



2GIG-UPDV

EASY UPDATER FOR GC2, TS1, & GC2E

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The Easy Updater (2GIG-UPDV) for GC2, TS1, and GC2E is a compact, portable tool that allows installers in the field to load the latest firmware update onto the Control Panel and Wireless Touchscreen Keypad (2GIG-TS1) - without requiring a computer.

NOTE: Firmware versions for BOTH the GC2 Control Panel and the Touchscreen Keypad (2GIG-TS1) must be at v1.10 or higher. For GC2E the firmware version must be v1.21 or 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, TS1, & GC2E
- 1—4 Pin Cable Adapter

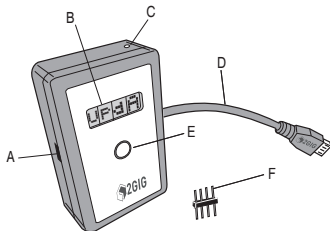


Figure 1. Easy Updater for GC2, TS1, & GC2E

- A. Micro USB Socket
- B. 4-Segment Display
- C. LED Indicator
- D. Panel Connector (Pigtail)
- E. Start Button
- F. 4-Pin Cable Adapter

UPDATING THE EASY UPDATER FOR GC2

The Easy Updater for GC2, TS1, and GC2E 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 Microsoft 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.

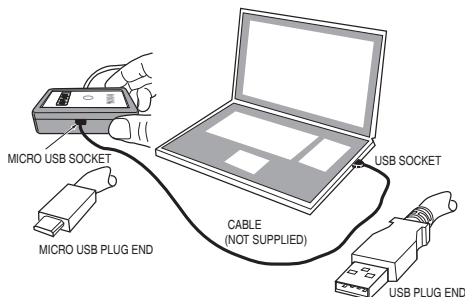
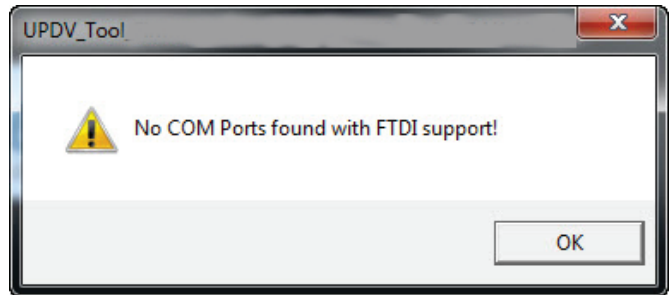


Figure 2. Micro USB/USB (Power and Data Transfer Type) Cable Connection
Next, connect the Easy Updater for GC2 to the computer using a micro-USB cable, (not supplied) then run the update package to automatically load the newer firmware onto the device. If a screen is displayed like **Figure 3**, the micro-USB cable being used may be a "Charge Only" type of cable. A cable that supplies power and transfers data is required.

Figure 3. Improper USB Cable Type



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

Figure 4. Driver Software Installation Search

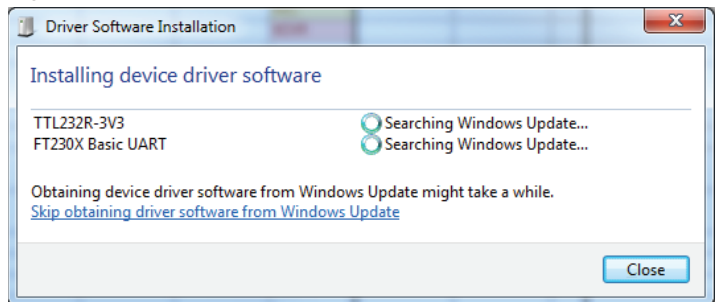
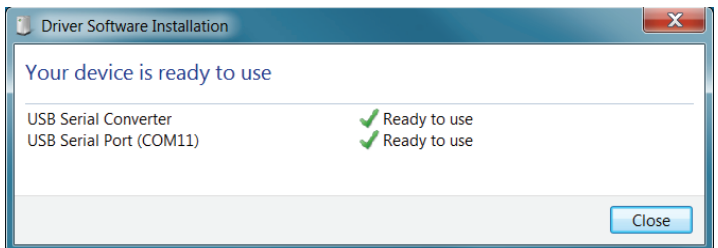


Figure 5 Driver Download



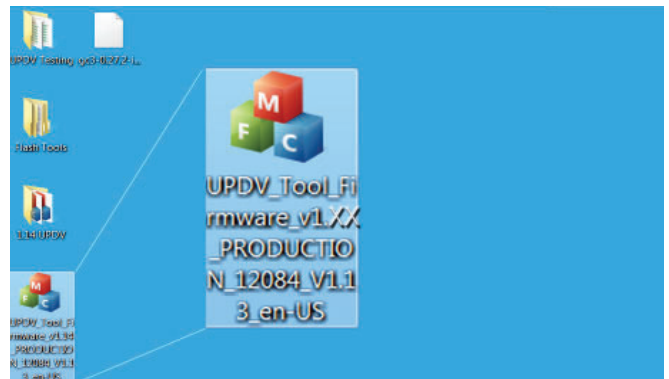
NOTE: If these drivers are not automatically found, then download them from the manufacturer and install the drivers (See 2gig website and UPDV instructions for location of the latest drivers).

