

# LV5600 / LV5350 / LV5300 / LV7600 / LV7300 WAVEFORM MONITOR / RASTERIZER

## INSTALLATION MANUAL

(UPDATING FIRMWARE)

Thank you for purchasing.

Please carefully read this instruction manual and the included "GENERAL SAFETY SUMMARY". Please use the product safely.

### 1. INTRODUCTION

This instillation manual describes the procedure for updating the LV5600 / LV5350 / LV5300 / LV7600 / LV7300 firmware.

Read the software license agreement on the LEADER's homepage, and this manual before downloading the firmware.

### 2. Terminology Used in This Manual

• SER\*\*

LV5300-SER\*\*, LV5350-SER\*\*, LV5600-SER\*\*, LV7300-SER\*\* and LV7600-SER\*\* are referred to as SER\*\*.

### 3. EQUIPMENT REQUIRED

Procure the following equipment on your side.

LV5600 / LV5350 / LV5300 / LV7600 / LV7300 mainframe	
USB memory	≥256 MB
PC	USB connector provided

### 4. BACKUP

When you update the firmware, the current panel setting will be lost. If you want to use them after updating the firmware, save them to the instruments preset.

For details of the preset see "Instruction Manual for LV5600 / LV5350 / LV5300 / LV7600 / LV7300".

### 5. CONFIRMING VERSION

Confirm the firmware version of the LV5600 / LV5350 / LV5300 / LV7600 / LV7300 mainframe before updating the firmware. When the version of the mainframe is the same as the version being distributed, no updating is required.

• Confirming the version on the startup screen

To confirm the version, view the bottom left of startup screen displayed immediately after the power is turned on.

• Confirming version on the system information tab

Pressing the SYS and  $\boxed{F \cdot 3}$  SYSTEM INFO sequentially displays the system information tab. Confirm that the version is displayed in the "Firmware" column.

### 6. DOWNLOADING AND COPYING THE FILE

Apply the procedure below when downloading and copying the update file.

- 1. Download the firmware from the LEADER's homepage.
- 2. Save the file to the PC.

The following file is saved. The file is automatically assigned a name that consisted of the instruments name, the downloaded year, month, day, hour, minute, second (in that order).

For LV5600 I leader\_lv5600\_yyyymmddhhmmss.zip For LV5350 For LV5300 I leader\_lv5300\_yyyymmddhhmmss.zip For LV7600 I leader\_lv7600\_yyyymmddhhmmss.zip For LV7300 I leader\_lv7300\_yyyymmddhhmmss.zip

3. Decompress the file being saved.

The file is compressed in ZIP format. To decompress the file, use the decompressing software procured on your side.

The ZIP file in the folder is as follows after the file is decompressed.

(The version are displayed at the "\*".)

```
Lv5600_5350_5300_7600_7300_ver*_*.zip
```

3. Decompress the firmware ZIP file.

The folder is as follows after the ZIP file is decompressed.

LV5600\_5350\_5300\_7600\_7300\_UPDATE

4. Copy the file to the USB memory.

Copy the decompressed folder at the top of the USB memory.

- USB memory
- LV5600\_5350\_5300\_7600\_7300\_UPDATE

### 7. UPDATING

When SER06 is installed and you update the firmware version from 4.5 earlier to 4.6 later, you need twice updating to the same firmware version. Update to follow the procedure "7.1 Twice updating when SER06 is installed".

When SER06 is installed and you update the firmware version to 4.6 later after downgrading it from 4.6 later to 4.5 earlier, you have to initialize the firmware of SER06. Update to follow the procedure "7.2 Initialization updating when SER06 is installed ".

Other than the above case, apply the procedure below when updating the firmware.

1. Insert the USB memory, which are saved the folder copied at Chapter 6, "DOWNLOADING AND COPYING THE FILE", to the instruments USB connector keeping the power on.

When the USB memory devices is recognized, the USB memory icon  $\checkmark$  appears in the upper right of the screen.

2. Pressing  $SYS \rightarrow F \bullet 7$  INITIALIZE  $\rightarrow F \bullet 7$  FIRMWARE UPDATE in order, then the update screen will appear after about 30 seconds.

<< CURRENT INFORMATION >> is shown the current firmware version.

<< UPDATE INFORMATION >> is shown the firmware version saved in the USB memory.

Confirm that the firmware version saved in the USB memory should be later (larger number) than the current version.

■ Note

When the USB memory is not inserted or the update folder in the USB memory is not correct, "FIRMWARE UPDATE" doesn't appear on the  $\boxed{\mathbf{F} \cdot \mathbf{7}}$  key.

3. Start the update pressing  $F \bullet 3$  UPDATE.

If you cancel the update, press F•1 UPDATE CANCEL and eject the USB memory.

When the update starts, the screen disappears once, "UPDATE" is displayed in the center of the screen, the firmware version is displayed in the lower left, and then the update screen is displayed.

During update, the progress status bar is displayed.

When the update is finished, the instruments is rebooted automatically.

■ Note

During update, not eject the USB memory and not turn off the power.

4. Confirm the version.

Confirm that the version of the mainframe, as described in Chapter 5, "CONFIRMING VERSION" (page 1), to know that the update operation is correctly performed.

5. Eject the USB memory from USB connector.

#### 7.1 Twice updating when SER06 is installed

When SER06 is installed and you update the firmware version from 4.5 earlier to 4.6 later, you need twice updating to the same firmware version.

Apply the procedure below when updating the firmware.

 Insert the USB memory, which are saved the folder copied at Chapter 6, "DOWNLOADING AND COPYING THE FILE", to the instruments USB connector keeping the power on.

