

Drum Trigger Module

Setup Manual for DT50S/DT50K

This manual describes how to correctly connect drum triggers (DT50S/DT50K) to your drum trigger module and set parameters on your module to use the triggers. Refer to the Owner's Manual that came with your DT50S/DT50K for details on how to use drum triggers and mount them on acoustic drums.

Select your drum trigger module.

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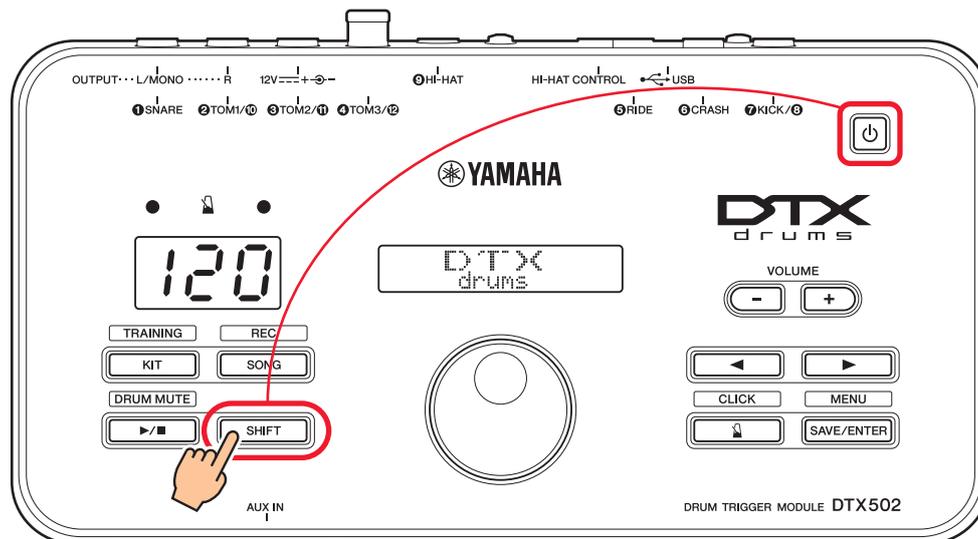
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DTX502

Checking the Firmware Version

Depending on the version of the firmware, you may need to update it. Before you connect the module to your DT50S/DT50K triggers, be sure to check the version of your module's firmware.

1. While holding down the [SHIFT] button, turn on the drum trigger module.



2. Confirm the version displayed on-screen.

Selecting a Setup Method

After you confirm the version, select the appropriate setup method.

- If Version 1.30 or later
 - Quick Setup (recommended)
 - Advanced Setup
- If Version less than 1.30
 - Update before Using (recommended)
 - Use without Updating

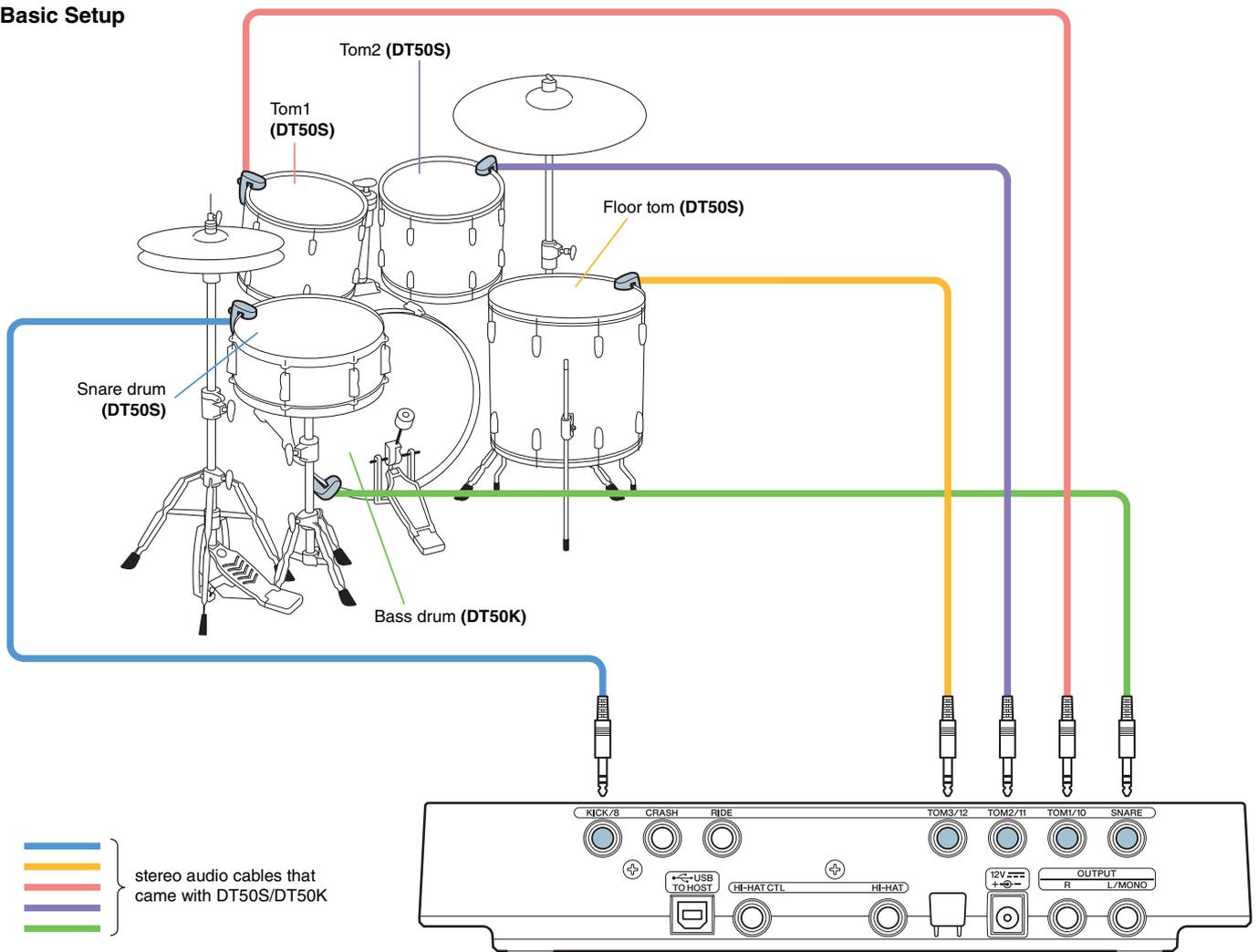
Quick Setup (recommended)

This section describes the basic setup for connecting your DT50S/DT50K triggers to your module, and how to automatically set parameters by using Trigger Setup. With this method, you do not need to select voices individually. You can play snare, tom, or kick drum sounds simply by selecting a Pre-set kit.

1. Connecting to the Drum Trigger Module

Connect your drum triggers to the jacks on your DTX502 indicated below by using the stereo audio cables that came with the triggers. Refer to the Owner's Manual that came with your DT50S/DT50K for details on how to use the drum triggers and mount them on acoustic drums.

Basic Setup



NOTE

- The following jacks on the DTX502 each comprise a pair of mono inputs (L: trigger, R: trigger): [2TOM1/10], [3TOM2/11], [4TOM3/12], and [7KICK/8]. In this basic setup, the snare drum (DT50S) is connected to the [7KICK/8] jack and the bass drum (DT50K) to the [1SNARE] jack in order to produce two sounds on the snare drum, one for a head shot and one for a rim shot. Note that in this case the connected drums will not match the jack names.
- If you wish to produce a sound for tom rim shots as well, refer to [Advanced Setup](#).

2. Selecting a Trigger Setup

1. While holding down the [SHIFT] button, press the [SAVE/ENTER] button to access Menu Mode.
2. Turn the Data Dial to select the Trigger area, and then use the [◀]/[▶] buttons to select the TRG1 page.
3. Turn the Data Dial to select “DT50” or “DT50Mesh”.

```
>TRG1 -----
16:DT50      ▶
```

DT50: Setup for a normal acoustic drum set.

DT50Mesh: Setup for mesh heads.

The most appropriate pad types will be automatically selected.

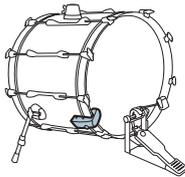
HINT

Input Exchange

Because the above connection consists of connecting the snare drum (DT50S) to the [7 KICK/8] jack and the bass drum (DT50K) to the [1 SNARE] jack, the connected drums will not match the jack names. In order to avoid confusion, if you have selected “DT50” or “DT50Mesh”, the Input Exchange function will automatically turn on to swap the snare and kick.

If Input Exchange is Off (normal input sources)

Bass drum



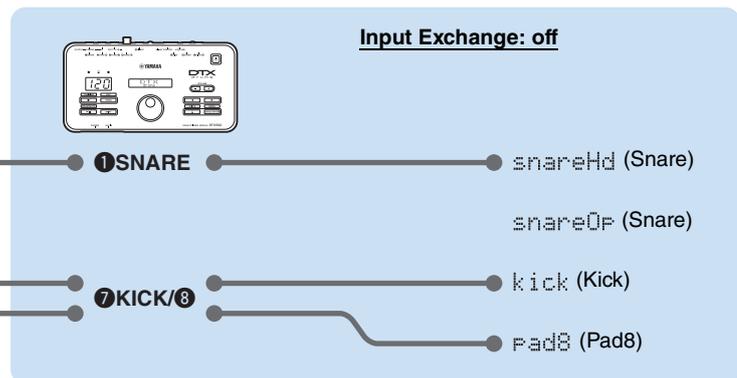
Head

Snare drum



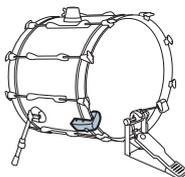
Head

Rim



If Input Exchange is On

Bass drum



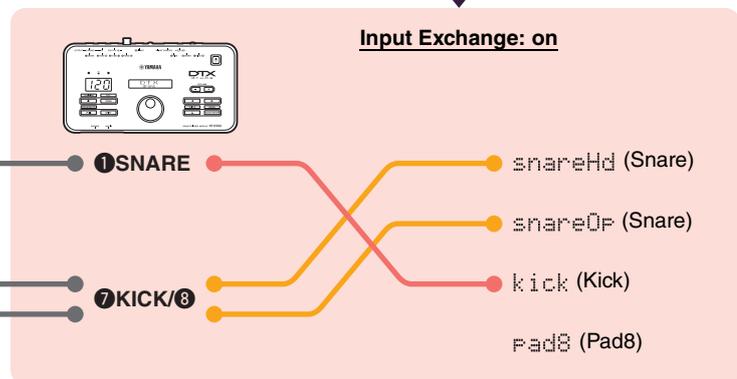
Head

Snare drum



Head

Rim



This completes the quick setup process.

