



Roland TD-50 to TD-50X upgrade

IMPORTANT! The contents of your TD-50 (sounds, kits, settings) will **NOT** work on the TD-50X **and vice versa!**

But you can, if you want, downgrade your upgraded TD-50X back to TD-50 (incl. firmware 1.07)!

Therefore make sure to make a complete backup (including your or other user samples) of your TD-50 BEFORE you start the upgrade!

Note: You will need at least **one blank SD card** with a storage capacity between 1 and 32 GB, which you may have to format with your TD-50 first.

“Do I actually have to read the whole manual?”

THIS TIME: YES!

... at least the part that concerns you...

Why?

- because you **must** have a **Roland Cloud account** and have the **Roland Cloud Manager** installed on your computer
- because it is important to know and react to which **firmware** is currently installed on your TD-50, since you can also **downgrade** again and for this it is absolutely necessary to save data *beforehand*.

BUT DON'T PANIC!

We will guide you through the process - as short as possible, as detailed as necessary.

IMPORTANT FOR ALL TD-50 OWNERS! It will be **much easier for you** to perform the upgrade if you read the **summary** and know how the individual steps are related. Also, with this knowledge you will be able to quickly identify the **part of the manual that is relevant to you.**

Read on to the very next page for the *summary!*

SUMMARY

YOU NEED A ROLAND CLOUD ACCOUNT!

You have received a **license key** from us, with which you can unlock the upgrade file in the **Roland Cloud**. For that you need a Roland Cloud **account**. You also need to install the **Roland Cloud Manager** on your computer (PC or MAC). We will show you how to do this.

THE KEY IS IN YOUR drum-tec DOWNLOAD!

With the download you purchased from us, you will receive the license key to unlock the upgrade file in the Roland Cloud. Once this is done, you can download the file and transfer it to an SD card, to install it on your TD-50.

IT DEPENDS ON THE FIRMWARE!

Upgrading to TD-50X is only possible if your TD-50 has **firmware 1.08** (also called System 1.08) **or higher**. (At the time of printing this manual, the latest release is **firmware 1.09**).

- All devices with firmware **1.05** or higher can be updated **to firmware 1.09 directly**.
- All devices with **older firmware**, namely **1.04 and earlier**, must **first** be upgraded to firmware **1.05** and can **only be upgraded to firmware 1.09 afterwards!**

You will find the **links** to all necessary firmwares in this manual.

DIGITAL HI-HATS SUPPORT FROM FIRMWARE 1.08!

With **firmware 1.08** or higher your **TD-50** (without X) is able to control **Roland's new digital hi-hats (VH-14D)**.

THE TD-50 IS INCOMPATIBLE WITH THE TD-50X!

The upgrade to TD-50X brings drastic changes in the system and sounds. *This makes the TD-50 incompatible with the TD-50X.* In other words, **you will NOT be able to use anything you have worked on with the TD-50 with the TD-50X**. Conversely, the TD-50 cannot handle files intended for the TD-50X.

However, you can **"carry" all user samples** from version to version throughout the process, to use them for new kits if needed.

YOU CAN DOWNGRADE AGAIN!

If you want, you can downgrade your TD-50X back to a TD-50. The firmware 1.07 will be

installed automatically. You can find more details on [page 24](#).

YOU CAN KEEP YOUR USER SAMPLES!

The upgrade process requires **several backups and factory resets**. In this manual we always perform factory resets **without resetting your user samples to** keep the samples and bring them with you to the TD-50X.

THIS IS HOW THE UPGRADE PROCESS WORKS

1. **First, create a Roland Cloud account** if you don't already have one. You also need to **install the Roland Cloud Manager** on your computer. (Cloud Manager is available for Windows and MAC).
2. With the **license key you** received from us, **you can unlock your upgrade file in the Cloud Manager**. You can now download the file to your computer and unzip it.
3. **Upgrade your TD-50 to firmware 1.09**. First of all, check the firmware that is currently installed on your device. This way you know where to jump to in order to perform only those steps that are necessary in your case.
We will show you when you have to create backups so that you do not lose any data.
4. Now you can **upgrade to the TD-50X**.

The remaining part of the manual covers **optional steps** like the downgrade from TD-50X back to TD-50.

Let's go!

CONTENTS

Summary	2
How the upgrade process works	3
First step (for all TD-50 owners):	
The Roland Cloud and the Roland Cloud Manager	7
Setting up an account in the Roland Cloud	7
Enter your license key in your Roland Cloud Account	7
Download and install Roland Cloud Manager	8
Download the upgrade file from Roland Cloud Manager	8
Second step (for all TD-50 owners):	
Which firmware is installed on your device?	10
All firmwares overview	10
<u>Firmware 1.04 and earlier</u>	
These are the necessary steps	11
on the way to firmware 1.09	
<i>Step 1: Prepare SD card</i>	11
<i>Step 2: Create first backup</i>	12
<i>Step 3: Installing the firmware 1.05</i>	12
<i>Step 4: Factory Reset (WITHOUT resetting the User Samples)</i>	13
under firmware 1.05	
<i>Step 5: Restore backup (without user samples)</i>	13
and recreate second backup under firmware 1.05	
<i>Step 6: Installing firmware 1.09</i>	14
<i>Step 7: Factory Reset (WITHOUT resetting the User Samples)</i>	15
under firmware 1.09	
<i>Step 8 (optional): Restore backup and</i>	15
recreate under firmware 1.09	
<u>Firmware 1.05 to 1.07</u>	
These are the necessary steps	17
on the way to the TD-50 with firmware 1.09	
<i>Step 1: Prepare SD card</i>	17

<i>Step 2: Create backup</i>	17
<i>Step 3: Installing the firmware 1.09</i>	18
<i>Step 4: Factory Reset (WITHOUT resetting the User Samples) under firmware 1.09</i>	19
<i>Step 5 (optional): Restore backup and recreate under firmware 1.09</i>	19

Firmware 1.08 and Firmware 1.09

These are the necessary steps on the way to the TD-50X	21
<i>Step 1: Prepare SD card</i>	21
<i>Step 2: Create backup</i>	21

Upgrade from TD-50 to TD-50X

Checking the User Samples

How to turn your TD-50X back into a TD-50 (DOWNGRADE)

Caution, tripping hazard: User Samples!