When the USB memory devices is recognized, the USB memory icon  $\checkmark$  appears in the upper right of the screen.

2. Pressing  $SYS \rightarrow F \bullet 7$  INITIALIZE  $\rightarrow F \bullet 7$  FIRMWARE UPDATE in order, then the update screen will appear after about 30 seconds.

<< CURRENT INFORMATION >> is shown the current firmware version (version 4.5 earlier).

<< UPDATE INFORMATION >> is shown the firmware version (version 4.6 later) saved in the USB memory.

#### ■ Note

```
When the USB memory is not inserted or the update folder in the USB memory is not correct, "FIRMWARE UPDATE" doesn't appear on the \boxed{F \cdot 7} key.
```

3. Start the update pressing  $F \bullet 3$  UPDATE.

If you cancel the update, press F•1 UPDATE CANCEL and eject the USB memory.

When the update starts, the screen disappears once, "UPDATE" is displayed in the center of the screen, the firmware version is displayed in the lower left, and then the update screen is displayed.

During update, the progress status bar is displayed.

When the update is finished, the instruments is rebooted automatically.

#### ■ Note

During update, not eject the USB memory and not turn off the power.

4. After restart, "Please update again." will be shown.



5. Pressing  $SYS \rightarrow F \bullet 7$  INITIALIZE  $\rightarrow F \bullet 7$  FIRMWARE UPDATE in order, then the update screen will appear after about 30 seconds.

<< CURRENT INFORMATION >> is shown the current firmware version (version 4.6 later).

<< UPDATE INFORMATION >> is shown the firmware version (version 4.6 later) saved in the USB memory.

#### ■ Note

When the USB memory is not inserted or the update folder in the USB memory is not correct, "FIRMWARE UPDATE" doesn't appear on the  $\boxed{F \cdot 7}$  key.

6. Start the update pressing  $F \cdot 3$  UPDATE.

If you cancel the update, press F•1 UPDATE CANCEL and eject the USB memory.

When the update starts, the screen disappears once, "UPDATE" is displayed in the center of the screen, the firmware version is displayed in the lower left, and then the update screen is displayed.

During update, the progress status bar is displayed.

When the update is finished, the instruments is rebooted automatically.

#### Note

During update, not eject the USB memory and not turn off the power.

- 7. After restart, if re-update message is not shown, the update has been successfully.
- 8. Eject the USB memory from USB connector.

#### 7.2 Initialization updating when SER06 is installed

When SER06 is installed and you update the firmware version to 4.6 later after downgrading it from 4.6 later to 4.5 earlier, you have to initialize the firmware of SER06.

To update the firmware version, apply the procedure below

 Insert the USB memory, which are saved the folder copied at Chapter 6, "DOWNLOADING AND COPYING THE FILE", to the instruments USB connector keeping the power on.

When the USB memory devices is recognized, the USB memory icon  $\bowtie$  appears in the upper right of the screen.

2. Pressing  $SYS \rightarrow F \bullet 7$  INITIALIZE  $\rightarrow F \bullet 7$  FIRMWARE UPDATE in order, then the update screen will appear after about 30 seconds.

<< CURRENT INFORMATION >> is shown the current firmware version (version 4.6 later).

<< UPDATE INFORMATION >> is shown the firmware version (version 4.5 earlier) saved in the USB memory.

#### ■ Note

```
When the USB memory is not inserted or the update folder in the USB memory is not correct, "FIRMWARE UPDATE" doesn't appear on the \boxed{F \cdot 7} key.
```

3. Start the update pressing  $F \bullet 3$  UPDATE.

If you cancel the update, press  $F \cdot 1$  UPDATE CANCEL and eject the USB memory.

When the update starts, the screen disappears once, "UPDATE" is displayed in the center of the screen, the firmware version is displayed in the lower left, and then the update screen is displayed.

During update, the progress status bar is displayed.

When the update is finished, the instruments is rebooted automatically.

#### ■ Note

During update, not eject the USB memory and not turn off the power.

4. After restart, if re-update message is not shown, the update has been successfully.

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- 5. Turn the power off.
- Turn the instrument on while pressing V POS and H POS dial, and you can initialize the instrument. About three seconds later from turning the instrument on, release your hand which is pressing those dials, and press F•5 SER06 FW INIT YES.
  Note not to press F•3 SRAM/FLASH INIT YES.

Note flot to press [ • 5] SRAM/I LASH INTE TES

7. "Please update the firmware." will be shown.



8. Pressing  $SYS \rightarrow F \bullet 7$  INITIALIZE  $\rightarrow F \bullet 7$  FIRMWARE UPDATE in order, then the update screen will appear after about 30 seconds.

<< CURRENT INFORMATION >> is shown the current firmware version (version 4.6 later).

<< UPDATE INFORMATION >> is shown the firmware version (version 4.6 later) saved in the USB memory.

#### ■ Note

When the USB memory is not inserted or the update folder in the USB memory is not correct, "FIRMWARE UPDATE" doesn't appear on the  $\boxed{F \cdot 7}$  key.

9. Start the update pressing  $F \cdot 3$  UPDATE.

If you cancel the update, press  $F \cdot 1$  UPDATE CANCEL and eject the USB memory.

When the update starts, the screen disappears once, "UPDATE" is displayed in the center of the screen, the firmware version is displayed in the lower left, and then the update screen is displayed.

During update, the progress status bar is displayed.

When the update is finished, the instruments is rebooted automatically.

#### ■ Note

During update, not eject the USB memory and not turn off the power.

- 10. After restart, if re-update message is not shown, the update has been successfully.
- 11. Eject the USB memory from USB connector.

### Contact Us

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