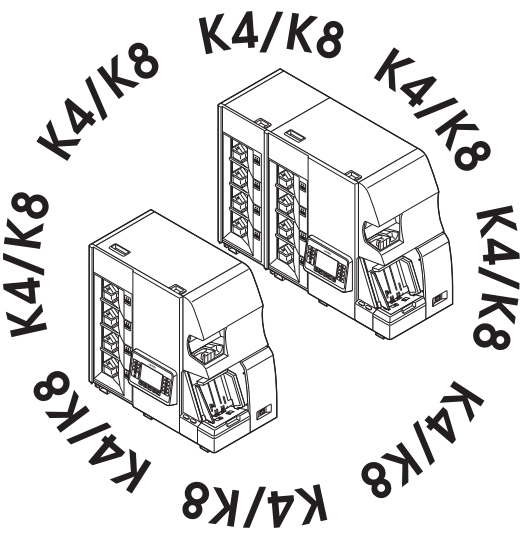


Note Sorter
K4/K8
User Manual

LAUREL

Introduction

Thank you very much for purchasing the "LAUREL K4/K8 note sorter".
This User Manual describes safety instructions, operations, functions, specifications etc.
Please read carefully and understand this manual before operating the machine.
Keep this User Manual handy for ready reference.

Note

1. It is strictly prohibited to use part or this entire manual to other publication without permission of publisher.
2. The contents of this manual and the specification of the product may change without a preliminary notice for future improvement.
3. Please contact a regional distributor of LAUREL, if there are any doubtful points, errors, etc. in this manual.
4. It is understood that LAUREL will not be responsible for any loss caused by use of the product, regardless of any errors in the manual.
5. The illustrations in this manual may differ from the actual product as they are abstract.
6. The display screen illustrated in this manual may differ from an actual display screen.
7. Please contact a regional distributor of LAUREL if the manual has disorderly binding or missing pages.
8. Please contact a regional distributor of LAUREL for loss or damage of the manual.

FCC Caution

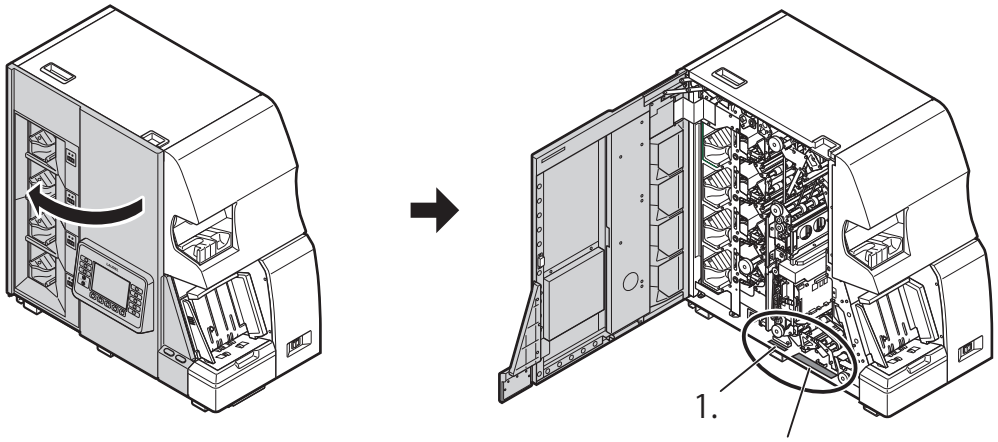
Changes or modifications not expressly approved by the party responsible for compliance could void the user’ s authority to operate the equipment.

FCC Note

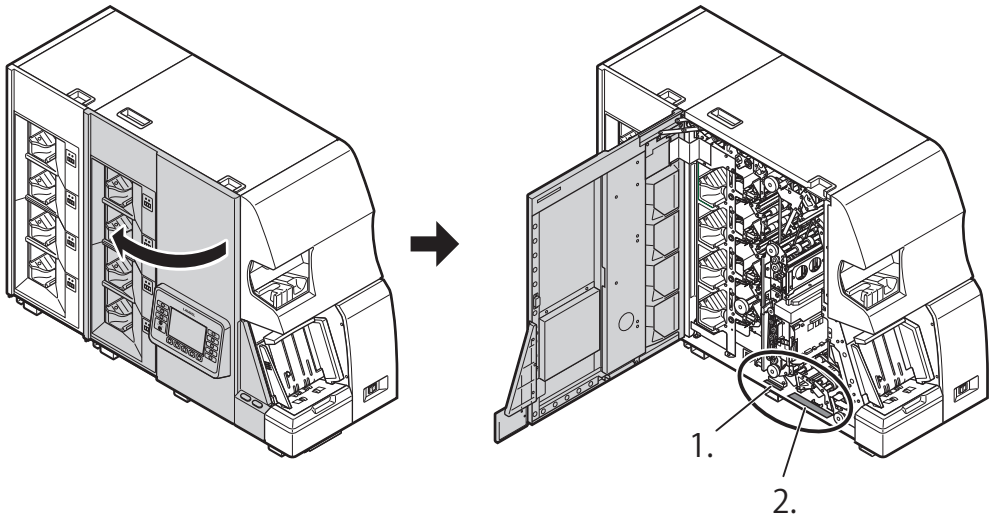
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmfulinterference in which case the user will be required to correct the interference at his own expense.

FCC Label in The Machine

Only for K4



Only for K8



1. FCC ID: 2ARVCK4K8K12

2. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Request from us

If you don't use the machine for long, be sure to turn off the power switch.

*About the installation of the machine:

Avoid high temperature, high humidity, dust, vibration, and direct sunlight.

In case the environment of operation exceeds room temperature (5°C to 34°C) and humidity (35% to 80%), the performance of the machine will deteriorate remarkably.

Please use an air-conditioner, a humidifier, etc. in case of above conditions.

*When turning on and off the power switch, make a time interval of 5 seconds or more.

*Handle the machine with care.

- Do not strike or shake the machine.
- Close all doors before start operation.
- Press the keys or switches gently for the operation

*Use a modular cable with a ferrite core specified by our company.

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Before Operation

- This manual is used to follow symbols to make you cautious in order to use the machine safely and to prevent you from a risk of an injury or from losing your property.
- It describes contents of danger and/or how to prevent the danger together with marking which indicates contents of the danger near the symbols.
- Please read through this manual to understand the meanings of symbols and markings before use.

Description of Warning, Caution and Examples

⚠ **WARNING**	In case the machine is wrongly operated without respect to this icon, there is a possibility of fatal or serious injury to the operator.
⚠ **CAUTION**	In case the machine is wrongly operated without respect to this icon, there is a possibility of injury or material physical damage to the machine.

Description of Symbol and Examples

The assumed incidents and contents are described below.

RISK OF INJURY	This symbol warns the operator to be cautious not to pinch a finger etc. In case of handling without care, there is a risk of injury.	DON'T DISASSEMBLE	This symbol warns the operator not to disassemble the machine. There is a risk of danger.
RISK OF FIRE	This symbol warns possibility of fire and smoke.	CAUTION OF HEAT	This symbol warns possibility of ininjury due to heat.
RISK OF ELECTRIC SHOCK	This symbol warns possiblity of electrical shock.	RISK OF EXPLOSION	This symbol warns possiblity of explosion.

△ The icon warns operators to be cautious. Please refer to the explanation beside the icon.

⃠ The icon warns prohibited actions. Please refer to the explanation beside the icon.

Discription of Symbols and Examples

The following symbols also indicate description of safe use of the product.

	This mark indicates an action must be carried out.		This mark indicates a prohibition.
	This mark requires proper grounding.		This mark requires that the power plug be removed before taking necessary action.

⃠ icon warns prohibited actions.

● icon requires an action must be carried out. Please refer to the explanation beside the icon.

Safety Caution

WARNING	
PULL OUT PLUG	If smoking, abnormal smell, noise is detected from the machine, stop the operation and pull out the plugs from outlet. Then contact A regional distributor of LAUREL. Without respect to this caution, there is risk of failure, an electric shock or a fire.
PULL OUT PLUG	If a liquid is spilled over the machine or metal, burnable material are dropped inside of the machine, do not use the machine. Pull out the plug from outlet and contact a regional distributor of LAUREL. Otherwise, there is a risk of an electric shock or a fire.
ELECTRIC SHOCK	If thunder sounds, do not touch the machine, any power cables or interface cables. And do not carry out attachment /removal of peripheral equipment. There is a risk of electric shocks.
	The machine may fall down in case of earthquakes. In case of earthquakes, please keep away from the machine.
RISK OF INJURY	When you transfer the machine, please contact a regional distributor. If you transfer the machine without safety planning, it may cause a break or a trouble and there is a risk of an injury due to the machine's declining.

CAUTION	
	Be sure to stop the machine completely when the power switch is turned off. If the power switch is turned off while operation, it may cause failure of machine.
	When cleaning the machine, please turn off the power switch and remove the plug from outlet. Otherwise, there is a risk of injury due to sudden motion.
	When the machine is installed, be sure that the base is flat and stable. Without respect to this caution, it may make the machine fall or break and/ or you will get an injury from it.
	The power cable enclosed in the box is exclusive for the machine. Use the cable for the machine. Otherwise there is a risk of failure, an electric shock or a fire.
RISK OF INJURY	Hold the specified part when opening and closing doors and be sure not to pinch your finger. Otherwise, there is a risk of an injury.
RISK OF INJURY	The weight of K4 is about 95kg and K8 is about 130kg. When you move the machine location, be sure to prevent from backache or machine's declining.

CAUTION	
RISK OF INJURY	Do not lean over, sit, step on or place heavy material on the machine. Otherwise, there is a risk of injure due to fall down the machine.
DISMOUNT PLUG	When removing the plug, be sure to hold the plug itself. If the plug is removed by holding the cable, it may cause physical failure, an electric shock or a fire.
	Be sure to connect the earth wire to the proper grounding. Otherwise, there is a risk of electric shock.
RISK OF EXPLOSION	Do not connect earth wire to gas pipe. There is a risk of explosion.
RISK OF ELECTRIC SHOCK	Do not touch the machine or power cable with a wet hand. There is a risk of an electric shock.
RISK OF ELECTRIC SHOCK	Do not place heavy material on the power cable or other interface cable. Also do not twist or pull out the cables. There is a risk of failure, an electric shock or fire.
RISK OF ELECTRIC SHOCK	Do not use the machine by other than the specified power (AC90 to 252V). There is risk of an electric shock and a fire.
RISK OF INJURY	Do not connect many plugs to one outlet. Adapter connecting outlet may heat up and there is a risk of a fire.
RISK OF INJURY	Do not install the machine at a moist area, dusty or any place for handling water. There is a risk of an electrical shocks and a fire.
RISK OF INJURY	Do not block the air duct for the machine. The heat inside the machine may cause fire.
DON'T DISASSEMBLE	Do not disassemble the machine except having been instructed in the user manual. There is a risk of an electric shock and a fire.
	Do not place the machine in an area where there is strong electromagnetic wave caused by wireless applications, monitors and speakers. There is a possibility of a malfunction. Turn off cellular phones when near the machine.

⚠ CAUTION	
	Do not remove warning mark that describes caution for safety.
	Do not use the power cable which is not for the machine.There is a risk of failure, an electric shock or a fire.

About instantaneous voltage drop

This machine may have a problem due to instantaneous voltage drop by thunderbolt etc.

We recommend employing UPS etc for countermeasure.

About Maintenance Service

This machine requires proper maintenance service. Please contact a regional distributor of LAUREL for further details about maintenance service.

Description of This Manual

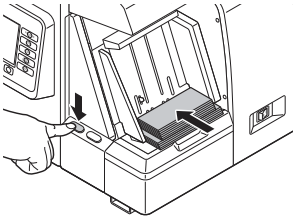
STEP-3
It describes operation procedure.

▷
Supplemental remarks about operation.

Point
It describes important points for operation.

Miscalculation
It describes miscalculation.

STEP-3 **Align the notes and put the notes onto the Hopper.**



▷ The count starts automatically.

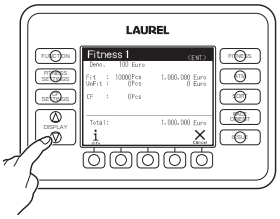
▷ If the count does not start automatically, press START/STOP Switch to start count.

▷ It is possible to put additional notes to the Hopper.

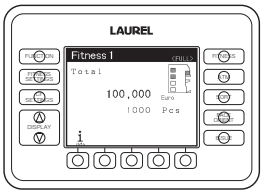
▷ When the count starts, Main-Display indicates count result in value or quantity.

Point

◆ It is possible to check the detailed count results or reject reasons by changing display indication. Please refer to Count Display page 9.



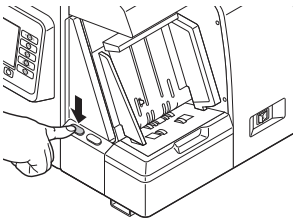
▷ When the pocket becomes full, the count stops once even if notes remain on the Hopper. The count will start after removing notes at the pocket.



Miscalculation

◆ The count result is accumulated to the present transaction. Therefore be sure not to recount the notes which are taken out form the pocket.

STEP-4 **When completing the transaction after the count, be sure no note on the Hopper and press START/STOP switch.**



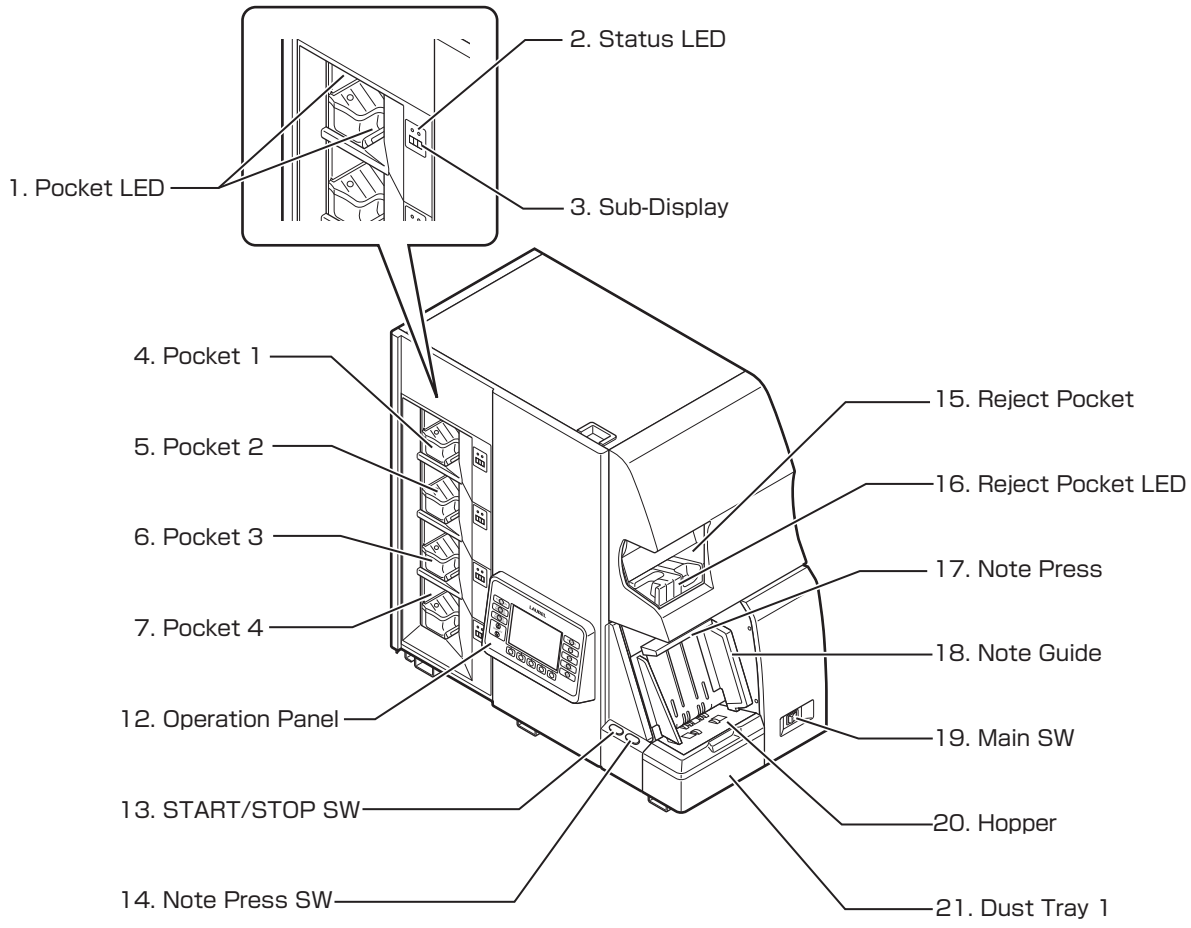
▷ When START/STOP switch is pressed without note at the Hopper, the count result on the display is cleared.

Chapter 1 OVERALL DESCRIPTIONS

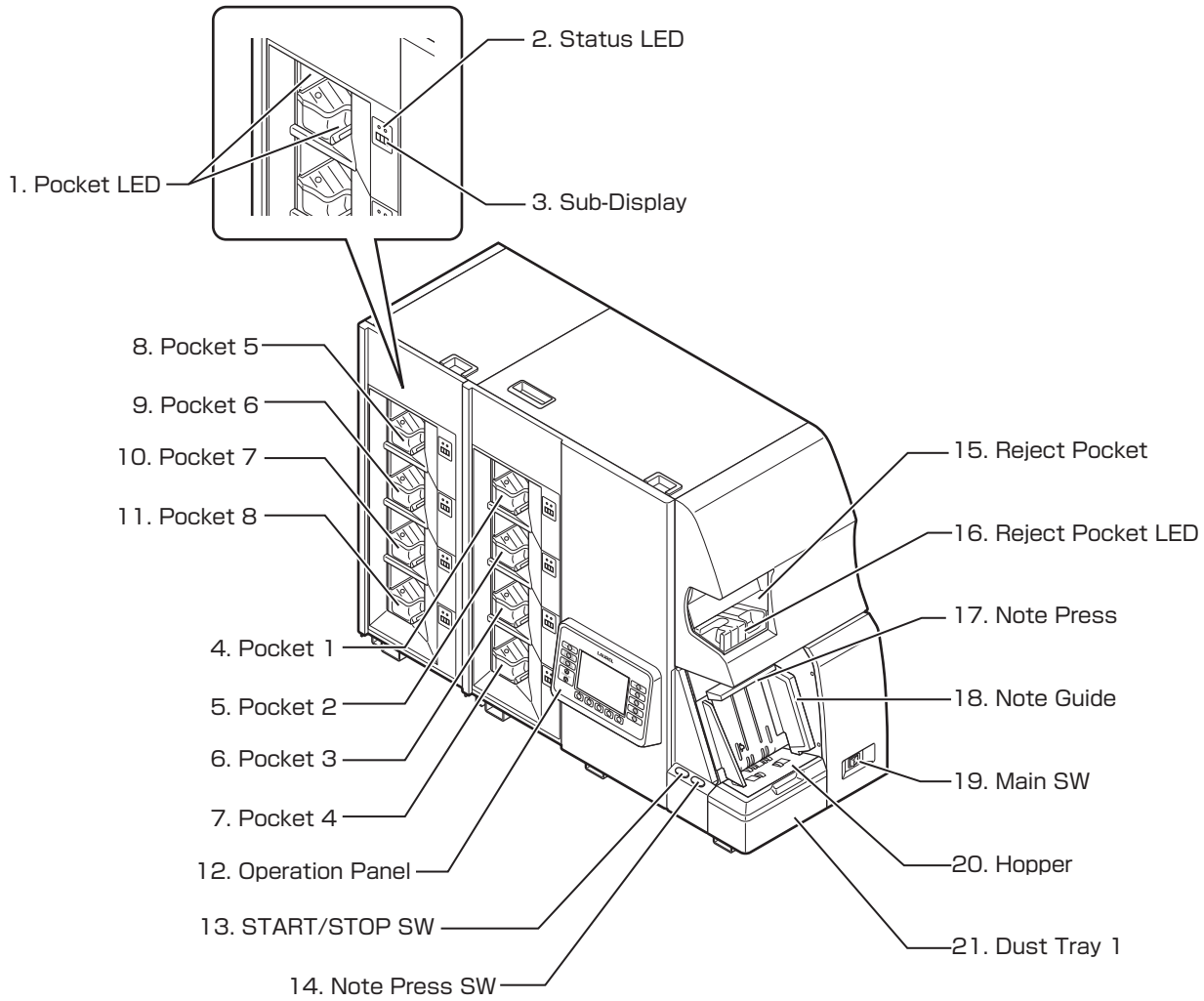
Description of Each Part

Overall Unit

Only for K4

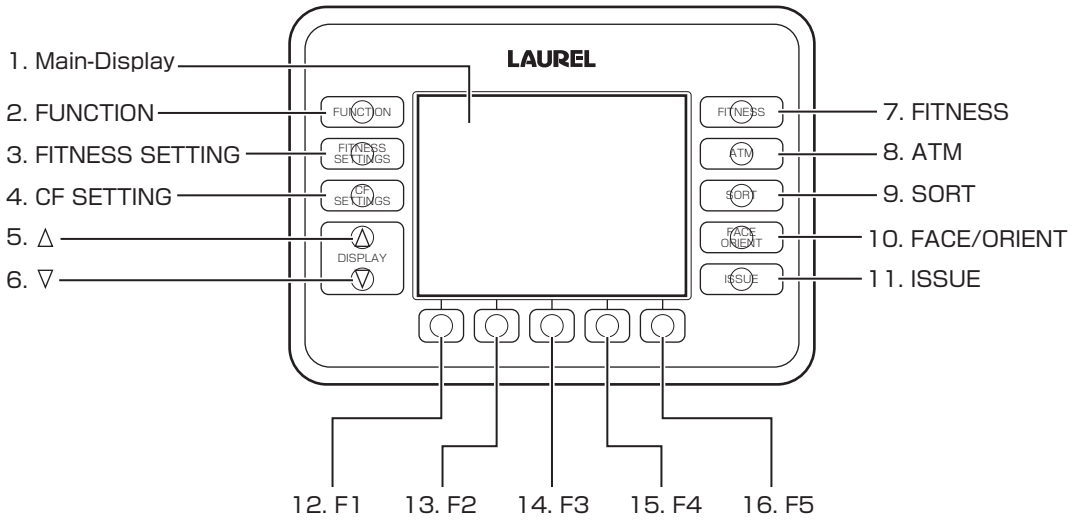


Only for K8


2. Status LED
1. Pocket LED
3. Sub-Display
8. Pocket 5
9. Pocket 6
10. Pocket 7
11. Pocket 8
15. Reject Pocket
16. Reject Pocket LED
17. Note Press
4. Pocket 1
5. Pocket 2
6. Pocket 3
7. Pocket 4
18. Note Guide
19. Main SW
12. Operation Panel
13. START/STOP SW
14. Note Press SW
20. Hopper
21. Dust Tray 1

1. Pocket LED ..... indicates status of pocket by lighting or blinking. Please refer to **Indication of Pocket Status (P.6)** .
2. Status LED..... indicates a category of note at the Pocket. Please refer to **Indication of Pocket Status (P.6)** .
3. Sub-Display ..... indicates quantity of notes at the Pocket.
4. Pocket 1..... stacks the notes to be sorted out. (Max. 200 pcs.)
5. Pocket 2..... stacks the notes to be sorted out. (Max. 200 pcs.)
6. Pocket 3..... stacks the notes to be sorted out. (Max. 200 pcs.)
7. Pocket 4..... stacks the notes to be sorted out. (Max. 200 pcs.)
8. Pocket 5..... stacks the notes to be sorted out. (Max. 200 pcs.)
9. Pocket 6..... stacks the notes to be sorted out. (Max. 200 pcs.)
10. Pocket 7..... stacks the notes to be sorted out. (Max. 200 pcs.)
11. Pocket 8..... stacks the notes to be sorted out. (Max. 200 pcs.)
12. Operation Panel..... indicates count result at Main-Display and there are various operation keys. Please refer to **Operation Panel (P.5)** .
13. START/STOP SW ..... to start, stop the count and complete transaction. Pressing this Switch during counting makes the machine stop counting. Pressing this Switch during stand-by makes the machine start counting.Pressing this Switch after counting with no notes on the Hopper makes the machine complete transaction.
14. Note Press SW ..... to move up and down the Note Press.
15. Reject Pocket..... stacks unreadable or untransportable notes.
16. Reject Pocket LED ..... - lights up when notes are rejected into the Reject Pocket.
    - blinks when the Reject Pocket is full.
17. Note Press ..... - holds notes on Hopper during counting.
    - automatically goes down when accumulated notes reach the specified height.
18. Note Guide ..... to arrange notes position on the Hopper.
19. Main SW ..... to turn on or off the power of the Unit.
20. Hopper..... to put notes to be counted. (Max 1000 pcs.)
21. Dust Tray 1 ..... to collect dust.

