iH-210 User Guide

3 Pockets Banknote Sorter

iH-210 is advanced banknote processing machine with maximized efficiency technology with 3 pockets banknote sorter.

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Introduction

Thank you for purchasing iH-210.

iH-210 is compact size with full Function 3 Pockets and saving workspace and minimize the cash processing movement.

iH-210 has Full color Dual CIS Sensor and equipped with a range of counterfeit detection technologies.

Furthermore, the machine has reliable Fitness sorting and Excellent tape detection performance.

Through 5 “Full LCD Color Touch Screen, 2-Teller mode& Multi-user mode and the related Application(Smart Integration Manager-SIM), iH-210 offers a highly convenient and easy operation.

For Safety Use (English)

Safety Guidelines

In this section, the compliance matters are described in order to use the product safely, and to prevent you and other people from the damages brought by the product to the human bodies or properties.

Please read this instruction manual thoroughly in advance to use in the correct way.

It denotes the contents in which mishandling of the product by neglecting this indication may cause people serious injury.

It denotes the contents in which mishandling of the product by neglecting this indication may cause people light injury or, physical damage.

	This symbol indicates that the precautions for handling the product. Please read the indications well and utilize the product safely.	
	This symbol indicates prohibited matters, do not attempt. Please read the indications well. Never try any prohibited matters.	
	This symbol denotes that there are indication matters which should be done without fail. Please read the indicated matters thoroughly and always perform them as shown.	

Warning Installation

1. At installation and relocation of the products, please contact our distributor near you or our designated dealers. If installation is not perfect, there is a risk of a falling accident, electric shock, fire, or burn injury.
2. At installation and use of the products, keep the space sufficient for opening and closing the door, cover and operation. If a part of the product touches a human body incorrectly, it may cause an accident.
3. In case of installing the product at the following places, you should confirm the Road Law, Road Traffic Law and Fire Protection Law, etc. If compliance conditions are not clear, please consult with the authorities concerned.
   - The place which may disturb traffic or accident prevention.
   - The place adjacent to the fire extinguishing and detecting apparatus.
   - The place adjacent to the road signs or traffic signals.
   - The place where combustible materials or gas are treated (gas stations, etc.)

   Passages and facilities for evacuation Illegal installation may cause an accident.
4. Keep an installation space as described in the instruction manual, and do not block or close the ventilation inlet. If the ventilation inlet is blocked, heat is accumulated inside and it may cause fire.
5. Depending on the installation place, mounting of an earth leakage breaker is required by Electricity Enterprises Law. Illegal installation may cause an accident.

1. Do not install the product in any place where water may spill on it. If water enters into the product, insulation performance degrades and it may cause fire and/or electric shock.
2. Do not install the product at the place where the floor cannot bear the load of the product, or at any unstable place with inclination and/or irregularity. It may cause floor caving and sudden movement accidents of the product to occur.
3. Installation at the following places should be avoided:
   - 1m or less from volatile combustible materials or curtains.
   - 1m or less from heating apparatus such as stoves, heaters etc.
   - Any place with direct winds blown from air conditioners, ventilating openings etc.
   - There are safety problems and deterioration of the product may be accelerated, which leads to any cause for failure.

- Any place with high temperature, high humidity, or low temperature.
- Any place with direct sunlight.
- Any place with large amounts of dust.

When installing the product at the following places, please contact our distributor near you or our designated dealers.

- Any place exposed to salty winds or corrosive gas.
- Any place with a large amount of swinging or vibration.

Grounding work should be made for safety and prevention of static electricity and noise failure. In addition, a ground wire should be installed independently without sharing the wire with other products. At grounding work, please be sure to contact our distributor near you or our designated dealers. In case of electrical leakage when grounding is insufficient or not connected, it may cause fire and/or electric shock.

The place where a ground wire can be fitted:

- Ground terminals for power receptacle.
- The copper piece etc. with a length of 65 cm or more, buried in the ground.
- The ground terminals on which grounding work is made.

The place where is a ground wire must not be fitted.

- Gas pipes
- Telephone wires for exclusive use
- Lightning rods
- Water pipes or faucets with plastic materials at their intermediate part.

Do not use or put the combustible materials such as thinner, combustible gas, or a high-volatile object around/inside the product. Otherwise, it may cause explosion and/or fire due to heating from the product or flashing from power supply..

Warning **Power Supply**

1. When using the product, connect it to the power supply specified in the instruction manual. If it is connected to the power supply, other than the product's specification, it may become a cause of fire, electric shock, and/or electrical leakage.
2. Do not use a power supply cord and the plug other than the attached ones. If a current that exceeds the rating flows in the power supply cord, it may cause fire.
3. Be sure to insert the blade part of the power supply plug into an outlet. Insufficient insertion may cause fire.

1. When the earth leakage breaker frequently operates, please contact our distributor near you or our designated dealers. If the product is used or left as it is, it may cause fire and/or electric shock.
2. Do not modify, process, or repair the power supply cord and the plug. In addition, do not convert a 3-prong power supply plug into a two-pole type. Grounding becomes insufficient and there may cause electric shock.

Please follow the items below to prevent electric shock and/or fire due to damage of the power supply cord.

- Do not pull the cord part when pulling out the power supply plug.
- Do not put anything on the cord part.
- Do not pass the cord near a source of heat.
- Do not bend or pinch the cord.
- Do not tread or twist the cord.
- Do not spill chemicals on the cord.
- Do not use it while it is bundled.
- Do not fix it with a stapler etc.

1. Do not use the power supply cord and the plug for other products or purposes. Further, when they are lost or damaged, please purchase them at our distributor near you or our designated dealers. The attached power supply cord and the plug are designed and confirmed the safety for connecting to this product to use. If they are used for other products or purposes, it may cause fire and/or electric shock.
2. The product should be used at the specified frequency. If it is used at other than the specified frequency, it may cause an accident.

Caution Handling

1. The product should be used under the environment specified in the instruction manual. If it is used under the other environment of the specification, there may cause fie and electric shock.
2. When operating inside the product for error or clearing or cleaning etc., the operation should be made in accordance with the description in the instruction manual. Operation other than the description may cause an accident.

1. Do not turn off the power, pull out the power supply plug, or open the cover of the product during the operation. Otherwise, it may cause an accident.
2. Do not put a vase or glass with an object and/or water etc. on the product. Otherwise, it may cause fire, electric shock, and/or injury by spilling water or dropping.
3. Do not apply shock on the product. There is a risk of damaging the product and normal operation cannot be performed.
4. Do not use chemicals such as thinner or benzene when removing dirt of the product. Otherwise, it may cause damages.
5. Do not use a interface cable other than the attached one. When cables are other than the attachment, it may cause the interface error or machine trouble.

Do not use a combustible spray etc. around product. If spraying gas etc. contacts the electrical parts inside the product, it may cause explosion and fire.

1. When touching inside the product for cleaning or parts replacement etc., be sure to turn off the power. If you work with turning the power on, it may cause electric shock and/or injury.
2. Do not touch the product, power supply plug, and cord with a wet hand. There is a risk of electric shock.
3. The electrical parts inside the product should not get wet by rain or water at cleaning etc. if they get wet, it may cause electric shock and/or shock.
4. Do not turn off air heating suddenly when the product is completely cold. Moisture may adhere inside the product due to sudden air heating and it may cause electric shock.

5. There is a charging part inside. Be sure to turn off the power before opening any cover. If the cover is opened without turning off the power, it may cause electric shock.

1. Do not drop any metallic piece such as a clip, staple etc. inside or in a clearance of the product. If a metallic piece drops inside the product and contacts the electric circuit, it may cause fire and/or damage to the product.
2. When the product is not use for a long time, be sure to pull out the power supply plug from an outlet for safety. Otherwise, it may cause heating and/or firing due to dust accumulation.

Do not modify the product or mount modified parts on the product. Further, do not dismount the portion which is not indicated to be opened/closed in the manual or the cover and parts etc. fixed with screws etc. Otherwise, it may cause fire, electric shock, and/or injury.

1. Keep your hand or clothes away from the machine during operation or any moving parts of the product reachable. This may cause body injury and/or damage to personal property.
2. When closing a door, pay attention not to not cause body injury or damage property.
3. When working ensure that all doors of the machine are locked. If a door is left open it may cause body injury or damage to property.

Do not touch the gear etc. It may cause injury.

Warning Maintenance

1. For repairing the product, please contact our distributor near you or our designated dealers. Insufficient repair may cause fire, electric shock, and/or injury.
2. When the product has sunk under the water due to a disaster etc., stop using it and please ask for repair/check to our distributor near you or our designated dealers. If used as it is, it may cause fire and/or electric shock.
3. Check periodically whether its installation place is unstable or not. If there is any abnormality, please contact our distributor near you or our designated dealers. If it is continuously used with insufficient installation, it may cause a falling accident.
4. Check and clean the power supply plug and the cord regularly. It the power supply plug is broken or the cord is damaged, stop using and please replace it by contacting our distributor near you or our designated dealers. It may cause fire and/or electric shock.

When smoke, abnormal smell or abnormal sound is generated from the product, stop using it immediately, cut off power supply and pull out the plug from the outlet. Then, please contact our distributor near you or our designated dealers. It used or left as it is, it may cause fire and/or electric shock.

Warning Others

1. This is a class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

2. The socket-outlet shall be installed near the equipment and shall be easily accessible.

3. Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Pour une utilisation sécuritaire (French)

Directives de sécurité

Dans cette section, les questions de conformité sont décrites afin d'utiliser le produit en toute sécurité et de vous protéger, vous et d'autres personnes, des dommages que le produit peut causer aux corps ou aux biens humains.
Veuillez lire attentivement ce manuel d'instruction avant de l'utiliser correctement.

⚠ **Warning**	Il indique le contenu dans lequel une mauvaise manipulation du produit en négligeant cette indication peut causer des blessures graves personnes.
⚠ **Caution**	Il indique le contenu dans lequel une mauvaise manipulation du produit en négligeant cette indication peut causer des blessures légères ou des dommages physiques.

	Ce symbole indique les précautions à prendre pour manipuler le produit. Veuillez bien lire les indications et utiliser le produit en toute sécurité.	
	Ce symbole indique des matières interdites, ne tentez pas. S'il vous plaît lire les indications bien. Ne jamais essayer des choses interdites.	
	Ce symbole indique qu'il y a des problèmes d'indication qui doivent être réalisés sans faute. Veuillez lire attentivement les informations indiquées et effectuez-les toujours comme indiqué.	

Warning Installation

1. Lors de l'installation et du déplacement des produits, veuillez contacter notre distributeur près de chez vous ou nos revendeurs désignés. Si l'installation n'est pas parfaite, il y a un risque de chute, d'électrocution, d'incendie ou de brûlure.
2. Lors de l'installation et de l'utilisation des produits, laissez suffisamment d'espace pour ouvrir et fermer la porte, le couvercle et le fonctionnement. Si une partie du produit touche mal le corps humain, cela peut provoquer un accident.
3. Si vous installez le produit aux endroits suivants, vous devez vérifier le code de la route, le code de la route, le code de protection contre les incendies, etc. Si les conditions de conformité ne sont pas claires, veuillez consulter les autorités concernées.
 - Lieu susceptible de gêner la circulation ou de prévenir les accidents.
 - L'endroit adjacent à l'appareil d'extinction et de détection d'incendie.
 - Le lieu adjacent aux panneaux de signalisation ou aux feux de circulation.
 - L'endroit où les matériaux combustibles ou le gaz sont traités (stations-service, etc.) Passages et installations d'évacuation Une installation illégale peut causer un accident.
4. Conservez un espace d'installation tel que décrit dans le manuel d'utilisation, et ne bloquez pas ou ne fermez pas l'entrée de ventilation. Si l'entrée de ventilation est bouchée, de la chaleur s'y accumule et peut provoquer un incendie..
5. En fonction du lieu d'installation, la loi sur les entreprises d'électricité exige le montage d'un disjoncteur de fuite à la terre. Une installation illégale peut causer un accident.

