

5 DATA TRANSFER

The entire data in the internal memory can be copied onto a memory card or disk, or the entire data on a memory card or disk into the internal memory.

Also, using Roland MIDI Exclusive messages, the data can be transferred from one D-20 to another D-20.

***If an Error Message is shown in the Display, resolve it by following the "Error Messages" on page 212.**

1. Copying with a Floppy disk

The entire data in the internal memory of the D-20 can be copied on a disk. This is called saving. Copying data on a disk into the internal memory is called loading.

Initializing the entire data on a disk is called formatting. Erasing a File of data on a disk is called deleting.

[NOTES]

- Use a 3.5", double density floppy disk, such as the Roland MF2-DD.
- Disks and disk drives are delicate, and can be easily damaged if not treated properly. Read "Important Notes" on page 2 in Volume 1.
- A brand new floppy disk cannot be used unless formatted as explained on page 177. This applies to a floppy disk that contains data for other than the D-20.

【File】

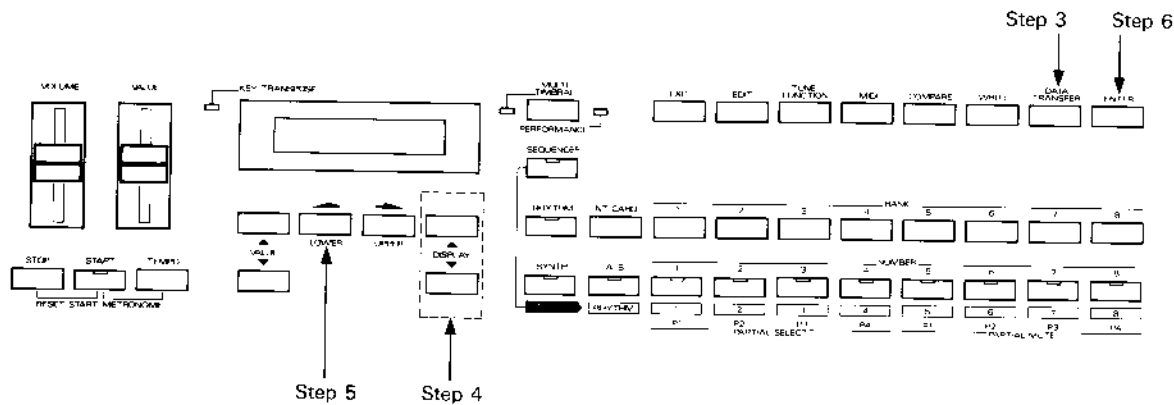
Data is stored on a disk with a file name. There are four types of files which are optional depending on the situation, but usually use "All".

File Type (Signature) Data	All (\downarrow \uparrow \uparrow \uparrow)	Song (\downarrow)	Sound (\uparrow)	Rhythm (\uparrow)
128 Patches (A11-88, B11-88)	○		○	
128 Timbres (A11-88, B11-88)	○		○	
64 Tones (i1-64)	○		○	
Sequencer Tracks (1-8)	○	○		
Sequencer Rhythm Track (1)	○	○		○
32 Rhythm Patterns (P-51-88)	○	○		○
Rhythm Setup (1 Set)	○	○		○

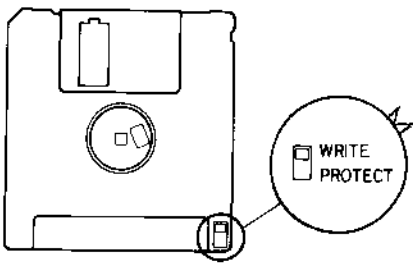
*The Display shows the file type with symbol.

a. Formatting

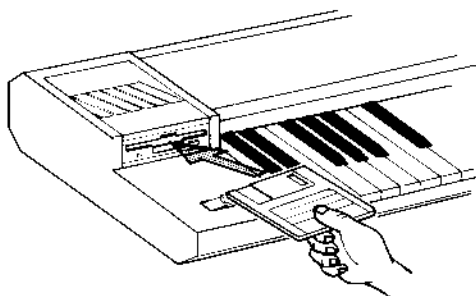
Formatting a disk is necessary to make it capable of saving data.



Step 1 Set the Protect Tab on the disk to "WRITE".



- Step 2** Insert the disk into the Disk Drive.



- Step 3** Push the DATA TRANSFER button.

```
Disk Select
Save      Load
```

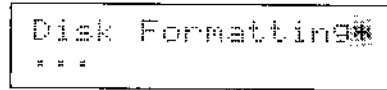
- Step 4** Call the following Display using the DISPLAY buttons.

```
Disk Select
Format    Delete
```

- Step 5** Push the left Cursor Button.

```
DiskFormat Sure?
Enter
```

Step 6 Push the **ENTER** button.