You can now use your drum triggers to experience a whole new world of drumming.

Click here for hints on how to make your triggers easier to use. → **TIPS!**

Advanced Setup

This section describes how to set individual pad types and voices for drum triggers without using **Trigger Setup**.

Use this method for more advanced configurations such as mounting a DT50S on a tom in order to produce two sounds, one for a head shot and one for a rim shot.

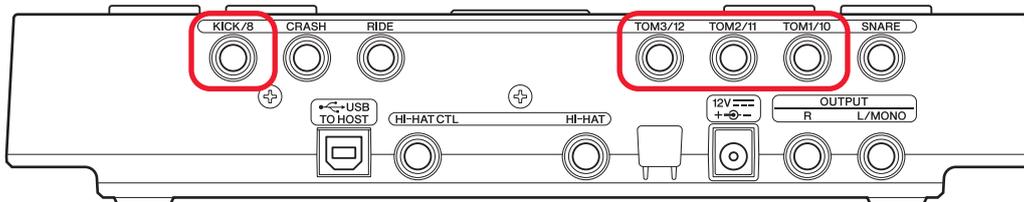
A high degree of customization is possible, but you will need to adjust the parameters yourself.

1. Connecting to the Drum Trigger Module

Connect your drum triggers to the jacks on your DTX502 by using the stereo audio cables that came with the triggers. Refer to the Owner's Manual that came with your DT50S/DT50K for details on how to use the drum triggers and mount them on acoustic drums.

NOTE

The following jacks on the DTX502 each comprise a pair of mono inputs (L: trigger, R: trigger): [2]TOM1/[10], [3]TOM2/[11], [4]TOM3/[12], and [7]KICK/[8]. (Refer to the diagram below).



If you wish to produce two sounds with a DT50S (which is designed for snares and toms), one for a head shot and one for a rim shot, connect the trigger to one of the jacks indicated above.

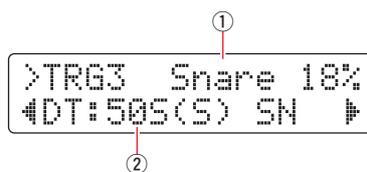
2. Setting Parameters on the Drum Trigger Module

This section describes how to set parameters to play voices by using signals from DT50S/DT50K triggers connected to your drum trigger module.

2-1. Selecting the Pad Type

Set the pad type for the DT50S/DT50K connected to the trigger input jack. Make sure to select the appropriate pad type for the drum trigger in order to take full advantage of its functions.

1. While holding down the [SHIFT] button, press the [SAVE/ENTER] button to access Menu Mode.
2. Turn the Data Dial to select the Trigger area, and then press the [◀]/[▶] buttons to select the TRG3 page.



3. Strike the head of the connected drum to select the trigger input (①). Alternatively, you can change the selection by holding down the [SHIFT] button and pressing the [◀]/[▶] buttons.

4. Turn the Data Dial to set the pad type (②). Refer to the table below for settings.

	Acoustic drum on which the trigger is mounted	Input jack on drum trigger module	
		[①SNARE]	[②TOM1/⑩], [③TOM2/⑪], [④TOM3/⑫], or [⑦KICK/⑥]
DT50S	Snare	DT50S(S) SN	DT50S SN
	Tom	DT50S(S) tomH	DT50S tomH
	Floor tom	DT50S(S) tomL	DT50S tomL
DT50K	Bass drum (*)	DT50K	DT50K

(S): Only the head trigger of the DT50S will produce a sound.

*: If mounting a DT50S on a bass drum, such as in the Yamaha Junior Kit, set the Pad Type parameter to "DT50K"

2-2. Saving Pad Types

Save your pad type settings on the drum trigger module as a User trigger setup to ensure they are not lost.

1. Press the [SAVE/ENTER] button.

Destination for saving

```

TRG save to 18
:[DT50 Custom ]
  
```

2. Turn the Data Dial to select the User trigger setup number (18 to 33) in which you wish to save your settings.
3. If necessary, change the setup name. Press the [◀]/[▶] buttons to move the cursor to the character you wish to change, and then turn the Data Dial to change it.
4. Press the [SAVE/ENTER] button. To cancel the process without saving any settings, press the [↵] button.

```

TRG save to 18
Are you sure?
  
```

5. To proceed, press the [SAVE/ENTER] button once again.

2-3. Selecting a Voice

Select a voice for each input jack.

1. Press the [KIT] button to access the Kit Mode.
2. Navigate to the KIT2 page using the [◀]/[▶] buttons.
3. Strike the head or rim whose instrument voice(s) you wish to change. Alternatively, you can change the selection by holding down the [SHIFT] button and pressing the [◀]/[▶] buttons.

Voice assignment destination

```

KIT2      Snare
◀532:Electro 2 ▶
  
```

① ②

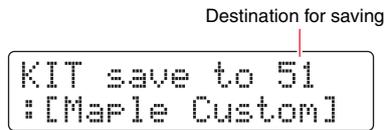
This changes the instrument to which the voice will be assigned.

4. Use the [◀]/[▶] buttons to move the cursor to the voice category (①) and/or voice number (②), and turn the Data Dial to change the voice.

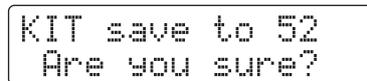
2-4. Saving Voices

Save your voice settings on the drum trigger module as a User kit to ensure they are not lost.

1. Press the [SAVE/ENTER] button.



2. Turn the Data Dial to select the User kit number (51 to 100) in which you wish to save your settings.
3. If necessary, name your new drum kit. Press the [◀]/[▶] buttons to move the cursor to the character you wish to change, and then turn the Data Dial to change it.
4. Press the [SAVE/ENTER] button. To cancel the process without saving any settings, press the [] button.



5. To proceed, press the [SAVE/ENTER] button once again.

2-5. Setting other Trigger Parameters

Based on the recommended settings below, adjust the parameters in accordance with your drum setup. Refer to “Menu Mode—Trigger-related settings” in the DTX502 Owner’s Manual for details on other trigger input parameters such as Gain and Minimum Level.

Recommended Settings (regular drums)

			Velocity Curve	Gain	Minimum Level (%)	Minimum Velocity	Reject Time (ms)	Wait Time (ms)	Noise Filter
DT50S	Snare	(Head)	norm	65	30	1	20	3	6
		(Rim)	norm	85	25	1	20	3	6
	Tom	(Head)	norm	40	35	1	51	3	7
		(Rim)	norm	85	25	1	26	3	7
	Floor tom	(Head)	norm	20	35	1	51	3	8
		(Rim)	norm	85	25	1	26	3	7
DT50K	Bass drum	—	norm	27	35	1	20	5	8

Recommended Settings (Mesh Pads)

		Velocity Curve	Gain	Minimum Level (%)	Minimum Velocity	Reject Time (ms)	Wait Time (ms)	Noise Filter
DT50S	Snare	norm	85	0	1	26	3	6
	Tom	norm	75	0	1	26	3	6
	Floor tom	norm	85	0	1	26	3	6
DT50K	Bass drum	norm	85	0	1	20	5	7

This completes the advanced setup process.

You can now use your drum triggers to experience a whole new world of drumming.

Click here for hints on how to make your triggers easier to use. → **TIPS!**

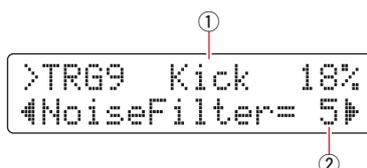
TIPS!

This section provides tips on how to make your drum triggers even easier to use.

■ Adjusting the Noise Filter

Follow the steps below to make adjustments in situations where, for whatever reason, noise enters the trigger signal when a pad is struck or other instability in trigger signals leads to sounds not being generated correctly.

1. While holding down the [SHIFT] button, press the [SAVE/ENTER] button to access Menu Mode.
2. Turn the Data Dial to select the Trigger area, and then press the [◀]/[▶] buttons to navigate to the Noise Filter page (TRG9).



3. Strike the head of the connected drum to select the trigger input (①), and then turn the Data Dial to set the noise filter (②).

HINT

The larger the value, the more noise and unintentional sounds will be filtered. Larger noise filter settings can, in cases where the drum is struck multiple times in rapid succession, result in sounds being dropped. Be sure to adjust the setting to best match your style of drumming.

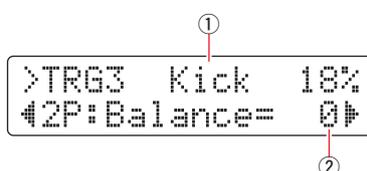
4. Save your settings on the drum trigger module as a User trigger setup to ensure they are not lost. Refer to “2-2. Saving Pad Types” in this manual for details on how to save settings.

