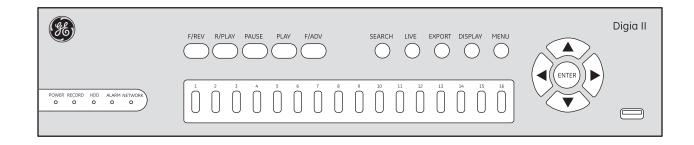
Digia II User Manual





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FCC compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

EMC directive

The European Union directive on electromagnetic compatibility (2004/108/EC) requires non-European manufacturers to designate an authorized representative in the Community. Our European representative is GE Security, Kelvinstraat 7, 6003 DH Weert, Nederland.



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Regulatory





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Preface

This is the GE *Digia II User Manual* for models Digia 204, Digia 209, and Digia 216. This document includes an overview of the product and detailed instructions explaining:

- how to install the unit; and
- how to set up the unit.

There is also information describing how to contact technical support if you have questions or concerns.

To use this document effectively, you should have the following minimum qualifications:

- a basic knowledge of CCTV systems and components; and
- a basic knowledge of electrical wiring and low-voltage electrical connections.

Read these instructions and all ancillary documentation entirely <u>before</u> installing or operating this product. The most current versions of this and related documentation may be found on our website. Refer to *Online publication library* on page 42 for instructions on accessing our online publication library.

Note: A qualified service person, complying with all applicable codes, should perform all required hardware installation.

Conventions used in this document

The following conventions are used in this document:

Bold	Menu items and buttons.
Italic	Emphasis of an instruction or point; special terms.
	File names, path names, windows, panes, tabs, fields, variables, and other GUI elements.
	Titles of books and various documents.
Blue italic	(Electronic version.) Hyperlinks to cross-references, related topics, and URL addresses.
Monospace	Text that displays on the computer screen.
	Programming or coding sequences.

Safety terms and symbols

These terms may appear in this manual:



CAUTION:

Cautions identify conditions or practices that may result in damage to the equipment or other property.



WARNING:

Warnings identify conditions or practices that could result in equipment damage or serious personal injury.

Chapter 1 Introduction

This chapter provides an overview of your Digia II, and describes how to configure and use your Digia II.

In this chapter:

Product overview	 		 									 2
Firmware												
Back panel	 											 4
Monitor onscreen display.												

Product overview

Your Digia II makes use of the latest compression technology, MPEG-4, which displays superior recorded video, making the Digia II ideal for your surveillance requirements. Installation is simple and the Digia II operation is intuitive, since video navigation is similar to that of other video playback devices.

Your Digia II allows you to:

- View, record, and playback images simultaneously.
- Record on MPEG-4 for digital playback quality, in both NTSC and PAL formats.
- Listen to full duplex high quality audio.
- Set full or partial motion detection.
- Record up to a full month of video with hard drives ranging from 160 to 640 GB.
- Export/archive with ThumbDriveTM, USB, flash drive, CD-RW, or hard disk drive, to USB 2.0.
- Operate through easy-to-use VCR style control buttons.

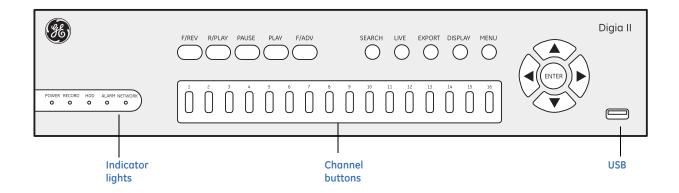
Firmware

Firmware is the software that is embedded in your Digia II and ensures your unit operates smoothly. You must download the firmware from GE's website (see *Upgrade firmware* on page 13.)

Front panel

The Digia II front panel (*Figure 1*) lets you monitor and enable Digia II functions.

Figure 1. Digia II front panel



Front panel buttons

The front panel gives you quick access to the more common Digia II functions, and include the following:

F/Rev. Fast reverse, starts or increases reverse slow motion. Press this once to rewind or repeatedly for 1/32, 1/16, 1/8, 1/4, and 1/2 slow motion increments. You usually use this after you pause video.

R/Play. Reverse playback plays the video in reverse. Press to reverse playback.

Pause. Pause stills the video during playback. Press to use with the F/REV or F/ADV function.

Play. Play starts playback of the selected video. Press to begin playback.

F/Adv. Fast advance, controls forward slow motion. Press once to advance or press repeatedly for 1/32, 1/16, 1/8, 1/4, and 1/2 slow motion increments. You usually use this after you pause video.

Search. The search function uses time and filter based searches. Press to open the search screen.

Live. Live mode displays video as it is happens. Press to open the live video mode.

Export. Export lets you transfer video to a USB device. Press to open the export screen.

Display. Display lets you access the video configurations your model has; either full screen, 4, 9, or 16 channels. Press this repeatedly to cycle through your unit's configurations.

Menu. The main menu is where you configure your Digia II. Press to open the main menu.

1 to 16. Channel buttons open a camera's video feed, your unit will either have 4, 9, or 16 channels. Press the channel number that corresponds to the video feed you want to view.

♦ ▶ ▲ ▼. Use the *directional buttons* to navigate through menus.

Enter. Select an option that is highlighted. Use in combination to configure your display and freeze or zoom in on live video.

Front panel indicators

The front panel indicators lets you monitor your Digia II, and include the following:

Power indicator. Indicates there is power to the unit.

Record indicator. Indicates that the system is recording.

Hard disk drive activity indicator. Indicates the hard disk drive is active.

Alarm indicator. Indicates an alarm is set.

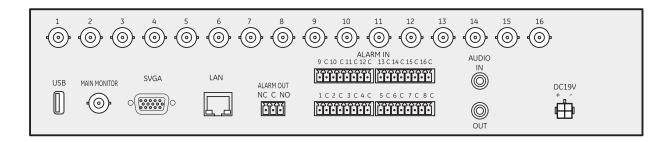
Network access indicator. Indicates the DVR's access to the network.