First, create a backup of your TD-50X

Download the downgrade file from the Roland Website

Downgrade to TD-50

Factory reset after downgrade

Note on firmware after downgrade

APPENDIX

How to format an SD card on the device

How to restore a backup from the SD card WITHOUT SAMPLES

How to restore a backup from the SD card restore WITH SAMPLES

How to create a backup on the SD card

How to perform a factory reset **32**
(WITHOUT resetting the user samples)

How to perform a factory reset **33**
(WITH reset of the user samples)

How to create an account in the Roland Cloud **33**

First step for **all** TD-50 owners:

THE ROLAND CLOUD AND THE ROLAND CLOUD MANAGER

Unlike the current firmware, your upgrade file is not publicly available, but is instead ready for you to download from the **Roland Cloud**.

You need a **Roland Cloud account** and you will have to install the **Roland Cloud Manager** on your computer. With the Cloud Manager you can manage content related to your TD-50X. This also applies to the upgrade file that turns your TD-50 into a TD-50X.

All contents that you can manage in Cloud Manager carry a **code that is not visible to you** and is linked to your account. This code is called a "**license**" by Roland. As soon as you upload the coded upgrade file to your TD-50X, this license is stored on your device.

(This is not to be confused with the *license key* you purchased from us to unlock the upgrade to TD-50X.)

This means that in the future, **your device will only accept content that matches this license** - in other words, that has the same encoding. This is the case for **all content that comes from your Roland Cloud account**.

Note: *You can delete the license at any time and play a "foreign" file on your device that originates from another Roland Cloud account. However, your user data will be deleted and the license of the other account will be stored on your device. **Content from your account will then no longer be accepted.***

Don't panic – the drum-tec sound editions are not affected!

Setting up an account in the Roland Cloud

Visit the website

<https://rolandcloud.com>

and click on "Sign In". Follow the instructions to log in if you already have an account or to create an account ("CREATE USER ACCOUNT").

If you are not familiar with the usual procedure, you can read the individual steps in detail in the **appendix on page 33**.

Enter your license key in your Roland Cloud account

You can unlock the upgrade file with the license key you purchased from us. The license key is available in your drum-tec customer account.

1. Log in to your Roland Cloud account.

2. Visit the following website:
<https://www.rolandcloud.com/roland-account/key>
3. Enter the license key and click "Submit".

This unlocks the upgrade file.

Download and install Roland Cloud Manager

Roland Cloud Manager is a program for Windows or MAC OS that you can download from your Roland Cloud account and then install normally on your computer. You will need administrator privileges for your computer. If you do not have those, contact your administrator for help.

1. Go to <https://rolandcloud.com> and log in to your account.
2. Click on the "Roland Cloud Manager" button. A new window will open. You may need to scroll down a bit to see a menu bar that includes the "DOWNLOADS" item. Click on "Downloads" and scroll down to find the version of Cloud Manager that fits your computer. Click on the appropriate "Download" button.
3. After the download is finished, locate the file on your computer. Double-click the file to start the installation. Follow the instructions that are displayed.
4. You can now start the Roland Cloud Manager like any regular program. Make sure that your computer is connected to the Internet.
5. If necessary, log in with your email address and password for your Roland Cloud account.

Download the upgrade file from Roland Cloud Manager

Note: We are referring to the version of Cloud Manager dated May 2021. Roland may provide new versions of the program at any time, which may have major changes in content and appearance.

1. Click on the "Hardware" item on the left.
2. In the context menu (top bar) click the entry "V-Drums". Now you can see in the main window the contents that are ready for you. This includes the upgrade file

represented by the image with the purple cross.

3. Click on the image so that it is outlined.
4. Click the "Download" button on the right to start downloading the file. It may take a few minutes for the download to complete.

Note: *If you don't see the "Download" button, check if the file is already unlocked. To do this, click on the "Available in library" link right next to the image.*

This will take you to the window where you can see all the files available to you. You will find the entry "TD-50 Upgrade" under the column "Product". Further to the right you will find the column "Unlocked". There must be the entry "Lifetime Key". If not, then the activation by the license key did not work correctly.

In most cases, logging out and logging back into the Cloud Manager will solve the problem. If this does not work, restart your computer and log in to your account again, if necessary.

Once the activation is complete, you can click the "Download" link to start the download.

5. If your computer does not unpack (unzip) the downloaded file automatically, you will have to do that. At the end you have a folder "**TDZ001_TD50XUpg**".

Congratulations - the first step is done!

To continue with updating your TD-50 to the "correct" firmware:

Read right on to the next page!

Second step for **all** TD-50 owners:

WHAT FIRMWARE IS INSTALLED ON YOUR DEVICE?

Once you've figured out what firmware is on your device, you'll know where to go next.

1. Press [SETUP] (by the four buttons on the top right of the device).
2. Navigate with [PAGE UP] or [PAGE DOWN] (keys to the right of the display) to *Setup Menu 2* (the display shows the windows "MIDI", "AUTO OFF" and "INFO")
3. Press the function key directly above the "INFO" window (at the four keys above the display).

Now the *program version* (firmware) is displayed. **The number in front of the bracket is decisive.**

If the display also shows "TD-50X PROGRAM INFORMATION", then you already have a TD-50X in front of you.

You can now jump directly to the instructions that apply to the firmware on your device **using the table of contents on page 4**.

ALL FIRMWARES OVERVIEW

Firmware (System)

1.04 and earlier ([click here to read the instructions starting on page 11](#))

Create first backup - Update to 1.05 - Create second backup (this may overwrite the first backup) - Update to 1.09 - Upgrade to TD-50X. If you want to downgrade back to TD-50, firmware 1.07 will be installed (runs with your second backup).