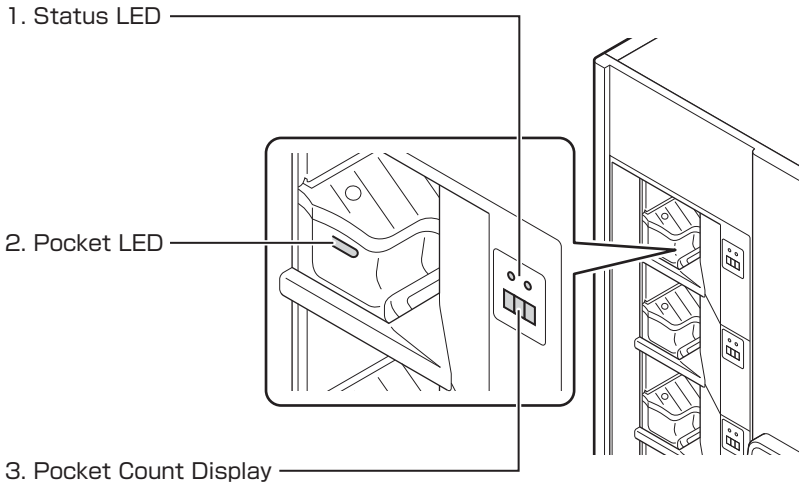
Operation Panel



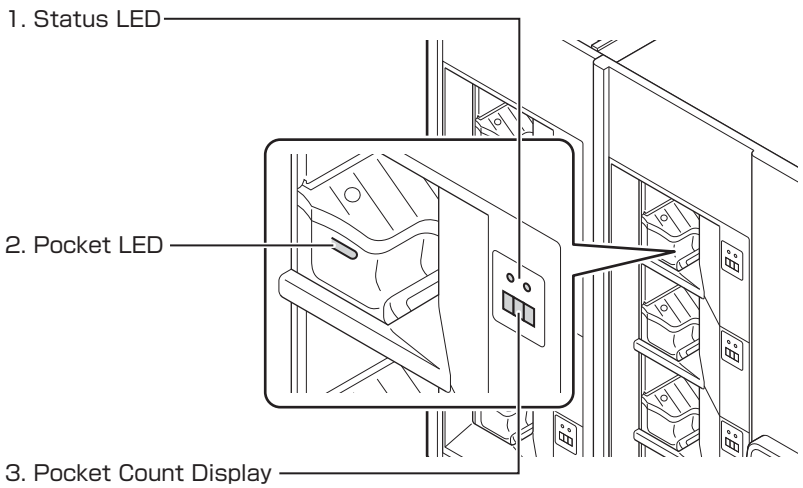
1. Main-Display..... - indicates count results in Value, Quantity or Mode settings.
   - indicates the error code in case of an error.
2. FUNCTION ..... to set Buzzer sound and Contrast of display.
3. FITNESS SETTING..... to set Fitness Sorting Level.
4. CF SETTING ..... to set of CF Level.
5. △..... to turn the pages or move the cursor.
6. ▽..... to turn the pages or move the cursor.
7. FITNESS ..... to set FITNESS Mode.
8. ATM..... to set ATM Mode.
9. SORT ..... to set Denomination Sort Mode.
10. FACE/ORIENT ..... to set FACE Mode or ORIENTATION Mode.
11. ISSUE ..... to set ISSUE Mode to sort out old and new issue.
12. F1 ..... to activate the function corresponding to the icon on the Main-Display above F1 key.
13. F2 ..... to activate the function corresponding to the icon on the Main-Display above F2 key.
14. F3 ..... to activate the function corresponding to the icon on the Main-Display above F3 key.
15. F4 ..... to activate the function corresponding the icon on Main-Display above F4 key.
16. F5 ..... to activate the function corresponding to the icon on the Main-Display above F5 key.

Indication of Pocket Status

Only for K4



Only for K8



1. Status LED..... LED indicates note category by color of light.

LED / Sorting Mode	Blue	Green	Orange	Red
FITNESS	Fit	——	Unfit	CF
ATM	ATM	Fit	Unfit	CF
SORT (Denom.)	Single	Mixed	——	CF
FACE	Fit	——	——	CF
ORIENT	Fit	——	——	CF
ISSUE (Old/New)	New	Old	2 generation old	CF

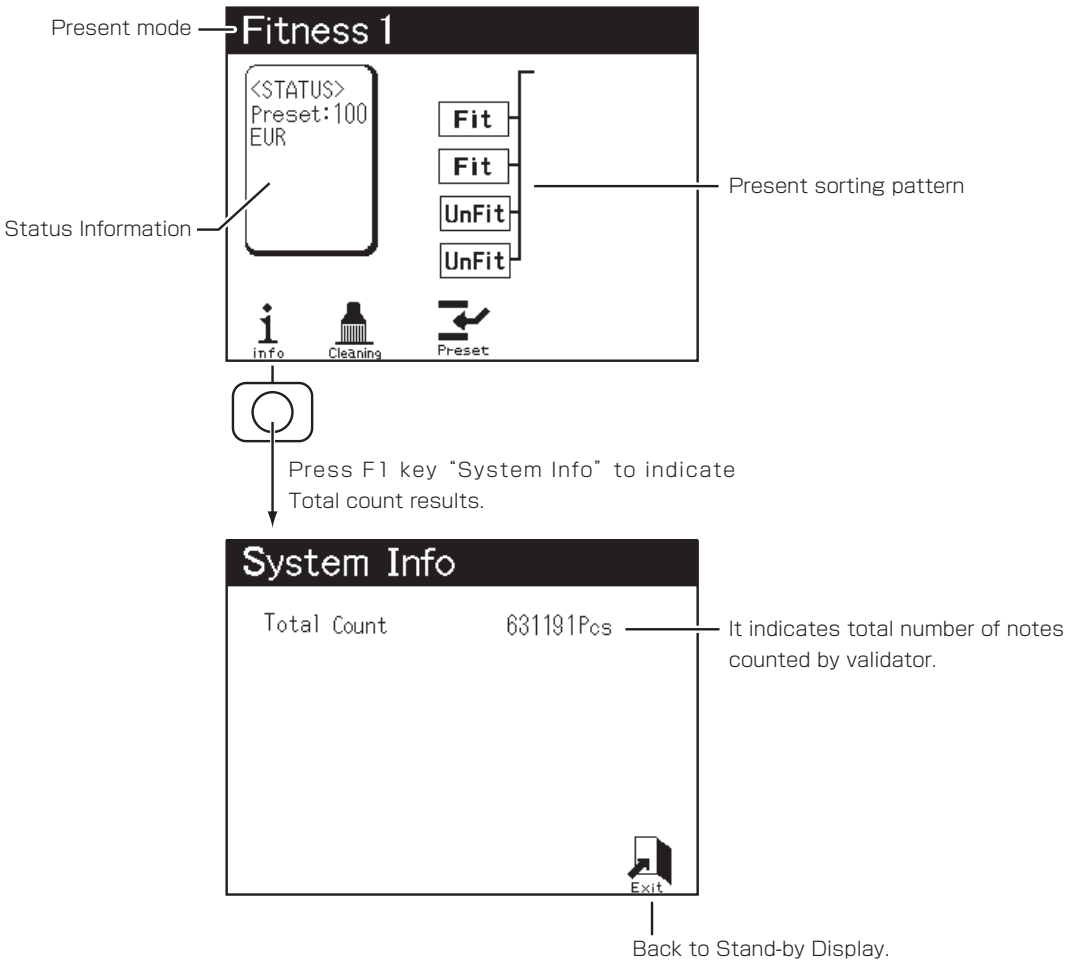
2. Pocket LED ..... guides operators to remove notes. When it is ready for removing them, LED lights on after blinking 2 seconds.

3. Pocket Count Display..... indicates a count result of the Pocket. When the pocket gets full, Pocket Count Display blinks slowly to guide you to remove notes. In case the notes are removed from the pocket irregularly, the Display blinks quickly.

Description of Display

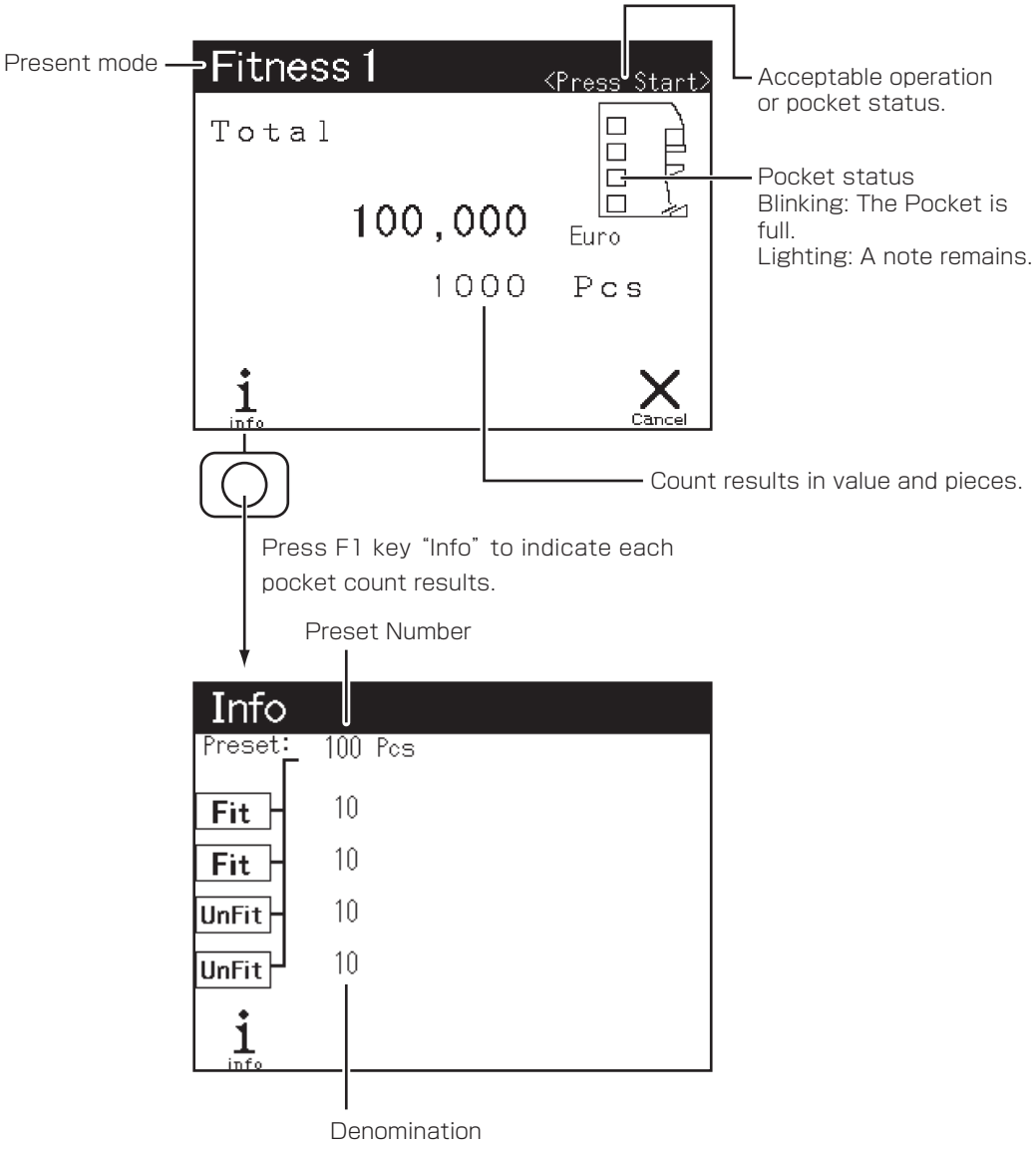
Stand-by Display

- Stand-by Display indicates present sorting mode, preset number and target currency.
- While showing Stand-by Display, the count starts by pressing START/STOP SW.



Count Display

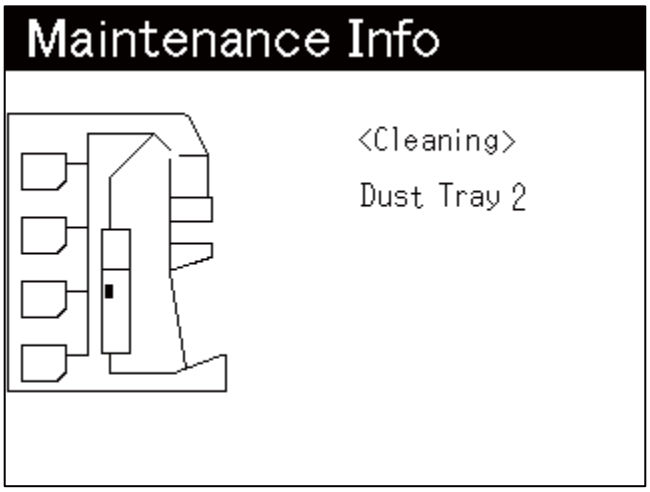
◆ When counting starts, the display turns from Stand-by Display to Count Display and count result will be shown.



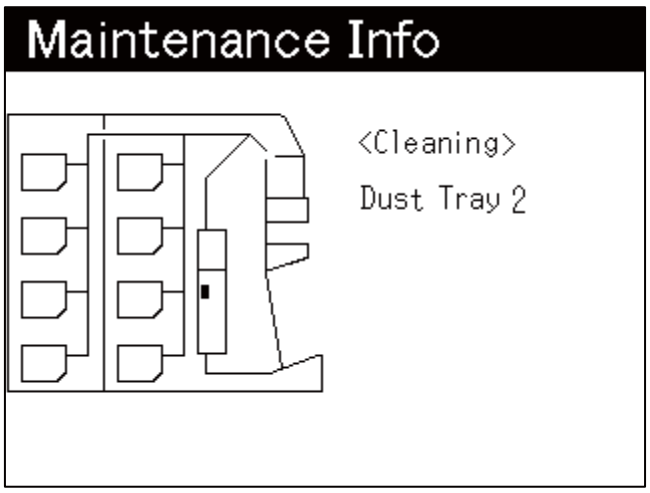
Guidance for Cleaning

- When the cleaning is required, the display indicates Cleaning Guidance on the display after turning on the power. If the Cleaning Guidance is indicated, clean the dust trays. Refer to **Cleaning(P.49)** for further details about cleaning.

Only for K4



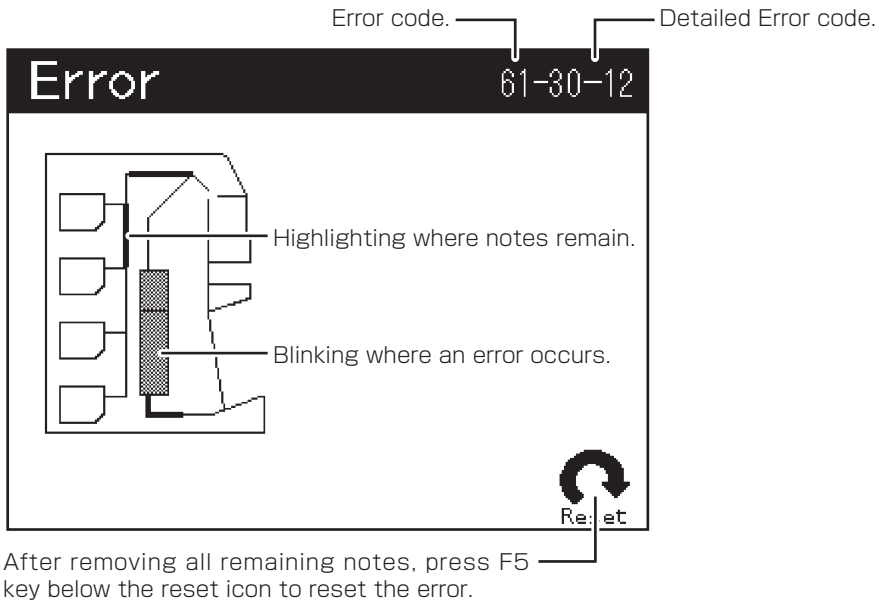
Only for K8



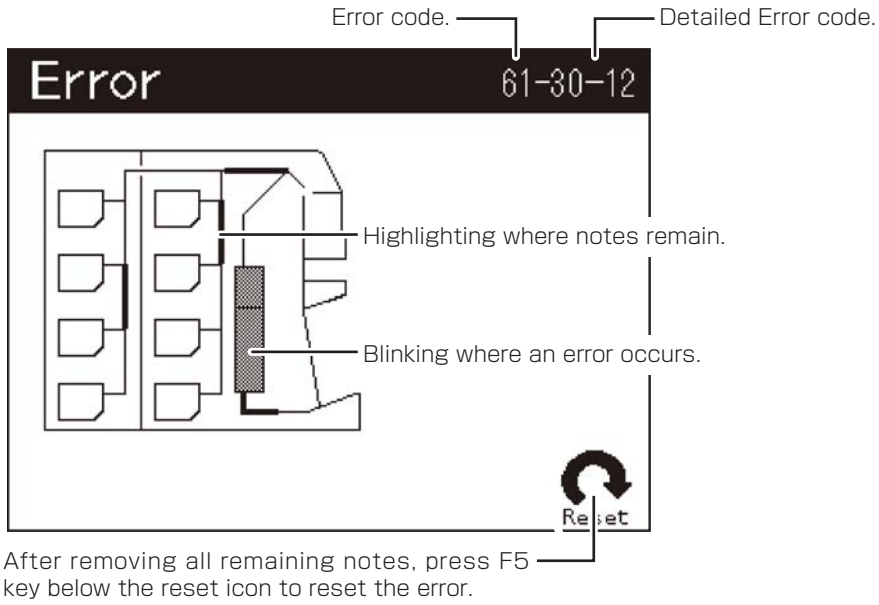
Error Display

- If a note jam occurs, the display switches Error Display and the display indicates error code and error location by graphic guidance.
- Refer to **How to clear an error (P.56)** and clear the error.

Only for K4



Only for K8



Description of Sorting Mode and Sorting Pattern

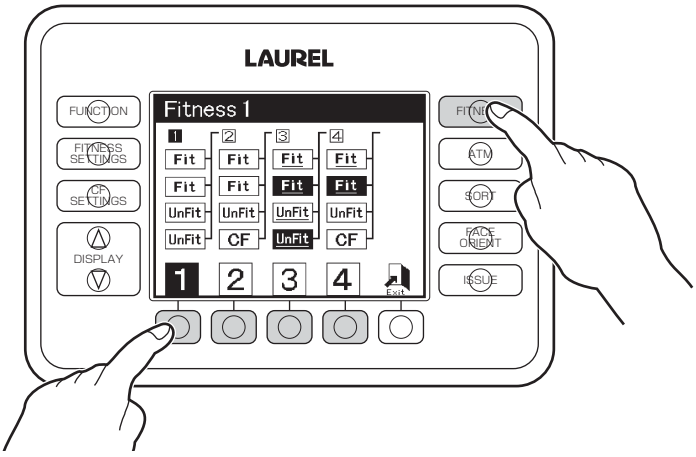
About mode of sorting

- Following modes are available.
  1) FITNESS Mode ..... Sorting out fit and unfit notes.
  2) ATM Mode ..... Sorting out ATM-fit notes.
  3) SORT Mode ..... Sorting out denominations.
  4) FACE/ORIENTATION Mode ..... Sorting out facing or orientation of notes.
  5) ISSUE Mode ..... Sorting out new and old issue of notes by each generation.

FITNESS Mode

Only for K4

- Press FITNESS key to activate FITNESS Mode and display indicates sorting pattern for each pocket.