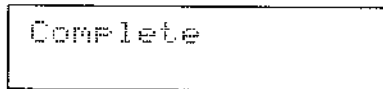


```
Disk Formatting***
***
```

The number of dots increases. —————→



When the disk is properly formatted, the following Display is shown for a while, then returns to the previous Display before Data Transfer was performed.



```
Complete
```

*The Disk Drive clicks when it starts, but this is nothing to worry about.

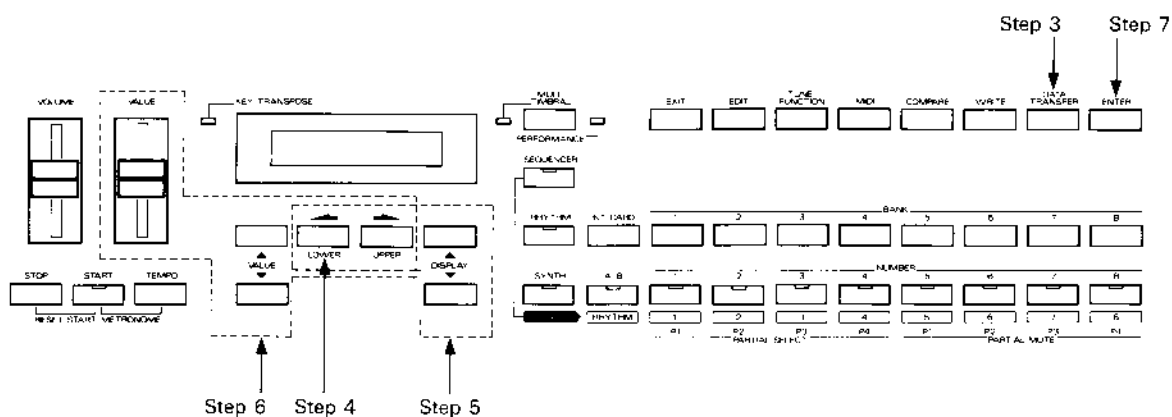
*Disk Formatting takes about 150 seconds.

*If the disk is not formatted properly, an Error Message will be shown in the Display. Resolve it by following "Error Messages" on page 212.

DATA TRANSFER

b. Saving

Data in the internal memory can be saved onto a disk for future use.



Step 1

Set the Protect Tab on the disk to "WRITE". *is required*

Step 2

Insert the disk into the Disk Drive.

Step 3

Push the DATA TRANSFER button.

```

Disk Select
Save      Load
    
```

Step 4

Push the left Cursor Button.

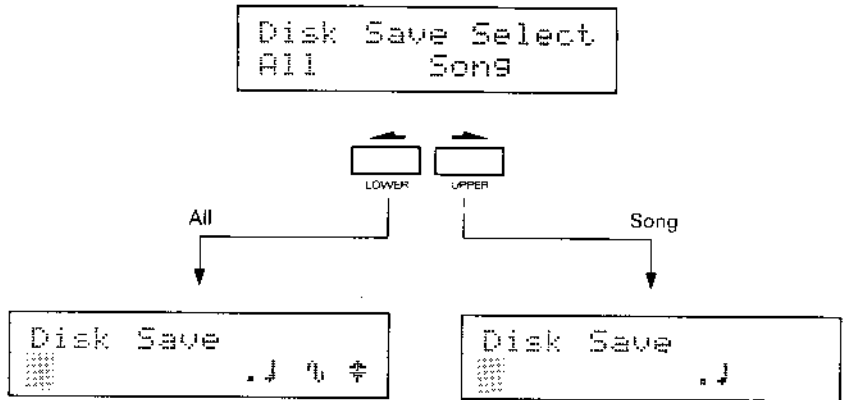
```

Disk Save Select
All          Song
    
```