1.05 to 1.07 ([click here to read the instructions starting on page 17](#))

Backup - Update to 1.09 - Upgrade to TD-50X. If you want to downgrade back to TD-50, firmware 1.07 will be installed (runs with your backup).

1.08 and 1.09 ([click here to read the instructions starting on page 21](#))

Enables control of the VH-14D digital hi-hat. 1.09 is the current firmware (as of May 2021).

Backup - Upgrade to TD-50X. When you downgrade your TD-50X back to TD-50, firmware 1.07 will be installed automatically. For your backup to run, you must first upgrade your TD-50 back to 1.09 (which is the current firmware, as of May 2021).

FIRMWARE 1.04 AND EARLIER

Note: You will quickly notice that some of the steps are repeated. Consequently, you will have most of the operating steps memorized pretty quickly. It would make the manual unnecessarily confusing if every operating step was explained again and again. Therefore we refer to the appendix at the appropriate places. There, the individual operating procedures are recorded. This way, you can look up specific information if you get stuck at a certain point.

First you have to upgrade your device to **firmware 1.05**. **Then** you can install the **firmware 1.09** on your TD-50. **After that** we will jump to the **upgrade process** in the manual.

These are the necessary steps on the way to the TD-50 with firmware 1.09:

- Prepare SD card
- Create backup under the firmware that is now installed on your device
- Install firmware 1.05, factory reset while keeping the user samples
- Restore backup and recreate under firmware 1.05
- Install firmware 1.09, factory reset while retaining user samples

Here are the steps in detail .

Step 1: Prepare SD card

You need a regular SD card (SDHC) with 1 GB to a maximum of 32 GB storage capacity. You may have many user samples that you want to transfer to the card. In this case, an SD card with at least 4 GB is recommended.

If you are using a **new SD card**, you **probably don't** need to **format** it at all. If your TD-50 does not give an error message regarding the card, then everything is fine.

Otherwise, we recommend **formatting directly with the device**. This firstly ensures that the correct format is automatically applied. Secondly, the TD-50 takes the opportunity to write the correct folders in the correct structure to the card.

If you want to format the SD card on the computer, use the **FAT32** format and disable the quick format.

CAUTION: *Formatting will irrevocably delete all files on the SD card! So be sure to make a backup copy on your computer before formatting your SD card if your SD card contains important files!*

*Formatting the SD card is described in the **appendix on page 28**.*

Step 2: **Backup your TD-50 under the firmware that is now installed on your device.**

This **first backup** (there will be others) is to restore your TD-50 after the update to firmware 1.05. You can **overwrite this backup with the second backup** (which will come later), because you won't need it anymore.

If you have any user samples on your device, include them in your backup.

*How to create a backup of your TD-50 on your SD card is described in the **appendix on page 30.***

Step 3: **Installing firmware 1.05**

First you have to download the firmware from the Roland website. Roland has already taken care and integrated the firmware 1.05 right into the download of the firmware 1.09.

1. Visit the website

https://www.roland.com/global/support/by_product/td-50/updates_drivers/

2. Click on the **TD-50 System Program (Ver.1.09)** link in the "TD-50" column on the right.
3. Now you can find some information about the operation and history of the firmware(s) on the right. Scroll down to the End User License Agreement. Read through this and click the checkbox "I AGREE AND WISH TO PROCEED WITH DOWNLOAD." Then click the "Download File" button to start the download.
4. The file will now be downloaded to your computer and will be located **either as a .zip file** ("td50_sys109.zip") **or as a folder** named "td50_sys109" on your computer.
If you find the .zip file, you have to unzip it to see the **folder "td50_sys109"**.
When you open this folder, you will find two more folders, each containing one of the two firmwares ("td50_sys_v105" and "td50_sys_v109").
5. Open the folder **"td50_sys_v105"**. You will find a folder "wave" and two .bin files.
Copy these three to the top level of your SD card.
IMPORTANT: Unfortunately you can't just copy the whole folder "td50_sys_v105". Also, you must not copy the "wave" folder and the two .bin files to any of the folders that may exist on the SD card either!
6. Eject the SD card and insert it into the **switched off** TD-50.

7. **Press and hold the Record button** (that's the button with the dot by the four buttons at the bottom left of the TD-50) **and turn the power on.**
8. As soon as "update" appears in the display, you can release the Record button.
9. When the update process is completed after about two minutes, the message "update finished" appears on the display.
10. Turn off the TD-50 and remove the SD card from the device.
11. Switch on the device again and check the firmware on your TD-50. The displayed *program version* must be 1.05.
How to check the firmware can be found [on page 10.](#)
12. **IMPORTANT!**
Insert the SD card into your computer again and navigate to the root directory of the card. **Delete the two .bin files and the "wave" folder** (these are exactly the three you copied to the SD card in point 5) **from the SD card.** (Mac OSX users may still need to empty the recycle bin for the deletion to be complete). **If you do not delete these files, step 6 (update to 1.09) will not work!**

Step 4: **Factory Reset (WITHOUT resetting the User Samples) under firmware 1.05**

Note that when you do a factory reset, you want to **uncheck the** "Reset with User Sample" option. This means that all your user samples (and/or those of third parties) will be **retained**.

The Factory Reset WITHOUT Reset of the User Samples is described in the [appendix on page 32.](#)

Step 5: **Restore backup (without user samples) and recreate under firmware 1.05**

The **backup created** before **under firmware 1.04** can be restored under firmware 1.05 - and that's exactly what you should do now! After that your TD-50 is basically the same as it was before, only with firmware 1.05 - and thus, ready for the next step!

*How to restore a backup of your TD-50 **without** user samples from your SD card is described in the [appendix on page 29.](#)*

After you have restored the backup, you can now directly create a new (the second) backup on your SD card. **You have to keep this backup!** You can use it later to restore

all your files if you decide to downgrade your TD-50X back to the TD-50. After the **downgrade, firmware 1.07** will be installed automatically - and it **can read your backup created with firmware 1.05!**

If you have your own or other user samples on your device, include them in your backup.