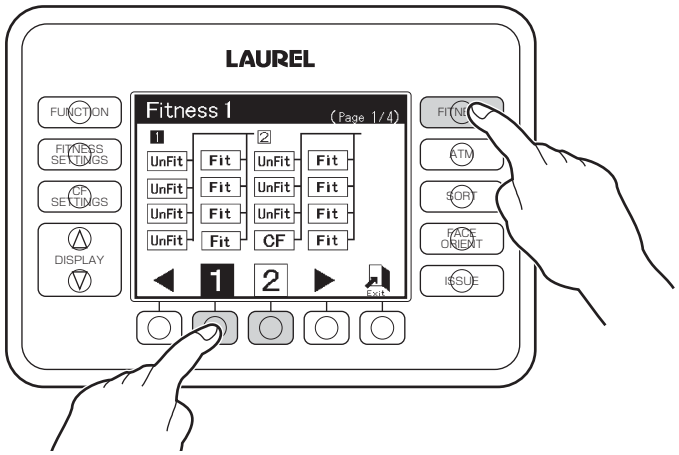


- Press F1 key to F4 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4
Pocket 1	Fit	Fit	Fit (Face)	Fit (Face)
Pocket 2	Fit	Fit	Fit (Unface)	Fit (Unface)
Pocket 3	Unfit	Unfit	Unfit (Face)	Unfit (Face)
Pocket 4	Unfit	CF	Unfit (Unface)	CF

Only for K8

◆ Press FITNESS key to activate FITNESS Mode and display indicates sorting pattern for each pocket.



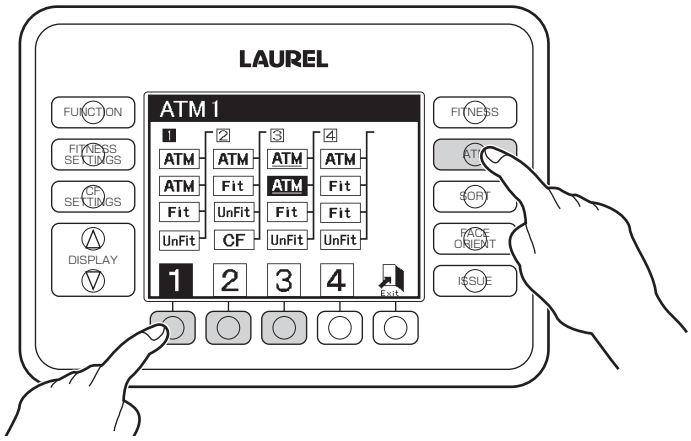
◆ Press F1 key or F4 key to select the display screen. Press F2 key or F3 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4	5	6	7
Pocket 1	Fit	Fit	Fit (Face)	Fit (Face)	Fit1	Fit1	Fit (A)
Pocket 2	Fit	Fit	Fit (Face)	Fit (Face)	Fit1	Fit2	Fit (B)
Pocket 3	Fit	Fit	Fit (Unface)	Fit (Unface)	Fit2	Fit3	Fit (C)
Pocket 4	Fit	Fit	Fit (Unface)	Fit (Unface)	Fit2	Fit4	Fit (D)
Pocket 5	Unfit	Unfit	Unfit (Face)	Unfit (Face)	Unfit1	Unfit1	Unfit (A)
Pocket 6	Unfit	Unfit	Unfit (Face)	Unfit (Face)	Unfit1	Unfit2	Unfit (B)
Pocket 7	Unfit	Unfit	Unfit (Unface)	Unfit (Unface)	Unfit2	Unfit3	Unfit (C)
Pocket 8	Unfit	CF	Unfit (Unface)	CF	Unfit2	Unfit4	Unfit (D)

ATM Mode

Only for K4

◆ Press ATM key to activate ATM Mode and display indicates sorting pattern for each pocket.

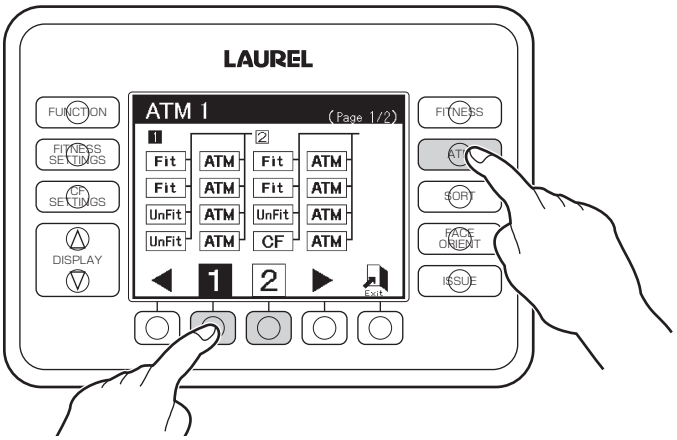


◆ Press F1 key to F3 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4
Pocket 1	ATM	ATM	ATM (Face)	ATM
Pocket 2	ATM	Fit	ATM (Unface)	Fit
Pocket 3	Fit	Unfit	Fit	Fit
Pocket 4	Unfit	CF	Unfit	Unfit

Only for K8

- Press ATM key to activate ATM Mode and display indicates sorting pattern for each pocket.



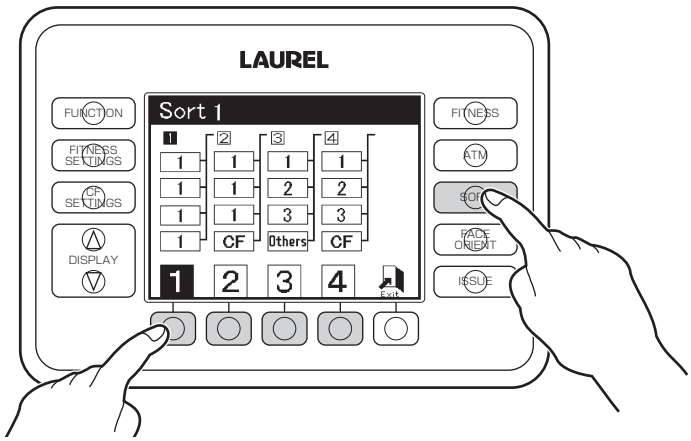
- Press F1 key or F4 key to select the display screen. Press F2 key or F3 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4
Pocket 1	ATM	ATM	ATM (Face)	ATM (Face)
Pocket 2	ATM	ATM	ATM (Face)	ATM (Face)
Pocket 3	ATM	ATM	ATM (Unface)	ATM (Unface)
Pocket 4	ATM	ATM	ATM (Unface)	ATM (Unface)
Pocket 5	Fit	Fit	Fit	Fit
Pocket 6	Fit	Fit	Fit	Fit
Pocket 7	Unfit	Unfit	Unfit	Unfit
Pocket 8	Unfit	CF	CF	Unfit

SORT Mode

Only for K4

- Press SORT key to activate SORT Mode and display indicates sorting pattern for each pocket.



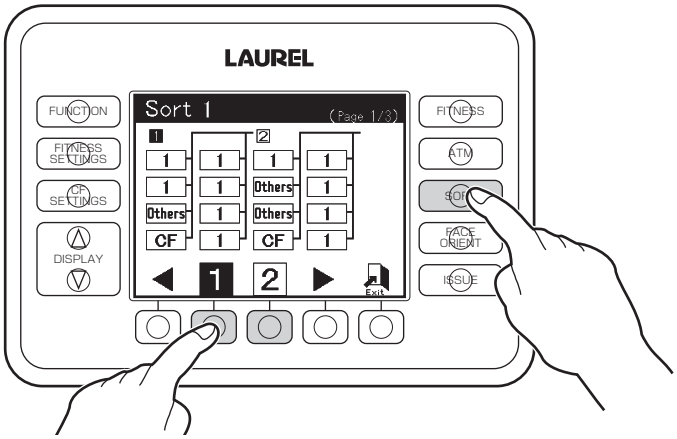
- Press F1 key to F4 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4
Pocket 1	1	1	1	1
Pocket 2	1	1	2	2
Pocket 3	1	1	3	3
Pocket 4	1	CF	Other	CF

- 1=First denomination to be counted.
  2=Second denomination to be counted.
  3=Third denomination to be counted.

Only for K8

- Press SORT key to activate SORT Mode and display indicates sorting pattern for each pocket.



- Press F1 key or F4 key to select the display screen. Press F2 key or F3 key to set sorting pattern. The contents of sorting patterns are following.

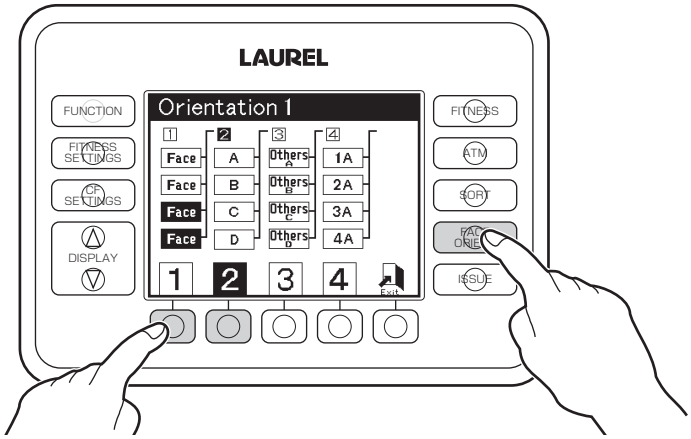
Sorting Pattern / Pocket	1	2	3	4	5
Pocket 1	1	1	1	1	Other
Pocket 2	1	1	2	2	Other
Pocket 3	1	1	3	3	Other
Pocket 4	1	1	4	4	Other
Pocket 5	1	1	5	5	Other
Pocket 6	1	Other	6	6	Other
Pocket 7	Other	Other	7	Other	Other
Pocket 8	CF	CF	Other	CF	Other

- 1=First denomination to be counted.
  2=Second denomination to be counted.
  3=Third denomination to be counted.
  ⋮
  7=7th denomination to be counted.

FACE/ORIENTATION Modes

Only for K4

- Press FACE/ORIENT key to activate FACE/ORIENTATION Mode and display indicates sorting pattern for each pocket.

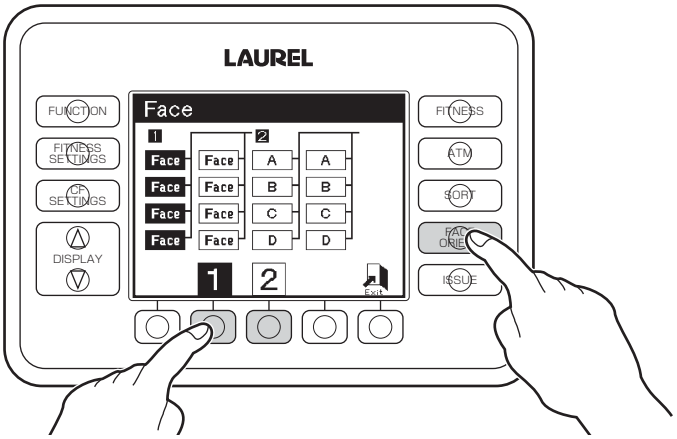


- Press F1 key or F2 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4
Pocket 1	Face	A direction	Others A	1A
Pocket 2	Face	B direction	Others B	2A
Pocket 3	Unface	C direction	Others C	3A
Pocket 4	Unface	D direction	Others D	4A

Only for K8

- Press FACE/ORIENT key to activate FACE/ORIENTATION Mode and display indicates sorting pattern for each pocket.



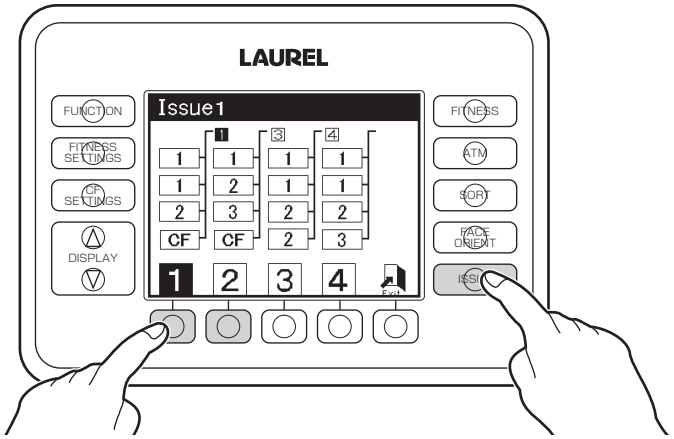
- Press F2 key or F3 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4
Pocket 1	Face	A direction	Others A	1A
Pocket 2	Face	B direction	Others B	2A
Pocket 3	Face	C direction	Others C	3A
Pocket 4	Face	D direction	Others D	4A
Pocket 5	Unface	A direction	Others A	5A
Pocket 6	Unface	B direction	Others B	6A
Pocket 7	Unface	C direction	Others C	7A
Pocket 8	Unface	D direction	Others D	8A

ISSUE Mode

Only for K4

- Press ISSUE key to activate ISSUE Mode and display indicates sorting pattern for each pocket.



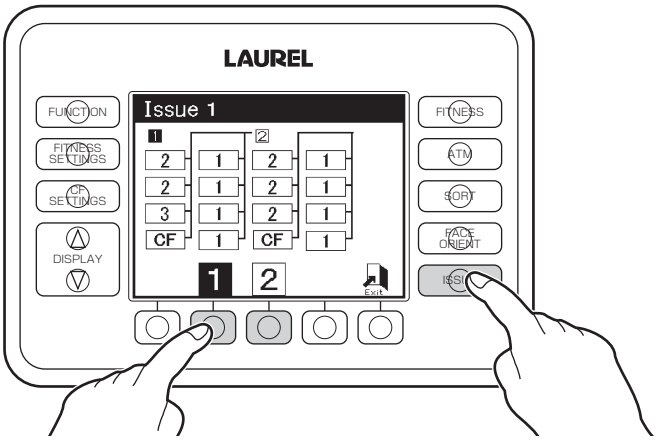
- Press F1 key or F2 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4
Pocket 1	Issue1	Issue1	Issue1	Issue1
Pocket 2	Issue1	Issue2	Issue1	Issue1
Pocket 3	Issue2	Issue3	Issue2	Issue2
Pocket 4	CF	CF	Issue2	Issue3

- The machine sorts out the notes corresponding to old or new issue and the first issue type goes to Issue1 pocket and second issue type goes to Issue2 pocket in order.

Only for K8

- Press ISSUE key to activate ISSUE Mode and display indicates sorting pattern for each pocket.



- Press F2 key or F3 key to set sorting pattern. The contents of sorting patterns are following.

Sorting Pattern / Pocket	1	2	3	4
Pocket 1	Issue1	Issue1	Issue1	Issue1
Pocket 2	Issue1	Issue1	Issue1	Issue1
Pocket 3	Issue1	Issue1	Issue2	Issue1
Pocket 4	Issue1	Issue1	Issue2	Issue1
Pocket 1	Issue2	Issue2	Issue3	Issue2
Pocket 2	Issue2	Issue2	Issue3	Issue2
Pocket 3	Issue3	Issue2	Issue3	Issue2
Pocket 4	CF	CF	CF	Issue3

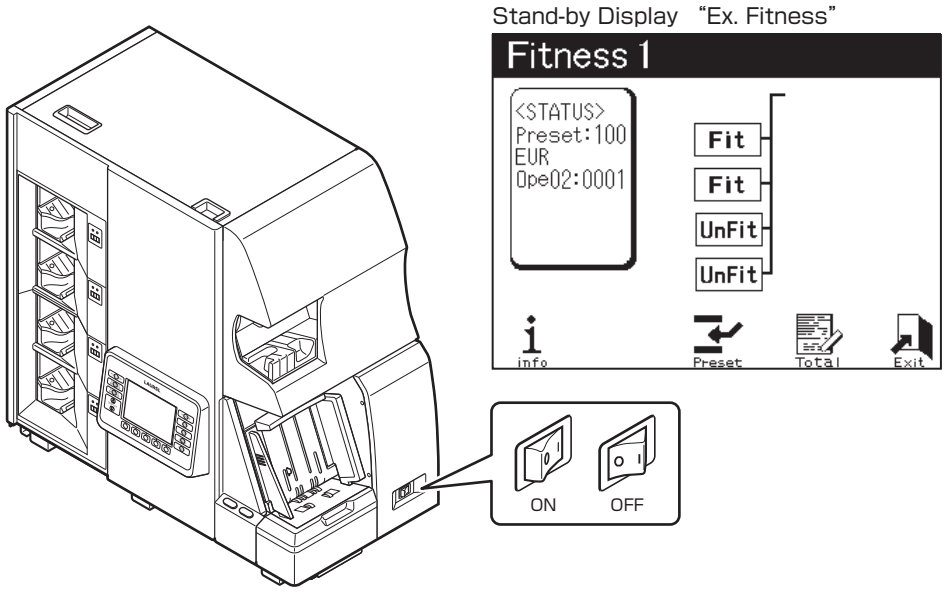
- The machine sorts out the notes corresponding to old or new issue and the first issue type goes to Issue1 pocket and second issue type goes to Issue2 pocket in order.

Chapter 2 DESCRIPTION OF OPERATION

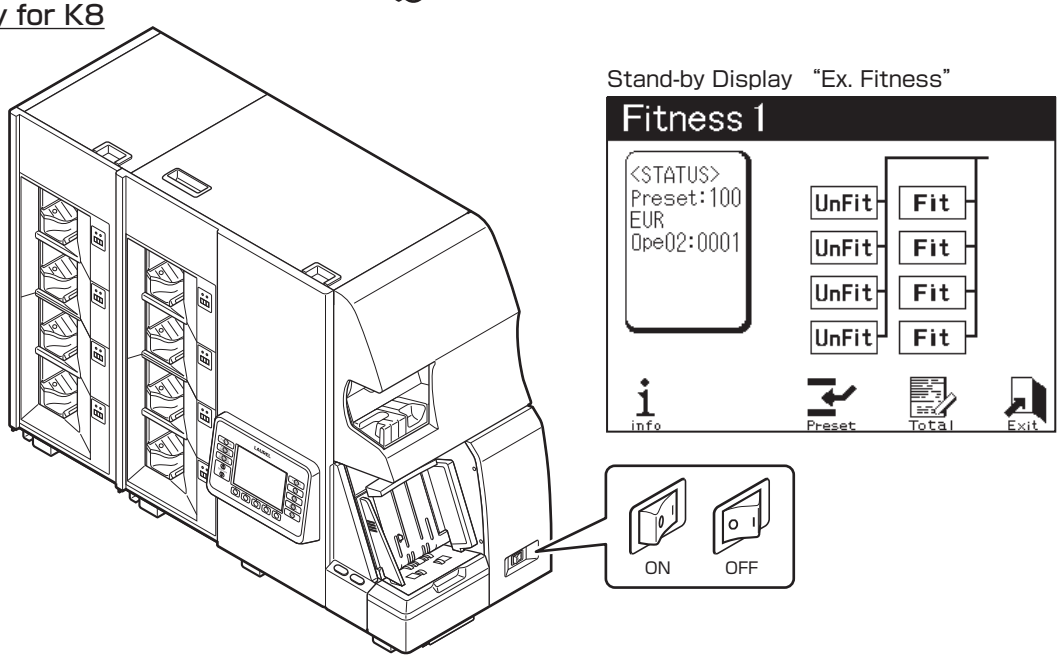
Starting-up and Closing-down of the Unit

- The unit starts up by turning on Main SW. Turn OFF Main SW when closing the Unit.
- The self-check function activates when the power is on. When no error is found in self-check, the stand-by display is indicated and gets ready for counting.

Only for K4

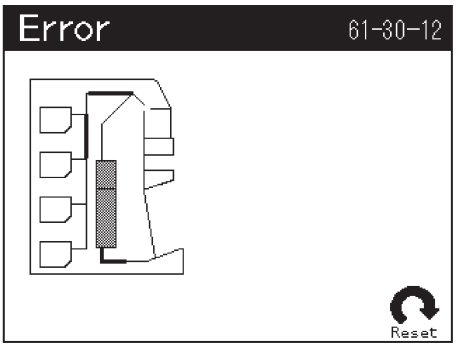


Only for K8

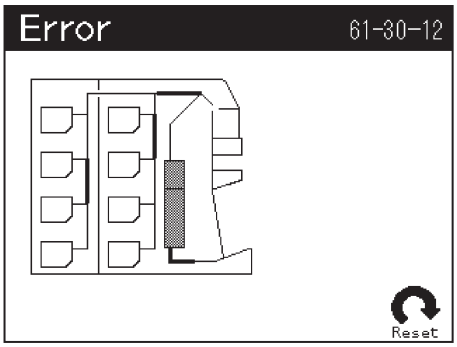


◆ If an error is found in self-check, Error Display is indicated. Clear the error according to the error showing on the display. Refer to **Setting of Sorting Modes and Sorting Pattern (P.29)** .

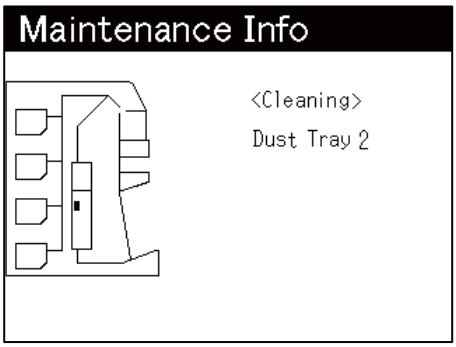
Only for K4

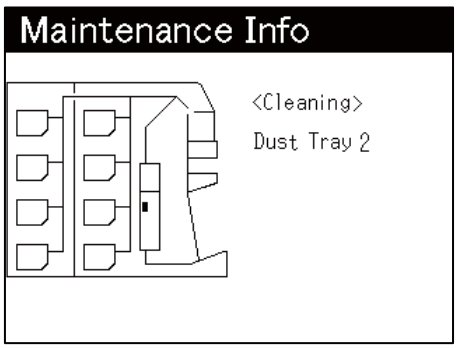


Only for K8



◆ If the dust tray cleaning is required, Maintenance Info Display is indicated after turning on the power. Clean the dust trays according the information showing on the display. Without cleaning dust trays, the display does not show Stand-by Display. Refer to **Cleaning (P.49)** .