1. N'installez pas le produit dans aucun endroit où de l'eau pourrait se répandre dessus. Si de l'eau pénètre dans le produit, les performances de l'isolant se dégradent et peuvent provoquer un incendie et / ou un choc électrique.
2. N'installez pas le produit à un endroit où le sol ne peut pas supporter la charge du produit, ni à un endroit instable avec une inclinaison et / ou des irrégularités. Cela pourrait provoquer la spéléologie du sol et des accidents de mouvement soudains du produit.
3. L'installation aux endroits suivants devrait être évitée:
   - 1 m ou moins de matières combustibles volatiles ou de rideaux.
   - 1 m ou moins d'appareils de chauffage tels que poêles, appareils de chauffage, etc..
   - Tout endroit directement soumis à des vents soufflant des climatiseurs, des ouvertures de ventilation, etc.

- Il y a des problèmes de sécurité et la détérioration du produit peut être accélérée, ce qui entraîne toute cause de panne.
- N'importe quel endroit à haute température, forte humidité ou basse température.
- Tout lieu directement exposé au soleil.
- N'importe quel endroit avec beaucoup de poussière.

Lors de l'installation du produit aux endroits suivants, veuillez contacter notre distributeur ou vos revendeurs désignés.

- Tout endroit exposé aux vents salés ou aux gaz corrosifs.
- N'importe quel endroit avec une grande quantité d'oscillation ou de vibration.

Des travaux de mise à la terre doivent être effectués pour la sécurité et la prévention de l'électricité statique et des défaillances sonores. De plus, un fil de terre doit être installé indépendamment, sans le partager avec d'autres produits. Lors des travaux de mise à la terre, assurez-vous de contacter notre distributeur près de chez vous ou nos revendeurs désignés. En cas de fuite électrique lorsque la mise à la terre est insuffisante ou non connectée, cela peut provoquer un incendie et / ou un choc électrique.

L'endroit où un fil de terre peut être installé:

- Bornes de terre pour prise de courant.
- la pièce de cuivre, etc., d'une longueur de 65 cm ou plus, enfouie dans le sol.
- Les bornes de terre sur lesquelles sont effectués les travaux de mise à la terre.

Le lieu où se trouve un fil de terre ne doit pas être installé.

- Tuyaux de gaz
- Fils téléphoniques à usage exclusif
- Paratonnerres
- Conduites d'eau ou robinets avec des matières plastiques à leur partie intermédiaire.

N'utilisez pas et ne placez pas de matériaux combustibles tels qu'un diluant, un gaz combustible ou un objet très volatil autour / à l'intérieur du produit. Sinon, cela pourrait provoquer une explosion et / ou un incendie dû à la chaleur du produit ou au clignotement de l'alimentation.

Warning **Source de courant**

1. Lorsque vous utilisez le produit, branchez-le sur l'alimentation spécifiée dans le manuel d'instructions. S'il est connecté à une source d'alimentation autre que celle spécifiée par le produit, il peut devenir une cause d'incendie, de choc électrique et / ou de fuite électrique.
2. N'utilisez pas de cordon d'alimentation et de fiche autres que ceux fournis. Si un courant supérieur à la valeur nominale circule dans le cordon d'alimentation, cela peut provoquer un incendie.
3. Veillez à insérer la partie lame de la fiche d'alimentation dans une prise. Une insertion insuffisante peut provoquer un incendie.

1. Lorsque le disjoncteur de fuite à la terre fonctionne fréquemment, veuillez contacter notre distributeur ou vos revendeurs désignés. Si le produit est utilisé ou laissé tel quel, il peut provoquer un incendie et / ou un choc électrique.
2. Ne pas modifier, traiter ou réparer le cordon d'alimentation et la fiche. De plus, ne convertissez pas une fiche d'alimentation à 3 broches en un type à deux pôles. La mise à la terre devient insuffisante et peut provoquer un choc électrique.

Veuillez suivre les instructions ci-dessous pour éviter un choc électrique et / ou un incendie dû à un endommagement du cordon d'alimentation.

- Ne tirez pas sur le cordon lorsque vous retirez la prise d'alimentation.
- Ne posez rien sur le cordon.
- Ne passez pas le cordon près d'une source de chaleur.
- Ne pliez pas et ne pincez pas le cordon.
- Ne marchez pas et ne tordez pas le cordon.
- Ne renversez pas de produits chimiques sur le cordon.
- Ne l'utilisez pas lorsqu'il est groupé.
- Ne le fixez pas avec une agrafeuse, etc.

1. N'utilisez pas le cordon d'alimentation ni la fiche pour d'autres produits ou usages. De plus, quand ils sont perdus ou endommagés, veuillez les acheter chez notre distributeur près de chez vous ou chez nos revendeurs désignés. Le cordon d'alimentation et la fiche fournis sont conçus et garantissent la sécurité de la connexion à ce produit. S'ils sont utilisés pour d'autres produits ou usages, cela peut provoquer un incendie et / ou un choc électrique.
2. Le produit doit être utilisé à la fréquence indiquée. S'il est utilisé à une fréquence autre que celle spécifiée, cela peut provoquer un accident.

Caution

Manipulation

1. Le produit doit être utilisé dans l'environnement spécifié dans le manuel d'utilisation. S'il est utilisé dans un autre environnement que celui spécifié dans la spécification, cela pourrait provoquer un choc électrique et électrique.
2. Lors de l'utilisation à l'intérieur du produit à la recherche d'erreurs, de nettoyage ou d'effacement, etc., cette opération doit être effectuée conformément à la description du mode d'emploi. Toute opération autre que celle décrite peut provoquer un accident.

1. Ne mettez pas l'appareil hors tension, ne débranchez pas le cordon d'alimentation et n'ouvrez pas le capot du produit pendant son utilisation. Sinon, cela pourrait causer un accident.
2. Ne posez pas de vase ou de verre avec un objet et / ou de l'eau, etc. sur le produit. Sinon, cela pourrait provoquer un incendie, un choc électrique et / ou des blessures en renversant de l'eau ou en tombant.
3. Ne pas appliquer de choc sur le produit. Il y a un risque d'endommager le produit et le fonctionnement normal ne peut pas être effectué.
4. N'utilisez pas de produits chimiques tels que diluants ou benzène lorsque vous enlevez la saleté du produit. Sinon, cela pourrait causer des dommages.
5. N'utilisez pas de câble d'interface autre que celui fourni. Lorsque les câbles ne sont pas connectés, cela peut provoquer une erreur d'interface ou un problème de machine.

N'utilisez pas d'aérosol combustible, etc. autour du produit. Si du gaz, etc. en contact avec les pièces électriques à l'intérieur du produit, cela pourrait provoquer une explosion et un incendie.

1. Lorsque vous touchez l'intérieur du produit pour le nettoyage ou le remplacement de pièces, etc., assurez-vous d'éteindre l'appareil. Si vous travaillez avec la mise sous tension, cela peut provoquer un choc électrique et / ou des blessures.
2. Ne touchez pas le produit, la fiche d'alimentation et le cordon avec les mains mouillées. Il y a un risque de choc électrique.
3. Les pièces électriques à l'intérieur du produit ne doivent pas être mouillées par la pluie ou l'eau lors du nettoyage, etc.
S'ils sont mouillés, cela peut provoquer un choc électrique et / ou un choc électrique.

4. N'éteignez pas le chauffage d'air brusquement lorsque le produit est complètement froid. L'humidité peut adhérer à l'intérieur du produit en raison du réchauffement soudain de l'air et peut provoquer un choc électrique.
5. Il y a une partie de charge à l'intérieur. Assurez-vous de couper l'alimentation avant d'ouvrir un couvercle. Si le couvercle est ouvert sans mettre le périphérique hors tension, cela peut provoquer un choc électrique.

1. Ne laissez pas tomber de pièce métallique telle qu'un clip, une agrafe, etc. à l'intérieur ou à l'écart du produit. Si une pièce métallique tombe à l'intérieur du produit et entre en contact avec le circuit électrique, cela peut provoquer un incendie et / ou endommager le produit.
2. Lorsque le produit n'est pas utilisé pendant une longue période, veillez à débrancher le cordon d'alimentation de la prise pour des raisons de sécurité. Sinon, cela pourrait provoquer un échauffement et / ou une inflammation en raison de l'accumulation de poussière.

Ne modifiez pas le produit et ne montez pas de pièces modifiées sur le produit. En outre, ne démontez pas la partie non indiquée dans le manuel, le couvercle, les pièces, etc., fixés avec des vis, etc. Cela pourrait provoquer un incendie, un choc électrique et / ou des blessures.

1. Gardez vos mains ou vos vêtements éloignés de la machine pendant le fonctionnement ou toute partie mobile du produit accessible. Cela pourrait causer des blessures corporelles et / ou des dommages aux biens personnels.
2. Lorsque vous fermez une porte, veillez à ne pas causer de blessures corporelles ou de dommages matériels.
3. Lorsque vous travaillez, assurez-vous que toutes les portes de la machine sont verrouillées. Si une porte est laissée ouverte, cela peut causer des blessures corporelles ou des dommages matériels.

Ne touchez pas l'engrenage, etc. Cela pourrait vous blesser.

Warning Entretien

1. Pour réparer le produit, veuillez contacter notre distributeur près de chez vous ou nos revendeurs désignés. Une réparation insuffisante peut provoquer un incendie, un choc électrique et (ou) des blessures.
2. Si le produit a sombré sous l'eau suite à une catastrophe, etc., arrêtez de l'utiliser et veuillez demander une réparation / vérification à notre distributeur local ou à nos revendeurs désignés. Si utilisé tel quel, cela peut provoquer un incendie et / ou un choc électrique.
3. Vérifiez périodiquement si son lieu d'installation est instable ou non. En cas d'anomalie, veuillez contacter notre distributeur près de chez vous ou nos revendeurs désignés. S'il est utilisé en permanence avec une installation insuffisante, il peut provoquer une chute accidentelle.
4. Vérifiez et nettoyez régulièrement la fiche d'alimentation et le cordon. Si la fiche d'alimentation est cassée ou si le cordon est endommagé, arrêtez de l'utiliser. Veuillez le remplacer en contactant notre distributeur local ou vos revendeurs désignés. Cela pourrait provoquer un incendie et / ou un choc électrique.

Si de la fumée, une odeur ou un son anormal sont générés par le produit, arrêtez de l'utiliser immédiatement, coupez l'alimentation électrique et retirez la fiche de la prise. Ensuite, veuillez contacter notre distributeur près de chez vous ou nos revendeurs désignés. Utilisé ou laissé tel quel, il peut provoquer un incendie et / ou un choc électrique.

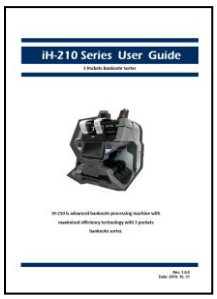
Warning Autres

1. Ceci est un produit de classe A. Dans un environnement domestique, ce produit peut provoquer des interférences radio, auquel cas l'utilisateur peut être tenu de prendre les mesures adéquates.
2. La prise de courant doit être installée à proximité de l'équipement et doit être facilement accessible.
3. Risque d'explosion si la batterie est remplacée par un type incorrect. Jetez les piles usagées conformément aux instructions.

