PocketWizard®

info@pocketwizard.com

September 27, 2011

Firmware Release Notes
MiniTT1® / FlexTT5® for Nikon

MiniTT1 Firmware Upgrade to version 3.003
FlexTT5 Firmware Upgrade to version 3.003
340.00 - 354.00 MHz, FCC/IC; 433.42 - 434.42 MHz, CE

MiniTT1/FlexTT5 for Nikon ControlTL® Firmware 3.003 Overview

MiniTT1 / FlexTT5 for Nikon ControlTL firmware version 3.003 corrected a pre-flash issue that affected exposure when shooting at distances greater than approximately 3 meters from Speedlight to subject. This was a correction made after the recent release of firmware version 3.000. Notes below include all updates included in firmware version 3.000.

IMPORTANT:

When updating firmware, be sure to update all of your Nikon radios to the latest version, 3.003. 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 3.003 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, in the Wiki manual, wiki.pocketwizard.com/reset, or simply hold TEST before you power on your radio and continue to hold TEST for 10 seconds until you see 4 blinks (green).

New Key Features:

Flash Power Control without a camera
Speedcycler with an AC3 ZoneController
HyperSync™ Automation

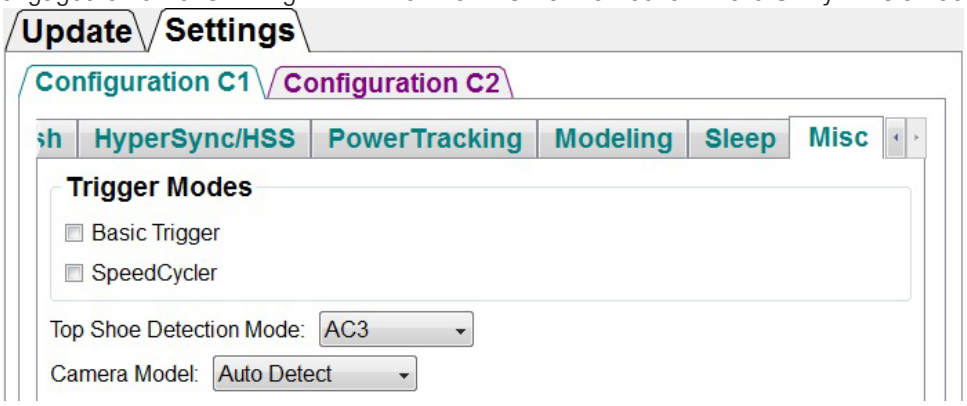
Flash Power Control without a Camera:

Photographers can now take their AC3 and transmitting radio off-camera and use it to set power levels for any flash with a ControlTL receiver, making it more convenient to use an optically triggered light meter, or control the power levels with just a MiniTT1/FlexTT5 and AC3 in their hand while another photographer takes the pictures. Previously, an AC3 ZoneController on a MiniTT1 or FlexTT5 needed to be on camera to send manual power levels to remote flashes. Now, when an AC3 is connected to a MiniTT1 or FlexTT5, manual power levels are transmitted to remote flashes when the TEST button is pressed - even when the transmitter is off the camera. This affects both speedlights connected to receiving FlexTT5s and larger flashes like AlienBees and Elinchrom RX units with ControlTL receivers.

Note: With the exception of Speedlights, flashes need to dump or charge their capacitors when the power level is changed. Pressing the TEST button on the transmitting radio will transmit power level changes and then immediately fire the flashes, so make sure to keep track of your flash's "ready" indicator. You may have to press TEST a second time once the flash is ready to get your desired power level.

SpeedCycler with an AC3 ZoneController:

Previously only seen with our MultiMAX radios, this new mode is designed to rapidly cycle through multiple flash units fired individually in sequence. This allows you to fire a camera in sync with flashes faster than a single flash can recycle. It can also be used for triggering remote cameras sequentially. SpeedCycler is engaged on a transmitting MiniTT1 or FlexTT5 via the PocketWizard Utility. It is an advanced mode.