USB. Use this in the export and firmware upgrade processes. The approved USB devices include the following: Corsair, Imation, Kingston, Lexar, PNY, Samsung, Sandisk Cruzer Titanium series, and Sandisk Cruzer Mini series.

Back panel

Figure 2 shows the back of the Digia II.

Figure 2. Digia II back panel



The back panel connections include the following:

1 to 16. Camera inputs so you can connect the camera to the corresponding BNC connector. The unit can identify NTSC or PAL off Camera 1, so ensure to connect a camera to connection one.

USB. USB 2.0 connection to connect compatible USB devices. Use to export and upgrade firmware.

Main monitor. Monitor BNC connection. Use to connect to a CCTV type monitor.

SVGA connector. VGA connection. Use to connect to a computer monitor.

LAN. Ethernet connection. Use to connect your Ethernet cable to the Digia II.

Alarm out. NC (normally closed), C (closed), and NO (normally open) connections. Use to connect alarm output devices, for example, a siren.

Alarm in. Alarm terminal strips. Use to connect to your alarm triggers; the triggers are based on the contact alarm you have set in the *Alarms* menu (NO, NC, NO trans, or NC trans). Refer to, *Alarms* on page 30

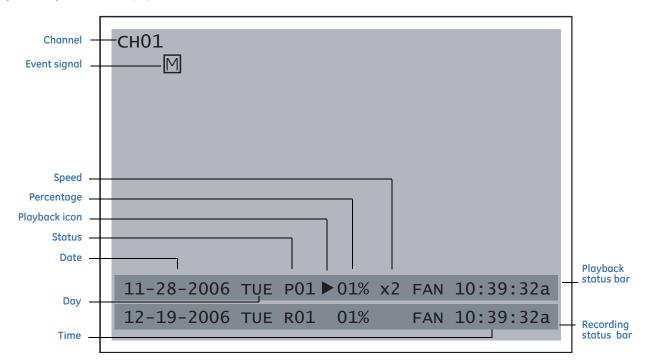
Audio in/out. RCA connection. Use to connect external speakers and/or microphone here.

DC19V. Power connection. Use to connect your power adapter.

Monitor onscreen display

Figure 3 shows the Digia II monitor display in full screen mode, the default view when you first power on your Digia II. You must select your onscreen display (OSD). See *Display* on page 34.

Figure 3. Digia II onscreen display



The Digia II onscreen display includes the following:

Channel. Indicates the channel that is onscreen.

Event signal. Indicates system events as described in *Table 1*.

Table 1. Event descriptions

Event	Description
А	A camera alarm has been triggered.
М	Motion has triggered a camera's alarm.
V	Video feed malfunction.
F	Fan malfunction.
Н	Hard drive malfunction.

Playback/Record status bar. Displays the playback or record video date, the recorded channel, events, and the location of the video on the hard drive. *Table 2* lists all onscreen display items that appears on both the playback and recording status bar, including *system events* and *playback* icons.

Table 2. Onscreen display items

System events	
Item	Description
Mnn	Motion camera <i>nn</i> .
Vnn	Video loss camera nn.
Ann	Alarm camera nn.
Rnn	Video was recorded.
PR	Power return.
PL	Power loss.
FAN	Fan failure.
Н	Hard drive failure.
RU1	Remote admin login.
RU2	Remote user login.
LU1	Local admin login.
LU2	Local user login.
Time	Displays the time when the video is played or was recorded.
Percentage	Displays the amount of hard drive space remaining.
Day	Displays the playback day or the day the video recording day.
Playback icons	
Icon	Name
•	Play.
II	Pause.
•	Play in reverse.
*	Fast forward.
4	Reverse slow motion.
▶	Forward slow motion.

Monitor configuration

Your Digia II can display a number of configurations, including the following:

- Four channel units, full screen and 2X2
- Nine channel units, full screen, 2X2, and 3X3
- Sixteen channel units, full screen, 2X2, 3X3, and 4X4

Figure 4 shows the channel icon and playback status bar for a 2X2 configuration.

Figure 4. Two-by-two monitor configuration

СН02	СН01
CH04	СН03
12-19-2006 TUE R01	01% FAN 10:39:32a

Shuffle camera views

You can reposition the channels to the configuration you want. To shuffle the camera views, do the following:

- 1. Press **Display** repeatedly, until you display the configuration you require.
- 2. Press **Enter**. *Select* displays in the upper right (*Figure 5*).
- 3. Use the directional buttons to move *Select* to the quadrant you require.
- 4. Press the *channel number* button you want to view. For example, to swap channel 2 with channel 1, press **Enter** to display *Select* and press **2** (see *Figure 5*).
- 5. To customize the display further, continue with Step 3.
- 6. When you finish press **Enter**. The unit stores your customized views for all displays.

Figure 5. Shuffle views

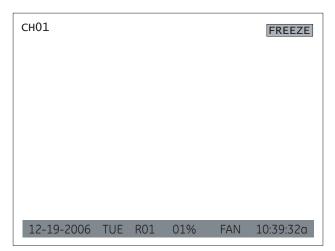
СН02	СН01	СН02	СН01
	Select	Select	
СН03	СН03	СН03	СН03
12-19-2006 TUE R01	01% FAN 10:39:32a	12-19-2006 TUE R01	01% FAN 10:39:32a
12-19-2006 TUE R01	01% FAN 10:39:32a	12-19-2006 TUE R01	01% FAN 10:39:32a

Freeze or zoom video

To freeze live video or zoom in on live video, do the following:

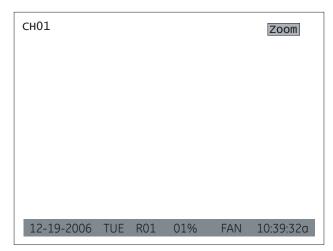
- 1. Press **Display** until you are in full screen mode or press the channel button you require.
- 2. Press **Enter** to freeze the video. The *Freeze* message displays (*Figure 6*).

