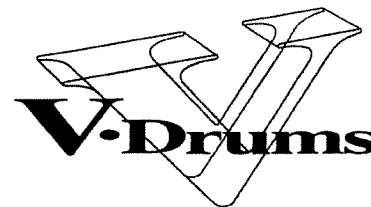


Roland®

**COSM**



**Wave & System Expansion Board for TD-10**

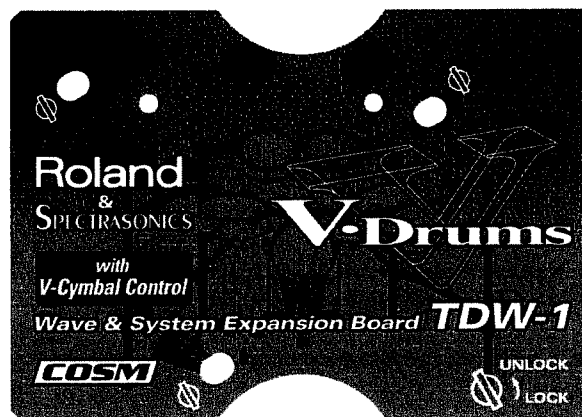
# **TDW-1**

## **with V-Cymbal Control**

### **Owner's Manual**

Thank you and congratulations on your choice of the Roland TDW-1.

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" (p. 2) and "IMPORTANT NOTES" (p. 4). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.



#### **IMPORTANT:**

The TDW-1 updates the TD-10 system with **NEW** sounds and **NEW** functions. Before performing the upgrade, save your **CURRENT** data.

When performing the upgrade, **ALL DATA** in the TD-10 will be lost. Save your **CURRENT** data to the Memory Card (M-512E), or to an external MIDI sequencer (**BULK DUMP**) **BEFORE** making the upgrade. For more information, refer to p. 8.

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# USING THE UNIT SAFELY

## INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About **WARNING** and **CAUTION** Notices

<b>WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
<b>CAUTION</b>	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly.  * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

	The  alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The  symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The  symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

**ALWAYS OBSERVE THE FOLLOWING**

**WARNING**

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

---

- Do not open or perform any internal modifications on the unit.

---

- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

---

- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.

---

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.

---

**WARNING**

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.

---

- Protect the unit from strong impact. (Do not drop it!)

---

- Before installing the TDW-1, you must first always turn off the TD-10 and unplug its power cord.

**CAUTION**

- Never climb on top of, nor place heavy objects on the unit.

---

- Install the circuit board only into the specified unit (TD-10). Remove only the specified screws during the installation.

---

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# Getting Started

## Important Notes

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In addition to the items listed under “USING THE UNIT SAFELY” on page 2, please read and observe the following:

- To avoid the risk of damage to internal components that can be caused by static electricity, please carefully observe the following whenever you handle the board.
  - Before you touch the board, always first grasp a metal object (such as a water pipe), so you are sure that any static electricity you might have been carrying has been discharged.
  - When handling the board, grasp it only by its edges. Avoid touching any of the electronic components or connectors.
- Veuillez suivre attentivement les instructions suivantes quand vous manipulez la carte afin d'éviter tout risque d'endommagement des pièces internes par l'électricité statique.
  - Toujours toucher un objet métallique relié à la terre (comme un tuyau par exemple) avant de manipuler la carte pour vous décharger de l'électricité statique que vous auriez pu accumuler.
  - Lorsque vous manipulez la carte, la tenir par les côtés. Évitez de toucher aux composants ou aux connecteurs.

## How To Use This Manual

---

This owner's manual explains additional sounds and functions. Please read the Owner's Manual carefully together with the TD-10 owner's manual.

- \* *In the interest of product improvement, the specifications and/or contents of this package are subject to change without prior notice.*
- \* *The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., includes newer sounds), so what you actually see in the display may not always match what appears in the manual.*

## Features

---

This board adds new sounds and functions to the TD-10.

### New Sounds

#### 360 New Instruments (p. 22)

- Completely new instruments
- 14 MB of sounds on the expansion board + 16 MB in the TD-10 = 30 MB's of sounds!
  - \* When converted to 16-bit linear format.
- Improved Hi-Hat pedal controls
- Improved quality of Toms and Cymbals
- New V-Tom sounds respond to positional sensing
  - \* *Some of the new sounds were developed in collaboration with Spectrasonics.*

#### 50 New Drum Kits (p. 24)

The 50 original preset kits of TD-10 can also be used, providing a total of 100 drum kits (p. 7).

#### New Backing Patterns (p. 25)

### New Functions

- “Fader Mode” function — Allows separate volume levels of the toms and cymbals (p. 16)
- Global settings for the direct outputs (p. 16)
- Pitch bend is now possible with the Hi-Hat control pedal (p. 18)
- Pedal Hi-Hat sound has a separate volume adjustment (p. 17)
- New improved onboard compressor function (p. 17)
- Faster sound selection using the new Instrument group function (p. 18)
- Trigger chase “lock” very helpful when editing (p. 15)
- New “Short Cut” functions (p. 15)
- Positional Detection is now possible for all trigger inputs (p. 12)
- Head adjustment indicator for the pads in addition to snare (p. 13)
- Bulk dump function for individual drum kits (p. 18)
- “Pad Pattern” function now responds to velocity (p. 18)
- 4 new click/metronome sounds (20 sounds in all) (p. 19)

## Improved Triggering Software, and Better Playing Ability

- Improved sensitivity and dynamics
- Improved sensitivity for the KD-120 (especially when playing softly)
- Cross stick technique available (p. 12) (possible to adjust the volume of cross stick sound)
- Better rim shot response with PD-120, PD-80R, PD-7/9
- Trigger settings for the new pads (PD-80, PD-80R, KD-80, and KD-120) have been added (p. 11).

## Completely supports the Roland V-Cymbals (CY-15R, CY-14C, CY-12H)

- Settings for V-Cymbal trigger types have been provided in trigger bank 2 (p. 11).
- Trigger types for the V-Cymbals (HH, CrA, CrB, RdA, RdB, CTR) have been added (p. 11).
- Choke play, edge shot, and bell shot (CY-15R only) are all supported (p. 14).
- CY-15R's three way triggering available (p. 14)
- Supports tonal changes relative to variances in strike position on the CY-15R and CY-14C (p. 12).

## Remarks (IMPORTANT)

- When performing upgrade, ALL DATA in the TD-10 will be lost. Save your CURRENT data to the Memory Card (M-512E), or to an external MIDI sequencer (BULK DUMP) BEFORE making the upgrade. This data can be loaded back into the expanded TD-10 AFTER executing the upgrade procedure.  
You can load this data of your non-expanded TD-10 to the new expanded TD-10 after executing the upgrade procedure.
- Data from an upgraded/expanded TD-10 can NOT be used by a non-expanded TD-10.
- The expanded TD-10 will not work if you remove the TDW-1 after performing the upgrade.
- You cannot restore the expanded TD-10 to the non-expanded TD-10.

## Compatibility

Drum kits, instruments, and the various functions are compatible with a non-expanded TD-10. The following are not compatible with non-expanded TD-10 because of improvement.

- **Compressor effects**  
The compressor can now be applied more strongly, and the settings now have different strengths (p. 17).
- **Trigger parameters**  
A Trigger parameter has been added, and the effect of the values has been modified (p. 11).
- **Percussion group 1 is changed**  
New percussion instruments are assigned (p. 25).
- **Preset patterns have been changed**  
Some of the preset patterns have been replaced (p. 25). In some cases, this will affect the settings of pad patterns specified for a drum kit.

### **NOTE**

When data of a non-expanded TD-10 is received, the compressor settings will be ignored, and the factory default values will be set. Trigger parameter settings will be ignored.

# Chapter 1 Expanding the Functionality of the TD-10

## Saving Data Before Performing the Upgrade

---

### IMPORTANT:

**Before performing the upgrade, save your CURRENT data.**

When performing the upgrade, ALL DATA in the TD-10 will be lost. Save your CURRENT data to the Memory Card (M-512E), or to an external MIDI sequencer (BULK DUMP) BEFORE making the upgrade.

This data can be loaded back into the expanded TD-10 AFTER executing the upgrade procedure (p. 10).



The preset drum kits of the TD-10 can be loaded after the upgrade has been performed, so it is not necessary to save them (p. 7).

### Saving Data to a Memory Card

1. Press [SETUP] - [F4 (UTIL)] - [F1 (SAVE)].
2. Move the protect switch on the memory card to the "OFF" position.
3. Insert the memory card into the MEMORY CARD slot located on the rear panel.
4. Press [F4 (SAVE)].
5. Press [F4 (EXEC)] and the data will be saved to the memory card.



For more information, refer to "Saving data to a memory card" (TD-10 owner's manual; p. 114).



You can also save individual kits to a memory card. To do so, use the Copy function (TD-10 Owner's Manual; p. 117).

### Saving Data to an External MIDI Device (Bulk Dump)

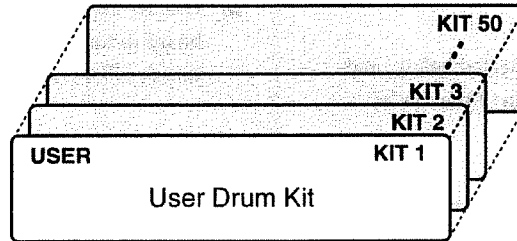
1. Use a MIDI cable to connect the TD-10's MIDI OUT connector to the MIDI IN connector of the external MIDI device.
2. Press [SETUP] - [F2 (MIDI)] - [F4 (BULK)].
3. Use [INC/DEC] or the VALUE dial to select "ALL."
4. Start the recording process of the external MIDI device.
5. Press [F4 (EXEC)] and data transmission will begin.



For more information, refer to "Saving/Loading data to/from an external device (Bulk Dump)" (TD-10 owner's manual; p. 121).

**User: Drum kits available for performance**

- A total of 50 drum kits available for selection and play.
- You can edit the drum kits.
- \* After performing the upgrade, the preset drum kits of the TDW-1 will be loaded into the user drum kits.

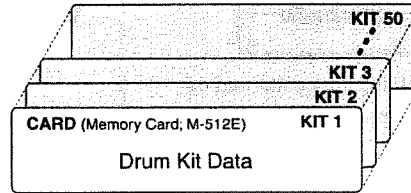


COPY ( [KIT] -> [TOOLS] -> [F1 (COPY)] )

COPY/  
EXCHANGE

**CARD: Drum kits saved by upgraded/expanded TD-10**

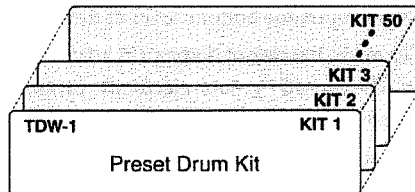
- You can save a total of 50 drum kits.
- By copying these to user drum kits, you can play or edit them.



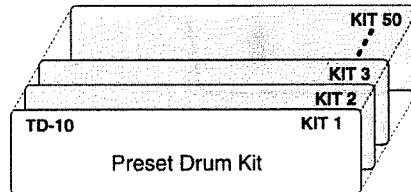
**Preset Drum Kit:  
Drum kits to be copied to user drum kits for use**

- There are the 50 preset drum kits of the TDW-1, and the 50 preset drum kits of the TD-10.
- By copying these to user drum kits, you can play or edit them.

**TDW-1: The TDW-1's factory-set drum kits**



**TD-10: The TD-10's factory-set drum kits**



**NOTE**

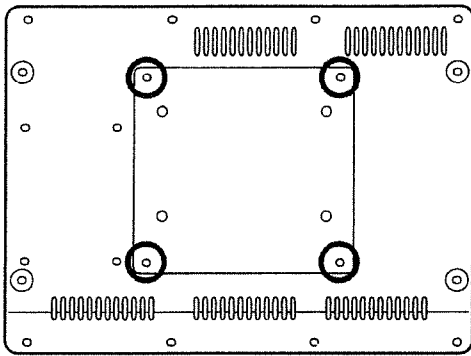
- Memory card data from a non-expanded TD-10 cannot be copied or exchanged. Only the "LOAD ALL" operation can be used.
- You cannot restore the expanded TD-10 to the non-expanded TD-10. (In other words, no "down-grade" is possible)
- The expanded TD-10 will not work if you remove the TDW-1 after performing the upgrade.

# How To Install the Expansion Board "TDW-1"

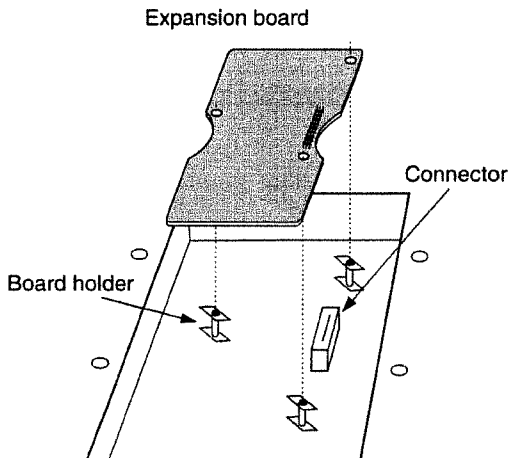
The bottom panel of the TD-10 has a slot that allows expansion boards to be installed.

1. Always turn the TD-10 off and unplug the power cord before attempting installation of the circuit board (TDW-1).
2. Remove only the four screws as indicated below, and open the cover located on the bottom of the TD-10.

○ Removal screws



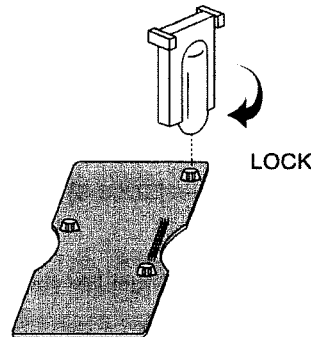
3. Check that the plastic board holders are positioned as shown figure. Rotate them if necessary.