SpeedCycler mode requires an AC3 ZoneController in the top shoe of the on-camera PocketWizard radio. Zones A, B, and C will be triggered sequentially and individual zones can be disabled by setting the AC3's Zone Switch to the off position. Both TTL and manual flash are supported.

Receiving MultiMAXes can be used instead of FlexTT5s provided they are set to a standard channel between 17 and 32. Make sure to set the Standard Transmit Channel on your transmitting ControlTL radio to match the receiving MultiMAX.

HyperSync™ Automation

A number of enhancements have been made to HyperSync with the MiniTT1 and FlexTT5 for Nikon. These changes can improve the performance of HyperSync and make it easier to configure.

This new method adjusts HyperSync timings in two separate places; on the transmitter and on the receiving ControlTL radio.

The transmitting or on-camera MiniTT1 or FlexTT5 automatically adjusts HyperSync to compensate for changes made to shutter speed. You can further refine HyperSync via the PocketWizard Utility.

The receiving ControlTL radio can additionally compensate for shutter speed and flash power level by automatically making adjustments to achieve the fastest possible sync speed for supported configurations, such as a FlexTT5 with speedlights, an AC9 AlienBees Adapter, a PowerST4, or a PowerMC2. Some configurations require adjustments via the PocketWizard Utility.

HyperSync can now be customized on a per-flash basis. If you have multiple flashes of different makes/models, you can now make HyperSync adjustments individually on each receiving FlexTT5. If you're using an AlienBees flash with an AC9 Adapter, you can specify your flash under the HyperSync/HSS tab in the PocketWizard Utility and the radios will automatically use the best timings for every shutter speed.

You can read more about how HyperSync works on our wiki page here:
http://wiki.pocketwizard.com/hypersync

Configuring Automated HyperSync using a transmitting MiniTT1 or FlexTT5

Using a transmitting MiniTT1 or FlexTT5 on your camera, follow the instructions below for your specific receiving PocketWizard radio and then take pictures normally.

Remote FlexTT5 with Speedlight in the Top Shoe:

You can sync at any shutter speed with the default settings. HyperSync Automation will be used only at 1/320th with Speedlights, after which the transmitting ControlTL radio will switch to using FP Sync instead. On the transmitting radio, adjust the HSS/FP Begins At (HyperSync Ends) control under the HyperSync/HSS tab to specify the shutter speed at which HyperSync Timings are no longer used and FP Sync is engaged.

Automated HyperSync will be used at all shutter speeds faster than x-sync until FP Sync is engaged. Full HyperSync Automation is available with Speedlights on the camera or as remotes, whether controlled from camera position or set manually via the flash's own controls.

FlexTT5 – Flash Connected to P2 Port:

- On the receiving FlexTT5, select the "P2 HyperSync Flash Duration" dropdown menu under the HyperSync/HSS Tab and choose a duration to match the estimated flash duration of your flash.
- Attach the transmitting MiniTT1 or FlexTT5 to your camera. Connect the receiving FlexTT5 to the flash and take pictures normally.

AC9 AlienBees Adapter:

- On the receiving FlexTT5, select the flash connected to the AC9 AlienBees Adapter in the HyperSync/HSS tab of the PocketWizard Utility.
- Attach the transmitting MiniTT1 or FlexTT5 to your camera. Connect the receiving FlexTT5 and AC9 AlienBees Adapter to the flash and take pictures normally.

As of this firmware release, HyperSync Automation is currently implemented for the following Paul C. Buff flashes:

- AlienBees AB400
- AlienBees AB800
- AlienBees AB1600
- AlienBees ABR800 Ringflash
- White Lightning X800
- White Lightning X1600
- White Lightning X3200
- White Lightning Ultra1200
- Zeus 1250 Power-Pack with Standard Head

If your flash is connected to an AC9 AlienBees adapter and is not in the list above, try selecting a flash of a similar power level.