Figure 6. Freeze



3. Press **Enter** to enable the zoom function. The *Zoom* message displays (*Figure 7*).

Figure 7. Zoom in



- 4. Use the directional buttons to navigate through the screen.
- 5. When you finish press **Enter** to exit back to the live video mode.

Chapter 2 Installation

This chapter provides instructions	for	hardware	and	software	installat	ion
In this chanter:						

Hardware installation	 	. 12
Upgrade firmware	 	. 13
Software installation	 	. 14

Hardware installation

You must install your Digia II in an area that is secure and away from water, heat, dust, dirt, and other substances that may damage the unit. To install your Digia II, see *Figure 8* and do the following:

- 1. Connect a camera to any one of the camera BNC connections.
- 2. Connect a microphone or another audio input device to the audio input connector.
- 3. Connect the speakers or another audio output device to the audio output connector of the unit.
- 4. Connect an Ethernet cable from a computer network to the LAN port.

Note: If you connect point to point, you must use a crossover ethernet cable.

- 5. Connect a monitor to the main monitor BNC connector.
- 6. Connect any alarm inputs to the alarm input connectors. The alarm inputs can be:

Normally open (NO). Where the relay contact is in an open state. When the contact is closed, an alarm is triggered from 1 to 60 seconds in duration.

Normally closed (NC). Where the relay contact is in a closed state. When the contact is open, an alarm is triggered from 1 to 60 seconds in duration.

NO trans. Where a relay is in an open state. When the contact is closed, an alarm is triggered and will remain until the contact is opened again.

NC tran. Where a relay is in a closed state. When the contact is opened, an alarm is triggered and will remain until the contact is closed again.

- 7. Connect your external device, such as an alarm panel, to the following alarm output connectors:
 - ALM-COM (common)
 - ALM-NO (normally open)
 - ALM-NC (normally closed)

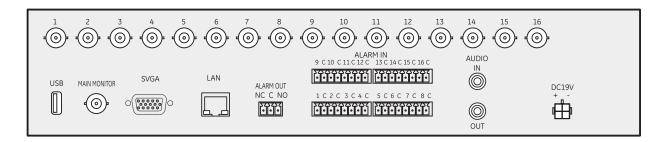
Note: These connectors have a built-in relay which can trigger your external device.

8. Connect the 19 VDC power supply to the unit, and then connect it to the wall outlet.

To install your Digia II in a standard 19-inch rack, you need to order the rack-mount kit (Digia2RK) separately.

Note: Non-LPS or TNV output connectors identify the type of circuit, intended cable type, or relevant circuit characteristics.

Figure 8. Back panel connections



Battery replacement

When you replace a battery ensure the following:

- Replace a battery with the correct type.
- Follow the instructions when you dispose of used batteries.

Note: It is not expected for a user to have to change this battery - only authorized service personnel.



WARNING: Using an incorrect battery could lead to product failure, battery corrosion, and possible damage to the unit. Dispose of used batteries according to local directives.

Upgrade firmware

The latest firmware is available from GE Video Upgrade at http://www.gesecurity.com/videoupgrades. To upgrade firmware do the following:

- 1. Click the Digia II firmware link to begin the download. The system notifies you when the download is complete.
- 2. Copy the file to your USB drive.
- 3. Plug your USB drive into either of the two USB ports on the Digia II unit (Figure 8 on page 12.)
- 4. Press Menu.
- 5. Log on to the *Main* menu, use the default Admin passcode as the primary and the User passcode as the secondary. See *Passcodes* on page 24.
- 6. Scroll down to the *System* menu.
- 7. Press Enter.
- 8. Scroll down to the *System Admin* menu.
- 9. Press the right directional button to access the menu.
- 10. Scroll down to Firmware Upgrade.
- 11. Press Enter.
- 12. Use the up and down directional buttons to toggle the value.
- 13. Enter the default Admin Passcode. The system begins the upgrade and starts the first of three downloads. The system displays *Phase 1/3* in the bottom right corner. When the upgrade is complete the system reboots.
- 14. You can now configure your unit.

Software installation

The DigiaPlayer software lets you view video you recorded from your Digia II. You can also convert files for Windows Media Player for users who do not have the Digia Player. To complete installation and ensure all items work correctly complete all items in this section.

Download the required DivX codec

To play an AVI export on your PC with Windows Media Player (v9.00 or greater), you must have the DivX codec, which you can download for free at the DivX for Windows page at http://www.divx.com/divx/windows/. Click **Free download** and follow the on screen instructions to install the DivX codec.

Download DigiaPlayer

To install the DigiaPlayer from the Digia II onto your PC use one of the following methods:

- Download the Digia II
- Download from Digia Browser

Download from Digia II

To download from the Digia II, do the following:

- 1. Insert a compatible USB drive into your computer's USB port.
- 2. Press **Export** from live mode.
- 3. Log on to access the *Export* menu.
- 4. Select **Player** from *Export Type*.
- 5. Scroll down and select **Start Export**.
- 6. Press Enter.

Note: You must not leave the player on the USB thumbdrive. Transfer the player to the desktop since the throughput of USB does not work well with video.

Download from Digia Browser

Digia Browser operates through your PC's web browser to access your Digia II. For complete instructions refer to the Digia Browser user manual. To use your remote browser to download the DigiaPlayer do the following:

- 1. Open the remote browser.
- 2. Select the *Playback* tab.
- 3. Select the *Clip Info*. sub tab.
- 4. Select *Download DigiaPlayer* (refer to the Digia Browser user manual for more information).

Chapter 3 Digia II features

This chapter describes the Digia II features.

In this chapter:

Features	 	 	 	16
Search	 	 	 	17
Playback	 	 	 	18
Export video to a USB device				
Play DGA files	 	 	 	20
Convert DGA files to AVI				
Activate a motion detection grid	 	 	 	22

Features

To invoke any of these features use the directional buttons on the Digia II's front panel (see *Figure 1* on page 2).