■ Adjusting Head and Rim Balance

Follow the steps below to adjust the balance between the head and rim of the snare or other drum on which a DT50S is mounted.

This setting will only work when you have selected “DT50S SN”, “DT50S tomH”, or “DT50S tomL” for the Pad Type parameter.

1. While holding down the [SHIFT] button, press the [SAVE/ENTER] button to access Menu Mode.
2. Turn the Data Dial to select the Trigger area, and then press the [◀]/[▶] buttons to navigate to the Balance page (TRG3).



3. Strike the head of the connected drum to select the trigger input (①), and then turn the Data Dial to set the balance (②).

HINT

If the head sounds when the rim is struck, move the balance further to the R side (i.e., raise the setting) to ensure that the rim sounds. Similarly, if the rim sounds when the head is struck, move the balance further to the H side (i.e., lower the setting) to ensure that the head sounds instead. Adjust the value until you reach the optimal balance.

4. Save your settings on the drum trigger module as a User trigger setup to ensure they are not lost. Refer to “2-2. Saving Pad Types” in this manual for details on how to save settings.

Update before Using (recommended)

There are two ways to update the firmware—a Windows application or an iOS app.

If you are using Windows, search for “DTX502 Updater” on the web site below, download the DTX502 Updater application, and follow the steps on the firmware updater page to update the firmware.

Yamaha Downloads: <http://download.yamaha.com>



Updating with the iOS App (DTX502 Touch)

Special Notices

- When the update is installing, be sure not to remove the USB cable from the [USB TO HOST] terminal or turn off the drum trigger module. Failure to observe this precaution can result in the module being damaged.
- A camera connector is required to connect the DTX502 to an iOS device.
- If you are using a version of DTX502 Touch earlier than Version 2.*.*, update the DTX502 Touch app before updating the firmware.

DTX502 Touch Version 2.*.*

1. Download the [iPhone/iPad Connection Manual](#).
2. Connect the device containing the DTX502 Touch app to the DTX502 in accordance with the directions in the iPhone/iPad Connection Manual.
3. Open the DTX502 Touch app. The app will automatically confirm the current firmware version, and a message will appear prompting you to update it. Follow the steps displayed to update.

Return to the **Selecting a Setup Method** section → [Selecting a Setup Method](#)

Use without Updating

You can use drum triggers with DTX502 drum trigger modules of Version less than 1.30, but in such a case, you will need to set parameters individually. We recommend updating the module, as it will make setup easier.

Follow the steps below to use your drum triggers without updating the DTX502.

1. Connecting to the Drum Trigger Module

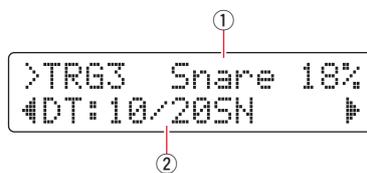
Connect your drum triggers to the jacks on your DTX502 by using the stereo audio cables that came with the triggers. Refer to the Owner's Manual that came with your DT50S/DT50K for details on how to use drum triggers and mount them on acoustic drums.

2. Setting Parameters on the Drum Trigger Module

2-1. Selecting the Pad Type

Set the pad type for the DT50S/DT50K connected to the trigger input jack.

1. While holding down the [SHIFT] button, press the [SAVE/ENTER] button to access Menu Mode.
2. Turn the Data Dial to select the Trigger area, and then press the [◀]/[▶] buttons to select the TRG3 page.



3. Strike the head of the connected drum to select the trigger input (①). Alternatively, you can change the selection by holding down the [SHIFT] button and pressing the [◀]/[▶] buttons.
4. Turn the Data Dial to set the pad type (②). Refer to the table below for settings.

	Acoustic drum on which the trigger is mounted	Settings	
		If connected to dual mono input jacks (L: trigger, R: trigger) (*1)	If connected to a mono input jack
DT50S	Snare	2P: 2Piezo	DT: 10/20SN
	Tom		DT: 10/20tomH
	Floor tom		DT: 10/20tomL
DT50K	Bass drum (*2)	DT: 10/20kick	

*1: The following jacks on the DTX502 each comprise a pair of mono inputs (L: trigger, R: trigger): [②TOM1/⑩], [③TOM2/⑪], [④TOM3/⑫], and [⑦KICK/⑧]. If you wish to produce two sounds with a DT50S (which is designed for snares and toms), one for a head shot and one for a rim shot, connect the trigger to one of these jacks.

*2: If mounting a DT50S on a bass drum, such as in the Yamaha Junior Kit, set the Pad Type parameter to "DT50K".

2-2. Setting Other Trigger Parameters

Based on the recommended settings below, adjust the parameters in accordance with your drum setup. Refer to “Menu Mode—Trigger-related settings” in the DTX502 Owner’s Manual for details on other trigger input parameters such as Gain and Minimum Level.

Recommended Settings (regular drums)

			Velocity Curve	Gain	Minimum Level (%)	Minimum Velocity	Reject Time (ms)	Wait Time (ms)	Noise Filter	Dual Piezo Balance
DT50S	Snare	(Head)	norm	65	30	1	20	3	6	R40
		(Rim)	norm	85	25	1	20	3	6	
	Tom	(Head)	norm	40	35	1	51	3	7	0
		(Rim)	norm	85	25	1	26	3	7	
	Floor tom	(Head)	norm	20	35	1	51	3	8	0
		(Rim)	norm	85	25	1	26	3	7	
DT50K	Bass drum	—	norm	27	35	1	20	5	8	—

Recommended Settings (Mesh Pads)

			Velocity Curve	Gain	Minimum Level (%)	Minimum Velocity	Reject Time (ms)	Wait Time (ms)	Noise Filter	Dual Piezo Balance
DT50S	Snare	(Head)	norm	85	0	1	20	3	6	R40
		(Rim)	norm	85	25	1	20	3	6	
	Tom	(Head)	norm	75	0	1	26	3	6	0
		(Rim)	norm	85	25	1	26	3	7	
	Floor tom	(Head)	norm	85	0	1	26	3	6	0
		(Rim)	norm	85	25	1	26	3	7	
DT50K	Bass drum	—	norm	85	0	1	20	5	7	—

2-3. Saving Settings

Save your settings on the drum trigger module as a User trigger setup to ensure they are not lost. Refer to “2-2. Saving Pad Types” under Quick Setup for details on how to save settings.

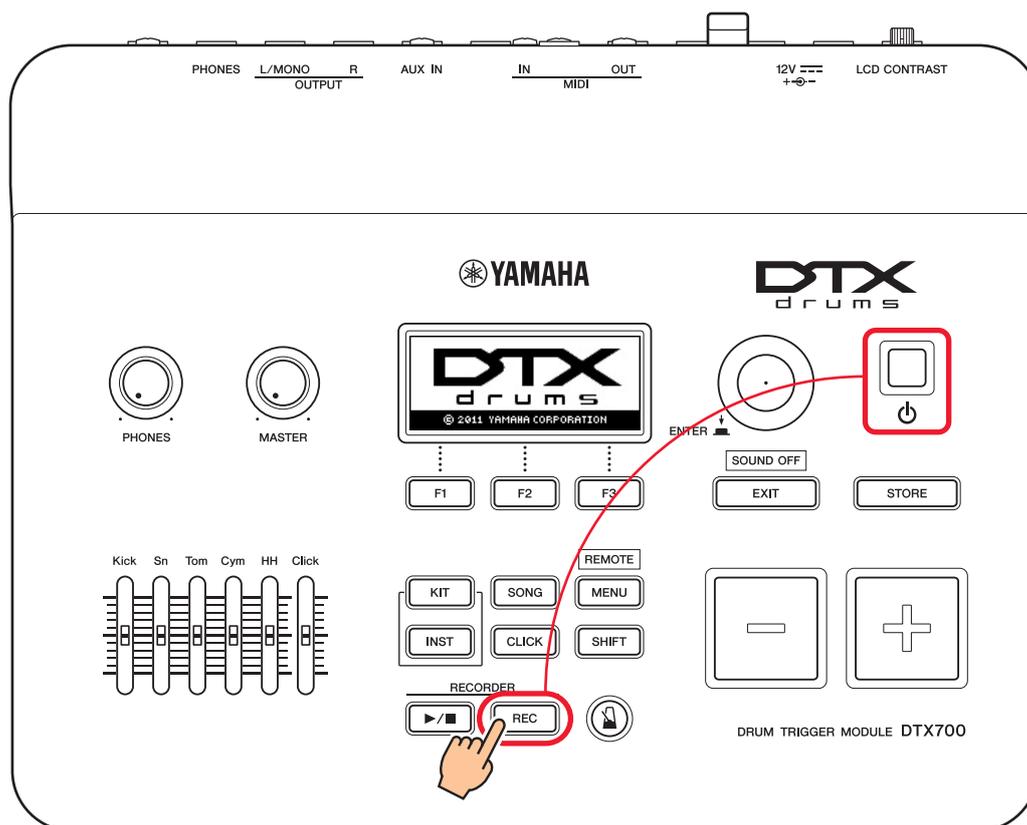
This completes the setup process.

You can now use your drum triggers to experience a whole new world of drumming.

Checking the Firmware Version

Depending on the version of the firmware, you may need to update it. Before you connect the module to your DT50S/DT50K triggers, be sure to check the version of your module's firmware.

1. While holding down the drum trigger module's [REC] button, turn on the power.



2. Confirm the version displayed on-screen. Look for the number after "Firm Ver:".
If the version is 1.03 or earlier, search for "DTX700" on the web site below, and then follow the steps on the Firmware Updater page to update the firmware.

Yamaha Downloads: <http://download.yamaha.com>

Confirm that the drum trigger module has been updated to Version 1.10, and then proceed to the setup procedures on the following page.

