

At Model Sounds Inc., we are committed to delivering the highest quality products that we know how to make. We are also committed to continually improving our products by improving, or offering increasing functionality in an easy to use manner. We therefore may publish frequent firmware and software updates for our latest **ShockWave 3** sound module.

Below is a list of the various revisions which reflect these changes in firmware and/or software.

ShockWave 3 5.1.0 Release Notes - Date : June 20, 2020

1. ShockWave 3 Sound Module

- a. Fixed Play Once sounds not being switched off when using RC 1x1 input mode.
- b. Fixed -ve Logic Sense on Logic Level input configuration not working.
- c. Fixed SOUND3, SOUND4 and SOUND5 inputs not responding to logic level inputs.
- d. Fixed RC Remote Volume Control on SOUND1 input not working.
- e. Added mandatory BasicHardwareSettings.txt file to simplify some basic hardware settings and allow them to be manually edited in a simple text file.
- f. Added new unique Remote Scroll-Through Mode feature to announce the name of the selected sound set and to scroll up and down through the specified sound set folder using a remote RC channel on SOUND1 input.
- g. Fully support the new DopplerFX feature.
- h. Added a new DopplerFXSettings.txt file on the microSD card.
- i. Migrated DopplerFX Speed Multiplier and Satellite Mode Settings from the 6-position switch into the DopplerFXSettings.txt file on the microSD card.
- j. Removed Remote DopplerFX Speed Multiplier option. Speed Multiplier is now set solely in the DopplerFXSettings.txt file on the microSD card.
- k. Removed DopplerFX Use Altitude option as it diluted the effect of ground speed calculations.
- l. Migrated the Throttle Setup Mode from the 6-position switch into the BasicHardwareSettings.txt file on the microSD card.
- m. Clarified usage of push buttons in the ShockWave 3 Hardware Reference manual.

2. ShockWave 3 PC Windows Application

- a. Clarified correct power up sequences and when to include and not include the microSD card inside the ShockWave 3 module in the ShockWave 3 Software manual.
- b. Corrected many incorrect tooltips in the Control Panel->Hardware Tab.
- c. Added new Stop All button in Main Window to stop playing all sounds in case you are playing multiple sounds and forgot which ones.
- d. Fixed Engine Control Form usually not working on first attempt.
- e. Updated Control Panel->DopplerFX Tab to include DopplerFX Speed Multiplier and Satellite Mode Settings which are now stored in the DopplerFXSettings.txt file.
- f. Updated Control Panel->Hardware Tab to include Throttle Setup Mode which is now stored in the BasicHardwareSettings.txt file.

ShockWave 3 5.0.2 Release Notes - Date : July 20, 2019

1. Fixed Analog Voltage control for Engine1 and Engine2 not working.
2. Fixed THTTL2 engine startup not working properly.
3. Added 3-position RC switch option for THTTL1 input pins in Control Panel->Hardware Tab.
4. Low Battery voltage alarms now supported in Control Panel->Hardware Tab.
5. Added "Output Active High" option to all four switched outputs – useful for driving logic circuits directly.
6. Added optional Engine Speed Changes Uses Frequency Multiplication in Control Panel->Hardware Tab (not compatible with DopplerFX and only if the engine sound is the only sound playing).
7. Added Throttle Ranges "Auto Set" button/function in ShockWave 3 PC application. This allows the user to set the engine startup sound throttle range and all subsequent steps can then be automatically calculated and displayed.
8. Introduced a new optional HardwareSettings.txt file in the microSD card root folder that can specify some basic Hardware settings such as Startup Delay Time without using the ShockWave 3 PC software application.

ShockWave 3 5.0.1 Release Notes - Date : March 29, 2019

1. More system sounds added. System Sounds are on by default.
2. Enabling/disabling of system sounds using pushbutton 1 now supported.
3. Setting of system sounds relative volume using pushbutton 2 now supported.
4. Remote setting of DopplerFX Use Altitude Option now supported.
5. Release notes removed from the hardware and software reference manuals and added to this new standalone RELEASE NOTES document.

ShockWave 3 5.0.0 Release Notes - Date : March 01, 2019

1. Initial Release of **ShockWave 3**.
See accompanying document **ShockWave3-ShockWave2 Differences.pdf** in the "Additional Documents" folder of the **ShockWave 3** microSD card.
2. Multi-Engine Sync. feature not yet supported. Reserved for a future release.
3. Low Battery voltage alarms not yet supported. Reserved for a future release.
4. Enabling/disabling of system sounds and setting of system sounds relative volume not yet supported.
5. Remote setting of DopplerFX Use Altitude Option not yet supported.