Step 5

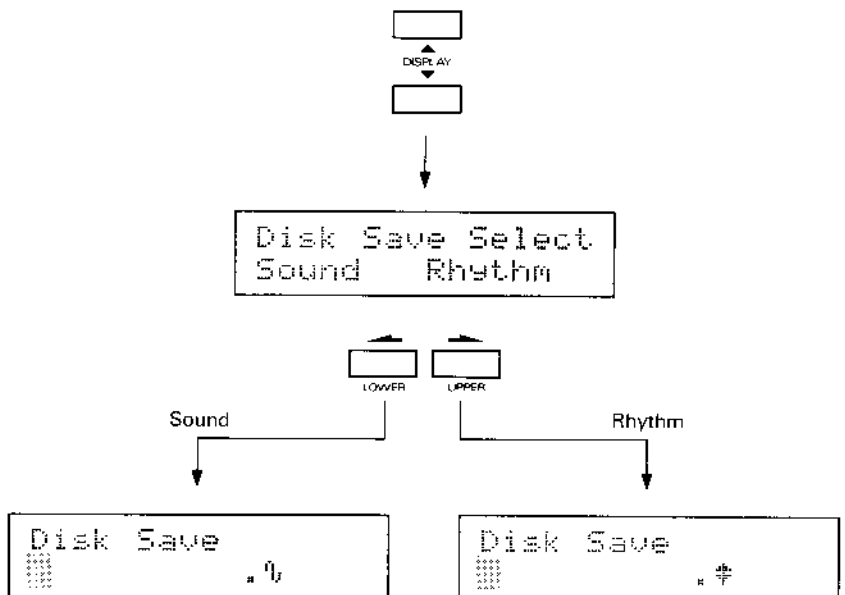
Select the type of data to be transferred.

○ Select "All" or "Song" while the following Display is being shown.



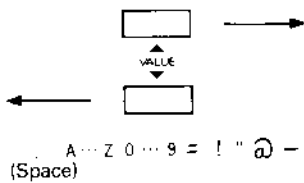
*When the data already has a Song Name, it is shown in the Display. If you wish to use the Song Name as a File name, go to Step 7.

○ "Sound" or "Rhythm" can be selected with the Cursor Buttons in the next Display.



Step 6 **Select a File name by using the Value Control Knob (selecting a letter) and the Cursor Buttons (moving to the position where the selected letter is to be written.)**

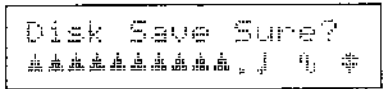
Available letters for a File name are as shown below.(Up to 10 letters can be used for a File name.)



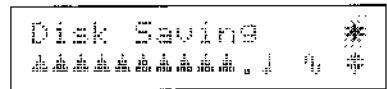
A...Z 0...9 = ! " @ -
(Space)

***Without a File name, data is not saved on the disk.**

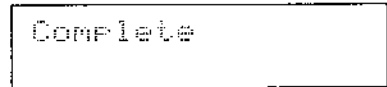
Step 7 **Push the ENTER button.**



Step 8 **Push the ENTER button.**



When the data is properly saved, the following Display is show for a while, then returns to the previous Display before Data, Transfer was performed.



***It takes quite a long time for data to be saved.**

***If the data is not properly saved, an Error Message is shown in the Display. Resolve this by following the "Error Messages" on page 212.**

- ☆If similar kind of the data using the same File name and File type is already saved on the disk, the following Display appears.
- If you wish to save it again on the same file, push the ENTER button, and the previous data will be replaced with the new data. If you wish to retain the current data as well as the new data, push the EXIT button. Step 6's Display will be called, for you to change the File name and save it.

```

Disk Save Renew?
#####.J 0 #

```

- ☆If the remaining capacity of a disk is too small for the data to be saved, the following Display is shown for a while then returned to the Saving/Loading Display. Delete any un-needed File (see page 186) or use a new disk.

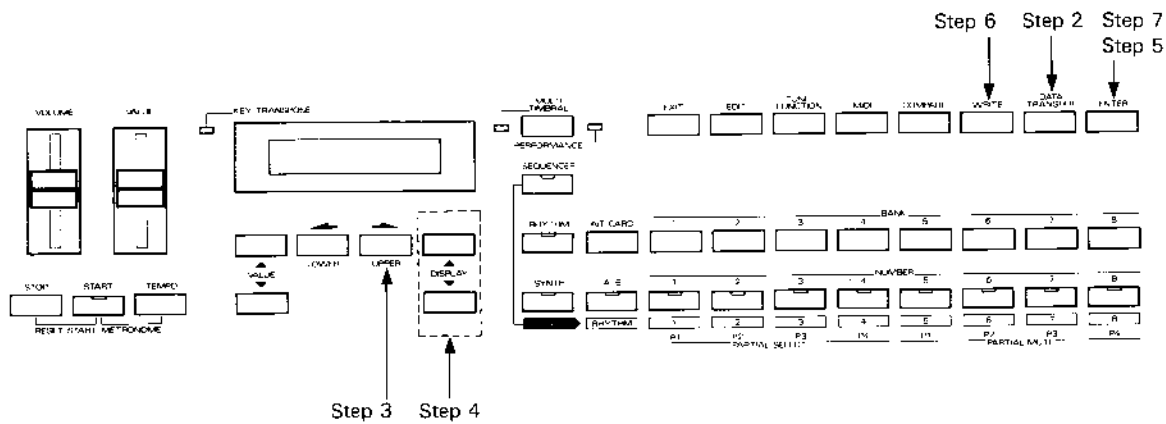
```

Disk Full

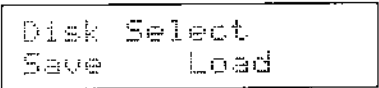
```

c. Loading

Data saved on a disk can be copied into the internal memory.