To make a selection use the directional buttons to navigate and press **Enter** to select the selection highlighted.

Download player software. Refer to *Download DigiaPlayer* on page 14.

Shuffle camera views. For this you must have 2 X 2 multi-channel display mode or greater. See *Shuffle camera views* on page 8.

Freeze or zoom video. To freeze live video or zoom you must be in full screen mode. See *Freeze or zoom video* on page 9.

Search

To locate recorded video from your Digia II's hard drive, see *Figure 9* and do the following:

- 1. Press **Search** on the front panel. The *Search* menu displays.
- 2. Select the search by type, either *Time* or *Filters*.

Figure 9. Search



- 3. For *Time* set the date and time to search.
- 4. For *Filters*, choose the starting date and time, and the ending date and time to search, and select the appropriate search option:
 - By camera
 - By video that was triggered by an alarm
- 5. Press **Search**. Any results will appear on the *Event list* page.
- 6. Use the directional buttons to navigate through your entries to select the file you require.
- 7. To export the file press **Export**. See *Export video to a USB device* on page 19.
- 8. To play the file press **Enter** to view the video or for more specific information see *Playback* on page 18. When you finish you can either press **Search** to return to the *Event list*, **Live** to return to live video, or **Menu** to return to the *Search* menu.

Playback

The playback controls are on the Digia II front panel (*Figure 1* on page 2). To playback video directly from your unit, do the following:

- 1. Press **Live** to open *Live video*.
- 2. Press Play. The system begins to play the last five minutes of recorded video.
- 3. You can use the following features during playback:
 - Quadrant configuration, press **Display** repeatedly to cycle through available configurations
 - Camera views, press any *Camera* button (1 to 16).
- 4. You can stop or increase the image size with the freeze or zoom functions.

Note: You can press **Export** at any time during playback to open the *Export* menu. The system transfers the date and time video information into the *Export* menu.

Export video to a USB device

You can export a recorded video file to a USB device. To export recorded video, do the following:

- 1. Press **Export** on the front panel of the Digia II (*Figure 1* on page 2).
- 2. The *Export* menu displays the video that you can export (*Figure 10*).

Figure 10. Export menu

```
Digia II Menu - Search
      Available Video
Start 11-30-2006
                   06:33:58a
End
      12-19-2006
                   03:17:42p
    Camera No
               01
   Start Date
              12-19-2006 TUE
         Time 03:27:46p
     End Date 12-19-2006 TUE
         Time 03:32:46p
  Export Type DGA
        Start Export
```

- 3. Select the camera view that you want to export.
- 4. Set the start date and time of the recorded video that you want to export.
- 5. Set the end date and time of the recorded video that you want to export.
- 6. Set the export type. Choose from *DGA*, *AVI*, or *DGA*+*player*.
- 7. Highlight *Start Export*, and press **Enter** to begin the export process. The system assigns a name to the file in the following format:

```
CH##-YYYYMMDDHHMMSS-YYYYMMDDHHMMSS
```

- CH## is the channel number that recorded this video.
- The first YYYYMMDDHHMMSS is the start time in year, month, day, hour, minute, and seconds that the recording started.
- The second YYYYMMDDHHMMSS is the end time in year, month, day, hour, minute, and seconds that the recording ended.

Note: Verify that the channel you choose for export has video recorded during the time range selected. If you export nonexistent video, you can get a empty and unusable exported file.

Play DGA files

Once you have a DGA file on your USB drive you can use DigiaPlayer to view those files. To view the files do the following:

- 1. Insert a compatible USB drive into your computer's USB port.
- 2. Open the USB directory on your computer.
- 3. Transfer the *DigiaPlayer.exe* file to your PC.
- 4. Double click the **DigiaPlayer.exe** icon (*Figure 11*). The DigiaPlayer opens (*Figure 12*).

Figure 11. Digiaplayer icon



Figure 12. DigiaPlayer



- 5. Click Load file.
- 6. Navigate to and load the DGA file.
- 7. Double click on the DGA file to begin playback.

Convert DGA files to AVI

To save AVI files, which are compatible with the Windows Media Player, do the following:

- 1. Download the DivX codec, if you have not done so. See *Download the required DivX codec* on page 14.
- 2. Open your DigiaPlayer.
- 3. Click **Load File** and select the file you require. The *Save to Avi* button becomes active.
- 4. Click Save to Avi.

Figure 13. Save to AVI



- 5. Select the frame rate for the AVI file under *Images Per Second*.
- 6. Select whether you want the system to create the AVI file with or without audio.
- 7. Click Save.

Play AVI files

To play an AVI file, once you have downloaded and installed the DivX codec, just double click the file. Your video should open in Windows Media Player.

Activate a motion detection grid

To define what areas of the camera image set off a motion event, do the following:

1. Set the motion detection to **Partial**.

Note: Enabled cells are shaded green and disabled cells are blank.

- 2. Use the directional buttons to navigate through the grid.
- 3. Press **Enter** to begin the cell selection.
- 4. Use the directional buttons to select the cells you require.
- 5. Press **Enter** again to toggle all the selected cells. The cells become enabled if they were disabled, and disabled if they were enabled.
- 6. Press **Menu** to save your changes and exit back to the *Alarms* menu.

Chapter 4 User menus

This chapter provides a description of your Digia II's main menu.	
In this chapter:	
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Digia II main many	25

Passcodes

Table 3 indicates the passcodes and what menus and submenus you can access, for your passcode type. Passcode types include the following:

Administrative passcode(4444). Gives you access to all the menus.

User passcodes (1234). Gives you access to only the *Display* and *Information* menus.

