



archerfish solo installation guide



Advanced Video
Technology



Remote Access



Mobile
Notifications



Wireless



Welcome

Welcome to Video Monitoring Done Right™. Archerfish is the only smart, wireless security camera and recorder that can understand what it sees and send video alerts when important things happen. While the *Getting Started with Archerfish Solo* insert provides an overview, this guide takes you step-by-step to set up and personalize your Archerfish system.

For additional help or troubleshooting, contact Archerfish Customer Support at support@myarcherfish.com or 877.3.THEFISH (877.384.3347) 8:00 am to 11:00 pm Eastern Time (Weekdays), 9:00 am to 9:00 pm Eastern Time (Weekends). Online Help is available anytime at www.myarcherfish.com/solosetup.

	Page
Table of Contents	
Before You Start Make Sure You Have What You Need	02
Step 1 Add Solo to Your Wireless Router	03
Step 2 Assemble Solo	06
2-1 Assemble Mount Base for Ethernet (optional)	08
Step 3 Install Solo	09
Step 4 Register Solo	11
4-1 Register Primary User	13
4-2 Define Notification Methods	14
4-3 Set Billing Preferences	15
4-4 Set Up Live Video	16
Step 5 Customize Your System	17
5-1 Set Up Zones	18
5-2 Configure Events	19
5-3 Define Notification Methods by Camera	20
Now that You're Done Using the Dashboard	21
Helpful Hints in Making Archerfish Work for You	22
Appendix A: Port Forwarding Set Up	23
Appendix B: Solo Device LED Quick Reference	24
Appendix C: Solo Device Technical Specifications	25
Notices	26

Before You Start Make Sure You Have What You Need

Your Archerfish Solo comes with the items pictured in Figure 1.

Other things you'll need to set up are:

- PC with Microsoft Internet Explorer (version 7.0 or higher), Mozilla Firefox (version 3.5 or higher), Apple Safari (version 3.2 or higher), or Google Chrome (version 2.0 or higher)
- Active broadband Internet connection with an upload speed of at least 512 kbps
- Wireless router (with available port for initial setup) connected to the Internet
- Phillips and slotted ("flathead") screwdrivers



Figure 1 Archerfish Solo items

Step 1 Add Solo to Your Wireless Router

Setting up wireless connectivity between Solo and your router is easy because there's an Archerfish Solo Wi-Fi Setup Tool that does the work for you. If you aren't using a wireless connection for Solo, skip ahead to Step 2.

Before the tool can begin, you need to connect the Ethernet connector to your wireless router and then connect the power connector to the power supply (Figure 2).

Next, plug in the power supply.

Wait for the small LED light on the bottom of Solo to turn green before proceeding to the next page. It may take several minutes for the light to turn green.

Note: The LED light on the Solo device uses different color and blink patterns to tell you what it's doing. For a summary of all the different LED states, see Appendix B on page 24.

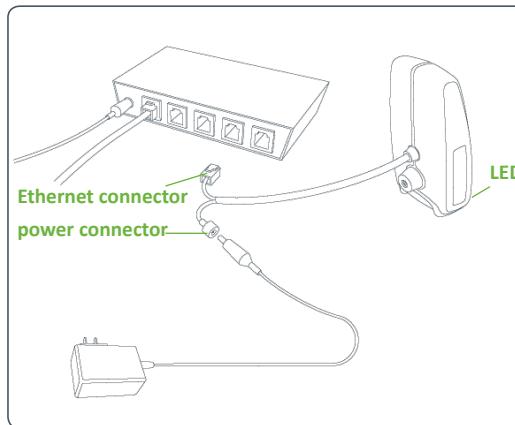


Figure 2 Solo device's power and Ethernet connectors

Step 1 Add Solo to Your Wireless Router (continued)

On a PC, go to www.myarcherfish.com/solosetup to download the Solo Wi-Fi Setup Tool. Make sure you're saving the file (SoloWiFiTool.exe) in the same local network you plan to install Solo on. Double click the file to run it.

Note: If your Windows firewall or other security application asks if you want to run "SoloConfigWizard" you'll need to agree.

Once the tool has launched, click the Start button.

The tool takes a few moments to detect all Solo devices that are connected to your router.

Select the Solo device you wish to configure for Wi-Fi (Figure 3). If you have multiple Solo devices, you can see which device is which by matching the four digits displayed at the end of the Solo device name with the last four digits in the device serial number (included in the *Getting Started* insert).

Click the Continue button.

Now you'll need to provide and confirm a password for the Solo device (Figure 4). You'll need this password if you ever need to go back and edit the device's Wi-Fi configuration at a later time.

Click OK.

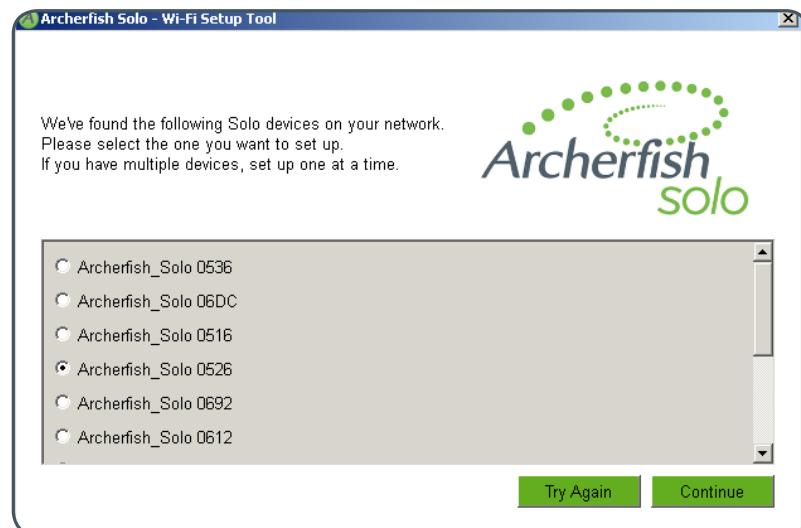


Figure 3 Archerfish Devices detected by the Wi-Fi Setup Tool



Figure 4 Creating a password for your Solo

Step 1 Add Solo to Your Wireless Router (continued)

Next, you'll be prompted for a Wireless Network Name, Wireless Network Key, and Wireless Network Key Type (Figure 5).

The Wireless Network Name should be the name of your wireless router. The Wireless Network Key is the password you use to access your router (it may even be written on a label on your router). If you don't see it in the drop-down list, click the Try Again button or enter it in the Wireless Network Name field.

There are several available Wireless Network Key types, each corresponding to a level of security. These include WEP, WPA-AES, WPA-TKIP, WPA2-AES, and WPA2-TKIP. By default, this field will automatically include the Wireless Network Key type your router is most likely using.

If no Wireless Network Key type appears and you don't know which Key type your router is using, first try WEP. If that fails, you can test each one of the other options until one of them works.

Note: If using WEP (e.g., you are a Verizon FiOS customer using your router's default settings), the Hex Key checkbox will appear. For most networks using WEP, the Hex Key option must be selected for connectivity to be established.