- Step 1** Insert a disk into the Disk Drive.
- Step 2** Push the DATA TRANSFER button.

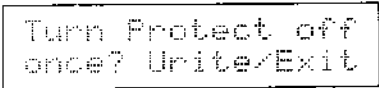


- Step 3** Push the right Cursor Button.



After a few seconds, the file name and the type of data are displayed.

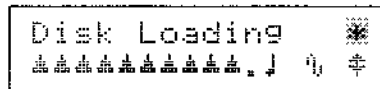
- Step 4** Select the File to be loaded with the DISPLAY buttons.
- Step 5** Push the ENTER button.



Step 6 Push the **WRITE** button.

The Memory Protect function is turned off just for this procedure, returning to Step 4's Display.

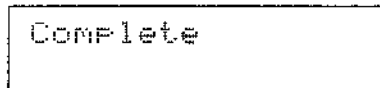
Step 7 Push the **ENTER** button.

A rectangular box containing the text "Disk Loading" on the first line. The second line consists of a series of asterisks followed by a period and a downward-pointing arrow, with a small asterisk to the right of the arrow. There is also a small asterisk in the top right corner of the box.

```
Disk Loading
*****.↓ *
*
```



When the data is properly loaded, the following Display is shown for a while, then returns to the previous Display before Data Transfer was Performed.

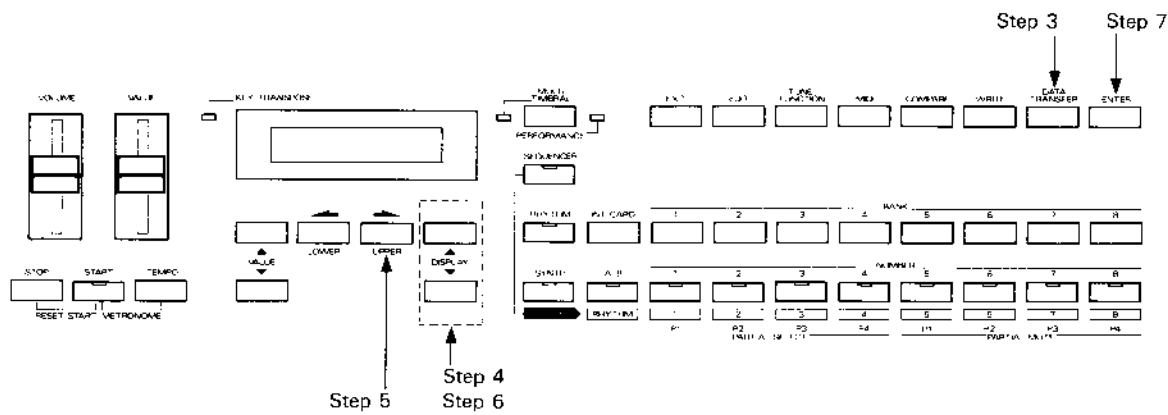
A rectangular box containing the word "Complete" in a monospaced font.

```
Complete
```

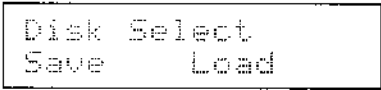
*If the data is not properly loaded, an Error Message is shown in the Display. Resolve this by following "Error Messages" on page 212.

d. Deleting

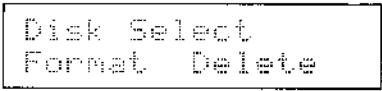
A File of data saved on a disk can be deleted.



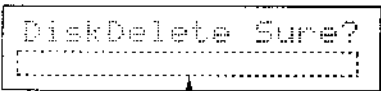
- Step 1 Set the Protect Tab on the disk to "WRITE".
- Step 2 Insert the disk into the Disk Drive.
- Step 3 Push the DATA TRANSFER button.



- Step 4 Call the following Display with the DISPLAY buttons.



- Step 5 Push the right Cursor Button.