4. While positioning the holes on the board over the board holders, carefully insert the connector on the board into the socket on the TD-10. Make sure the connector is securely connected, and that all three board holders project through the holes.



- Do not touch any of the printed circuit pathways or connection terminals.
  - Never use excessive force when installing a Expansion Board. If it doesn't fit properly on the first attempt, remove the board and try again.
5. Use the Installation Tool supplied with the Expansion board to turn the holders in the LOCK direction, so the board will be fastened in place.



When Expansion Board installation is complete, double-check your work.

6. Secure the cover plate using the four screws removed in step 2.

### ⚠ WARNING

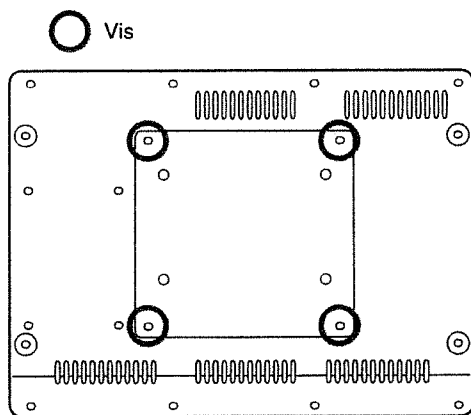
- Immediately turn the power off, and request servicing by your dealer or qualified Roland service personnel when:
  - Objects (such as screws) have fallen into, or liquid has been spilled on to the TD-10; or
  - The TD-10 has been exposed to rain (or otherwise has become wet); or
  - The TD-10 does not appear to operate normally or exhibits a marked change in performance.
- Never open the bottom cover of the TD-10 by yourself.
- To avoid the risk of damage to internal components that can be caused by static electricity, please carefully observe the following whenever you handle the board.
  - Before you touch the board, always first grasp a metal object (such as a water pipe), so you are sure that any static electricity you might have been carrying has been discharged.
  - When handling the board, grasp it only by its edges. Avoid touching any of the electronic components or connectors.



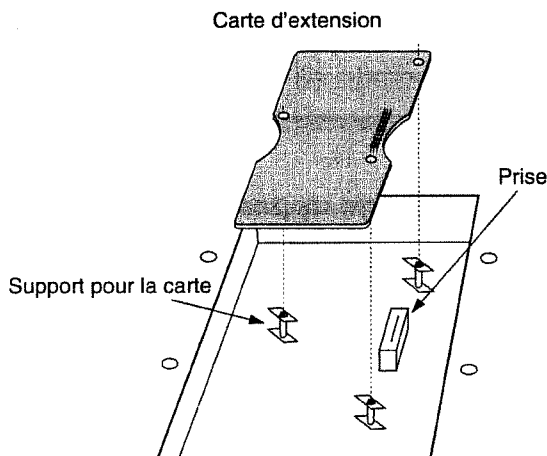
## À propos des cartes d'extension (French language for Canadian Safety Standard)

Le panneau du dessous du TD-10 a un créneau permettant l'installation des cartes d'extension.

1. Éteignez toujours le TD-10 et débranchez le câble électrique avant toute tentative d'installation de carte de circuits imprimés (WAVE & SYSTEM EXPANSION BOARD série TDW).
2. Enlevez seulement les quatre vis et ouvrez la plaque située sous le TD-10.



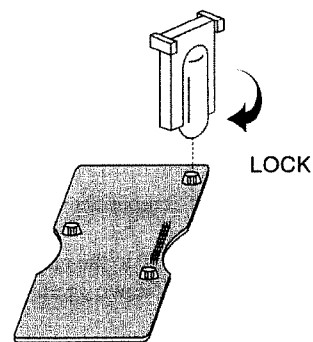
3. Veillez à ce que les supports en plastique pour la carte soient positionnés tel qu'indiqué. Faites-les pivoter si nécessaire.



4. Pendant que vous alignez les trous de la carte au-dessus des supports, insérez délicatement le connecteur sur la carte dans la prise du TD-10. Assurez-vous que le connecteur est raccordé correctement et que les trois supports s'emboîtent bien dans les trous.

### NOTE

- Ne pas toucher aux circuits imprimés ou aux connecteurs.
  - Ne jamais forcer lors de l'installation de la carte de circuits imprimés. Si la carte s'ajuste mal au premier essai, enlevez la carte et recommencez l'installation.
5. Pour tourner les supports en position LOCK (verrouillé), utilisez l'outil d'installation de la carte d'extension fournie à cet effet. De cette façon, la carte sera bien fixée à sa place.



### NOTE

Quand l'installation de la carte de circuits imprimés est terminée, revérifiez si tout est bien installé.

6. Refermez la plaque en utilisant les quatre vis enlevées à l'étape 2.

### AVERTISSEMENT

- Éteignez immédiatement l'unité, et contactez le SAV de votre revendeur ou un service de maintenance Roland qualifié lorsque:
  - Des objets (vis) sont tombés dans l'unité ou du liquide s'est répandu à l'intérieur
  - L'unité a été exposée à la pluie (ou d'une façon ou d'une autre a été mouillée)
  - L'unité ne semble pas fonctionner normalement ou montre une altération de ses performances.
- N'ouvrez jamais vous-même le capot du dessous du TD-10.
- Veuillez suivre attentivement les instructions suivantes quand vous manipulez la carte afin d'éviter tout risque d'endommagement des pièces internes par l'électricité statique.
  - Toujours toucher un objet métallique relié à la terre (comme un tuyau par exemple) avant de manipuler la carte pour vous décharger de l'électricité statique que vous auriez pu accumuler.
  - Lorsque vous manipulez la carte, la tenir par les côtés. Évitez de toucher aux composants ou aux connecteurs.

### Loading the Program Data from the TDW-1

1. Turn on the power.

The "BOOT LOADER" screen appears.

```

BOOT LOADER      Ver. 1.00
FLASH-ROM      EXP-BOARD
Ver. 1.03      Ver. 2.50
97/06/30      00/12/18
F1=CANCEL      F4=LOAD
    
```

#### NOTE

- **Did you save your original data??**  
When performing the upgrade, ALL DATA in the TD-10 will be lost. Save your CURRENT data to the Memory Card (M-512E), or to an external MIDI sequencer (BULK DUMP) BEFORE making the upgrade. For more information, refer to p. 6.
- An expanded TD-10's data is NOT compatible with a non-expanded TD-10.
- You cannot restore the expanded TD-10 to the non-expanded TD-10. (In other words-no "down-grade" is possible)

#### INT

If you decide not to perform the expansion, press [F1 (CANCEL)].

2. To perform the upgrade, press [F4 (LOAD)].  
This will take approximately 35 seconds so **do not turn the power off until completed.**
3. The "Load Completed!" screen will appear. Now turn off the power.

```

BOOT LOADER      Ver. 1.00
Ver. 2.50
00/12/18
Load Completed !
Please, POWER-OFF.
    
```

4. Next, turn the power ON.  
The "SYSTEM INITIALIZE" screen appears.

```

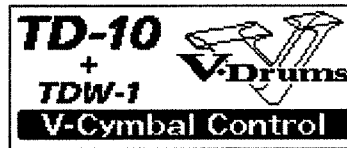
SYSTEM INITIALIZE
Clear all data and
load factory preset
Press 'F4' to EXEC.
EXEC
    
```

5. Press [F4 (EXEC)].  
The internal data will be initialized. 50 new drum kits will be loaded.

#### NOTE

The expanded TD-10 does not work without the expansion board TDW-1.

After performing the upgrade, the following screen appears when the TD-10 is powered up.



### Re-loading YOUR Saved Data Back to the TD-10

Data saved on a memory card or an external MIDI device can be loaded into the expanded TD-10.



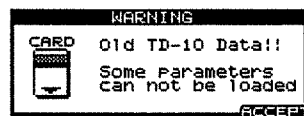
- Loading data from a memory card  
→ Refer to the TD-10 Owner's manual (p. 115)
- Loading data from an external MIDI device (Bulk Dump)  
→ Refer to the TD-10 Owner's manual (p. 121)

#### NOTE

- Memory card data from a non-expanded TD-10 cannot be copied or exchanged. Only the "LOAD ALL" operation can be used.
- The trigger parameter and the internal operation of the compressor has been completely redesigned. These settings are not compatible with a non-expanded TD-10. When data from a non-expanded TD-10 is loaded, compressor settings will be ignored, and these parameters will be set to factory default values. The Trigger parameter will be ignored.



#### If a message appears



This message is informing you that the data on the inserted memory card was saved by a non-expanded TD-10. **(This will not affect the data saved on the memory card.)**

After you have read the message, press [F4 (ACCEPT)] to dismiss the message.

This message will be displayed in the following situations.

- If you use the TDW-1 to perform the upgrade with a memory card inserted
- If you insert a memory card that was saved by a non-expanded TD-10
- If you perform System Initialize (TD-10 Owner's Manual; p. 137) with a memory card inserted

# Chapter 2 About Improvement of Triggering

Triggering algorithms have been improved over-all with the following now possible:

## Trigger Bank and Trigger Type Settings

At the initial settings, the trigger bank provides settings for frequently used kit configurations. If you are using the PD-9s as cymbals, it is convenient to use bank 1. If using the V-cymbals, use bank 2.

### Trigger Bank 1

For the Drum Kit using the PD-9s as cymbals

INPUT	Trigger Type	Pad
1/KICK	K12	KD-120
2/SNARE	12A	PD-120
3/TOM1	10A	PD-100
4/TOM2	10A	PD-100
5/TOM3	12A	PD-120
6/TOM4	12A	PD-120
7/HI-HAT	P7B	PD-7
8/CRASH1	P9B	PD-9
9/CRASH2	P9B	PD-9
10/RIDE	P9A	PD-9
11/AUX1	P9B	PD-9
12/AUX2	P9B	PD-9

### Trigger Bank 2

For the Drum Kit using the V-Cymbals

When using the CY-15R's Three Way Triggering (p. 14)

INPUT	Trigger Type	Pad
1/KICK	K12	KD-120
2/SNARE	12A	PD-120
3/TOM1	10A	PD-100
4/TOM2	10A	PD-100
5/TOM3	12A	PD-120
6/TOM4	12A	PD-120
7/HI-HAT	HH	CY-12H
8/CRASH1	CrB	CY-14C
9/CRASH2	CrB	CY-14C
10/RIDE	RdA	CY-15R (BOW/BELL OUTPUT)
11/AUX1	CTR	CY-15R (BOW/EDGE OUTPUT)
12/AUX2	CrB	CY-14C

### Trigger Bank 3

For the Drum Kit using the V-Cymbals

### Trigger Bank 4

Setting that disables strike position detection



How to Load the Settings of Preset Trigger Banks

1. Press [SETUP] - [F1 (TRIG)] to display the trigger setting screen.
2. Press [TOOLS] - [F1 (COPY)] to display the trigger bank copy screen.
3. Select the copy-source preset trigger bank, and the copy-destination trigger bank, then press [F4] twice to have the copy be made.

When you use different pads, please change the trigger "type."

### Procedure

Press [SETUP] - [F1 (TRIG)] - [F1 (BANK)].



For more information, refer to "Specifying the type of pad (TD-10 Owner's Manual; p. 108)."

The trigger "type" menu has been expanded to 30 types (previously only 16).

### Trigger Type List

Trigger Type	Pad	Rim (Edge)	Position Detect
12A	PD-120	o	o
12B	PD-120	o	
10A	PD-100		o
10B	PD-100		
8RA	PD-80R	o	o
8RB	PD-80R	o	
8 A	PD-80		o
8 B	PD-80		
P9A	PD-9	o	o
P9B	PD-9	o	
P7A	PD-7	o	o
P7B	PD-7	o	
PD5	PD-5		
K12	KD-120		
K80	KD-80		
KD7	KD-7/KD-5		
HH	CY-12H	o	
CrA	CY-14C	o	o
CrB	CY-14C	o	
RdA	CY-15R	o	o
RdB	CY-15R	o	
CTR	CY-15R Control (for Three Way Triggering) (p. 14)		
P 1	Pad 1		
P 2	Pad 2		
K 1	Kick Pad 1		
K 2	Kick Pad 2		
KIK	Kick (Acoustic Drum Trigger)		
SNR	Snare (Acoustic Drum Trigger)		
TOM	Tom-tom (Acoustic Drum Trigger)		
FLR	Floor Tom (Acoustic Drum Trigger)		



The sound of the trigger input set to "CTR" will not be played for any purpose other than three way triggering.

### Improved Sensitivity Toward Light Hits

The new version detects very minute signals more accurately than the previous version.

Sensitivity and Threshold resolution have been expanded from 16 steps to 32 steps. Sensitivity 3 in a non-expanded TD-10 is equivalent to Sensitivity 6 in the expanded version.

### Playing with the Cross Stick Technique

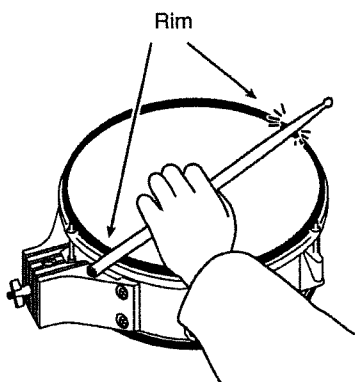
When using V-Snare instruments, you can have rim shots and cross stick sounds.

To perform a cross-stick playing technique, you will need the following combination.

- Use trigger input 2 (SNARE)
- Trigger Type is either "12A," "12B," "8RA," or "8RB" (p. 11)
- "X Stick SW" is turned "ON" (following item)

#### NOTE

When using the PD-120 or PD-80R to play the cross stick sound, be sure that you only strike the rim (outer edge) of the pad. Placing your hand on the head (the "normal" way) of the pad prevents the cross stick sound from being played properly.



The following parameters have been added.

#### Cross Stick Switch

Cross Stick switch setting can be turned on/off for each drum kit.