Setup Procedures

1. Connecting to the Drum Trigger Module

Connect your drum triggers to the jacks for the DTX700 voices you wish to play by using the stereo audio cables that came with the triggers. Refer to the Owner's Manual that came with your DT50S/DT50K for details on how to use the drum triggers and mount them on acoustic drums.

NOTE

- The DTX700 has only one dual mono input jack (L: trigger, R: trigger)—[**9**KICK/**10**]. If you wish to produce two sounds with a DT50S (which is designed for snares and toms), one for a head shot and one for a rim shot, connect the trigger to this jack.
- You can connect multiple DT50S/DT50K triggers to the module. See **TIPS!** for sample connections.

2. Setting Parameters on the Drum Trigger Module

This section describes how to set parameters to play voices by using signals from DT50S/DT50K triggers connected to your drum trigger module.

2-1. Selecting the Pad Type

Set the pad type for the DT50S/DT50K connected to the trigger input jack. Make sure to select the appropriate pad type for the drum trigger in order to take full advantage of its functions.

1. Press the [MENU] button to access the Menu area.
2. Use the dial to navigate to the TRIGGER/PAD/PAD TYPE page.



HINT

Using the dial

The dial can be turned or pressed. Turn the dial to select pages, and press it to confirm.

3. Use the [F1] button to set the name of the jack used for connection to the drum trigger module.
4. Set the pad type. Refer to the table below for settings.

	Acoustic drum on which the trigger is mounted	Input jack	
		[1]SNARE] – [3]HI-HAT], [1]	[9]KICK/ 10]
DT50S	Snare	DT50S(S) Snare	DT50S Snare
	Tom	DT50S(S) HiTom	DT50S HiTom
	Floor tom	DT50S(S) LoTom	DT50S LoTom
DT50K	Bass drum (*)	DT50K	DT50K

(S): Only the head trigger of the DT50S will produce a sound.

*: If mounting a DT50S on a bass drum, such as in the Yamaha Junior Kit, set the Pad Type parameter to "DT50K".

2-2. Storing Pad Types

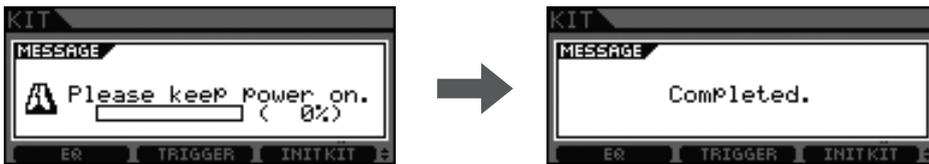
Store your pad type settings on the drum trigger module to ensure they are not lost.

1. Press the [STORE] button.

You can press the [EXIT] button to return to the previous page without storing.



2. Press the [ENTER] button to store the settings.



Notice

Never attempt to turn off the drum trigger module while the message “Please keep power on” is shown. If this precaution is not observed, user data may be lost or the internal system may be damaged, rendering your drum trigger module unable to startup normally when it is next turned on.

2-3. Selecting a Voice

Select the voice(s) you wish to play for each input jack (instrument).

1. Press the [INST] button.
2. Strike the head or rim whose instrument voice(s) you wish to change.
This will change the displayed trigger input jack.



NOTE

If you have connected a DT50S to the [KICK/10] jack, “Kick” will be displayed when you strike the head, and “Pad10” will be displayed when you strike the rim.

3. Select a voice for your newly-added drum trigger.

NOTE

If you wish to assign a voice to the rim, navigate to the Menu area’s Kit/Voice page and make the necessary settings.

2-4. Storing Voices

Store your voice settings on the drum trigger module to ensure they are not lost. Follow the steps indicated in “2-2. Storing Pad Types”.

This completes the setup process.

You can now use your drum triggers to experience a whole new world of drumming.

TIPS!

This section provides tips on how to make your drum triggers even easier to use.

■ Adjusting Head and Rim Balance

Follow the steps below to adjust the balance between the head and rim of the snare or other drum on which a DT50S is mounted.

This setting will only work when you have selected “DT50S Snare”, “DT50S HiTom”, or “DT50SLoTom” for the Pad Type parameter.

1. Press the [MENU] button to access the Menu area.
2. Use the dial to navigate to the TRIGGER/PAD/PAD TYPE page.



3. Adjust the Balance parameter to set the balance.

HINT

If the head sounds when the rim is struck, move the balance further to the R side (i.e., raise the setting) to ensure that the rim sounds. Similarly, if the rim sounds when the head is struck, move the balance further to the H side (i.e., lower the setting) to ensure that the head sounds instead. Adjust the value until you reach the optimal balance.

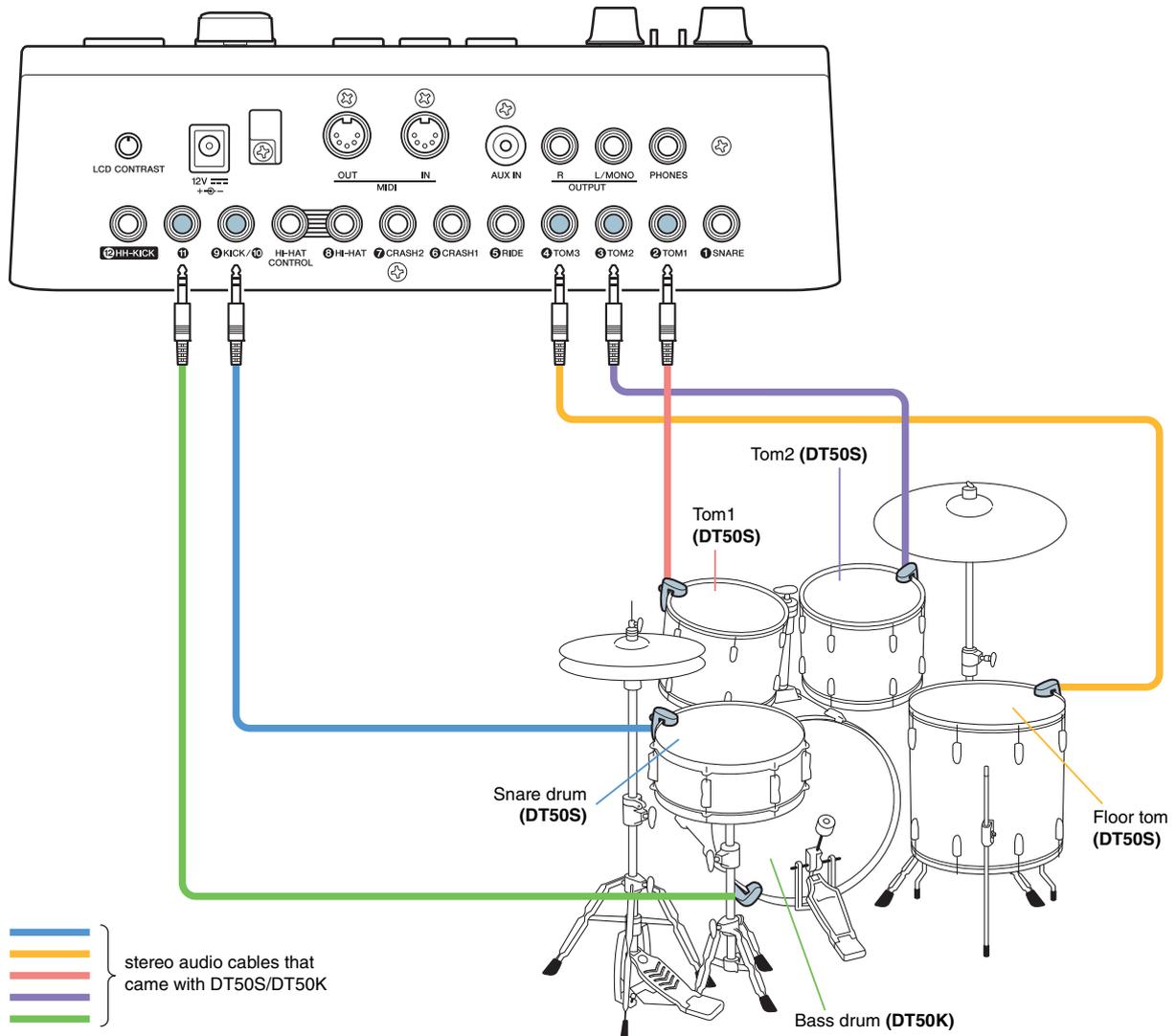
NOTE

If noise enters the trigger signal or sounds are not being generated correctly, adjust the noise filter. For details, refer to “Noise Filter Table (NoiseFltrTbl)” in this drum trigger module’s Reference Manual.

■ Connecting Multiple DT50S/DT50K Triggers

This section describes how to connect five DT50S/DT50K triggers—for example, four DT50S triggers and one DT50K trigger to the five [9]KICK/[10], [2]TOM1, [3]TOM2, [4]TOM3, and [1] jacks.

Adding triggers is a great way to expand your performance options by playing voices, waves, and songs; assigning functions to the triggers; and so on.



If setting up your drum trigger module with the above connections, refer to the table below for settings. See “[Setup Procedures](#)” for details on setting parameters.