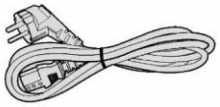
Packing List

iH-210 Series

Manual



Power Cable



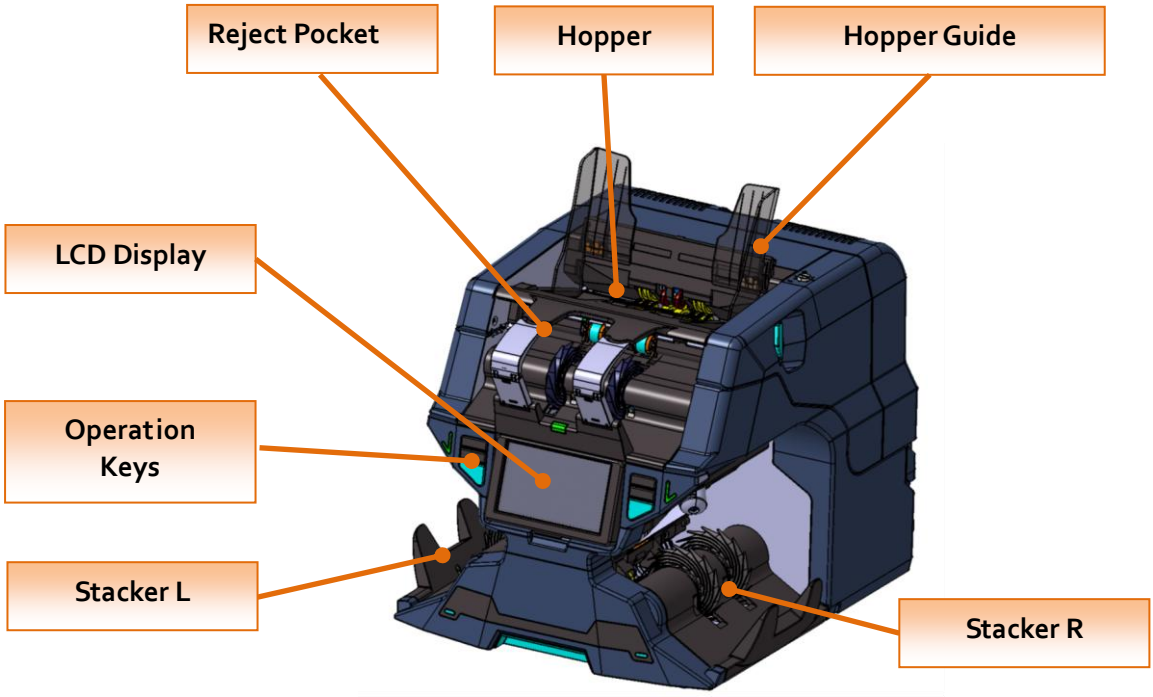
Options *(sold separately)*

External Display

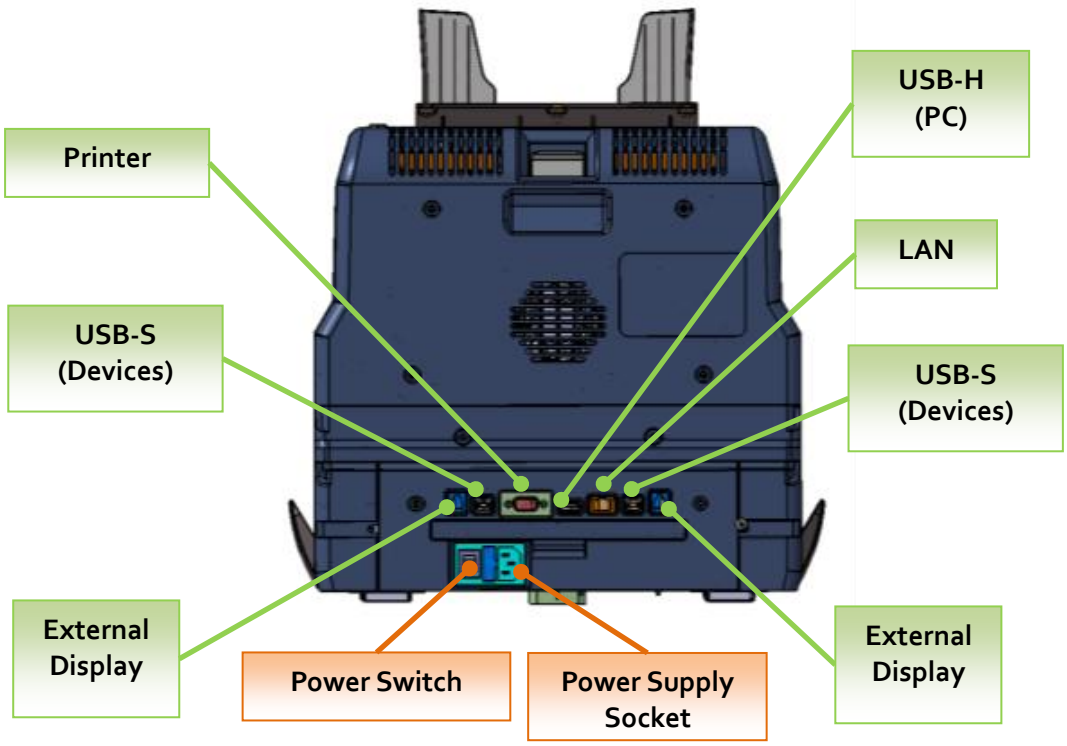
Serial Printer

Appearance

<Front View>

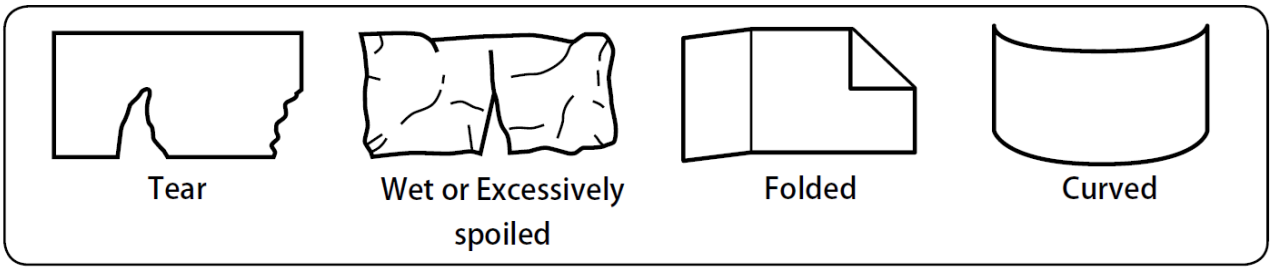


<Rear View>

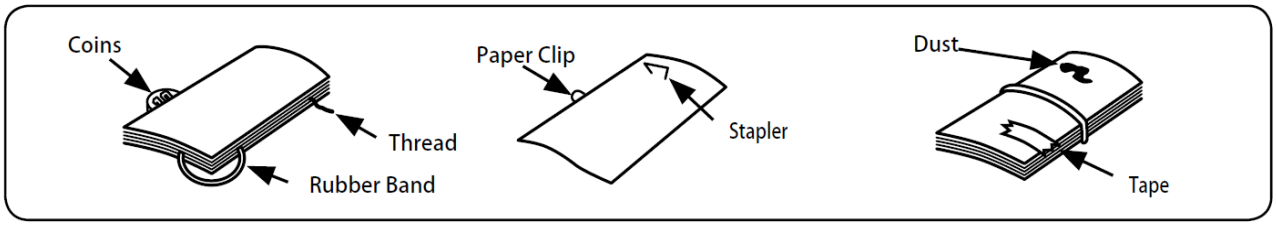


Before Using

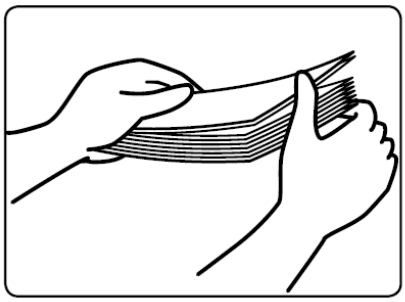
Avoid counting wet, excessively dirty or spoiled notes.



Check for foreign matter (paper chips, rubber bands, clips, dust etc.) mixed with notes.

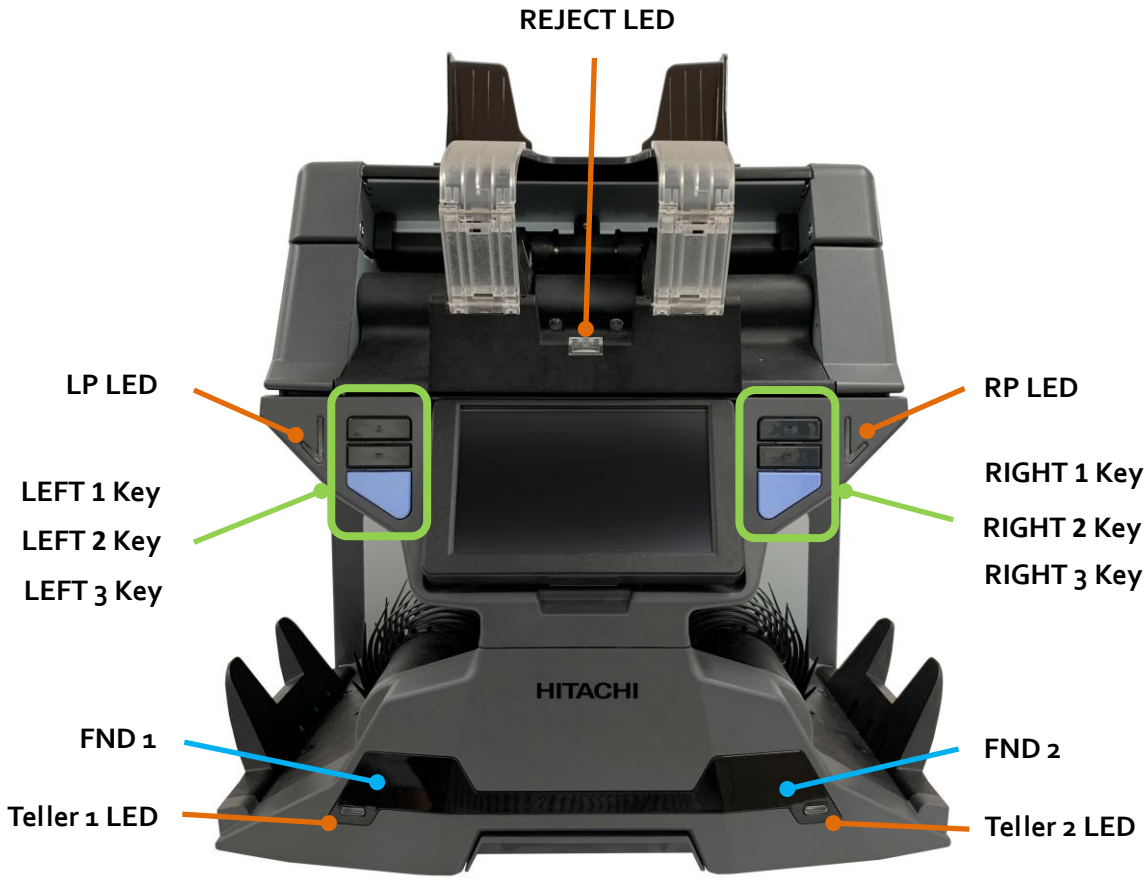


Remove folds or end from notes beforehand. Spread and separate brand new notes well for some of them are slightly adhesive.



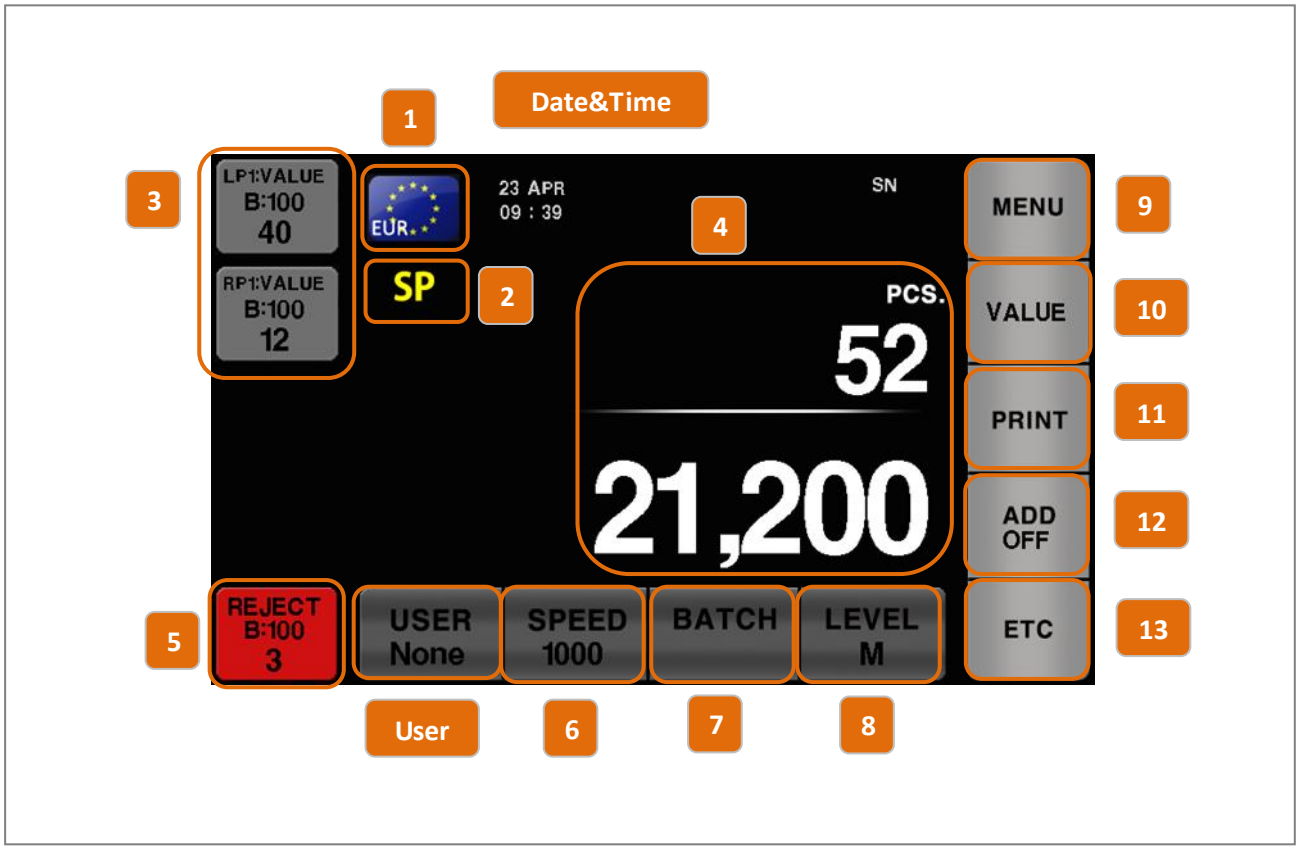
Align all the four corners and edges of notes. Any unevenness may cause an error.

