

## Motion Detection Made Easy

### How does it work?

Cameras cannot actually see movement; all surveillance video is just a series of still images.

Instead, your camera and/or recorder compares each image it takes with the last one. Even if your camera is set to record snaps once every minute, it's still doing this comparison all the time.

When the camera detects that a set of pixels shifts color by a significant amount, it considers this a motion event. This is why the camera considers it a motion event when a light gets switched on, for example, or a tree's shadow sways against the wall.

### What's the best approach?

For best results, use as small a motion area as is feasible. If you want to detect whether someone comes through a door, just set the motion area for that door, not for the whole room.

With a smaller area to check, you can get more reliable results within that area, and not be bothered by results from areas that do not matter.

Also, as far as it is possible, ensure that the area you want to detect has uniform lighting.

### How do I set up motion-activated recording?

Fire up the web interface, and click on the Settings  icon to get into the menu system.

Click on **Configure the Recorder > Camera Settings > Motion Detection** as shown here.

- **Important:** When you make changes, click **Save** before switching to another camera, tab, or menu item!



### Set the area

Select a camera in the dropdown at the top, and ensure motion detection is enabled with the checkbox.

By default, the system detects motion over the entire camera screen. This is not ideal.

Click **Clear All**, then **Draw Area**. Click and drag to define up to three areas to use; these areas can overlap. You can also click and drag an existing area to move it around the screen.

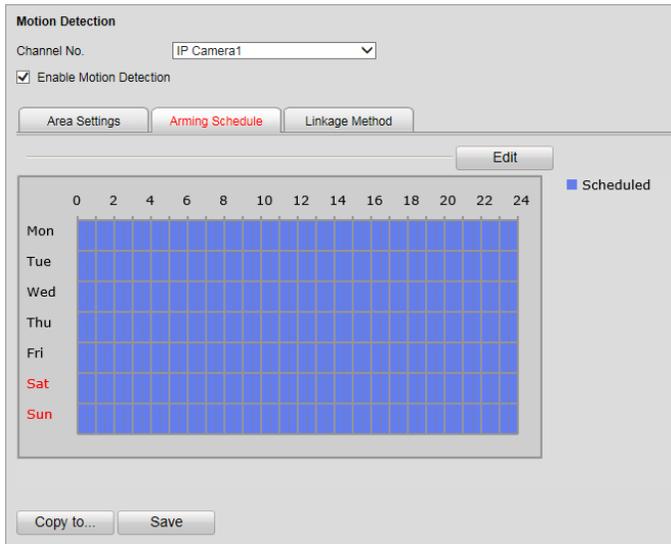
When you are done drawing, click **Stop Drawing**.

To the right is a sample setup (it's from our QA lab). We put motion detection areas at each doorway, so we can see whenever someone enters or leaves.

We deliberately left the center of the screen without motion detection, because (a) the TV screen is always "moving," and (b) if someone is sitting in the chair, we don't want them endlessly triggering motion events.



### Adjust additional settings



Next, click on the Arming Schedule tab. This tab tells the system when the camera is and is not allowed to detect motion.

You set the master schedule under **Configure the Recorder > Camera Settings > Schedule Settings**. See the manual for more details.

With the master schedule in place, you want motion detection for the individual cameras enabled 24/7. By default, it should be, and you should leave it this way.

If you want to send an email alert, you can also see our bulletin on configuring emails.

### Trigger an Alarm

If you want to set off a local alarm or send an email notification when motion is detected, use the Linkage Method tab. See the manual for more details.

### Pre- and Post-Record

If you want to add extra footage to the start and end of each motion event, navigate to **Configure the Recorder > Camera Settings > Schedule Settings**. Then click the **Advanced** button.

The pop-up lets you decide how much extra time to add before the start and after the end of each motion event.

After you press **OK** to exit the pop-up, be sure to click **Save** to keep your changes.

### Further Reading

For additional information on motion detection, see the manual.