By the way: You can either save the backup on the same bank on which you created the backup under firmware 1.04 earlier, because you won't need that anymore. It will then simply be overwritten. But you can also choose a free bank, then the old backup remains.

*In **the appendix on page 30** you can read how to create a backup of your TD-50 on your SD card.*

Step 6: Installing firmware 1.09

First, you need to transfer the update files to the SD card.

1. Insert the SD card into your computer.
2. Navigate on your computer to the folder

„td50_sys109/td50_sys_v109“

and open it.

3. You will find a file "**TD50_UPA.BIN**". **Copy** it to the **root directory** of the SD card. **IMPORTANT:** Unfortunately you can't just copy the whole folder "td50_sys_v109". You also must not copy the .bin file to any of the folders that may be on the SD card!
AND: Did you think of removing the files from firmware 1.05 from the SD card (see point 12 on page 13)?
4. Eject the SD card and insert it into the **switched off** TD-50.
5. **Press and hold the Record button** (that's the button with the dot by the four buttons at the bottom left of the TD-50) **and turn the power on.**
6. As soon as "update" appears in the display, you can release the Record button.
7. When the update process is completed after about two minutes, the message "update finished" appears on the display.
8. Turn off the TD-50 and remove the SD card from the device.

9. Switch on the device again and check the firmware on your TD-50. The *program version* displayed must be 1.09.
How to check the firmware can be found [on page 10](#).
10. **IMPORTANT!**
Insert the SD card into your computer again and navigate to the top level of the card.
11. **Delete the file "TD50_UPA.BIN"** (this is exactly the file you copied to the SD card in point 3) **from the SD card**. (Mac OSX users may need to empty the recycle bin to complete the deletion). **If you do not delete this file, the upgrade process to the TD-50X will not work later!**

Step 7: **Factory Reset (WITHOUT resetting the User Samples) under firmware 1.09**

After updating to firmware 1.09, your TD-50 is not yet fully "awake". It does **not** show **kit names** in the main display, but only a numbering. **This is not an error!** It only needs the factory reset, then everything is back to normal again.

Note that you want to **uncheck** the "Reset with User Sample" option during the factory reset. This means that all your user samples (and/or those of third parties) will be **retained**.

The Factory Reset WITHOUT Reset of the User Samples is described in the [appendix on page 32](#).

Step 8 (optional - ONLY IF YOU **DO NOT** WANT TO CONTINUE WITH THE UPGRADE TO TD-50X INSTANTLY): **Restore the backup and recreate it under firmware 1.09.**

If you want to work on your TD-50 before upgrading to the TD-50X, then it makes sense to **first** install the backup that was created earlier under firmware 1.05. After that your TD-50 will be exactly as it was before under the old firmware.

How to restore a backup of your TD-50 without user samples from your SD card is described in the [appendix on page 29](#).

If you make significant changes (e.g. configuring Roland's VH-14D digital hi-hat or editing sounds and kits), make **another backup before upgrading** to the TD-50X in case you want to downgrade back to the TD-50 at some point.

If you have your own or other user samples on your device, include them in your backup.

In the appendix on page 30 you can read how to create a backup of your TD-50 on your SD card.

Congratulations - this part is done!

Now it's time for the actual upgrade to the TD-50X.

Read on directly on page 22!

FIRMWARE 1.05 TO 1.07

Note: You will quickly notice that some of the steps are repetitive. Consequently, you will have most of the operating steps memorized pretty quickly. It would make the manual unnecessarily confusing if every operating step was explained again and again. Therefore we refer to the appendix at the appropriate places. There, the individual operating procedures are recorded. This way, you can look up specific information if you get stuck at a certain point.

These are the necessary steps on the way to the TD-50 with firmware 1.09:

- Prepare SD card
- Create backup under the firmware that is now installed on your device
- Install firmware 1.09, factory reset while retaining user samples

Here are the steps in detail.

Step 1: Prepare SD card

You need a regular SD card (SDHC) with 1 GB to a maximum of 32 GB storage capacity. You may have a lot of user samples that you want to transfer to the card. In this case, an SD card with at least 4 GB is recommended.

If you are using a **new SD card**, you **probably don't** need to **format** it at all. If your TD-50 does not give an error message regarding the card, then everything is fine.

Otherwise, we recommend **formatting directly on the device**. This firstly ensures that the correct format is automatically applied. Secondly, the TD-50 takes the opportunity to write the correct folders in the correct structure to the card.

If you want to format the SD card on the computer, use the **FAT32** format and disable the quick format.

ATTENTION: Formatting will irrevocably delete all files on the SD card! So be sure to make a backup copy on your computer before formatting your SD card if your SD card contains important files!

*Formatting the SD card is described in the **appendix on page 28**.*

Step 2: Backup your TD-50 under the firmware that is now installed on your device.

Before you install the firmware 1.09 on your TD-50, first create a complete backup on your SD card. **You must keep this backup!** You can use it later to restore all your files if you decide to turn your TD-50X back into a TD-50. After the **downgrade, firmware 1.07**

will be installed automatically - and it **can read your backup**, even if it was created under firmware 1.05 or 1.06!

If you have your own or other user samples on your device, include them in your backup.

In **the appendix on page 30** you can read how to create a backup of your TD-50 on your SD card.

