	**1 ~ 2**	**1: H.264;** **2: H.265**
CGI List for AI Setting					
Eyes Tracking On/Off (AI Mosaic, Eyes Tracking and AI Video	**/cgi-bin?Set=**	**trk_tracking_on,3,N**	**value**	**0 / 1**	**0: OFF; 1: ON**
	/cgi-bin?Get=	**trk_tracking_on,3**			**trk_tracking_on,3=*N***

Detection are mutually exclusive.)					
Tracking Preset	**/cgi-bin?ActPreset=1,255**				**Save current pos. for eye tracking preset point.**
Timeout to preset	**/cgi-bin?Set=**	**trk_lost_time,3, N**	**value**	**3 / 5 / 7 / 10**	**timeout in seconds**
Tracking Site	**/cgi-bin?Set=**	**trk_mode,3,N**	**value**	**0 / 1**	**0: Face; 1: Eyes**
Tracking Range	**/cgi-bin?Set=**	**trk_sensitivity,3,N**	**value**	**0 ~ 2**	**0: Close; 1: Medium; 2: Wide**
Get detect zone(target frame) number	**/cgi-bin?Get=trk_detect_num**				
	- Reply	**trk_detect_num=X**	**X: number of target frames , 50 max.**		
Get detect zone(target	**/cgi-bin?GetGroup=trk_detect_zones**				

frame) info	**- Reply**	**trk_detect_zones="trk_num:02.focus:-1.zone[00]:760,09,222,300.zone[01]:660,540,16,22."**	**focus - current target frame index. zone[NN]: x,y,w,h - 1080P based**	**(0,0) at top left of video. X,Y,W(width),H(height) is based on the top left of the target frame. "focus:" is followed by the current tracking target frame index. Example: "-1" indicates no target is being tracked. If 3 targets are being detected, "focus:" should be**	

				followed by either 0, 1, or 2.	
Select Tracking Target	**/cgi-bin?SetString=**	**TrackingFocusZone,x,y,w,h**		**x, y: coordinates, w: width, h: height, (0,0 at top left)**	**Based on the result of trk_detect_zones, select tracking target. ex: x=343, y=373, w=213, h=310 /cgi-bin?SetString=TrackingFocusZone,343,373,213,310**

AI Mosaic On/Off (AI Mosaic, Eyes Tracking and Fall/Egress Detection are mutually exclusive.)	/cgi-bin?Set=	vdo_net_stm_mosaic,3,N	value	0 / 1	0: OFF; 1: ON
AI Video Detection On/Off (AI Mosaic, Eyes Tracking and AI Video Detection are mutually exclusive.)	/cgi-bin?Set=	vdo_det_alarm,3,N	value	0 / 1	0: OFF; 1: ON
Detection Type	/cgi-bin?Set=	vdo_det_type,3,N	value	0 ~ 2	0: All Type; 1: Fall Detection; 2: Egress Detection
Fall Detection View	/cgi-bin?Set=	vdo_det_fall_down_preset,3,N	value	0 ~ 255	Fall Detection View Preset Point
Fall	/cgi-bin?Set=	vdo_det_fa	value	0 ~ 2	0: Low; 1: Medium; 2:High

Detection Sensitivity		**ll_down_sensitivity,3,N**			
Egress Detection View	**/cgi-bin?Set=**	**vdo_det_off_bed_preset,3,N**	**value**	**0 ~ 255**	**Egress Detection View Preset Point**
Egress Detection Sensitivity	**/cgi-bin?Set=**	**vdo_det_off_bed_sensitivity,3,N**	**value**	**0 ~ 2**	**0: Low; 1: Medium; 2:High**