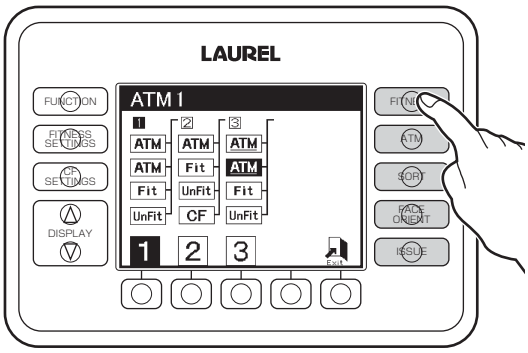


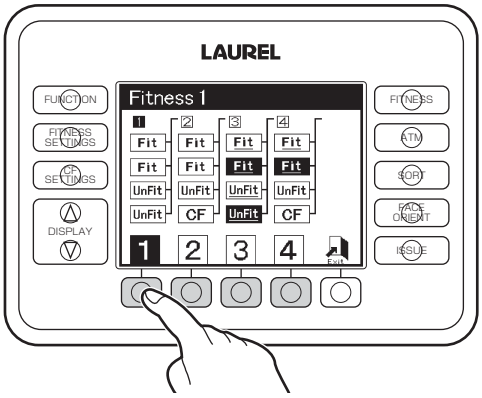
Count

STEP-1 If necessary change Sorting Mode or Sorting Pattern.

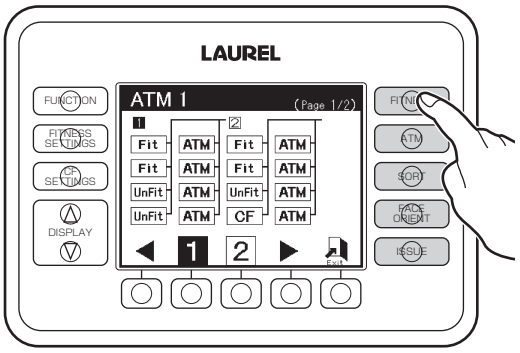
Refer to Setting of Sorting Modes and Sorting Pattern (P.29) for further details.

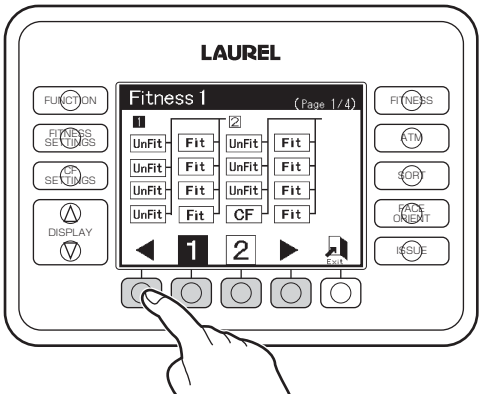
Only for K4





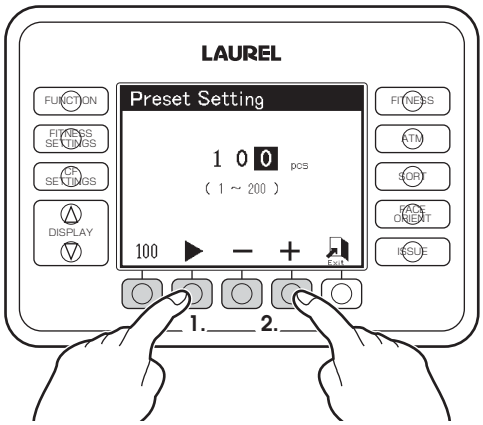
Only for K8





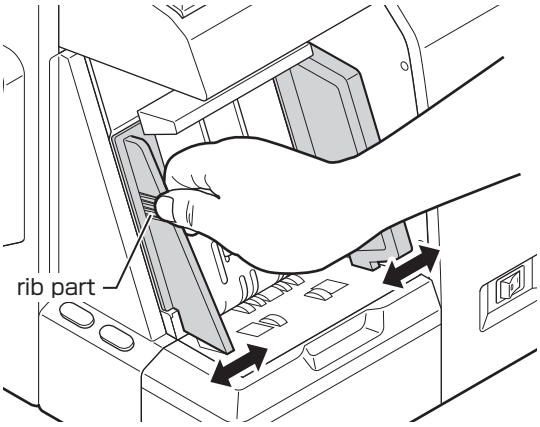
STEP-2 If necessary, change a preset number.

Refer to Setting of Preset Number (P.31) .

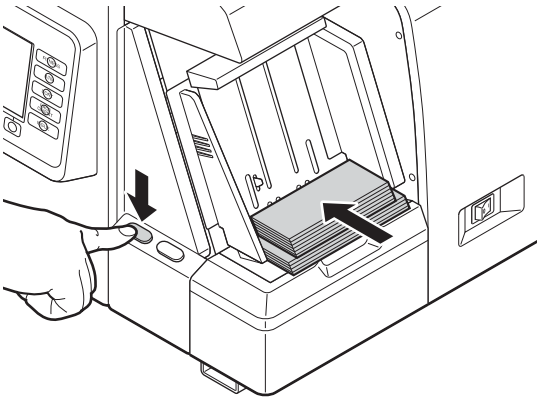


STEP-3 **Adjust Note Guide to size of note.**

▷ Move Note Guide by holding rib part.



STEP-4 **Align the notes and put the notes onto the Hopper.**

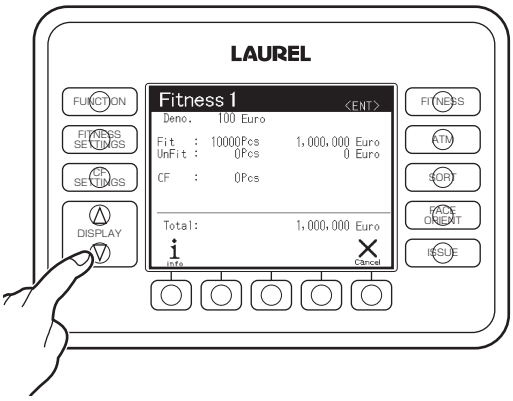


▷ The count starts automatically.

▷ If the count does not start automatically, press START/STOP Switch to start count.

▷ It is possible to put additional notes to the Hopper.

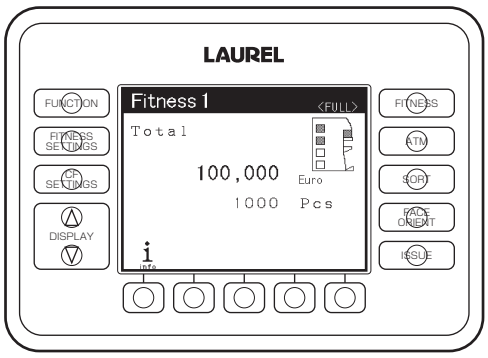
▷ When the count starts, Main-Display indicates count result in value or quantity.



Point

◆ It is possible to check the detailed count results or reject reasons by changing display indication. Please refer to **Count Display (P.9)** .

▷ When the pocket becomes full, the count stops once even if notes remain on the Hopper. The count will start after removing notes at the pocket.

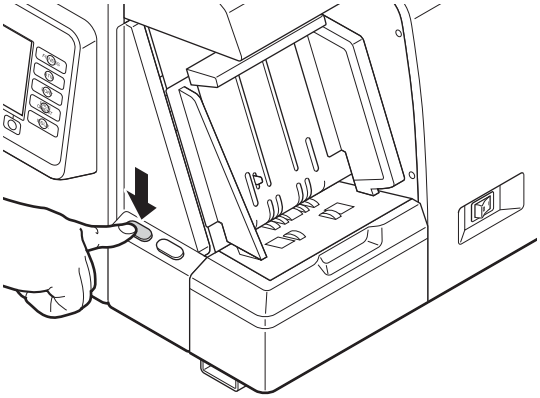


Miscalculation

◆ The count result is accumulated to the present transaction. Therefore be sure not to recount the notes which are taken out form the pocket.

STEP-5 **When completing the transaction after the count, be sure no note on the Hopper and press START/STOP switch.**

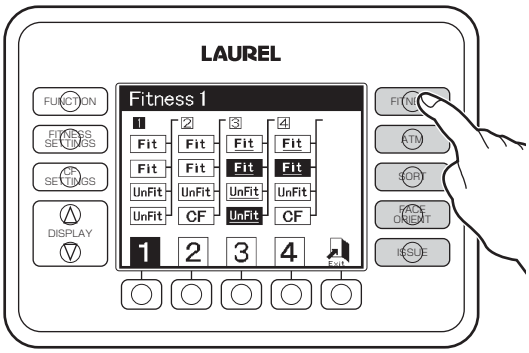
▷ When START/STOP switch is pressed without note at the Hopper, the count result on the display is cleared.



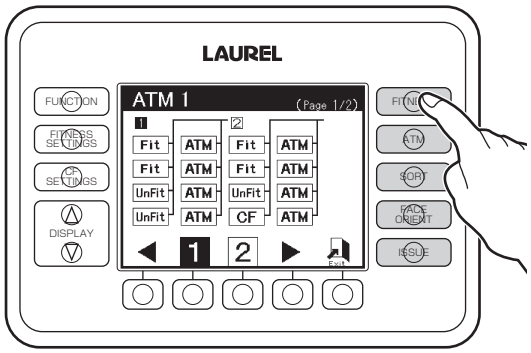
Setting of Sorting Modes and Sorting Pattern

STEP-1 Press sorting key to set a Sorting Mode.

Only for K4
Ex. Fitness



Only for K8
Ex. Fitness



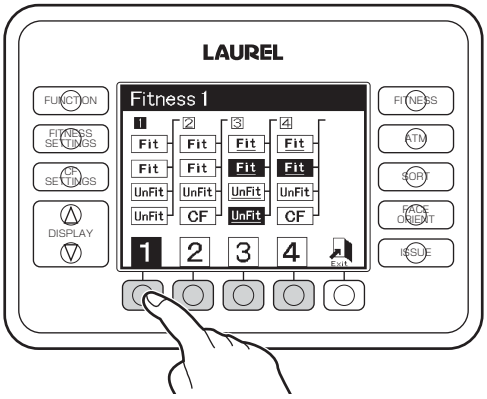
STEP-2

Only for K4

Press F1 key to F4 key to select sorting pattern.

▷ The selected sorting pattern's number inverts.

Ex. Fitness

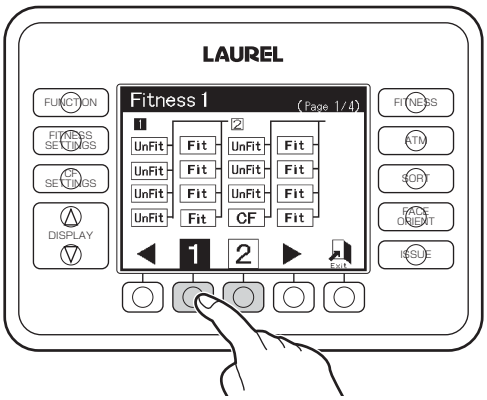


Only for K8

Press F1 key or F4 key to select the display screen. Press F2 key or F3 key to set sorting pattern.

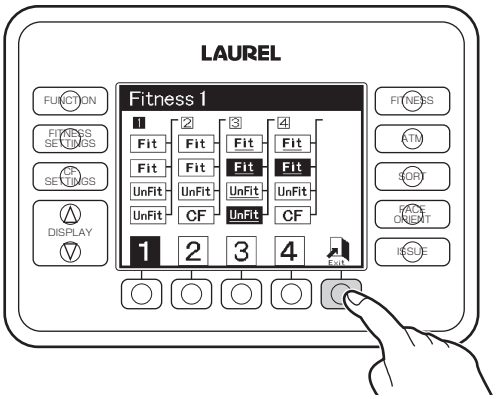
▷ The selected sorting pattern's number inverts.

Ex. Fitness

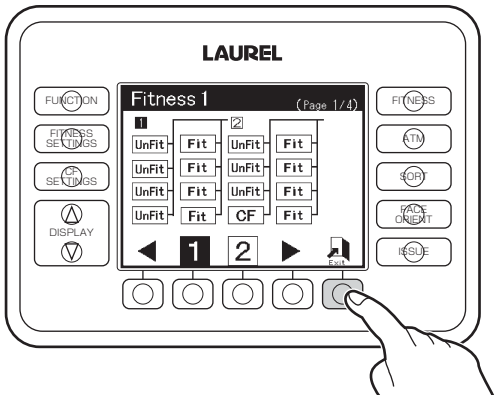


STEP-3 Press F5 key to return to Stand-by Display.

Only for K4
Ex. Fitness



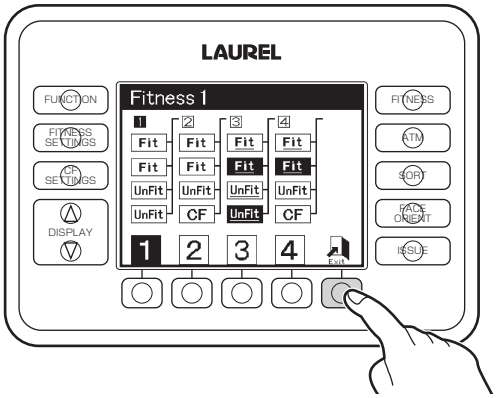
Only for K8
Ex. Fitness



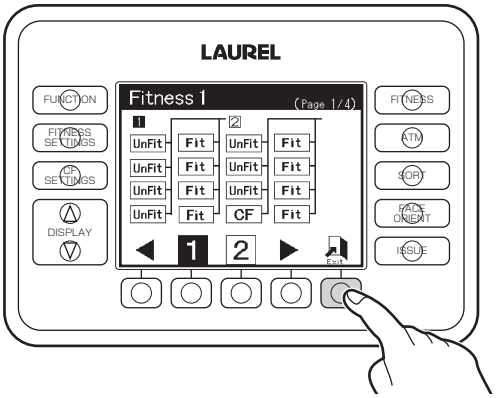
Setting of Preset Number

STEP-1 If the display indicates sorting pattern, press F5 key “Exit” to return to Stand-by Display.

Only for K4
Ex. Fitness



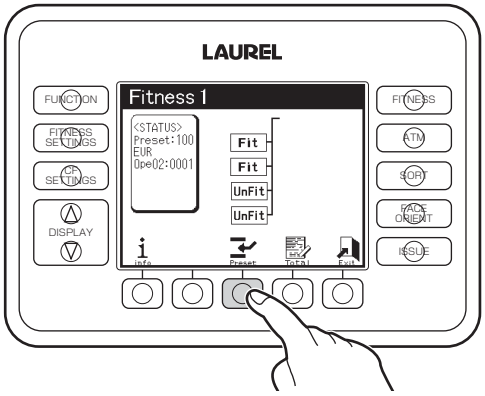
Only for K8
Ex. Fitness



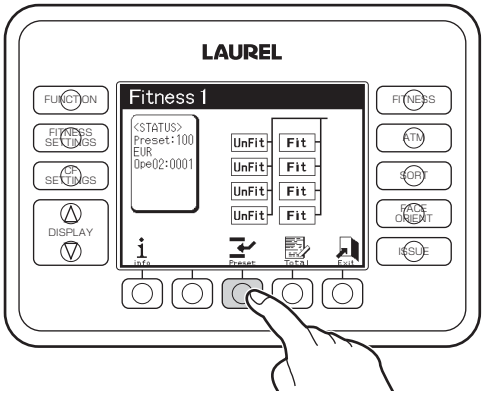
STEP-2 Press F3 key “Preset”.

▷ Preset Setting display is indicated.

Only for K4
Ex. Fitness



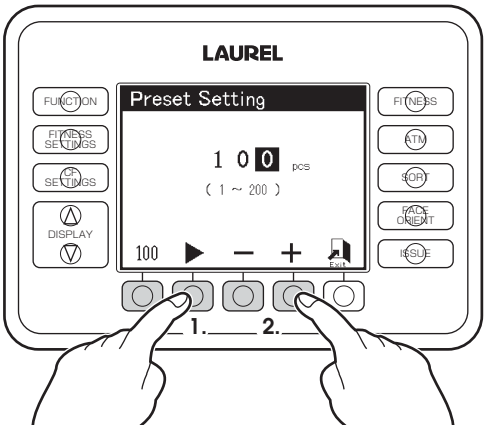
Only for K8
Ex. Fitness



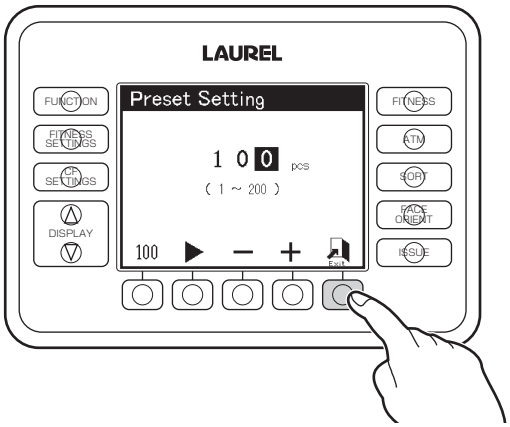
STEP-3 Set the preset number.

1. Press F2 key to move the cursor to desired digit.
2. Change the value by F3 key “−” or F4 key “+”.

▷ Press F1 key “100” to set 100.



STEP-4 Press F5 key “Exit” to return to Stand-by Display after saving the preset number.



Total Function

◆ When option printer is connected, a result of count can be printed out.

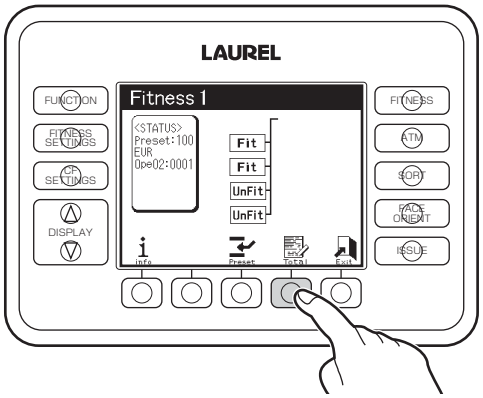
1) Grand Total..... It indicates Ground Total.
2) Operator Record*1)..... It indicates count Record per operator.
3) Fitness Record..... It indicates percentage of fit and unfit result.
4) History..... It indicates Record of operations.

*1) In order to activate this function, it is necessary to set OP function on in Administrator Setting. Refer to **To activate Administrator Mode (P.47)** .

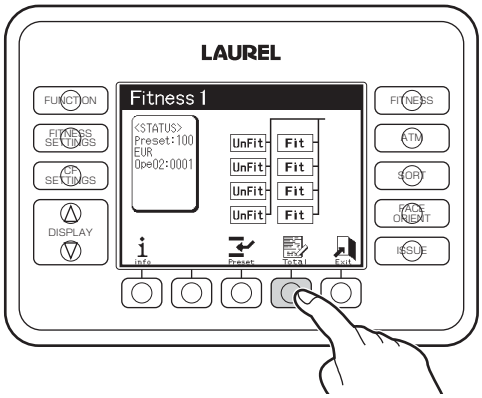
STEP-1 Press F4 key "Total".

▷ The display indicates Total menu.

Only for K4
Ex. Fitness



Only for K8
Ex. Fitness

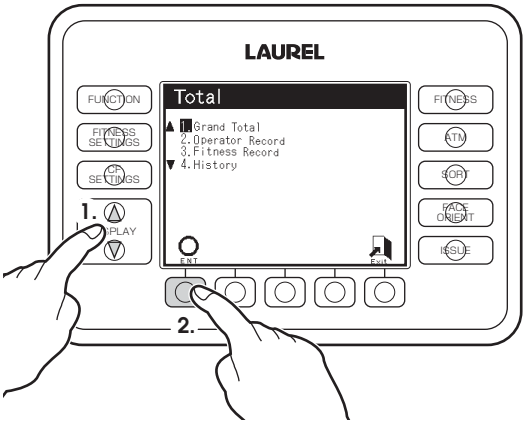


STEP-2 Select menu.

Grand Total

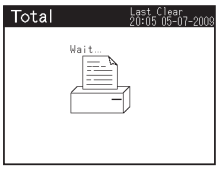
1. Move the cursor to Grand Total by △ Key or ▽ key.
2. Press F1 key "ENT".

▷ The display indicates grand total since the last clear.

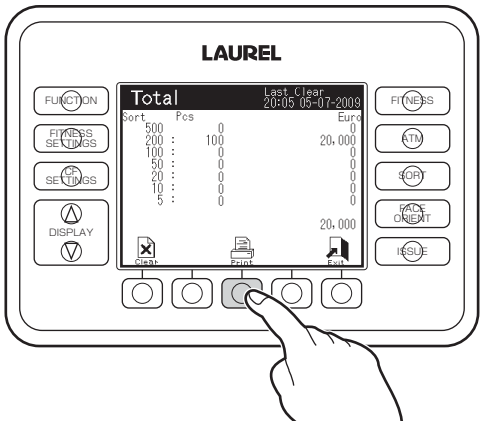


When printing out (Option)

1. Press F3 key “Print”.



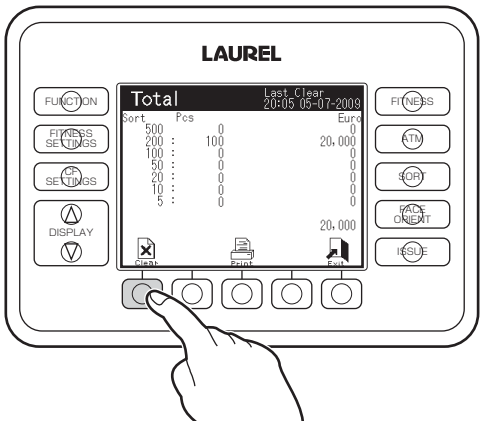
▷ The display indicates printing screen. It returns back to previous screen after completing print out.



When clearing data

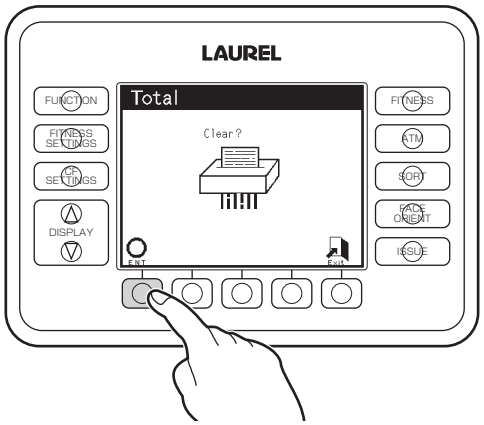
1. Press F1 key “Clear”.

