

USB Autofocus Camera Module



16MP IMX298 (SKU: B0290)

QUICK START GUIDE

INTRODUCTION

• About Arducam

Arducam has been a professional designer and manufacturer of SPI, MIPI, DVP and USB cameras since 2012. We also offer customized turnkey design and manufacturing solution services for customers who want their products to be unique.

• About this USB Camera

The B0290 is a new member of the Arducam's USB camera family. It's an 16MP, autofocus, UVC compliant, USB 2.0 camera. This USB camera is based on the 1/2.8" IMX298 image sensor, and you can read more about its specs in the next chapter. Arducam also provides the sample application that demonstrates some of the features of this camera.

• About UVC

The B0290 is a UVC-compliant camera. The native UVC drivers of Windows, Linux and Mac shall be compatible with this camera so that it does not require extra drivers to be installed.

• About Customer Service

If you need our help or want to customize other models of USB cameras, feel free to contact us at support@arducam.com

SPECS

	Camera	
Sensor	IMX298	
Optical Size	1/2.8 inch	
Resolution	16MP 4656H x 3496V	
Data Format	MJPG/YUY2	
Frame Rate	MJPG: 10fps@4656x3496/4160x3120/3264x 2448/2592x1944; 30fps@2320x1744/1080P/720; YUJY2:	
	10fps@1024x768/800x600/640x480	
Lens		
Field of View (FOV)	60°(H)	
Focusing Range	100mm to infinity	
IR Sensitivity	Integral IR filter, visible light only	
Functiona	lity and Compatibility	
Auto Controlled Features	Brightness, Contrast, Saturation, Sharpness, Gamma, White balance.	
Audio	Single channel microphone	
Audio System Compatibility	Single channel microphone Win7/8/10, Linux, Mac and OS with UVC driver	
	Win7/8/10, Linux, Mac and OS with	
	Win7/8/10, Linux, Mac and OS with UVC driver	
System Compatibility	Win7/8/10, Linux, Mac and OS with UVC driver Power	
System Compatibility Power Supply	Win7/8/10, Linux, Mac and OS with UVC driver Power DC 5V	
System Compatibility Power Supply	Win7/8/10, Linux, Mac and OS with UVC driver Power DC 5V MAX 200mA	
System Compatibility Power Supply Working Current	Win7/8/10, Linux, Mac and OS with UVC driver Power DC 5V MAX 200mA Physical	
System Compatibility Power Supply Working Current Operating Temp.	Win7/8/10, Linux, Mac and OS with UVC driver Power DC 5V MAX 200mA Physical -4°F~158°F (-20°C~+70°C)	

QUICK START

• How to download the program Download the APP Amcap from the following link https://www.arducam.com/downloads/app/ AMCap.exe

NOTE:

- 1. If used with the Android device, USB Camera APP and connect adapter are needed.
- 2. For Mac OS, please open the native software facetime and select the video camera "USB Camera" .

How to connect the camera

Connect the one end of the USB 2.0 cable to the USB 2.0 connector provided on the back of B0290, and connect the other end to the USB 2.0 host controller on the computer.

How to use the program (Windows demo only)

The Menu bar at the top of the shown image contains few menu items and the current preview resolution and the frame rate are displayed on the bottom bar when the application is running. The following sections describe each of the menu items in detail.

Menu>Devices

This menu will show the available video devices to host PC. The B0290 named "Arducam imx298 AF Camera". This camera support capturing audio, so the menu shows the "Microphone (Arducam IMX298 AF Camera)".



Menu>Options

The options menu can be used to select the preview, video and image parameters supported by this camera. AMCAP - CAUSerSynthAc2OD/VideoS/Captures



How to use the program (Windows demo only)

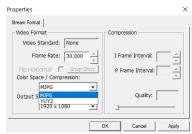
- Video Capture Filter -> Video Proc Amp/Camera Control

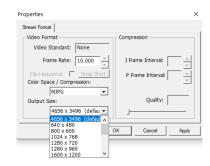
Properties		
Video Proc Amp Camera Contro		
		Auto
Brightness	0	
Contrast	32	
Hue		
Saturation	64	
Sharpness	3	
Gamma		0
White Balance	46	00 🔽
Backlight Comp		
Gain	J0	
ColorEnable	PowerLine Frequency 60 (Anti Flicker)	Hz 💌
	Default	
	OK Cancel	Apply



How to use the program (Windows demo only)

- Video Capture Pin





How to use the program (Windows demo only)

• Menu> Capture

The capture menu is used to capture the still image and video by using this application. You can also select the related parameters.

NOTE: If you want to get the voice from the microphone, you need to select the option "Capture Audio" before capturing video.

AMCAP - C:\Users\rtbh2020\Videos\Captures

