



Integration Note

Manufacturer:	ICRealtime
Model Number(s):	DVR-FLEX4E, DVR-FLEX8E, DVR-FLEX16E
Core Module Version:	6.5.219
Required ICRealtime Firmware:	DVR V1.0 (Single Ethernet Port): System Version 2.610.KL05.0 DVR V2.0 (Dual Ethernet Ports): System Version 2.616.KL05.0
Document Revision Date:	06/25/2014

OVERVIEW AND SUPPORTED FEATURES

The ICRealtime Flex Series of DVRs are network-enabled DVR that supports the connection of 4, 8, or 16 analog cameras. The DVR Connects to the g! Controller via Ethernet to provide communications, enabling live video, and control from the g! system.

THE FOLLOWING FEATURES ARE SUPPORTED:

Video Streams: Each of the connected cameras is available as a Video Camera/Source in the g! system for live video streaming.

Basic Control: The ICRealtime Flex DVR OSD is controllable via g! Keypads and the ICRealtime OSD with a built in one-way IP driver and interface. This interface is assignable as a source on any zone controller on the Media tab.

THE FOLLOWING FEATURES ARE NOT SUPPORTED:

Recorded Video: Video output from the ICRealtime Flex DVR is not available in the g! Viewer.

PTZ: Pan / tilt / zoom features are not available for video cameras connected to the ICRealtime Flex DVR.

Any feature not specifically noted as supported should be assumed to be unsupported.

INSTALLATION OVERVIEW

Installing the ICREaltime Flex DVR can be broken down into the following steps:

1. During the rough-in phase install the necessary power, A/V, and network cabling for the ICREaltime Flex DVR and Cameras
2. Also during the rough-in phase, run a Cat5 wire from the location of the DVR back to the Router to provide the Ethernet connection needed to control the DVR.
3. Install the DVR and Cameras.
4. Test the DVR and Cameras independently of the g! system to ensure proper operation of the DVR and Cameras.
5. Configure the g! system for the DVR. This step is outlined in **g! Configuration Details**.
6. Test the system.

DVR-FLEX4E, DVR-FLEX8E, DVR-FLEX16E CONFIGURATION

In addition to normal ICREaltime Flex setup procedures, it is required to set the Flex DVR devices to static IP addresses for reliable communications. To set a DVR to a static IP address, use the front panel or attached mouse to navigate the on screen interface:

1. Click with the mouse anywhere on the display to bring up the menu.
2. Navigate to Setting -> Network.
3. In Network, deselect the DHCP Checkbox
4. Select IP ADDRESS and enter an available static IP address. Typically the first IP Video device is set to 192.168.0.80, the second to 192.168.0.81, and so on.
5. Select SUBNET MASK and set to 255.255.255.000
6. Set the DEFAULT GATEWAY and DNS SERVER (PRIMARY) to the router IP address. By default, 192.168.000.001.
7. Click Save to save settings and get back to the General Menu screen.

When displaying live video from the ICREaltime Flex DVRs, the g! system will use the DVR's "Extra Stream". This stream must be configured to use MJPEG, and made available for each camera channel being used:

To enable the Second Stream (Must be done for each channel being used):

1. Click with the mouse anywhere on the display to bring up the menu.
2. Navigate to Setting -> Encode
3. Select the Channel you are attempting to configure
4. Under "Extra Stream1", set the Compression to MJPEG

On slower networks there can be occasional issues rendering the video feeds from the ICREaltime Flex DVRs. In order to alleviate this, the Resolution, Frame Rate(FPS), Bit Rate Type, and Bit Rate settings may need to be adjusted:

To adjust Resolution, Frame Rate(FPS), Bit Rate Type, and Bit Rate:

1. Click with the mouse anywhere on the display to bring up the menu.
2. Navigate to Setting -> Encode
3. Adjust Resolution, Frame Rate(FPS), Bit Rate Type, and Bit Rate according to your network needs.

For detailed information on Resolution, Frame Rate(FPS), Bit Rate Type, and Bit Rate settings and their impact on the DVR, please refer to the ICR realtime DVR documentation.