▷ The display indicates data clear screen.



2. Press F1 key “ENT”.

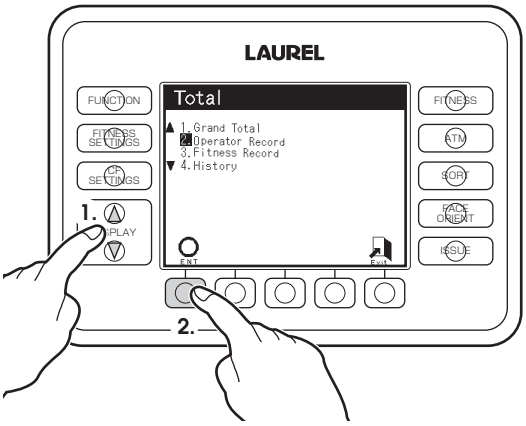
▷ The display returns back to previous screen after clearing data.



Operator Record

1. Move the cursor to Operator Record by △ Key or ▽ key.

2. Press F1 key “ENT”.

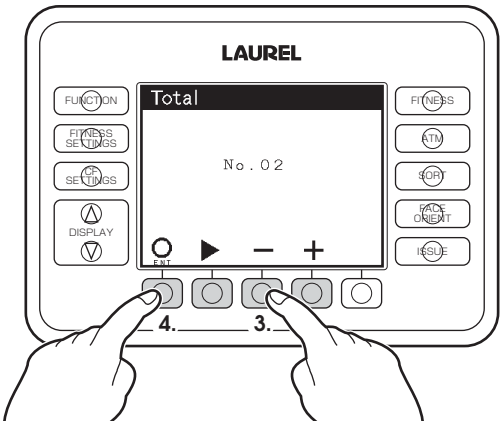


3. Input operator number by F3 key "−" or F4 key "+".

◆ Press F2 key to move the cursor to desired digit.

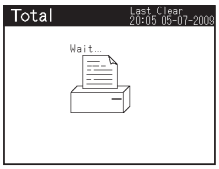
4. Press F1 key "ENT".

▷ The display indicates total for selected operator.

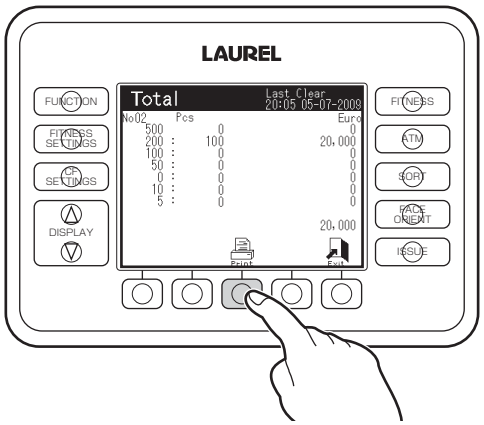


When printing out (Option)

1. Press F3 key "Print".



▷ The display indicates printing screen. It returns back to previous screen after completing print out.

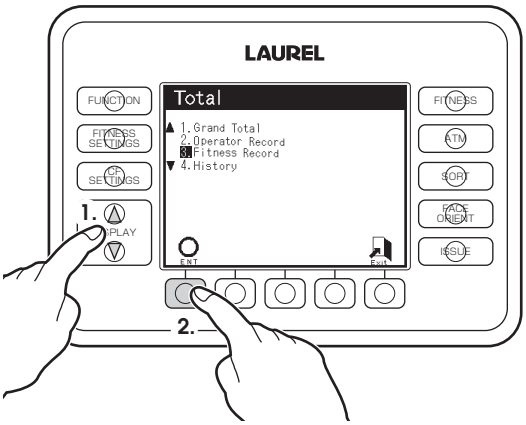


Fitness Record

1. Move the cursor to Fitness Record by △ Key or ▽ key.

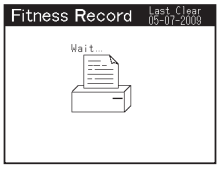
2. Press F1 key "ENT".

▷ The display indicates percentage of fit and unfit results for each denomination since the last clear.

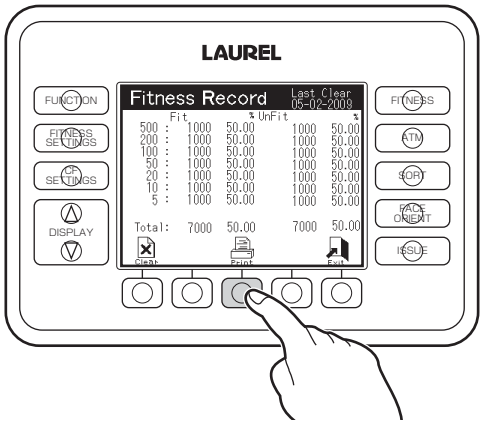


When printing out (Option)

1. Press F3 key "Print".



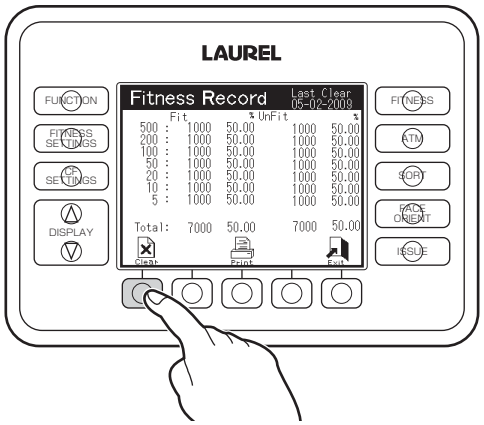
▷ The display indicates printing screen. It returns back to previous screen after completing print out.



When clearing data

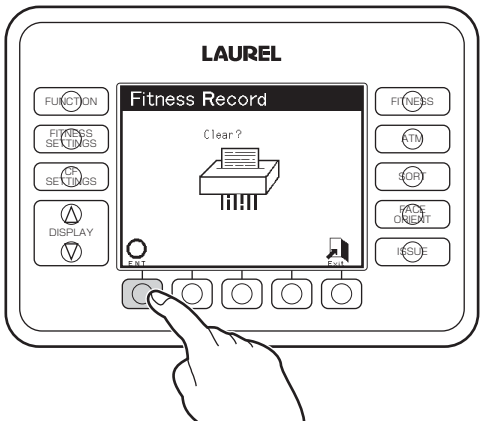
1. Press F1 key “Clear”.

▷ The display indicates data clear screen.



2. Press F1 key “ENT”.

▷ The display returns back to previous screen after clearing data.

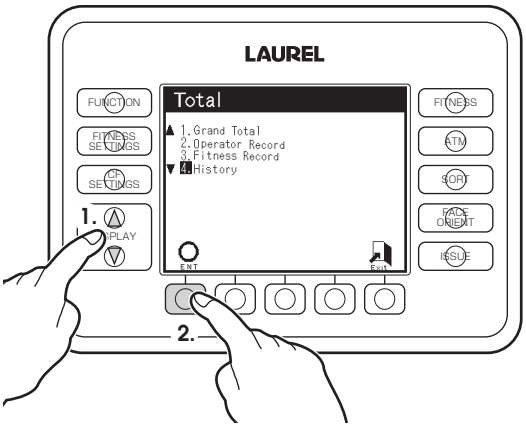


History

1. Move the cursor to History by △ Key or ▽ key.

2. Press F1 key “ENT”.

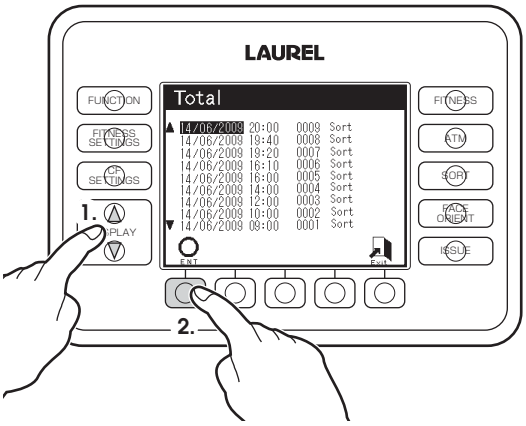
▷ The display indicates History since the last clear.



3. Move the cursor to target History by △ Key or ▽ key.

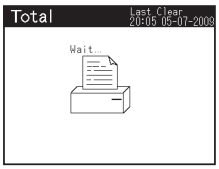
4. Press F1 key “ENT”.

▷ The display indicates total for each transaction.

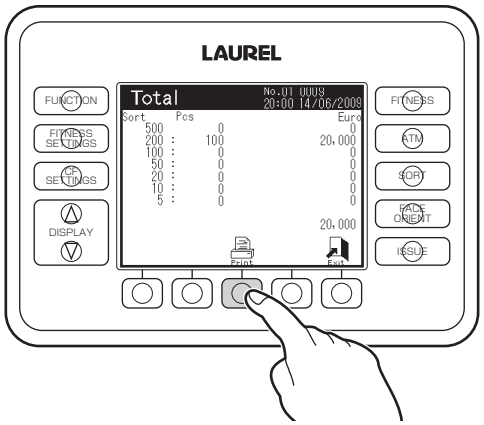


When printing out (Option)

1. Press F3 key “Print”.



▷ The display indicates printing screen. It returns back to previous screen after completing print out.



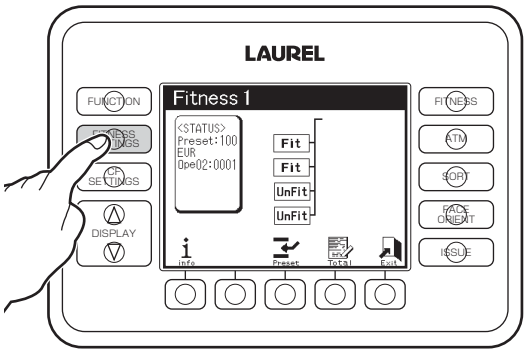
Setting of Fitness Level

STEP-1 **Press FITNESS SETTING key while the display is showing Stand-by Display.**

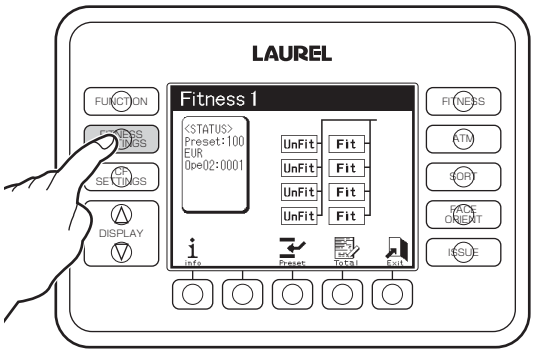
▷ The display indicates Fitness Setting Display.

▷ If Admin Mode is activated, the password is required.

Only for K4
Ex. Fitness



Only for K8
Ex. Fitness

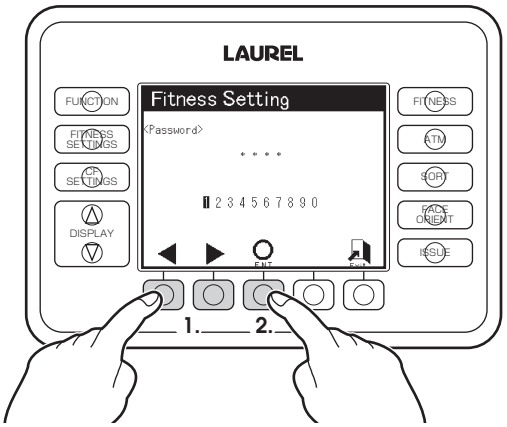


How to input the password.

1. Press F1 key or F2 key to select the number.
2. Press F3 key “ENT” to set the number in order.

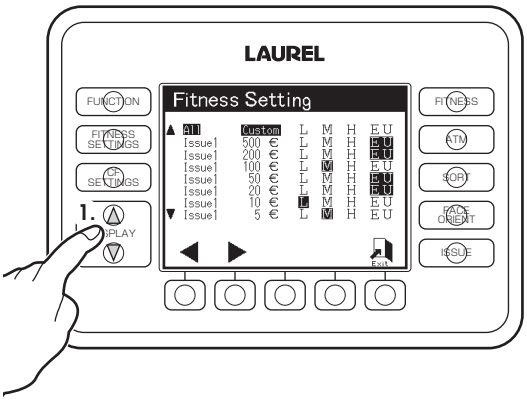
▷ If the password is identical, the display indicates Fitness Setting Display.

◆ F5 Key “Exit” : To cancel Fitness Level setting and return to Stand-by Display.

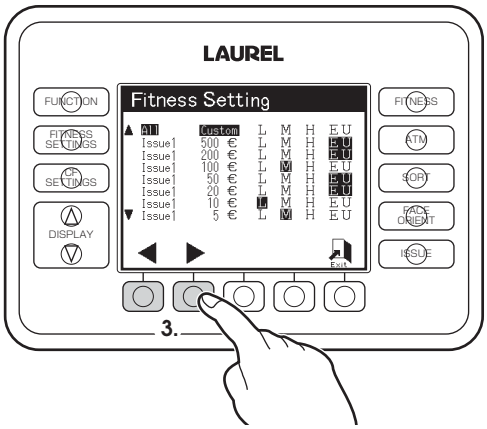


STEP-2 **Set a denomination and set Fitness Level.**

1. Move the cursor to your desired denomination by △ Key or ▽ key.
2. If the detailed Fitness Level Setting is set, skip following 3 and 4 and then go to STEP-3 to set Fitness Level.

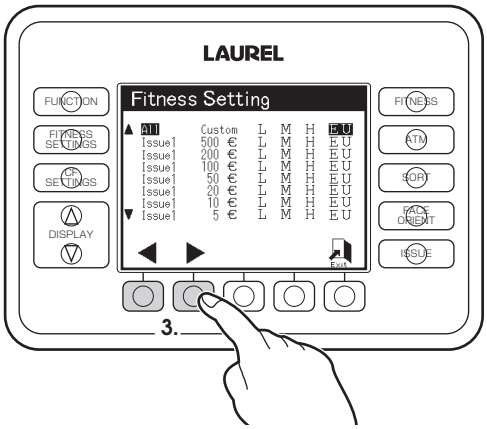


3. Move the cursor to your desired Fitness Level by F1 key or F2 key.



▷ If L, M, H or (EU) of ALL is selected, Fitness Level of all denominations will be set all together.

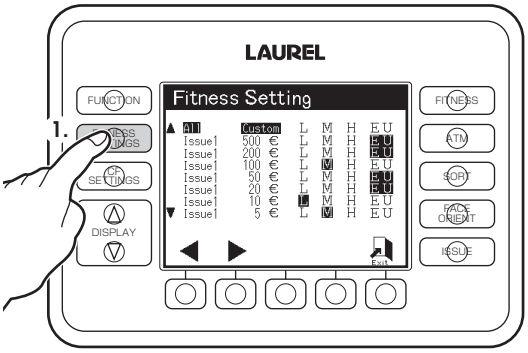
4. Skip STEP-3 and go to STEP-4.



STEP-3 Detailed Fitness Level Setting

1. Press FITNESS SETTING key again while display is showing Fitness Setting Display. The display indicates Fitness Detail Setting Display.

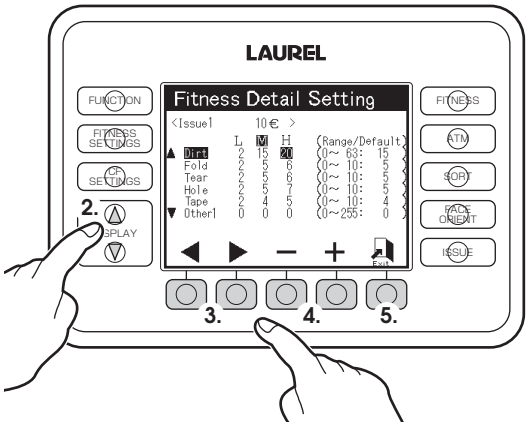
2. Move the cursor to desired item by △ Key or ▽ key.



3. Move the cursor to desired Fitness Level by F1 Key or F2 key.

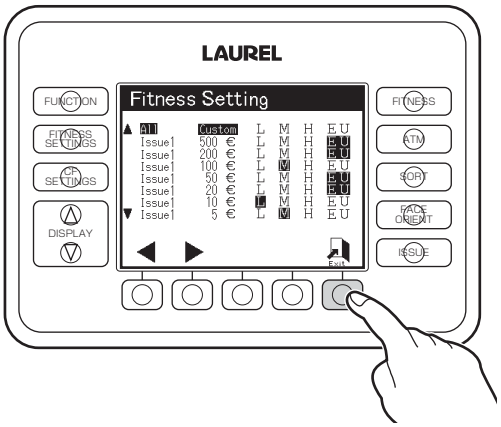
4. Change the detection level by F3 key "−" or F4 key "+".

5. Press F5 key "Exit" to return the display to Fitness Setting Display.



STEP-4 Press F5 key “Exit” to return the display to Stand-by Display.

▷ Fitness Level is memorized.



Setting of CF Level

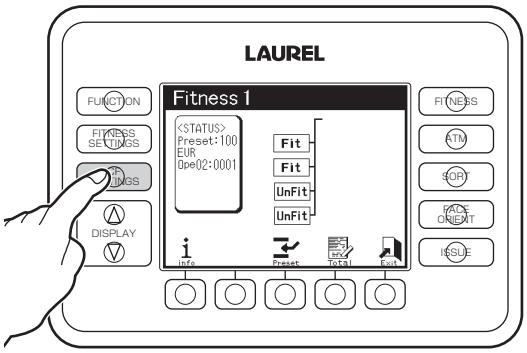
◆ CF Level means the level of security feature detection.

STEP-1 **Press CF SETTING key while the display is showing Stand-by Display.**

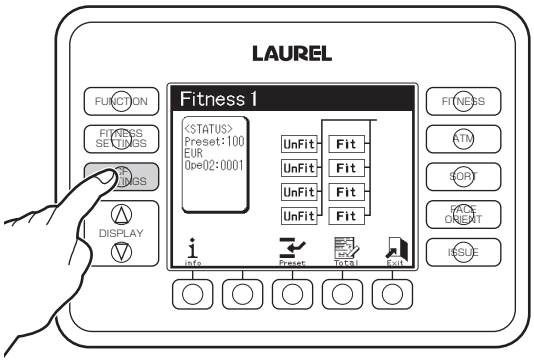
▷ CF Setting Display is indicated.

▷ If Admin Mode is activated, the password is required.

Only for K4
Ex. Fitness



Only for K8
Ex. Fitness

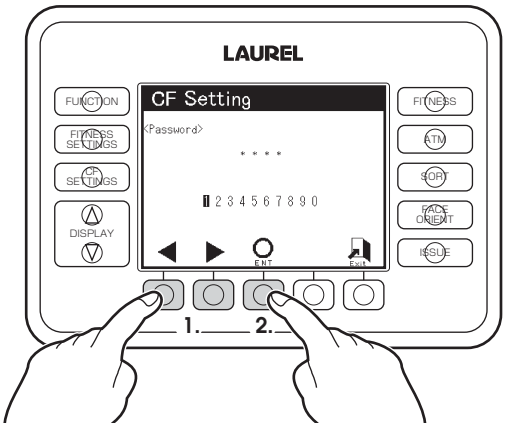


How to input the password.

1. Press F1 key or F2 key to select the number.
2. Press F3 key “ENT” to set the number in order.

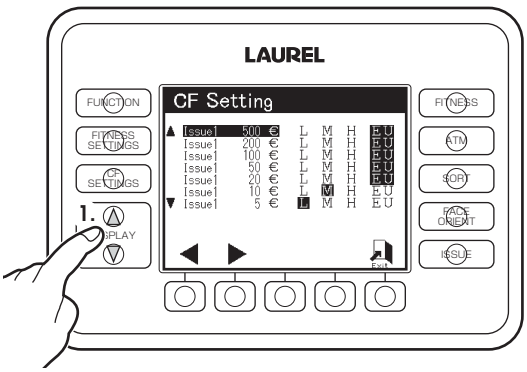
▷ If the password is identical, CF Setting Display is indicated

◆ F5 Key “Exit”:To cancel Fitness Level setting and return the display to Stand-by Display.



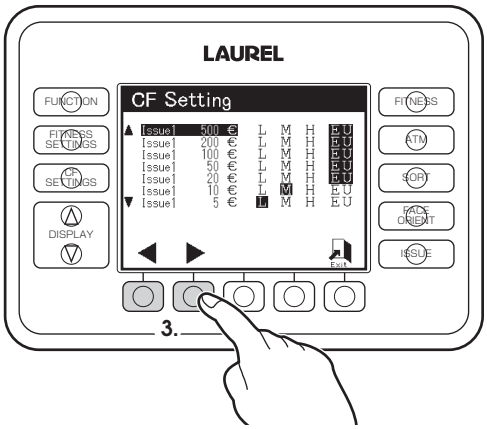
STEP-2 **Set denomination and set CF Level.**

1. Move the cursor to desired denomination by △ Key or ▽ key.
2. If the detailed CF Level Setting is set, skip following 3 and 4 and then go to STEP-3 to set CF Level.



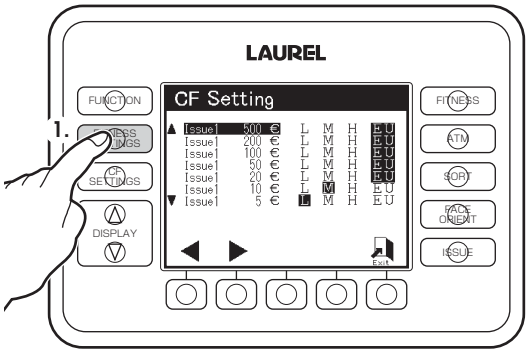
3. Move the cursor to desired CF Level by F1 key or F2 key.

