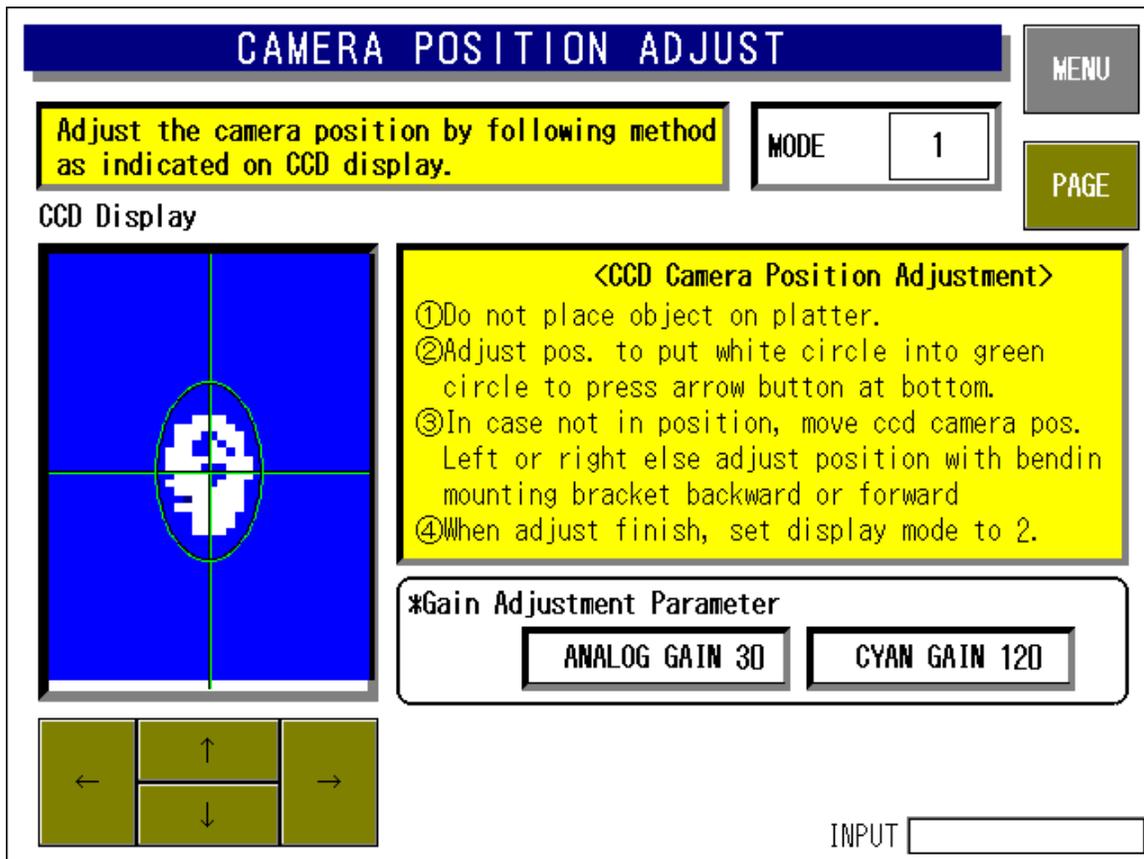


Ishida WM-4000 Auto Wrapper Camera Calibration

1. Enter the menu.
2. Enter 495344, press Test Mode.
3. Press Page, select Auto Verification Adjustment.
4. Press Page.
5. Remove and clean the blue platter.
6. Place a label on the bottom covering the level bubble window and return the platter to the scale.
7. Clean the camera lens located under the exit conveyor.
8. If necessary, reinitialize the camera:
 - a. Press 3, MODE.
 - b. Enter "0" for Analog Gain and Cyan Gain.
 - c. Press INITIAL > Execute.
 - d. Repeat steps a-c two more times.
9. Press 1, MODE.



Camera Position Adjust – Mode 1

10. On the Camera Position Adjust screen center the white dot in the circle using the arrow keys.
11. Press 3, MODE.

Ishida WM-4000 Auto Wrapper Camera Calibration

CAMERA POSITION ADJUST

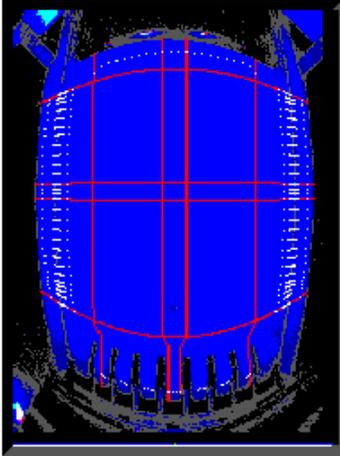
Adjust the camera position by following method as indicated on CCD display.

MODE 3

MENU

PAGE

CCD Display



<CCD Camera Position Adjustment>

① Remove object on platter, press initialize detection button.

② Place white tray on platter. when green dot is out from tray edge, increase cyan gain and check with green dot position again.

③ When green dot displayed along tray edge press PAGE to flickering adjustment.