1. Key Operation



Key		Explain
LEFT 1	Short Key	Change Local Currency.
	Long Key	Go to Select Local screen.
LEFT 2	Short Key	Change Counting Mode.
	Long Key	Not available.
LEFT 3	Short Key	Stop the machine operation manually. Go to the previous screen.
	Long Key	Not available.
RIGHT 1	Short Key	Go to MENU screen.
	Long Key	Not available.
RIGHT 2	Short Key	Go to ETC screen.
	Long Key	Not available.
RIGHT 3	Short Key	Stop the machine operation manually. Go to the previous screen.
	Long Key	Not available.

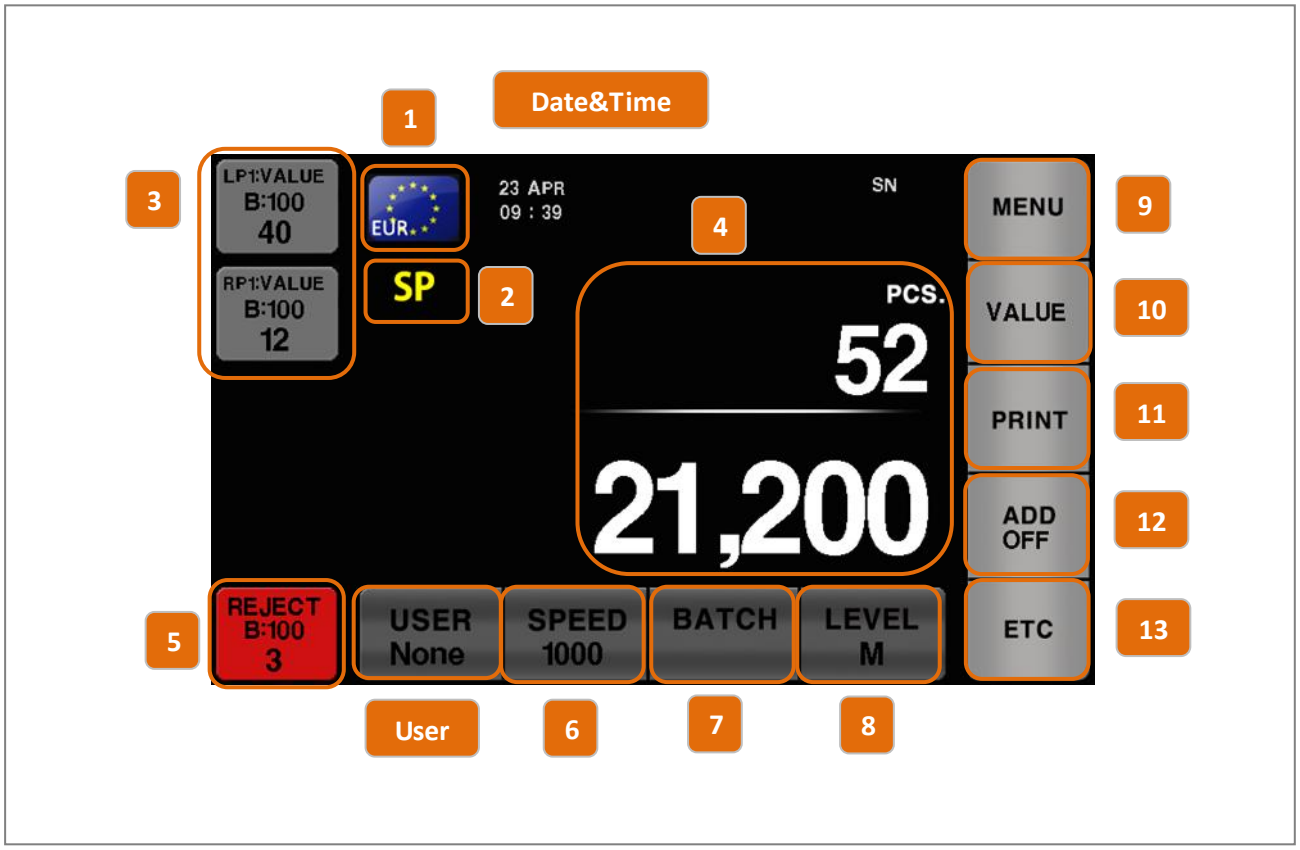
2. Display Operation



1	Display the current local currency and change the currency including Mix Currency.
2	Display and change Counting Mode. (MIX, SP, SG, USER.)
3	Information of Stacker L and Stacker R.
4	Display Quantity(Pieces) and Amount and view count result.
5	Display Reject Amount and see the details..
6	Display and change Speed.
7	Set Batch number for Stacker L and Stacker R.
8	Set User Level. (High, Middle, Low).
9	Enter Menu screen
10	Set Operation Mode. (VALUE, PREFIT, ATM, FIT, ATM+FIT).
11	Icon for printing the receipt of counting result.

12	Turn on/off ADD function.
13	Enter ETC screen.
Date&Time	Display and set date and time.
User	Display the current user and select the user.

3. Basic Operation



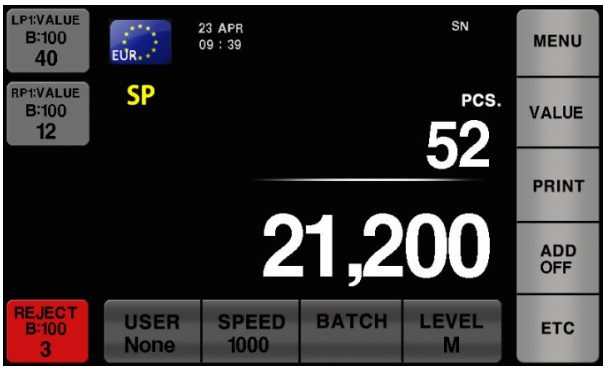
3-1. Currency Mode (including Multi Currency)

By short touch the currency icon, change the currency mode.

If long touch the currency icon, go to “Select Local” screen.

3-2. Count Mode

By short touch the currency icon, change the count mode.

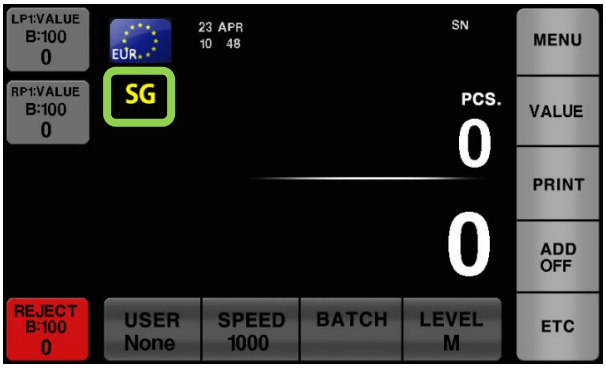


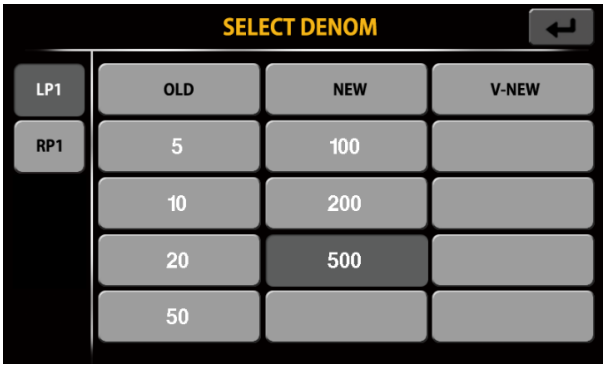
1) MIX : Count all denominations of selected currency.

2) SP: The first inserted denomination is sent to Stacker Pocket.

3) SG: The selected denomination is counted.

After select SG mode, long touch “SG”, “SELECT DENOM” screen is shown.



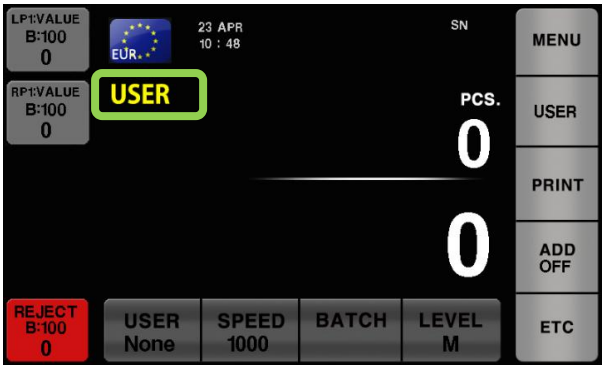


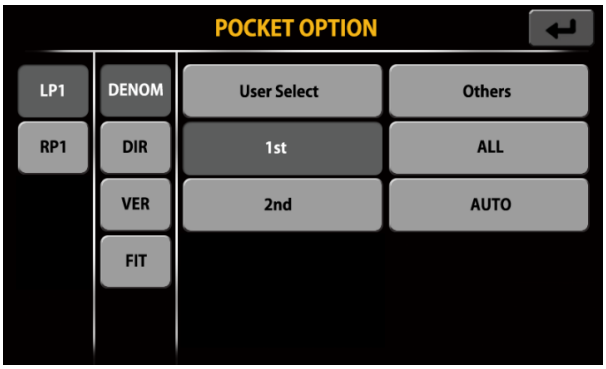
When select Version(OLD, NEW, V-NEW), only the version is sent to Left Pocket or Right Pocket.

When select a denomination, the denomination is counted.

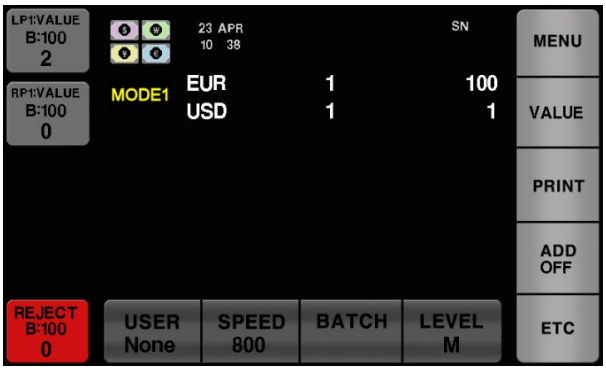
4) USER: the user set the pocket option for counting notes.

After select USER mode, long touch “USER”, “POCKET OPTION” screen is shown.





If Multi Currency is selected, count mode is changed as below.