	Acoustic drum on which the trigger is mounted	Input jack on drum trigger module	Settings for pad type		Settings for Voice	
			Name of trigger	Pad type	Name of trigger	Voice *
DT50S	Snare Head Rim	[9]KICK/[10]	Kick	DT50S Snare	Kick	Sn1: 013 Bright Oak
			Pad10		Pad10	Sn1: 014 BrOak OpRm
	Tom1	[2]TOM1	Tom1	DT50S(S) HiTom	Tom1	Tom1: 005 Oak H
	Tom2	[3]TOM2	Tom2	DT50S(S) HiTom	Tom2	Tom1: 006 Oak M
Floor tom	[4]TOM3	Tom3	DT50S(S) LoTom	Tom3	Tom1: 007 Oak L	
DT50K	Bass drum	[1]	Pad11	DT50K	Pad11	Kick: 009 BriteOak22

*: These voices are presented as examples only. Feel free to change them to suit your personal preferences. Furthermore, if you wish to assign a voice to the rim, navigate to the Menu area’s Kit/Voice page and make the necessary settings.

DTX900

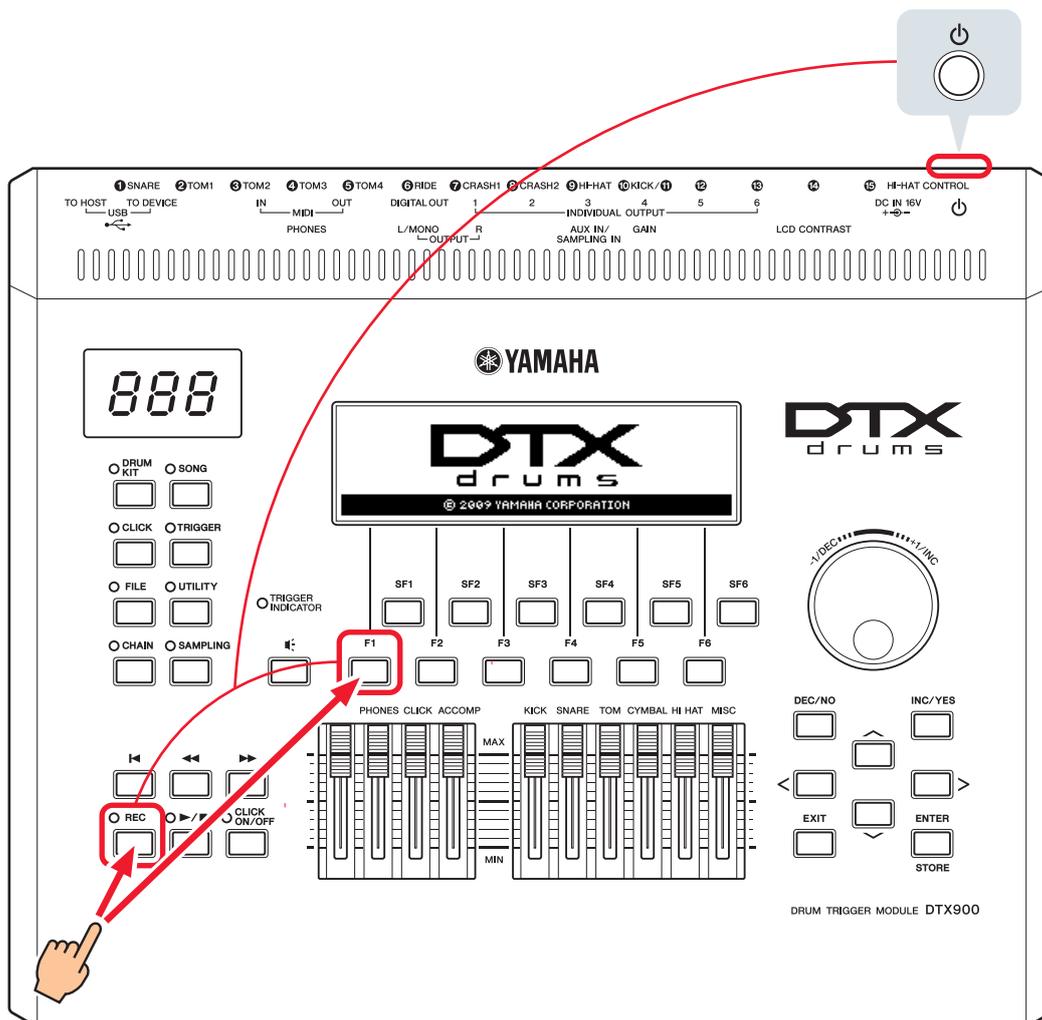
Unless otherwise noted, “DTX900” in this manual refers to the DTX900M, DTX900, and DTX-TREME III drum trigger modules.

Please interpret it as referring to your module.

Checking the Firmware Version

Depending on the version of the firmware, you may need to update it. Before you connect the module to your DT50S/DT50K triggers, be sure to check the version of your module’s firmware.

1. While holding down the [F1] button and the [REC] button simultaneously, turn on the drum trigger module.



2. Confirm the version displayed on-screen.

If the version is 1.05 or earlier, search for “DTX900” on the web site below, and then follow the steps on the Firmware Updater page to update the firmware.

Yamaha Downloads: <http://download.yamaha.com>

Confirm that the drum trigger module has been updated to Version 1.10, and then proceed to the setup procedures on the following page.

Setup Procedures

1. Connecting to the Drum Trigger Module

Connect your drum triggers to the jacks for the DTX900 voices you wish to play by using the stereo audio cables that came with the triggers. Refer to the Owner's Manual that came with your DT50S/DT50K for details on how to use the drum triggers and mount them on acoustic drums.

NOTE

- The DTX900 has only one dual mono input jack (L: trigger, R: trigger)—[**ⓀICK/Ⓜ**]. If you wish to produce two sounds with a DT50S (which is designed for snares and toms), one for a head shot and one for a rim shot, connect the trigger to this jack.
- You can connect multiple DT50S/DT50K triggers to the module. See **TIPS!** for sample connections.

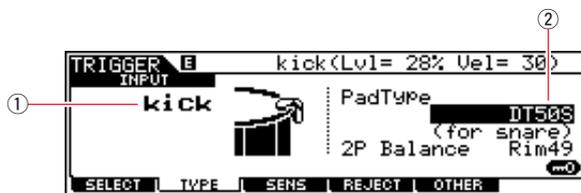
2. Setting Parameters on the Drum Trigger Module

This section describes how to set parameters to play voices by using signals from DT50S/DT50K triggers connected to your drum trigger module.

2-1. Selecting the Pad Type

Set the pad type for the DT50S/DT50K connected to the trigger input jack. Make sure to select the appropriate pad type for the drum trigger in order to take full advantage of its functions.

1. Press the [TRIGGER] button to access Trigger mode.
2. Press the [F2] button to open the PadType parameter page.



3. Set the PadType parameter.

Select the trigger input jack (①), and then set the pad type (②). Refer to the table below for settings.

	Acoustic drum on which the trigger is mounted	Input jack on drum trigger module	
		[Ⓚ SNARE] – [Ⓜ HI-HAT], [Ⓛ] – [Ⓟ]	[ⓀICK/Ⓜ]
DT50S	Snare	DT50S(S) (for snare)	DT50S (for snare)
	Tom	DT50S(S) (for HiTom)	DT50S (for HiTom)
	Floor tom	DT50S(S) (for LoTom)	DT50S (for LoTom)
DT50K	Bass drum (*)	DT50K	DT50K

(S): Only the head trigger of the DT50S will produce a sound.

*: If mounting a DT50S on a bass drum, such as in the Yamaha Junior Kit, set the PadType parameter to "DT50K."

2-2. Storing Pad Types

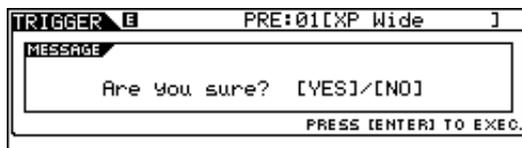
Store your pad type settings on the drum trigger module as a User Trigger Setup to ensure they are not lost.

1. Press the [TRIGGER] button to access Trigger mode.
2. Press the [ENTER/STORE] button.



Destination Trigger Setup number for storing

3. Turn the data dial to select the Trigger Setup number in which you wish to store your settings.
4. Press the [ENTER/STORE] button. You will be asked to confirm that you wish to proceed. Press the [DEC/NO] button to cancel the process without storing any settings.



5. To proceed, press the [INC/YES] button.

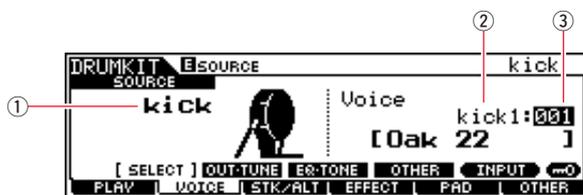
Notice

Never attempt to turn off the drum trigger module while the message “Please keep power on” is shown. If this precaution is not observed, user data may be lost or the internal system may be damaged, rendering your drum trigger module unable to startup normally when it is next turned on.

2-3. Selecting a Drum Voice

Select the drum voice(s) you wish to play for each input jack.

1. Press the [DRUM KIT] button to access Drum Kit mode.
2. Press the [F2] VOICE button, and then the [SF1] SELECT button to call up the Select page.
3. Press the [SF5] button to set “SOURCE”.
4. Strike the head or rim whose Trigger Input Jack you wish to change. Alternatively, you can move the cursor to ①, and then change the setting by pressing the [DEC/NO] and [INC/YES] buttons.



NOTE

If you have connected a DT50S to the [KICK/1] jack, “Kick” will be displayed when you strike the head, and “Pad11” will be displayed when you strike the rim.

5. Move the cursor to the Voice Category (②) and Voice Number (③) parameters, and select the desired category and voice by using the [DEC/NO] and [INC/YES] buttons.

2-4. Storing Drum Voices

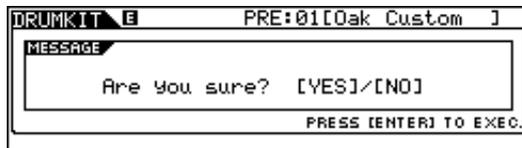
Store your drum voice settings on the module as a User kit to ensure they are not lost.