Click OK.

If the wireless connectivity is successfully established, the tool will let you know and display a snapshot of whatever's currently in front of your Solo device (Figure 6). At this point, the LED light on the Solo device will be green.

Before proceeding to the next step, disconnect both the Ethernet and power connections.

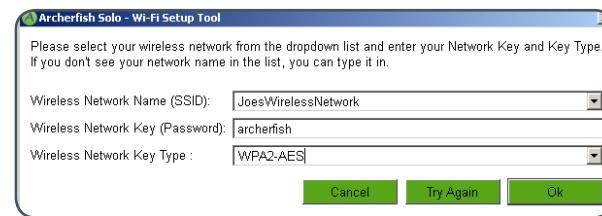


Figure 5 Wireless network settings



Figure 6 Wi-Fi Setup Tool completion

Step 2 Assemble Solo

There are a few steps you need to perform to physically put Solo together, including inserting a MicroSD card for recording and attaching the mount.

Before inserting the MicroSD card, make sure that the Solo device does not have power.

Open the MicroSD slot cover (“door”) of the Solo device and insert the MicroSD card into the card slot as shown in Figure 8. When inserting the card, gently push it straight in until it clicks into place. Be sure to insert it with the underside of the card facing the front of the Solo device (“upside down”) as shown in Figure 7. Close the door.

Now Solo will be able to record continuous video to the MicroSD card. Once you’re done with the installation process, you’ll be able to view this recorded video on the Archerfish SmartPortal.

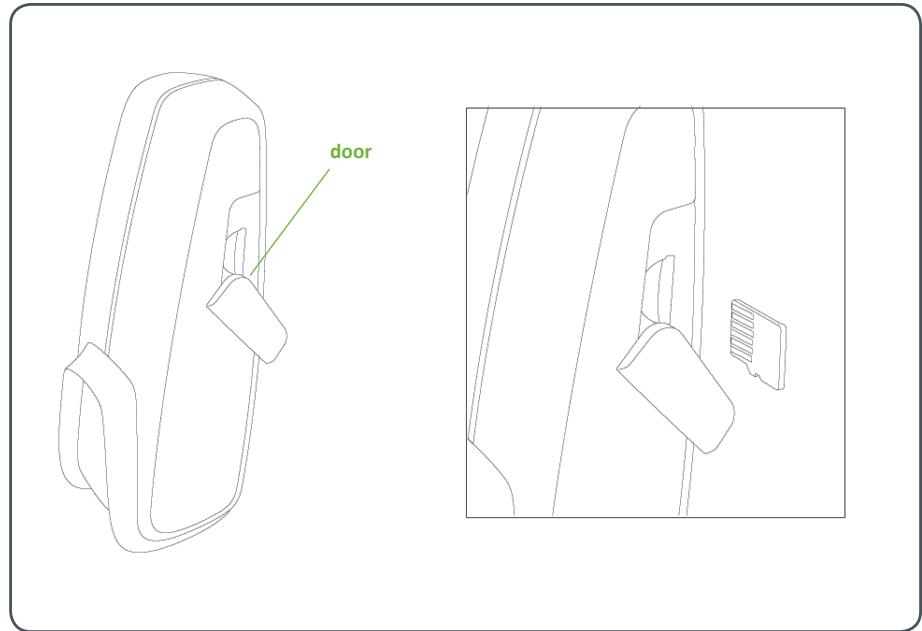


Figure 7 MicroSD card inserted into the Solo device

Step 2 Assemble Solo (continued)

The Solo device comes with a mount for installing it on a wall, ceiling, or shelf. Attaching the device to its mount requires some basic assembly, illustrated in Figure 8 on the right.

- First remove the nut and stud from the rotating joint to expose the screw inside the rotating joint (Figure 8A).
- Using your slotted screwdriver, tighten the screw in order to attach the rotating joint to Solo (Figure 8B)
- Finally, slide the mount arm into the rotating joint and secure the stud into place with the nut (Figure 8C). The head of the stud should rest in the side of the rotating joint that is recessed.

Next, assemble the mount base. To connect the power cables within the mount base, first remove the Ethernet adapter from inside the mount base. Gently pull the rubber gasket away from the base. Press the cable attached to Solo down through the gasket's left-hand slot and then press the power supply cable down through the right-hand slot (Figure 9A). Connect the two cables inside the base (Figure 9B).

You will attach the mount base to the mount when you screw the mount in place (described on page 10).

If Solo is going to be wirelessly connected to the Internet, press the tab into the center slot to close it (Figure 10) and then skip ahead to Step 3 on page 9.

If you will be using a cabled Ethernet connection, proceed to Step 2-1 on the next page.

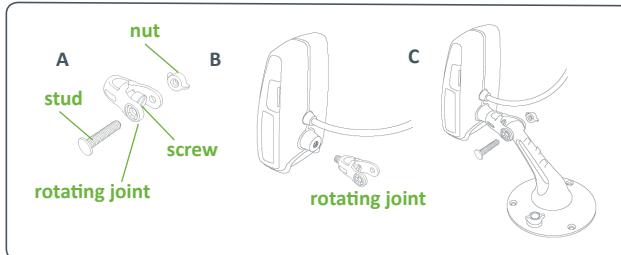
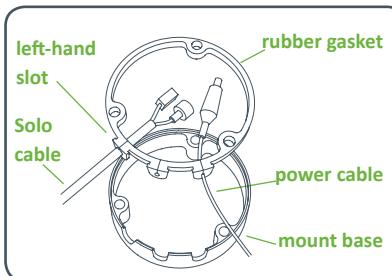
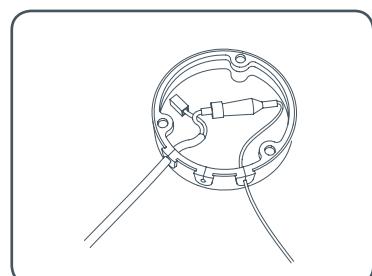


Figure 8 Attaching the Solo device to the mount with the rotating joint



A How cables are placed into the mount base's rubber gasket



B Power cables connected within the mount base

Figure 9 Assembling the mount base

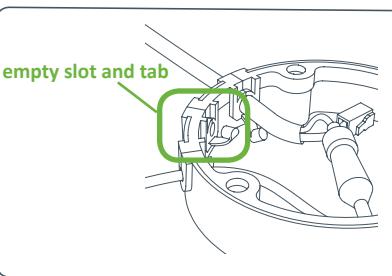


Figure 10 Unused left-hand slot, with tab



Step 2-1 Assemble Mount Base for Ethernet (optional)

Although Solo is designed to work over a wireless network, you're free to have it permanently connected to your router over a dedicated Ethernet cable. In such a case, you'll need to have the Ethernet cable coming out of the Solo device to connect to the Ethernet cable leading to your router.

If you followed the instructions on the previous page, you've already placed the Solo cable through the left-hand slot in the mount base and connected its power connector to the power supply.

To connect the Solo cable's Ethernet connector to the Ethernet cable leading to your router, press the router's Ethernet cable down through the center slot. Then insert the Ethernet adaptor into the mount base and connect both Ethernet connectors to either side (Figure 11).

