Correcting for Misalignment in Bidirectional Printing

Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely)

Models: LEC-300/300A/330/540, LEJ-640

Articles in the User’s Manual
* Replace the information on the following articles of the table of contents with the information found in this document.

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<tr>
<th>LEC-300</th>
<th>“Correcting for Misalignment in Bidirectional Printing More Precisely”</th>
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<td>LEC-300A</td>
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<td>“Performing the Initial Adjustment (Correcting for Misalignment in Bidirectional Printing More Precisely)”</td>
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Perform the initial adjustment of this machine. This adjustment is necessary in the following cases.
- When using this machine for the first time
- When changing the media to use
- When further correction is required to improve printing, such as when simple correction is performed for misalignment in bidirectional printing (“Correcting for Misalignment in Bidirectional Printing” (p. 20)).

If you will change the print head height, do so before performing this adjustment.
- Included User’s Manual “Adjusting Head Height to Match Media Thickness”

1. Output a test pattern.

1. Press [MENU].
2. Press [▼] several times to display the figure on the below.

```
MENU
ADJUST BI-DIR
```

3. Press [▶] and then [▲] to display the figure on the below.

```
ADJUST BI-DIR
DETAIL SETTING
```

4. Press [▶] to display the figure on the below.

```
DETAIL SETTING
TEST PRINT
```

5. Press [ENTER].

A test pattern is output.
6. When printing ends, press \( \downarrow \) to display the figure on the below.

<table>
<thead>
<tr>
<th>DETAIL SETTING</th>
<th>SETTING NO.1</th>
</tr>
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</table>

7. Press \( \rightarrow \).  
Go to “2. Enter the adjustment value.”

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6. When printing ends, press MENU and then \( \leftarrow \).

7. Remove the front cover 2.

8. Press \( \downarrow \) and feed the media forward to a position where you can clearly see the condition of the test print.
This operation is not necessary when using roll media or sheet media. Proceed to step 9.

9. Repeat steps 1 to 4 until the screen shown on the left appears.

<table>
<thead>
<tr>
<th>DETAIL SETTING</th>
<th>TEST PRINT</th>
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10. Press \( \downarrow \) to display the figure on the below.

<table>
<thead>
<tr>
<th>DETAIL SETTING</th>
<th>SETTING NO.1</th>
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11. Press \( \rightarrow \).

2. Enter the adjustment value.

1. Press \( \leftarrow \) \( \rightarrow \) to select one from H1 to H6 (from H1 to H3 for the LEC-300/300A)

<table>
<thead>
<tr>
<th>H1</th>
<th>H2</th>
<th>H3</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H4</th>
<th>H5</th>
<th>H6</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Correcting for Misalignment in Bidirectional Printing

2. Press ↑, ↓ to decide a correction value for the selected item from H1 to H6 (from H1 to H3 for the LEC-300/300A).

To decide a Correction Value
Choose the value that produces the least misalignment of 2 lines. When wavering between two numbers, select half value.

If the Printing-test Results Are Difficult to Interpret
Examine the results from different angles in a well-lighted location. Take advantage of reflected light to enable visual checking.

If you cannot see "H5" or "H6" ("H3") (such as when using white media with no shine)
You may not be able to see "H5" or "H6" ("H3" for the LEC-300/300A) when using certain media, such as white media with no luster. In this case, set "H5" and "H6" ("H3" for the LEC-300/300A) to the same value as "H4" ("H2" for the LEC-300/300A).

3. Press ENTER .
This completes the configuration of [SETTING NO.1].

4. Press ↓ .

5. In the same manner as performed for [SETTING NO.1], repeat steps 1 to 4 to set the correction values for [SETTING NO.2] to [SETTING NO.8].