##### Procedure

Press [KIT] - [F2 (FUNC)] - [F3 (STICKS)].

##### Parameters

X Stick SW (Cross Stick Switch): OFF, ON

#### Cross Stick Volume

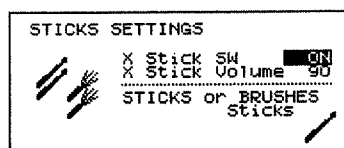
For each Drum kit, you can adjust the volume of cross stick sound independently.

##### Procedure

Press [KIT] - [F2 (FUNC)] - [F3 (STICKS)].

##### Parameters

X Stick Volume (Cross Stick Volume): 0-127



#### Cross Stick Threshold

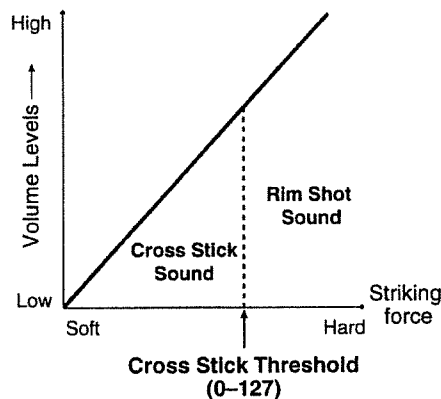
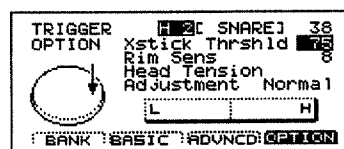
This determines the "cross over point" between the cross stick and a rim shot sounds. Cross Stick Threshold setting can be memorized in each Trigger Bank.

##### Procedure

Press [SETUP] - [F1 (TRIG)] - [F4 (OPTION)].

##### Parameters

Xstick Thrshld (Cross Stick Threshold): 0-127



### Positional Detection is Now Possible for All Trigger Inputs

The sound will be change depending on where you hit the pad.

The following requirements must be met.

- TRIGGER TYPE "\*\*\*A" (position detect) must be used (p. 11).
- Instrument that can receive and respond to position messages must be used (p. 22).

### Adjusting the Head Tension

On an upgraded TD-10, the head tension adjustment screen will appear for all trigger inputs.

**If you are using a pad with a mesh head (PD-80, PD-80R, PD-100, PD-120) and want the tone to change depending on the strike position, you will need to adjust the head tension.**

Before making adjustments, make sure that the pad you are adjusting is set to a trigger type of either "8 A," "8RA," "10A," or "12A."

#### Procedure

Press [SETUP] - [F1 (TRIG)] - [F4 (OPTION)].

#### Parameters

Head Tension Adjustment: Loose, Normal, Tight



For more information, refer to "Adjusting the head tension (TD-10 Owner's Manual; p. 31)."

### Position message

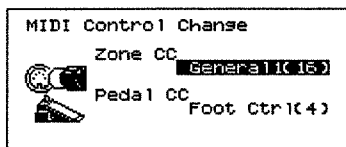
An upgraded TD-10 is able to transmit and receive MIDI messages to indicate the strike position of the tom, as well as the snare and ride cymbal. At the factory settings, control change number 16 is used to transmit and receive strike position data.

#### Procedure

Press [SETUP] - [F2 (MIDI)] - [F2 (CTRL)].

#### Parameters

Zone CC: OFF, Modulation (1), General1 (16), General2 (17)



#### MEMO

These control change numbers are used for both transmission and reception to/from an external MIDI device.

#### NOTE

If the performance data of the original TD-10, which was recorded by an external MIDI device, is to be used on an upgraded TD-10, you need to change the Control Change number of strike position data to 16 (the factory setting for an expanded TD-10).

(You do not need to change the Control Change number of MIDI bulk data or patterns saved on a memory card.)

## Prevention of Erroneous Triggering Caused by Crosstalk

The following parameters have been added.

### Crosstalk Cancel

This setting also prevents crosstalk, just like with a non-expanded TD-10. We've improved the "steps" in this parameter setting allowing finer tuning.

#### Procedure

Press [SETUP] - [F1 (TRIG)] - [F3 (ADVNCDD)].

#### Parameters

Xtalk Cancel (Cross Talk Cancel): OFF, 5-80 (5 steps)

### Mount Type

To avoid inadvertent sounding due to crosstalk, specify the state in which the pad is attached. **Specify this when you change how the pad is installed.**

#### Factory Settings of TRIGGER BANK 1

INPUT	Pad	Mount Type
1/KICK	KD-120	Separate
2/SNARE	PD-120	Separate
3/TOM1	PD-100	PadMount
4/TOM2	PD-100	PadMount
5/TOM3	PD-120	PadMount
6/TOM4	PD-120	PadMount
7/HI-HAT	PD-7	CymMount
8/CRASH1	PD-9	CymMount
9/CRASH2	PD-9	CymMount
10/RIDE	PD-9	CymMount
11/AUX1	PD-7	CymMount
12/AUX2	PD-7	CymMount

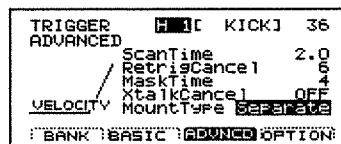
If the pad connected to trigger input 2, and used as the snare, is attached directly to the drum stand (e.g., when using the PD-80R in the snare position with the MDS-8), you should set "MountType" to "PadMount." This will prevent the vibrations produced when striking the snare from erroneously triggering the other pads.

#### Procedure

Press [SETUP] - [F1 (TRIG)] - [F3 (ADVNCDD)].

#### Parameters

MountType: Separate, PadMount (Pad Mount), CymMount (Cymbal Mount)



#### MEMO

For pads that are not attached directly to a drum stand, select "Separate."

# Chapter 3 About the V-Cymbal

Specify a trigger type that is appropriate for each type of V-Cymbal: the V-Cymbal Ride CY-15R, the V-Cymbal Crash CY-14C, or the V-Cymbal Hi-Hat CY-12H. (For example, set the CY-12H to "HH.")

\* **Trigger parameters of TRIGGER BANK 2 at the factory defaults are set for using the V-Cymbals.**

Since V-Cymbals support edge shots, you can strike the edge to play the sound specified for the rim on the sound module. After playing the sound, you can also grasp the edge of the V-Cymbal to "choke" (halt) the sound. The CY-15R will vary the tone depending on the striking location on the bow.

For more information on V-Cymbal, refer to the V-Cymbal Owner's Manual.

## Connections and Settings for the V-Cymbal Ride CY-15R

The CY-15R has two jacks; the way in which you connect to them will vary depending on how you intend to use the unit.

### Using Bow Shot and Bell Shot

Connect the CY-15R's "BOW/BELL OUTPUT" to the TD-10's "TRIGGER INPUT 10/RIDE."

Set the trigger type of 10/RIDE to "RdA."

The sound normally heard when striking the rim can be sounded when the bell is struck.

### Using Bow Shot and Edge Shot

Connect the CY-15R's "BOW/EDGE OUTPUT" to the TD-10's "TRIGGER INPUT 10/RIDE."

Set the trigger type of 10/RIDE to "RdA."

The sound normally heard when striking the rim can be sounded when the edge is struck.

### Using Bow Shot, Bell Shot, and Edge Shot (Three Way Triggering)

When you connect the CY-15R and the TD-10 with two cables, you can play different sounds with the CY-15R's bow, bell, and edge (Three Way Triggering).

Connect the CY-15R's output as follows, then set the trigger types.

## Example connections

CY-15R OUTPUT	TD-10 TRIG INPUT	Pad Type
BOW/BELL	10/RIDE	RdA (CY-15R)
BOW/EDGE	11/AUX 1	CTR (CY-15R CONTROL)



These are the TDW-1's initial settings for trigger bank 2 (p. 11).

TRIGGER BANK	TRIG	KICK	36
4	12A	12A	9 CrB
5	12A	12A	10 RdB
6	10A	HH	11 CTR
7	10A	8 CrB	12 CrB

BANK BASIC ADVANCED OPTION

## Correspondence between playing method and trigger input

Playing Method	Trigger Input	Tones Sounded
Bow Shot	10/RIDE HEAD	Bow sound of the Ride
Bell Shot	10/RIDE RIM	Bell sound of the Ride
Edge Shot	11/AUX 1 RIM	Edge sound of the Ride



If you use a single cable to connect the CY-15R, set the trigger type to "RdA" (or RdB). If the trigger type is set to "CTR" when the cymbal is connected via a single cable, the sound will not be played.



If you use two cables to connect the CY-15R to the TD-10 without using the "CTR" trigger type, striking the bow (or edge) will cause the sounds of both the bow and edge to be heard. Furthermore, trigger chase will not occur correctly.

If the trigger type is set to "CTR," the sound module will perform internal processing so that the sound of the pad set to "RdA" (or RdB) will not be played when a trigger signal is input to the trigger input set to "CTR." In order to use three way triggering, you must use the "CTR" and "RdA" trigger types together. The "CTR" trigger type cannot be used for any purpose other than three way triggering the CY-15R.

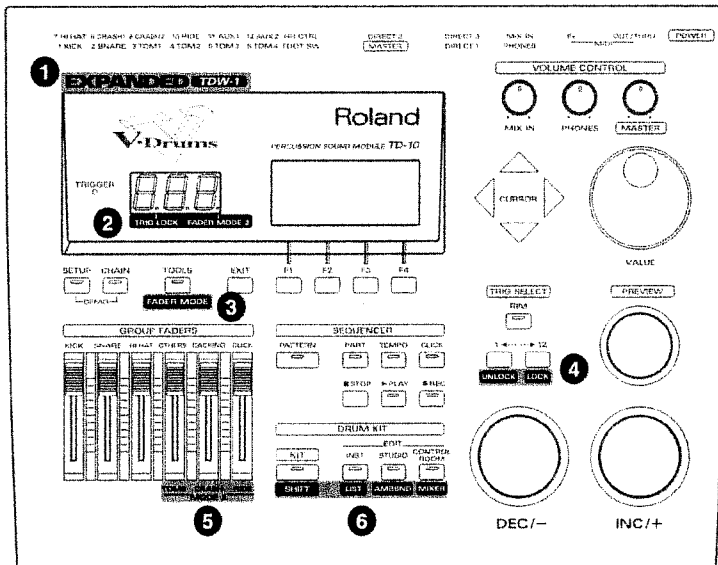
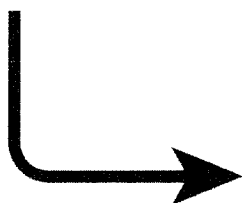
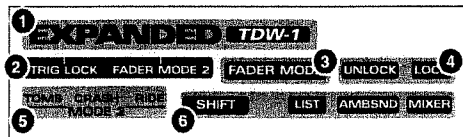


Only one CY-15R can be used with three way triggering. You must set "CTR" for only one trigger input. At this time, you must also select only one RdA (or RdB). If you set "CTR" for two or more pads, those other than the lowest-numbered trigger input will be displayed as "---" and will not function as "CTR" (nor will they sound).

# Chapter 4 Trying Out the New Functions

## Putting the Stickers on the TD-10

Stickers for the new functions are included.



## Short Cut Functions

Shortcuts to the following screens have been added.

Screen	Procedure
"INST LIST"	Hold down [SHIFT (KIT)] and press [LIST (INST)].
"AMBIENCE SEND"	Hold down [SHIFT (KIT)] and press [AMBSND (STUDIO)]
"MIXER"	Hold down [SHIFT (KIT)] and press [MIXER (CONTROL ROOM)]
"TRIGGER BASIC"	Hold down [SHIFT (KIT)] and press [SETUP]



Words in parentheses ( ) indicate the button names printed in orange on the TD-10.

## Trigger Chase Lock

When setting instruments, you can keep the settings screen from being switched, even if you inadvertently strike a different pad.

### Trigger Chase Lock ON

After striking the pad that you wish to lock, hold down [SHIFT (KIT)] and press [LOCK (12)].



If Trigger Chase Lock is on, the far left dot of the LED display will light.



If Trigger Chase Lock is on, you can press [PREVIEW] and then strike the pad to temporarily defeat Trigger Chase Lock and change the pad that is locked.

### Trigger Chase Lock OFF

Hold down [SHIFT (KIT)] and press [UNLOCK (1)].



Words in parentheses ( ) indicate the button names printed in orange on the TD-10.

## Switching the "Group Fader" Function

You can separately adjust the volume levels of the toms and cymbals.

The functions of 3 faders in the right will be switched.

<b>MODE 1</b> (original TD-10)	OTHERS	BACKING	CLICK
<b>MODE 2</b> (New function)	TOMS	CRASH	RIDE

**Procedure**

Hold down [SHIFT (KIT)] and press [FADER MODE (TOOLS)].



- Words in parentheses ( ) indicate the button names printed in orange on the TD-10.
- When you select Fader Mode 2, the far right dot of the LED display will light.
- Even when the Fader Mode is switched, the settings values for each faders do not change.



After adjusting the volume balance of the toms, crash, and ride in Mode 2, if you return to Mode 1 and move the "OTHERS" slider, the set balance of mode 2 will be cleared, and the volume is set to the slider position.

## Choosing the Global Output/Pan Destination

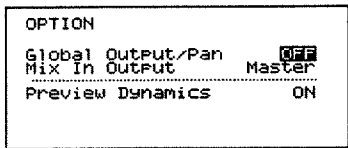
A function has been added to allow mixer output settings (output and pan) to be set for all drum kits in common. When this is turned "ON," shared settings will be recalled for all kits when you make pan and output settings.

**Procedure**

Press [SETUP] - [F3 (CTRL)] - [F4 (OPTION)].