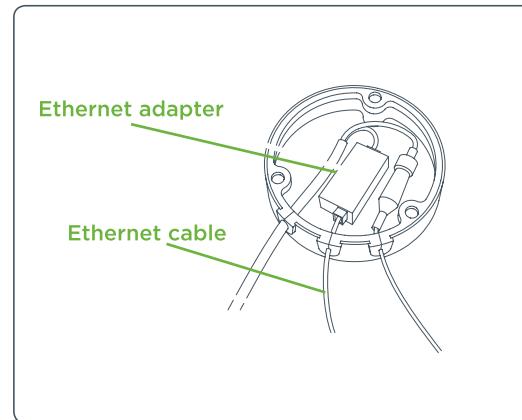


Figure 11 Ethernet cables connected via the Ethernet adapter within the mount base

Step 3 Install Solo

Solo is a very smart and flexible device, but you can help it work, and make your own viewing experience better, by installing Solo where it can have a clear view of the things you want to see. So we recommend following these guidelines when you select a location for your Archerfish system.

DESCRIPTION		✓
WI-FI CONNECTIVITY	Confirm that the Solo device can receive a signal from your wireless router. To do this, plug it into a nearby power outlet. If you see a green light on the Solo LED within two minutes, there's a wireless signal.	
SOLO PLACEMENT	Solo device should be installed 8 to 20 feet above the ground and tilted downward at an angle between 15° and 45° (Figure 12). It should be positioned 10 to 40 feet from people, or 20 to 60 feet from vehicles.	
DIRECTION OF MOTION	People and vehicles should normally move from left-to-right or right-to-left in the camera view (Figure 13A), not directly toward or away (Figure 13B).	
IMAGE SHARPNESS	Maintain a clear camera image. Don't point the camera through a window pane or screen, and avoid placing it in conditions that would cause the camera lens to fog up or accumulate water droplets.	
CAMERA ORIENTATION	Objects in the camera view should appear upright. In other words, the Solo device should not be rotated clockwise or counter-clockwise.	
SECURE MOUNTING	Solo device should be securely mounted.	
ADEQUATE, EVEN LIGHTING	Lighting should be constant and sufficient to read a newspaper in the camera view where people or vehicles appear.	
PHYSICAL OBSTRUCTIONS	Physical obstructions or sources of constant motion (e.g., moving doors, flags waving in the wind, etc.) are not in the camera view.	
REFLECTIONS, GLARE, OTHER LIGHTING EFFECTS	Reflective surfaces (e.g., mirrors, window panes, water, or polished floors) or bright lights (e.g., headlight glare, direct sunlight) are not directed at the camera.	

For more information and specific examples, go to www.myarcherfish.com/solosetup and review the *Camera Placement Guide*. At that site you can also watch a short video on camera setup.

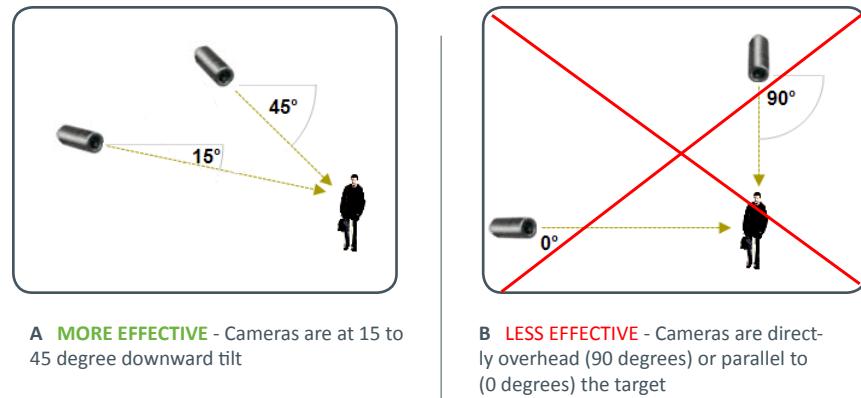


Figure 12 Camera Angle

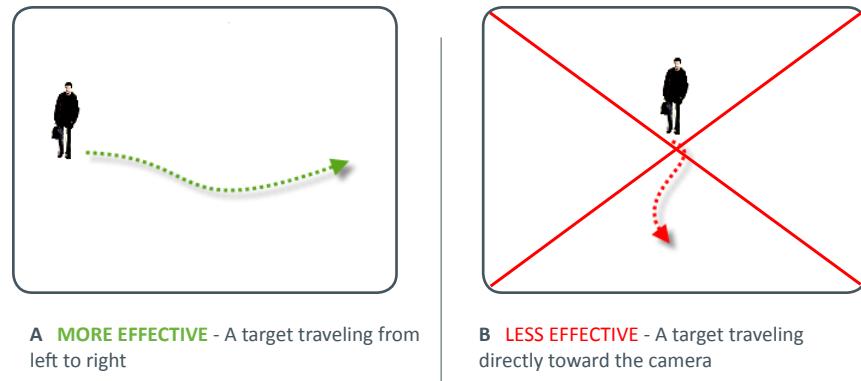


Figure 13 Target Direction of Motion

Step 3 Install Solo (continued)

You can attach Solo to a ceiling, wall, or shelf as seen in Figure 14. Notice that in each example the lens is pointed down at about a 45 degree angle.

Once the Solo device is assembled with its mount, you can adjust the direction Solo is pointed (Figure 15, left). To do so loosen a nut, change the Solo device position, and then re-tighten the nut. Then use the three screws to attach the Solo mount to the desired surface. The screws must pass through both the mount and mount base (see Figure 15, right).

Make sure that the cabling coming out of the mount base is pointed downward.

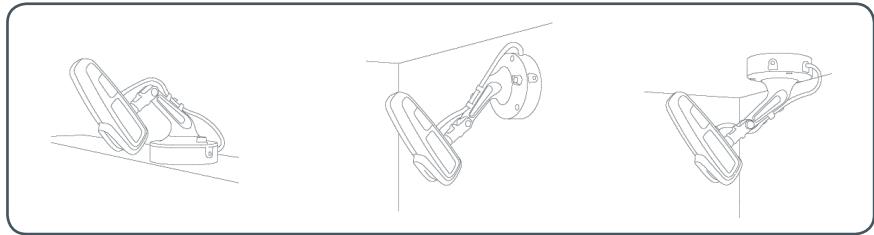


Figure 14 Shelf (left), wall (center), and ceiling (right) mounting positions

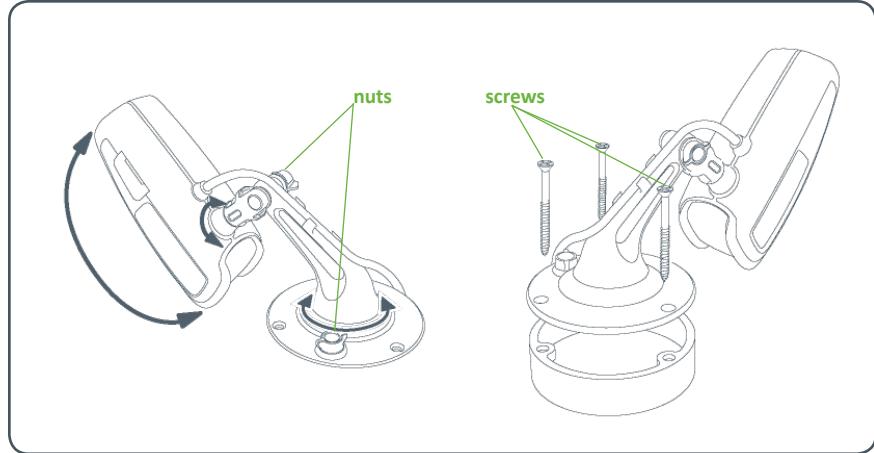


Figure 15 Adjustment nuts (left); using three screws to attach mount and mount base to surface

Step 4 Register Solo

You'll need to activate your Archerfish Solo by registering it. To do so, open an Internet browser and sign in at portal.myarcherfish.com/signup.