Table 3. Main menu hierarchy

User type	Menus	Submenus
Admin and User	Camera	
Admin and User	Record	
Admin and User	Schedule	Time periods Camera
Admin and User	Alarms	
Admin and User	Network	Network configuration Network e-mail Network DDNS
Admin only	Display	
Admin and User	System	System date & time System admin
Admin only	Information	

Digia II main menu

To access the Digia II Main menu, do the following:

- 1. Press the **Menu** button.
- 2. Enter either your admin or user passcode. See *Passcodes* on page 24.
- 3. From the Main menu (*Figure 14*), use the directional buttons on the Digia II's front panel to navigate through the menus.
- 4. Press **Enter** to select a menu option. See *Table 3* for a layout of the Main menu submenus.

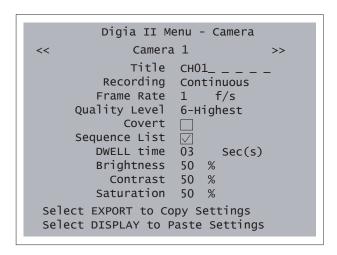
Figure 14. Main menu

Digia II Menu 1. Camera 2. Record 3. Schedule 4. Alarms 5. Network 6. Display 7. System 8. Information 9. Logout

Camera

Use the *Camera* menu (*Figure 15*) to configure your camera's options.

Figure 15. Camera



The menu options include the following:

Camera #. Each camera has its own submenu. The number of submenus depends on how many cameras your Digia II supports.

Title. Set the title for the camera (up to 12 characters).

Recording. Set the recording method for this camera, which include the following:

- *Disable*, the camera does not display in live mode and does not record.
- Alarms, the camera displays in live mode, but records according to the Alarms menu settings.
- *Schedule*, the camera displays in live mode, but records according to the *Schedule* and *Alarm's* menu settings.
- Continuous, the camera displays in live mode and continuously records.

Frame rate. Select the frame rate for this camera, from 1 to 30 frames per second (fps). The frames available at any time are distributed across all recording channels (continuous, schedule, alarms). The recording resolution (set in the *Recording* menu) determines the fps. See *Table 11* on page 46.

Quality level. Select the recording quality for this camera. Choose 1 (lowest) to 6 (highest).

Covert. Select to make the camera appear disabled, but actually record to the method set.

Sequence list. Select to include this camera in the sequence list. Sequence works only in full screen view.

Dwell time. Set the dwell time between 1 and 99 seconds. This is a property of the sequencing function and defines how long the sequencing display will dwell on this camera.

Brightness. Set the brightness level for this camera. Default is 50%.

Contrast. Set the contrast level for this camera. Default is 50%.

Saturation. Set the saturation level for this camera. Default is 50%.

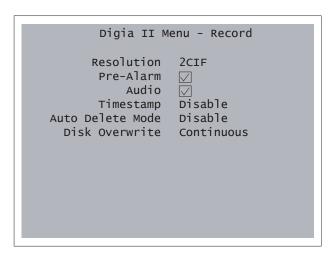
Select EXPORT to copy settings. Press **Export** to copy the settings from this camera submenu to the clipboard. Everything but the title is copied.

Select DISPLAY to paste settings. If you copied settings from another camera submenu, press **Display** to paste those settings in the appropriate places on the current submenu.

Record

Use the *Record* menu (*Figure 16*) to set the Digia II recording features.

Figure 16. Record



The menu options include the following:

Resolution. Choose the resolution you want to record at. Choose from CIF, 2CIF, and D1/4CIF.

Prealarm. Select this box to record prealarm video. Records five seconds of video before alarm.

Audio. Select this box to record audio.

Timestamp. Select how you want the system to use time stamps. Choose between *Disable*, *Top*, or *Bottom* to enable timestamps.

Note: Timestamp is a permanent part of the recording and cannot be removed.

Autodelete mode. Choose the number of days the system begins to delete footage. Choose disable or between 1 and 255 days.

Disk overwrite. Choose between *Continuous* or *No overwrite*.

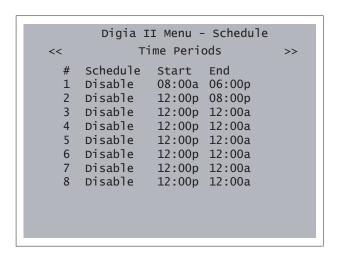
Schedule

Use the *Schedule* menu, including the *Time periods* and *Camera* submenus to configure your camera's scheduling options.

Time periods

You can set the time period the camera is activated or deactivated in the *Time periods* submenu (*Figure 17*).

Figure 17. Time periods



The menu options include the following:

Camera #. The list of schedules, in numerical order.

Schedule. Choose from *Disable*, *Weekday*, *Weekend*, *Daily*, and *Monday* through *Friday*.

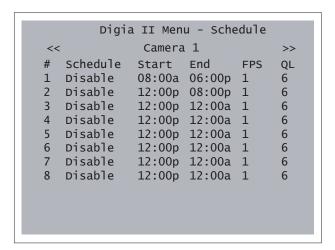
Start. Set the start time.

End. Set the end time.

Camera

The system administrator can assign a separate FPS and QL value for each camera that is recording by schedule, in the *Camera* submenu, (*Figure 18*).

Figure 18. Camera schedule



Note: The number of cameras for your Digia II may be different from the number of cameras listed here.

The menu options include the following:

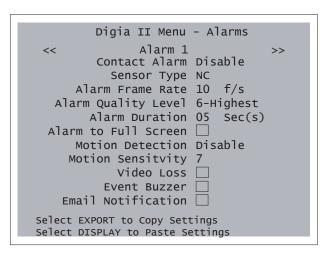
FPS (frames per second). Set between 0 and 30.

QL (quality level). Set between 1 and 6.

Alarms

Use the *Alarms* menu (*Figure 19*) to control the alarm triggers for your Digia II.

Figure 19. Alarms



The menu options include the following:

Alarm #. The current alarm being edited.

Contact alarm. Select how you want the contact to function. Choose one of the following:

- Enable: When the contact alarm is triggered, the record settings defined in this menu item override any other settings.
- Disable: The contact alarm cannot be triggered.
- Group: When this contact alarm is triggered, all other group alarms are triggered; otherwise, the alarm behaves as if it were enabled.

