



Tempest® CodeUpdater and Firmware Installation Instructions

What is Tempest® CodeUpdater?

Tempest CodeUpdater is a program specifically designed to update the firmware internal to Tempest Wireless systems. CodeUpdater will automatically detect the firmware version currently installed on your equipment and will indicate to you whether a later version is available. Note: You must have internet access on your PC for CodeUpdater to accurately detect the latest version available. If Internet is not available, the "Advanced" tab can be used to browse to the proper firmware application file. The necessary firmware files can be downloaded from Tempest Wireless Tech Support (<http://tempestwireless.com/support/>) and saved to your PC's local drive.

Why do I need to update my firmware?

Firmware is the internal program that operates and controls the Tempest Wireless BaseStations and BeltStations. It is important to keep your equipment up-to-date with the latest firmware versions available so that you maximize the performance of your Tempest Wireless system. Staying up-to-date gives you access to the newest features and enhancements that Tempest has to offer, as well as fixing programming bugs present in previous firmware versions. To insure proper operation, all Tempest devices must be at the same revision of firmware release. When adding additional Tempest devices to your Tempest Wireless system, ensure that the new devices are at the same version of firmware as your current hardware.

Note: *The latest firmware version is the only supported firmware version*

Required Equipment:

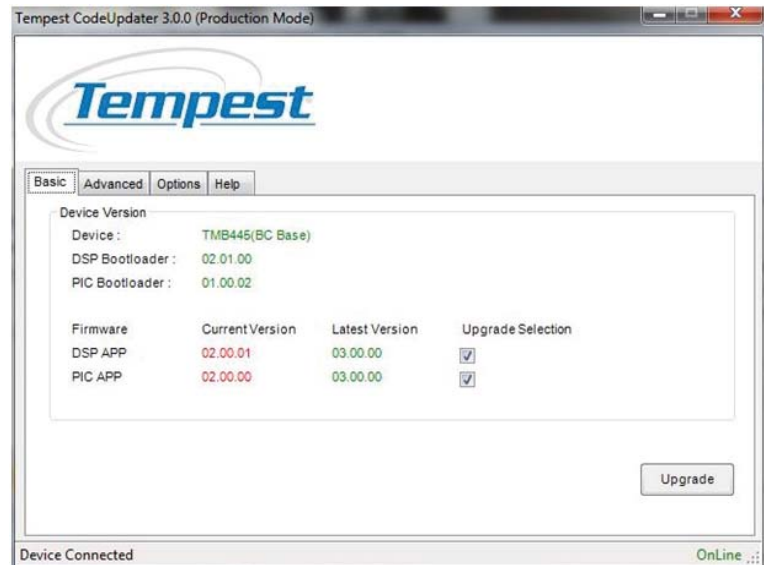
- Windows based PC
- Tempest BaseStation
- Tempest BeltStation (Beltpack)
- USB-A to USB-B cable (for BaseStation update)
- USB-A to USB Mini-B cable (for BeltStation update)
- 3.5mm pairing cable

Important Notes on updating to Firmware version 3.00.00 from any previous Firmware version:

1. Make a note of the following BaseStation and BeltStation settings before beginning the update process:
 - a. BaseStation Network Number, Lockout Key, and Frequency Band - These are displayed in the following menu screen: Menu > BaseStation Settings > Tech Menu > Radio Configuration > Radio Information.
 - b. BaseStation 2-Wire and 4-Wire settings and levels - 2-Wire and 4-Wire status lights are located on the front panel display and level settings are displayed by pressing the "SEL" button next to the "CHAN" lights on the front panel.
 - c. BaseStation Name - This is displayed on the home screen top left corner next to "Base:"
 - d. BeltStation Settings - Make note of any critical BeltStation settings (Talk button settings, Channel Disables, Relay assigns, Min/Max Volume, Mic Gain, Slot Number, etc.).
 - e. Any LAN or IP settings you may have selected for TDesk operation.
2. Once the BaseStation and BeltStation Firmware are updated, all of the Tempest devices will need to have their memory cleared.
 - a. BaseStation: Menu > BaseStation Settings > Tech Menu > Factory Default > Clear Memory.
 - b. BeltStation: Menu > Belt Settings > Tech Menu > Set Defaults > Clear Memory.
3. After the BaseStation and BeltStation memories have all been cleared, verify the BaseStation settings you took note of in Step 1 (Restore if necessary).
4. Pair the BeltStations with the BaseStations with the 3.5mm pairing cable.
5. Verify the BeltStation settings you took note of in Step 1 (Restore if necessary).
6. Test the system.