Note: If you already have an Archerfish account and need to register *additional* Archerfish devices, do not go through the Initial Registration process. Instead, go to www.myarcherfish.com, log in to the SmartPortal, and then click on Devices > Add a Device.

On the Initial Logon and Registration Wizard page, you'll need to enter the serial number of your Solo (Figure 16). The serial number can be found in your *Getting Started with Archerfish Solo* insert. You may want to save this insert so you can have the serial number for your records. If you no longer have the insert, the Serial number can also be found on the tag attached to the Solo device's power cable.

The screenshot shows the 'Initial Logon and Registration Wizard' page. At the top, there is a barcode icon with the serial number '123412340005' displayed below it. The 'Dashboard' tab is selected. The main section is titled 'Register Device' and contains fields for 'Device Serial Number' (containing '123412340005') and 'Device Name' (with a placeholder 'Enter Device Name'). A red 'Test Device' button is next to the device name field. A note says '* Required field'. Below the main form, there are several blue buttons for 'User Information', 'Define Notification Methods', 'Billing Preferences', 'Authorize Subscription', and 'Configure Live Video'. The status bar at the bottom right shows the date and time: 'Today is: 03/08/2010 12:11:31 PM'.

Figure 16 Archerfish device serial number in Device Serial Number field



Step 4 Register Solo (continued)

On the Initial Logon and Registration Wizard page, Register Device section, enter a name for your device (Figure 17). The name of the physical location for an Archerfish device is recommended (e.g. "Satellite Office"). Because Archerfish is flexible and easy to use, you can change the name at any time.

Click the Test Device button (Figure 18).

- If the test is successful, you will receive a Congratulations message (Figure 18). This means that your Archerfish Solo has been successfully connected to the Archerfish SmartPortal.
- If the test fails, you'll be walked through a series of questions to troubleshoot the problem. If you need additional help, contact support@myarcherfish.com or call **877.384.3347 (877.3.THEFISH)**.

Once you have completed a successful Archerfish device test, continue with the Initial Logon and Registration Wizard page by clicking the Set up User Information button (Figure 19).

You will be prompted to accept the terms of service. You must agree to the terms to continue with the installation.

The screenshot shows the 'Initial Logon and Registration Wizard' interface. At the top right, it says 'Today is: 03/08/2010 12:22:08 PM'. The main section is titled 'Register Device'. It contains two input fields: one for 'Device Serial Number' (containing '123412340005') and one for 'Device Name' (containing 'Satellite Office'). A red asterisk indicates both fields are required. Below these fields is a large orange 'Test Device' button. To the right of the fields, there's a link 'Next I Want to' followed by a blue 'Set up User Information' button. On the right side of the page, there's a vertical list of other steps: 'User Information', 'Define Notification Methods', 'Billing Preferences', 'Authorize Subscription', and 'Configure Live Video', each in its own blue box.

Figure 17 Customization of Device Name



Figure 18 Congratulations message, displayed upon successful Archerfish device test



Figure 19 Installation Wizard button that will direct you to the next step in the initial Archerfish device registration process

Step 4-1 Register Primary User

The second part of registration is to register the primary user. The primary user is usually the owner and main contact of this account, and will define system preferences such as adding users to the Archerfish system.

On the Initial Logon and Registration Wizard page, User Information section, enter the requested information in each field (Figure 20).

Some fields to pay particular attention to include:

- Email Address: Enter a valid email address as the primary email address that you want associated with your Archerfish account. You will use this same email address to log into your account from www.myarcherfish.com.
- Password: Enter an alphanumeric password between 6 and 12 characters long. After initial registration, you can update your password at any time via your User Profile page.
- Time Zone: Select the time zone you prefer as the default time zone for all Archerfish devices registered to this account. All event configuration options and event notifications will be displayed according to the time zone you select.

After you have completed the required information fields, click the Define Notification Methods button (Figure 21) to proceed to the next step in the registration process.

The screenshot shows the 'Initial Logon and Registration Wizard' interface. At the top right, it says 'Today is: 03/08/2010 1:35:58 PM'. Below that is a blue header bar labeled 'Register Device'. The main area is titled 'User Information' and contains the following fields:

- * Email Address: (name@company.com)
- * First Name, Last Name:
- Company Name:
- * Address 1:
- Address 2:
- * City:
- * State, Postal Code:
- Office Phone:
- * Password: (6-12 alphanumeric characters; case sensitive)
- * Re-enter Password:
- * Select Default Time Zone:

Below these fields, there is a note: 'Required field'. To the right, there is a link 'Next I Want to' and a prominent orange button labeled 'Define Notification Methods'. Other tabs visible at the bottom include 'Define Notification Methods', 'Billing Preferences', 'Authorize Subscription', and 'Configure Live Video'.

Figure 20 Initial Logon and Registration Wizard page, User Information section



Figure 21 Installation Wizard button that will direct you to the next step

Step 4-2 Define Notification Method for Primary User

On the Initial Logon and Registration Wizard page, Define Notification Methods section (Figure 22), you can tell Archerfish how to send video notifications and other messages to you and people that you designate.

- Email 1 and Email 2: The email addresses entered in the last step will automatically show up in the Email 1 field. If you also want notifications sent to your mobile phone, enter in your phone's email address in the Email 2 field (e.g., a Verizon email address might be 7035551212@vtext.com). Be sure to use the correct email address for the type of message you want to receive, SMS for text-only messages and MMS for messages with an attached video or image, since they may differ. Figure 23 shows SMS and MMS email addresses for major U.S. wireless providers. Please refer to your provider's support documentation or web site for more information.
- Select one of the following Notification Formats:
 - "Text" means you'll receive an all-text notification.
 - "Text with hyperlink to video" means you'll receive a notification with a link to the Archerfish SmartPortal to view a 10 second clip of the event. This option is only for email and not valid for mobile phones.
 - "Text with attached still image" means you'll receive a notification that includes an attached snapshot of the event.
 - "Text with attached video clip" means you'll receive a notification with a video clip of the event. Choose the file format appropriate for your mobile phone: MPEG-4 (standard), WMV (Windows phones), 3GPP (other phones), or MPEG-4 for 3GS (iPhone). If you're unsure of your format, try each one starting with MPEG-4 (standard).