After a few seconds, the File name and the type of data are displayed.

- Step 6 Select the File to be deleted, with the DISPLAY buttons.

Step 7 Push the ENTER button.

```
Disk Deleting *  
AAAAAAAAAAAA.1 0 #
```



When the data is properly deleted, the following Display is shown for a while, then returns to the previous Display before Data Transfer was performed.

```
Complete
```

*If the data is not properly deleted, an Error Message is shown in the Display. Resolve this by following "Error Messages" on page 212.

2. Copying with a Memory Card

The entire data in the internal memory of the D-20 can be copied on a memory card. This is called saving. Copying data on a memory card into the internal memory is called loading.

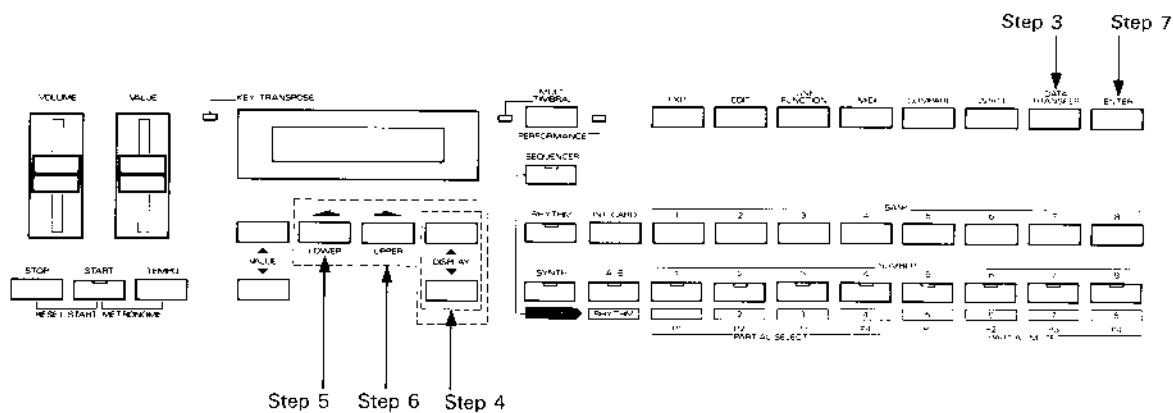
[Data which can be saved]

The optional memory card (M-256D) can store the following data.

All	Sound	Patches : 128 (A11-88, B11-88) Timbres : 128 (A11-88, B11-88) Tones : 64 (c1-64)
	Rhythm	Rhythm Patterns : 32 (P-51-88) Rhythm Track : 1 Rhythm Setup

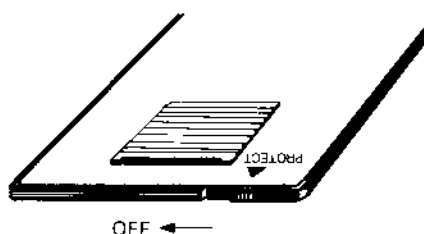
a. Saving

Data in the internal memory can be saved onto a memory card for future use.



Step 1 Insert a memory card into the Card Slot.

Step 2 Set the Protect Switch on the memory card to OFF.



Step 3 Push the DATA TRANSFER button.

```

Disk Select
Save      Load
  
```

Step 4 Call the following Display with the DISPLAY buttons.

```

Card Select
Save      Load
  
```

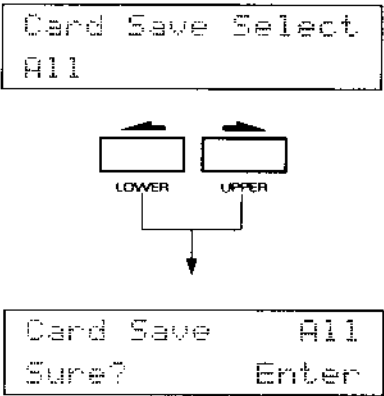
Step 5 Push the left Cursor Button.

```

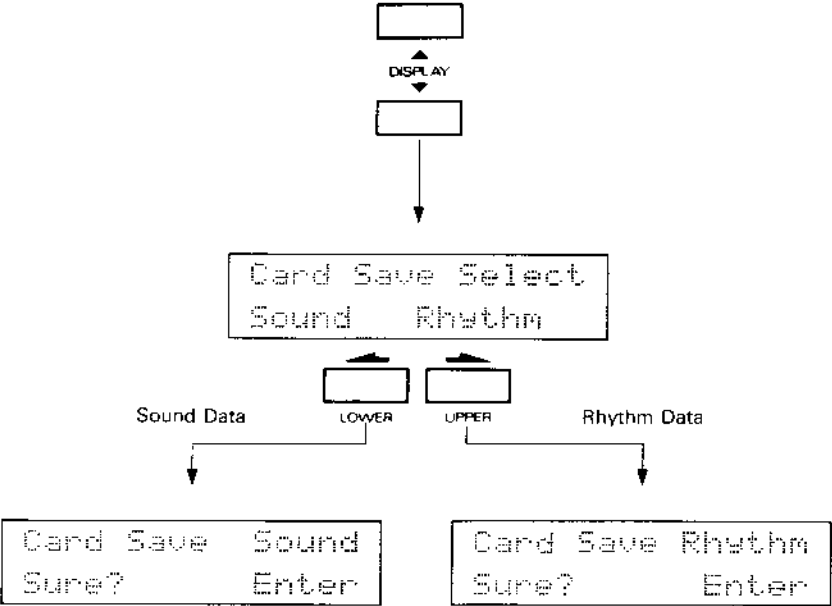
Card Save Select
All
  