Step 3: Installing firmware 1.09

1. First you need to download the firmware from the Roland website. Open your browser and go to

https://www.roland.com/global/support/by_product/td-50/updates_drivers/

1. Click on the **TD-50 System Program (Ver.1.09)** link in the "TD-50" column on the right.
2. Now you can find some information about the operation and history of the firmware(s) on the right. Scroll down to the End User License Agreement. Read through this and click the checkbox "I AGREE AND WISH TO PROCEED WITH DOWNLOAD." Then click the "Download File" button to start the download.
3. The file will now be downloaded to your computer and will be located **either as a .zip file** ("td50_sys109.zip") **or as a folder** named "td50_sys109" on your computer.
If you find the .zip file, you have to unzip it to see the **folder "td50_sys109"**. When you open this folder, you will find two more folders, each containing one of the two firmwares ("td50_sys_v105" is not needed, only "td50_sys_v109" is).
4. Open the folder "**td50_sys_v109**". You will find a file "TD50_UPA.BIN. **Copy this file to the root directory** of your SD card.
IMPORTANT: Unfortunately you can't just copy the whole folder "td50_sys_v109". Also, you must not copy the .BIN files to any of the folders that may exist on the SD card!
5. Eject the SD card and insert it into the **switched off** TD-50.
6. **Press and hold the Record button** (that's the button with the dot by the four buttons at the bottom left of the TD-50) **and turn the power on**.
7. As soon as "update" appears in the display, you can release the Record button.

8. After the update process is completed (this will take about aout two minutes), the message "update finished" appears on the display.
9. Turn off the TD-50 and remove the SD card from the device.
10. Switch on the device again and check the firmware on your TD-50. The displayed *program version* must be 1.09.
How to check the firmware can be found [on page 10](#).
11. **IMPORTANT!**
Insert the SD card into your computer again and navigate to the root directory of the card. **Delete the file "TD50_UPA.BIN"** (this is exactly the three you copied to the SD card in point 4) **from the SD card**. (Mac OSX users may still need to empty the recycle bin for the deletion to be complete). **If you do not delete the file, step 6 (update to 1.09) will not work!**

Step 4: **Factory Reset (WITHOUT resetting the User Samples) under firmware 1.0 9**

After updating to firmware 1.09, your TD-50 is not yet fully "awake". It does **not** show **kit names** in the main display, only digits. *You may also not hear any sounds. This is not an error!* It only needs the factory reset, then everything is back to normal again.

Note that when you do a factory reset, be sure to **uncheck** the "Reset with User Sample" option. This means that all your user samples (and/or those of third parties) will be **retained**.

The Factory Reset WITHOUT Reset of the User Samples is described in the [appendix on page 32](#).

Step 5 (optional): **ONLY IF YOU DO NOT WANT TO CONTINUE WITH THE UPGRADE TO TD-50X INSTANTLY: Restore the backup and recreate it under firmware 1.09.**

If you want to work on your TD-50 before upgrading to the TD-50X, it makes sense to **first restore** the backup that was created under your "old" firmware (1.05, 1.06 or 1.07). After that, your TD-50 will be exactly as it was before under the old firmware.

How to restore a backup of your TD-50 without user samples from your SD card is described in the [appendix on page 29](#).

If you make significant changes (e.g. configuring Roland's VH-14D digital hi-hat or editing sounds and kits), make **another backup before upgrading** to the TD-50X in case you want to downgrade back to the TD-50 at some point.

If you have your own or other user samples on your device, include them in your backup.

In the appendix on page 30 you can read how to create a backup of your TD-50 on your SD card.

Congratulations - this part is done!

Now it's time for the actual upgrade to the TD-50X.

Read on directly on page 22!

FIRMWARE 1.08 AND FIRMWARE 1.09

You can upgrade from firmware 1.08 as well as from 1.09 directly to the TD-50X. So you don't have to update to firmware 1.09 first, if firmware 1.08 is installed on your device. Therefore, the preparation is only limited to the creation of a backup.

These are the necessary steps to prepare for the upgrade to TD-50X:

- Prepare SD card
- Create backup under the firmware that is now installed on your device

Step 1: Prepare SD card

You will need a regular SD card (SDHC) with 1 GB to a maximum of 32 GB storage capacity. You may have a lot of user samples that you want to transfer to the card. In this case, an SD card with at least 4 GB is recommended.

If you are using a **new SD card**, you **probably don't** need to **format** it at all. If your TD-50 does not give an error message regarding the card, then everything is fine.

Otherwise, we recommend **formatting directly on the device**. This firstly ensures that the correct format is automatically applied. Secondly, the TD-50 takes the opportunity to write the correct folders in the correct structure to the card.

If you want to format the SD card on the computer, use the **FAT32** format and disable the quick format.

ATTENTION: Formatting will irrevocably delete all files on the SD card! So be sure to make a backup copy on your computer before formatting your SD card if your SD card contains important files!

*Formatting the SD card is described in the **appendix on page 28.***

Step 2: Create a backup under the firmware that is now installed on your device.

If you downgrade from TD-50X to TD-50 at some point, you can restore your TD-50 with the backup. Both firmware 1.08 and 1.09 can read your backup.

If you have your own or other user samples on your device, include them in your backup.

*How to create a backup of your TD-50 on your SD card is described in the **appendix on page 30.***

Congratulations - this part is done!

Now it's time for the actual upgrade to the TD-50X. **Read on directly on the next page!**

UPGRADE FROM THE TD-50 TO THE TD-50X

The procedure of upgrading to the TD-50X is only slightly different from that of updating to another firmware. However, it takes more time, namely a good half hour.

1. Insert your SD card into your computer.
2. On your computer, navigate to the folder you downloaded via Roland Cloud Manager ("**TDZ001_TD50XUpg**") and open it.
3. You will find a **folder "wave"** as well as a **file with the extension ".bin"** and a **file with the extension ".tdz"**.
Copy these three to the **top level of** the SD card.
IMPORTANT: Unfortunately you can't just copy the whole folder "**TDZ001_TD50XUpg**". You **must not** copy the "wave" folder and the .bin file and the .tdz file to any of the folders that may exist on the SD card either!
4. Eject the SD card and insert it into the **switched off** TD-50.
5. **Press and hold the Record button** (that's the button with the dot by the four buttons at the bottom left of the TD-50) **and turn the power on**.
6. As soon as "update" appears in the display, you can release the Record button.
7. A **prompt** appears **asking if you** want to install the **license** for the upgrade. Press the **Record button** to **confirm**.
8. In addition, the question appears whether the **upgrade** (here called "update") should be **performed**.
You can still **cancel the** process by turning off the TD-50.
To **start the** process, press the **Record button**.