Once you have defined an email address and associated it with a Notification Format, click the Test button to confirm you can receive alerts as expected. If the test fails, try another Notification Format.

Click the Set up Billing button to proceed to the next step in the registration process.

The screenshot shows the 'Initial Logon and Registration Wizard' interface. At the top right, it says 'Today is: 03/08/2010 1:40:49 PM'. Below the title, there are several tabs: 'Register Device' (selected), 'User Information', 'Define Notification Methods', 'Billing Preferences', 'Authorize Subscription', and 'Configure Live Video'. The 'Define Notification Methods' tab is active, showing a table with two rows. The first row has 'Email 1:' set to 'john Doe @somecompanyname.co' and 'Notification Format' set to 'Text w/hyperlink to video'. The second row has 'Email 2:' set to an empty field and 'Notification Format' set to 'Text'. There are 'Test' buttons next to each row. A note at the bottom of the table says 'Required field'. At the bottom right of the wizard, there is a 'Set up Billing' button.

Figure 22 Initial Logon and Registration Wizard page, Define Notifications section

Provider	SMS	MMS
AT&T	<i>mobile number@txt.att.net</i>	<i>mobile number@mms.att.net</i>
Sprint	<i>mobile number@messaging.sprintpcs.com</i>	<i>mobile number@pm.sprint.com</i>
T-Mobile	<i>mobile number@tmomail.net</i>	<i>mobile number@tmomail.net</i>
Verizon	<i>mobile number@vtext.com</i>	<i>mobile number@vzwpix.com</i>
Virgin Mobile	<i>mobile number@vmobl.com</i>	<i>mobile number@vmobl.com</i>

Figure 23 E-mail address format for major U.S. wireless providers

Step 4-3 Set Billing Preferences

On the Initial Logon and Registration Wizard page, Billing section (Figure 24), you can choose your Archerfish SmartPortal Subscription and method of payment.

Two subscription levels are available:

- Premium Subscription provides full Archerfish SmartPortal functionality, including intelligent video filtering and mobile notifications.
- Basic Subscription provides remote system operation and is best for those who only want to view live and DVR video. The Basic Subscription is available free of charge.

Upon the registration of your first Archerfish device, you will receive an automatic free Premium Subscription upgrade for three months. After the trial period, you may choose to continue with either subscription option. Premium Subscriptions are charged monthly, so you can always update your subscription level. More information is available at www.myarcherfish.com/subscription.

During initial registration you are required to enter a valid credit card, even if you plan to switch to the free Basic Subscription at the end of the Premium Subscription trial.

Fill in your billing information and click the Authorize Subscription button (Figure 25). You'll see a screen that summarizes your monthly charges. Click Confirm Billing.

Click the Set up Live Video button (Figure 26) and proceed to the next step in the registration process.

The screenshot shows the 'Initial Logon and Registration Wizard' interface. At the top right, it says 'Today is: 03/08/2010 1:46:51 PM'. Below the title, there are four tabs: 'Register Device' (selected), 'User Information', 'Define Notification Methods', and 'Billing Preferences'. The 'Billing Preferences' tab is active, displaying a form with the following fields:

- Subscription Level:** Radio buttons for 'Premium' (\$5.00) and 'Basic' (\$0.00). A link 'What is this?' is next to 'Premium'. A note above the radio buttons says: 'Enter an automatic Premium Subscription service at NO CHARGE for you for three months. Before the upgrade expires, you can choose between the Basic or Premium Subscription Level.'
- Billing Email Address:** Input field containing 'johndoe@somecompanyname.com' with a 'What is this?' link.
- Credit Card Number:** Input field containing '4111111111111111' with a 'Why?' link.
- Expiration Date:** Input field showing '12-December 2012' with a dropdown arrow.
- Card Verification Code:** Input field containing '123' with a 'What is this?' link.
- First Name, Last Name:** Input fields for 'John' and 'Doe'.
- Company Name:** Input field.
- Address 1:** Input field containing '30 Rockefeller Plaza'.
- City:** Input field containing 'New York'.
- State, Postal Code:** Input field showing 'New York' with a dropdown arrow and '10112'.

A note below the fields says 'Required field'. At the bottom right of the form area is an 'Authorize Subscription' button.

Figure 24 Initial Logon and Registration Wizard page, Billing Preferences section

Next I Want to Authorize Subscription

Figure 25 Installation Wizard button that will direct you to the next step

The screenshot shows the 'Authorize Subscription' page. At the top, it says 'Thank You for Your Business. Your billing information has been updated'. Below that, under 'Billing details:', there is a table with the following information:

Subscription Plan:	Premium
Billing Start Date:	2010-06-17
Billing Email:	johndoe@somecompanyname.com
Credit Card Number:	XXXX1111

At the bottom of the page are three buttons: 'Print', 'Skip Live Video Step and Complete Registration' (highlighted in orange), and 'Set up Live Video'.

Figure 26 Installation Wizard provides the option to skip or set up live video



Step 4-4 Set Up Live Video

The last step in registration is to set up live video. Once this step is done, you'll be able to see live video from your Archerfish Solo in the Archerfish SmartPortal.

On the Initial Logon and Registration Wizard page, Configure Live Video section (Figure 27), you'll see networking information about your Archerfish Solo. For live video to work, port forwarding needs to be set up. Archerfish can automatically set up port forwarding if your router supports Universal Plug and Play, or UPnP. Just set UPnP to On in the drop down option.

Once you have turned UPnP on, click the Complete Registration button (Figure 28) to complete the process. You'll receive an email letting you know live video has been set up.

If your router doesn't support UPnP, select Off and refer to "Appendix A: Port Forwarding Configuration" on page 23.

Once the registration process is complete, the Configure Device screen appears. Proceed to Step 5.

The screenshot shows the 'Initial Logon and Registration Wizard' interface. At the top right, it says 'Today is: 03/08/2010 2:25:18 PM'. Below the title, there's a vertical list of steps: 'Register Device', 'User Information', 'Define Notification Methods', 'Billing Preferences', 'Authorize Subscription', and 'Configure Live Video'. The 'Configure Live Video' section is currently active. It contains a table with the following data:

Device Serial Number	Device Name	Device Private IP	Device Public IP	UPnP What is this?	Device Port Number
123412340005	Satellite Office	192.168.1.101	207.136.167.226	<input checked="" type="checkbox"/> On	###

At the bottom of the page are three buttons: 'Next I Want to', 'Skip Live Video Step and Complete Registration' (which is highlighted in orange), and 'Complete registration'.

Figure 27 Initial Logon and Registration Wizard page, Configure Live Video section



Figure 28 Installation Wizard button that completes the registration process

Step 5 Customize Your System

Congratulations, you've just completed the Initial Installation and Registration process. Now that Solo has been installed and activated, this next step will help you to personalize your Archerfish system. You'll be able to tell Archerfish what you want it to watch for.