```

Step 6 Select the data to be saved.

○To save the entire data in memory, push either of the Cursor Buttons.



○To save either of the data blocks, push either of the DISPLAY buttons, and assign the data block using the Cursor Buttons.



*If you are using a memory card which has never been used for writing data, "All" is the only alternative.

Step 7 Push the ENTER Button.

When data is properly saved, the Display responds as below for a while and returns to the previous Display (before the data transfer procedure was used).

Complete

If you are using a memory card which has never been used for writing data, the following is shown in the Display. If so, push the ENTER button again.

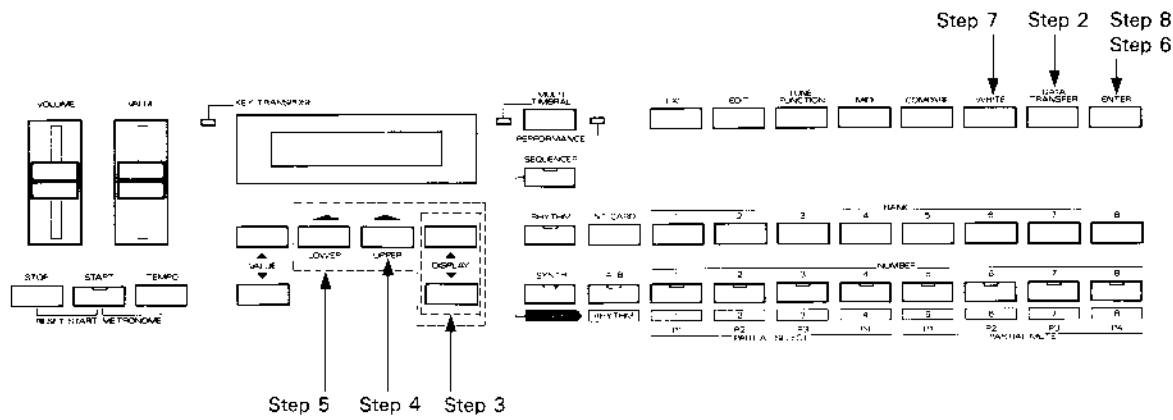
Illegal Card
Enter

*If an Error Message is shown in the Display, resolve it by following the "Error Messages" on page 212.

Step 8 Return the Protect Switch on the memory card to ON.

b. Loading

Data on a memory card can be copied back to the internal memory.



- Step 1 Insert a memory card into the Card Slot.
- Step 2 Push the DATA TRANSFER button.

Disk Select
Save Load

- Step 3 Call the following Display with the DISPLAY buttons.

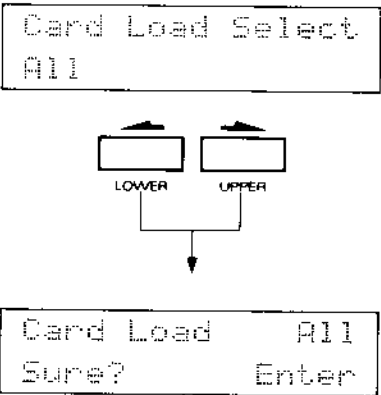
Card Select
Save Load

- Step 4 Push the right Cursor Button.

