EASY UPDATER FOR GC2 DESCRIPTION

The Easy Updater for GC2 (2GIG-UPDV) is a compact, portable tool that lets installers in the field load the latest firmware update onto the Control Panel and Wireless Touchscreen Keypad (2GIG-TS1)—without requiring a computer. This device will update GC2 Control Panel with Firmware 1.5 and higher, and Touchscreen Keypad with 1.8 and higher. With a compact design intended to easily fit in a technician’s toolbox, the device ships with the firmware update package already installed.

Contents

Verify that the package includes the following:

- 1—Easy Updater for GC2
- 1—4 Pin Cable Adapter

UPDATING THE EASY UPDATER FOR GC2

The Easy Updater for GC2 ships with the firmware update for the Control Panel and Touchscreen already installed. When newer firmware updates are released, the new firmware package can be easily loaded into the device.

NOTE: Before changing the firmware update on the device for the first time, always install the UPDV Device Drivers. To obtain the drivers and instructions, visit the Firmware Update Tool page at: dealer.2gig.com. A Micro Windows-based PC is used to perform the firmware update of the 2GIG-UPDV. The PC must use Windows 7 or Windows 8, and all windows updates must be current.

Preparing to Update the Device: PC Preparation

To load newer firmware onto the device, go to the 2GIG Dealer Site at: dealer.2gig.com and download the UPDV Update Tool Kit. This kit includes a firmware update for the device, as well as the latest firmware release for the GC2 Panel and Wireless Touchscreen Keypad.

UPDV Tool

When the UPDV Device is first connected to the PC using the micro USB cable, it will look for drivers.

NOTE: If these drivers are not automatically found, then download them from the manufacturer and install the drivers. (See 2gig website and UPDV instructions for location of the latest drivers).

At this point the UPDV device is ready to use and the UPDV payload installer can be executed. (See UPDATING THE EASY UPDATER FOR GC2 section on this page).

Updating the UPDV Device.

Using the executable program downloaded from the 2gig.com website, place the executable file on the desktop.

Figure 1. Easy Updater for GC2
A. Micro USB Socket
B. 4 Segment Display
C. LED Indicator
D. Panel Connector (Pigtail)
E. Start Button
F. 4 Pin Cable Adapter

Figure 2. Micro USB/USB (Power and Data Transfer Type ) Cable Connection

Next, connect the Easy Updater for GC2 to the computer using a micro-USB cable, (not supplied) then run the update package to automatically load the newer firmware onto the device. If a screen is displayed like Figure 3, the micro-USB cable being used may be a "Charge Only" type of cable. A cable that supplies power and transfers data is required.
An Open File-Security Warning may appear prior to opening software. If this happens select run.

**Figure 7.** Security Warning-Opening Software

The program will search for the UPDV Device by pinging active COM ports on the PC.

**Figure 8.** Pinging Active COM Port on PC

Once the UPDV Device is found, it will display the NO UPDATE IS REQUIRED if the latest firmware is currently installed.

**Figure 9.** Update is Not Required

- If update IS NOT required of the firmware, proceed to updating the Control Panel firmware.
- If update IS REQUIRED, the version of software being installed will show up in the status bar.

**Figure 10.** Firmware Update is Needed

While communicating with the Firmware Updater Tool, the following events will change on the display:
- “bE” - bulk erasing the SPI flash
- “FE” - individual erasing of SPI flash sectors
- “0000” - flashing address (goes up to 0x1000)

The 2GIG-UPDV has the ability to flash a Control Panel as well as a TS1. Firmware for both products will be loaded into the 2GIG-UPDV.

**Figure 11.** Bulk Erase-Old Firmware is being erased

**Figure 12.** Loading Control Panel Firmware

**Figure 13.** Loading TSI Touchscreen Keypad Firmware

When the update is complete the dialogue box of the programmer will display that the update is successful and the 2GIG-UPDV will show “done” on the 4-digit display.

**Figure 14.** Update Completed

Update done is displayed on the Easy Updater for GC2 screen and eight (8) fast “beeps” alert user that the firmware loading task is complete.

**Figure 15.** Download Completed on Easy Updater for GC2
USING THE 2GIG EASY UPDATER FOR GC2
Control Panel Firmware Update Instructions
Make sure that the 2GIG-UPDV has the latest control panel and Touchscreen Keypad firmware loaded. See section "How to Update Easy Updater for GC2" and update if necessary.