First, Archerfish will check to see if there are any updates for your Solo device. This process should only take a few moments. Once complete, you'll see a confirmation message (Figure 29).

Click the Configure Device button.

On the Configure Device page, Select Device section (Figure 30), choose the Archerfish device to customize from the drop down menu.

Note: If you wish to change the name of the Archerfish device, enter the new name in the Update Device field and click the Update Now link.

For the Select Video Resolution option, select Standard for both Live Video/DVR Recording and Event Clips. This setting will give you good video quality while optimizing storage.

Click the Set Up Zones for My Camera button to proceed to the next step (Figure 31).

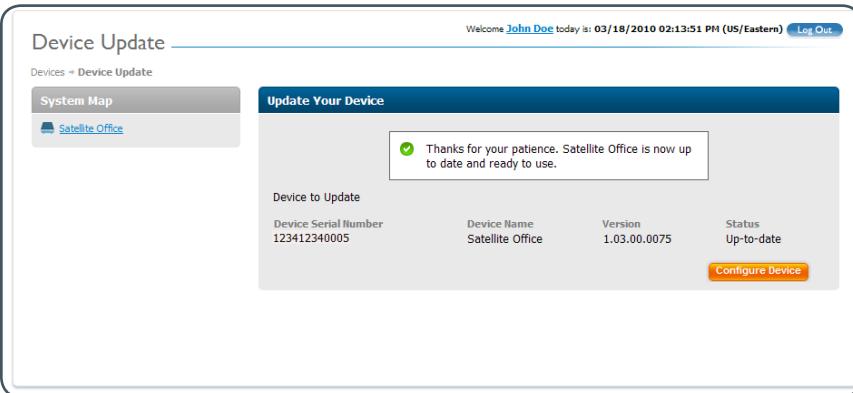


Figure 29 Device Update page: Device up-to-date confirmation

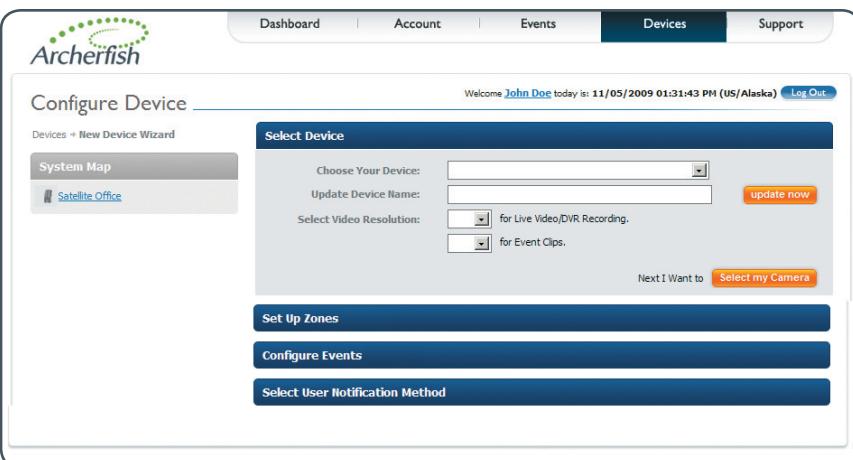


Figure 30 Configure Device page, Select Device section

Next I Want to **Set Up Zones for My Camera**

Figure 31 Installation Wizard button that will direct you to the next step

Step 5-1 Set Up Zones

On the Configure Device page, Set Up Zones section, you can select up to three specific areas, or zones, within the camera's view for Archerfish to monitor. Zones help Archerfish focus on what matters to you.

For example, Figure 32 shows a camera's field of view—an entryway to a small business office. The business owner only wants to know when a person tampers with some bins placed in the entryway. He doesn't care about activity in any other part of this camera view.

It's easy to create and set the shape of the area you want Archerfish to monitor. Don't worry about making a mistake. You can always adjust or erase any zone and start over!

- To create a zone, click the Edit radio button. Then use your mouse to draw the zone by clicking the left mouse button wherever you want to define a corner of the zone.
- The first point you create will be colored green; each subsequent point will be blue.
- When drawing the zone, keep in mind that it should cover the entire area where Archerfish should watch for a person, vehicle, or moving object. It shouldn't cover areas where you don't care about activity. In the example depicted in Figure 33, the zone covers the area around the bins placed in the entryway. This area covers not just the floor in front of the bins, but the area above them to account for the height of people walking.
- To delete a point of the zone, click it. To move a point, click and drag it to the new location. To create an additional point between two existing points, SHIFT+click the point that was placed first.
- To complete the zone, click the Configure Events button, or the Edit radio button to set up another zone. A completed zone shows a single red point at the zone's start point (Figure 33B).
- To completely erase a zone and start again from scratch, click the red point. If you want to edit the dimensions of the zone, SHIFT+click the red point.

Note: If you move or reposition a camera, you must click the Refresh Image button to see the new camera view and save your settings.

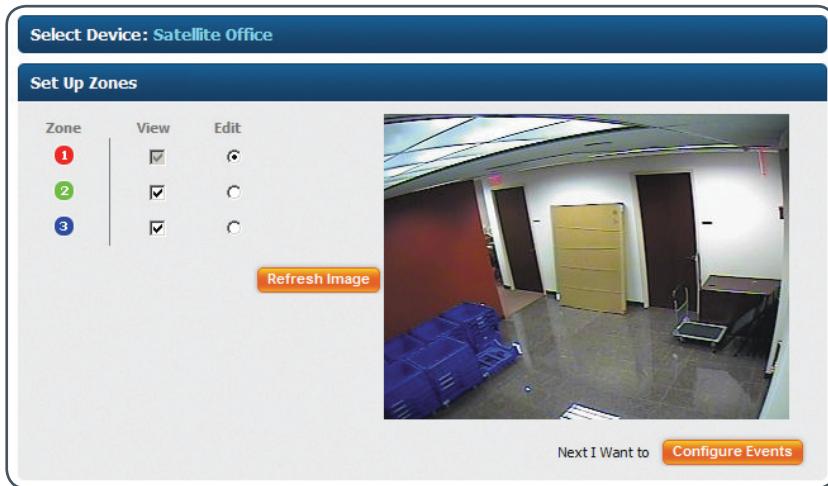
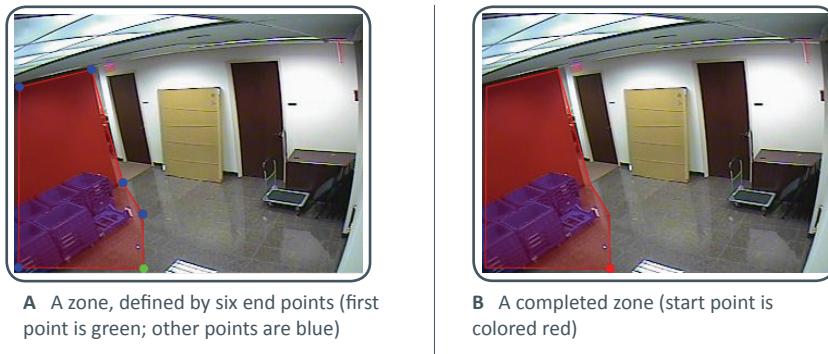