1. Press the [DRUM KIT] button to access Drum Kit mode.
2. Press the [ENTER/STORE] button.



Destination Drum Kit bank for storing Destination Drum Kit number for storing

3. Turn the data dial to select the Drum Kit bank and Drum Kit number in which you wish to store your settings.
4. Press the [ENTER/STORE] button. You will be asked to confirm that you wish to proceed. Press the [DEC/NO] button to cancel the process without storing any settings.



5. Press the [INC/YES] button to store your settings.

Notice

Never attempt to turn off the drum trigger module while the message "Please keep power on" is shown. If this precaution is not observed, user data may be lost or the internal system may be damaged, rendering your drum trigger module unable to startup normally when it is next turned on.

This completes the setup process.

You can now use your drum triggers to experience a whole new world of drumming.

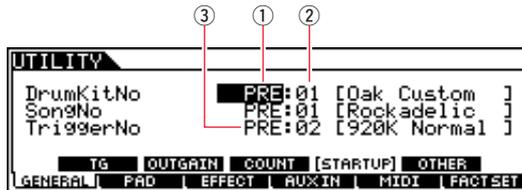
TIPS!

This section provides tips on how to make your drum triggers even easier to use.

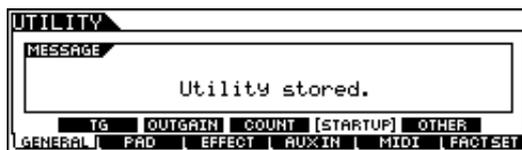
■ Configuring Startup Settings

You can configure settings so that stored pad type and voice settings will be automatically selected when you turn on the drum trigger module.

1. Press the [UTILITY] button to access Utility mode.
2. Press the [F1] GENERAL button, and then the [SF4] STARTUP button to call up the display for making the drum trigger module's startup settings.



3. Select a User Kit (①, ②) that you stored as described in “2-4. Storing Drum Voices”.
4. Select a User Trigger Setup (③) that you stored as described in “2-2. Storing Pad Types”.
5. Press the [ENTER/STORE] button to store your settings.



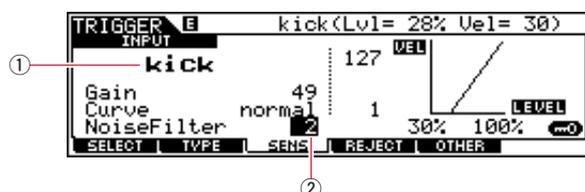
Notice

Never attempt to turn off the drum trigger module while the message “Utility stored.” is shown. If this precaution is not observed, user data may be lost or the internal system may be damaged, rendering your drum trigger module unable to startup normally when it is next turned on.

■ Adjusting the Noise Filter

Follow the steps below to make adjustments in situations where, for whatever reason, noise enters the trigger signal when a pad is struck or other instability in trigger signals leads to sounds not being generated correctly.

1. Press the [TRIGGER] button to access Trigger mode.
2. Press the [F3] button to call up the Trigger Sensitivity Settings display.



3. Select the name of the jack (①) used for connection to the drum trigger module, and then adjust the NoiseFilter parameter (②).

HINT

The larger the value, the more noise and unintentional sounds will be filtered. Larger noise filter settings can, in cases where the drum is struck multiple times in rapid succession, result in sounds being dropped. Be sure to adjust the setting to best match your style of drumming.

4. Store your settings on the drum trigger module as a User Trigger to ensure they are not lost. Refer to “2-2. Storing Pad Types” in this manual for details on how to store settings.

■ Adjusting Head and Rim Balance

Follow the steps below to adjust the balance between the head and rim of the snare or other drum on which a DT50S is mounted.

This setting will only work when you have selected “DT50S (for snare)”, “DT50S (for HiTom)”, or “DT50S (for LoTom)” for the PadType parameter.

1. Press the [TRIGGER] button to access Trigger mode.
2. Press the [F2] button to open the PadType parameter page.



3. Select the name of the jack (①) used for connection to the drum trigger module, and then adjust the balance (②).

HINT

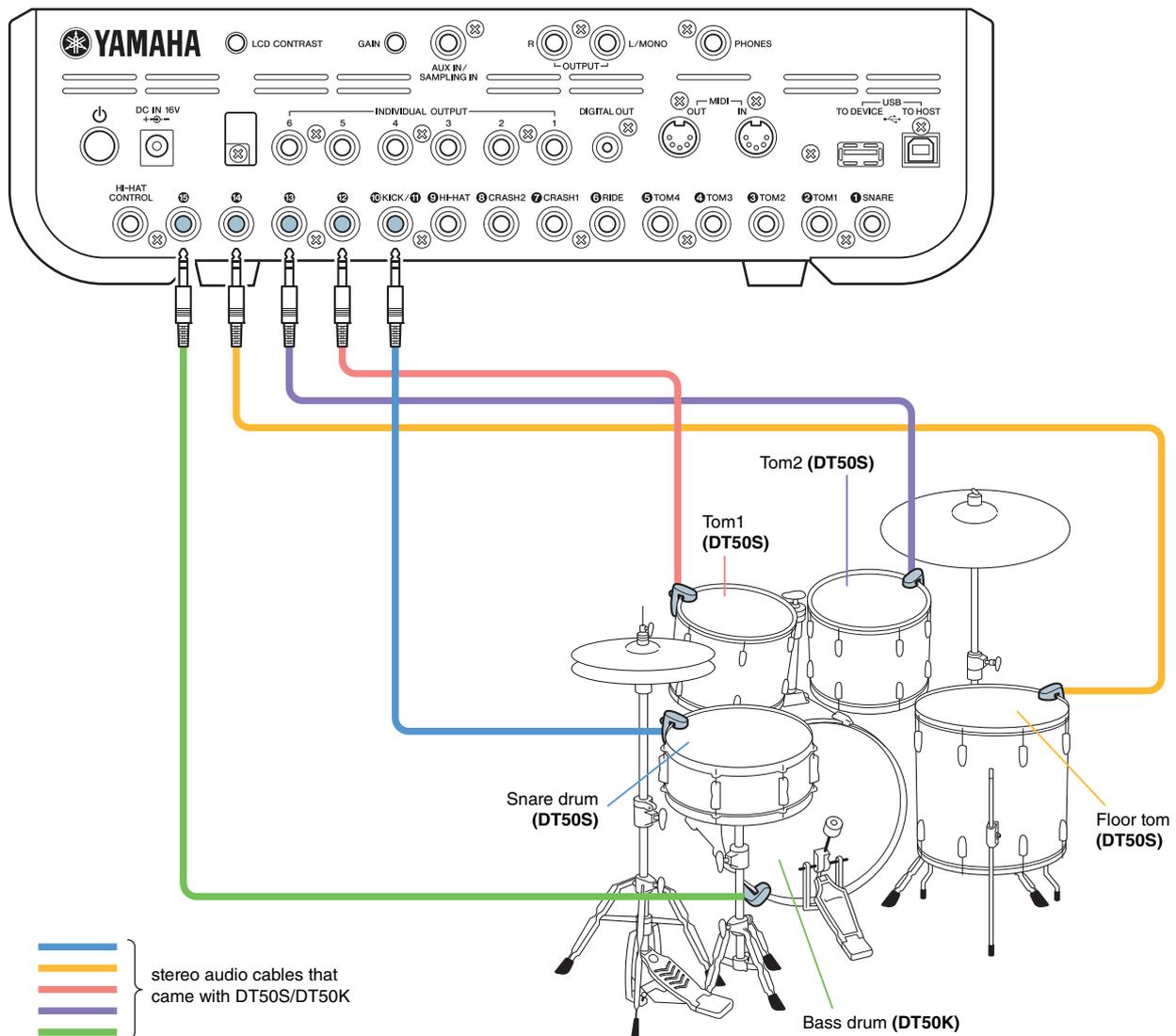
If the head sounds when the rim is struck, move the balance further to the R side (i.e., raise the setting) to ensure that the rim sounds. Similarly, if the rim sounds when the head is struck, move the balance further to the H side (i.e., lower the setting) to ensure that the head sounds instead. Adjust the value until you reach the optimal balance.

4. Store your settings on the drum trigger module as a User Trigger to ensure they are not lost. Refer to “2-2. Storing Pad Types” in this manual for details on how to store settings.

■ Connecting Multiple DT50S/DT50K Triggers

This section describes how to connect five DT50S/DT50K triggers—for example, four DT50S triggers and one DT50K trigger to the five [10]KICK/[11], [12], [13], [14], and [15] jacks.

Adding triggers is a great way to expand your performance options by playing voices, waves, and songs; assigning functions to the triggers; and so on.



If setting up your drum trigger module with the above connections, refer to the table below for settings. See “[Setup Procedures](#)” for details on setting parameters.