IMPORTANT: DURING THE UPGRADE PROCESS THE POWER SUPPLY MUST NOT BE INTERRUPTED!
If this happens, it is possible that the device will be damaged and must be repaired in a service workshop.
9. When the message "**WaveRom Write finished**" appears on the display, **turn off the device** and remove the SD card.
10. **IMPORTANT:** After the upgrade, your TD-50X is not yet fully "awake". It will **not** show **kit names in** the main display, only a numbering. *You may also not hear any sounds.* **This is not an error!** It only needs the factory reset, then everything is as

usual again.

11. Switch the device on again. The **Factory Reset** display appears immediately. Make sure that the "Reset With User Sample" field is **unchecked!** If necessary, turn the dial counterclockwise to remove the checkmark.
Press [F5] (this is the button directly below the "Factory Reset" field).
12. A confirmation prompt appears. (You can still cancel the process by pressing [EXIT] or [ENTER].)
To trigger the factory reset, move the cursor with the right *arrow* (on the four arrow keys next to the rotary wheel) to the "OK" field and press [ENTER].
13. When the Factory Reset is complete, the display will show the message "Factory Reset Completed! The TD-50X is ready." Confirm with [F5] (Okay).

That's it! You can now make the first settings to adjust Auto Off and Hi-Hat. By pressing [KIT] you end up in the main display.

Checking the User Samples

Hold down [SHIFT] and then press [SETUP]. Then press [F2] (function key directly above the "Sample List" window).

Scroll through the memory locations with the rotary wheel to see your user samples.

Congratulations! You can now get started with your TD-50X.

Have fun drumming!

HOW TO TURN YOUR TD-50X BACK INTO A TD-50 (DOWNGRADE)

CAUTION, TRIPPING HAZARD: USER SAMPLES!

If you work with new user samples on the TD-50X - i.e. samples that you have not already used with the TD-50 - you can take them with you when downgrading to the TD-50. **But they will be overwritten when you import a TD-50 backup *including its user samples into the TD-50!***

There are several approaches to address this problem:

- If the number of your user samples is manageable and is expected to remain so, then simply leave the user samples from the TD-50 that you took with you when you upgraded to the TD-50X stored in the TD-50X. New User Samples that you import while working with the TD-50X are also left in the unit. When you downgrade, you simply take all user samples with you to the TD-50.
- **However, it is best to keep all user samples that you import into the device (regardless of whether TD-50 or TD-50X) as original wave files on your computer.**

This is recommended because once you import samples, the device will not give them back. **You can't export imported samples again** and even in backups the samples are inseparable from the file.

If you keep the originals, you always have the possibility to delete all user samples and import them again.

First, create a backup of your TD-50X

Since the TD-50 is not compatible with the TD-50X, you cannot transfer backups of one system to the other.

However, you can upgrade from the TD-50 to the TD-50X and downgrade from the TD-50X to the TD-50 at any time and as often as you like (if this makes any sense).

Therefore, be sure to create a backup of your TD-50X **before** returning to the TD-50. **Remember to include the user samples in the backup.**

***Note:** You can theoretically create backups of both the TD-50 and the TD-50X on the same SD card. However, the backups of one device will not be displayed on the other. There is a risk to overwrite an important backup by mistake!*

We therefore strongly recommend the use of two SD cards - one for the TD-50 and one for the TD-50X!

In the appendix on page 30 you can read how to create a backup on your SD card.

Download the downgrade file from the Roland website

Note: *drum-tec has no influence on the maintenance and content of Roland's websites. Roland can change or discontinue support as well as add, change or remove corresponding files at any time.*

Open your web browser and visit

<https://rolandus.zendesk.com/hc/en-us/articles/360059737571-TD-50-TD-50X-After-I-upgrade-from-the-TD-50-to-the-TD-50X-can-I-go-back-to-the-TD-50->

Scroll all the way down the page. On the line

"The downgrade file can be downloaded **here**"

click "**here**" to start the download.

The file will now be downloaded to your computer and will be located **either** as a **.zip file** ("td50x_downgrade.zip") **or** as a **folder** named "td50x_downgrade" on your computer.

If you find the .zip file, you have to unzip it to see the folder "td50x_downgrade". When you open this folder, you will find a folder called "wave", as well as two .bin files.

Downgrade to TD-50

1. Insert the SD card into your computer and navigate to the top level of the SD card.
2. If your SD card still has the **upgrade files** (TD-50 to TD-50X), you will need to **delete** them **first**.
On the top level of your SD card, look for
 - a. the "wave" folder
 - b. the "td50_ext_exec.bin" file
 - c. the file "TD50X_UPA.tdz".

and delete them. (Mac OSX users may still need to empty the recycle bin for the deletion to be complete).

3. Navigate on your computer to the folder

"td50x_downgrade"

and open it. (It's the file you just downloaded and unzipped.)

4. You will find a folder "wave" and two .bin files.
Copy these three to the **top level of** the SD card.
IMPORTANT: Unfortunately you can't just copy the whole folder "td50x_downgrade". You also can't copy the folder "wave" and the two .bin files to any of the folders that might be on the SD card!
5. Eject the SD card and insert it into the **switched off** TD-50X.
6. **Press and hold the Record button** (that's the button with the dot by the four buttons at the bottom left of the TD-50X) **and turn the power on.**
7. As soon as "update" appears in the display, you can release the Record button.
8. Additionally the question appears, if the **downgrade** (here called "update") should be **executed**.
You can still **cancel the** process by turning off the TD-50X.
To **start the** process, press the **Record button**.

IMPORTANT: DO NOT INTERRUPT THE POWER SUPPLY DURING THE UPGRADE PROCESS!

If this happens, it is possible that the device will be damaged and must be repaired in a service workshop.