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). With the micro USB cable still plugged into the unit, open the program.

Updating the UPDV Device.

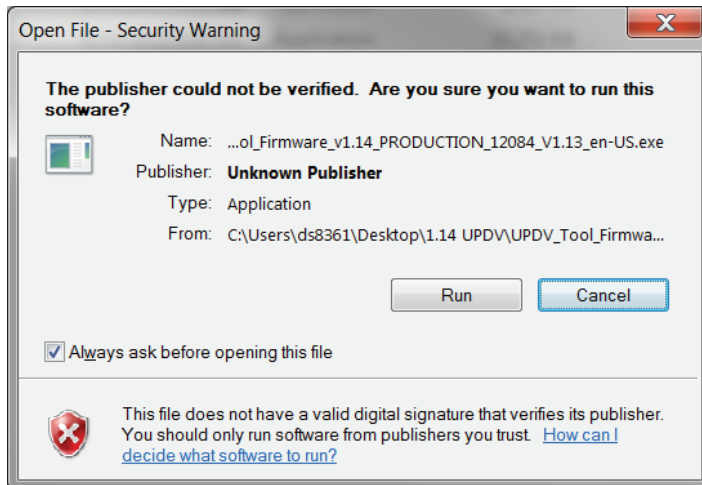
Using the executable program downloaded from the 2gig.com website, place the executable file on the desktop.

Figure 6. Opening the Program



An Open File-Security Warning may appear prior to opening software. If this happens select run.

Figure 7. Security Warning-Opening Software



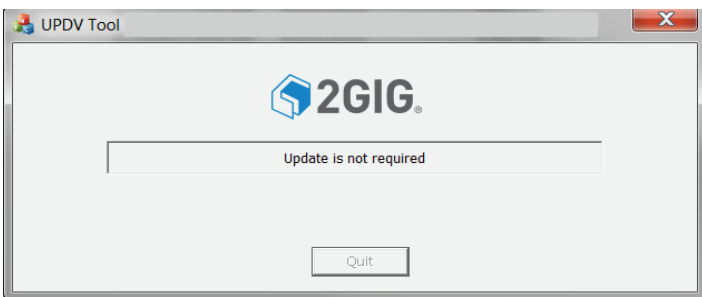
The program will search for the UPDV Device by pinging active COM ports on the PC.

Figure 8. Pinging Active COM Port on PC



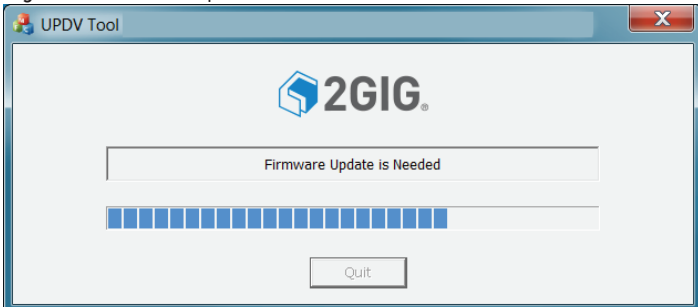
Once the UPDV Device is found, it will display the NO UPDATE IS REQUIRED if the latest firmware is currently installed.

Figure 9. Update is Not Required



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

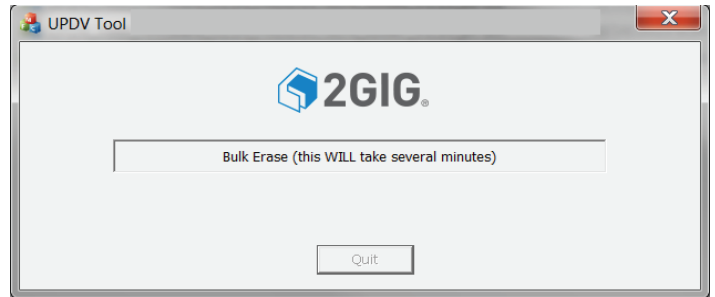
Figure 10. Firmware Update is Needed



While communicating with the Firmware Updater Tool, the following events will change on the display:

- -bE- bulk erasing the SP flash
- -FE- individual erasing of SPI flash sectors
- 0000 flashing address (goes up to 0x1000)