Updating BaseStation Firmware:

1. Download CodeUpdater
2. Install CodeUpdater on your PC
3. Open Tempest CodeUpdater.
4. Connecting to a BaseStation:
 - a. Be sure the BaseStation is powered OFF.
 - b. Plug in your BaseStation USB firmware cable to your computer and into the front of the BaseStation.
 - c. Press and hold the MIC KILL button on the BaseStation front panel and then power ON. Do not release the MIC KILL button until the BaseStation display message appears: "Mic Kill Button Pressed at Boot Up, For New Image Connect PC Now, or Cycle Power to Cancel". (Note: CodeUpdater will list the model of the equipment connected under the "Basic" tab).
5. In some instances you may be prompted to update Bootloader firmware. If needed you must complete this step before proceeding. See the section in this document titled "Updating Bootloader." **NOTE: When updating the Bootloader it is very important that you not interrupt the update. Be sure the USB cable is securely connected before starting the upgrade process. Interrupting the Bootloader update may require the device to be returned to the factory for re-programming.**
6. The Current Version of firmware will display in CodeUpdater along with the Latest Version available (if applicable). Note: The PIC firmware version is only applicable to the BaseStation firmware. There is no PIC for the BeltStation.

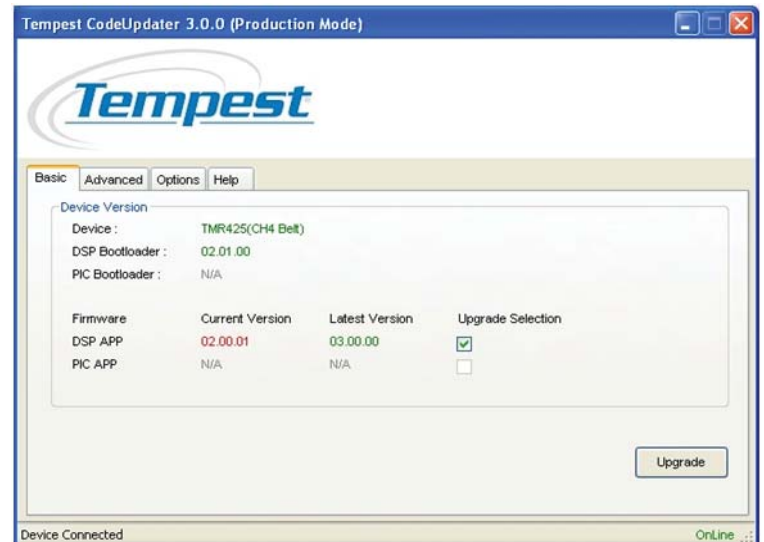


7. If a Latest Version is available check the box under Upgrade Selection and click the <Upgrade> button. A progress bar will appear.
8. Repeat steps 4-7 for additional BaseStations.

Note: When updating a BaseStation manually from the CodeUpdater "Advanced" tab, it is necessary to update the DSP APP, re-boot the BaseStation, connect to CodeUpdater, then update the PIC APP separately.

Updating BeltStation (Beltpack) Firmware:

1. Open Tempest CodeUpdater.
2. To connect the device:
 - a. Be sure the BeltStation is powered OFF.
 - b. Open the rubber plug in the side of the BeltStation to reveal the USB connector.
 - c. Plug in your BeltStation USB cable into the PC, but **do not** plug it into the BeltStation.
 - d. While holding the CALL button on the front of BeltStation, power on the BeltStation, then plug in your BeltStation USB cable into the mini-USB port on the side of the BeltStation.
 - e. Do not release the CALL button until the BeltStation display message appears. (Note: CodeUpdater will list the model of the equipment connected under the "Basic" tab).
3. You may be prompted to update Bootloader firmware. See the section in this document titled "Updating Bootloader." **NOTE: When updating the Bootloader it is very important that you not interrupt the update. Be sure the USB cable is securely connected before starting the upgrade process. Interrupting the Bootloader update may require the device to be returned to the factory for re-programming.**



4. The Current Version of firmware will display in CodeUpdater along with the Latest Version available (if applicable). Note: The PIC firmware version is only applicable to the BaseStation firmware. There is no PIC for the BeltStation.
5. If a Latest Version is available check the box under Upgrade Selection and click the <Upgrade> button. A progress bar will appear.
6. Repeat steps 2-5 for additional BeltStations.

Updating Bootloader (only if prompted):

1. In order to update Bootloader firmware, your PC must be connected to the Internet.
2. Open Tempest CodeUpdater.
3. Connect the device. (Note: CodeUpdater will list the type of the equipment connected under the "Basic" tab).
4. After connecting your device, CodeUpdater will prompt to upgrade Bootloader firmware if one is needed.
5. Upgrading the Bootloader will erase all firmware on the device.
6. **IMPORTANT: When upgrading the Bootloader it is very important that you not interrupt the upgrade. Be sure the USB cable is securely connected before starting the upgrade process. Interrupting the upgrade may require the device to be returned to the factory for re-programming.**
7. After the Bootloader upgrade is complete, the device will need to be re-booted and re-connected to CodeUpdater to install firmware following the update BaseStation or BeltStation instructions above. **Note:** When re-booted after Bootloader upgrade, the BaseStation will display "Application Corrupted, For New Image Connect PC Now, and Load App or Power Down." This is normal, Connect to CodeUpdater and follow the update BaseStation or BeltStation instructions above.