Sensor type. Select how the contact function. Choose one of the following:

- NC: The contact is normally closed, and the alarm resets after the period that is set in alarm due.
- NO: The contact is normally open, and the alarm resets according to the period set in the alarm due period.
- NC Trans: The contact is normally closed, and the alarm does not reset until the contact is reopened.
- NO Trans: The contact is normally open by default, and the alarm does not reset until the contact is reclosed.

Alarm frame rate. Select between off, 1, 2, 3, 4, 5, 6, 7.5, 10, 20, and 30 fps.

Alarm quality level. Select between 1 (lowest) to 6 (highest).

Alarm duration. Choose between 1 and 60 seconds.

Alarm to full screen. Check this box if you want the video to go to full screen when an alarm is triggered.

Motion detection. Choose between *Disable*, *Partial*, and *Full*. If you set it to *Partial*, it will take you into the motion detection grid (see *Activate a motion detection grid* on page 22.)

Motion sensitivity. Choose between 1 (lowest) to 9 (highest).

Video loss. Check this box if you want this event triggered when video is lost.

Event buzzer. Check this box if you want to hear a buzzer on motion, alarms, and video loss.

Email notification. Check this box if you want the Digia II to send an e-mail to a predetermined e-mail address when the alarm is triggered.

Network

The *Network* menu includes three submenus: *Network configuration*, *Network email*, and *Network dynamic domain system (DDNS)*.

Network configuration

Use the *Network configuration* submenu (*Figure 20*) to assign your network settings.

Figure 20. Network configuration

```
Digia II Menu - Network

<< Network Configuration >>
Data Port 00554
HTTP Port 00080
Control Port 01600
Client Access
Bandwidth Saving 8192

Network type DHCP
IP Address 000.000.000.000
Subnet Mask 000.000.000.000
Gateway 000.000.000.000
DNS Server 168.095.001.001
```

The menu options include the following:

Data port. Default is 00554.

HTTP port. Default is 00080.

Control port. Default is 01600.

Client access. Check this box if you want to enable access to the Digia II over a network.

Bandwidth saving. Limits the bandwidth of the network stream. Default is 8192 KB. Select between 10 and 8192 KB.

Network type. Select your network type. Choose between *Static* and *DHCP*. DHCP will assign values to the IP, subnet, gateway, and DNS server values automatically.

IP. The IP address of the unit. If you choose static as a network type, you can set the IP address by highlighting the number you want to change, click **Enter**, and then use the directional buttons to change the values. Click **Enter** again to set the number, then use the left or right directional buttons to move to another position and repeat to change that number.

Subnet mask. The subnet mask of the unit. If you choose static as a network type, you can set the subnet mask the same way as you set the IP address.

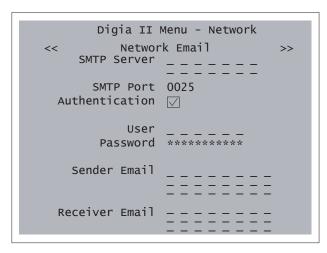
Gateway. The IP address to the gateway router the unit is getting its network connection from. If you choose static as a network type, you can set the gateway the same was as you set the IP address.

DNS server. The IP address to the DNS server you wish to use. If you choose static as a network type, you can set the DNS server address the same way as you set the IP address.

Network e-mail

Use the *Network email* submenu (*Figure 21*) to configure your network e-mail.

Figure 21. Network email



The menu options include the following:

SMTP server. Enter the SMTP server address for your mail server.

SMTP port. Default is 00025.

Authentication. Check this box if your mail server requires authentication.

User name. Enter the user name for the SMTP server. This is optional.

Password. Enter the password for the SMTP server. This is optional.

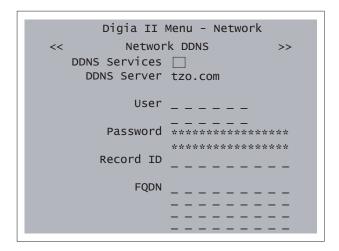
Sender e-mail address. Enter the e-mail address you want the e-mail to come from. This is required for SMTP operation.

Receiver e-mail address. Enter the e-mail address you want the e-mail to go to. This is required for SMTP operation.

Network dynamic domain naming system (DDNS)

Use the Network DDNS submenu (Figure 22) to set your DNS network options.

Figure 22. Network DDNS



The menu options include the following:

DDNS services. Check this box to enable DDNS on the Digia II.

DDNS server. Choose between *www.tzo.com*, *www.sitelutions.com*, or *www.dyndns.org*. To set up an account, see those websites for more information.

User. Enter the user name of the DDNS account.

Password. Enter the password of the DDNS account.

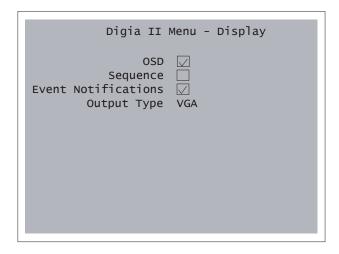
Record ID. A record ID that your DDNS service provides for you.

FQDN. This stands for fully qualified domain name. Enter this domain name here, for example, digia2.dyndns.com.

Display

Use the *Display* menu (*Figure 23*) to enable special features that display during recording and playback in

Figure 23. Display menu



The menu options include the following:

OSD. Check this box if you want the playback and record status bars to display.

Sequence. Check this box to enable sequencing. Sequencing will automatically switch the live view to the next available video feed where you have enabled *Sequence List* in the *Camera* menu. It will switch to the next feed after the defined dwell time interval.

Event notifications. Check this box to enable the alarm icons to display (A, M, V, F).

Output type. Select the monitor signal type you require. Choose *VGA* for computer monitors or *BNC* for TV monitors.

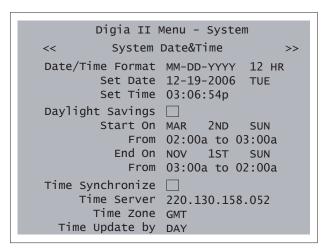
System

The System menu includes both the System date&time and System admin submenus.

