Atik Air Advance Setup Guide:

Introduction:

Atik Air allows you to use your Cameras* and Filter Wheels* on your network instead of connected into your main PC. To do this, we will be using a Raspberry Pi 3. You can then use your cameras on using either the built in Wifi connection or direct Ethernet connection of the Raspberry Pi. You can then use Capture (or most other astronomy programs**) to control your cameras.

This guide describes the 'Advanced Setup' and is designed for people who already have a Raspberry Pi and are familiar with how to connect to it.

This guide will walk you through the steps needed to allow you to use your cameras and filter wheels on your wifi network.

There are two main steps you need to follow:

1) Installing Atik Air on the Raspberry Pi.
2) Setting up your PC to use cameras connected to your Raspberry Pi

Note: It is assumed that you have installed the latest version of the core installer (v3.2.0.5 onwards) in which this document is included. Atik Air will not work with previous versions of the installer. You can download this from our website:

http://www.atik-cameras.com/downloads/

Please follow all instructions on that page.

USB1 and EFW1 filter wheel will not work.

*** GP Acquire will not work.*

Step 1: Setting up the Raspberry Pi:

This step downloading and installing the Atik Air service for the raspberry pi.

1) Open a terminal on your Raspberry Pi.
2) Run the following command to download the software:
   wget downloads.atik-cameras.com/AtikAir.tar.gz
3) Once done, run the following command to unzip the folder:
   tar –zxvf AtikAir.tar.gz
4) Once done, run the following command to change into the correct directory:
   cd AtikAir
5) Then run the following command to install the software. Enter your password if necessary.
   sudo ./Installer
6) Lastly. If you are using an AtikGP, you will need to open the file:

   /boot/cmdline.txt

   And add this text at the start:

   usbcore.usbfs_memory_mb=20000

7) You will need to reboot you Raspberry Pi for changes to take effect.

Step 2: Setup PC

You will now need to setup your PC. If you have an Ethernet Cable, you can follow the instructions in 'Step 2' of the 'Atik Air Simple Setup Guide'. However, it's much easier to follow these steps:

1) Find the IP address of your Raspberry Pi. This will be 4 numbers separated by '.'s. Usually, it will take the form 192.168.1.xxx where the xxx will change depending on your network. To find out the IP address, simple run the following command on you Raspberry Pi

   ifconfig

   The command will list settings for 'eth0' which is your Ethernet connection and 'wlan0' which is your wifi connection. In both cases, the IP address will be listed after 'inet addr'.

2) Open the AtikAir application on your PC. This will be located in 'Start -> Applications -> ArtemisCCD'.

You will see two options 'Local' and 'Remote'. Local will look for cameras connected to your PC. Remote will look for cameras connected to the Raspberry Pi. The first time you see this screen, Remote will say 'Not Set'. Before you can use the cameras connected to the Raspberry Pi, you will need to set it up.

3) Press the 'Set Remote IP' button and enter the IP address of the Raspberry Pi. The Press OK.

4) This should take you back to the first page and 'Remote' should now be 'Available'

5) Select 'Remote' to start using your Raspberry Pi

Notes on AtikAir:

If you wish to connect to a camera connected to your PC, select the local value again.

These settings are saved every time you make a change (i.e. select local or remote)

When using any program that controls our cameras (such as capture), the settings are only checked when the program is started. Therefore, changing the setting will not affect programs that are currently running.

The settings are saved, so you can close the AtikAir whenever you want. The settings will be remembered even if you restart your PC.

Once finished, you can shut the Raspberry Pi down by pressing the 'Shutdown Pi' option.