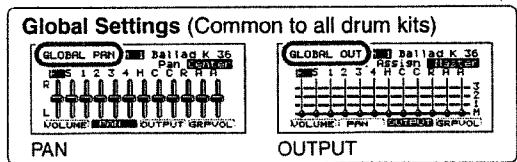
**Parameters**

Global Output/Pan: OFF, ON



### ■ Global Output/Pan=ON

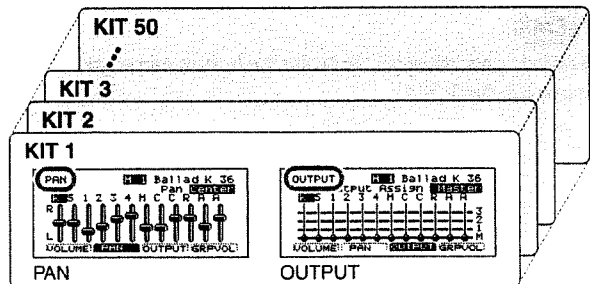
Make pan and output settings common to all drum kits. The upper left of the screen will indicate either "GLOBAL PAN" or "GLOBAL OUT."



While global output/pan is turned "ON," the pan and output settings that were made for each individual drum kit will be ignored.

### ■ Global Output/Pan=OFF

Set the pan and output for the currently selected drum kit. This can be set for each drum kit. The upper left of the screen will indicate either "PAN" or "OUTPUT."





## Adjusting the Pedal Hi-Hat Volume

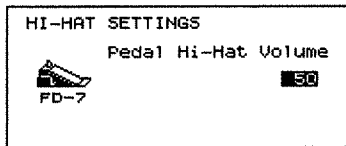
For each kit, you can adjust the volume of the pedal hi-hat.

### Procedure

Press [KIT] - [F2 (FUNC)] - [F2 (HI-HAT)].

### Parameter

Pedal HI-HAT Volume: 0-127

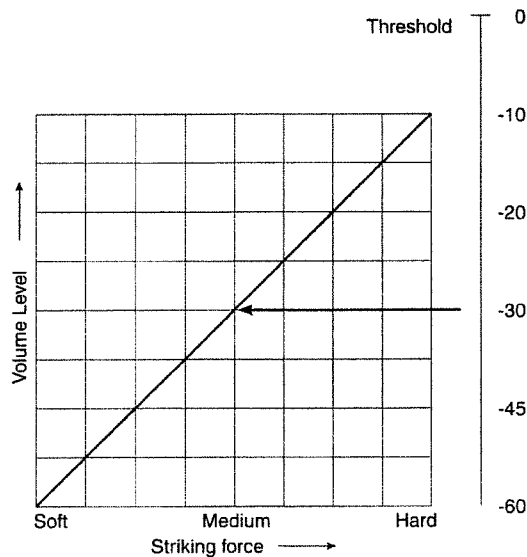


## Improved Compressor

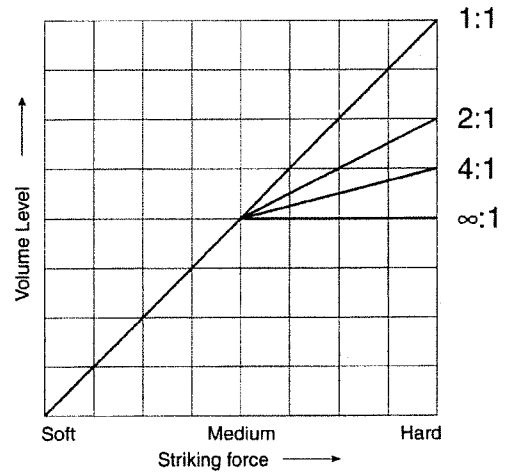
The compressor can now be applied more strongly, and the settings now have different strengths.

### Setting Example (The settings that makes less volume level changes and more average volume level)

1. Turn "AMBIENCE" off and "COMP" on by FX SW.
2. In the compressor setting screen, set Ratio to "∞:1", ATTACK to "0.05 (minimum)", RELEASE to "25."
3. Hit the pad with "medium" force, and turn down "Threshold," and set the value when volume levels beginning to turn down. (ex: -30)



4. Set the "Ratio" the value between "2:1" and "8:1" to set the compression ratio.



5. Raise the "ATTACK Time," until the attack sound of percussion instrument can be heard. (ex. 1 ms)

### ATTACK Time (ATTACK):

Specify the time from when the volume goes up the threshold level until the compressor effect applies. Increasing the "Attack Time" value may cause less compressor effect.

Parameters: 0.05-50 (ms)

### Release Time (RELEASE):

Specify the time from when the volume falls below the threshold level until the compressor effect no longer applies.

Increasing the "Release Time" value may cause a different problem when playing very fast, as the latter sound may fail to respond.

Parameters: 0.05-2000 (ms)

6. Set the "OUTPUT."

While repeatedly turning "COMP SW" ON and OFF, set the "OUTPUT" until the resulting volume stabilizes at the loudest level.

### MEMO

On an expanded TD-10, the range of the OUTPUT setting has been changed, so it now ranges from -48→+24.

## Typical Settings

	Threshold	Ratio	ATTACK	RELEASE
Limiter	-10 - -20	∞:1 - 8:1	0.05	25
Compressor	-20 - -40	8:1 - 2:1	1.0	25
Sound processing	-40 - -60	2:1 - 4:1	0.05 - 10.0	25

### Choosing an Instrument from Group Names

You can choose the instrument from group categories. "EXP" will be added to the group name of instruments that were added by the TDW-1.

#### "INST" screen



Move the cursor to "Group" and select the group name.

#### Function buttons

[F3 (IN ◀ EX)]: Cycle between TD-10 instruments (IN) and TDW-1 instruments (EX).

#### "INST LIST" screen



Press [F1 (GROUP ◀)] and [F2 (GROUP ▶)] to select the group name.

#### Function buttons

[F1 (GROUP ◀)]: Select the group name.

[F2 (GROUP ▶)]: Select the group name.

[F3 (IN ◀ EX)]: Cycle between TD-10 instruments (IN) and TDW-1 instruments (EX).



To see which instrument group can be selected here, refer to "Instrument List" (p. 22).

### Changing an Instrument's Pitch with the Hi-Hat Controller

This setting allows you use a Hi Hat controller (FD-7) as a pitch bender for sounds assigned to any pad or rim. Specified in semitone steps.

#### Procedure

Press [INST] - [F4 (CTRL ▶)] - [F2 (PITCH)].

#### Parameters

PEDAL PITCH CTRL RANGE: -24 - 0 - +24



To stop the pedal hi-hat from sounding, set "Pedal Hi-Hat Volume" to "0" (p. 17).



For smooth pitch changes, press [SETUP] - [F2 (MIDI)] - [F1 (GLOBAL)], and set "Pedal Data Thin" to "OFF."

### Pad Pattern Velocity Switch

You can control the dynamics of a pattern being played back by the dynamics of your playing.

#### Procedure

Press [INST] - [F4 (CTRL ▶)] - [F3 (PATTERN)].

#### Parameters

Pad PTN Velo: OFF, ON

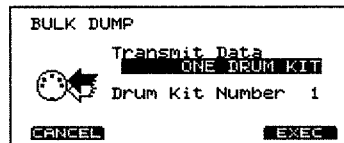


### Saving individual Drum Kit Data via MIDI (BULK DUMP)

Now you can save or back-up individual kit settings via MIDI.

#### Procedure

Press [SETUP] - [F2 (MIDI)] - [F4 (BULK)], and set "Transmit Data" to "ONE DRUM KIT," then select the drum kit. Next press [F4 (EXEC)].



## Hi-Hat Note Number Border

This setting affects the MIDI messages that are transmitted when you play the TD-10 and pads to sound an external sound module. If you are playing/recording using only the TD-10 and pads, it is not necessary to modify this setting. (At the factory settings this is set to "127.")

The note number that is transmitted when you strike the hi-hat pad of the TD-10 will change depending on the extent to which the hi-hat pedal is depressed.

Hi-Hat Note Number Border allows you to adjust the pedal position at which the note number switches from the open hi-hat to the closed hi-hat.

At the factory default value (127), the closed hi-hat note number will be transmitted only if the hi-hat pad is struck with the pedal completely depressed.

If you want the closed hi-hat note number to be transmitted even when the pedal is slightly raised, set this to a value such as 90.



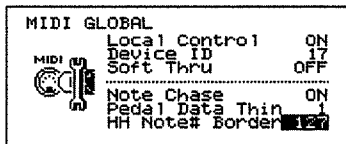
If you change the Hi-hat Note Number Border setting, the hi-hat of a pattern that was recorded onto the internal sequencer by playing the pads may play back in a way that is different from the actually recorded performance.

### Procedure

Press [SETUP] - [F2 (MIDI)] - [F1 (GLOBAL)].

### Parameters

HH Note# Border: 0-127



## New 4 Click Sounds

New 4 click sounds have been added via the TDW-1.

### Procedure

Press [CLICK] - [F2 (INST)].

### List

Voice, Click, Beep +, Metronome +, Claves, Wood Block, Sticks +, Cross Stick +, Triangle, Cowbell, Conga, Talking Drum, Maracas, Cabasa, Cuica, Agogo, Tambourine, Snaps, 909 Snare, 808 Cowbell, +: New sounds

## Master EQ "ON" and "OFF" indicator in "DRUM KIT" Screen

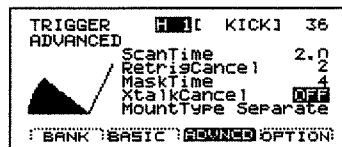
When Master EQ is set to "ON," the "MAS EQ" icon appears in the "DRUM KIT" screen.



When Master EQ is set to "OFF," nothing is indicated.

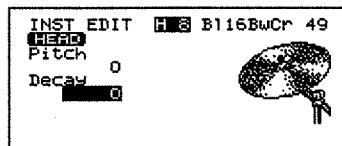
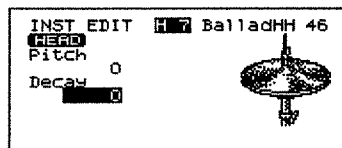
## Velocity Indicator in the "TRIGGER ADVANCED" Screen

The velocity indicator is added to the "TRIGGER ADVANCED" screen.



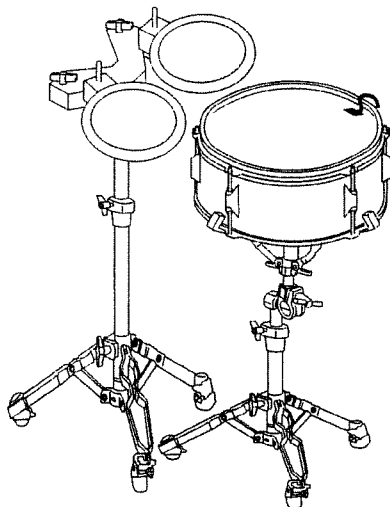
## Cymbal Edit Screen Icon

Icons appearing in the cymbal edit screen have been changed.



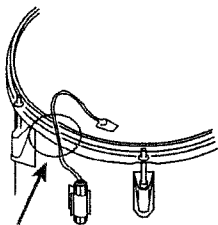
# Chapter 5 Advanced Pro Tips

## How to Prevent Crosstalk Between Pad and Acoustic Drum



If you have a “mixed” set-up of acoustic and V-Drums, and are experiencing the triggering of sounds from those pads when hitting an acoustic snare, for example; you can prevent crosstalk by attaching an Acoustic Drum Trigger to snare drum.

1. Attach the acoustic drum trigger to the acoustic snare drum.



Make sure that the wire does not touch

2. Using the proper cable, connect the trigger to one of the trigger input jacks. (ex. AUX 1)
3. Select “SNR” as the trigger type, and “CymMount” as the mount type for the trigger input to which the drum trigger is connected.
4. If you do not want to hear the sound of the TD-10, set instrument to either “600 OFF” or “960 EXP OFF” for the trigger input to which the drum trigger is connected.



Alternatively, you can set the volume to “0” in [CONTROL ROOM] - [MIXER].

5. Adjust the “Crosstalk Cancel” setting for the pad which sounds (p. 13).

6. If the pad still sounds, raise the “Threshold.”



For more information on setting the “Threshold,” refer to TD-10 Owner’s Manual; p. 109.

## How to record and play Tap Pattern

You can use the Pad Pattern function to successively play the sounds of a recorded pattern each time you strike a pad. In addition, you can set the Pad Pattern Velocity function so that the pattern volume will change according to the force with which you strike the pad.

1. Record the pattern that you will use for tap playback.



When using realtime recording to record patterns used for Tap playback, set the Quantize parameters before you begin recording. If you neglect the Quantize settings, the Tap Playback cannot be executed correctly.



For more information on recording a pattern, refer to TD-10 Owner’s Manual; p. 101.



- You need an external MIDI keyboard (or sequencer) to record using the backing instruments.
- You can use both phrase Melody and Chord.

2. Specify how the recorded pattern will play back.

- Press [PATTERN] - [F2 (FUNC)] - [F3 (TYPE)].
- Switch the “Play Type” to “TAP.”

3. Make settings for the Pad Pattern function and the Pad Pattern Velocity function.

- Press [INST] - [F4 (CTRL ▶)] - [F3 (PATER)].
- Set the “Pad Pattern Velocity” (p. 18).
- Select the pattern to play.



If different patterns have been assigned to two or more pads, striking another pad while a pattern is playing back will cause pattern playback to switch to the newly selected pattern. If you have switched to a pattern whose instrument settings are different, the sound may be interrupted for an instant.

## Synchronizing the Click Sound to an External Sequencer

You can synchronize only the click sound with an external MIDI device. (With this settings, the sequencer will not synchronize.)

1. Connect the TD-10's MIDI IN to the MIDI OUT connector of the external sequencer.
2. Press [PATTERN] - [F2 (FUNC)] - [F1 (GLOBAL)].
3. Switch the "Sync Mode" to "MIDI → Delay."
4. Press [KIT].
5. Press [CLICK]. (TD-10 OWNER'S MANUAL; p. 129)

## About Rim Shots

The rim shots of the PD-120 and PD-80R are usable only when connected to trigger input 2 (SNARE).