***Gain Adjustment Parameter**

ANALOG GAIN 17

CYAN GAIN 133

← ↑ ↓ →

INITIAL

INPUT

Camera Position Adjust – Mode 3

12. After the screen refreshes (about 10 seconds) check:
 - a. There are no green dots on the blue platter.
 - b. All red lines are complete with no breaks.
 - c. The white dot-dash-dot are complete on both right and left sides.
13. If some of the white dot-dash-dot are missing from one side:
 - a. Press 1, MODE
 - b. Adjust the white dot inside the circle toward the side of the missing white dot-dash-dots.
 - c. Press 3, MODE.
 - d. Check if the white dot-dash-dot are complete – repeat as needed.
14. If there are green dots reduce the Analog Gain and increase the Cyan Gain by the same amount. Example: reduce the Analog Gain from 30 to 28, increase the Cyan Gain from 120 to 122.
15. Repeat step 14 as needed to eliminate the green dots but do not go below 10 for Analog Gain / above 140 for Cyan Gain.
16. If values 10 and 140 are reached and there are still green dots adjust the brightness of the LED camera lights:
 - a. Note the Analog Gain Cyan Gain values.
 - b. Set the Analog Gain = 1 (indicates the LED light adjustment).
 - c. Set the Cyan Gain = 1 (dim) ~ 15 (bright) as needed. The default is 7.

Ishida WM-4000 Auto Wrapper Camera Calibration

- d. Press INITIAL to enter the values.
- e. Reenter the Analog Gain Cyan Gain values from step a.
 - Note:** Depending on the ambient lighting the LED brightness may need to be increased or decreased for the best results.
17. If there are green dots remaining repeat steps 14 and 16 as needed.
18. After the screen refreshes (about 10 seconds) check:
 - a. There are no green dots on the blue platter
 - b. All red lines are complete with no breaks
 - c. The white dot-dash-dot are complete on both right and left sides
19. Press Page if these three points are good.

FLICKERING ADJUSTMENT

MENU

- 1) Put a tray on the weighing platter.
- 2) Press MEASURE button and wait for at least 5 seconds.
- 3) Flicker length is greater than 12: Increase the cyan gain.
- 4) Flicker width is greater than 6: Also increase the cyan gain.
- 5) After 3) or 4), go back to 2) and repeat the procedures.
- 6) Adjustment is over when width within the acceptable range.

	MIN	DETECT SIZE	MAX	WIDTH
TRAY LENGTH	201	201	202	1
TRAY WIDTH	105	105	105	0

***Gain Adjustment Parameter**

ANALOGUE GAIN 17

+
-

CYAN GAIN 133

+
-

MEASURE

INPUT

Flickering Adjustment

20. On the Flickering Adjustment screen place a tray on the platter.
21. Press Measure.
22. After 20 seconds confirm the Width values do not exceed the maximum limits:
 - a. Tray Length – less than 12
 - b. Tray Width – less than 6
23. If the maximum limits are exceeded return and adjust the Analog gains and LED brightness.
24. Press Page if the maximum limits are within tolerance.

Ishida WM-4000 Auto Wrapper Camera Calibration

AUTO VERIFICATION ADJ.

MENU
PAGE

1) Make this adjustment after the adjustment of camera position and flickering.
2) Place the tray and select the height of tray by TRAY HEIGHT SELECT.
*If the camera detected tray size is not actual, make necessary adjustment with the adjustment button.

*HEIGHT SELECT

10mm	20mm	30mm	40mm	50mm
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Long Side	0	mm	Short Side	0	mm	Lateral	0	mm
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*Detected Size Adjustment

<table style="width: 100%;"><tr><td style="background-color: #808080; color: white; padding: 5px;">LENGTH CORRECT 1</td></tr><tr><td style="display: flex; justify-content: space-around;">+-</td></tr></table>	LENGTH CORRECT 1	+ -	<table style="width: 100%;"><tr><td style="background-color: #808080; color: white; padding: 5px;">WIDTH CORRECT 3</td></tr><tr><td style="display: flex; justify-content: space-around;">+-</td></tr></table>	WIDTH CORRECT 3	+ -
LENGTH CORRECT 1					
+ -					
WIDTH CORRECT 3					
+ -					

INPUT

Auto Verification Adj.

25. Use the Rice Lake calibration block (p/n 155149) or find a tray or stack of trays that measure exactly 20mm, 30mm, or 40mm from the table to the top of the tray lip.
26. On the Auto Verification Adjust screen select measure height on the screen: 20mm, 30mm, or 40mm.
27. Measure the long and short sides of the trays as precisely as possible.
28. Place the calibration block or tray(s) on the platter parallel to the infeed.
29. Move the calibration block or tray(s) right or left until the Lateral value is zero.
30. Adjust the Length Correct and Width Correct values until the Long Side and Short Side dimensions match the measurements in step 27.
31. Remove the label from the bottom of the platter.
32. Exit to the main menu screen.
33. Gather an empty tray of each type programmed in the wrapper.
34. Select Programming menu > Tray File.
35. Press the Tray list button.
36. Select the first tray on the list.
37. Select Manual.

Ishida WM-4000 Auto Wrapper Camera Calibration

Tray Program - Manual

38. Press Tray Detect, it will turn yellow.
39. Place the corresponding tray on the platter.
40. Press Tray Detect again, it will turn blue.
41. Press the Tray No. button in the top left corner to advance to the next tray.
42. Repeat steps 38-41 until all trays have been detected.
43. Exit to the main operation mode.
44. Confirm trays are recognized by the camera during wrapping.