



## Release Notes: F-750

### Version 1.2.0.6754

Release Date: November 2, 2016

This firmware version is compatible with Hardware version 10\*. It is not compatible with hardware versions lower than 10

\*To identify your hardware version, it is the middle number on the serial number of the device:



### Additions:

adds a driver for the speaker (SETUP INSTRUMENT>NOTIFICATION SOUNDS>SPEAKER). The speaker beeps after a measurement if enabled. Fixed Github #673

### Version 1.1.0.5702

Release Date: January 6, 2016

### Fixes:

- Spectrometer signal noise reduced caused by SD card
- Records delete correctly from the SD card
- Device stability with Power Saver Mode On
- Specimen ranges display correctly in large training sets
- F-750 doesn't freeze when taking a scan with a corrupt SD card
- F-750 doesn't freeze when SD card is removed during a scan
- Loading models works correctly with 8 or more models



- Training sets do not give error with corrupt SD card
- Creating duplicate prefixes doesn't delete other prefixes
- Intercept Coefficients menu can be viewed
- SD card no longer corrupted if ejected while viewing measurements

#### **Additions:**

- Onscreen lot averaging has been added, which updates the average after every measurement in a lot
- Bad model files (e.g. renamed or converted files) are skipped/ignored
- Spectrometer Temperature Compensation got implemented.
- Fonts included to support different languages
- Ability to run scripts
  - Scripts are files that can be loaded to the F750 SD card (not in any folder) that, when inserted into the device, automatically run the commands listed by the user/script writer.
  - Scripts are created by listing commands in the following format:
    - {RIGHT}
    - {RIGHT}
    - {DOWN}
    - {RIGHT}72

These commands correspond to the respective buttons one would use on the device to manually apply the desired settings. Scripts allow this to happen much faster by automatically running when the device powers on.

- Commands include LEFT, RIGHT, UP, DOWN, SLEEP (for pauses to prevent crashing), and RESET (to shut off the device). The user may also set desired values by following the command with a number, e.g. {RIGHT}72.
- The SLEEP command must be followed by the length of the desired pause in milliseconds, e.g. {SLEEP, 500}

#### **Changes:**

- Model limit increased to 1000
- Saturation Levels change from min 80% and max 85% to min 75% and max 80%
- The following advanced settings have changed:
  - Lamp Automatic Gain is removed
  - Maximum Integration Time is now 1000 ms (previously it was 3000 ms)



- Spectrometer ADC Gain is now called "DAC Offset". Value should be set to 0.4. The instruments don't need Set Zero & Span calibrations.
- Watchdog is Enabled, which helps fix freezes
- Power Saver mode is Enabled

**Known Issues:**

- Code needed to turn off device if it overheats
- Predicted values are different between devices
- Device will record spectra without temperature correction
- Analog power should only be on when needed
- Ejecting the microSD card causes errors (not an issue for those who don't have a microSD)
- GPS does not save the last location recorded
- Lamp timeout can't be set to values less than 61
- If Lamp Off Shutter Closed is disabled under Advanced settings of a training set, spectra is incorrectly calculated.
- Scans to average field displays as 1 but initial value is 4 (when a new model is loaded).
- Date and Time Format Not Clearly Defined. It should be entered as mm/dd/yyyy