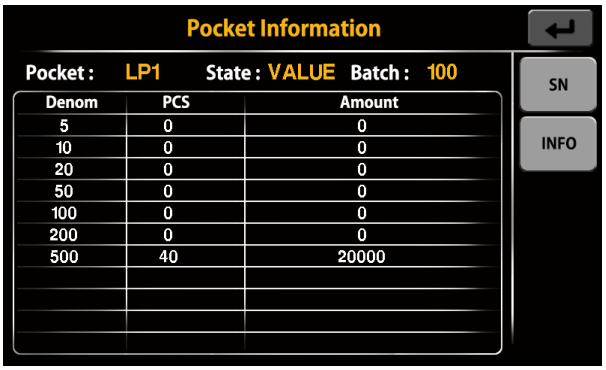


- **ALL** : Count all currencies and denominations.
- **MIX** : MIX mode for the first recognized currency.
- **SP** : SP mode for the first recognized currency.
- **SG** : The selected denomination is sent to Stacker Pocket.
- **PC** (Pocket Currency) : Count by specifying local for each pocket.

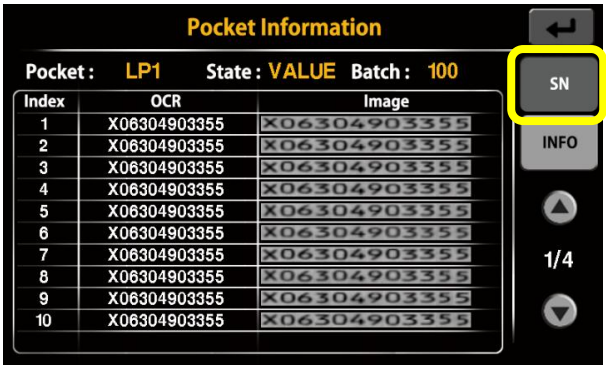
3-3. Stacker Pocket Information

You can check the count mode, batch number and the counted notes by Stacker Pocket icon.
And the color of icon is changhed by the selected count mode.

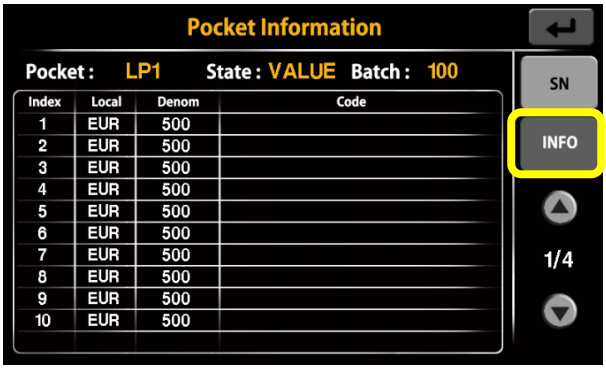
By short touch Left&Right Pocket icon, Pocket Information screen is shown.



When click “SN” icon, the details of SN regognition are shown. (SN function must be turned on.)

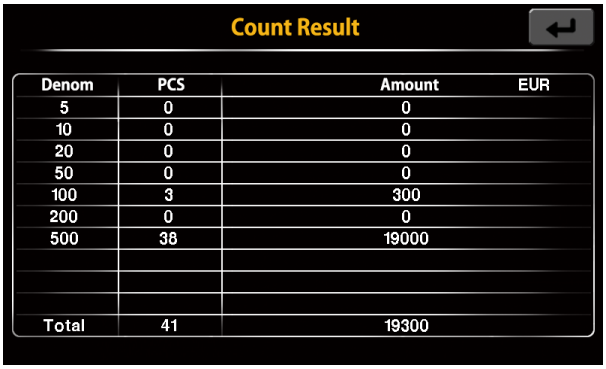


When click “INFO” icon, the currency, denomination, error code(unfit and reject) about the counted notes are shown.



3-4. Count Result on Main Screen

When touch the count result displayed on the screen, Count Result screen is shown.



3-5. Reject Pocket Information

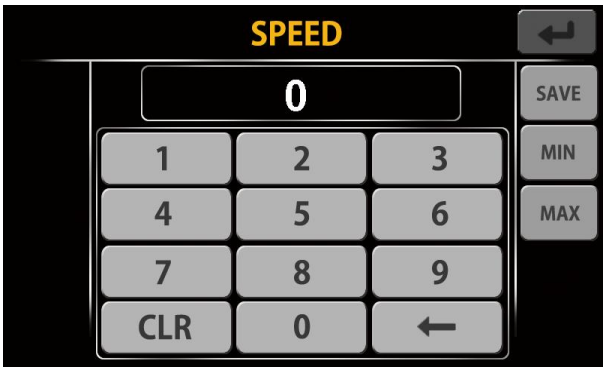
You can check the batch number and the rejected notes by Reject Pocket icon.

By short touch Reject Pocket icon, Pocket Information screen is shown too.

3-6. SPEED

When short click SPEED icon, the counting speed is increased by 100 units.

If you long click the icon, SPEED Setting screen is shown.



When click “MIN” button, the speed is set to 600.

When click “MAX” button, the speed is set to 1300.

After enter the speed, you have to click “SAVE” button to save the change.

3-7. BATCH

When short click BATCH icon, the batch of Stacker Pocket is increased by 100 units.

If you long click the icon, BATCH Setting screen is shown.

After select Pocket first, enter the new batch number.

When click “ALL” button, you can set LP1 and RP1 together.

The range of batch number is as below.

LP1 and RP1 : 10 ~ 300 notes

REJECT: 10 ~ 150 notes

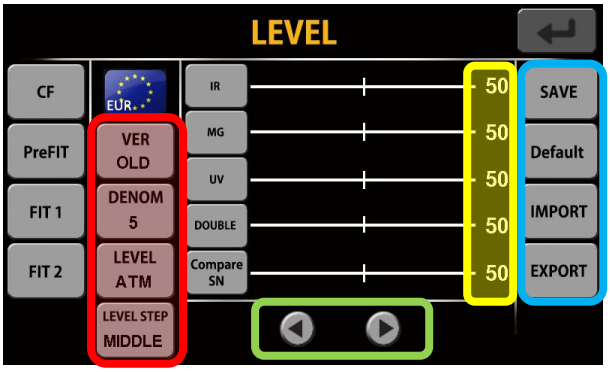
After enter the speed, you have to click “SAVE” button to save the change.

3-8. LEVEL

This function is available when “Fit Level Activation” is turned on. (4-3. Operation- page 38~39)

When click “LEVEL” icon, the level is changed to High -> Middle -> Low.

If you long click the icon, LEVEL Setting screen is shown.



In the area marked in red, you can set the version, volume, level and level step you want to change.

When counting on the LEVEL screen, the level setting target is automatically changed to the version and denom of the counted note.

If “Fit Level Activation” is turned off, Middle level is default.

By clicking “<” or “>” button, you can increase the each parameters by 5 units.

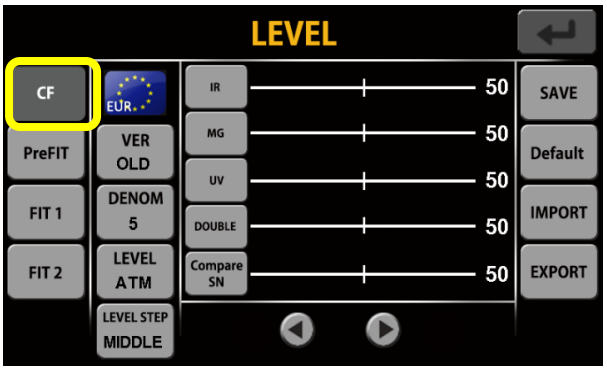
After selecting a parameter, click on the yellow colored area and you can enter the parameter value directly.

After change the parameter value, you have to click “SAVE” button to save the change.

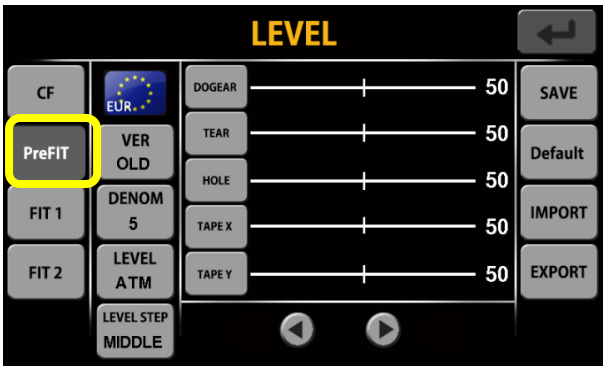
When click “Default”, the default value is loaded.

By IMPORT and EXPORT button, you can load the parameter level from USB or save the currenct level to USB.

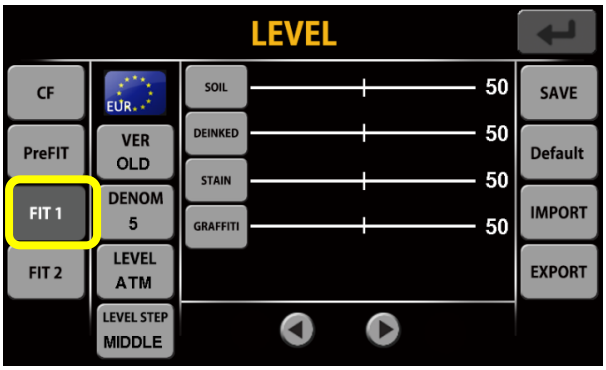
1) CF Parameters: IR, MG, UV, Double, Compare SN



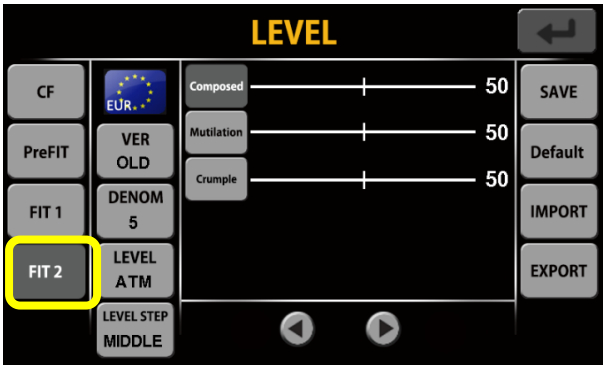
2) PreFIT Parameters: Dogear, Tear, Hole, Tape X, Tape Y



3) FIT 1 Parameters: Soil, Deinked, Stain, Graffiti

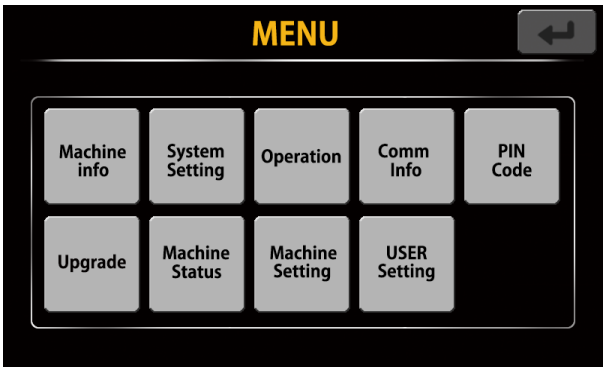


4) FIT2 Parameters: Composed, Mulilation, Crumple



3-9. MENU

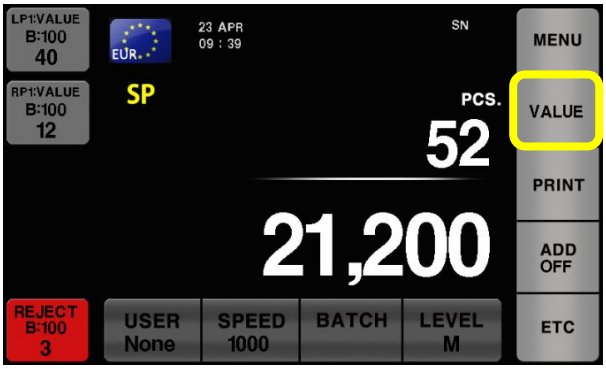
When click “MENU” icon, enter MENU screen.



A detailed description of the MENU screen can be found in Chapter 4.