Figure 32 Configure Device page, Set Up Zones section



A A zone, defined by six end points (first point is green; other points are blue)

B A completed zone (start point is colored red)

Figure 33 Drawing a zone

Step 5-2 Configure Events

On the Configure Device page, Configure Events section (Figure 34), you can define the events you want Archerfish to look for by using the following options:

- Time Span: Use the drop down menus to select the Day of Week [day], Start [time] and End [time] that you want Archerfish to look for an event.
- Events: Select the type(s) of event you want Archerfish to look for. You can tell Archerfish to look for a person, vehicle, or motion. You can also select a combination of these. For instance, if Archerfish is monitoring your driveway, you might choose to have Archerfish notify you when a car or person comes up the driveway. Note that if you choose Motion, you'll be notified of any object moving in the camera view.
- Zones: Select the zones where Archerfish should look for the event. You will only be able to select zones that you have already defined.
- Duration: Select the amount of time the event (e.g., person, vehicle, or object) stays within the zone before Archerfish notifies you. Setting a duration is helpful in focusing Archerfish on the things that matter (a person loitering) versus things that don't (a person passing through).

Using the same example from Step 5-1, if you wanted to detect people who might be tampering with some bins on Monday morning, you might set the Time Span to Monday between 5:00 AM and 11:59 AM and the Events as Person.

Once you have defined your event, click the Add Event button. You will see your event in the table (Figure 35) and can edit or delete the event at any time.

Click the Select User Notification Method button to proceed (Figure 36).

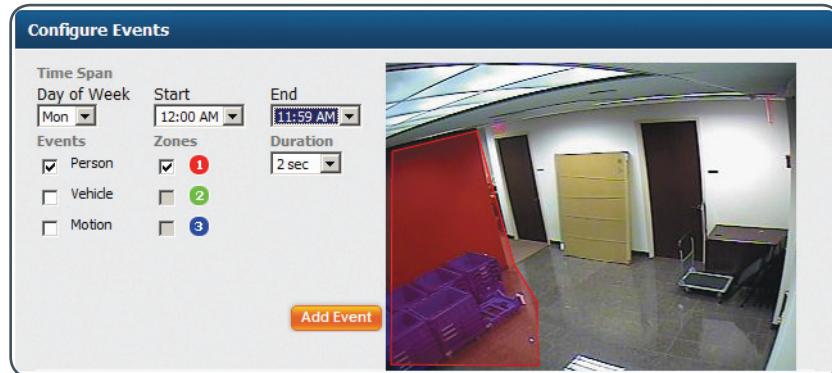


Figure 34 Configure Device page, Configure Events section

Event	Duration	Zones	Day of the Week	Start Time	End Time	Actions
Person	2	1	Mon	05:00 AM	11:59 AM	

Figure 35 Event table

Next I Want to [Select User Notification Method](#)

Figure 36 Installation Wizard button that will direct you to the next step



Step 5-3 Define Notification Methods by Camera

On the Configure Device page, Select User Notification Method section (Figure 37), you can decide how notifications will be received, and who will receive them. Since Archerfish is flexible, different notification settings can be defined for different cameras.

The Primary User name and notification methods that were completed in the Primary User Profile will automatically appear in the Users list.

Select the user(s) who should receive notifications for this camera. Then use the drop down box under Notification Method to choose the destination and format of their notifications.

Click the Save and Return to Dashboard or the Save and Configure Another Camera button (Figure 38).

Congratulations! Archerfish is now ready to watch for you.

Event	Duration	Zones	Day of the Week	Start Time	End Time
Person	5	1	Mon	12:00 AM	11:59 PM
Users					
John Doe					

Figure 37 Configure Device page, Define Notifications section



Figure 38 Installation Wizard button that will direct you to the next step



Now that You're Done Using the Dashboard

Once you have registered your Archerfish device, you can access the Archerfish SmartPortal at www.myarcherfish.com. After you sign in, you will automatically be directed to the Dashboard page (Figure 39).

Within the Dashboard, you have access to several key features:

1 System Map	Displays the names of every Archerfish device and associated camera in your Archerfish system
2 PLAY Button	Lets you view live video from any camera in your Archerfish system
3 Video Viewer	Displays live video, event video clips, or DVR video. Moving your mouse over the Video Viewer displays DVR options for accessing a specific time frame in the video
4 Last Ten Events Table	Lists the 10 most recent events, including system events related to the health of the overall system (e.g., loss of video, loss of Internet)
5 View All Events Button	Directs you to another page that displays all events currently stored within your Archerfish SmartPortal
6 System Activity Summary	Provides information about the amount of storage used, the number of events since your last log in, and whether any system alerts are present
7 Navigation Bar	Allows you to make changes to your system

For additional information on these Dashboard features and other aspects of the Archerfish SmartPortal, please refer to the Archerfish Online Help.

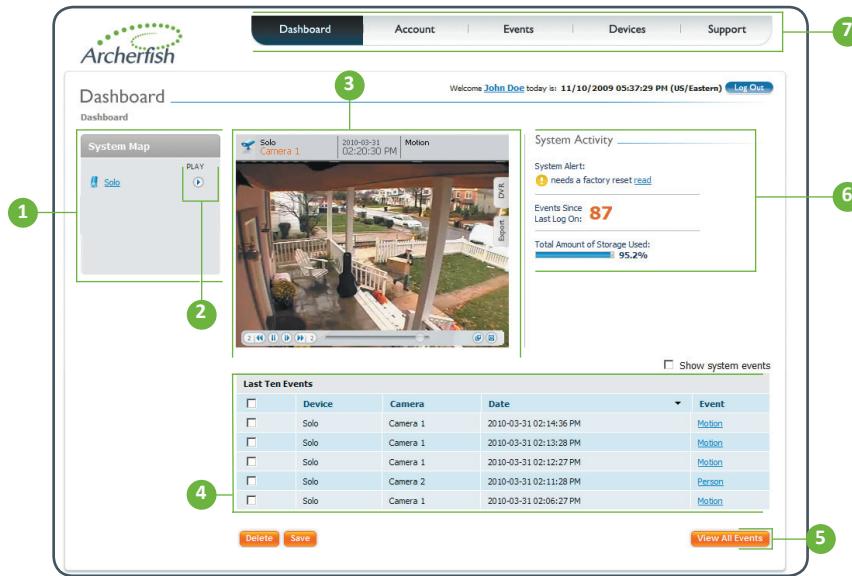


Figure 39 Dashboard page

Helpful Hints in Making Archerfish Work for You

Here are some helpful hints that will help you make the most of your Archerfish system.