	Acoustic drum on which the trigger is mounted	Input jack on drum trigger module	Settings for pad type		Settings for Drum Voice	
			Name of trigger	Pad type	Name of trigger	Drum Voice *
DT50S	Snare	[10]KICK/[11]	kick	DT50S (for snare)	kick	sanre1: 001 OakCustom
			pad11		pad11	sanre1: 002 OakCusOpRm
	Tom1	[12]	pad12	DT50S(S) (for HiTom)	pad12Hd	tom1: 001 Oak 10
	Tom2	[13]	pad13	DT50S(S) (for HiTom)	pad13Hd	tom1: 004 Oak 12
	Floor tom	[14]	pad14	DT50S(S) (for LoTom)	pad14Hd	tom1: 007 Oak 14
DT50K	Bass drum	[15]	pad15	DT50K	pad15Hd	kick1: 001 Oak 22

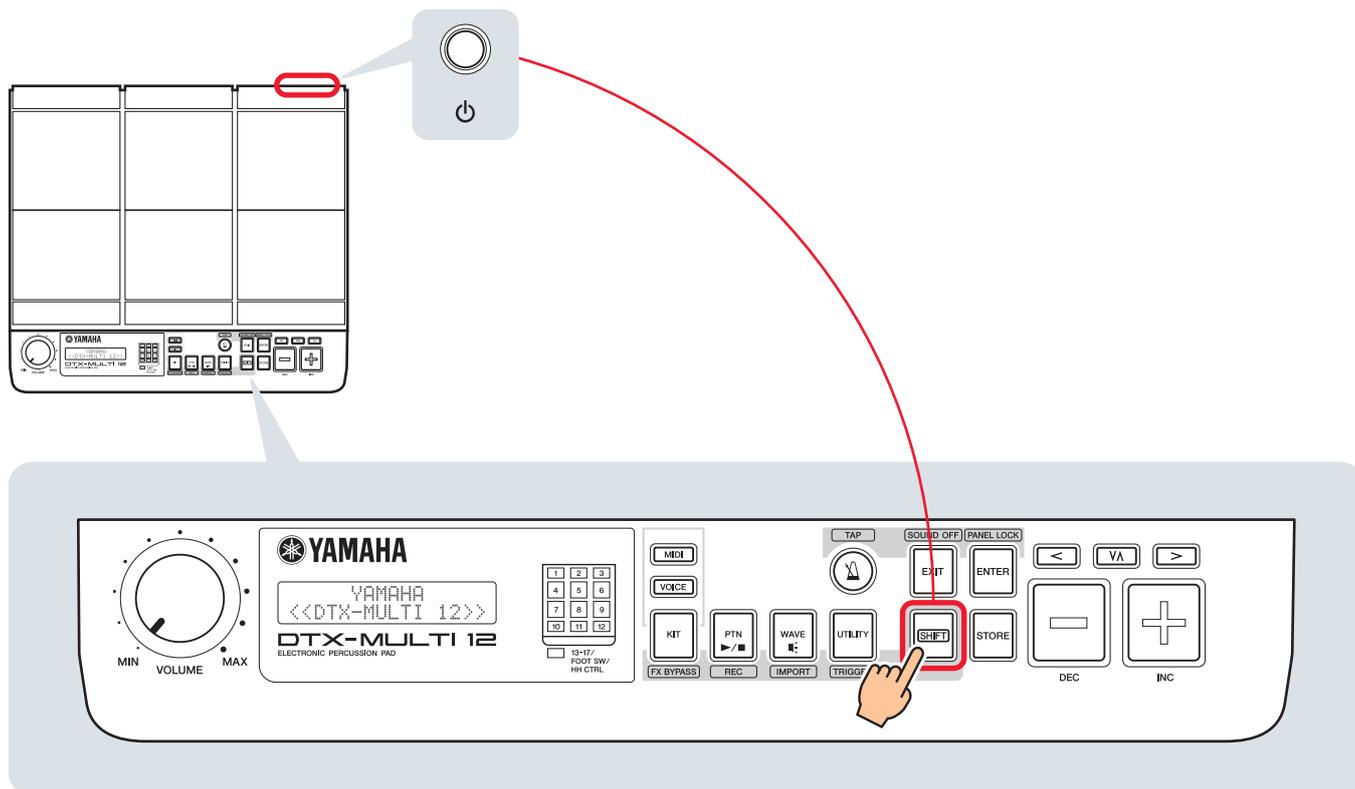
*: These drum voices are provided as examples only. Feel free to change them to suit your personal preferences.

DTX-MULTI 12

Checking the Firmware Version

Depending on the version of the firmware, you may need to update it. Before you connect the electronic percussion pad to your DT50S/DT50K triggers, be sure to check the version of your instrument's firmware.

1. While holding down the [SHIFT] button, turn on the instrument.



2. Confirm the version displayed on-screen.

If the version is 1.03 or earlier, search for “DTX-MULTI 12” on the web site below, and then follow the steps on the Firmware Updater page to update the firmware.

Yamaha Downloads: <http://download.yamaha.com>

Confirm that the instrument has been updated to Version 1.10, and then proceed to the setup procedures on the following page.

Setup Procedures

1. Connecting to the Instrument

Connect your drum triggers to the jacks for the DTX-MULTI 12 voices you wish to play by using the stereo audio cables that came with the triggers. Refer to the Owner's Manual that came with your DT50S/DT50K for details on how to use the drum triggers and mount them on acoustic drums.

NOTE

- The following jacks on the DTX-MULTI 12 each comprise a pair of mono inputs (L: trigger, R: trigger): **[14/15]** and **[16/17]**. If you wish to produce two sounds with a DT50S (which is designed for snares and toms), one for a head shot and one for a rim shot, connect the trigger to one of these jacks.
- You can connect multiple DT50S/DT50K triggers by using a commercially available Y-cable. See **TIPS!** for sample connections.

2. Setting Parameters on the Instrument

This section describes how to set parameters to play voices by using signals from DT50S/DT50K triggers connected to your instrument.

2-1. Selecting the Pad Type

Set the pad type for the DT50S/DT50K connected to the trigger input jack. Make sure to select the appropriate pad type for the drum trigger in order to take full advantage of its functions.

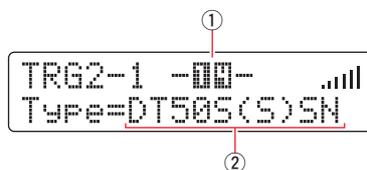
1. While holding down the [SHIFT] button, press the [UTILITY] button to access the Trigger setting area.
2. Use the [\leftarrow]/[\rightarrow] buttons and the [ENTER] button to navigate to the TRG2 section, and from there to the TRG2-1 settings page.

HINT

Navigating between sections

Each setting area is subdivided into a number of different sections (e.g., TRG1, TRG2). Use the [\leftarrow]/[\rightarrow] buttons to navigate between these sections. Each section contains a number of parameter setting pages (e.g., TRG1-1, TRG1-2) that are used to make actual settings. With a section page displayed, press the [ENTER] button to access its parameter setting pages (which are arranged hierarchically). You can use the [\leftarrow]/[\rightarrow] buttons to navigate between the parameter setting pages.

3. Set the pad type.



Use the [VA] button to move the cursor to the jack name (①) and the pad type (②), and set each one with the [-/DEC] and [+ /INC] buttons. Refer to the table below for settings.

	Acoustic drum on which the trigger is mounted	Input jack on drum trigger module		
		[13]	[14/15]	[16/17]
DT50S	Snare	DT50S(S)SN	DT50S SN	
	Tom	DT50S(S)HTm	DT50S HTm	
	Floor tom	DT50S(S)LTm	DT50S LTm	
DT50K	Bass drum (*)	DT50K	DT50K	

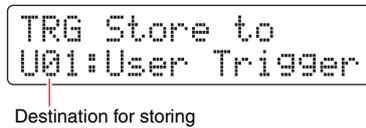
(S): Only the head trigger of the DT50S will produce a sound.

*: If mounting a DT50S on a bass drum, such as in the Yamaha Junior Kit, set the Type parameter to "DT50K".

2-2. Storing Pad Types

Save your pad type settings on the instrument as a User trigger setup to ensure they are not lost.

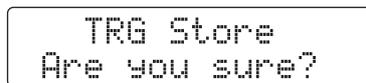
1. While holding down the [SHIFT] button, press the [UTILITY] button to access the Trigger setting area.
2. Press the [STORE] button.
3. By using the [-/DEC] and [+ /INC] buttons, indicate where you wish to store your settings.



TRG Store to
U01:User Trigger

Destination for storing

4. Press the [ENTER] button. You will be asked to confirm that you wish to proceed. Press the [EXIT] button to cancel the process without storing any settings.



TRG Store
Are you sure?

5. To proceed, press the [ENTER] button.

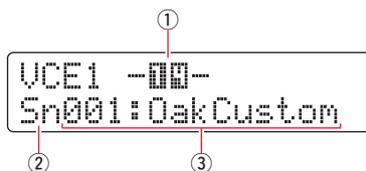
Notice

Never attempt to turn off the instrument while the message “Please keep power on” is shown. If this precaution is not observed, user data may be lost or the internal system may be damaged, rendering your instrument unable to startup normally when it is next turned on.

2-3. Selecting a Voice

Select a voice for each input jack.

1. Press the [VOICE] button to access the Voice setting area.



VCE1 -00-
Sn001:OakCustom

2. Strike the head or rim whose voice you wish to change. Alternatively, you can use the [VA] button to move the cursor to ①, and then change the setting by pressing the [-/DEC] and [+ /INC] buttons. This will change the trigger input jack (①).

NOTE

If you have connected a DT50S to the [14/15] jack, “14” will be displayed when you strike the head, and “15” will be displayed when you strike the rim.

3. Move the cursor to the voice category (②) and the voice number (③), and select the desired category and voice by using the [-/DEC] and [+ /INC] buttons.

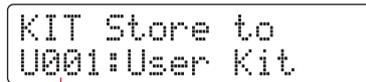
2-4. Storing Voices

Store your voice settings on the instrument as a User kit to ensure they are not lost.

NOTE

Voice data is stored as part of kit data. For details, refer to “Internal Design—Makeup of Internal Memory” in the DTX-MULTI 12 Owner’s Manual.

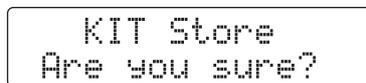
1. Press the [VOICE] button to access the Voice setting area.
2. Press the [STORE] button.
The following will be displayed on-screen. Use the [-/DEC] and [+ /INC] buttons to indicate where you wish to store your settings.



