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# **Firmware Release Notes** MiniTT1°/ FlexTT5° for Canon

*MiniTT1 Firmware Upgrade to version 6.150 FlexTT5 Firmware Upgrade to version 6.150* 340.00 - 354.00 MHz, FCC/IC 433.42 - 434.42 MHz, CE

# **MiniTT1/FlexTT5 for Canon ControlTL® Firmware 6.150 Overview**

**Intro:** MiniTT1/FlexTT5 for Canon ControlTL firmware version 6.150 addresses some improvements we have made since the launch of Canon ControlTL firmware version 6.000.

### **IMPORTANT:**

This new firmware requires that you use PocketWizard Utility version 1.35 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 Canon radios to the latest version, 6.150. 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 6.150 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:**

- Compatibility with new Canon equipment
- Added Support for the Sekonic RT-32CTL
- Added Optimized Rear Curtain Sync Utility Control

# **New Key Features:**

# **Compatibility with new Canon equipment:**

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

- 600EX-RT Speedlite
- ST-E3-RT Speedlite Transmitter

This equipment will work in the ControlTL<sup>®</sup> system similarly to previous Canon equipment.

Please review the general Canon Compatibility section of the PocketWizard Wiki.

#### The following modes are supported:

- Master E-TTL
- Master Manual
- Remote E-TTL
- Remote Manual

#### The following modes are not supported:

- Multi (stroboscopic) is not supported.
- Group mode is not supported.
- "ALL" selection is not supported, but Ratios are available in supported Master modes.

Just like with all other Canon Speedlites, it is important to make sure that Speedlites mounted on remote FlexTT5s are set to standard E-TTL mode and \*not\* remote or slave mode.

#### Canon 5D Mark III not supported:

- This firmware does not provide support for the Canon 5D Mark III, 1DX, or Rebel T4i.
- As of this date, the Canon 5D Mark III is being reverse engineered and is our highest firmware priority. Learn more about our firmware development plan here:

http://www.pocketwizard.com/news\_events/news/firmware\_release\_plan/

# Added support for the Sekonic RT-32CTL module:

Sekonic has started shipping the RT-32CTL module for use in compatible light meters. Learn more here:

http://www.sekonic.com/Products/All/Accessories/RT-32CTL-Radio-Transmitter-Module-for-L-358-and-L-758-series.aspx

Using this module in your Sekonic light meter allows you to trigger ControlTL® radios receiving on ControlTL channels. This allows you to use an AC3 ZoneController on your



transmitting MiniTT1 or FlexTT5 to set your remote flash power levels, and then meter those remote flashes using your compatible Sekonic light meter all wirelessly within the ControlTL system.

The firmware in the MiniTT1 and FlexTT5 has been upgraded to support this operation with the following features:

- Meter remote Speedlites mounted on FlexTT5 radios and controlled by an AC3 ZoneController in Manual Mode (HSS/FP and TTL metering not supported).
- Meter remote AC9 AlienBees Adapter compatible flashes.
- Take your MiniTT1 or FlexTT5 with AC3 ZoneController off your camera and set levels away from camera position. This feature was previously implemented, but the latest release improves that operation substantially. It also makes adjusting levels when using any light meter in non-cord mode simpler, including Sekonic meters without an RT-32CTL module.
- Use your MiniTT1 or FlexTT5 with an AC3 ZoneController on nearly \*any\* camera with a basic hot shoe. Get Manual Power Control for Mamiya, Leica, Hassleblad, etc. Trigger any ControlTL receiver in sync up to 1/125 on some camera models.

The latest PowerST4 (5.100) and PowerMC2 (2.200) firmware supports triggering from the Sekonic RT-32CTL module.

#### **Operational Notes:**

You can always press TEST on your camera's ControlTL transmitter or trigger the camera to set the power level you just dialed in on your AC3 ZoneController. Sometimes you don't need to do that, which can be very convenient.