6. Press MENU ← in this order to go back to the original screen.
Correcting for Misalignment in Bidirectional Printing

Corrections Performed from the [MEDIA SETTING] Menu

Models: LEC-540, LEJ-640

Articles in the User’s Manual
* This section only discusses the procedure for setting [ADJUST BI-DIR] on the [MEDIA SETTING] menu. For other setting items, follow the instructions in the User’s Manual.

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<th>Models</th>
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<td>LEC-540</td>
<td>Procedure 3. “Performing the correction for misalignment in bidirectional printing” in “Setup of Media ([MEDIA SETTING] menu)”</td>
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Performing the correction for misalignment in bidirectional printing

**POINT!**
This machine prints by the bidirectional mode (in which the print heads perform printing during both their outbound pass and return pass). This printing method is called "Bidirectional Printing." This method offers the advantage of being able to shorten output times, but subtle misalignment occurs during the outbound and return passes. The procedure to correct this and eliminate misalignment is "Bidirectional Correction."

1. **ADJUST BI-DIR**
   - Press \(\downarrow\) to select [SET].
   - Press \(\rightarrow\) to enable the setting.
   - The test pattern of bidirectional correction is output.

2. **INPUT**
   - **ADJ. VALUES**

3. **ADJUST BI-DIR**
   - Press \(\downarrow\) to select [1] or [2].
   - Use \(\uparrow\) to select [1] or [2].
   - Use \(\downarrow\) to set the correction value.
   - Select a correction value for “Simple No.1” in 1 and a correction value for “Simple No.2” in 2.
   - Press \(\rightarrow\) to enable the setting.

To decide a Correction Value

Choose the value that produces the least misalignment of 2 lines. When wavering between two numbers, select half value.

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2. Changes to the User’s Manual
Correcting for Misalignment in Bidirectional Printing

Models: LEC-300/300A/330/540, LEJ-640

Articles in the User’s Manual
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<td>LEC-330</td>
<td>“Correcting for Misalignment in Bidirectional Printing”</td>
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<tr>
<td>LEC-540</td>
<td></td>
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<tr>
<td>LEJ-640</td>
<td></td>
</tr>
</tbody>
</table>

Procedure

1. Press \( \text{MENU} \).

2. Press \( \downarrow \) several times to display the figure on the below.

3. Press \( \uparrow \).

4. Press \( \text{ENTER} \).
   A test pattern is printed.

5. When printing is completed, press \( \downarrow \) \( \uparrow \) in this order.

6. Press \( \leftarrow \) \( \rightarrow \) to select 1 or 2.

[To confirm again / adjust again]
Press \( \leftarrow \) to select [YES].
Press \( \text{ENTER} \) to enable the setting.
The test pattern of bidirectional correction is output again. Go back to the procedure (3) and set again.

[To go to the next after correction is completed]
Press \( \rightarrow \) to select [DONE].
Press \( \text{ENTER} \) to enable the setting.
Correcting for Misalignment in Bidirectional Printing

7. Press  
   to select a correction value.
   Select a correction value for “Simple No.1” in 1 and a correction value for “Simple No.2” in 2.

To decide a Correction Value

Choose the value that produces the least misalignment of 2 lines.
When wavering between two numbers, select half value.

8. Press  
   to enable the setting.

9. Press  
   in this order to go back to the original screen.

Description

This machine prints by the bidirectional mode (in which the print heads perform printing during both their outbound pass and return pass). This printing method is called “Bidirectional Printing.” This method offers the advantage of being able to shorten output times, but subtle misalignment occurs during the outbound and return passes. The procedure to correct this and eliminate misalignment is “Bidirectional Correction.” This misalignment varies according to the print-head height and the thickness of the media, so we recommend performing correction to match the media you’re using.

LEC-300/300A/330/540

This settings also serves to correct for misalignment of the printing and cutting positions. In such cases, check or adjust this setting.

“Correcting Misalignment of the Printing and Cutting Positions,” and “Correcting Misalignment for Printing and Cutting When Using Crop Marks” on included User’s Manul.