	PD-7/9 Rim Shot	PD-120/PD-80R Rim Shot
1/KICK	O	X
2/SNARE	O	O
3/TOM1	O	X
4/TOM2	O	X
5/TOM3	O	X
6/TOM4	O	X
7/HI-HAT	O	X
8/CRASH1	O	X
9/CRASH2	O	X
10/RIDE	O	X
11/AUX1	O	X
12/AUX2	O	X



You cannot use a "split" or "Y"(PCS-31) cable to connect two pads to a single input.

## List of COPY function

Only the various parameters can be copied.

When at the screen below, you can get to Copy screen by pressing [TOOLS] - [F1 (COPY)].

Screen	Content that will be copied	Destination
"DRUM KIT"	Drum kit settings	Drum kit
"PERC GROUP"	Percussion group settings	Percussion group
"INST"	Instrument settings	The same trigger inputs of the other drum kits
"STUDIO"	Studio settings	Drum kit
"CONTROL ROOM"	Control room setting	Drum kit
"MIXER"	Mixer setting	Drum kit
"COMP"	Compressor settings (all trigger inputs 1—10)	Drum kit
"EQ"	Equalizer setting (all trigger inputs 1—10)	Drum kit
"EFFECT"	Effect setting	Drum kit
"TRIGGER BANK"	Trigger bank setting	Trigger Bank



You can not copy individual data settings of a non-expanded TD-10. (for example from your memory card) Only "LOAD ALL" is available.

# Chapter 6 Appendices

## Instrument List

No.	Name	Remark
-----	------	--------

### EXP V-KICK

601	Ballad K	
602	Swing K	
603	60's K	
604	HevyAtkK	
605	Pop K	
606	Booth K	
607	Soul K	
608	Disco K	
609	PileDrvk	
610	LARock K	
611	Custom K	
612	Oldies K	
613	Beech K	
614	Ebony K	
615	MahognyK	
616	AcrylicK	
617	LoBoostK	
618	Solid3 K	
619	Dry 2 K	
620	Buzz 1 K	
621	Buzz 2 K	
622	Amb 1 K	
623	Amb 2 K	
624	Wood 4 K	
625	MdVrb2 K	
626	Ninja K	
627	Boomy K	

### EXP KICK

628	ThinHedK	
629	StandrdK	
630	Power K	
631	Jazz 3 K	
632	ElBend K	
633	ElBend2K	
634	Elec 2 K	
635	Plastk1K	
636	Plastk2K	
637	Plastk3K	
638	Gabba K	
639	Gabba2 K	
640	Tail K	
641	Jungle K	
642	HipHop K	
643	LoFi K	

### EXP V-SNARE

644	Ballad2S	*p	*x
645	Bld2RimS	*x	
646	Swing S	*p	*x
647	SwngRimS	*x	
648	60's S	*p	*x
649	60'skims	*x	
650	Hevy S	*p	*x
651	HevyRimS	*x	
652	Pop S	*p	*x
653	Pop RimS	*x	
654	Studio S	*p	*x
655	StdcRimS	*x	
656	Custom S	*p	*x
657	CstmRimS	*x	
658	Dirty S	*p	*x
659	DrtyRimS	*x	
660	12" S	*p	*x
661	12" RimS	*x	
662	Birch S	*x	
663	BrchRimS	*x	
664	Booth S	*p	*x
665	BothRimS	*x	

### EXP SNARE

666	Snappy S		
667	SnpYrimS		
668	Brush3 S	*b	
669	MIDIBr3S		
670	Bronze2S		
671	Brz2RimS		
672	10" S		
673	Stndrd1S		
674	Stndrd2S		
675	Stndrd3S		
676	Jazz 2 S		
677	FatBladS		
678	DncClapS		
679	ElecPwrS		
680	ElcPwr2S		
681	Real808S		
682	Real909S		
683	ElBend2S		
684	Elec 2 S		
685	HipHop2S		
686	LoFi S		
687	LoFiRimS		
688	Radio S		
689	CrsStk 7		
690	CrsStk 8		
691	CrsStk 9		
692	CrsStk10		
693	CrsStk11		
694	CrsStk12		
695	CrsStk13		

### EXP V-TOM

696	BalladT1	*p	
697	BalladT2	*p	
698	BalladT3	*p	
699	BalladT4	*p	
700	Swing T1	*p	
701	Swing T2	*p	
702	Swing T3	*p	
703	Swing T4	*p	
704	60's T1	*p	
705	60's T2	*p	
706	60's T3	*p	
707	60's T4	*p	
708	Heavy T1	*p	
709	Heavy T2	*p	
710	Heavy T3	*p	
711	Heavy T4	*p	
712	Pop T1	*p	
713	Pop T2	*p	
714	Pop T3	*p	
715	Pop T4	*p	
716	OldiesT1	*p	
717	OldiesT2	*p	
718	OldiesT3	*p	
719	OldiesT4	*p	
720	MahgnyT1	*p	
721	MahgnyT2	*p	
722	MahgnyT3	*p	
723	MahgnyT4	*p	
724	Stage T1	*p	
725	Stage T2	*p	
726	Stage T3	*p	
727	Stage T4	*p	
728	OysterT1	*p	
729	OysterT2	*p	
730	OysterT3	*p	
731	OysterT4	*p	
732	Comp T1	*p	
733	Comp T2	*p	
734	Comp T3	*p	
735	Comp T4	*p	
736	Dry2 T1	*p	
737	Dry2 T2	*p	
738	Dry2 T3	*p	
739	Dry2 T4	*p	
740	Rose T1	*p	
741	Rose T2	*p	
742	Rose T3	*p	
743	Rose T4	*p	
744	Jazz2 T1	*p	
745	Jazz2 T2	*p	
746	Jazz2 T3	*p	
747	Jazz2 T4	*p	
748	Balsa T1	*p	
749	Balsa T2	*p	
750	Balsa T3	*p	
751	Balsa T4	*p	

### EXP TOM

752	StndrdT1	
753	StndrdT2	
754	StndrdT3	
755	StndrdT4	
756	ElcPwrT1	
757	ElcPwrT2	
758	ElcPwrT3	
759	ElcPwrT4	
760	ElBendT1	
761	ElBendT2	
762	ElBendT3	
763	ElBendT4	
764	ElBnd2T1	
765	ElBnd2T2	
766	ElBnd2T3	
767	ElBnd2T4	
768	ElDualT1	
769	ElDualT2	
770	ElDualT3	
771	ElDualT4	
772	Elec2 T1	
773	Elec2 T2	
774	Elec2 T3	
775	Elec2 T4	

### EXP HI-HAT

776	BalladHH	
777	Bld EgHH	
778	Swing HH	
779	SwngEgHH	
780	60's HH	
781	60'sEgHH	
782	Heavy2HH	
783	Hvy2EgHH	
784	GroovyHH	
785	GrvyEgHH	
786	PureEgHH	
787	BritEgHH	
788	JazzEgHH	
789	ThinEgHH	
790	Pop EgHH	
791	HevyEgHH	
792	DarkEgHH	
793	LiteEgHH	
794	12" EgHH	
795	13" EgHH	
796	14" EgHH	
797	15" EgHH	
798	TechnoHH	
799	Voice HH	

\*p: Responds to positional sensing (p. 12).

\*x: Cross-stick playing technique can be used. If you do not need to play the cross-stick sound, turn off the Cross-stick switch (p. 12).

\*b: "sweep" or "swish" technique can be used.

#### About the "edge" sound of Hi-Hat

New edge sound for Hi-Hat (the sound when hitting the edge of hi-hat cymbals). "Assign edge" instrument to the pad for Hi-Hat are added via the TDW-1.

HH: Hi-Hat sound

EgHH: Hi-Hat sound hitting the edge

\* Edge sound pair to Hi-Hat sound in the non-expanded TD-10 are added.

Example: 786: PureEgHH (TDW-1) is the pair to 316: Pure HH (TD-10.)

No.	Name	Remark
-----	------	--------

### EXP CRASH

800	Blad18Cr	
801	Bl18BwCr	
802	Bl18EgCr	
803	Blad16Cr	
804	Bl16BwCr	
805	Bl16EgCr	
806	Hard16Cr	
807	Hd16BwCr	
808	Hd16EgCr	
809	Hard14Cr	
810	Hd14BwCr	
811	Hd14EgCr	
812	Swng18Cr	
813	Sw18EgCr	
814	Swng16Cr	
815	Sw16EgCr	
816	LAJz Cr	
817	LAJzEgCr	
818	Paper Cr	
819	PapEgCr	
820	Thin16Cr	
821	Thin18Cr	
822	MalletCr	
823	Splsh 6"	
824	Cup 6"	
825	HdSpl10"	
826	FsnSplsh	
827	BldSplsh	
828	RokChina	
829	JazChina	
830	FsnChina	
831	MinChina	
832	PgyCrsh7	
833	PgyCrsh8	
834	PgChina1	
835	PgChina2	
836	PgChina3	
837	Elec Cr	
838	TR808 Cr	

### EXP RIDE

839	BaladRd	*p
840	BaladRdB	
841	BaladRdX	*p
842	SwngRd	*p
843	SwngRdB	
844	SwngRdE	
845	SwngRdX	*p
846	LAJzRd	*p
847	LAJzRdB	
848	LAJzRdX	*p
849	HeavyRd	*p
850	HeavyRdB	
851	Fusn Rd	*p
852	Fusn RdB	
853	PrgJzRd	
854	PrgJzRdE	
855	JzSz1Rd	*p
856	JzSz1RdB	
857	RkSz1Rd	*p
858	RkSz1RdB	
859	CrashRd	*p
860	CrashRdB	
861	Crash2Rd	
862	Flat1 Rd	*p
863	Flat2 Rd	*p
864	Jazz RdE	
865	Pop RdE	
866	Rock RdE	
867	Lite RdE	
868	MalletRd	

### EXP PERC

869	Bongo2Hi	
870	Bongo2Lo	
871	Conga2Mt	
872	Conga2Sl	
873	Conga2Op	
874	Conga2Lo	
875	CngMt VS	
876	CngSl VS	
877	Tmb13 Hi	
878	Tmb13 Rm	

879	Tmb13 Lo	
880	Faila	
881	PotDrmOp	
882	PotDrmMt	
883	PotDrmAc	
884	PotDrmUp	
885	TrkDrmOp	
886	TrkDrmUp	
887	ThaiGong	
888	Wa-Daiko	
889	TreeChim	
890	CncrtBD2	
891	ConBD Mt	
892	TimpaniG	
893	TimpaniC	
894	PercHit2	
895	Orch Maj	
896	Orch Min	
897	Orch Dim	
898	Kick/Rol	
899	Kick/Cym	
900	Hit Roll	
901	Finale	

### EXP OTHER

902	909Clap	
903	Clap	
904	Bendor	
905	Thunder	
906	Bomb	
907	Beep	
908	MetRoBel	
909	MetroClk	
910	Sticks	
911	Tamb FX	
912	Tek Klik	
913	Random	
914	DynScrCh	
915	Phil Hit	
916	LoFi Hit	
917	ChoVoice	
918	Atmspher	
919	Ring FX	
920	JungleCr	

921	Laser	
922	Tekno FX	
923	Bend Up	
924	TeknoBrd	
925	Scrape	
926	Nantoka!	
927	TeknoHit	
928	FunkHit1	
929	FunkHit2	
930	FunkHit3	
931	Vocoder1	
932	Vocoder2	
933	OhYear!	
934	Hooch!	
935	Voice K	
936	Voice S	
937	Voice T1	
938	Voice T2	
939	Voice T3	
940	Voice T4	
941	Voice Cr	

### EXP FIXED HI-HAT

942	Pure CH	
943	Pure ECH	
944	Pure OH	
945	Jazz CH	
946	Jazz ECH	
947	Jazz OH	
948	Thin CH	
949	Thin ECH	
950	Thin OH	
951	Hevy CH	
952	Hevy ECH	
953	Hevy OH	
954	BalladCH	
955	BalladECH	
956	BalladOH	
957	Swng CH	
958	SwngECH	
959	Swng OH	

### EXP OFF

960	EXP OFF	
-----	---------	--

#### About crash cymbal instrument

There are some new "types" of crash cymbals.

Cr: Usual Crash sound with natural tone changes

BwCr: Sound when hit the bow of cymbal

EgCr: Sound when hit the edge of cymbal

\* Using the "BwCr" instrument to Head and "EgCr" instrument to Rim, you can control "bow" and "edge" sound

#### About ride cymbal instrument

There are some new "types" of ride cymbals.

Rd: Usual ride sound when hitting the "bow"

RdB: Bell sound when hitting the cup

RdX: Bow sound (soft), Bell sound (hard) (velocity controlled cross-fade)

RdE: Sound when hit the edge of cymbal

\* Using the "Rd" instrument to Head and "RdB" instrument to Rim, you can control "bow" and "bell" sound.

#### About instrument group "Fixed Hi-Hat"

Sometimes drummers have a second pair of hi-hats mounted in their set up. The "Fixed Hi-Hat" sounds ignore Hi-Hat control signals.

CH: Closed Hi-Hat sound

ECH: Closed Hi-Hat sound hitting the edge

OH: Half Open Hi-Hat sound

\* You can simulate the "open" adjustment of the hi-hat cymbals with the "DECAY" setting.

## Drum Kit List

### TDW-1 Preset Drum Kits

New drum kits for TDW-1. After performing the upgrade, these 50 drum kits will be loaded into the user drum kits.

