

KC901 Firmware Upgrade Steps

Upgrade Steps

- 1. Please download the latest ROM package.
- 2. After downloading, if it is a zip package, you need to unzip it. Copy this ROM package into the root directory of the TF card. Insert the TF card into the TF card slot located on the right side of the instrument.
- 3. Power off the analyzer, and then press the last three keys of the topmost soft menu buttons of the instrument (the 3rd to 5th buttons counting from left to right) at the same time. After all three buttons are pressed together, briefly press the [CS] button and hold the right three buttons of the soft menu until the Firmware Upgrade screen appears.
- 4. If the operation in step 3 is successful, the Upgrade Firmware screen will appear and ask if you want to upgrade. Select YES and wait for the upgrade to complete.
- 5. When the upgrade is complete, the analyzer will prompt for completion, and after pressing the YES key, the device will automatically reboot and operate normally.

Note: Do not unplug the SD card, plug in the USB, etc. during the upgrade process.

Handling of abnormal situations

In the event that the upgrade does not go smoothly, the KC901 may return an error message, or there may be abnormalities such as: the interface stays on, a completely black screen, it cannot be turned on, and the backlight is on but there is no display. In any case, the device will not be damaged.

Please check if the TF card has stored the upgrade package correctly, and then start the upgrade from the beginning. That is: Press and hold the upper right three buttons, then press the [CS] button for more than 1 second, release the [CS] button and wait for a few seconds or ten seconds (at this time, still keep pressing the three buttons) until the system enters the upgrade package again.

If there is no prompt for successful upgrade, i.e. reboot or shutdown, the program may not have been fully upgraded, and you need to re-execute the complete upgrade steps until the prompt for successful upgrade appears.

On rare occasions, the analyzer may suddenly shut down during an upgrade and fail to restart the upgrade function. This condition usually results from occasional abnormal CPU behavior, and is generally a small probability of occurrence. When this happens, the upgrade program has erased the original firmware, including the battery management aspect. Therefore, in this case, it is necessary to disassemble the case, remove the battery, and then plug in the charger and re-execute the upgrade.

The following is a description of each of the error messages:

- 1. Could not find the SD card, please insert SD card! Note: At this time, the KC901 does not find the TF card, please unplug it again and try again.
- 2. SD card file system error! Note: At this time, KC901 found that the file system on the SD card is corrupted, please format the TF card (FAT32) with a card reader on your computer and follow the steps to upgrade again.
- 3. Could not find the update file! Note: At this time, the KC901 does not find the ROM package, please make sure the ROM package has been loaded in the TF card and the name has been changed to 901SPRom.bin.
- 4. Error occurred while writing data in application memory! Or: Written Data in flash memory is different from expected one! *Note: This error is usually caused by calibration failure, please make sure the analyzer power supply is normal, the upgrade package is a complete copy of the upgrade package, the upgrade package belongs to the correct model (to avoid confusion with the upgrade package of other instruments), and reboot to try to upgrade.*