The ICR realtime Flex DVRs require an always logged in account to facilitate the use of its OSD. There are 2 alternatives to configuring access:

Configuring the default user's permissions. This will give you unprompted access to basic functionality, such as Status, Monitor, and Playback:

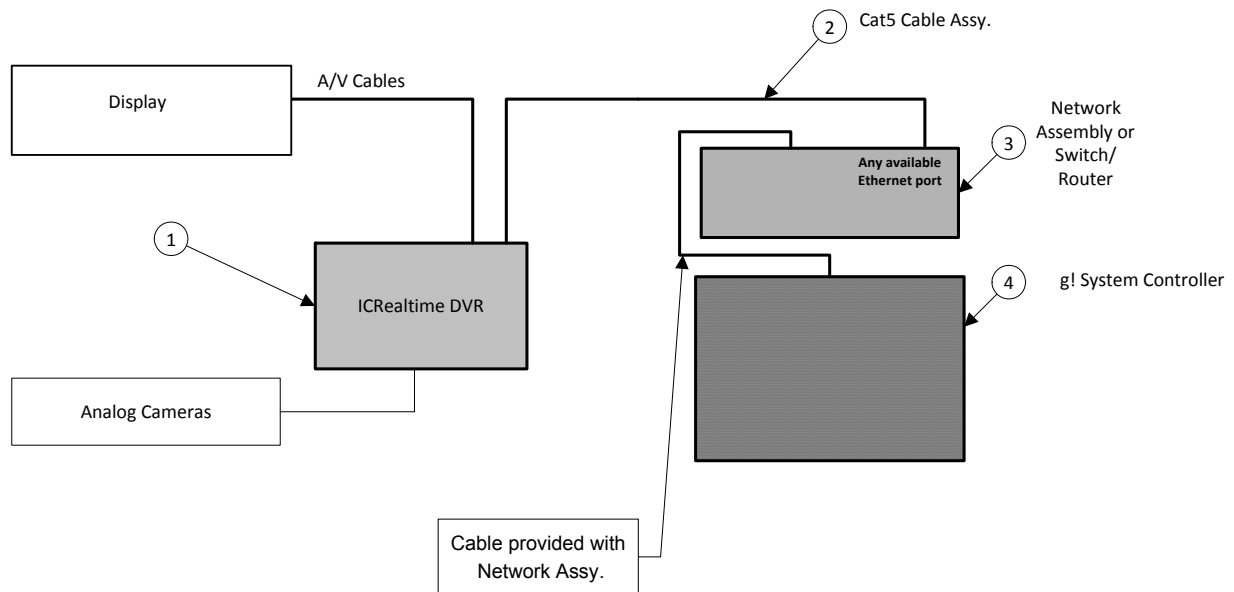
1. Click with the mouse anywhere on the display to bring up the menu.
2. Navigate to Advanced.-> Account.
3. Select the Default User (default) and click Modify User
4. Under the permissions, ensure that all available Authorities are selected
5. Click Save.

Configuring an always logged in Admin. This will give you unprompted access to all DVR functionality.

1. Click with the mouse anywhere on the display to bring up the menu.
2. Navigate to Settings.
3. Log in as Admin.
4. In Settings, navigate to General.
5. Set Auto Logout to 0 Minutes (prevent Auto Logout) and click OK
6. Navigate to Advanced -> Auto Maintain
7. Set Auto-Reboot System to Never
8. Click Save.

IMPORTANT: If the ICR realtime Flex DVR is shut down or forcibly logged off, the Default User's permissions will allow basic operation of the DVR through the g! interface. You must go to the DVR to log in the Admin user to get full functionality of the device through the g! interface.