- **Location, Location, Location:** Just like with real estate, location is one of the key factors in using Solo effectively. While you don't have to follow all of the camera placement guidelines listed on page 9, following as many as possible makes Solo a more powerful tool. Our *Camera Placement Guide* (available at www.myarcherfish.com/solosetup) gives more details on placement and provides real-world examples of typical settings.
- **Start slowly:** Archerfish allows for a high level of customization, so it's best to slowly experiment and figure out what works best for you. Try sending notifications to yourself in different formats to see what you like, and then add other users. Set up one camera at a time and experiment with event duration, zone placement, and different behaviors to see which events are most useful.
- **Use zones:** Especially in busy scenes, using zones within a camera field of view can help increase the accuracy of your notifications since Archerfish will focus on looking for events only in the area(s) you care about.
- **Use duration:** Letting Archerfish wait a bit before reporting something to you can be helpful, especially if you are concerned about people loitering in an area versus those that just pass by.
- **For outdoor scenes, use People or Vehicle Behaviors:** Archerfish can detect more than just whether or not things are moving. Archerfish can actually tell the difference between people and vehicles. We recommend setting Archerfish to look for these behaviors over general motion for outdoor monitoring since wind, shadows and other kinds of movement may trigger unwanted notifications.
- **Pets can look like people:** Occasionally Archerfish may consider your very large family pet to be a person. If you have a pet that frequently gets in the camera field of view, consider pointing the camera in a different direction or using zones to ignore their favorite places.

Appendix A: Port Forwarding Set Up

This section describes how to manually set up port forwarding in order to view live video in the Archerfish SmartPortal. This section only applies if you set UPnP to Off on the Initial Logon and Registration Wizard, Configure Live Video section (see page 16).

Next, in the Device Port Number field enter a port number between 1024 and 65535 (Figure 40). This helps avoid potential conflicts with port numbers already in use. If you have more than one Archerfish device, make sure each device has its own unique port number.

Next, set up port forwarding by using your router to map the Archerfish device private IP address to the port number you've chosen. You'll need administrative rights to log on to your router. Specific instructions vary by manufacturer, so you should refer to your router manufacturer's web site for details. If your router is provided by your Internet Service Provider, their technical support can provide instructions for your router.

Here's an example of how to set up port forwarding for a Cisco® Linksys® WRT54G2 router:

- On the page displayed when you first log into the router (Figure 41), select the Applications & Gaming tab.
- On the Applications & Gaming page, enter "Archerfish" in the Application field. In the Start and End fields, enter the Device Port Number that appears in the Archerfish SmartPortal's Live Video Setup (in this case, 61999). On the same line, enter the last numbers of the Device Private IP Address. Make sure that the Enable box is checked. In the example in Figure 42, the Device Port Number is 61999 and the Device IP Address is 192.168.1.101.
- Click the Save Settings button.

The screenshot shows the 'Configure Live Video' page. It includes fields for Device Serial Number (123412340005), Device Name (Satellite Office), Device Private IP (192.168.1.101), Device Public IP (207.136.167.226), UPnP (Off), and Port Number (61999). Below the form are buttons for 'Next I Want to', 'Skip Live Video Step and Complete Registration', and 'Complete registration'.

Figure 40 Specifying a port number for Live Video

The screenshot shows the Linksys WRT54G2 main configuration page under the 'Setup' tab. It displays the 'Internet Setup' section with 'Internet Connection Type' set to 'Automatic Configuration - DHCP'. Other fields include Router Name (WRT54G2), Host Name, Domain Name, MTU (Auto), and Size (1500). To the right, there are notes about automatic configuration via DHCP and host/domain names.

Figure 41 Linksys WRT54G2 main configuration page

The screenshot shows the 'Port Range' configuration page. It lists an application named 'Archerf' with a start port of 61999, end port of 61999, protocol as 'Both', and IP address as 192.168.1.101. The 'Enable' checkbox is checked.

Figure 42 Required fields to set up port forwarding

Appendix B: Solo Device LED Quick Reference

Archerfish Solo has a small LED light on the bottom which helps it to visually communicate what's going on.

Generally speaking, a **green** light means it's transmitting video, an **orange** light has to do with Wi-Fi connectivity, and a **red** light means Solo is having trouble or being reset.

- **LED Light Off** - Device is not on. The device does not have power, or if it does have power the Solo device button needs to be pushed.
- **Solid Red** - Displayed initially when the device is turned on. If it remains in this state for more than five minutes, there may be something wrong with the device. If this happens during your initial installation, power down and then restart the device. If the problem continues, contact Archerfish Customer Support.
- **Blinking Orange** - Device is booting up or being reset.
- **Solid Orange** - Device cannot reach the Archerfish SmartPortal.
- **Solid Green** - Device has an active Ethernet connection. Recording is not taking place. The light should be green before you run the Solo Wi-Fi Setup Tool (see Step 1).
- **Blinking Green Every 1.5 Seconds** - Device has an active Ethernet connection and is recording.
- **Solid Green with Brief Orange Flashes** - Device has an active Wi-Fi connection. Recording is not taking place.
- **Blinking Green with Brief Orange Flashes** - Device has an active Wi-Fi connection and is recording.
- **Blinking Red/Green** - While you are pressing the reset device button the device will initially blink, alternating between red and green with each blink.

NOTE: After you've pressed the reset button for 10 seconds or longer, the LED will switch from a red/green blink to an orange blink and then undergo a factory reset. You should not perform a factory reset unless you're told to do so by Customer Support.

	DEVICE ON	AWAITING BOOT -or- ERROR	BOOTING	ETHERNET	WI-FI	RECORDING	RESET BUTTON
LIGHT OFF							
SOLID RED	●	●					
BLINKING ORANGE	●		●				
SOLID ORANGE	●						
SOLID GREEN	●			●			
BLINKING GREEN	●			●	●		
SOLID GREEN (ORANGE FLASHES)	●				●		
BLINKING GREEN (ORANGE FLASHES)	●				●	●	
BLINKING GREEN/ BLINKING RED	●						●



Appendix C: Solo Device Technical Specifications

Size	4.5" high x 2.5" wide x 1.5" deep
Lens	3.0 mm focal length; 1/4" imager
Visual Range for Event Detection	10-60 ft
Video	VGA resolution, H.264 compressed
Network	802.11 b/g IP wireless network compatibility or RJ-45 Ethernet
Recording Media	microSD card with 1 to 16 GB capacity
Light Requirement	0.1 lux
Environment	Indoor/outdoor, weatherproof with IP64 rating Operating temperature: 14° F to 122° F (-10° C to 50° C)
Power Input to Unit	12 V, 1.0 A (Contact support@myarcherfish.com if a replacement is needed)
Mounting Options	Ceiling, wall, or ledge



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While every effort has been made to ensure that the information in these guides are accurate and complete, we would appreciate if any errors or omissions were brought to our attention by emailing us at support@myarcherfish.com.

Archerfish Solo Installation Guide (7AFSLGD000E-02.05) August 2010.

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Changes or modifications not expressly approved by Cernium Corporation could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Radiation Exposure Statement

This equipment shall only be installed and operated with antenna gain not more than that shown in the table below, and installed with a minimum of 20 cm of separation distance between the antenna and the general public.

Environment	Numeric Gain	Power (W)	Separation Distance (cm)	Calculated Power Density (mW/cm ²)
General Population/ Uncontrolled	2.75	0.078	20	0.04

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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