The 2GIG-UPDV was preloaded at the time of production with product firmware.

On the back of the device it shows the factory loaded product firmware revision and the serial number for the 2GIG-Easy Updater for GC2.

Figure 16. Serial Number/Firmware Pre-Load Labels on Backside of Updater

Update the Control Panel
To update the Control Panel firmware:
1. Remove the backplate from the Control Panel. For instructions, see the Go!Control Panel’s Installation & Programming Guide.
2. Disconnect power and battery.
3. Plug the device’s pigtail cable into the Control Panel’s J4 Pin Connector port as shown in Figure 18.
4. Plug in the back-up battery.
5. Power ON the Control Panel

Figure 18. Firmware Update Cable and J4 Pin Connector Port

Firmware Update
The UPDV Device will communicate with the Control Panel. The UPDV Device will determine that a firmware update can occur and wait for the start button to be pressed; L: \l (Control Panel or TS1 version build number scrolling) update in progress; F: 00 (display % progress (0 to 100), scrolling decimal points when communicating with panel).

Press the Start Button.

NOTE: Intermediate progress steps will include (changing the first letter on the display); the update process will take several minutes.
- 'b' erasing the bootloader
- 'B' flashing the bootloader
- 'c' erasing the main program
- 'C' flashing the main program

NOTE: The "done" and long beep is preceded by a 40 second delay to allow the panel to power up after performing the firmware update in case the XCVR firmware was updated. The tech/installer should not remove the Firmware Update from the panel until the long beep/"done" is shown.

Update done: done 2 second beep followed by 0.5 sec. beeps every 10 seconds.

Update the Wireless Touchscreen Keypad
1. Remove the backplate from the Wireless Touchscreen Keypad. For instructions, see the 2GIG Wireless Touchscreen Keypad Installation Instructions.
2. Power OFF the Wireless Touchscreen Keypad.
3. The UPDV Device will connect to the 2GIG TSI keypad using one (1) of the following:
   - FOR EARLY PRODUCTION MODELS: Fully-insert the 4-Pin Cable Adapter into the device’s pigtail cable. Then connect it to the four (4) holes on the printed circuit board as shown in Figure 19 below.

NOTE: Slots and logo on pigtail in Figure 19 are facing toward the power connection.

Figure 19. Cable Adapter/EARLY PRODUCTION MODEL Wireless Touchscreen Keypad

- FOR LATER PRODUCTION MODELS: Plug the device’s pigtail cable directly into the 4-pin connector on the printed circuit board as shown in Figure 20 below.

Figure 20. Update Cable/LATER MODEL Wireless Touchscreen Keypad

4. Power ON the Wireless Touchscreen Keypad.

IMPORTANT: To avoid equipment damage, ensure the slotted/logo side of the pigtail cable is facing away from PCB as shown in Figure 20. When inserted properly, the LED indicator on the Easy Updater for GC2 lights GREEN. When inserted backwards, the LED indicator lights RED and the device will not perform an update. See "LED Indicators" on Page 4.

5. When the Easy Updater for GC2 powers ON, it emits a single beep and then the firmware version and build number that will be installed scrolls across the display. For example, 1.13 12084.

NOTE: If a different message appears, see "Status Messages" below.


NOTE: A progress indicator shows the update status. When complete, the LCD displays the Done status message and the device emits several beeps.

7. The UPDV device automatically reboots the wireless touchscreen keypad.

8. Unplug the UPDV device.

9. Replace the Wireless Touchscreen Keypad back plate. You have successfully updated the firmware.

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Easy Updater for GC2 | Installation Instructions

### LED Indicators
The LED indicators display the following status:

<table>
<thead>
<tr>
<th>LED Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREEN LED</td>
<td>Lights GREEN when pigtail cable is correctly attached to the Control Panel or Wireless Touchscreen</td>
</tr>
<tr>
<td>RED LED</td>
<td>Lights RED when pigtail cable is plugged into the system backwards or pins are misaligned. The GC2 Firmware Easy Updater for GC2 will not function in this state</td>
</tr>
<tr>
<td>NO LED</td>
<td>Check cable installation for misaligned or incorrect pin alignment</td>
</tr>
</tbody>
</table>

### Status Messages
The 4-segment display reveals the following status messages:

Press button to start update.