CONNECTION DIAGRAM



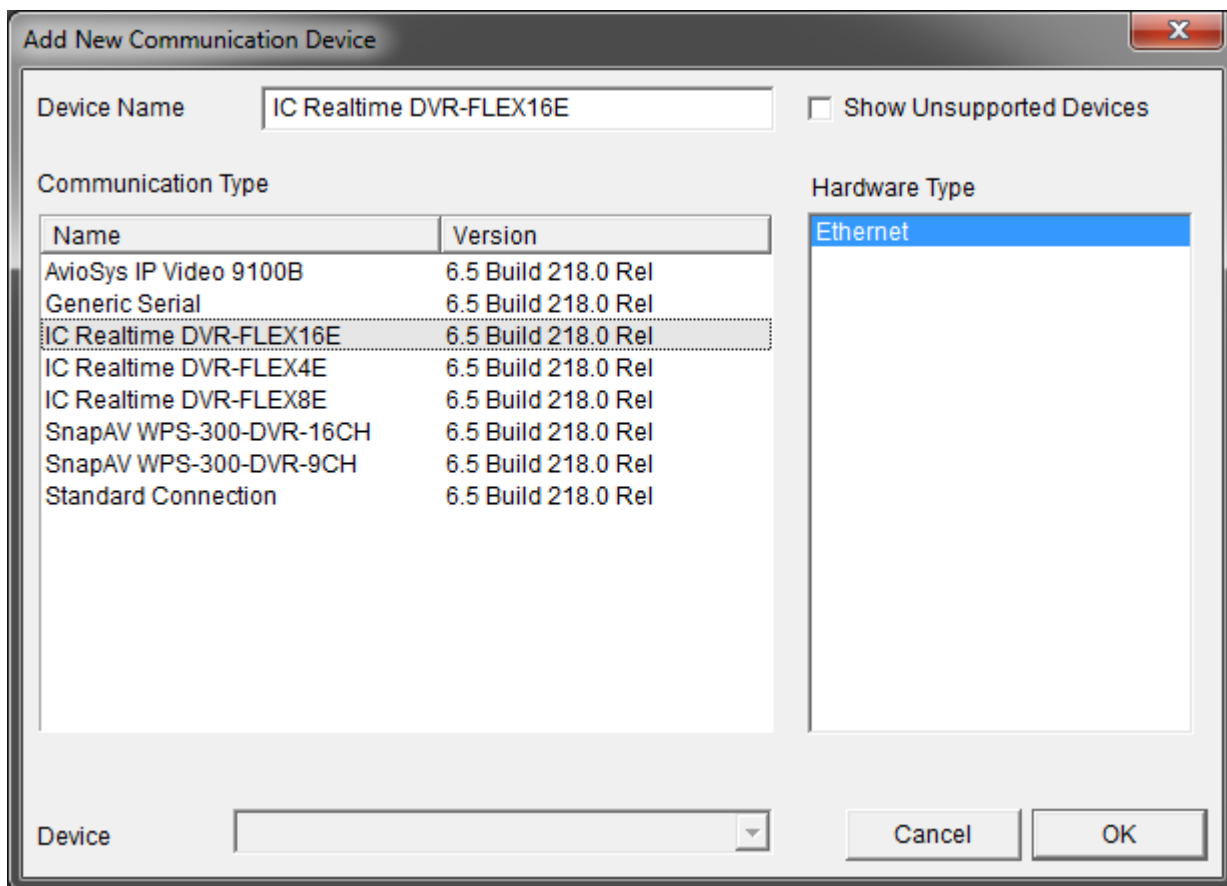
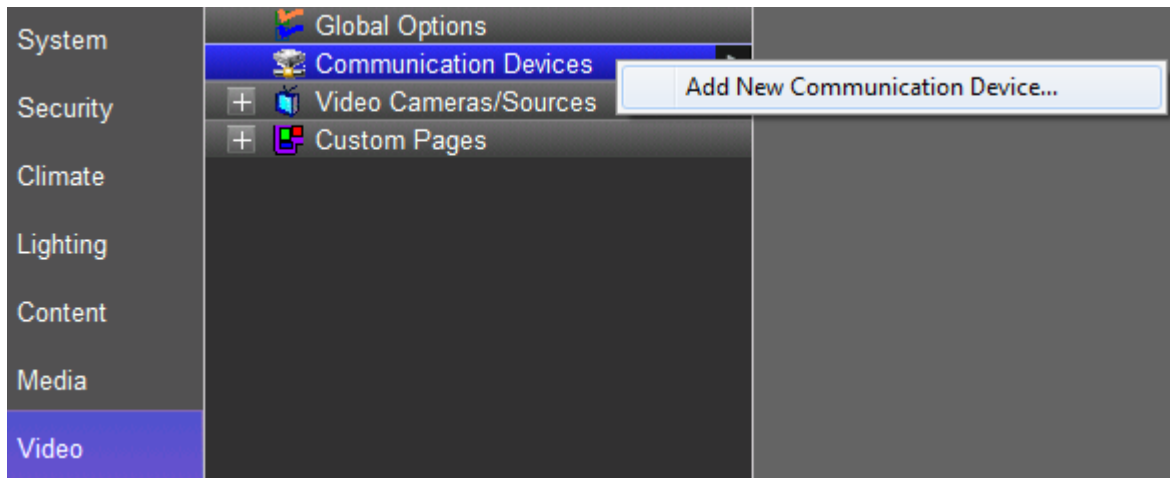
BILL OF MATERIALS