PowerMC2:

- No configuration is necessary. Attach the transmitting MiniTT1 or FlexTT5 to your camera. Connect the receiving PowerMC2 to the flash and take pictures normally.

PowerST4:

- If the receiving PocketWizard radio is a PowerST4 connected to a Ranger RX series or Digital 1200RX/2400RX pack, choose the Elinchom flash head in use under the Misc Tab in the PocketWizard Utility. This control is set specifically on the receiving PowerST4. The Ranger S head will offer better HyperSync performance than the A head due to its longer flash duration.

- Attach the transmitting MiniTT1 or FlexTT5 to your camera. Connect the receiving PowerST4 to the flash and take pictures normally.

  As of this firmware release, HyperSync Automation is currently implemented for the following Elinchrom flashes:

  - Elinchrom Style 300RX
  - Elinchrom Style 600RX
  - Elinchrom Style 1200RX
  - Elinchrom Digital 2400RX with Digital SE Head
  - Elinchrom Digital 2400RX with A6000 Head
  - Elinchrom Digital 2400RX with A3000 Head
  - Elinchrom Digital 2400RX with Mini A Head
  - Elinchrom Digital 2400RX with Mini S Head
  - Elinchrom Digital 2400RX with Digital S Head
  - Elinchrom Digital 1200RX with Digital SE Head
  - Elinchrom Digital 1200RX with A6000 Head
  - Elinchrom Digital 1200RX with A3000 Head
  - Elinchrom Digital 1200RX with Mini A Head
  - Elinchrom Digital 1200RX with Mini S Head
  - Elinchrom Digital 1200RX with Digital S Head
  - Elinchrom Ranger RX with Ranger A Head
  - Elinchrom Ranger RX with Ranger S Head
  - Elinchrom Ranger RX Speed with Ranger A Head
  - Elinchrom Ranger RX Speed with Ranger S Head

If your flash is using a flash head not listed above, try selecting a flash head of a similar power level.

Note: Make sure to install the latest firmware (version 5.100) for the PowerST4 for proper functionality.

PocketWizard radio receiving on a Standard Channel (PLUS® II, MultiMAX, FlexTT5 in Basic Trigger Mode):

On the transmitting radio, adjust the HSS/FP Beings AT (HyperSync Ends) control under the HyperSync/HSS tab to specify the shutter speed at which HyperSync Timings are no longer used and FP Sync is engaged. Triggers on Standard Channels will only be sent at shutter speeds where FP Sync is disabled. Transmitter-side Automated HyperSync will be used at all shutter speed faster than x-sync until FP Sync is engaged.

- For the transmitting ControlTL radio, select the "Flash Duration Selection" dropdown menu under the HyperSync/HSS tab and choose a duration to match the estimated flash duration of your strobe.
- Attach the transmitting MiniTT1 or FlexTT5 to your camera. Connect the receiving PocketWizard radio to the flash and take pictures normally.
- See the P2 HyperSync Flash Duration section for more information.

To use HyperSync at any shutter speed up to 1/8000th and never transition to FP Sync, check the "HyperSync Only (Disable HSS/FP)" box, also under the HyperSync/HSS tab.

New settings are available under the HyperSync/HSS tab of the PocketWizard Utility:

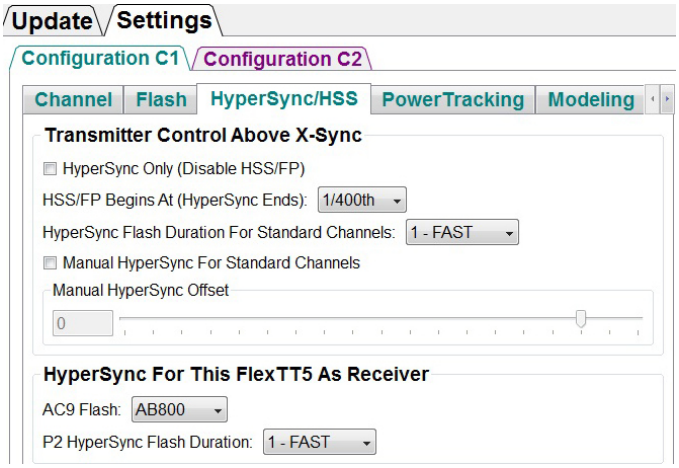
Transmitter Control Above X-Sync

HyperSync Only (Disable HSS/FP)
Leave this box unchecked to have seamless transitions from HyperSync shutter speeds to High Speed Sync (HSS/FP) shutter speeds. Select where HSS begins using the control below.
Check this box to turn off HSS. HyperSync settings will be used for all shutter speeds above X-sync up to 1/8000. Use this mode when you have no TTL remotes.
Default = Unchecked

HSS/FP Begins At (HyperSync Ends):
Select the shutter speed where HyperSync timings are no longer used, and HSS/FP is engaged. Leave this control at the default setting for seamless transition to HSS/FP with any camera. Select a specific shutter speed based on HyperSync performance.

HyperSync Flash Duration For Standard Channels:
1 (FAST) to 10 (SLOW) - These settings automatically take into account the specific shutter timings of your camera, and combines them with an estimated duration of your remote flash.

A setting of 1-3 (FAST) will work best with a flash that has a short duration, like some hot shoe flashes. A 4-7 (MEDIUM) setting would be useful for a medium duration flash, such as an Alien Bees B400 or an Elinchrom 300RX, and an 8-10 (SLOW) setting would fit best for a Profoto Acute series, or higher powered Elinchrom or AlienBees flash. Some experimentation may be necessary to find the best setting for your camera and flash combination. Default - 1 (FAST)



Manual HyperSync For Standard Channels:

Checking this box enables the use of the Manual HyperSync Offset Control.

HyperSync Automation is still used in the transmitter to detect your specific camera model's shutter timings. This control adjusts how remote flashes connected to Standard Channel receivers like the PLUS® II or MultiMAX will trigger relative to your camera model's timings.

If you have previously found your HyperSync offset and would like to continue using that method, select this menu option and set the offset with the slider control below. A manual HyperSync value used in the previous production firmware is not likely to work, however, and you will need to test again to find your new HyperSync value. This is because of the new HyperSync Automation camera detection which was not used in previous firmware. Default = not checked

HyperSync For This FlexTT5 As Receiver

These settings improve HyperSync timings for the flash connected directly to this FlexTT5 when used as a remote.

AC9 Flash:

Use this setting to choose the flash connected via an AC9 AlienBees Adapter to a receiving FlexTT5. Selecting your flash here will optimize HyperSync for that specific model.
Defalt = AB800

P2 HyperSync Flash Duration:

This setting controls the automatic timings used by a receiving FlexTT5's P2/Flash port. HyperSync Automation is still used in the transmitter to detect your specific camera model's shutter timings. If you have a smaller flash or Speedlite connected via the P2/Flash port, start by testing with lower numbers. If you have a studio strobe or larger flash, you'll likely see the best results with higher numbers. Default = 1-FAST

A setting of 1-3 (FAST) will work best with a flash that has a short duration, like most hot shoe flashes. A 4-7 (MEDIUM) setting would be useful for a medium duration flash, such as an Alien Bees B400 or an Elinchrom 300RX, and an 8-10 (SLOW) setting would fit best for a Profoto Acute series, or higher powered Elinchrom or AlienBees flash. Some experimentation may be necessary to find the best setting for your camera and flash combination.

There are thousands of possible camera and flash combinations and we haven't tested them all. We'd love to hear your results, what camera and flashes you're using, and the successful settings you used. Please send feedback to info@pocketwizard.com. HyperSync results rely on very specific timings of the combined camera and flash system.