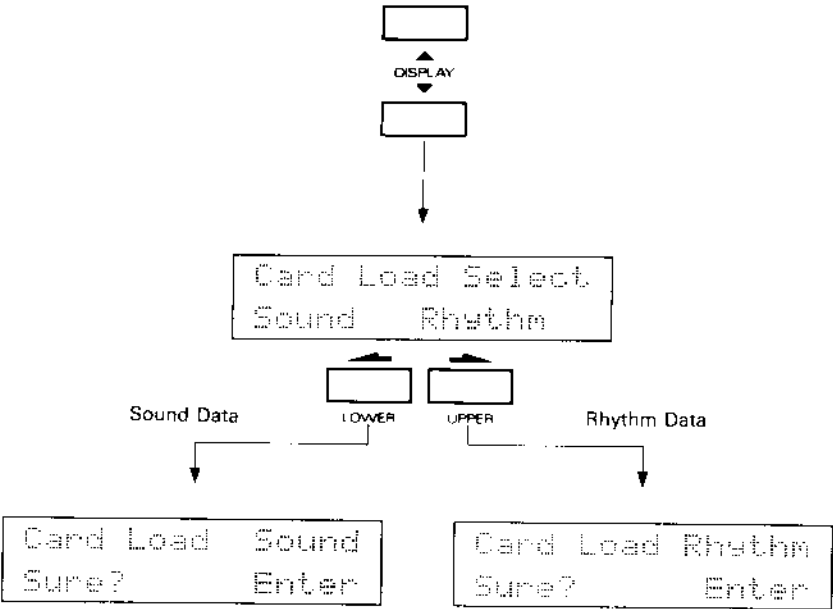
Card Load Select
All

- Step 5 Select the data to be loaded.

○To copy the entire data, push either of the Cursor Buttons.



○To copy a block of data, push either of the DISPLAY buttons, then assign the block using the Cursor Buttons.



Step 6 **Push the ENTER button.**

Turn Protect off
once? Write/Exit

Step 7 **Push the WRITE button.**

The Memory Protect is released, and the Display returns to that of Step 5.

Step 8 **Push the ENTER button.**

When the data is properly loaded, the Display responds as shown below for a while, then returns to the previous Display (before the loading procedure was taken).

Complete

***If an Error Message is shown in the Display, resolve it by following the "Error Messages" on page 212.**

2. Data Transfer with MIDI

Using Roland MIDI Exclusive messages, the data can be transferred from one D-20 to another D-20.

[Data which can be transferred]

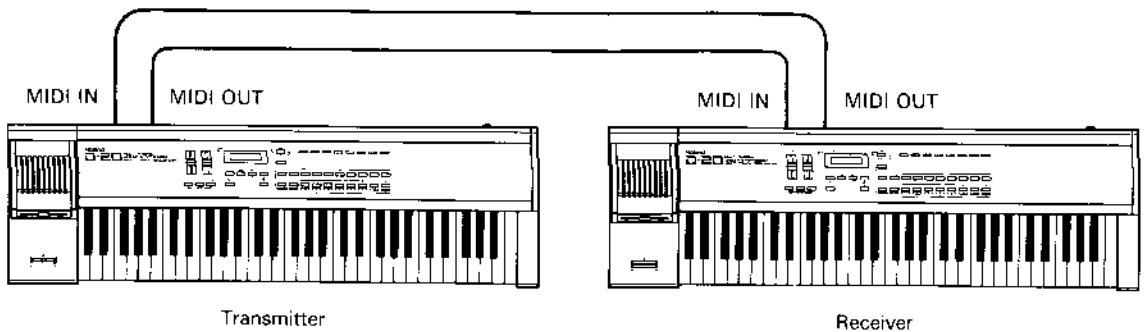
The Data Transfer function of the D-20 allows you to divide the entire data into two blocks separately, Sound data and Rhythm data,

All	Master Tuning
	Reverb Type/Time/Level (Multi Timbral mode)
	Pan (Part 1-8)
Sound	Level (Part 1-8, Rhythm Part)
	Patches : 128 (A11-88, B11-88)
	Timbres : 128 (A11-88, B11-88)
Rhythm	Tones : 64 (i 1-64)
	Rhythm Patterns : 32 (P-51-88)
	Rhythm Track : 1
	Rhythm Setup

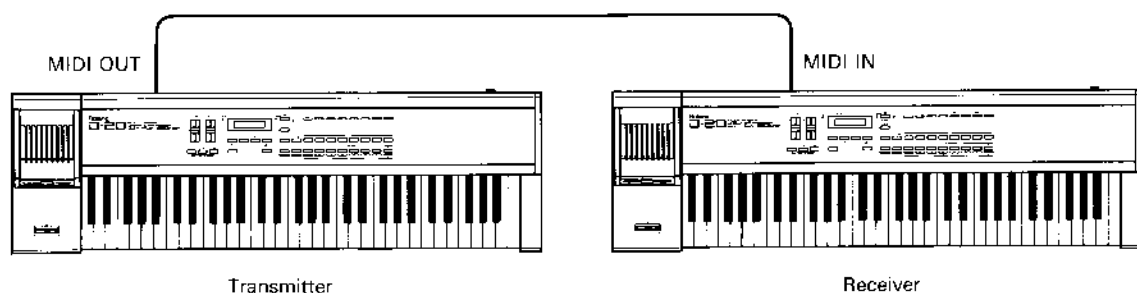
[How to transfer data]

There are two methods of data transfer via MIDI: Handshake and One-way.

