

## Copyright

© 2015, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

## Document identity

Publ. No.: LX400039

Release: 2.0

Commit: 25789

Head: 25789

Language: en-US

Modified: 2015-05-14

Formatted: 2015-05-14

## Website

[www.flirsecurity.com/pro](http://www.flirsecurity.com/pro)

## Technical Support

1-866-816-5919

## Customer Service

1-866-344-4674

## Legal disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply. Products described herein may be subject to US Export Regulations. Please refer to [exportquestions@flir.com](mailto:exportquestions@flir.com) with any questions.

## 1 What is MPX?

MPX is a new standard for transmitting high definition video (1MP and 2MP) over standard coaxial cabling (typically RG59 or RG6).



Daytime video from our 1MP 720p MPX cameras.

In addition to outstanding image quality, MPX provides the following advantages:

- MPX enables an easy upgrade path to HD security without running new cabling.
- MPX systems enable extended cable runs up to 2300ft (700m). See *4 How long can I make the cable runs?* for details.
- MPX provides HD video with zero latency to the DVR.
- MPX allows connection and control of PTZ cameras (PTZ cameras sold separately) over the coax cable. You do not have to run separate RS485 wires to control MPX PTZ cameras.

## 2 Is MPX compatible with my existing equipment?

Our first MPX bundles in the M3100 Series are designed to be installed as a complete new system or an upgrade/replacement to an older analog system. Therefore, the DVR and cameras are only compatible with MPX equipment.

Future DVR models will support both MPX cameras and standard analog cameras, allowing customers to utilize existing analog cameras in their installation. Future MPX cameras will feature dual outputs for MPX and 960H analog recorders.

## 3 What resolutions are supported by MPX?

Our first MPX bundles in the M3100 Series include 1MP 720p cameras and a 720p DVR that can record all channels in real time (30fps). Future MPX DVRs and cameras will support 2MP 1080p cameras and can record at 1080p in real time (30fps).

## 4 How long can I make the cable runs?

You can have a maximum cable run of 2300ft (700m) between the camera and DVR, depending on the type of cable used and the resolution of the cameras (see below). It is required that the cable runs be made in a single run between camera and DVR, as daisy

chaining multiple cable runs together can prevent the DVR from getting a picture from the camera or may impact image quality.

The table below shows the maximum allowable run for each cable type:

Cable Type	Maximum Run Length for 720p 1MP Cameras	Maximum Run Length for 1080p 2MP Cameras
RG59 20AWG Conductor 95% Braid CSA/UL or C(UL) approved	1500ft / 455m	1000ft / 300m
RG6 20AWG Conductor 95% Braid CSA/UL or C(UL) approved	2300ft / 700m	2000ft / 600m
Analog CCTV Balun	300ft / 91m	300ft / 91m

 **NOTE**

Long cable runs over 1000ft may be affected by electromechanical interference (EMI), which can increase the amount of noise in the picture in some installations.

## 5 Can I run baluns with MPX?

Yes, MPX supports standard CCTV analog baluns if you want to use twisted pair cabling, such as CAT5E or CAT6, in your installation. You can run up to 300ft (91.4m) per segment of CAT5E or CAT6 with baluns.



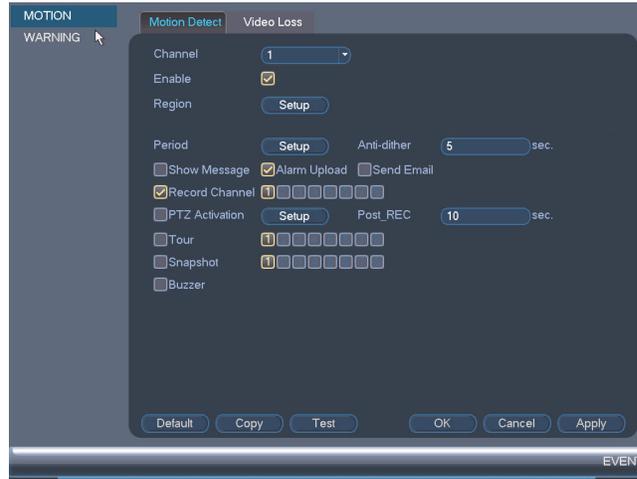
Example of compatible CCTV analog balun

## 6 Do you provide power supplies or extension cables in the MPX bundles?

A 12V power adapter is provided for the DVR. 12V power supplies for the cameras and extension cables are not provided with the MPX bundles or MPX cameras and must be purchased separately.



1. On the system, right-click and then click **Main Menu**. From the Main Menu, click  and select **Event>Motion>Motion Detect**.
2. Under **Channel**, select the channel you would like to set up.
3. Check **Enable** to enable motion detection on the selected channel.

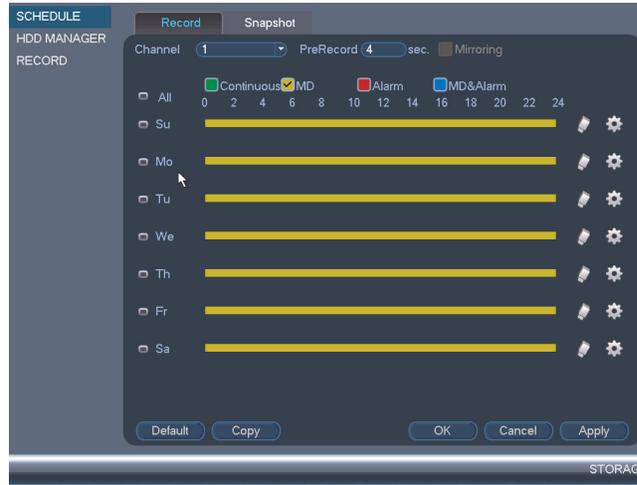


4. Repeat steps 2-3 for each channel you would like to enable motion detection on.
5. Click **OK** to save changes.

### Step 2 of 2: Set up the recording schedule for motion only:

1. From the Main Menu, click  and then click **Storage>Schedule>Record**.
2. Under **Channel**, select the channel you would like to configure or select **All** to set up the schedule for all channels.
3. Click  next to All to link the recording schedules for all days. The icon for a day changes to  when days are linked.
4. Check **Continuous** to set up continuous recording.
5. Click and drag over one of the green lines to disable continuous recording. This will be automatically copied for all days.
6. Check **MD** to set up motion recording.

- Click and drag on the schedule so the yellow line covers the entire day. This enables motion recording all day. The schedule should look like the screen shown below.



- Repeat steps 2-7 for additional channels you would like to set up.
- Click **OK** to save changes.

## 9 What are the default passwords for the system?

The default user name for the DVR is **admin** and the default password is **000000**. The first time you connect using the CMS or apps, you are required to change the password.

The CMS also includes a separate user name and password, as it is a central location for administrators and users to view multiple systems from the same computer. The default user name is **admin** and the default password is **admin**.

If you lose the password for the DVR or CMS, contact FLIR Technical Support to have it reset. For security reasons, there is no way to reset the password yourself.

## 10 Why is the MPX camera not auto-focusing?

Affected models: C237BD and C237ED

When wide dynamic range (WDR) is active on a C237BD or C237ED MPX camera, the camera does not auto-focus when you zoom in or out. To avoid this issue, turn off WDR before you zoom in or out, then turn it back on when you're done. We are working on a firmware update to fix this issue in the near future.