System date&time

Use the *System date&time* submenu (*Figure 24*) to update your system settings.

Figure 24. System date&time



The menu options include the following:

Date/time format. Choose between MM-DD-YYYY, DD-MM-YYYY, and YYYY-MM-DD, and between 12 HR and 24 HR.

Set date / Set time. Set the current date and time.

Daylight saving. Check this box if you want to enable daylight saving time. If you are setting up daylight saving time, check this box last after you have specified all the other settings.

Start on. Select when daylight saving time begins. Choose the month, the week (last, 1st, 2nd, 3rd, and 4th), and the day of the week you want applied.

From. Set the hour and minute at which you would like the time to change, and set the hour and minute you want the time to change to.

End on. Select when daylight saving time ends. Choose the month, the week (last, 1st, 2nd, 3rd, and 4th), and the day of the week you want applied.

From. Set the hour and minute at which you would like the time to change, and set the hour and minute you want the time to change to.

Time synchronize. Check if you want the Digia II to synchronize its time clock to an external source.

Time server. Set the IP address of the external source you want to use as your time synchronizing server.

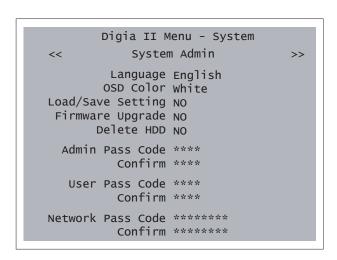
Time zone. Choose between GMT, GMT+(1, 2, 3, 3:30, 4, 4:30, 5, 5:30, 5:45, 6, 6:30, 7, 8, 9, 9:30, 10, 11, 12, and 13), and GMT-(12, 11, 10, 9, 8, 7, 6, 5, 4, 3:30, 3, 2, and 1).

Time update by. Select the time interval you want the system to update its time. Choose between day, week, and month.

System admin

Use the System admin submenu (Figure 25) to set the system administration options.

Figure 25. System admin



The menu options include the following:

Language. English.

OSD color. Select the color of your display. Choose from white, black, red, yellow, magenta, and cyan.

Load/save setting. Press **Enter**, then up or down. Select whether you'd like to cancel the process, load factory defaults, load other settings, or save settings.

Firmware upgrade. Plug in a USB device that has the new firmware on it, press **Enter**, then use the directional buttons to select *Firmware upgrade*. Enter the passcode (default is 4444). Your USB device must have at least 5 MB of free space.

Delete HDD. Press **Enter**, then up or down. Enter the passcode (default is 4444). This will delete everything on the hard drive.

Admin passcode. Change an admin passcode.

Confirm. Reenter the passcode you entered as your Admin passcode to confirm.

User passcode. Change a user passcode.

Confirm. Reenter the passcode you entered as your User passcode to confirm.

Network passcode. Change a network passcode.

Confirm. Reenter the passcode you entered as your Network passcode to confirm.

Information

Use the *Information* menu (Figure 26) to update your unit information.

Figure 26. Information

```
Digia II Menu - Information

DVR ID _ _ _ _ _ _

Firmware Version 0.9.28

HDD Size 76 GB

IP Address 000.000.000.000

MAC Address 00:00:00:00:00:00

Model Digia II-16

Record Time

From 11-30-2006 06:33:58a

To 12-19-2006 03:13:04a
```

The menu options include the following:

DVR ID. Enter a DVR ID.

Firmware version. Displays your firmware version.

HDD size. The size of the hard drive installed.

IP address. The IP address of the unit.

MAC address. The MAC address of the unit.

Model. The model number of the unit.

Record time from. The date the unit started recording.

Recording time to. Either the current date or the last date the unit was recording.

Chapter 5 Troubleshooting, maintenance, support

This chapter provides information to help you troubleshoot problems and contact technical support in case you need assistance with your GE equipment.

In this chapter:

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Troubleshooting

This section provides information to help you diagnose and solve various problems that may arise while configuring or using your GE product and offers technical support contacts in case you need assistance. (See *Contacting technical support* on page 42.)

Troubleshooting your Digia II

• I cannot log onto the Digia II main menu.

First, verify that you are using the correct admin passcode (the default is 4444) for user passcode (the default is 1234).

Note: The admin passcode will grant you access to all of the menus and allow you to configure all of the options. The user passcode will only allow you access to the search, export, display, and information menus.

If the default passcodes do not work, try 1111.

If there are no passcodes that work, contact technical support. Once you have access to the menus, set the admin passcode and user passcode.

• I cannot upgrade the firmware on my Digia II.

When you download the firmware files, Windows may add a .DAT file extension, or a similar extension that Windows does not recognize. Edit the firmware's file name and remove the .DAT file extension.

Verify there is at least 5 MB of free space on your USB device

• I cannot record at 30 fps.

The unit supports up to 30 fps recording at D1 resolution, 60 fps recording at 2CIF resolution, and 120 fps recording at CIF resolution. The unit distributes these frames across all the enabled channels evenly (when the recording mode is set to continuous, schedule, or alarms) so that if you are recording at 2CIF (60 fps) with four channels enabled, each channel will be capable of recording up to 15 fps. By default, all channels are enabled and recording at 2CIF resolution. If you have a four-channel unit, you can do one of the following:

- Disable two of the four channels to be able to record at 30 fps on any channel at the default resolution of 2CIF.
- Change the recording resolution from 2CIF to CIF.

If you decide to record at D1 resolution on that same four-channel unit, then you will need to disable three of the four channels to be able to record at 30 fps.

• I cannot get my Digia II to recognize my USB device.

When you export video, insert the USB device into the USB port just before the last step, so the Digia II has time to recognize the device. Some devices may not be compatible.

If the unit does not recognize the USB device, reboot the unit with the USB drive inside the USB port. If your PC still does not recognize the device, try another USB brand or contact technical support.