○Handshake allows you to verify whether the receiver is ready to receive the data.



- One-way transfers the data without confirming the condition of the receiver. The D-20 allows you to select either of the two methods.



[Procedure]

- Step 1** Set the Unit number of the receiver and transmitter to the same number.

- ①Push the MIDI button.
- ②Push the DISPLAY button until the Display responds as below.

MIDI Exclu Unit#
17

- ③Set the Unit number using the Value Control Knob.

- Step 2** Push the DATA TRANSFER buttons on both the receiver and transmitter.

- Step 3** Push the DISPLAY buttons on both the receiver and transmitter until the Display responds as shown below.

<One-way>

```
One-way Bulk
Dump      Load
```

<Handshake>

```
Handshake Bulk
Dump      Load
```

(The following procedure is common for both One-way and Handshake.)

- Step 4** Push the left Cursor Button on the transmitter and the right on the receiver.

<Transmit>

```
H-shake Dump Sel
All
```

<Receive>

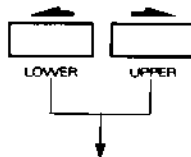
```
H-shake Load Sel
All
```

- Step 5** Match the data group of the receiver and transmitter.

○To transfer the entire data, push either of the Cursor Buttons.

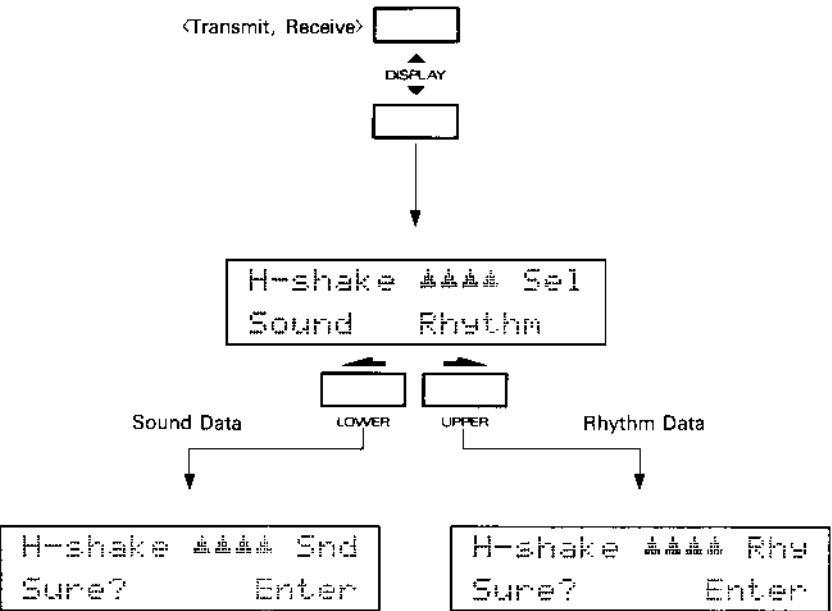
<Transmit, Receive>

```
H-shake ▲▲▲▲ Sel
All
```



```
H-shake ▲▲▲▲ All
Sure?      Enter
```

○To transfer Rhythm or Sound block, push either of the DISPLAY Buttons, then assign the block using the Cursor Buttons.



Step 6 Push the ENTER button on the receiver.

Turn Protect off
once? Write/Exit

Step 7 Push the WRITE button on the receiver.

The Memory Protect function is cancelled, and the Display returns to that of Step 5.

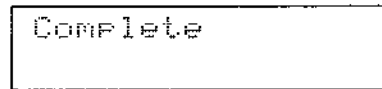
Step 8 Push the ENTER button on the receiver.

Now, the receiver unit is ready.

H-shake Load
Waiting

Step 9 Push the **ENTER** button on the transmitter.

When the data is properly copied, the Display responds as shown below for a while, then returns to the previous Display (before the data transfer procedure was taken).



Complete

*If an Error Message is shown in the Display, resolve it by following the "Error Messages" on page 212.