# Native WDM and BroadCast WDM

# Manual of QHYCCD Native WDM Driver and BroadCast WDM Driver

QHYCCD WDM Driver is a standard video streaming driver for QHYCCD cameras. It can be used to connect the camera with the application software which support the wdm driver. There is a lot software support wdm driver, eg. amcap, sharpcap, firecapture, ufocapture, handyavi and any of the video chat software like msn , skype etc. If you want to do video online broadcast you can also connect the video encoder software with QHYCCD camera to do it.

QHYCCD supply two WDM driver. One is the native WDM driver and another is the broadcast wdm driver.

## Native WDM Driver

When use this driver. the host application software can run the camera directly and control the camera directly. But the video streaming can be required only by this host application. It can not transfer to another applications.

#### BroadCast WDM Driver

BroadCast WDM Driver is a windows shared video streaming driver. You need to use one host application to connect the camera and control the camera and at the same time the video streaming showing on the this host application can be share to any other of the multiple applications in windows. Currently the host application can be SharpCAP or EZPlanetary. And the application can be any other software which support wdm driver.

#### Installations

You can go to the product web page and download both native wdm driver and boardcast wdm driver and install them.

	Windows Driver and	d Software Download	
	Camera Driver	Latest Version	Previous Version
	Update Check	Latest Version	N/A
	SharpCap	Official Download	Mirror Download
-	SharpCap Patch	Latest Version	Previous Version
	EZCAP_QT	Latest Version	Previous Version
-	ASCOM Capture	Latest Version	Previous Version
	ASCOM Guide	Latest Version	Previous Version
	ASCOM Platform	Official Website	N/A
	ASCOM Platform NativeWDM Driver	Official Website	N/A <u>Previous Version</u>
	ASCOM Platform NativeWDM Driver BroadCast Driver	Official Website Latest Version Latest Version	N/A <u>Previous Version</u> <u>Previous Version</u>
	ASCOM Platform NativeWDM Driver BroadCast Driver PHD2Guiding	Official Website       Latest Version       Latest Version       Official Website	N/A Previous Version Previous Version N/A
	ASCOM Platform NativeWDM Driver BroadCast Driver PHD2Guiding Mac Driver and Soft	Official Website Latest Version Latest Version Official Website tware Download	N/A Previous Version Previous Version N/A
	ASCOM Platform NativeWDM Driver BroadCast Driver PHD2Guiding Mac Driver and Soft EZCAP_QT	Official Website Latest Version Cofficial Website Ware Download Latest Version	N/A Previous Version Previous Version N/A Previous Version
	ASCOM Platform NativeWDM Driver BroadCast Driver PHD2Guiding Mac Driver and Soft EZCAP_QT Driver and Software	Official Website Latest Version Latest Version Official Website tware Download Latest Version Cloud Drive Download	N/A Previous Version Previous Version N/A Previous Version ad

And please use the update check software to confirm the current driver/software is the lastest version.

	Windows Driver and Software Download			
	Camera Driver	Latest Version	Previous Version	
	Update Check	Latest Version	N/A	
	SharpCap	Official Download	Mirror Download	
7	SharpCap Patch	Latest Version	Previous Version	
	EZCAP_QT	Latest Version	Previous Version	
 _	ASCOM Capture	Latest Version	Previous Version	

#### Use Native WDM Driver (sample as QHY5III174M) in UFOCapture

🔛 UFOCaptureHD2 (before registration)

Input	Operation Profile DB			
Video	3:QHY Camera (Native W 🔻		-	set
	1:LG HD WebCam 2:QHYCCD Camera(WDM) 3:QHY Camera (Native WDM	<b>Fps</b> eld Fir	<b>60.000</b> st	

2. The QHY5III174 is a progressive camera not interlace camera. So you need to click off the "Interlace". You an set the FPS, Please note this is only the FPS that the AVI file playback FPS, not the camera's FPS.

You can not set any X, Y size. Only the X,Y size that camera WDM supported can be set.

Xi	1920	Yi	1080	Fps 15	
	nterlace	E B	lottom Fi	eld First	

Please read the camera user manual for the supported resolution in native WDM

3. You can set the exposure, gain and USB traffic in the "set" button. USB traffic will effect the camera maxium frame rate. When decreasing it, the max frame rate can be increased. In some slow computer you may need increase the USB traffic to control the bandwidth otherwise image maybe hang.

Input Operation Profile DB	Live Replay Previewing
Videc 3:QHY Camera (Native W 🚽 💽	set Stop Preview Detect Rec Audio
Xi 1920 Yi 1200 Fps 15.000	Detect Size 13
Audio NULL	set Detect Lev 12
Codec AVI(uncompressec - suffix .avi	属性
Frame Shift	General About
Head 30 Tail 30 Diff 1	Exposure 20 ms V
Video Trigger	Lauto
Detect Area DA-ALL.bmp Ed	Gain - 10
Min(frm) 2 A Max(sec) 0 A EXsize 100	
Detect Level Noise Tracking ignore blacks	High Speed
DLratio 110 + MinDL 4 + MinL-N 10	USB 50
Scintillation Mask 4pix	
SMlevel 110 SMspeec 2 SMsize 8	
✓ DarkObjMask DOlevel 2 ▲	
SlowObjMask Pix/s 36 + SOsize 36	<b>确定 取消</b> 应用(A)

Note: Currently the UFOCapture only support "YUV" color space mode. The QHYCCD Native WDM support this color space mode. QHYCCD BroadCast does not support this color space mode. So you can only use the QHYCCD Native WDM driver in UFOCapture

#### 2. Use Native WDM in HandyAvi

Run HandyAvi and select QHY Camera(Native WDM drivr) .You use "video settings" to set the gain, exposure and USB tranffic

Meteor Trail Detect and Capture	×
QHY Camera (Native WDM) Video Form	
Video Frame Size: 1920 X 1200 Video Settir	START STOP
Frames per Second: 60	
Meteor Trail Movie Setup	Live Video Preview Enlarge Last Captured - Composite Enlarge
Output File: C:\HandyAvi\MeteorDetect.avi Brow	
Compression: [iyuv] - Intel IYUV codec	
Quality:	international and an an an an and and a second
Sensitivity:	
Pre-Frames	
Post-Frames	Frame number: 134
-	Status: Monitoring sensitivity adjustments
Play-back frame rate (images per second):	
Create a new output file for each trail.	
Advanced Create a JPG file for each Composite Image	

You can also select the resolution in the "video Format" OHV Camera (Native WDM) 居性

QHY Camera (Native WDM) 属性	×
Video Format	
Color Space RGB8	
Color LUT	
~	
Resolution 1920 x 1200	

### 3. Use BroadCast WDM in HandyAvi

📵 Motion Detect Capture

Please make sure you have successfully installed the QHYCCD BroadCast WDM driver. Run HandyAvi and select the QHYCCD Camera(WDM)  $\times$ 

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Capture Device	a(WDM)	Video Format
Video Frame Size	e: 320 X 240	Video Settings
Frames per Seco	nd: 25	
Motion Detect Me	ovie Setup	
Output File:	C:\HandyAvi\MotionDetect.avi	Browse
Compression:	[iyuv] - Intel IYUV codec	•
Quality:		

After select the broadcast driver the image shown in the HandyAVI preview window maybe grey an no image. Now we can start the sharpcap and select "enable user BroadCast" . The video displayed in sharpcap will be broadcast to HandyAvi. You can control the gain, exposure and other parameter in SharpCAP.