• I want to export video to a CD-RW or DVD-RW drive.

The Digia II supports external optical burners via the USB 2.0 port. Check www.gesecurity.com or contact technical support for the latest list of compatible optical drives.

• The Digia II DVR boots up to a startup screen but does not progress to live mode.

The Digia II runs a self-diagnostic test once the unit powers up. If a failure is detected, such as a fan, hard drive, or Ethernet, the unit may not boot completely. Contact technical support.

• The Digia II DVR only records for a few hours.

Verify that motion recording is set up properly by following the instructions in *Alarms* on page 15.

The DVR will record at a lower frame rate when motion has not been detected, to conserve hard disk space. Once a camera detects motion, the DVR will record at a higher frame rate to ensure a higher resolution during motion events playback.

• *The monitor displays no picture.*

First, verify the equipment is wired properly. Refer to your installation documentation for assistance.

Verify that all of the wires used work properly.

Verify that the recorder is properly powered.

• There is no display coming from one of the channels on the DVR.

Verify that the problem comes from the recorder or the camera. Take a working camera and plug it into the port that seems to not be working properly. If you see a picture, the original recorder or camera is faulty.

• I received an onscreen event message.

Use the list below to resolve any system events that display onscreen.

Invalid start date. Verify the *Export start date* is within the available video range.

Invalid start time. Verify the *Export end time* is within the available video range.

Invalid end date. Verify the *Export start time* is within the available video range.

Invalid end time. Verify the *Export end time* is within the available video range.

Start date must be before end date. Update *Start date* so that is before *End date*.

Start time must be before end time. Update *Start time* so that is before *End time*.

No video available at selected time. Update the time from *Search time*, ensure the start and end times make sense.

No USB device found. Verify you have a compatible USB device or reboot with the USB connected.

Checksum error - file may be corrupt. Load firmware onto a USB a second time and try again.

Contacting technical support

For assistance installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions, you may contact technical support during normal business hours (Monday through Friday, excluding holidays, between 5 a.m. and 5 p.m. Pacific Time).

Table 4. Service and support contact information

	Customer service	Technical support
Phone	Toll-free: 888.GESECURity (888.437.3287) in the US, including Alaska and Hawaii; Puerto Rico; Canada. Outside the toll-free area: 503.885.5700.	
E-mail	gesecurity.customerservice@ge.com	nstechsrv@ge.com
Fax	888.329.0331	888.329.0332

Note: Be ready at the equipment before calling for technical support.

Online publication library

Another great resource for assistance with your GE product is our online publication library. To access the library, go to our website at the following location:

http://www.gesecurity.com

In the **Customer Support** menu, select the *Resource Library* link. After you register and log on, you may search through our online library for the documentation you need.¹

^{1.} Many GE documents are provided as PDFs (portable document format). To read these documents, you will need Adobe Reader, which can be downloaded free from Adobe's website at www.adobe.com.

Appendix A Reference tables

This appendix provides all the default settings that came with your Digia II camera and a recording resolution reference table.

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ecording resolution	

Main menu default values

This section provides all the default values for the Digia II submenus, which you can access from the Menu button on the front panel.

Camera menu

Use *Table 5* to reset the default values for the *Camera* menu.

Table 5. Camera menu default values

Setting	Default value
Title	CH##
Recording mode	Continuous
FPS	1
Quality level	6
Covert	Disabled

Setting	Default value
Sequence list	Enabled
Brightness	50%
Contrast	50%
Saturation	50%

Record menu

Use *Table 6* to reset the default values for the *Record* menu.

Table 6. Record menu default values.

Setting	Default value
Resolution	2CIF
Pre-alarms	Enabled
Audio	Enabled

Setting	Default value
Timestamp	Disabled
Autodelete mode	Disabled
Disk overwrite	Continuous

Schedule menu

The default values for Schedules is all time periods disabled.

Alarms menu

Use *Table 7* to reset the default values for the *Alarms* menu.

Table 7. Alarms menu default value

Setting	Default value
Contact alarm	Disabled
Sensor type	NC
Alarm frame rate	10 fps
Alarm quality level	6
Alarm duration	5 seconds
Alarm to full screen	Disabled

Setting	Default value
Motion detection	Disabled
Motion sensitivity	7
Video loss	Disabled
Event buzzer	Disabled
Email notification	Disabled

Network menu

Use *Table 8* to reset the default values for the *Network* menu.

Table 8. Network menu default values

Setting	Default value
Data port	00554
HTTP port	00080
Control port	01600
Client access	Enabled
Bandwidth savings	8192 KB

Setting	Default value
Network type	DHCP
SMTP port	25
Authentication	Disabled
DDNS services	Disabled
DDNS server	tzo.com

Display menu

Use *Table 9* to reset the default values for the *Display* menu.

Table 9. Display menu default values.

Setting	Default value
OSD	Enabled
Sequence	Disabled

Setting	Default value	
Event notifications	Enabled	
Output type	VGA	

System menu

Use *Table 10* to reset the default values for the *System* menu.

Table 10. System menu default values

Setting	Default value
Date format	MM/DD/YYYY
Time format	12 hour
Daylight saving	Disabled
Time synchronize	Disabled
Language	English

Setting	Default value
OSD color	White
Admin passcode	4444
User passcode	1234
Network passcode	11111111

Recording resolution

Use *Table 11* to determine what recording resolution would work best for the number of channels you are recording on your system.

Table 11. Frames per second distribution chart

	Recording resolution		
	D1/4CIF	2CIF	CIF
1 channel recording	30 fps	60 fps1	120 fps¹
4 channels recording	7.5 fps	15 fps	30 fps
9 channels recording	3.3 fps	6.7 fps	13.3 fps
16 channels recording	1.9 fps	3.8 fps	7.5 fps

^{1.} The maximum number of frames that you can record on one channel is 30 frames per second (real time recording), even when there are options for 60 to 120 frames per second.