9. When the message "**WaveRom Write finished**" appears on the display, **turn off the device** and remove the SD card.
10. Switch the device on again. Make the "Auto Off" setting as desired and press [KIT].

IMPORTANT: Factory reset after downgrade

After the downgrade, your TD-50 will **not** show **any kit names** in the main display, only a numbering. *You may also not hear any sounds.* **This is not an error!** It only needs the factory reset, then everything is as usual again.

Note that when you do a factory reset, you **uncheck the** "Reset with User Sample" option. This means that all your user samples (and/or those of third parties) will be **retained**.

*The Factory Reset WITHOUT Reset of the User Samples is described in the **appendix on page 29.***

Note on firmware after downgrade

After the downgrade, your device will automatically have **firmware 1.07** installed. You can restore your device with any backup you made before upgrading to TD-50X under firmware 1.07 or earlier. In order to restore a backup previously created under firmware 1.08 or 1.09, you must first upgrade your TD-50 to firmware 1.09.

APPENDIX

How to format an SD card in the device:

Note: *You will only need to format the SD card once, if at all, at the beginning of the entire upgrade process. You will create one or more backups on the SD card during the process. You would delete these when you format the SD card again. And, of course, you don't want that.*

1. Turn on the device and insert the SD card into the SD slot on the device.
2. Press [SD CARD] (at the four buttons in the upper right corner).
3. Navigate with the [PAGE UP] or [PAGE DOWN] buttons (to the right of the display) to the display page that shows the "FORMAT" window.
4. Press the one of the four function buttons above the display (F1 - F4) that is placed directly above the "FORMAT" window. (The position may vary depending on the firmware version).
5. A warning message for deleting all files on the SD card appears on the display. If you want to cancel the process, press [EXIT] (at the three buttons below the rotary wheel). You can also press the [KIT] button, which will take you directly to the main display. If you want to continue, press [F5] (function key directly below the "FORMAT" field).
6. A security question appears. You can now cancel the process by pressing [EXIT]. To start the formatting process, move the cursor with the right *arrow* (at the four arrow keys next to the rotary wheel) to the "OK" field and press [ENTER].

After about one minute, the process is completed and the main display appears.

That's it!

How to restore a backup from the SD card WITHOUT SAMPLES

You should always back up user samples when you create a backup.

Then you can decide when importing a backup whether you want to import the user samples or not.

Since we make sure that the User Samples remain in the device during the entire upgrade process, it makes sense to import backups WITHOUT the User Samples.

1. Turn on your device and insert the SD card containing your backup into the SD slot on the device.
2. Press [SD CARD] (by the four buttons at the top right of the device).
3. Navigate with the [PAGE UP] or [PAGE DOWN] button (to the right of the display) to **SD CARD BACKUP ALL** (the windows "SAVE", "LOAD" and "DELETE" are visible in the display).
4. Press the one of the function buttons (the four buttons above the display) that is located directly above the 'LOAD' window.
5. Probably the check mark in the box next to the display *With User Sample* is set. *If not, you can continue at point 6.*
Otherwise you have to remove the checkmark first. To do this, move the cursor to the box with the *arrow up* or *down* buttons (arrow keys to the left of the large rotary wheel) so that it is visually highlighted, and then turn the rotary wheel **counterclockwise to** remove the checkmark.
6. Is the name of your backup displayed next to the *bank number*? *Then continue with point 7.*
But if there is another name or a number, then you have to select the desired backup.
To do this, move the cursor to the field next to *Bank Number with the arrow up* or *arrow down* buttons (arrow keys to the left of the large rotary wheel) so that it is visually highlighted. Then rotate the wheel to select the desired backup.
7. Press [F5] (the key below the [LOAD] field in the display).
8. A confirmation prompt appears. Move the cursor to the *OK* field with the *right arrow* and press [ENTER] (for the three keys below the arrow keys). This starts the process.

When the process is finished, press [KIT] to go to the main display.

That's it!

How to restore a backup from the SD card WITH SAMPLES

1. Turn on your device and insert the SD card containing your backup into the SD slot on the device.
2. Press [SD CARD] (by the four buttons at the top right of the device).
3. Navigate with the [PAGE UP] or [PAGE DOWN] button (to the right of the display) to *SD CARD BACKUP ALL* (the windows "SAVE", "LOAD" and "DELETE" are visible in the display).
4. Press the one of the function buttons (the four buttons above the display) that is located directly above the "LOAD" window.
5. Is the checkmark in the box next to the display *With User Sample set? Then you can continue with point 6. Otherwise you have to set the checkmark first.* To do this, move the cursor to the box with the *arrow up* or *down* buttons (arrow keys to the left of the large rotary wheel) so that it is visually highlighted, and then turn the rotary wheel clockwise to set the check mark.
6. Is the name of your backup next to the *bank number? Then continue with point 7.* But if there is another name or a number, then you have to select the desired backup.
To do this, move the cursor to the field next to *Bank Number with the arrow up* or *arrow down* buttons (arrow keys to the left of the large rotary wheel) so that it is visually highlighted. Then rotate the wheel to select the desired backup.
7. Press [F5] (the key below the "LOAD" field in the display).
8. A confirmation prompt appears. Move the cursor with *arrow right* to the *OK* field and press [ENTER] (for the three keys below the arrow keys). This starts the process, which can take a few minutes depending on the size of the user samples.

When the process is finished, press [KIT] to go to the main display.

That's it!

How to create a backup on the SD card

1. Turn on your device and insert the SD card into the SD slot on the device.
2. Press [SD CARD] (by the four buttons at the top right of the device).