- If you only want to remember one thing, then remember this: you can always press TEST on your ControlTL transmitter after you set a power level on your AC3 and wait for flash recycle before metering, to get the best results.
- When the transmitter+AC3 is OFF camera, you usually do not need to press TEST. AC3 power dial changes are made "real time." When the Sekonic meter triggers the ControlTL receiver, it will be with the power level set on your AC3. This is very convenient when taking your AC3+transmitter on set to make incident readings and adjustments. NOTE: If the MiniTT1 has fallen asleep when you've taken it off camera, you need to press TEST to wake it up again. It stays awake for about 3 minutes when off camera. The FlexTT5 does not sleep.
- When the transmitter+AC3 is ON camera, and your remote flashes are PowerST4, PowerMC2, or AC9 connected, you usually do \*not\* need to press TEST or trigger the camera before taking a meter reading. AC3 power dial changes are made "real time" for studio flashes, however you may need to "dump" your flash if going from a high power level to a lower one rapidly.



- When the transmitter+AC3 is ON camera, and your remote flashes are Speedlites, you should always press TEST or trigger the camera before taking a meter reading. See Special Considerations below.
- If the meter reading doesn't make sense to you or returns an error, press TEST on the transmitter, wait for your flash to recycle, and meter again.
- Remember, studio 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.

#### **Special Considerations:**

If you always press TEST on your AC3's transmitter after changing an AC3 power dial, or you always change your power levels with your AC3+transmitter off camera, then you can ignore these special considerations.

The ControlTL system handles studio power and Speedlite power separately. Studio power can move around in a more "real time" fashion from the AC3 when the transmitter is on camera and the camera is awake, but there is little time left over for treating remote Speedlites the same way. Speedlites usually get their power levels at the moment of trigger and not before. Therefore, some special considerations need to be considered when at tempting real time adjustments of remote Speedlites from the camera.

• MiniTT1+AC3 on camera = TEST \*must\* be pressed on the MiniTT1 to set remote Speedlite levels.

A MiniTT1+AC3 on camera will not send out AC3 dial change information to Speedlites when the camera is awake unless you press TEST on the MiniTT1. The MiniTT1 sleeps when the camera sleeps and does not send out AC3 dial change information when asleep, but when TEST is pressed it will wake up and send the information.

• FlexTT5+AC3 on camera = TEST may need to be pressed on the FlexTT5 to set remote Speedlite levels.

If you are using a FlexTT5+AC3 on camera, it will not send out AC3 dial change information to Speedlites when the camera is awake. If the camera is asleep however, changes to an AC3 Power Dial will set the remote Speedlites power level.

#### Using a MASTER flash or ST-E2 / ST-E3 instead of an AC3:

All of the special considerations apply when using a MASTER flash or controller like the ST-E2 in place of the AC3.

When using these devices to control remote Speedlite power level, the transmitter must be on camera and you must press TEST on the transmitter to set the remote power levels. You cannot use this combination off-camera.



# If you only want to remember one thing, always press TEST on your ControlTL transmitter after you set a power level.

Cheat sheet for when you \*don't\* need to press TEST before metering:

- AC3+Tx off camera? Usually no TEST required!
- Camera asleep and FlexTT5 as Tx? No TEST required!

Cheat sheet for when you \*must\* press TEST before metering:

- Remote studio light needs to dump? Press TEST before metering.
- On camera and camera's awake? Press TEST before metering.
- MiniTT1 asleep? Press TEST before metering.
- Just powered on? Press TEST before metering.
- Just slide an AC3 or MASTER flash onto your transmitter? Press TEST before metering.
- Using a MASTER or ST-E2 / ST-E3 on camera? Press TEST before metering.

#### Sekonic RT-32CTL Channels:

When using the RT-32CTL module in your compatible Sekonic Light Meter, it will trigger both a Standard Channel and a ControlTL Channel with a single press of the meter's measuring button.

Standard Channels are used in Plus II, Plus III and MultiMAX radios, as well as many flash packs with built-in PocketWizard radios.