#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	ICRealtime DVR	ICRealtime	Flex/ElitexE DVR	Ethernet	RJ-45	
2	Cat 5 Cable Assy	Installer	N/A	Ethernet	RJ-45 Male X RJ-45 Male	
3	Switch/Router	Various	Various	Ethernet	RJ-45	
4	g! System Controller	ELAN	Various (e.g. HC 12)	Ethernet	RJ-45	

g! CONFIGURATION STEPS

CREATE DVR INSTANCE

1. Under **Video** tab/**Communication Devices**, select **Add New Communication Device**.

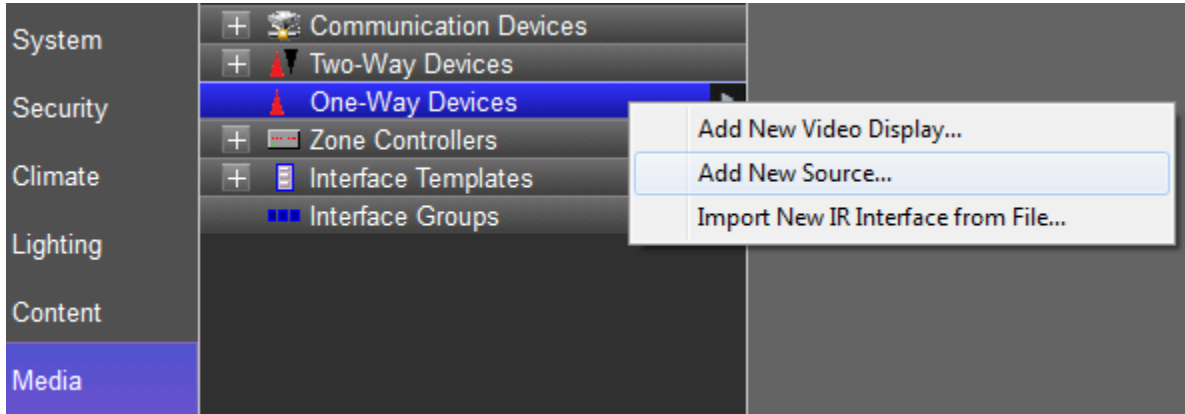


2. Configure the ICRealtime DVR Communication device as Hardware Type: **Ethernet**

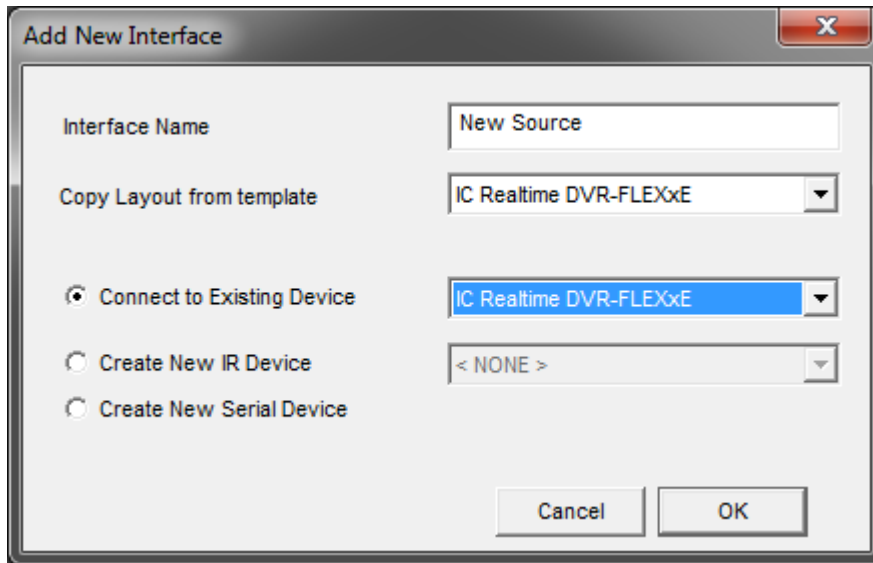
- On the Video tab, the correct number of cameras for the DVR model chosen will automatically populate as **Video Cameras/Sources**.
- On the Media tab, a DVR Player Two-Way Device will automatically populate.