3-10. Operation Mode

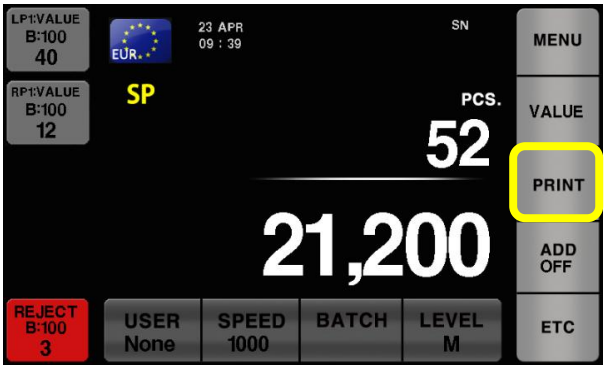
You can check the currently selected operation mode and click the icon to change the operation mode.



- VALUE: Fitness is off.
- PREFIT: Detect(Reject) Dogear, Tear, Hole and Tape notes.
- ATM: Sort the notes by ATM and UNFIT.
- FIT: Sort the notes by FIT and UNFIT.
- ATM+FIT: Sort the notes by ATM, FIT and UNFIT.

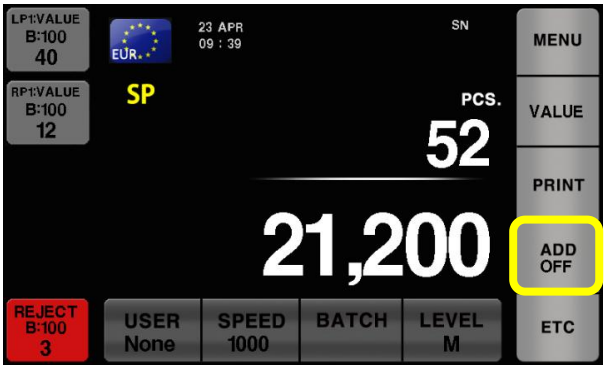
3-11. PRINT

When click “PRINT” icon, the currenct counting result is printed to receipt.



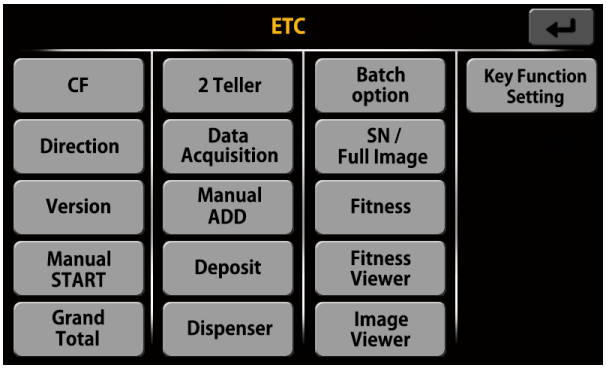
3-12. ADD

Turn on or off ADD function.



3-13. ETC

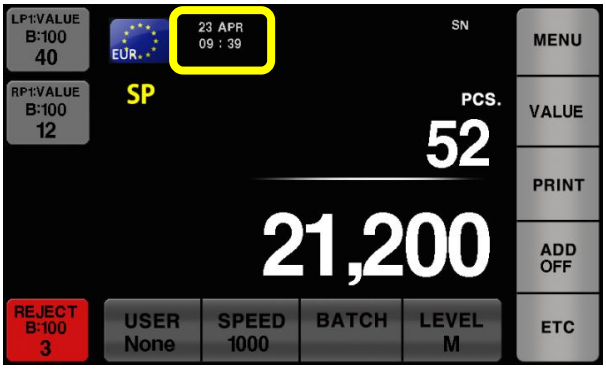
When click “ETC” icon, enter ETC screen.



A detailed description of the ETC screen can be found in Chapter 5.

3-14. Date&Time

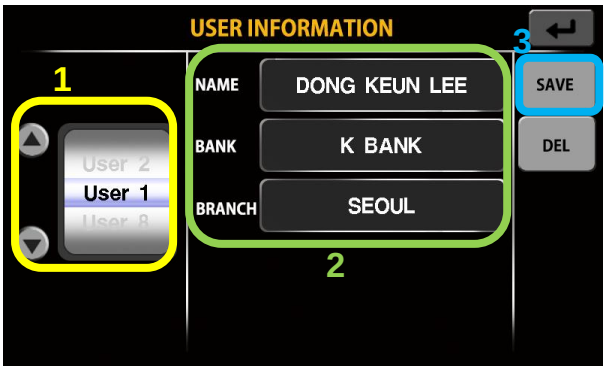
The set date and time are displayed.



3-15. USER

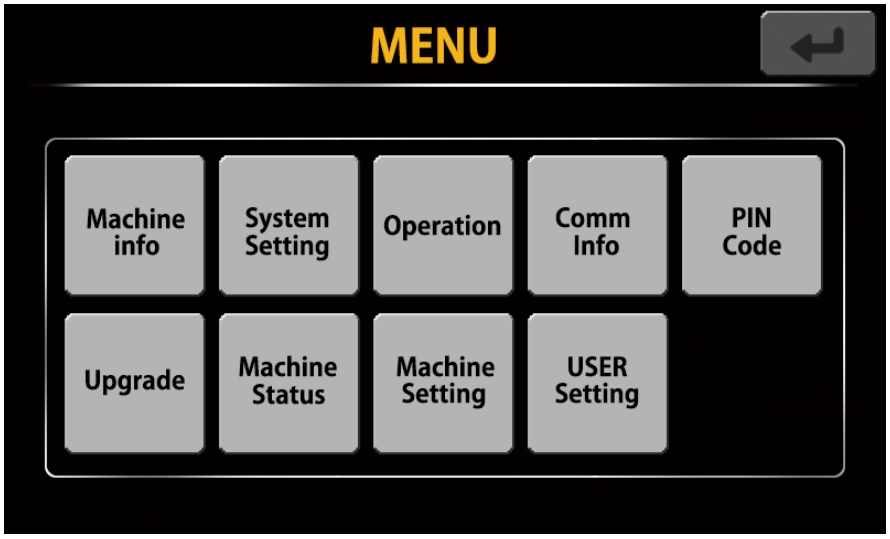
When short click USER icon, the registered users are selected in turn.

If you long click the icon, USER INFORMATION screen is shown.



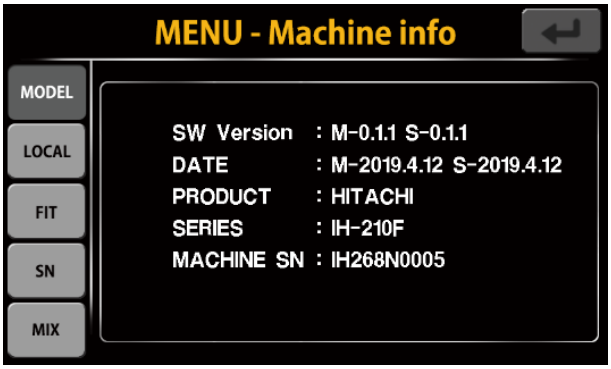
Select the user, enter the relevant information and press the "SAVE" button to save the entered user information.

4. MENU Screen



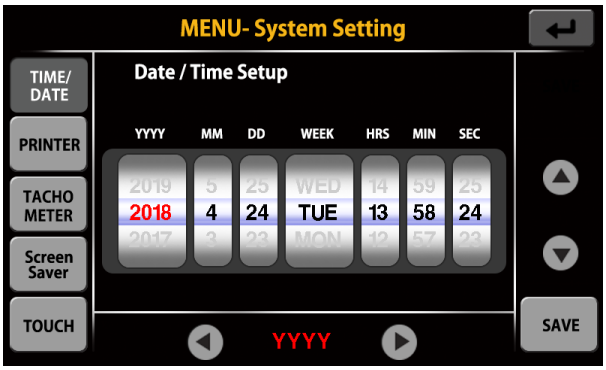
4-1. Machine info

You can check S / W information, machine serial number, and local currency information on the machine..



4-2. System Setting

You can set TIME / DATA and PRINTER, check TACHOMETER information, and set Screen Saver and TOUCH screen.

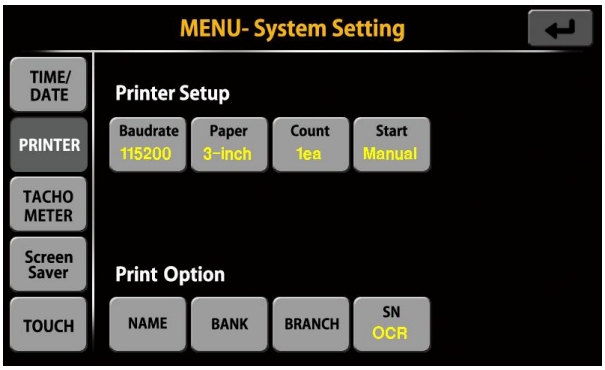


1) TIME/DATE

After setting the date and time, press the "SAVE" button to save.

2) PRINTER

You can select the setting and output option of the serial printer connected to the machine.



- Printer Setup

Baudrate: Set the baudrate with the connected printer. (9600 ~ 115200)

Paper: Paper size of the receipt. (2 or 3 inch)

Count: Neumber of the receipt. (1 ~ 2 ea)

Start: Choose whether to print the receipt manually or automatically

- Print Option

NAME: Print the user name to the receipt.

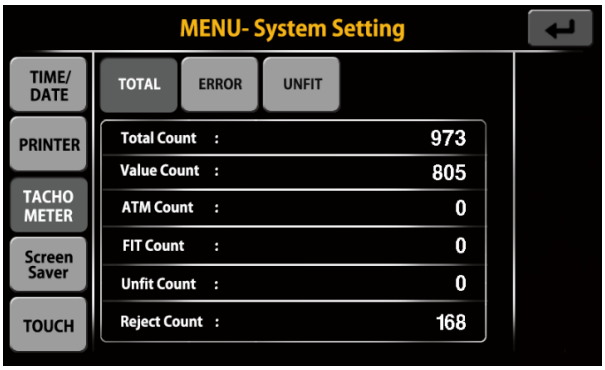
BANK: Print the bank name to the receipt.

BRANCH: Print the branch name to the receipt.

SN: Select Serial Number output type. (OCR, Image, OFF)

3) TACHOMETER

Counted banknotes quantity indication after factory shipment

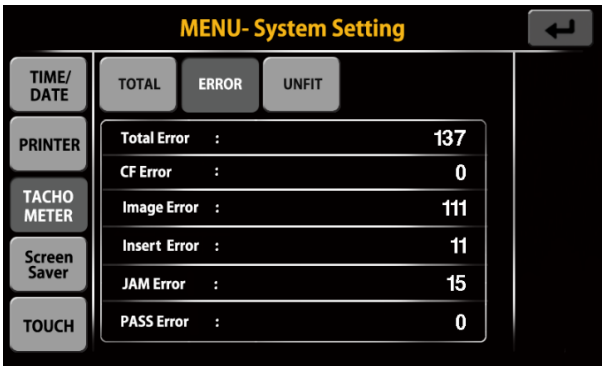


- TOTAL

Value Count refers to the number of notes sent to the stacker in value mode and prefit mode.

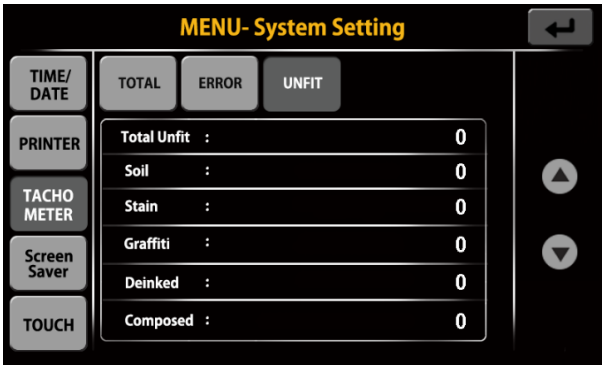
- ERROR

The number of bills sent to the reject pocket can be checked for each classified error.



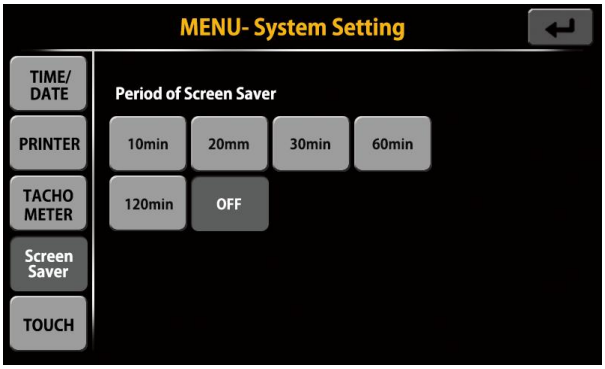
- UNFIT

You can check the number of banknotes recognized as UNFIT.