ControlTL Channels are used with the MiniTT1, FlexTT5 with Speedlites, FlexTT5 with the AC9 AlienBees Adapter, PowerST4, and PowerMC2.

Learn more about PocketWizard Channels here.

Newer L-758 DigitalMaster light meters can select Standard and ControlTL Channels and zones independently. Review the manual for your light meter or your RT-32CTL manual for more information.

The L-358, and previous versions of the L-758 meter, use a channel mapping mode to pair up Standard and ControlTL channels automatically. Refer to your RT-32CTL documentation for a list of the mapped channels.

# Added Optimized Rear Curtain Sync Utility Control:

A new feature has been added to the Utility under the Flash tab:

[] Optimized Rear Curtain Sync / Manual Shutter Speeds

Check this box in the Utility if you are using manual shutter speeds and would like the benefit of Optimized Rear Curtain Sync as described here:

http://www.pocketwizard.com/inspirations/technology/rear\_curtain\_sync/

Leave this box unchecked in the Utility (default operation), if you are using Aperture Priority

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or other automatic modes that adjust the shutter speed. You can use Aperture Priority mode and Rear Curtain Sync together, but not with optimized timings. If you check this box while using Aperture Priority, you may experience missed flash events or dark/clipped frames.

# **Other Improvements:**

- Improved default Aperture Priority combined with Rear Curtain Sync operation. See "Added Optimized Rear Curtain Sync Utility Control" above.
- Corrected FlexTT5 Pre-Trigger operation when used as a remote camera trigger with an ACC cable in Basic Trigger Mode with a MultiMAX.
- When selecting Basic Trigger Mode, the default channel is now 1 instead of 32.
- Improved reliability of getting the first shot when waking a Canon camera from sleep.
- Changed AC3 operation so that when a zone is switched off, it no longer allows a remote Speedlite on that zone to trigger at a very low power level.
- Fixed a situation where using an AC3 ZoneController on a MiniTT1 or FlexTT5 off-camera wouldn't trigger a PowerST4 for the first TEST press.
- Small improvements made in "No Change Trigger Only" mode.
- Fixed a bug where -1.7 on an AC3 ZoneController in Manual mode used a -3.0 setting.
- Corrected an occasional issue when using the +1 manual setting on an AC3 Zone-Controller caused an incorrect power level to be used at certain HSS shutter speeds.
- Made camera selection on the Misc Tab alphabetical instead of chronological.
- Calibration shot no longer triggers any flashes, remote or on-camera. This conserves battery power and helps indicate the calibration shot. Previously any flash energy appearing in the calibration shot was purely coincidental and sometimes caused confusion.
- Default Settings Change: Rear Curtain Sync is now disabled by default. Most users were not using it and were confused by the operation. Users that understand when to use Rear Curtain Sync can enable it as needed.
- Improved operation at X-sync immediately after disconnecting a Canon MiniTT1 or FlexTT5 from a USB cable while running the PocketWizard Utility and not power-cycling the radio.
- Corrected a clipping situation with the 7D at 1/320 shutter speed.
- Improved 7D operation with Rear Curtain Sync when using a flash on-camera with a ControlTL transmitter.
- Improved 5D Mark II operation at 1/250 shutter speed when using a flash on-camera with a ControlTL transmitter.



- Improved HyperSync<sup>®</sup> Automation performance of the 1D Mark III and 1D Mark IV. Fixed an issue where a 580EX II in Master Manual mode wouldn't send FEC commands for Zones B and C.
- Corrected logic when using an AC3 ZoneController so that when all Zones are turned off (A, B, and C), Standard Channel Zone D also turns off just like in the Nikon radios.
- Reduced the likelihood of clipping or banding in a 5D using rear curtain sync.
- Reduced the likelihood of bottom frame banding or clipping in a 5D at HSS shutter speeds.
- Fixed rear curtain sync operation when using an AC9 AlienBees Adapter.

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