No.	Kit Name	Remark	No.	Kit Name	Remark
1	TDW-1	*x	26	5thElmnt	
2	FunkSeq	*x *seq	27	Edgey	
3	Ballad	*x	28	Pot Drum	*pitch
4	Pop	*x	29	Studio	*x
5	NeoJazz	*x	30	UndrWatr	
6	Rocker	*x	31	TechBoy	
7	60'sRock	*x	32	Nashkit	*x
8	Phase!		33	NoRain	*x
9	Egad	*x	34	BendMe	*pitch
10	Brushes2	*b	35	BackSlap	*x
11	Caliente	*seq	36	Mallet	
12	Techno		37	RoseWood	*x
13	TimpBend	*pitch	38	Birch	*x
14	JHThang	*x	39	LatnFevr	
15	GateKepr	*x	40	Spooked	*pitch
16	Buzzz..	*x	41	DrumsJr.	*x
17	Break>it		42	BTO	
18	ToP	*x	43	BeBopDlx	*x
19	Voices		44	Dr.Delay	*x
20	Backbeat	*x	45	ThinHead	*x
21	Realdeal	*x	46	ShrtStop	
22	HipBop	*x	47	Found	*pitch
23	Custom	*x	48	Drum'nBs	*tap
24	Loopy		49	BgBndSeq	*x *tap
25	Stage!	*x	50	5/4 Funk	*x *seq

\*x: Cross-stick playing technique can be used. If you do not need to play the cross-stick sound, turn off the Cross-stick switch (p. 12).

\*b: A kit to be played with brushes.

\*pitch: The HI-Hat control pedal will control the pitch of a specific pad (p. 18).

\*seq: A pattern will play back when you strike the rim of Crash2 and so on.

\*tap: A tap pattern is assigned.

### 5 New Kits Added to the Original TD-10 Preset Drum Kits

46	ProgJazz	*x *seq
47	NoSnare	*x
48	Theater	*x *seq
49	Take 1	*x *seq
50	DenkiTom	*seq



Use copy function to load TD-10 preset drum kits (p. 7).



## Percussion Group

Note No.	Instrument	Drum kit	Trigger input jack
22	600 OFF		7/HI-HAT Rim (close)
23	529 Ou!		
24	544 WahGtDwl		
25	545 WahGtUp1		
26	600 OFF		7/HI-HAT Rim (open)
27	516 Hi-Q		
28	517 MtlNoise		
29	546 WahGtDw2		
30	547 WahGtUp2		
31	600 OFF	11/AUX1	
32	600 OFF	11/AUX1	Rim
33	600 OFF	12/AUX2	
34	600 OFF	12/AUX2	Rim
35	600 OFF	1/KICK	Rim
36	600 OFF	1/KICK	
37	689 CrsStk 7 *		
38	600 OFF	2/SNARE	
39	600 OFF	6/TOM4	Rim
40	600 OFF	2/SNARE	Rim
41	600 OFF	6/TOM4	
42	600 OFF	7/HI-HAT	(close)
43	600 OFF	5/TOM3	
44	600 OFF	7/HI-HAT	(pedal)
45	600 OFF	4/TOM2	
46	600 OFF	7/HI-HAT	(Open)
47	600 OFF	4/TOM2	Rim
48	600 OFF	3/TOM1	
49	600 OFF	8/CRASH1	
50	600 OFF	3/TOM1	Rim
51	600 OFF	10/RIDE	
52	600 OFF	9/CRASH2	Rim
53	600 OFF	10/RIDE	Rim
54	409 Tambrn 1		
55	600 OFF	8/CRASH1	Rim
56	407 Cowbell12 *		
57	600 OFF	9/CRASH2	
58	600 OFF	5/TOM3	Rim
59	379 Pop...RdX		
60	869 Bongo2Hi *		
61	870 Bongo2Lo *		
62	871 Conga2Mt *		
63	873 Conga2Op *		
64	874 Conga2Lo *		
65	878 Tmb13 Rm *		
66	879 Tmb13 Lo *		
67	446 Agogo H		
68	447 Agogo L		
69	435 CabasUp		
70	432 Maracas		
71	445 WhislSht		
72	444 Whislng		
73	449 GuiroSht		
74	448 GiroLng1		
75	434 Claves		
76	463 WdBlockH		
77	464 WdBlockL		
78	451 CuicaMt1		
79	452 CuicaOpr		
80	462 TringlMt		
81	461 TringlOp		
82	433 Shaker		
83	465 Sleibell		
84	476 BellTree		
85	460 Castanet		
86	442 SurdoLmt		
87	443 SurdoLop		
88	880 Paila *		
89	872 Conga2S1 *		
90	889 TreeChim *		
91	882 PotDrmMt *		
92	881 PotDrmOp *		
93	883 PotDrmAc *		

\*: The instrument is changed from non-expanded TD-10.

Other percussion groups are not changed.

## Preset Pattern List

No.	Ptn Name	Tempo	Length	Type	Remark
1	Drums	124	8	Loop	*
2	GroovPop	132	4	Loop	*
3	Pop Rock	132	4	Loop	*
4	Big Rock	82	4	Loop	*
5	Funk 1	174	4	Loop	*
6	Funk 2	196	4	Loop	*
7	16bt'Rok	112	4	Loop	
8	16bt'Bld	75	4	Loop	
9	CntryRok	106	12	Loop	
10	Blues	55	8	Loop	
11	JazCombo	180	8	Loop	*
12	Big Band	140	4	Loop	
13	JazWaltz	160	4	Loop	
14	UK Acid	86	4	Loop	
15	Gang Rap	90	4	Loop	
16	T Groove	100	4	Loop	
17	Funky	105	4	Loop	
18	JazzFunk	125	4	Loop	
19	S.Soul	154	4	Loop	
20	Pop Shfl	114	8	Loop	
21	Fusion	120	12	Loop	
22	Tech Fsn	106	4	Loop	
23	Funk 7/8	100	4	Loop	*
24	N.J.S	107	4	Loop	
25	House	113	4	Loop	
26	HipHop	144	4	Loop	*
27	Techno	140	4	Loop	
28	Jungle	170	4	Loop	
29	Latin	125	8	Loop	
30	Bossa	74	8	Loop	
31	Songo	109	4	Loop	
32	Samba	110	2	Loop	
33	Salsa	108	4	Loop	
34	Raggae	132	8	Loop	
35	Ska	132	4	Loop	
36	PercLoop	130	2	Loop	*
37	Funk5/4A	86	2	Loop	*
38	Funk4/4B	86	4	Loop	*
39	Cowbell	120	1	Loop	*
40	Dbl Bass	130	1	1Shot	*
41	DrumFill	240	2	1Shot	
42	Syn Bass	120	4	Tap	*
43	EP Chord	120	1	Tap	*
44	StrChord	150	8	Tap	*
45	Aco Bass	160	4	Tap	*
46	Brs Sect	160	5	Tap	*
47	Chord	120	2	Tap	
48	BassLine	120	1	Tap	
49	Perc Tap	120	8	Tap	
50	AdlbSolo	160	11	Tap	*

\*: The pattern is changed from non-expanded TD-10.

### Messages

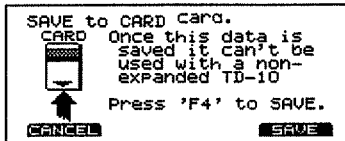
Following messages are added.

#### Old TD-10 Data!!! Some parameters can not be loaded



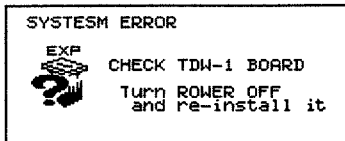
This memory card has been used by the non-expanded TD-10. Certain parameters (trigger & compressor settings) cannot be loaded.

#### Once this data is saved it can't be used with a non-expanded TD-10



After the expanded TD-10's data is saved, you can not use this memory card with a non-expanded TD-10.

#### CHECK TDW-1 BOARD Turn POWER OFF and re-install it



Either the expansion board has been removed or is not installed correctly. Please turn off the power and re-install the TDW-1.

# MIDI Implementation

## Parameter address map

(Model ID = 00H 2DH)

This map indicates address, size, Data (range), Parameter, and Description of parameters which can be transferred using "Data set 1 (DT1)".

All the numbers of address, size, Data, and Default Value are indicated in 7-bit Hexadecimal-form.

Addresses marked at "\*" cannot be used as starting addresses.

Addresses marked by "(\*TDW)" are not compatible with the TD-10 (Model ID=00H 0AH).

### Parameter Address Block

TDW-1 (Model ID = 00H 2DH)

Start address	Description	
00 00 00 00	SETUP	(Individual) *1-1
01 00 00 00	DRUM KIT 1	(Individual) *1-2
01 31 00 00	DRUM KIT 50	(Individual) *1-2
04 00 00 00	PERCUSSION GROUP 1	(Individual) *1-3
04 03 00 00	PERCUSSION GROUP 4	(Individual) *1-3
10 00 00 00	PATTERN	(Bulk) *1-4
40 00 00 00	SETUP	(Bulk) *1-1
41 00 00 00	DRUM KIT 1	(Bulk) *1-2
41 31 00 00	DRUM KIT 50	(Bulk) *1-2
44 00 00 00	PERCUSSION GROUP 1	(Bulk) *1-3
44 03 00 00	PERCUSSION GROUP 4	(Bulk) *1-3

#### \* 1-1 SETUP

Offset address	Description	
00 00 00	TRIGGER BANK 1	*1-1-1
00 30 00	TRIGGER BANK 4	*1-1-1
01 00 00	DRUM KIT CHAIN 1 (Name)	*1-1-2
01 0F 00	DRUM KIT CHAIN 16 (Name)	*1-1-2
02 00 00	DRUM KIT CHAIN 1 (Step)	*1-1-3
02 0F 00	DRUM KIT CHAIN 16 (Step)	*1-1-3
03 00 00	MIDI	*1-1-4
04 00 00	PROGRAM CHANGE MAP	*1-1-5
05 00 00	CONTROL	*1-1-6
06 00 00	MASTER EQ	*1-1-7
07 00 00	MASTER TUNE	*1-1-8
08 00 00	GLOBAL OUT/PAN	*1-1-9

#### \* 1-1-1 TRIGGER BANK

Offset address	Description	
00 00	Pad parameters (1/KICK)	*1-1-1-1
0E 00	Pad parameters (12/AUX2)	*1-1-1-1

#### \* 1-1-1-1 TRIGGER BANK (Pad parameters)

Offset address	Description	
00	000a aaaa	Trigger Type (12A, 12B, 10A, 10B, 8RA, 8RB, 8A, 8B, 8PA, 8PB, 8TA, 8TB, 8DS, 8K1, 8K2, 8K3, 8K4, 8K5, 8K6, 8K7, 8K8, 8K9, 8K10, 8K11, 8K12, 8K13, 8K14, 8K15, 8K16, 8K17, 8K18, 8K19, 8K20, 8K21, 8K22, 8K23, 8K24, 8K25, 8K26, 8K27, 8K28, 8K29, 8K30, 8K31, 8K32, 8K33, 8K34, 8K35, 8K36, 8K37, 8K38, 8K39, 8K40, 8K41, 8K42, 8K43, 8K44, 8K45, 8K46, 8K47, 8K48, 8K49, 8K50, 8K51, 8K52, 8K53, 8K54, 8K55, 8K56, 8K57, 8K58, 8K59, 8K60, 8K61, 8K62, 8K63, 8K64, 8K65, 8K66, 8K67, 8K68, 8K69, 8K70, 8K71, 8K72, 8K73, 8K74, 8K75, 8K76, 8K77, 8K78, 8K79, 8K80) 0 - 29 (*TDW)
01	0000 0aaa	Sens Curve (Linear, EXP1, EXP2, LOG1, LOG2, Spline, Loud1, Loud2) 0 - 7 (*TDW)
02	000a aaaa	Crosstalk Cancel (OFF, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80) 0 - 16 (*TDW)
03	0000 0aaa	Mount Type (Separate, PadMount, CymMount) 0 - 2 (*TDW)
04	0000 aaaa	Rim Sensitivity (OFF, 1 - 15) 0 - 15 (*TDW)

Offset address	Description	
05	0aaa aaaa	Xstick Thresoid (2/SHARE only) 0 - 127 (*TDW)
06	0000 00aa	Head Tension Adjustment (Loose, Normal, Tight) (2/SHARE only) 0 - 2 (*TDW)
07	000a aaaa	STICK Sensitivity (1 - 32) 0 - 31 (*TDW)
08	000a aaaa	STICK Threshold 0 - 31 (*TDW)
09	00aa aaaa	STICK Scan Time (0.0ms - 4.0ms, 0.1ms step) 0 - 40 (*TDW)
0A	0000 aaaa	STICK Retrigger Cancel (1 - 15) 0 - 15 (*TDW)
0B	000a aaaa	STICK Mask Time (0ms - 64ms, 4ms step) 0 - 16 (*TDW)
0C	000a aaaa	BRUSH Sensitivity (1 - 32) 0 - 31 (*TDW)
0D	000a aaaa	BRUSH Threshold (0.0ms - 4.0ms, 0.1ms step) 0 - 31 (*TDW)
0E	00aa aaaa	BRUSH Scan Time 0 - 40 (*TDW)
0F	0000 aaaa	BRUSH Retrigger Cancel (1 - 15) 0 - 15 (*TDW)
10	000a aaaa	BRUSH Mask Time (0ms - 64ms, 4ms step) 0 - 16 (*TDW)

#### \* 1-1-2 DRUM KIT CHAIN (Name)

Offset address	Description	
00	0aaa aaaa	Drum Kit CHAIN Name 32 - 127
01	0aaa aaaa	Drum Kit CHAIN Name 32 - 127
07	0aaa aaaa	Drum Kit CHAIN Name 32 - 127

#### \* 1-1-3 DRUM KIT CHAIN (Step)

Offset address	Description	
00	0aaa aaaa	Drum Kit Number (Step1) (1-50, END) 0 - 50
01	0aaa aaaa	Drum Kit Number (Step2) (1-50, END) 0 - 50
1F	0aaa aaaa	Drum Kit Number (Step32) (1-50, END) 0 - 50

