

June 11, 2013

Firmware Release Notes

MiniTT1®/ FlexTT5® for Nikon

MiniTT1 Firmware Upgrade to version 3.400

FlexTT5 Firmware Upgrade to version 3.400

340.00 - 354.00 MHz, FCC/IC

433.42 - 434.42 MHz, CE

MiniTT1/FlexTT5 for Nikon ControlTL® Firmware 3.400 Overview

Intro: MiniTT1/FlexTT5 for Nikon ControlTL firmware version 3.400 addresses some improvements we have made since the launch of Nikon ControlTL firmware version 3.150.

IMPORTANT:

This new firmware requires that you use PocketWizard Utility version 1.54 or later. It is available for download [here](#). Upgrade to the latest Utility first, then upgrade your radios' firmware.

When updating firmware, be sure to update all of your Nikon radios to the latest version, 3.400. Your radios will only operate as expected when all units are using the latest firmware.

Note: Previously used settings or saved profiles cannot be automatically reloaded after installing the new 3.400 firmware. Make sure to copy down any important settings before loading the firmware because the PocketWizard Utility will perform a factory reset once the installation is complete.

PocketWizard Utility and Factory Reset Note: Always perform a factory reset after updating your firmware. The PocketWizard Utility performs a factory reset automatically when you upgrade the firmware. It also has a Factory Reset button on the Update tab which additionally simplifies factory reset. You can also perform a Factory Reset with the radio: See RESET B [here](#), or simply hold TEST before you power on your radio and continue to hold TEST for 10 seconds until you see 4 blinks (green).

Learn More: Visit the [PocketWizard Wiki](#) for more information on using your radios.

Overview of New Key Features:

- New Camera Compatibility
- HyperSync® Improvements
- USB port power-able
- Modeling Light Control Improvements

New Key Features:

Compatibility with Nikon Cameras:

The following new Nikon gear is supported in this firmware release:

- Nikon D600 camera
- Nikon D3200 Camera

This equipment will work in the ControlTL® system similarly to previous Nikon equipment.

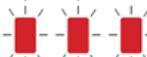
Please review the general Nikon Operational Considerations on the PocketWizard Wiki.

Special Nikon D600 notes:

- This camera will only perform as expected with the ControlTL system if the camera's battery is 50% or greater. Always make sure the camera's battery is fully charged before use.
- Set Custom Function e1 "Flash Sync Speed" to 1/200s (Auto FP) to work with the ControlTL system.
- Nikon D600 firmware – C: 1.01 is recommended:
http://support.nikonusa.com/app/answers/detail/a_id/18267/

Color-blind battery level status LED:

The Nikon MiniTT1 and FlexTT5 Status LEDs previously changed color with battery level, but now they also blink a number of blinks to make the battery level even more apparent.

1 Green blink =	More than 50% remaining		> 1/2
2 Amber blinks =	Less than 50% remaining		< 1/2
3 Red blinks =	Less than 25% remaining		< 1/4

These battery levels are tuned for alkaline batteries in the FlexTT5 and a standard Lithium coin cell in the MiniTT1. Other battery chemistries can work, but their battery level may not be reported accurately.

Nikon MiniTT1 and FlexTT5 now power-able via USB port:

Save batteries! The Nikon MiniTT1 and FlexTT5 can now be powered using a standard AC adapter with a USB Mini-B DC plug like the PocketWizard PW-AC-USB:

http://www.pocketwizard.com/products/cable_accessory/accessories/pw-ac-usb/

Connecting directly to a computer's USB port is only for communication with the PocketWizard Utility, and not for powering the MiniTT1 or FlexTT5.

Introducing the [PW-DC-N10](#), a new accessory for the Nikon MiniTT1 that powers the radio directly from cameras equipped with a Nikon 10-pin port. See the PW-DC-N10 section at the end of these release notes.

HyperSync® Improvements:

Some modest improvements have been made to Nikon ControlTL HyperSync. These improvements are best achieved in the Nikon ControlTL system by checking “HyperSync Only (Disable HSS/FP)” on the HyperSync/HSS tab in the Utility. This is the recommended setting for shooting with studio flash at shutter speeds above X-sync. Some equipment may provide less clipping with this control unchecked, but try checking the control first.

HyperSync timings extended:

The manual HyperSync control, used for HyperSync with Standard Channel receivers like the Plus radios or MultiMAX, now allows for settings down to -2500 (previously the limit was -1600). This allows for improved HyperSync operation for some users.

Not all cameras can use the full range of this setting. Some cameras, like the Nikon D800, will show no change from -1400 through -2500. This is a limitation of the camera. Other cameras, like the D90 or D2X, will be able to get useful results with settings beyond -1600 that were not previously attainable.

More information on how to best optimize HyperSync will be added to the [PocketWizard Wiki](#) in the coming months. Since every camera and flash combination is unique, it is best to experiment and discover your own results!

Improved HyperSync optimizations for the FlexTT5 as receiver:

There is a new control in the PocketWizard Utility for a receiving FlexTT5 called “Optimize HyperSync For.” There are 2 settings: “Reduced Clipping” and “Highest Energy.” They optimize HyperSync timings for the connected flash for a specific photographic result. Connected flashes can include AlienBees, White Lightning or Zeus flashes attached via the [AC9 AlienBees Adapter](#), or a Speedlight in the hotshoe (though Speedlights are often not the best choice for HyperSync flashes due to their short flash durations – if you must use a Speedlight, it will get the best HyperSync performance at full power).