Figure 11. Bulk Erase-Old Firmware is being erased



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 12. Loading Control Panel Firmware

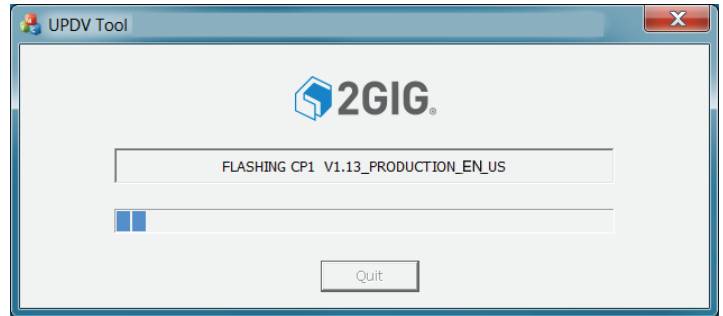
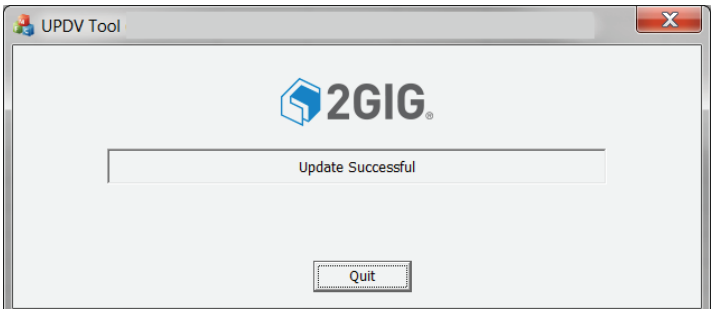


Figure 13. Loading TSI Touchscreen Keypad Firmware



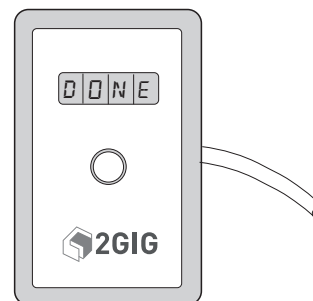
When the update is complete the dialogue box of the programmer will display that the update is successful and the 2GIG-UPDV will show "DONE " on the 4-digit display.

Figure 14. Update Completed



Update DONE is displayed on the Easy Updater for the GC2, TS1, or GC2E screen. Eight (8) fast "beeps" alert the user that the firmware loading task is complete.

Figure 15. Download Completed on Easy Updater for the GC2, TS1, or GC2E



UPDV UPDATE DEVICE FRONT

USING THE 2GIG EASY UPDATER FOR GC2, TS1, & GC2E 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, TS1, & GC2E" 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 serial number for the 2GIG-Easy Updater for the GC2, TS1, and GC2E.

Figure 16. Model and Serial Number on the back of the Updater Tool

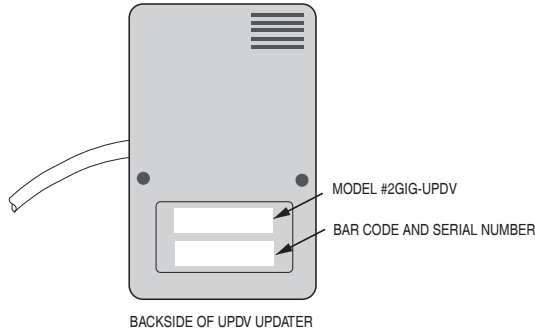
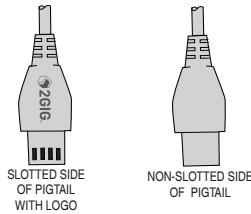


Figure 17. Reference Diagram of Pigtails/ Slots & Logo side & Non-Slotted Side

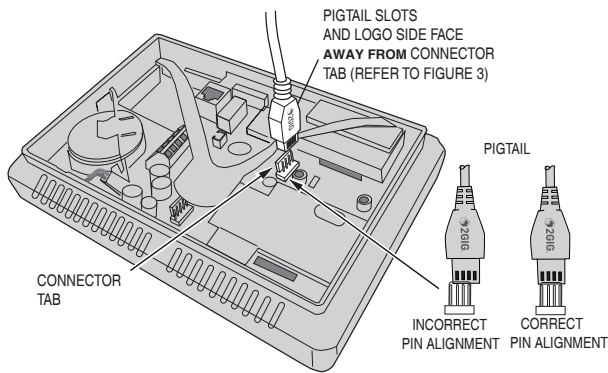


Update the Control Panel

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 13 12084** (Control Panel or TS1 version build number scrolling) update in progress: **F 0** (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
- 'E' erasing the main program
- 'F' 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 Updater from the panel until the long beep/"**DONE**" is shown.