CREATE ONE-WAY DRIVER

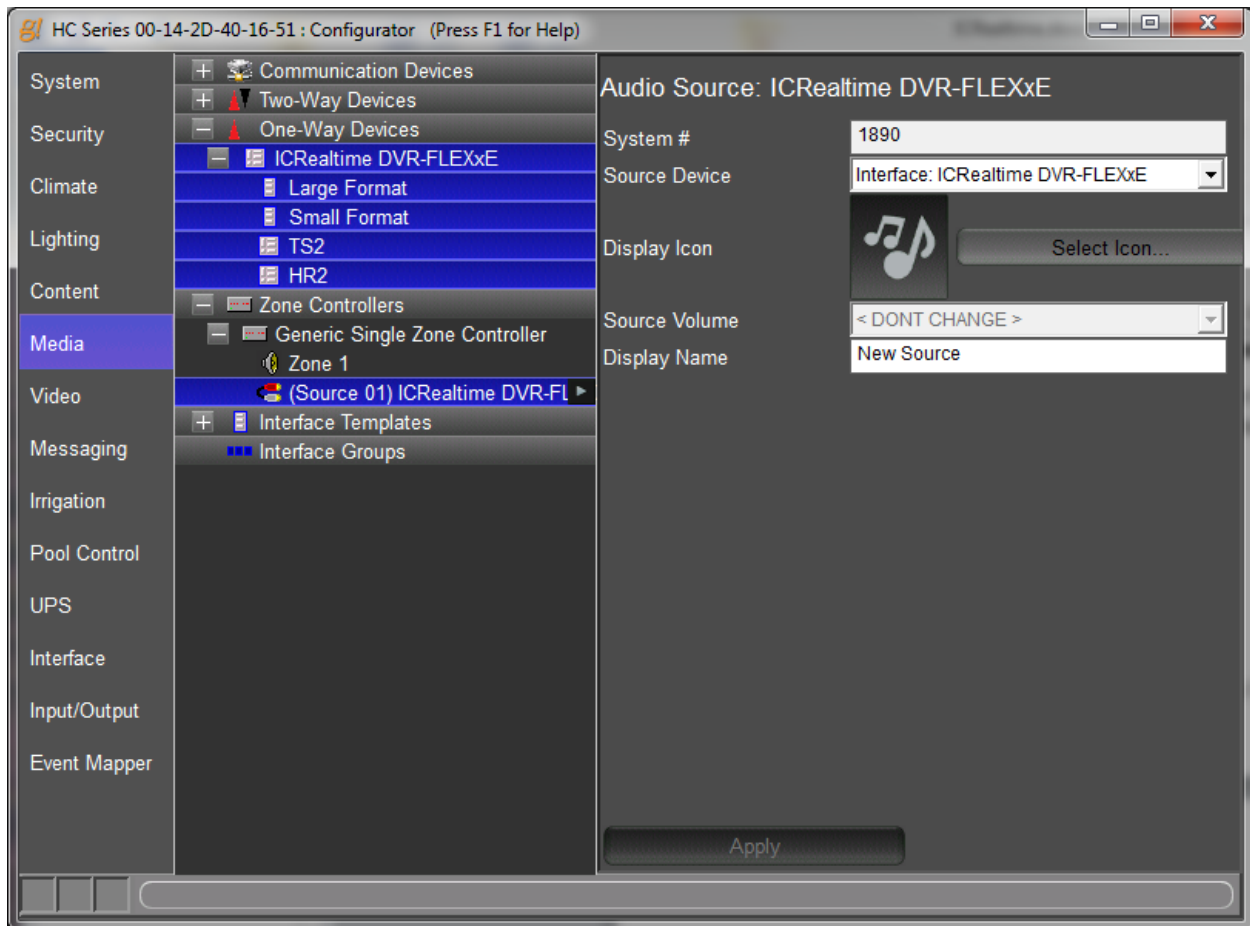
- On the Media tab under **One-Way Devices**, select **Add New Source**.



- Select the **ICRealtime** template and connect to **ICRealtime DVR-FLEXxE** automatically added by populating the DVR Communication Device on the Video Tab.



- Finally, add the source to the desired zone controller input as normal and arrange the appropriate selections to manage your Display source to select the ICRealtime DVR monitor out for one-way control from the g! Viewer.



COMMON MISTAKES

1. No Video: Check to ensure that the “Extra Stream” has been configured to use MJPEG rather than H.264.
2. Unable to Navigate: Make sure the Default User and Admin Users permissions are set according to the Configuration Section of this document.
3. Slow or Choppy video can be experienced on a slow network or with a large number of Viewers streaming video attached to the system. This can be alleviated by adjusting the DVR’s Resolution, Frame Rate(FPS), Bit Rate Type, and Bit Rate settings, as detailed in the ICR realtime DVR-FLEXxE Configuration section of this document
4. No control of the device: Check which ICR realtime hardware you have and make sure the appropriate ICR realtime firmware is installed on it. See Firmware revisions at the top of the document.