“Reduced Clipping” optimizes for an elimination or reduction of hard black clipping at the bottom of the frame. This causes a smoother gradient of light across the frame at the expense of some flash output power.

“Highest Energy” optimizes for getting as much flash energy in the frame as possible. This makes for less of a gradient in the frame at shutter speeds just above X-sync, but may come at the expense of some clipping at faster shutter speeds.

Modeling Light Control Improvements:

Improved Modeling Light Control for helping with AF-Assist:

Using the controls on the Modeling Tab, you can set your remote ControlTL studio flash to engage its modeling light when the camera requests more light for auto focus. This feature can be useful when you are shooting in a dark venue like a dance hall and you are lighting the room with ControlTL-enabled studio flashes.

Follow these steps to engage the feature:

1. Check the “Modeling Light Control” box.
2. Select “AF-Assist” for the Control Mode.
3. Check the “Modeling Light Sleep” box.
4. Adjust the “Modeling Light Delay After AF-Assist” to suit your situation. This sets how many seconds the modeling light will stay on after the camera asks for AF-Assist.

Depending on how fast you take the picture, the modeling light might also contribute to the scene, but in most cases the light from the flash will be the primary light source and the modeling light's contribution may be negligible.

Other Improvements:

- Changed the default “HSS/FP Begins At (HyperSync Ends)” value to 1/250th. This is helpful for users shooting primarily TTL and looking for an experience very similar to using Nikon's native system. HyperSync users will need to reset this control to their desired preference.
- Changed “P2 HyperSync Flash Duration” for a FlexTT5 when used as a receiver from 1 to 7. This should provide better out of the box performance with many studio flashes.
- Changed default for “HyperSync Flash Duration For Standard Channels” from 1 to 7 as that served more users.
- Improved remote modeling light control in many situations, including when using a camera's Depth of Field Preview button. Note: modeling light control is disabled by default in the PocketWizard Utility.
- Improved a situation where a remote FlexTT5 with an SB-800 attached would not allow you to make mode changes on the Speedlight itself after being triggered by a Sekonic L-478DR or a hand-held MiniTT1 with an AC3 ZoneController. If the Speedlight “locks up” like this, press TEST on the FlexTT5 to restore access to its controls.
- Masterminded a plan to take over the universe, but chose not to for humanitarian reasons.
- Fixed a situation where a D800/D800E would miss remote flash sync if triggered in Continuous High motor drive with certain lenses.
- Fixed a Relay Mode bug where a ControlTL remote flash would trigger one channel higher than desired.
- Corrected “Center on ISO Only – Set ISO Below” PowerTracking method.
- Tested with recent camera firmware releases. Please make sure to update your camera to the latest firmware.
 - D4 - A:1.05/B:1.03
 - D3X/D3S - A:1.01/B:1.02
 - D3 - A/B:2.03
 - D800/D800E - A:1.01/B:1.02

- D700 - A:1.04/B:1.03
- D300S - A/B:1.02
- D300 - A/B:1.11
- D600 - C:1.01
- D7000 - A:1.03/B:1.04
- D3200 - C:1.01
- Tested against other Nikon cameras with no recent firmware changes

PW-DC-N10 Power Cable:

Provides power FROM Nikon cameras with a 10-pin remote terminal TO the Nikon MiniTT1 Transmitter. Requires MiniTT1 firmware 3.173 or later.

- Eliminates expensive MiniTT1 coin cells
- Keeps the MiniTT1 awake for faster reaction time
- Uses very little power – near zero impact on camera battery life

WARNING:

- For Nikon MiniTT1, Plus III, or compatible MultiMAX ONLY. DO NOT CONNECT TO ANY OTHER DEVICE as it may damage your camera.
- Orientation = near the prism. This is different from other Nikon 10-pin accessories like remote or GPS cords. Improper orientation could damage your camera.



IMPORTANT: Power switches on your radio and camera will *not* turn off the radio when using this cable.

The camera's battery will power the radio even when the camera is turned off. A Nikon MiniTT1 set to OFF and powered via this adapter will operate as if set to C.2.

To save camera batteries, do not store the camera and radio with the cable connected.

Recommendation: unplug the USB end. Nikon recommends removing the camera's battery when storing.

Batteries in your radio are not required. The radio will use power from the USB port first. It will switch to its own battery if power is no longer provided via USB.

When powered from USB, the MiniTT1 sleeps after 60 minutes when there is no camera hot shoe communication. This low power state uses the camera's battery at a very low rate. Depending on the camera's battery, it may last many days in this state. Pressing TEST or using the camera will wake the radio.

USB Power Sleep Delay is set in the PocketWizard Utility. It is an Advanced Setting on the Sleep Tab.

© 2013 LPA Design, Inc. All rights reserved. Product features and specifications are subject to change without notice. PocketWizard, ControlTL, MiniTT1, FlexTT5, HyperSync, Plus II, Plus III, PlusX and MultiMAX are either trademarks or registered trademarks of LPA Design, Inc. All other trademarks contained herein are the property of their respective owners.

This product is covered under a warranty. For more information on this warranty and to register your product, please go to www.PocketWizard.com/support.

US Patent: www.pwpatents.com
US and other patents pending.