4. Skip STEP-3 and go to STEP-4.



STEP-3 Detailed CF Level Setting

1. Press CF SETTING key again while the display is showing CF Setting Display. Detailed CF Setting Display is indicated.

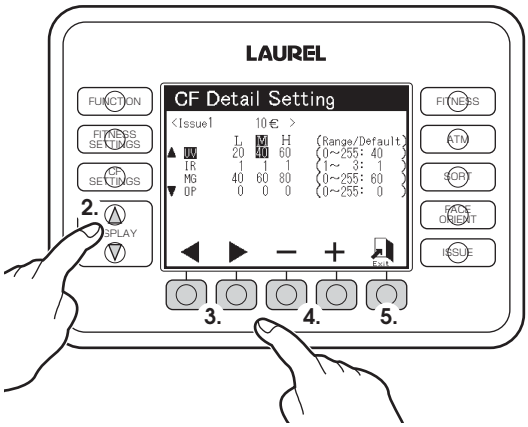


2. Move the cursor to desired item by △ Key or ▽ key.

3. Move the cursor to desired CF Level by F1 Key or F2 key.

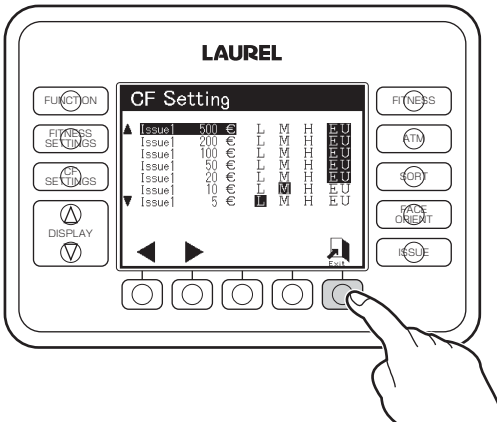
4. Change the detection level by F3 key “−” or F4 key “+”.

5. Press F5 key “Exit” to return the display to CF Setting Display.



STEP-4 Press F5 key “Exit” to return to Stand-by Display.

▷ CF Level is memorized.

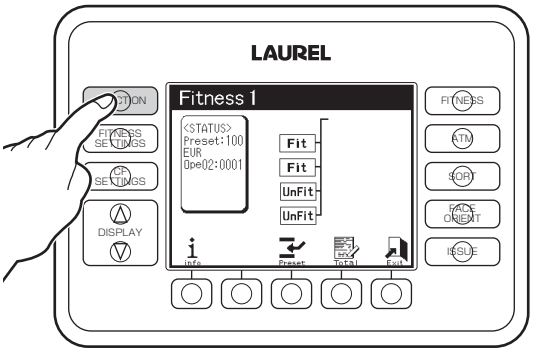


Function Setting

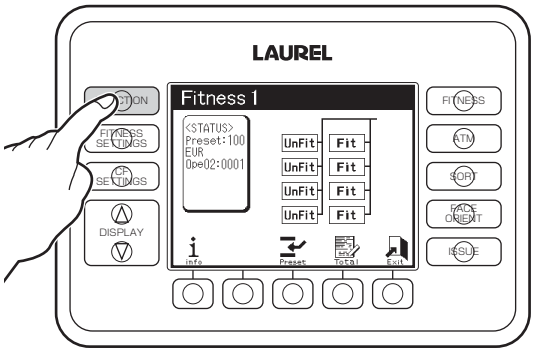
1) Currency .....Currency Selection.
2) Language .....Language Selection.
3) Contrast.....Contrast Setting of Main-Display.
4) Back Light.....Time Setting of Back Light saving mode.
5) Buzzer.....Volume Setting of Buzzer.
6) Date .....Date Setting of internal clock.
7) Time .....Time Setting of internal clock.
8) Printer.....Printer Setting(Printer is option.)
9) Admin.....Admin Mode Setting.

STEP-1 Press FUNCTION key while the display is showing Stand-by Display.

Only for K4
Ex. Fitness



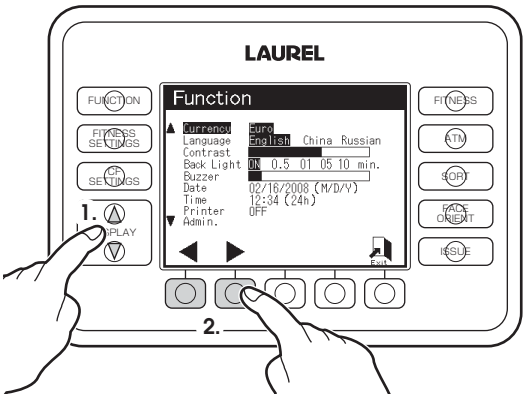
Only for K8
Ex. Fitness



STEP-2 Select item and change the setting.

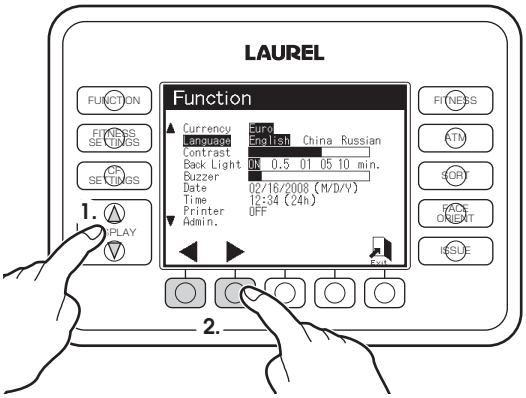
Currency

1. Move the cursor to select Currency by △ Key or ▽ key.
2. Move the cursor to desired Currency by F1 Key or F2 key.



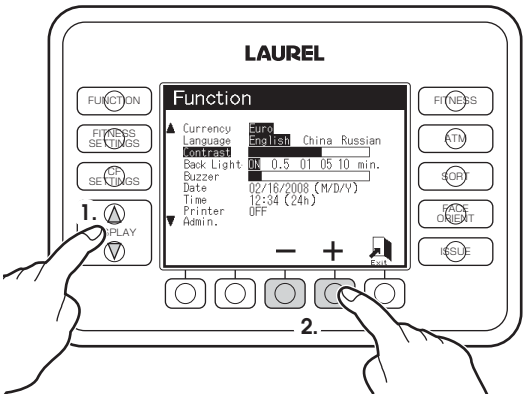
Language

1. Move the cursor to select Language by △ Key or ▽ key.
2. Move the cursor to desired Language by F1 Key or F2 key.



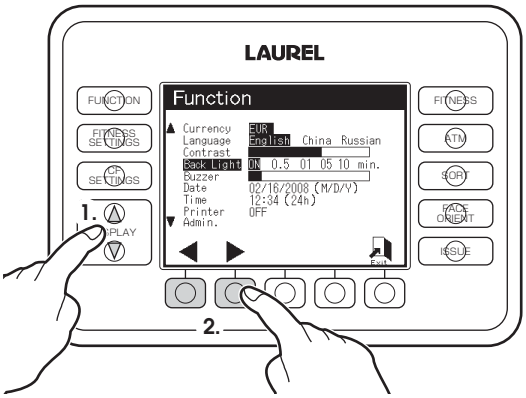
Contrast

1. Move the cursor to Contrast by △ Key or ▽ key.
2. Adjust the contrast by F3 key "−" or F4 key "+".



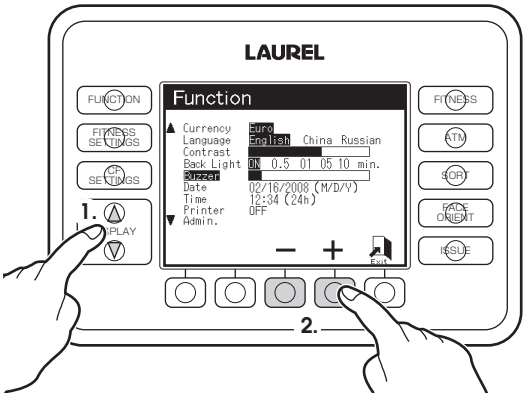
Back Light

1. Move the cursor to choose Back Light by △ Key or ▽ key.
2. Set the time by F1 key or F2 key.



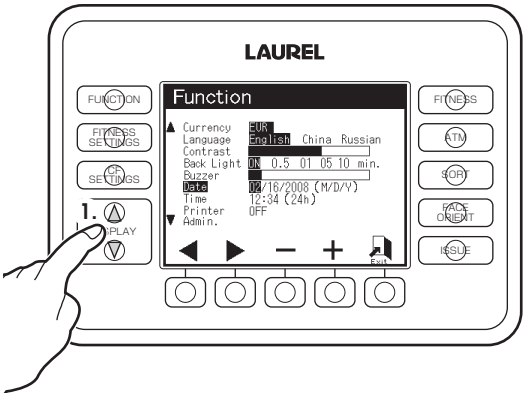
Buzzer

1. Move the cursor to set the Buzzer by △ Key or ▽ key.
2. Adjust the buzzer sound by F3 key "−" or F4 key "+".

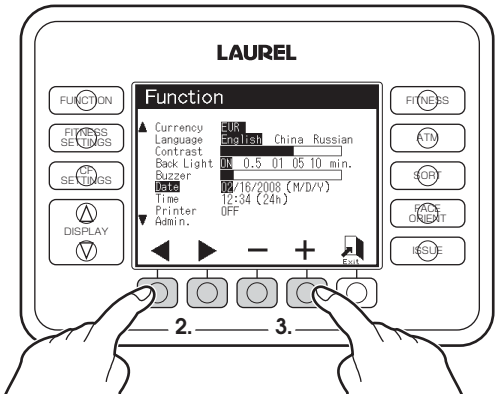


Date

1. Move the cursor to Date by △ Key or ▽ key.

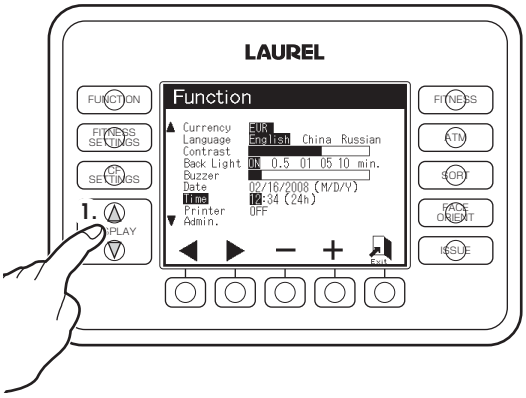


2. Move the cursor to year, month or day by F1 key or F2 key.
3. Change the value by F3 key "−" or F4 key "+".

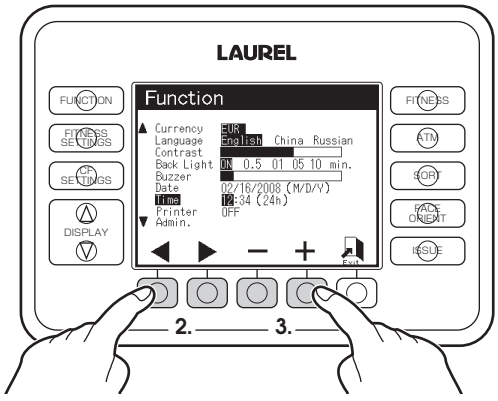


Time

1. Move the cursor to Time by △ Key or ▽ key.



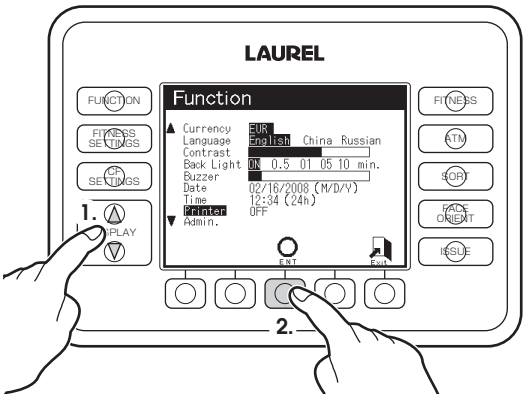
2. Move the cursor to hour or minute.
3. Change the value by F3 key "−" or F4 key "+".



Printer

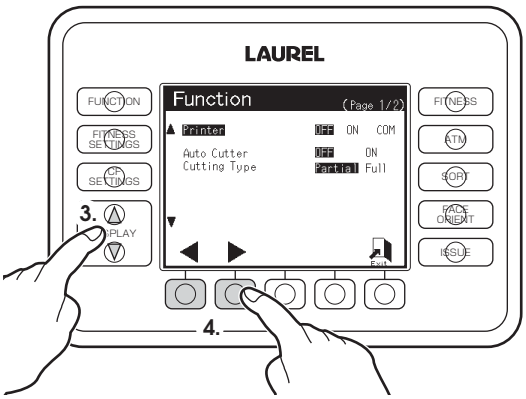
- Regarding printer connection, please contact your regional distributors.
- The following describes the setting after connecting a printer.

1. Move the cursor to Printer by △ Key or ▽ key.
2. Press F3 key "ENT".

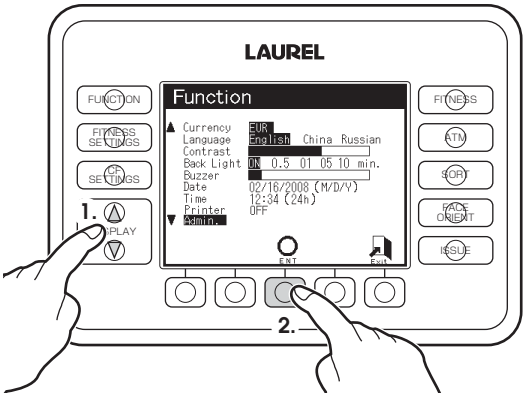


3. Move the cursor to Printer by △ Key or ▽ key.
4. Set it to ON by F1 key or F2 key.

- Regarding further printer settings, please contact your regional distributor.

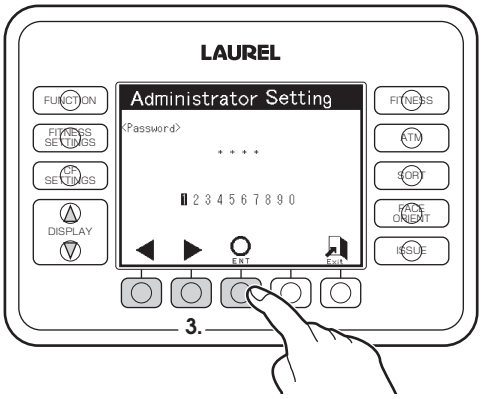


Admin



1. Move the cursor to Admin by △ Key or ▽ key.
2. Press F3 key “ENT”.

▷ Password Input Display is indicated.

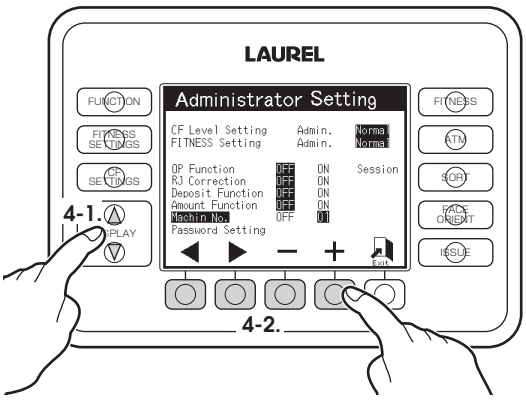


3. Select a number by F1 key or F2 key and input it by F3 key “ENT” one by one.

▷ If the password is identical, the display indicates Administrator Setting Display.

4. Change the setting Admin Mode for CF Level or Fitness Setting..... change the password.

To activate Administrator Mode



4-1. Move the cursor to desired function by △ key or ▽ key.

4-2. Set status Admin / Normal or OFF / ON for each function by F1 key or F2 key.
Set machine number by F3 key “−” or F4 key “+”.

CF Level Setting
FITNESS Setting
OP Function
Deposit Function
Amount Function
Machine No.

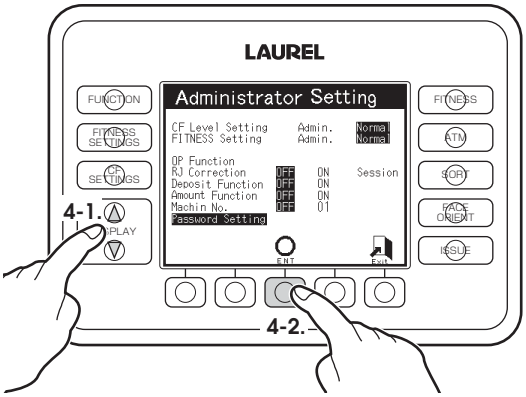
◆ Contact to your regional distributor for further details about the function.

Admin : Password is required to enter CF Level or Fitness Setting.
Normal : Password is not required to enter CF Level or Fitness Setting.
Session : This function indicates sectional total.

In order to change password

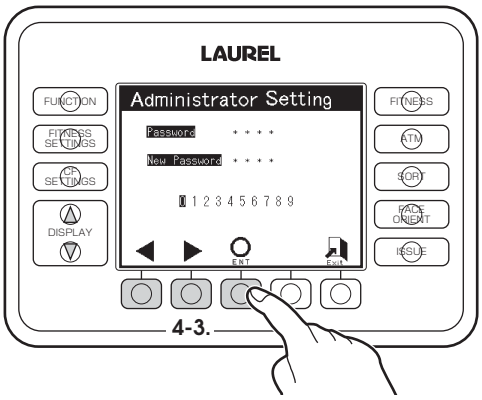
4-1. Move the cursor to Password Setting by △ Key or ▽ key.

4-2. Press F3 key "ENT".

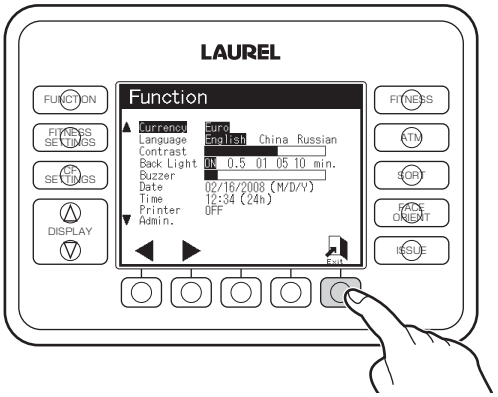


4-3. Input the current password and new password.

▷ FUNCTION display is indicated after changing the password.



STEP-3 Press F5 key "Exit" to return to Stand-by Display.



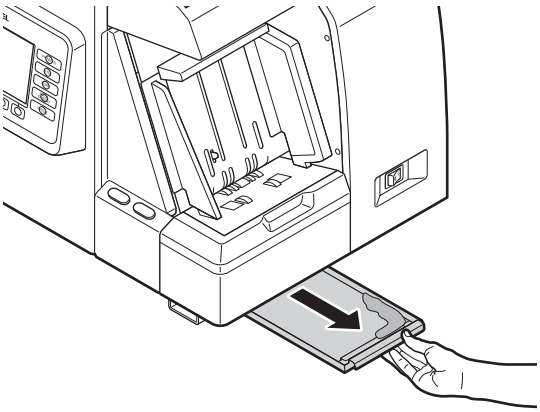
Cleaning

Periodical Cleaning and Position

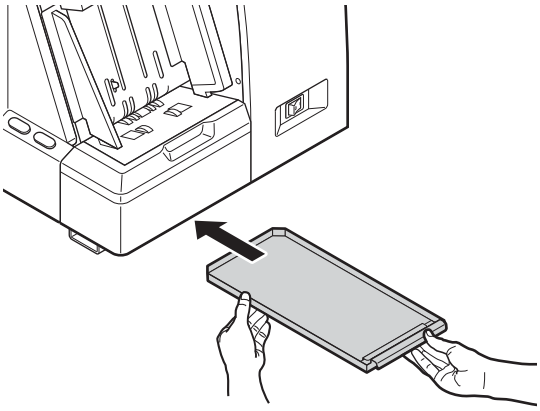
- Clean the Dust Trays at least once in a day. "Dust Tray 1 and Dust Tray 2"
- Clean the Transportation Path 1 and the Validator periodically.

Cleaning the Dust Tray 1

STEP-1 Hold the handle of Dust Tray 1 and pull it out. Remove the dust in the Dust Tray 1.

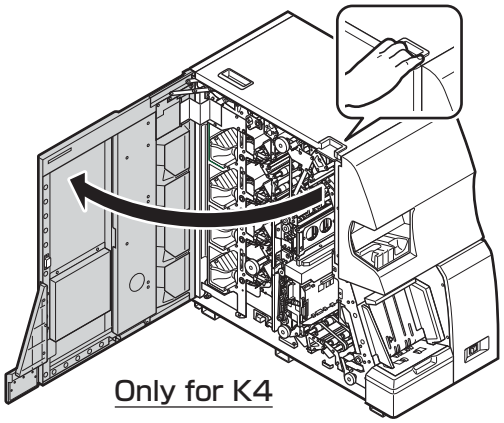


STEP-2 Set the Dust Tray 1 back to the unit.

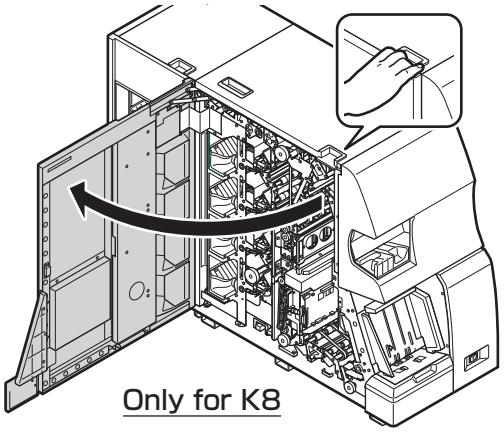


Cleaning the Dust Tray 2

STEP-1 Open the Front Door by the handle.