<table>
<thead>
<tr>
<th>Messages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X.XX XXXX</td>
<td>Displays the firmware version and build number running on the device and indicates the device is ready to update the Control Panel or Wireless Touchscreen. Where X.XX = firmware version and XXX = build number</td>
</tr>
<tr>
<td>F &lt;X %&gt;</td>
<td>Indicates the percentage complete of the current firmware update on the Control Panel or Wireless Touchscreen Keypad. Where X=0 - 100%</td>
</tr>
<tr>
<td>donE</td>
<td>Firmware update successful</td>
</tr>
<tr>
<td>C=RnE UPdRE</td>
<td>Indicates the Control Panel or Wireless Touchscreen is running the same version as the Easy Updater for GC2</td>
</tr>
<tr>
<td>C=RnE UPdRE</td>
<td>Indicates the Control Panel or Wireless Touchscreen is running a newer version than the Easy Updater for GC2. See How to Update the Easy Updater for GC2 below</td>
</tr>
<tr>
<td>Error n -- 99999</td>
<td>Indicates a device error. Where 99999 = error number</td>
</tr>
<tr>
<td>C &lt;X %&gt;</td>
<td>Indicates firmware diagnostics procedure occurring</td>
</tr>
</tbody>
</table>

### Updating Errors
All updating errors will show C=RnE UPdRE - HHHH (xxxx = specific update failure reason).

Possible Reasons:
- bRd ER=3E - connected panel does not correspond to an updatable device
- n o RnE=3E - same firmware in panel and firmware updater
- bRd bU=d - firmware updater build is invalid or has been erased (please use the Firmware Update Tool to download the image again).
- bRd bU=d bU=n3 bU=8PnR=32 -- firmware updater build was found invalid during flashing (internal check)
- n o nE=3E bU=8PnR -- the UPDV cannot be used to update internal (test) builds, or no firmware payload is present
- bU=d n o FdInD -- no firmware payload detected on UPDV Device
- bU=d bU=8PnR -- firmware updater build was validated as correct and complete
- bU=d bU=8PnR -- firmware payload has been erased
- bRd bRd -- corrupt payload or no firmware payload is present

### All Other Errors
All other errors will show Error n -- 99999 (n = error number, 99999 = error label)

While other errors are very unlikely they are diagnostic in nature:
- (1) Get Version Info Max Retries
- (2) Get Resource Table Max Retries
- (3) Get Build Info Resource Max Retries
- (4) Bad Build Info
- (5) Get Build Info Max Retries
- (6) Set Baud Rate Max Retries
- (7) High Baud Rate no I/O
- (8) SPI Flash no I/O
- (9) SPI Flash bad
- (10) Build Not Found
- (11) Erase Bootloader Max Retries
- (12) Flash Bootloader Max Retries
- (13) Erase Main Program Max Retries
- (14) Flash Main Program Max Retries
- (15) Resource Table Bad
- (16) Code Bad (Firmware is corrupted) displays the firmware version also
- (17) Failed to update target, the Control Panel or TSI Keypad firmware is corrupted

**IMPORTANT:** (16) Code Bad is a Fatal Error. If this is displayed, the device will need to be replaced. Contact Technical Support for approval of RMA.

### Start Button Functions
- **Start Update** - Single Button Press - (0.5 second) - - Starts the update. Firmware installation begins when 2GIG UPDV device is properly configured and connected to a Control Panel or TSI Touchscreen Keypad
- **Payload Diagnostic Check** - Press and Hold - (3 seconds) - - A single “beeps” will be heard and the 2GIG-UPDV device will perform a firmware payload diagnostic check. The 2GIG-UPDV must be powered ON to perform this check.
- **Erase Firmware Payload** - Press and Hold - (10 seconds) - - Three “beeps” will be heard. - 2E- shows bulk erase occurring. Build erased.

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>USB Port</th>
<th>Micro-B socket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W x H x D)</td>
<td>2.32 x 3.70 x 1.00 in.</td>
</tr>
<tr>
<td>Weight</td>
<td>0.2 lbs.</td>
</tr>
<tr>
<td>Housing Material</td>
<td>ABS Plastic</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
</tbody>
</table>

### LIMITED WARRANTY
This Nortek Security & Control LLC product is warranted against defects in material and workmanship for two (2) years. This warranty extends only to wholesale customers who buy direct from Nortek Security & Control LLC or through Nortek Security & Control LLC’s normal distribution channels. Nortek Security & Control LLC does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer’s warranty, if any.

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