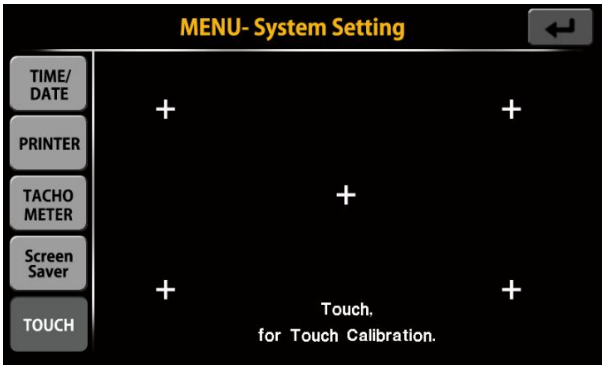
4) Screen Saver

If the machine is idle for a selected amount of time, the LCD screen will dim.



5) TOUCH

You can proceed Touch calibration of LCD screen.

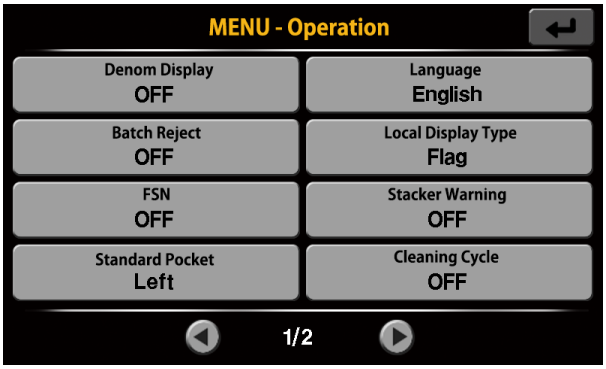


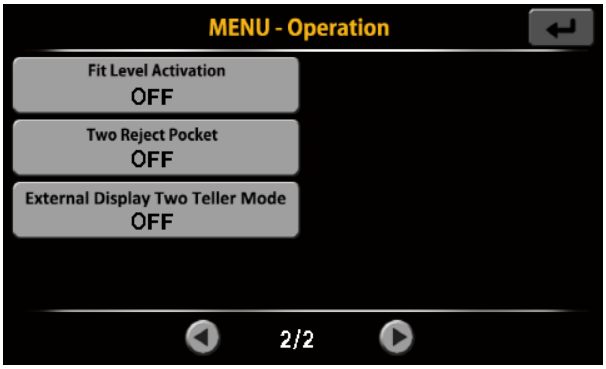
Touch “+” shape in the order of the numbers on the screen until the numbers turn yellow.

If it doesn't turn yellow, touch another + first.

When all five are yellow, the setting is complete.

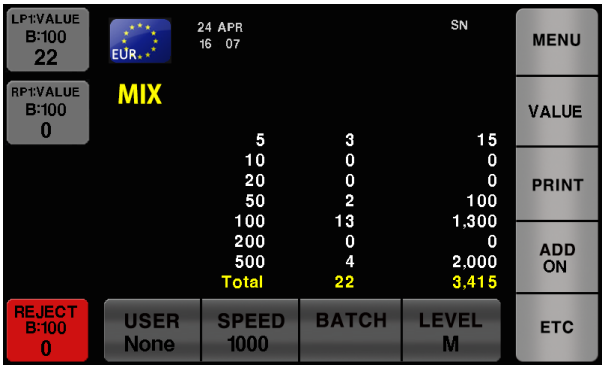
4-3. Operation





1) Denom Display

If it is set to ON, all denominations of the local currency is displayed on the count screen.



2) Batch Reject

If it is set to ON, notes are counted without Batch Full Reject.

3) FSN

Change to SN Data FSN protocol.

4) Language

Select the language displayed on the screen.

5) Local Display Type

Select the symbol of local currency displayed on the coefficient screen (Flag, Text).

6) Stacker Warning

If the bill is not removed for the selected time while the batch is full, an alarm will sound.
(OFF ~ 240s)

7) Cleaning Cycle

If you count banknotes above the selected quantity, you will be prompted to clean the machine.

8) Fit Level Activation

When it is set to ON, the user level can be divided into high, middle, and low levels.

9) Standard Pocket

Set the reference pocket (Pocket Left or Pocket Right). When counting bills, the counted notes are stacked to the reference pocket first.

10) Two Reject Pocket

Set two reject pockets. One of the stacker pockets becomes a reject pocket, and the pockets are stacked with discriminated counterfeits.

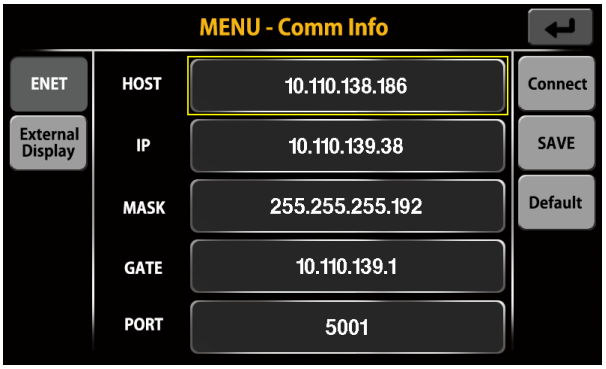
11) External Display Two Teller Mode

When set to ON, the display is only displayed in the right port when the right user is selected in the two teller mode, and the display is updated only in the left port when the left user is selected. When set to OFF, both are updated at the same time.

4-4. Comm Info

Set up ENET and External Display connection.

1) ENET



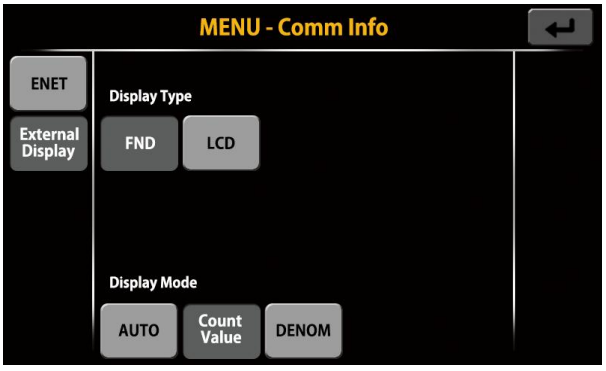
After selecting each item, press and hold the item to edit it.

After enter all items, try to press “Connect” button to connect the machine to Server.

You can save the current setting by pressing “SAVE” Button.

When press “Default” button, Default ENET Setting is loaded.

2) External Display



- Display Type: FND type and LCD type can be selected.

- Display Mode: Select information displayed on the screen of External Display.

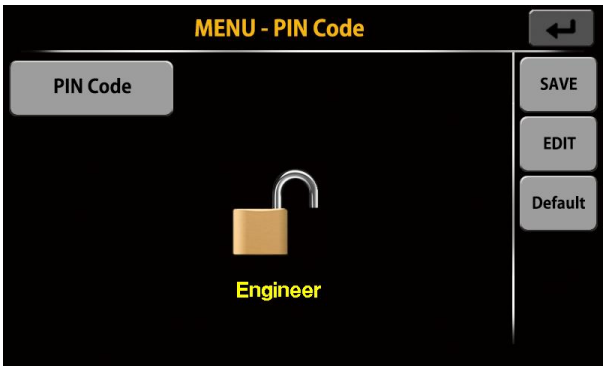
AUTO: It will automatically change to Count Value or Denom depending on the screen of the machine. (Only for LCD Type)

Count Value: Displays the total count and amount of bills counted.

DENOM: Displays count and amount of all denominations of counted currency. (Only for LCD Type)

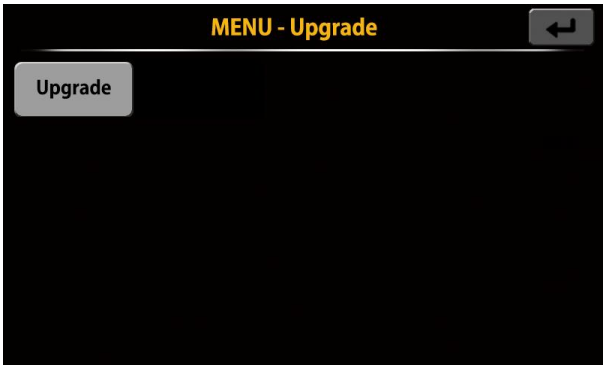
4-5. PIN Code

You can enter and modify the machine's pincode and load the default pincode.



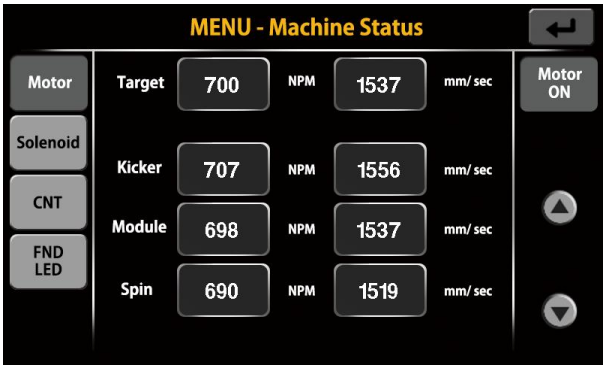
4-6. Upgrade

Upgrade S/W of the machine via USB.



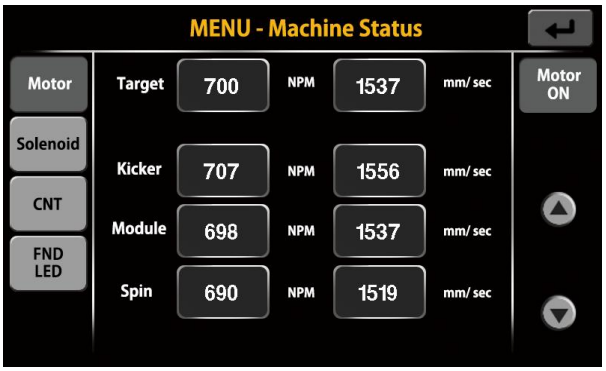
4-7. Machine Status

You can check the motor, solenoid, counter sensor and FND LED status of the machine.



1) Motor

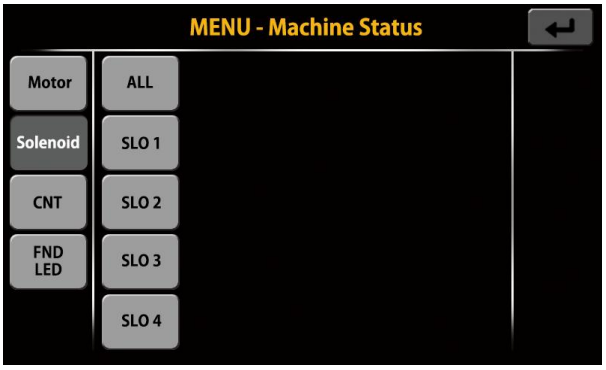
When "Motor OFF" button is pressed, all motors start running and the speed is shown on the screen.



2) Solenoid

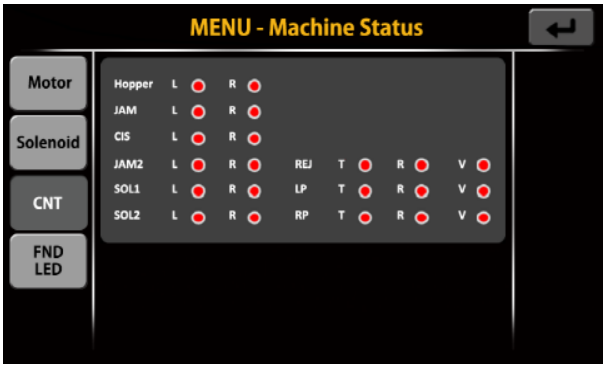
You can check the operation each solenoid by turning it ON/OFF.

SOL 3 and SOL 4 are for IH-410 series.