3. Navigate with the [PAGE UP] or [PAGE DOWN] buttons (to the right of the display) to *SD CARD BACKUP ALL* (the windows "SAVE", "LOAD" and "DELETE" are visible in the display).
4. Press the one of the function buttons (the four buttons above the display) that is located directly above the "SAVE" window.
5. **Is the checkmark** in the box next to the display "With User Sample" **set?** *Then you can continue at point 6.*
Otherwise you have to set the checkmark first. To do this, move the cursor to the box with the *arrow up* or *down* buttons (arrow keys to the left of the large rotary wheel) so that it is visually highlighted, and then turn the rotary wheel **clockwise** to set the checkmark. *If you can't, then there are no User Samples at all. No problem.*
6. Is there a number next to the *bank number* (1-99)? *Then continue with point 7.* But if there is a designation like "TD-50 Backup", then this bank is already occupied with a backup.
 In this case, move the cursor to the field next to *Bank Number* with the *arrow up* or *down* buttons (arrow keys to the left of the large rotary wheel) so that it is visually highlighted. Then rotate the wheel to select any number.
7. Press [F5] (the key below the "SAVE" field on the display).
8. Press the function key directly above the "NAME" field. This opens the option to give the backup a meaningful name. By default, it already says "Backup". **You will do yourself a big favor if you give it a meaningful name!** The cursor can be moved left and right with the arrow keys (left of the silver dial). If necessary, bring it to the beginning and press [F4] (DELETE) so often until there is nothing left in the name.
 You could now assign a name that refers to the firmware under which you create this backup. Example: *104* (for firmware 1.04).
 Use either the big wheel (which controls all characters) or the third knob below the display (which controls numbers and special characters). Turn to "1", then press *right arrow*, turn again, this time to "0", then *right arrow* again and finally turn "4".
 Press [F5] (Exit) to leave the name assignment area.
9. Press [F5] (Execute) again. A confirmation prompt appears. Move the cursor with *arrow right to the OK* field and press [ENTER] (for the three keys below the arrow keys). This starts the backup process.

Press [KIT] to get to the main display.

Note: You should always keep a backup copy of your SD card on your computer, just in case. Copy the SD card as it is, i.e. do not change the folder structure (otherwise your TD-50/TD-50X will not find the files again).

How to perform a factory reset (WITHOUT resetting the user samples)

If you have backups in which your user samples are also saved, you normally perform a factory reset with simultaneous reset of the user samples.

For our purposes, however, it makes sense to perform the factory reset **WITHOUT** resetting the user samples. This means that the User Samples are NOT deleted from the TD-50. So you can take your User Samples with you to the TD-50X. (With the backup method this would not work, because a TD-50 backup cannot be read by the TD-50X).

1. Press [SETUP].
2. Navigate with the [PAGE UP] or [PAGE DOWN] buttons (to the right of the display) to the display page that shows the "FACTORY RESET" window.
3. Press the one of the four function buttons above the display (F1 - F4) that is placed directly above the 'FACTORY RESET' window. (The position may vary depending on the firmware version).
4. A warning message regarding the deletion of the data appears. The field labeled "RESET WITH USER SAMPLE" is highlighted.
5. **If necessary, uncheck the "RESET WITH USER SAMPLE" box by turning the dial counterclockwise.**
6. Press [F5] (this is the function button under the "FACTORY RESET" field).
7. A confirmation prompt appears. (You can still cancel the process now by pressing [EXIT] or [ENTER].)
To trigger the formatting process, move the cursor with *arrow* right (at the four arrow keys next to the rotary wheel) to the "OK" field and press [ENTER].

After about one minute, the process is completed and the main display appears.

That's it!

How to perform a factory reset (WITH reset of the user samples)

If you have a backup that contains your own user samples or those of third parties, you can always perform a **factory reset including a sample reset**. This means that all user samples will be deleted. This way you avoid double usage in the sample memory when you restore the backup together with the User Samples.

7. Press [SETUP].
8. Navigate with the [PAGE UP] or [PAGE DOWN] buttons (to the right of the display) to the display page that shows the "FACTORY RESET" window.
9. Press the one of the four function buttons above the display (F1 - F4) that is placed directly above the "FACTORY RESET" window. (The position may vary depending on the firmware version).
10. A warning message regarding the deletion of the data appears. The field labeled "RESET WITH USER SAMPLE" is highlighted.
11. **If necessary, check** the "RESET WITH USER SAMPLE" box **by turning** the dial **clockwise**.
12. Press [F5] (this is the function button under the "FACTORY RESET" field).

A confirmation prompt appears. (You can still cancel the process now by pressing [EXIT] or [ENTER].)

To trigger the formatting process, move the cursor with *arrow* right (at the four arrow keys next to the rotary wheel) to the "OK" field and press [ENTER].

After about one minute, the process is completed and the main display appears.

That's it!

How to create a Roland Cloud account

You will need a device (e.g. a computer or tablet) with a browser and internet access to set up the account. You will also need to be able to access your email, as Roland will send you a confirmation code to your email address.

1. Open your web browser and go to the website

<https://rolandcloud.com>

2. Click on the "Sign In" field. The registration form will appear. Under the form there is a link "Create user account". Click on this link.

3. The "Create Roland Account" window will open. Enter the email address you want to register with in the corresponding line. (A confirmation link will be sent to this email address).
4. Click on the "Submit" button.
5. A window opens in which you must now enter details about your account. In particular, you create a password here that you will use to log in to the Roland Cloud in the future. **Make a note of the password and keep it safe.**
6. After you have filled in all the fields, click the "Register" button.
7. A new window will open telling you that Roland will now send you an activation link to the email address you just entered. Open your email program, retrieve the email and click on the link. You can also enter the code manually. To do this, switch back to your browser and click on the link "You can also enter the activation code manually". Then a field will open where you can enter the code you received in the email. Click on "Confirm".
8. This completes the setup of your Roland account. A login window will appear and you can now log in by entering your email address and password and then clicking "Login".

By the way: depending on the settings of your browser, it is possible that you stay logged in to your account if you do not explicitly log out. This means that you only need to go to <https://rolandcloud.com> in your browser to go directly to your account. If this is not the case, you can log in again at any time by entering your email address and password under *Log In* or *Sign In*.

- End of the manual -