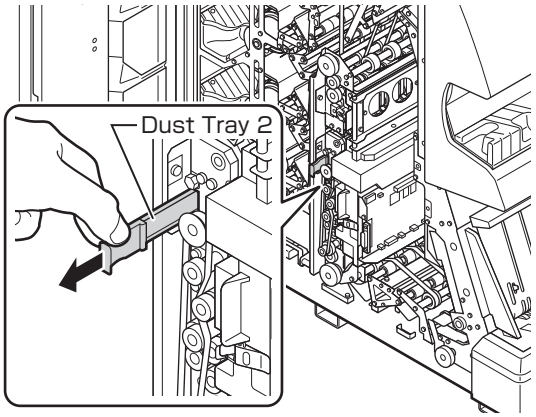


Only for K4

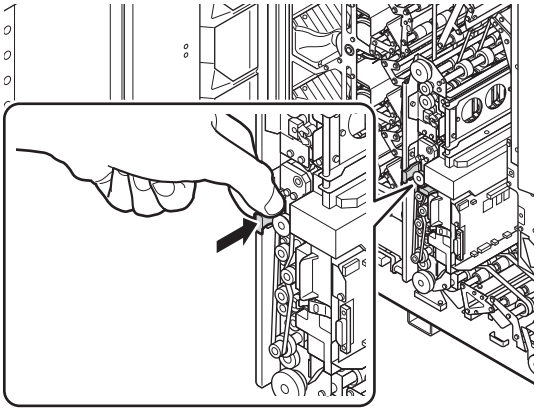


Only for K8

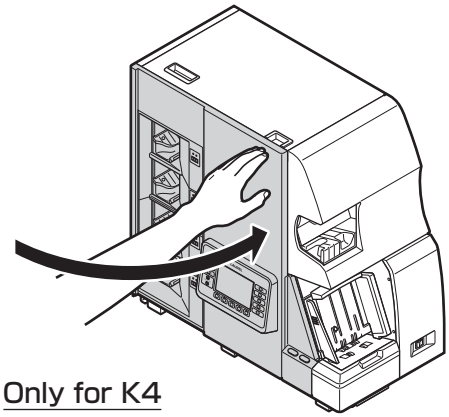
STEP-2 Pull out Dust Tray 2 by holding green parts. Remove the dust in the Dust Tray 2.



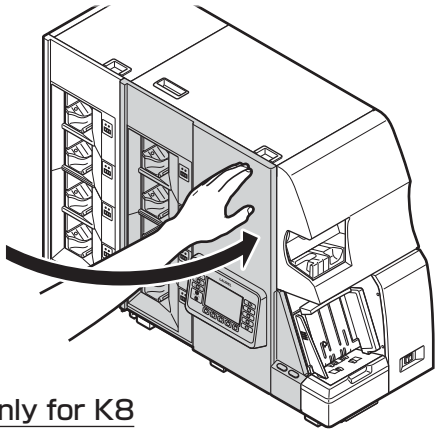
STEP-3 Set the Dust Tray 2 back to the unit.



STEP-4 Close the Front Door.



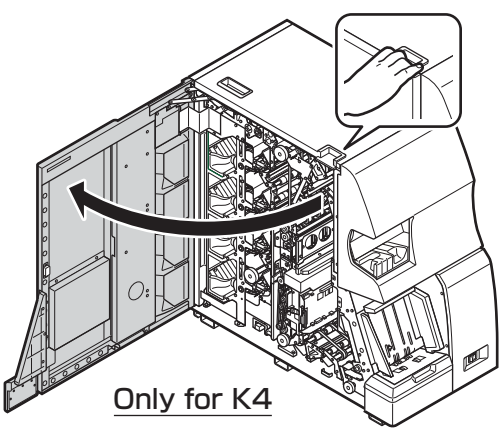
Only for K4



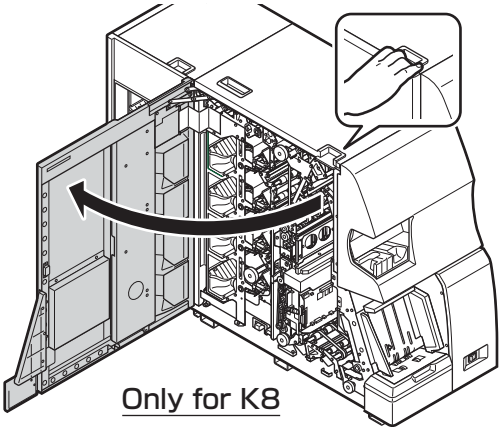
Only for K8

Cleaning Sensors

STEP-1 Open the Front Door by the handle.



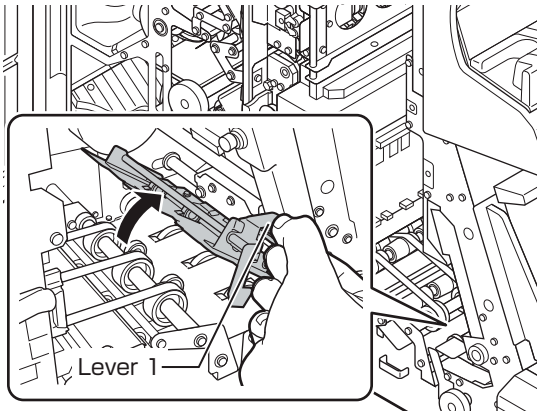
Only for K4



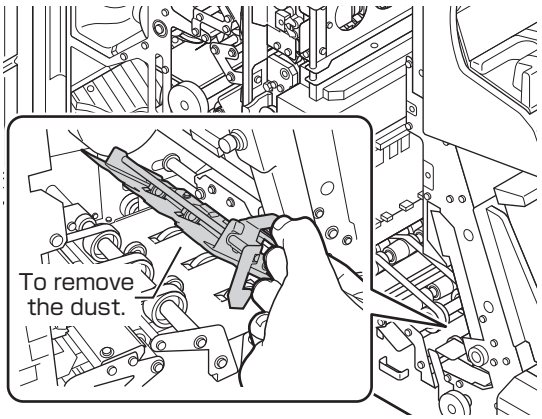
Only for K8

STEP-2 Open the Transportation Path 1 and remove the dust.

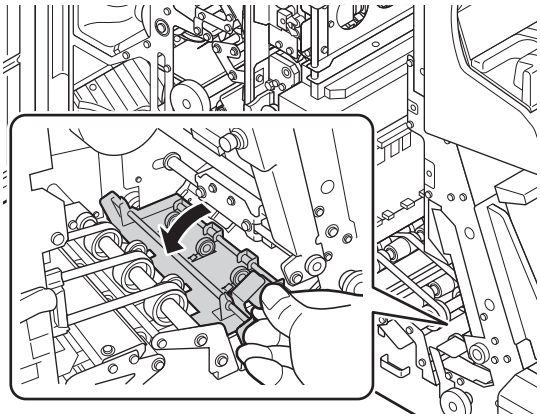
1. Unlock the Transportation Path 1 by lever 1 and open it.



2. Clean the transportation path by cotton swab or brush.



3. Close the Transportation Path 1 gently by holding lever 1.

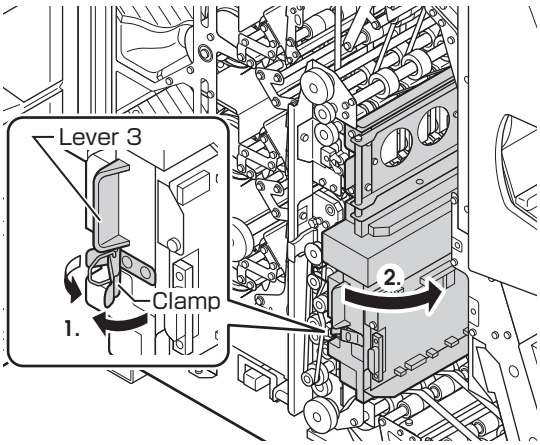


◆ Be sure to lock the Transportation Path 1 by locking lever 1.

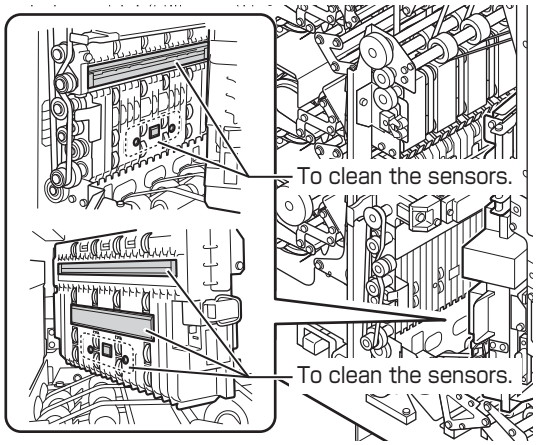
STEP-3 **Open the Validator and clean the sensors.**

1. Unlock the clamp of Validator.

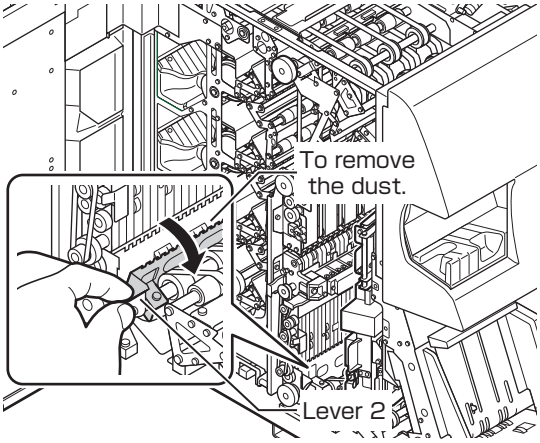
2. Open Validator with holding lever 3.



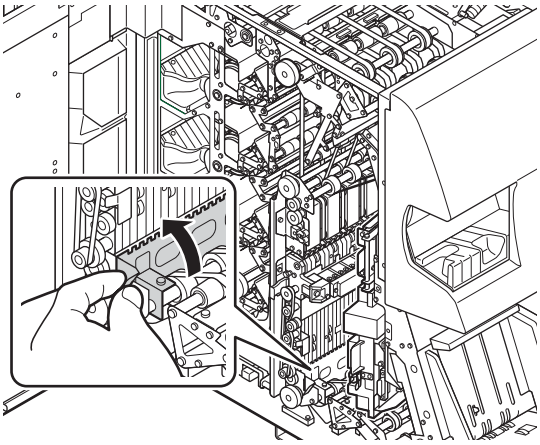
3. Clean the Validator by cotton swab or brush.



4. Open the Transportation Path 2 by holding lever 2 and remove the dust by cotton swab or brush.

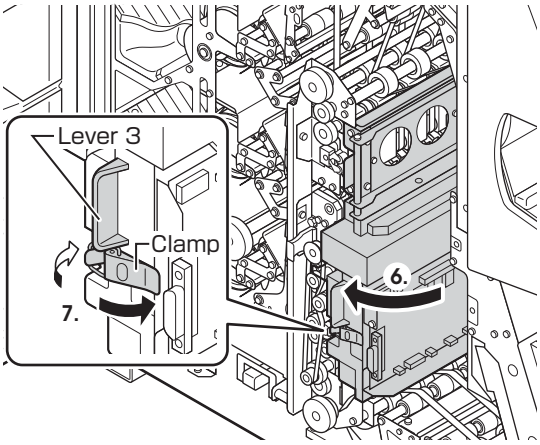


5. Close the Transportation Path 2 gently.

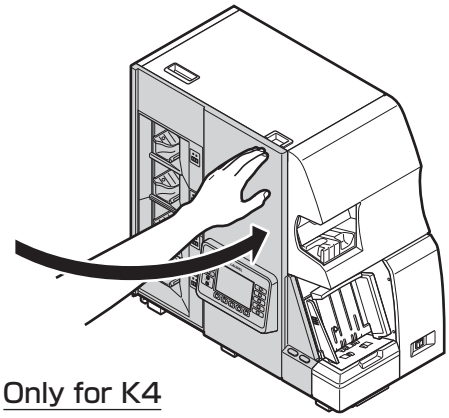


6. Close the Validator by holding lever 3.

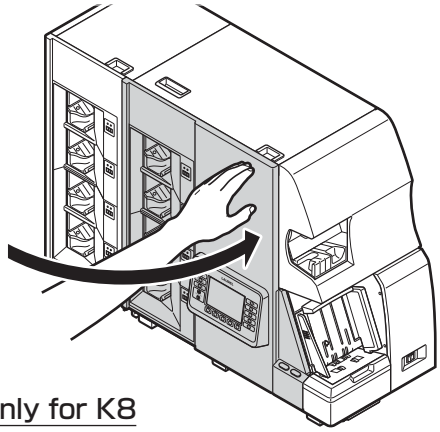
7. Lock the Validator by clamp.



STEP-4 Close the Front Door.



Only for K4



Only for K8

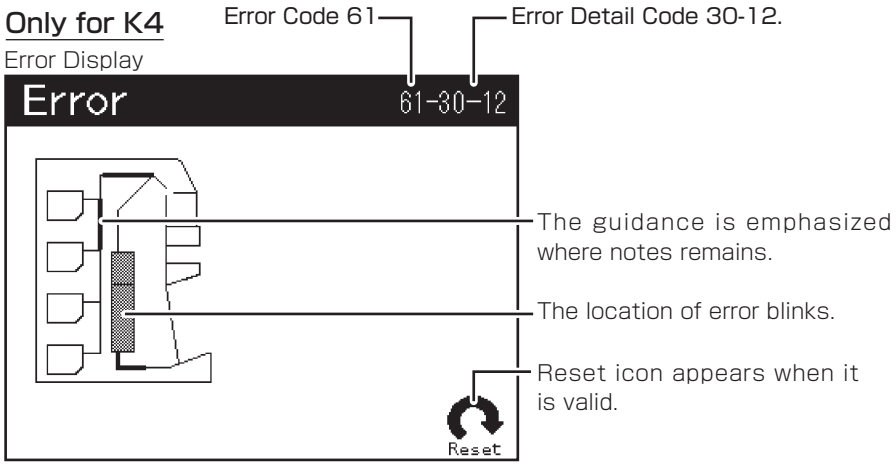
Chapter 3 IF AN ERROR OCCUR

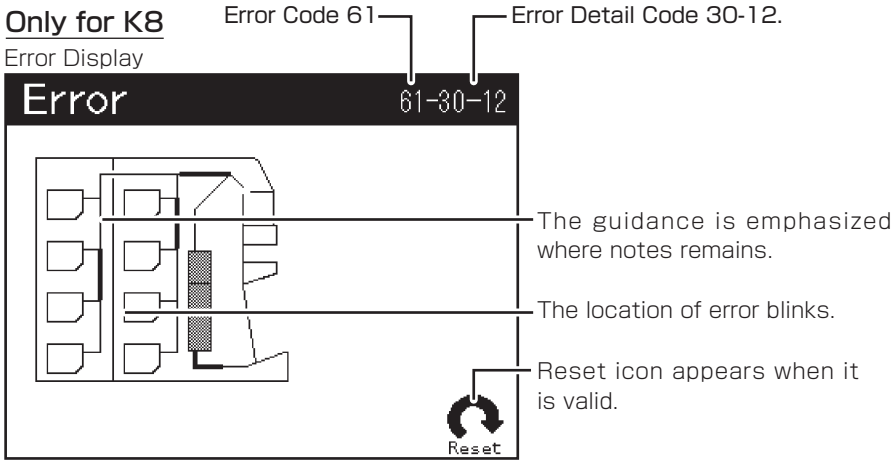
How to clear an error

This chapter describes action to be taken when an error occurs.

Error Display

- If an error occurs such as note jam, the main-display switches to Error Display which shows error code and location of the error by guidance.
- In order to clear the error, check the error code and location of error and take remedial action correspond to Error and Remedial Measure page 49.





Point

- In case the problem does not clear, please contact your regional distributor and inform them of Error Code and Error Detail Code.

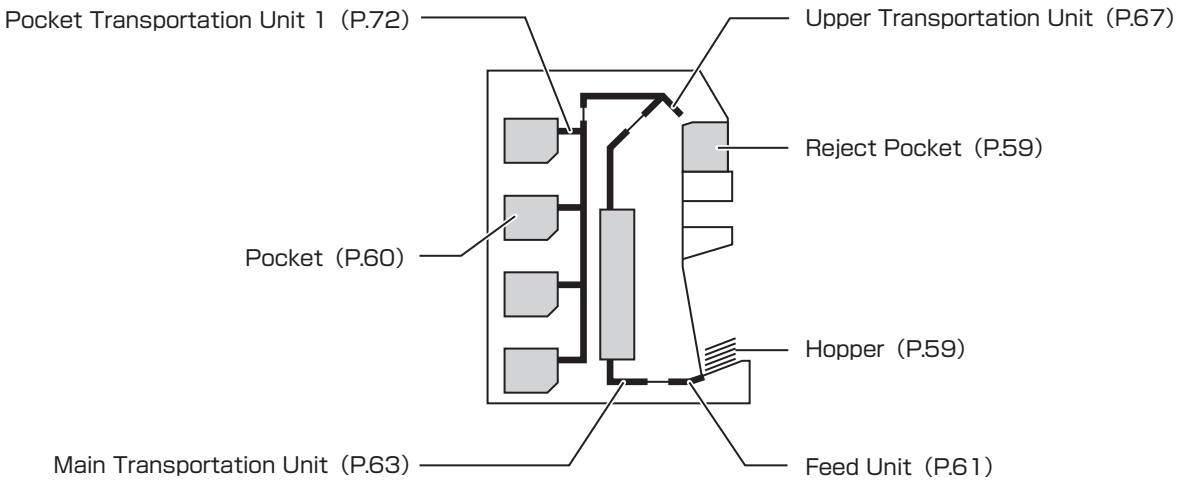
Error and Remedial Measure

Error Code	Content of Error	Remedial Measure
Error 10 to 32	Mechanical Error	**1.** Remove remaining notes according to the guidance on the display. **2.** Press Reset key. **3.** If the notes are discharged to the pockets after the reset actions, remove the notes from the pockets. Refer to **How to remove jam notes (P.58)** .
Error 40	Validator Error	**1.** Remove remaining note according to the guidance on the display. Refer to **How to remove jam notes (P.58)** .
Error 41 to 43	I/F Error	**1.** Turn off and on the Main SW.
Error 50 to 51	Note Remaining Sensor Error	**1.** Remove remaining notes according to the guidance on the display. **2.** Press Reset key. **3.** If the notes are discharged to the pockets after the reset actions, remove the notes from the pockets. Refer to **How to remove jam notes (P.58)** .
Error 60 to 67	Jam Error	**1.** Remove remaining notes according to the guidance on the display. Refer to **How to remove jam notes (P.58)** .
Error 68 to 6A	Cover Open	**1.** Close the Front Cover. **2.** Press Reset key.
Error 70 to 76	Adjustment Error	**1.** Turn off and on the Main SW.
Error E0 to FF	System Error	**1.** Turn off and on the Main SW.

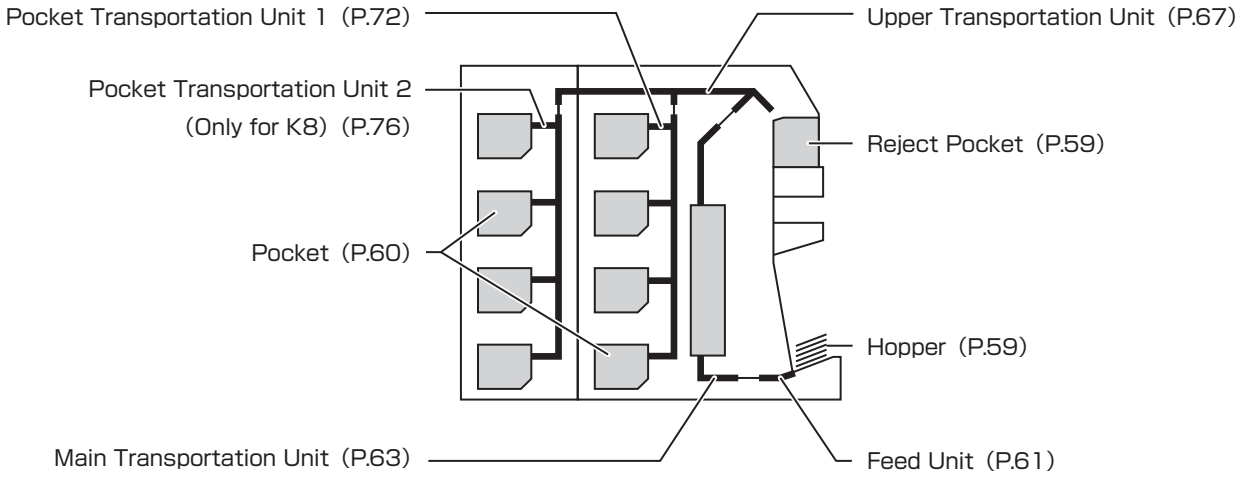
How to remove jam notes

Description of Guidance

Only for K4

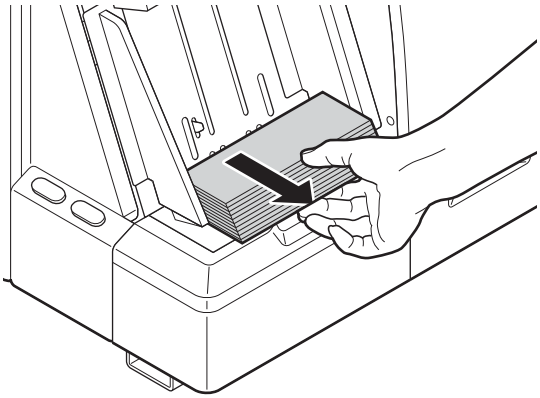


Only for K8



Hopper

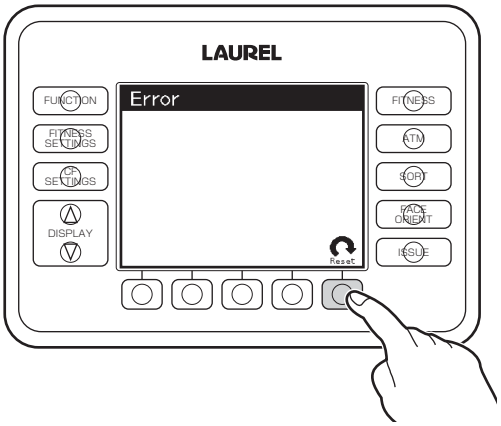
STEP-1 Remove all the notes from the Hopper.



STEP-2 Press F5 key “Reset”.

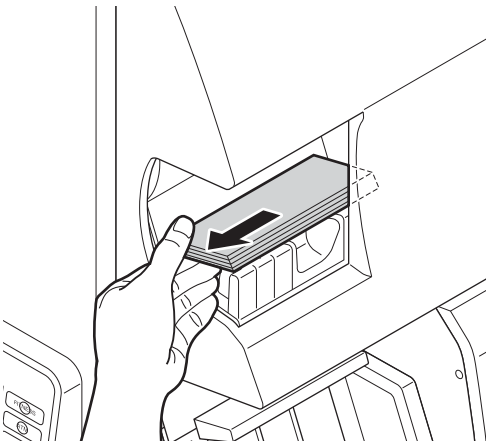
▷ The reset action gets started.