Operational Notes:

- Corrected a pre-flash issue that affected exposure when shooting at distances greater than approximately 3 meters from Speedlight to subject.
- Implemented support for the D5100.
- Enabled 14-Bit RAW mode for the D300, D300s, and D3x.
- Corrected an issue where banding could appear in images when using a Speedlight in Master Mode with D90, D7000, D300s, D700, or D3x while using FP sync.
- Corrected a synchronization issue with the D2X using an AC3 when FP sync was enabled.
- Improved sync timing reliability when using a MiniTT1 with a D700 or D7000 and a Speedlight in Master Mode at FP sync shutter speeds.
- Resolved an issue with the D200 where it could fail to synchronize properly when triggering Speedlights in TTL mode.
- Improved flash synchronization with the D3s and D90 when using a receiving PowerMC2 or PowerST4.
- Fixed a potential flash synchronization issue with the D3s when rear curtain sync was enabled and the aperture was set to near f/20.
- Improved flash synchronization with the SB-600 at lower manual power levels and fixed a bug with the SB-600 where it would only fire at full power when set to manual mode.
- Implemented compatibility with the SB-700 flash for TTL and Manual operation, both as a Master and remote. NOTE: Use of GN / A:B Ratio mode is not supported.
- Implemented support for color correction gels with the SB-700 and SB-900.
- Improved exposure accuracy with a remote SB-800 for exposures immediately following an aperture change.
- Fixed an issue where an SU-800 could power off instead of firing its AF-assist beam..
- Fixed a bug where an SB-900 in Master Mode could stop responding if AA mode was selected for group B. AA mode is still not supported.
- Fixed a bug where triggering a flash connected to an AC9 AlienBees Adapter with the TEST button on a transmitting FlexTT5 could cause intermittent trigger failures.
- Corrected a phenomenon where changing the mode of the Master zone on a Speedlight in the top shoe of a MiniTT1 could interrupt communications.
- Fixed a bug where light from the AF-assist beam would occasionally be visible in images.
- Fixed an issue that could cause the camera to back-focus in dim lighting conditions when no AF-assist beam was used.

- Added support for AF-assist with cameras that have an AF-assist lamp built into the camera body.
- Improved reliability of triggers subsequent to a TEST button press on a transmitting FlexTT5.
- Fixed a phenomenon where remote flashes could change their power levels when the camera woke from sleep.
- Fixed a bug where Speedlights would fire at a lower than expected power level when using HyperSync
- Corrected a synchronization issue that could occur while transitioning between HyperSync and FP Sync.
- Fixed an issue where synchronization problems could occur when using HyperSync unless an image was taken using FP sync first.
- Improved high temperature operation.
- Reduced the amount of time required to wake a MiniTT1 from sleep.
- Fixed a bug where TEST button presses wouldn't always transmit on all zones.
- Broadened compatibility with unsupported flashes in the top shoe of a MiniTT1 or FlexTT5 at shutter speeds faster than x-sync.
- Improved exposure consistency with a transmitting FlexTT5 when quickly pressing a camera's shutter button while the camera is asleep.
- Implemented support for remote TTL flash sleep.
- A MinTT1 or FlexTT5 on-camera now blinks red in sync with camera triggers at all shutter speeds.
- Fixed an issue where a FlexTT5 in Basic Trigger Mode connected to a remote camera would stop triggering if the radio's TEST button was pressed.
- With PowerTracking enabled, flash power levels now only track with aperture and ISO changes after the center point has been set with the first shot.
- Improved behavior with Continuous Shooting Mode when triggering a camera remotely.
- Fixed an issue where a remote camera could fire multiple times from a single TEST button press when set to High Speed Drive mode.
- Fixed a bug where a MiniTT1 wouldn't transmit until power cycled after making changes via the PocketWizard Utility.
- Fixed an issue where an on-camera master flash would fail to fire at the camera's x-sync speed, if "ControlTL Priority at X-sync" was unchecked in the PocketWizard Utility.

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 Numbers: 5,359,375; 7,437,063; 7,702,228
US and other patents pending.