KIT Store to
U001:User Kit

Destination for storing

3. Press the [ENTER] button. You will be asked to confirm that you wish to proceed. Press the [EXIT] button to cancel the process without storing any settings.



KIT Store
Are you sure?

4. To proceed, press the [ENTER] button.

Notice

Never attempt to turn off the instrument while the message “Please keep power on” is shown. If this precaution is not observed, user data may be lost or the internal system may be damaged, rendering your instrument unable to startup normally when it is next turned on.

This completes the setup process.

You can now use your drum triggers to experience a whole new world of drumming.

TIPS!

This section provides tips on how to make your drum triggers even easier to use.

■ Configuring Startup Settings

You can configure settings so that stored pad type and voice settings will be automatically selected when you turn on the instrument.

1. Press the [UTILITY] button to access the Utility setting area.
2. Use the [<]/[>] buttons and the [ENTER] button to navigate to the GENERAL page (UTIL1), and from there to the Startup Kit page (UTIL1-3).

```
UTIL1-3<GENERAL>
StartupKit=U001
```

3. Set the User Kit you stored as described in “2-4. Storing Voices”.
4. Navigate to the GENERAL page (UTIL1), and from there to the Startup Trigger page (UTIL1-5).

```
UTIL1-5<GENERAL>
StartupTrg=U01
```

5. Select the User trigger setup you stored as described in “2-2. Storing Pad Types”.
6. Press the [STORE] button.

```
UTIL Store
Are you sure?
```

7. To proceed, press the [ENTER] button.

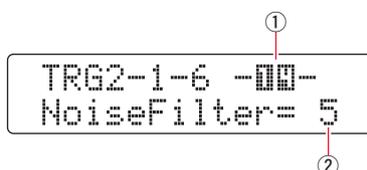
Notice

Never attempt to turn off the instrument while the message “Please keep power on” is shown. If this precaution is not observed, user data may be lost or the internal system may be damaged, rendering your instrument unable to startup normally when it is next turned on.

■ Adjusting the Noise Filter

Follow the steps below to make adjustments in situations where, for whatever reason, noise enters the trigger signal when a pad is struck or other instability in trigger signals leads to sounds not being generated correctly.

1. While holding down the [SHIFT] button, press the [UTILITY] button to access the Trigger setting area.
2. Use the [<]/[>] buttons and the [ENTER] button to navigate to page TRG2, then to page TRG2-1, and from there to the Noise Filter page (TRG2-1-6).



3. Strike the head or rim for which you wish to adjust the noise filter. Alternatively, you can use the [VA] button to move the cursor to ①, and then change the setting by pressing the [-/DEC] and [+ /INC] buttons. This will change the trigger input jack (①).
4. Set the noise filter (②).

HINT

The larger the value, the more noise and unintentional sounds will be filtered. Larger noise filter settings can, in cases where the drum is struck multiple times in rapid succession, result in sounds being dropped. Be sure to adjust the setting to best match your style of drumming.

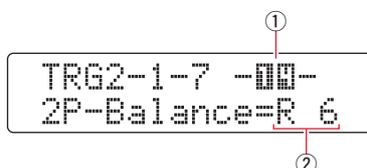
5. Store your settings. Refer to “2-2. Storing Pad Types” in this manual for details on how to store settings.

■ Adjusting Head and Rim Balance

Follow the steps below to adjust the balance between the head and rim of the snare or other drum on which a DT50S is mounted.

This setting will only work when you have selected “DT50S SN”, “DT50S HTm”, or “DT50S LTm” for the Type parameter.

1. While holding down the [SHIFT] button, press the [UTILITY] button to access the Trigger setting area.
2. Use the [<]/[>] buttons and the [ENTER] button to navigate to page TRG2, then to page TRG2-1, and from there to the Balance page (TRG2-1-7).



3. Strike the head or rim for which you wish to adjust the balance. Alternatively, you can use the [VA] button to move the cursor to ①, and then change the setting by pressing the [-/DEC] and [+ /INC] buttons. This will change the trigger input jack (①).
4. Set the balance (②).

HINT

If the head sounds when the rim is struck, move the balance further to the R side (i.e., raise the setting) to ensure that the rim sounds. Similarly, if the rim sounds when the head is struck, move the balance further to the H side (i.e., lower the setting) to ensure that the head sounds instead. Adjust the value until you reach the optimal balance.

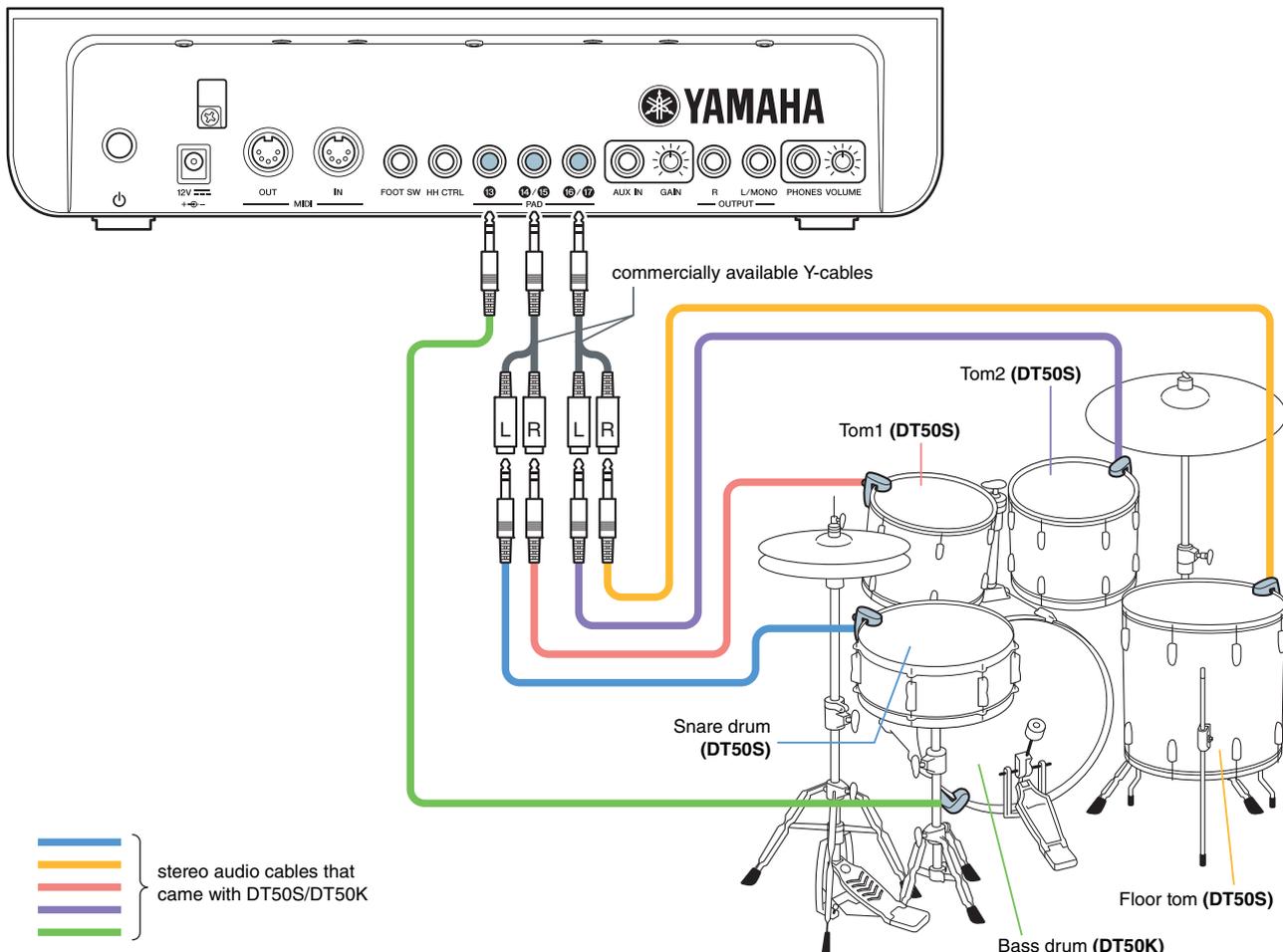
5. Store your settings. Refer to “2-2. Storing Pad Types” in this manual for details on how to store settings.

■ Connecting Multiple DT50S/DT50K Triggers

The instrument has three input jacks that allow triggers to be connected—[13], [14/15], and [16/17]. However, you can connect up to five DT50S/DT50K triggers (e.g., four DT50S triggers and one DT50K trigger) by using commercially available Y-cables.

This section describes how to connect five DT50S/DT50K triggers (four DT50S triggers and one DT50K trigger) as an example.

Adding triggers is a great way to expand your performance options by playing voices, waves, and patterns; assigning functions to the triggers; and so on.



If setting up your instrument with the above connections, refer to the table below for settings. See “Setup Procedures” for details on setting parameters.

	Acoustic drum on which the trigger is mounted	Input jack on drum trigger module	Settings for pad type		Settings for Voice	
			Name of trigger	Pad type	Name of trigger	Voice *
DT50S	Snare	[14/15]	[14]	DT50S(S)SN	[14]	Sn001: OakCustom
	Tom1	[14/15]	[15]	DT50S(S)HTm	[15]	Tm001: OakCtm H
	Tom2	[16/17]	[16]	DT50S(S)HTm	[16]	Tm002: OakCtm M
	Floor tom	[16/17]	[17]	DT50S(S)LTm	[17]	Tm003: OakCtm L
DT50K	Bass drum	[13]	[13]	DT50K	[13]	Kk001: OakCustom

*: These voices are presented as examples only. Feel free to change them to suit your personal preferences.