#### \* 1-1-4 MIDI

Offset address	Description	
00 00	000a aaaa	MIDI Channel (DRUM) (1 - 16, OFF) 0 - 16
00 01	000a aaaa	MIDI Channel (PART1) (1 - 16, OFF) 0 - 16
00 02	000a aaaa	MIDI Channel (PART2) (1 - 16, OFF) 0 - 16
00 03	000a aaaa	MIDI Channel (BASS) (1 - 16, OFF) 0 - 16
00 04	0000 00aa	Zone CC (OFF, Modulation(1), General(16), GENERAL2(17)) 0 - 3
00 05	0aaa aaaa	HH Note# Border 0 - 127 (*TDW)
00 06	0000 0aaa	Pedal CC (OFF, Modulation(1), Foot Ctrl(4), General(16), General2(17)) 0 - 4
00 07	0000 000a	Program Change Rx SW (OFF, ON) 0 - 1
00 08	0000 000a	Program Change Tx SW (OFF, ON) 0 - 1
00 09	0000 000a	Local Control (OFF, ON) 0 - 1
00 0A	0000 000a	Soft Through (OFF, ON) 0 - 1
00 0B	0000 000a	Note Chase (OFF, ON) 0 - 1
00 0C	0000 00aa	Pedal Data Thin (OFF, 1, 2) 0 - 2

#### \* 1-1-5 PROGRAM CHANGE MAP

Offset address	Description	
00 00	0aaa aaaa	Program Change (DRUM KIT 1) (1 - 128) 0 - 127
00 31	0aaa aaaa	Program Change (DRUM KIT 50) (1 - 128) 0 - 127

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## \* 1-1-6 CONTROL

Offset address	Description	
00 00	0000 00aa	Foot SW Mode 0 - 2 (*1)
00 01	0000 0aaa	Pad SW Mode 0 - 4 (*2)
00 02	0000 aaaa	Display Contrast 0 - 15 (1 - 10)
00 03	0000 000a	Mix In Output 0 - 1 (Master, Phones Only)
00 04	0000 009a	Preview Dynamics 0 - 1 (OFF, ON)
00 05	0aaa aaaa	Preview Velocity 1 - 127
Total size: 00 00 00 06		

### (\*1) Foot SW Mode

	[SW1]	[SW2]
0 KIT SELECT	KIT# DEC	KIT# INC
1 PATTERN SEL	PTN# DEC	PTN# INC
2 PATTERN PLAY	PTN# INC	STOP/PLAY

### (\*2) Pad SW Mode

	[AUX1]	[AUX2]
0 OFF	OFF	OFF
1 KIT SELECT	OFF	KIT# INC
2 PATTERN SEL	OFF	PTN# INC
3 KIT SELECT(2)	KIT# DEC	KIT# INC
4 PATTERN SEL(2)	PTN# DEC	PTN# INC

## \* 1-1-7 MASTER EQ

Offset address	Description	
00 00	0000 aaaa	Low Frequency 0 - 14 (20Hz - 500Hz)
00 01	0aaa aaaa	Low Gain 49 - 79 (-15db - +15db)
00 02	000a aaaa	Mid Frequency 7 - 23 (100Hz - 1kHz)
00 03	0aaa aaaa	Mid Gain 49 - 79 (-15db - +15db)
00 04	000a aaaa	Mid Q 0 - 20 (0.5, 1.0 - 20.0, 1.0step)
00 05	000a aaaa	High Frequency 14 - 30 (500Hz - 20kHz)
00 06	0aaa aaaa	High Gain 49 - 79 (-15db - +15db)
00 07	0000 000a	SW 0 - 1 (OFF, ON)
Total size: 00 00 00 08		

## \* 1-1-8 MASTER TUNE

Offset address	Description	
00 00	0000 aaaa	Master Tune 0 - 509 (415.3 - 466.2Hz)
01	0000 bbbb	
02	0000 cccc	
03	0000 dddd	
Total size: 00 00 00 04		

## \* 1-1-9 GLOBAL OUT/PAN

Offset address	Description	
00 00	0000 000a	SW 0 - 1 (OFF, ON) (*TDW)
00 01	000a aaaa	Pan Kick (L15 - R15) (*TDW)
00 02	000a aaaa	Pan Snare (L15 - R15) (*TDW)
00 03	000a aaaa	Pan Tom1 (L15 - R15) (*TDW)
00 04	000a aaaa	Pan Tom2 (L15 - R15) (*TDW)
00 05	000a aaaa	Pan Tom3 (L15 - R15) (*TDW)
00 06	000a aaaa	Pan Tom4 (L15 - R15) (*TDW)
00 07	000a aaaa	Pan Hihat (L15 - R15) (*TDW)
00 08	000a aaaa	Pan Crash1 (L15 - R15) (*TDW)
00 09	000a aaaa	Pan Crash2 (L15 - R15) (*TDW)
00 0A	000a aaaa	Pan Ride (L15 - R15) (*TDW)
00 0B	000a aaaa	Pan Aux1 (L15 - R15) (*TDW)
00 0C	000a aaaa	Pan Aux2 (L15 - R15) (*TDW)
00 0D	0000 00aa	Output Assign Kick (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)

00 0E	0000 00aa	Output Assign Snare (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 0F	0000 00aa	Output Assign Tom1 (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 10	0000 00aa	Output Assign Tom2 (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 11	0000 00aa	Output Assign Tom3 (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 12	0000 00aa	Output Assign Tom4 (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 13	0000 00aa	Output Assign Hihat (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 14	0000 00aa	Output Assign Crash1 (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 15	0000 00aa	Output Assign Crash2 (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 16	0000 00aa	Output Assign Ride (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 17	0000 00aa	Output Assign Aux1 (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
00 18	0000 00aa	Output Assign Aux2 (MASTER, DIR1, DIR2, DIR3) 0 - 3 (*TDW)
Total size: 00 00 00 19		

## \* 1-2 DRUM KIT

Offset address	Description	
00 00	Common parameters	*1-2-1
01 00	Pad parameters (1/KICK)	*1-2-2
02 00	Pad parameters (2/SHARE)	*1-2-2
03 00	Pad parameters (3/TOM1)	*1-2-2
04 00	Pad parameters (4/TOM2)	*1-2-2
05 00	Pad parameters (5/TOM3)	*1-2-2
06 00	Pad parameters (6/TOM4)	*1-2-2
07 00	Pad parameters (7/HiHAT)	*1-2-2
08 00	Pad parameters (8/CRASH1)	*1-2-2
09 00	Pad parameters (9/CRASH2)	*1-2-2
0A 00	Pad parameters (10/RISE)	*1-2-2
0B 00	Pad parameters (11/AUX1)	*1-2-2
0C 00	Pad parameters (12/AUX2)	*1-2-2

## \* 1-2-1 DRUM KIT (Common parameters)

Offset address	Description	
00 00 00	0aaa aaaa	Drum Kit Name 1 32 - 127
00 00 01	0aaa aaaa	Drum Kit Name 2 32 - 127
00 00 07	0aaa aaaa	Drum Kit Name 8 32 - 127
00 00 08	0000 00aa	PERCUSSION GROUP Assign 0 - 3 (1 - 4)
00 00 09	0000 0000	dummy (ignored)
00 00 0A	0aaa aaaa	GROUP VOLUME (DRUMS) 0 - 127
00 00 0B	0aaa aaaa	GROUP VOLUME (PERC) 0 - 127
00 00 0C	0aaa aaaa	AMBIENCE Group Send Level (DRUMS) 0 - 127
00 00 0D	0aaa aaaa	AMBIENCE Group Send Level (PERC) 0 - 127
00 00 0E	0aaa aaaa	AMBIENCE Group Send Level (PART) 0 - 127
00 00 0F	0aaa aaaa	EFFECT Group Send Level (DRUMS) 0 - 127
00 00 10	0aaa aaaa	EFFECT Group Send Level (PERC) 0 - 127
00 00 11	0aaa aaaa	EFFECT Group Send Level (PART) 0 - 127
00 00 12	0aaa aaaa	AMBIENCE Output Level (MASTER) 0 - 127
00 00 13	0aaa aaaa	AMBIENCE Output Level (DIR1) 0 - 127
00 00 14	0aaa aaaa	AMBIENCE Output Level (DIR2) 0 - 127
00 00 15	0aaa aaaa	AMBIENCE Output Level (DIR3) 0 - 127
00 00 16	0aaa aaaa	EFFECT Output Level 0 - 127
00 00 17	0000 000a	AMBIENCE SW 0 - 1 (OFF, ON)
00 00 18	0000 000a	EFFECT SW 0 - 1 (OFF, ON)
00 00 19	0000 000a	COMP SW 0 - 1 (OFF, ON)
00 00 1A	0000 000a	EQ SW 0 - 1 (OFF, ON)
00 00 1B	0000 aaaa	AMBIENCE Type 0 - 9 (Beach, Living Room, Bath Room, Studio, Garage, Locker Room, Theater, Cave, Gymnasium, Dome Stadium)
00 00 1C	0000 0aaa	AMBIENCE Room Size 0 - 4 (Tiny, Small, Medium, Large, Huge)
00 00 1D	0000 00aa	AMBIENCE Wall Type 0 - 2 (Wood, Plaster, Glass)
00 00 1E	0000 000a	AMBIENCE Mic Position 0 - 1 (Low, High)
00 00 1F	000a aaaa	EFFECT Type 0 - 29
00 00 20	0aaa aaaa	EFFECT Param 1 0 - 127
00 00 21	0aaa aaaa	EFFECT Param 2 0 - 127
00 00 22	0aaa aaaa	EFFECT Param 3 0 - 127
00 00 23	0aaa aaaa	EFFECT Param 4 0 - 127
00 00 24	0000 000a	Stick Type 0 - 1 (Sticks, Brushes)
00 00 25	0000 aaaa	Pedal HH Volume Adjust -127 - +127 (*TDW)
00 00 26	0000 bbbb	
00 00 27	0000 000a	X Stick SW 0 - 1 (OFF, ON) (*TDW)

#	00 00 26	0000 aaaa	X Stick Volume Adjust	-127 - +127	(*TDW)
	26	0000 bbbb			
Total size: 00 00 00 2A					

### \* 1-2-2 DRUM KIT (Pad parameters)

Offset address	Description				
#	00 0000 aaaa	HEAD	Instrument	0 - 959	
#	01 0000 bbbb			(1 - 960)	
#	02 0000 cccc				
#	03 0000 dddd				
#	04 0000 aaaa	HEAD	Fitch (Head Tuning)	-480 - +480	
#	05 0000 bbbb			(-4800 - 4800cent, 10cent step)	
#	06 0000 cccc				
#	07 0000 dddd				
#	08 0aaa aaaa	HEAD	Decay	33 - 95	
				(-31 - +31)	
#	09 0aaa aaaa	HEAD	Level	0 - 127	
#	0A 0aaa aaaa	HEAD	Note number	0 - 127	
#	0B 0aaa aaaa	HEAD	Ambience Send Level	0 - 127	
#	0C 0aaa aaaa	HEAD	Effect Send Level	0 - 127	
#	0D 0aaa aaaa	HEAD	Play Pattern number	0 - 100	
#	0E 0aaa aaaa	HEAD	MIDI Gate Time	(OFF, 1 - 100)	
				(0.1s - 8.0s, 0.1s step)	
#	0F 0000 aaaa	RIM	Instrument	0 - 959	
#	10 0000 bbbb			(1 - 960)	
#	11 0000 cccc				
#	12 0000 dddd				
#	13 0000 aaaa	RIM	Fitch (Head Tuning)	-480 - 480	
#	14 0000 bbbb			(-4800 - 4800cent, 10cent step)	
#	15 0000 cccc				
#	16 0000 dddd				
#	17 0aaa aaaa	RIM	Decay	33 - 95	
				(-31 - +31)	
#	18 0aaa aaaa	RIM	Level	0 - 127	
#	19 0aaa aaaa	RIM	Note number	0 - 127	
#	1A 0aaa aaaa	RIM	Ambience Send Level	0 - 127	
#	1B 0aaa aaaa	RIM	Effect Send Level	0 - 127	
#	1C 0aaa aaaa	RIM	Play Pattern number	0 - 100	
#	1D 0aaa aaaa	RIM	MIDI Gate Time	(OFF, 1 - 100)	
				(0.1s - 8.0s, 0.1s step)	
#	1E 000a aaaa	Pan		0 - 30	
				(L15 - R15)	
#	1F 0000 00aa	Output Assign		0 - 3	
				(MASTER, DIR1, DIR2, DIR3)	
#	20 0000 000a	Compressor SW		0 - 1	
				(OFF, ON)	
#	21 0aaa aaaa	Compressor Threshold		0 - 100	(*TDW)
				(-inf, -99db - 0db)	
#	22 000a aaaa	Compressor Ratio		0 - 18	(*TDW)
				(1:1 - 9:1 (1step),	
				10:1 - 90:1 (10step),	
				inf:1)	
#	23 000a aaaa	Compressor Attack Time		0 - 31	(*TDW)
				(0.05 - 3.09 (0.01step),	
				0.1 - 0.9 (0.1step),	
				1.0 - 9.0 (1.0step),	
				10.0 - 50.0 (5.0step))	
#	24 000a aaaa	Compressor Release Time		0 - 23	(*TDW)
				(0.05, 0.07, 0.1, 0.5, 1.5, 10, 17,	
				25, 50, 75, 100, 200, 300, 400, 500,	
				600, 700, 800, 900, 1000, 1200,	
				1500, 2000 ms)	
#	25 0aaa aaaa	Compressor Output Level		0 - 72	(*TDW)
				(-48 - +24db)	
#	26 0000 000a	EQ SW		0 - 1	
				(OFF, ON)	
#	27 0000 00aa	EQ HIGH Type		0 - 2	
				(Peaking, L.Shelving, H.Shelving)	
#	28 000a aaaa	EQ HIGH Frequency		0 - 30	
				(20, 25, 31.5, 40, 50, 63, 80, 100, 125,	
				160, 200, 250, 315, 400, 500, 630, 800,	
				1k, 1.25k, 1.6k, 2k, 2.5k, 3.15k, 4k,	
				5k, 6.3k, 8k, 10k, 12.5k, 16k, 20k)	
#	29 0aaa aaaa	EQ HIGH Gain		49 - 79	
				(-15 - +15db)	
#	2A 000a aaaa	EQ HIGH Q		0 - 20	
				(0.5, 1.0 - 20.0, 0.1step)	
#	2B 0000 00aa	EQ LOW Type		0 - 2	
				(Peaking, L.Shelving, H.Shelving)	
#	2C 000a aaaa	EQ LOW Frequency		0 - 30	
				(20, 25, 31.5, 40, 50, 63, 80, 100, 125,	
				160, 200, 250, 315, 400, 500, 630, 800,	
				1k, 1.25k, 1.6k, 2k, 2.5k, 3.15k, 4k,	
				5k, 6.3k, 8k, 10k, 12.5k, 16k, 20k)	
#	2D 0aaa aaaa	EQ LOW Gain		49 - 79	
				(-15 - +15db)	
#	2E 000a aaaa	EQ LOW Q		0 - 20	
				(0.5, 1.0 - 20.0, 0.1step)	
#	2F 0000 00aa	Mic Type		0 - 2	(*3)
				(1/KICK:Condenser, Dynamic1, Dynamic2)	
				(2/SNARE:Condenser, Dynamic, Lo-P)	
#	30 0000 00aa	Mic Position		0 - 2	(*4)
				(Outside, Standard, Inside)	
#	31 0aaa aaaa				(*5)
#	32 0aaa aaaa				(*5)
#	33 0aaa aaaa				(*5)
#	34 0aaa aaaa				(*5)
#	35 0aaa aaaa				(*5)