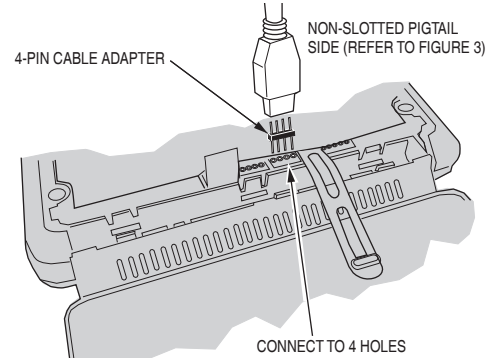
Update done: **DONE** 2 second beep followed by 0.5 sec. beeps every 10 seconds.

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.

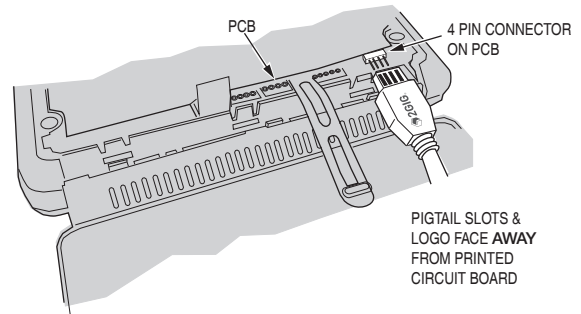
NOTE: Slots and logo on pigtail in Figure 19 are facing toward the power connection.

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, TS1, or GC2E 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 the GC2,TS1, or GC2E powers ON, it emits a single beep and then the firmware version and build number being installed scrolls across the display. For example, 1.13 12084.

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

6. On the device, press Start Update Button.

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 restarts the wireless touchscreen keypad. Unplug the UPDV device.
8. Replace the Wireless Touchscreen Keypad back plate.

You have successfully updated the firmware.

LED Indicators

The LED indicators display the following status:

LED Indicator	Description
GREEN LED	Lights GREEN when pigtail cable is correctly attached to the Control Panel or Wireless Touchscreen
RED LED	Lights RED when pigtail cable is plugged into the system backwards or pins are misaligned. The GC2 Firmware Easy Updater for GC2,TS1, and GC2E will not function in this state
NO LED	Check cable installation for misaligned or incorrect pin alignment

Status Messages

The 4-segment display reveals the following status messages: Press button to start update.

Messages	Description
X.XX XXXX	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 Keypad Where X.XX = firmware version and XXXX=build number
F <X %>	Indicates the percentage complete of the current firmware update on the Control Panel or Wireless Touchscreen Keypad. Where X=0 - 100%.
DONE	Firmware update successful
CANT UPDATE -- no change	Indicates the Control Panel or Touchscreen is running the same version as the Easy Updater for the GC2, TS1, and GC2E.
CANT UPDATE -- older	Indicates the Control Panel or Touchscreen is running a newer version than the Easy Updater for the GC2, TS1, and GC2E See How to Update the Easy Updater for GC2,TS1, and GC2E below
ERROR N -- YYYYYY	Indicates a device error. Where yyyyyy = error number
C <X %>	Indicates firmware diagnostics procedure occurring

Updating Errors

All updating errors will show *CANT UPDATE -- HHHH* (xxxx = specific update failure reason).

Possible Reasons:

- BAD TARGET* -- connected panel does not correspond to an updatable device
- NO CHANGE* -- same firmware in panel and firmware updater
- OLDER* -- panel firmware is newer than in the firmware updater
- BAD BUILD* -- firmware updater build is invalid or has been erased (please use the Firmware Updater Tool to download the image again).
- BAD BUILD DURING UPDATING* -- firmware updater build was found invalid during flashing (internal check)
- INTERNAL BUILD* -- the UPDV cannot be used to update internal (test) builds, or no firmware payload is present
- BUILD NOT FOUND* -- no firmware payload detected on UPDV Device
- BUILDIS GOOD* -- firmware updater build was validated as correct and complete
- BUILD ERASED* -- firmware payload has been erased
- BUILD IS BAD* -- corrupt payload or no firmware payload is present

All Other Errors

All other errors will show *ERROR N -- YYYYYY* (n = error number, yyyyyy = 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 "beep" 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. - BE- shows bulk erase occurring. Build erased.

SPECIFICATIONS

USB Port	Micro-B socket
Dimensions (W x H x D)	2.32 x 3.70 x 1.00 in.
Weight	.2 lbs.
Housing Material	ABS Plastic
Color	Black

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 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. There are no obligations or liabilities on the part of Nortek Security & Control LLC for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation. All implied warranties for functionality, are valid only until the warranty expires. This Nortek Security & Control LLC Warranty is in lieu of all other warranties expressed or implied.

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