▷ Stand-by Display is shown after completing the reset action normally.



Reject Pocket

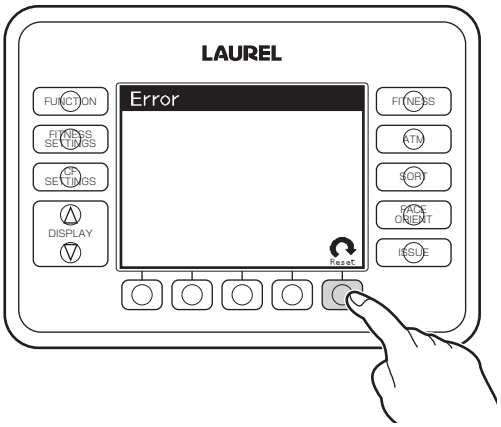
STEP-1 Remove all the notes from the Reject Pocket.



STEP-2 Press F5 key “Reset”.

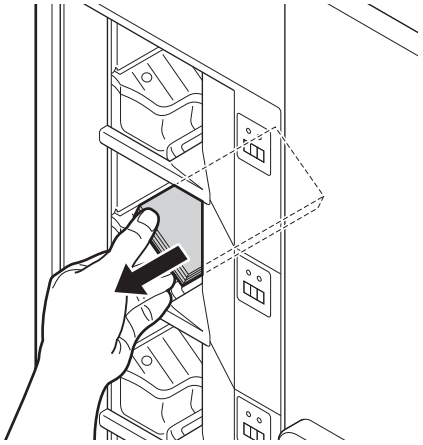
▷ The reset action gets started.

▷ Stand-by Display is shown after completing the reset action normally.



Pocket

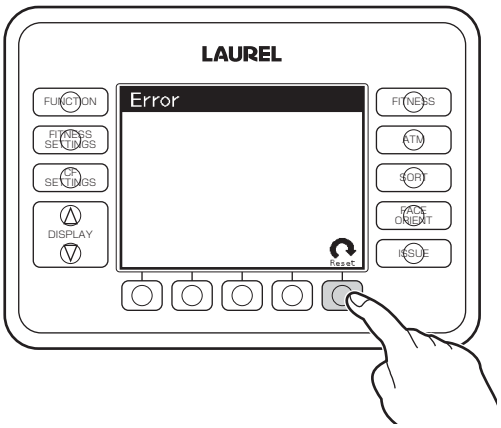
STEP-1 Remove all the notes from the Pockets.



STEP-2 Press F5 key “Reset”.

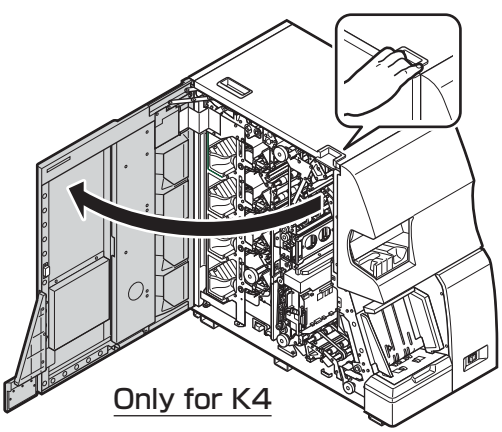
▷ The reset action gets started.

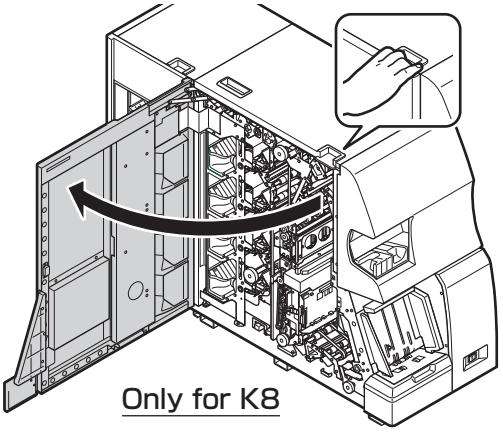
▷ Stand-by Display is shown after completing the reset action normally.



Feed Unit

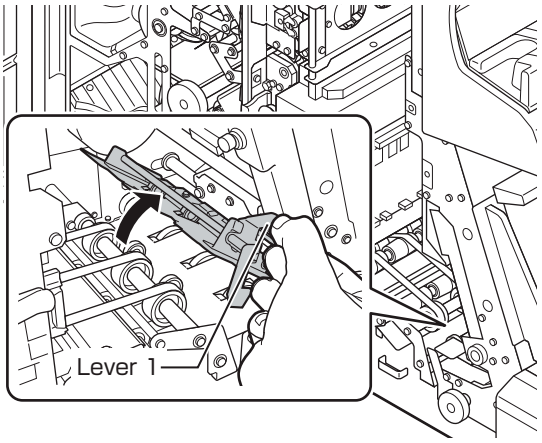
STEP-1 Open the Front Door by the handle.



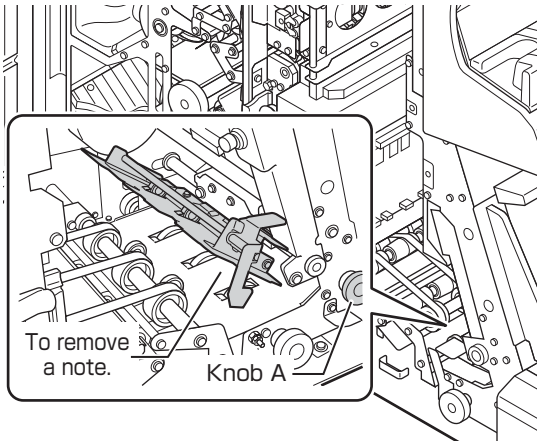


STEP-2 Remove remained note by opening the Transportation Path

1. Hold Lever 1 to unlock the Transportation Path 1 to open.

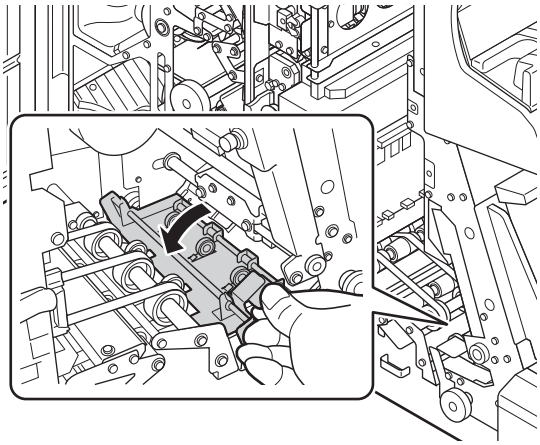


2. Remove remained note.
If the note are blocked, turn the knob A. Then remove it.



3. By holding the Lever 1, close the Transportation Path 1 gently.

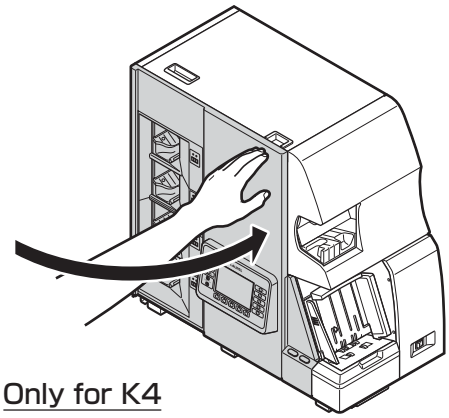
◆ Release the Lever 1 and make sure that the Transportation Path 1 gets locked.



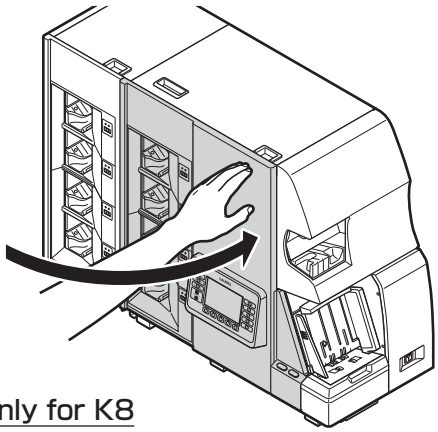
STEP-3 Close the Front Door.

▷ The reset action gets started.

▷ Stand-by Display is shown after completing the reset action normally.

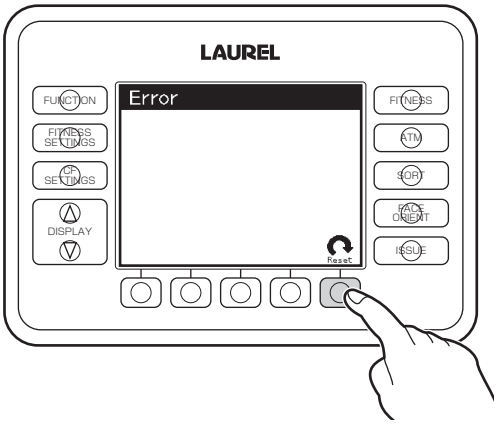


Only for K4



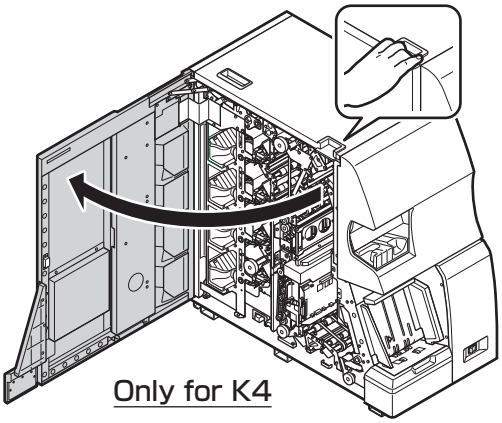
Only for K8

▷ If the reset action does not gets started, press F5 key "Reset" to activate it.

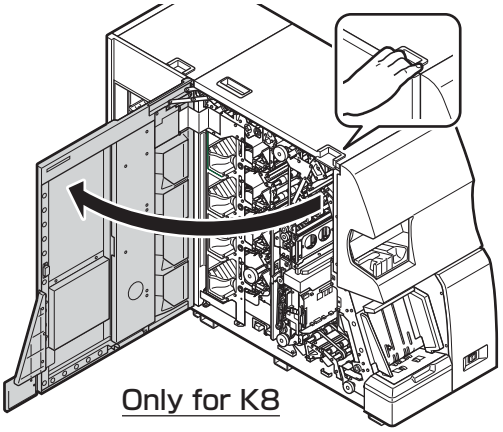


Main Transportation Unit

STEP-1 Open the Front Door by the handle.

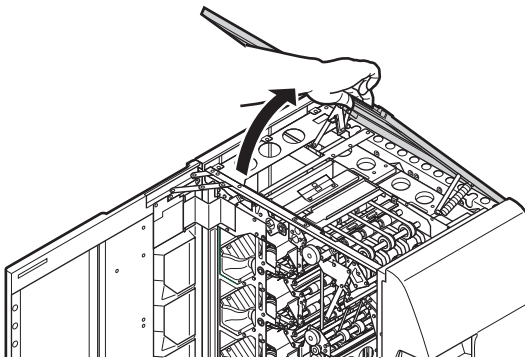


Only for K4

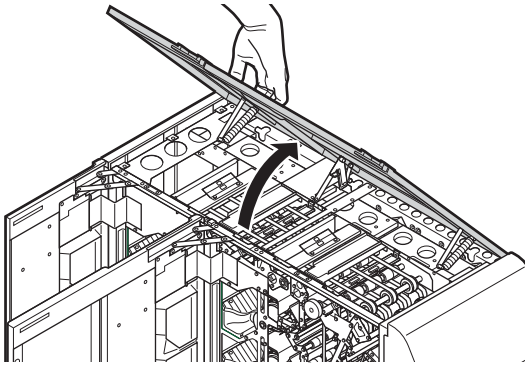


Only for K8

STEP-2 Open the Upper Door and be sure to lock the door kept open.



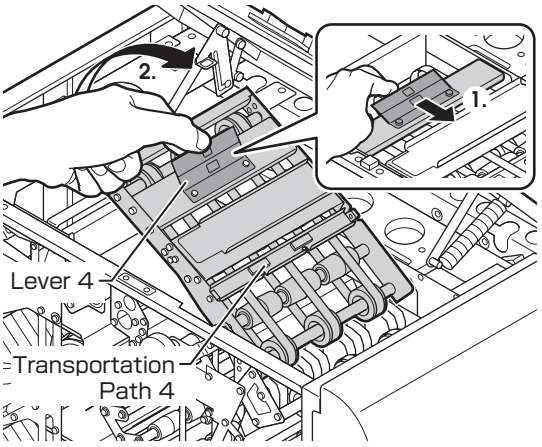
Only for K4



Only for K8

STEP-3 Open the Transportation Path 4,

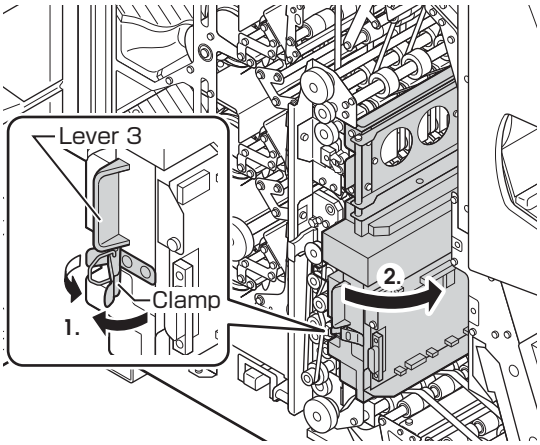
1. Unlock Transportation Path 4 by pressing Lever 4 in the direction to arrow mark.
2. Open Transportation Path 4 till locking the position.



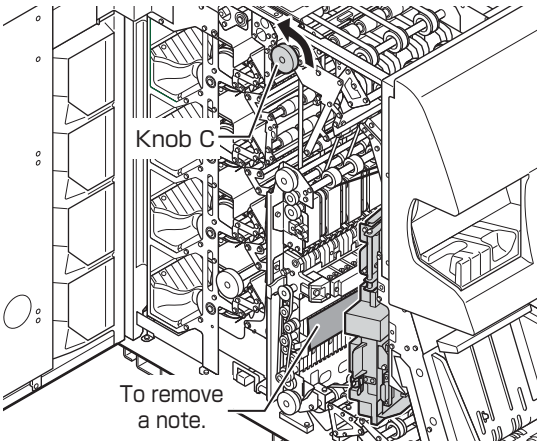
STEP-4 **Open the Validator Unit and remove remained notes.**

1. Release the clamp of Validator Unit.

2. Open the Validator Unit by holding the Lever 3.

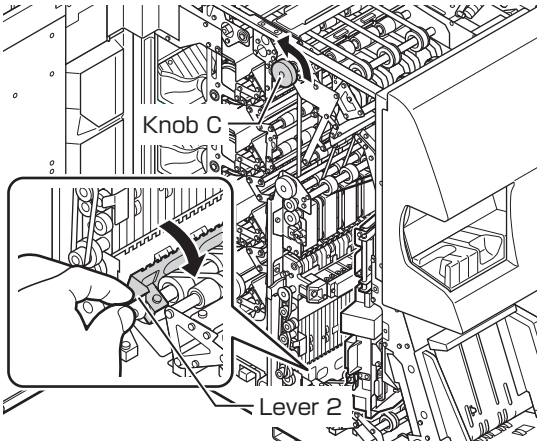


3. Remove note by rotating Knob C in the direction of the arrow mark.

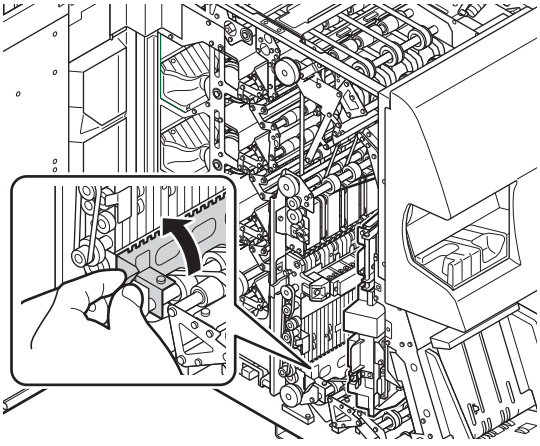


<u>In case a note is blocked.</u>

3-1. Open the Transportation Path 2 by the Lever 2 and remove a note blocked by rotating the Knob C.

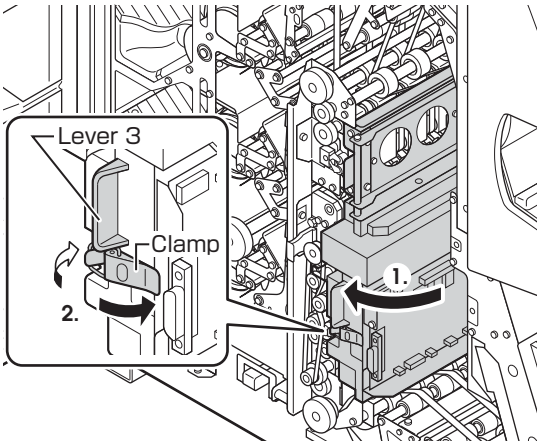


3-2. Close the Transportation Path 2 gently.



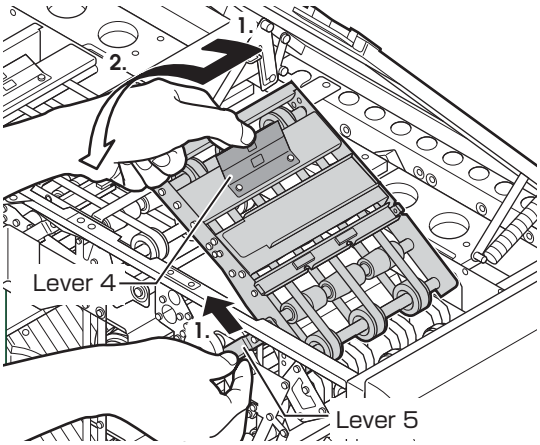
STEP-5 Close the Validator Unit.

1. Close the Validator Unit by the Lever 3.
2. Lock Validator Unit by clamp.

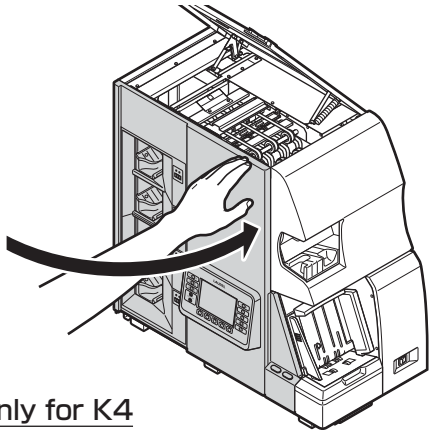


STEP-6 Close the Transportation Path 4.

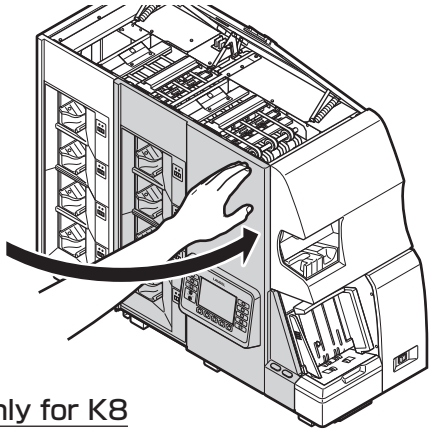
1. Keep up the Transportation Path 4 by the Lever 4 and unlock by pressing Lever 5.
2. Close the Transportation Path 4 gently.



STEP-7 Close the Front Door.



Only for K4



Only for K8

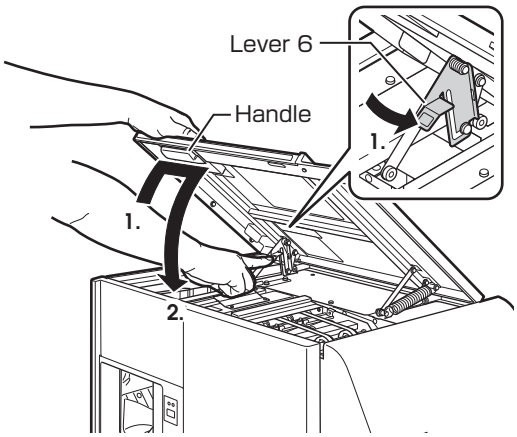
STEP-8 Close the Upper Door.

1. Keep up the Upper Door by the handle to unlock by pressing Lever 6.

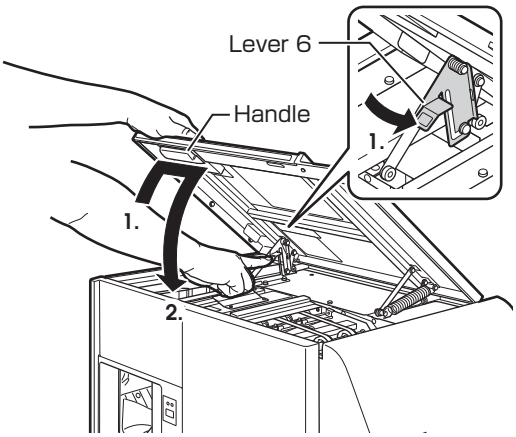
2. Close the Upper Door gently.

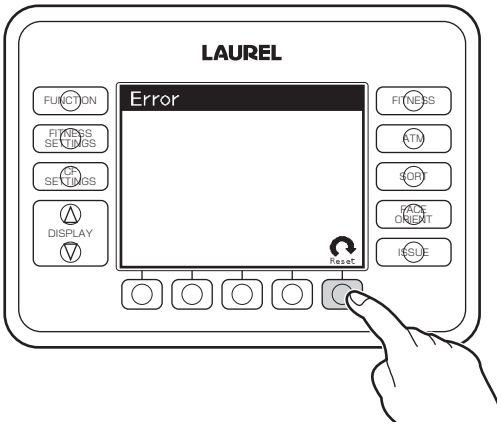
▷ The reset action gets started.

▷ Stand-by Display is shown after completing the reset action normally.



Only for K4



Only for K4

▷ If the reset does not get started, press F5 key to activate the reset.