#	36 0aaa aaaa				(*5)
#	37 0000 000a	HEAD	Pad PIN Velo	0 - 1	(*TDW)
				(OFF, ON)	
#	38 0aaa aaaa	HEAD	Pedal Fitch Range	40 - 60	(*TDW)
				(-24 - +24)	
#	39 0000 000a	RIM	Pad PIN Velo	0 - 1	(*TDW)
				(OFF, ON)	
#	3A 0aaa aaaa	RIM	Pedal Pitch Range	40 - 60	(*TDW)
				(-24 - +24)	
Total size: 00 00 30 3E					

(\*3) 1/KICK, 2/SNARE only

(\*4) 1/KICK, 2/SNARE, 3/TOM1, 4/TOM2, 5/TOM3, 6/TOM4 only

(\*5) 1/KICK, 2/SNARE, 3/TOM1, 4/TOM2, 5/TOM3, 6/TOM4 only

Depending on the instrument group of the assigned instruments, settings are as follows.

#### Instrument Group: V-KICK

Offset address	Description				
#	31 0000 00aa	Head Type		0 - 2	
				(Clear, Coated, PinStripe*)	
#	32 0000 000a	PinStripe	is a registered Trademark of Remo Inc. U.S.A.		
		Shell Depth		0 - 1	
				(Normal, Deep)	
#	33 0000 0aaa	Muffling		0 - 4	
				(OFF, Tapel, Tape2, Blanket, Weight)	
#	34 0000 0000	dummy (ignored)			
#	35 0000 0000	dummy (ignored)			
#	36 0000 0000	dummy (ignored)			

#### Instrument Group: V-SNARE

Offset address	Description				
#	31 0000 00aa	Head Type		0 - 2	
				(Clear, Coated, PinStripe*)	
#	32 000a aaaa	PinStripe	is a registered Trademark of Remo Inc. U.S.A.		
		Shell Depth		0 - 38	
				(1.0* - 20.0*, 0.5step)	
#	33 0000 0aaa	Muffling		0 - 4	
				(OFF, Tapel, Tape2, Daughnutel, Daughnuts2)	
#	34 0000 00aa	Shell Material		0 - 2	
				(Wood, Steel, Brass)	
#	35 0000 00aa	Strainer Adjustment		0 - 3	
				(OFF, Loose, Medium, Tight)	
#	36 0000 0000	dummy (ignored)			

#### Instrument Group: V-TOM

Offset address	Description				
#	31 0000 00aa	Head Type		0 - 2	
				(Clear, Coated, PinStripe*)	
#	32 0000 000a	PinStripe	is a registered Trademark of Remo Inc. U.S.A.		
		Shell Depth		0 - 1	
				(Normal, Deep)	
#	33 0000 0aaa	Muffling		0 - 4	
				(OFF, Tapel, Tape2, Felt1, Felt2)	
#	34 0000 0000	dummy (ignored)			
#	35 0000 0000	dummy (ignored)			
#	36 0000 0000	dummy (ignored)			

#### Instrument Group: ELEC KICK, ELEC SNARE, ELEC TOM1 - ELEC TOM4

Offset address	Description				
#	31 0aaa aaaa	Attack		0 - 127	
#	32 0aaa aaaa	Decay		0 - 127	
#	33 0aaa aaaa	Noise		0 - 127	
#	34 0aaa aaaa	Tone		0 - 127	
#	35 0aaa aaaa	Bend		0 - 127	
#	36 0aaa aaaa	Balance		0 - 127	

#### Instrument Group: TR808 KICK

Offset address	Description				
#	31 0000 0000	dummy (ignored)			
#	32 0aaa aaaa	Decay		0 - 127	
#	33 0aaa aaaa	Tune		0 - 127	
#	34 0aaa aaaa	Tone		0 - 127	
#	35 0000 0000	dummy (ignored)			
#	36 0000 0000	dummy (ignored)			

#### Instrument Group: TR808 SNARE

Offset address	Description				
#	31 0000 0000	dummy (ignored)			
#	32 0000 0000	dummy (ignored)			
#	33 0aaa aaaa	Tune		0 - 127	
#	34 0aaa aaaa	Tone		0 - 127	
#	35 0aaa aaaa	Snappy		0 - 127	
#	36 0000 0000	dummy (ignored)			

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## Instrument Group: TR808 TOM

Offset address	Description	
31   0000 0000	Dummy (ignored)	
32   0aaa aaaa	Decay	0 - 127
33   0aaa aaaa	Tune	0 - 127
34   0000 0000	Dummy (ignored)	
35   0000 0000	Dummy (ignored)	
36   0000 0000	Dummy (ignored)	

## Instrument Group: TR909 KICK

Offset address	Description	
31   0aaa aaaa	Attack	0 - 127
32   0aaa aaaa	Decay	0 - 127
33   0aaa aaaa	Tune	0 - 127
34   0000 0000	Dummy (ignored)	
35   0000 0000	Dummy (ignored)	
36   0000 0000	Dummy (ignored)	

## Instrument Group: TR909 SNARE

Offset address	Description	
31   0000 0000	Dummy (ignored)	
32   0000 0000	Dummy (ignored)	
33   0aaa aaaa	Tune	0 - 127
34   0aaa aaaa	Tone	0 - 127
35   0aaa aaaa	Snappy	0 - 127
36   0000 0000	Dummy (ignored)	

## Instrument Group: TR909 TOM

Offset address	Description	
31   0000 0000	Dummy (ignored)	
32   0aaa aaaa	Decay	0 - 127
33   0aaa aaaa	Tune	0 - 127
34   0000 0000	Dummy (ignored)	
35   0000 0000	Dummy (ignored)	
36   0000 0000	Dummy (ignored)	

## \* 1-3 PERCUSSION GROUP

Offset address	Description	
16 00	Note #22 (Note parameters)	*1-3-1
50 00	Note #93 (Note parameters)	*1-3-1

## \* 1-3-1 PERCUSSION GROUP (Note parameters)

Offset address	Description	
00   0000 aaaa	Instrument	0 - 959
01   0000 bbbb		01 - 960
02   0000 cccc		
03   0000 dddd		
04   0000 aaaa	Fitch	-480 - +480
05   0000 bbbb		(-4800 - +4800cent, 10cent step)
06   0000 cccc		
07   0000 dddd		
08   0aaa aaaa	Volume	0 - 127
09   000a aaaa	Fan	0 - 30
0A   0aaa aaaa	Decay	(115 - 95)
0B   0aaa aaaa	Ambience	(-31 - +31)
0C   0aaa aaaa	Fx Send	0 - 127
0D   0000 00aa	Output	0 - 1
(MASTER, PHONES ONLY)		
Total size	00 00 00 0F	

## \* 1-4 PATTERN

Offset address	Description
00 00 00	All User Pattern Request
7F 7F 7F	User Pattern Data End

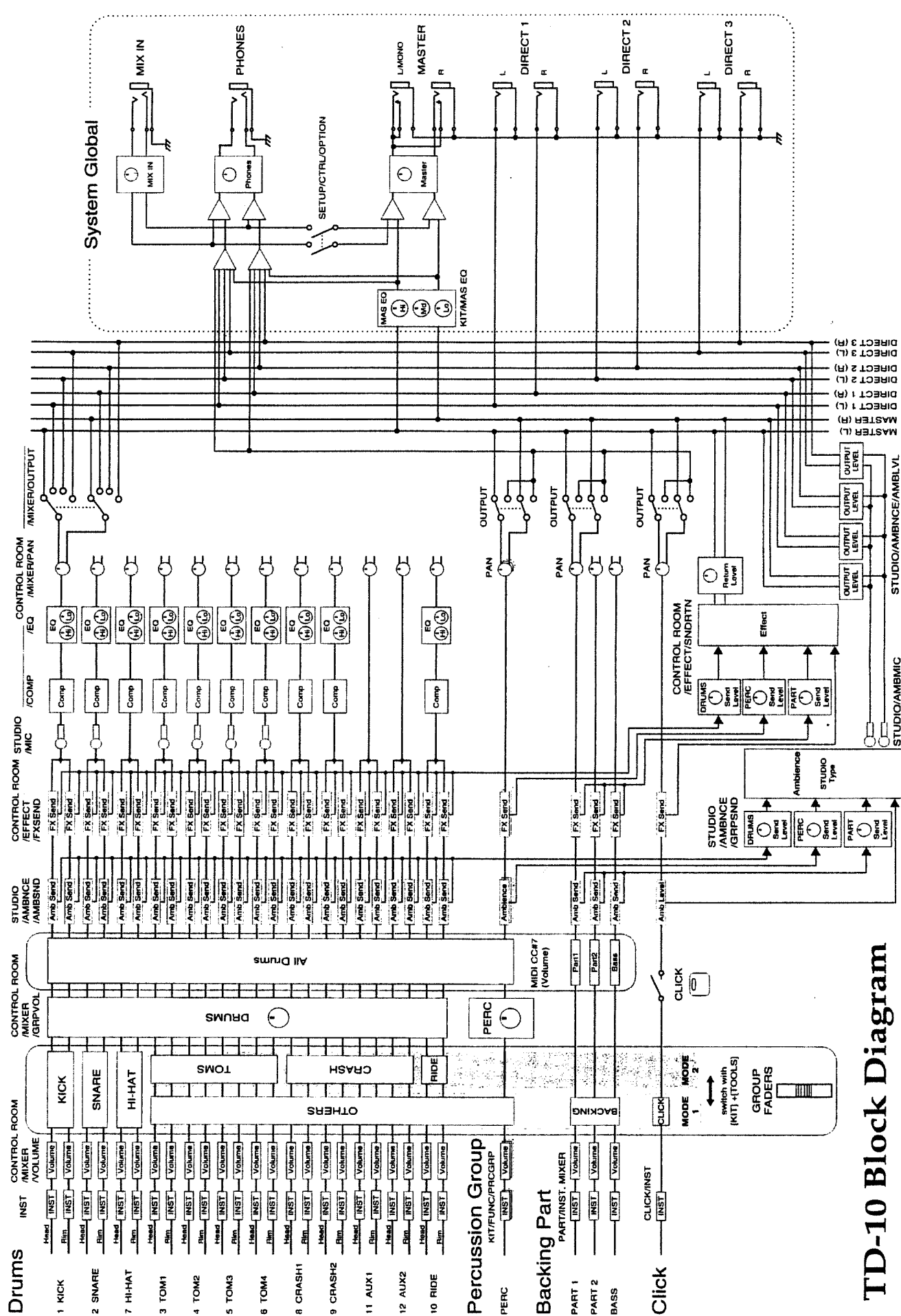
mm = User Pattern Number: 01H - 32H (Pattern No.51 - Pattern No.100)

- \* Data size should be 00 00 00 00.
- \* Data of demo song and Preset patterns cannot be transmitted.

## Parameter Address Block Map

An outlined address map of the Exclusive Communication is as follows;

Address(H)	Block	Sub block	Reference
00 00 00 00	SETUP	TRIGGER BANK 1	Pad 1 *1-1-1
		TRIGGER BANK 4	Pad 12
		KIT CHAIN 1 (Name)	*1-1-2
		KIT CHAIN16 (Name)	
		KIT CHAIN 1 (Step)	Step 1 *1-1-3
		KIT CHAIN16 (Step)	Step 32
		MIDI	*1-1-4
		PROGRAM CHANGE MAP	*1-1-5
		CONTROL	*1-1-6
		MASTER EQ	*1-1-7
		MASTER TUNE	*1-1-8
		GLOBAL GUY/PAN	*1-1-9
01 00 00 00	DRUM KIT	DRUM KIT 1	*1-2
		DRUM KIT 50	
04 00 00 00	PERCUSSION GROUP	PERCUSSION GROUP 1	Note #22 *1-3
		PERCUSSION GROUPE 41	Note #93
10 00 00 00	PATTERN		
40 00 00 00	SETUP		
41 00 00 00	DRUM KIT	Bulk area	
44 00 00 00	PERCUSSION GROUP	v	



**TD-10 Block Diagram**

## Information

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