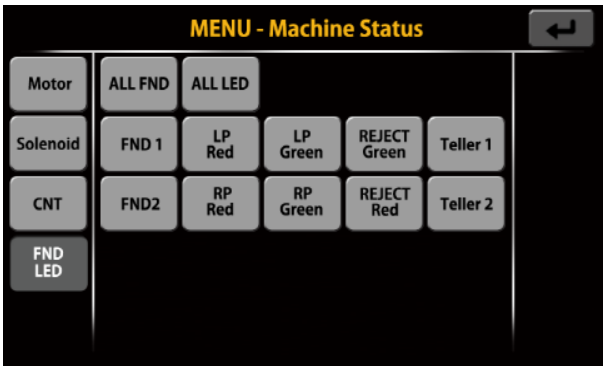
3) CNT

Displays the current status of each count sensor.



4) FND LED

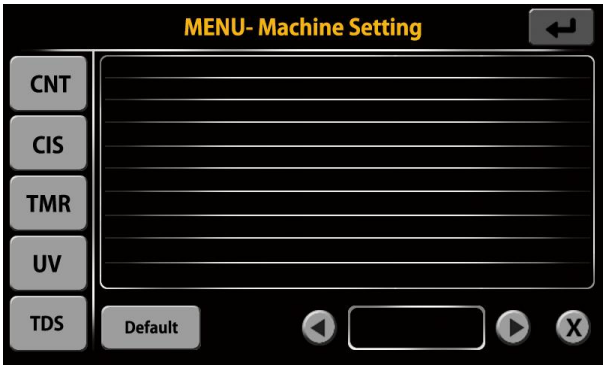
You can check the operating status of all FNDs and LEDs.



4-8. Machine Setting

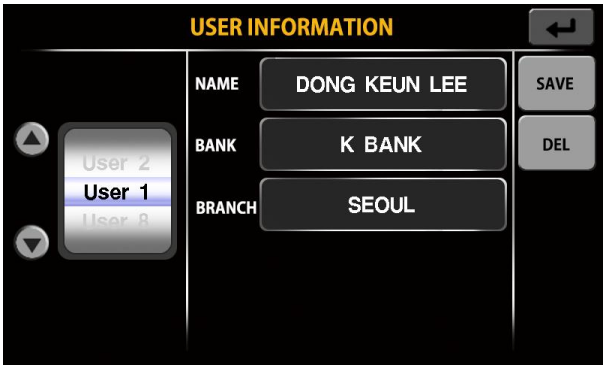
You can set the installed CNT Sensor, CIS Sensor, MG Sensor, UV Sensor and TDS.

Please refer to the service manual for the setting method.

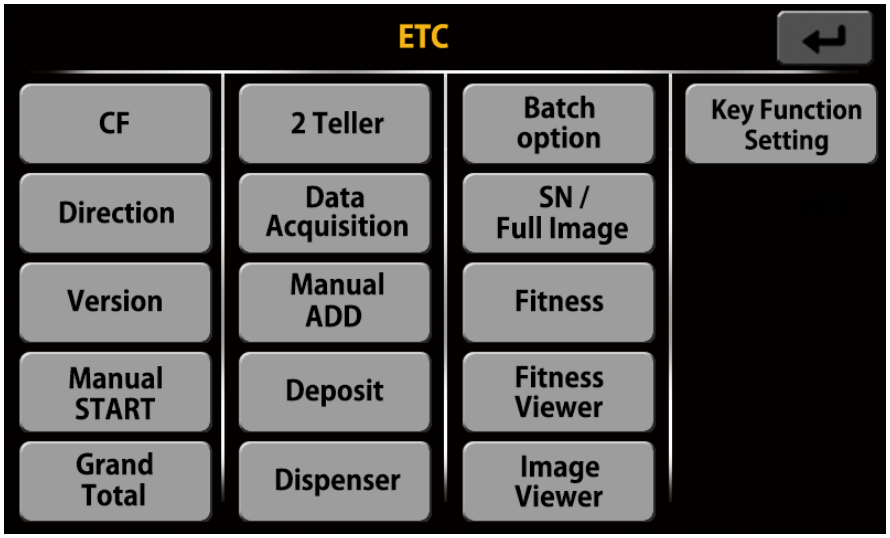


4-9. User Setting

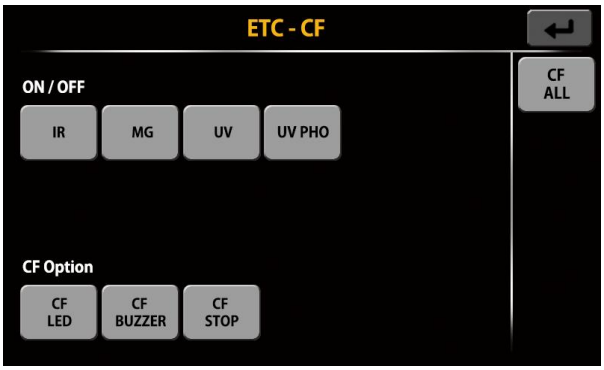
You can register user information.



5. ETC Screen



5-1. CF

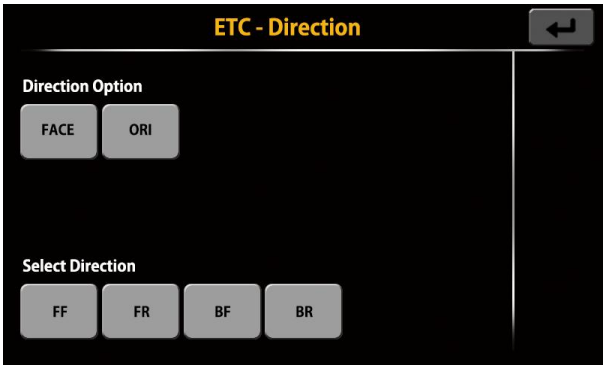


1) ON / OFF : You can turn on or off the detection of CF note of each sensor.

2) CF Option: When detecting CF note, the operation of the machine can be selected.

- CF LED: When a counterfeit is detected, the red LED flashes.
- CF BUZZER: If a counterfeit is detected, a pop-up message is output after the buzzer warning tone.
- CF STOP: When detecting a counterfeit, a pop-up message is output after the machine stops operating.

5-2. Direction



1) Direction Option

- FACE: Sort the notes by the front and Rear side of the notes. (FF+FR , BF+BR)
- ORI: Sort the notes by the direction of the notes. (FF, FR, BF, BR)

2) Select Direction

Select a specific direction and only the banknotes inserted in that direction is ejected into the Stacker Pocket.

5-3. Version

You can sort the counted notes by version of the banknote.

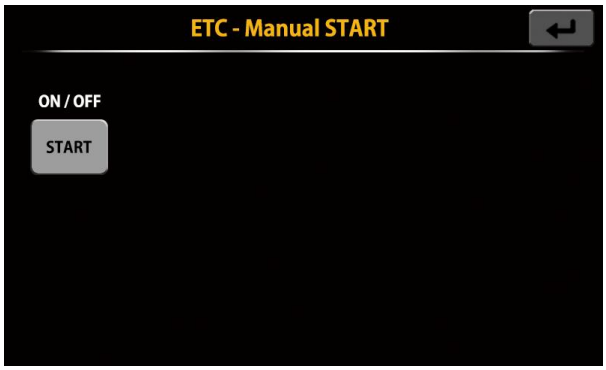
1) Separate Version ON/OFF

Version classification can be turned on or off.

2) Select Version

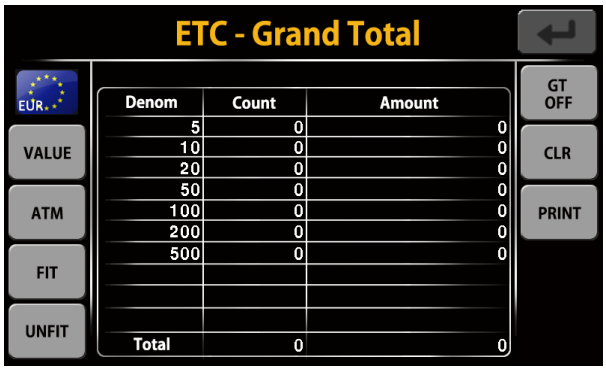
Select a specific version, and only that version is ejected into the Stacker Pocket.

5-4. Manual START



You can set the count start automatically or manually.

5-5. Grand Total



The counting result can be added up and managed from the specified time point.

Value, ATM, FIT, and UNFIT results can be summed separately, and the count result in Mix Currency mode is not supported by Grand Total function.

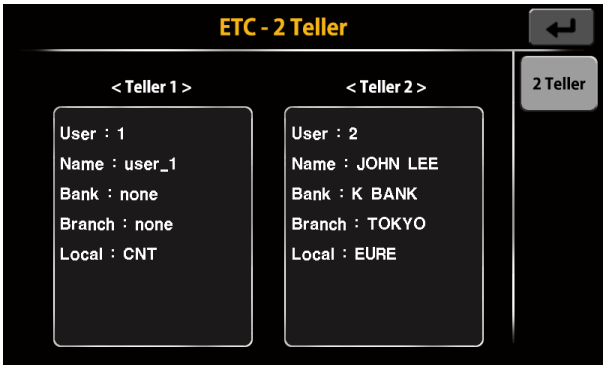
1) VALUE: Sum of count results in VALUE and Prefit Mode.

2) ATM: Sum of ATM count results in ATM and ATM+FIT Mode.

3) FIT: Sum of FIT count results in FIT and ATM+FIT Mode.

4) UNFIT: Sum of UNFIT count results in ATM and FIT Mode.

5-6. 2 Teller

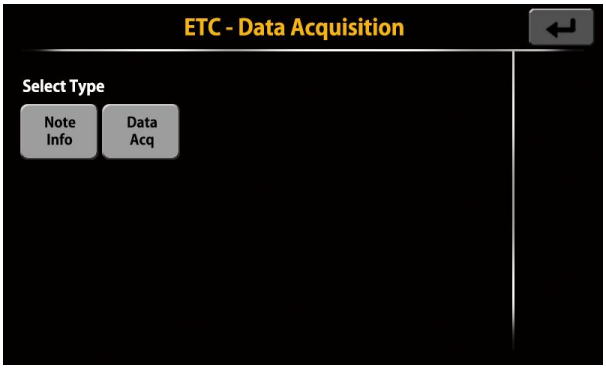


This function is for 2 users to use the machine together.

In 2 Teller Mode, only the stacker in one direction operates. (Left or right)

You need to register 2 or more users first.

5-7. Data Acquisition



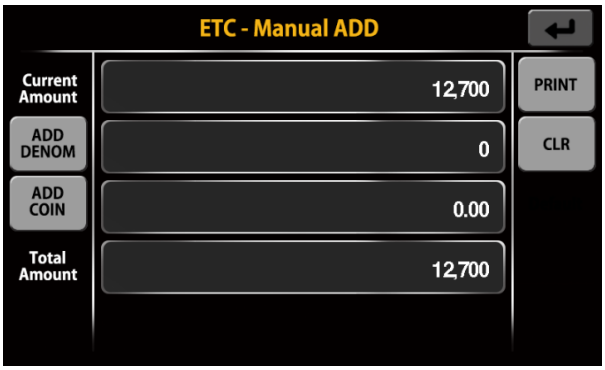
Collect data from banknotes.

There are two ways to collect data. The data can be saved by USB or LAN.

1) Note Info: Collect data except the note image data.
Save data from multiple notes at the same time.

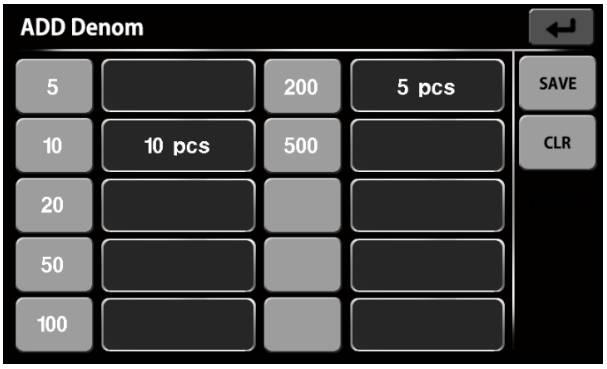
2) Data Acq: Collect data including the note image data.
Save data from one note only.

5-8. Manual ADD



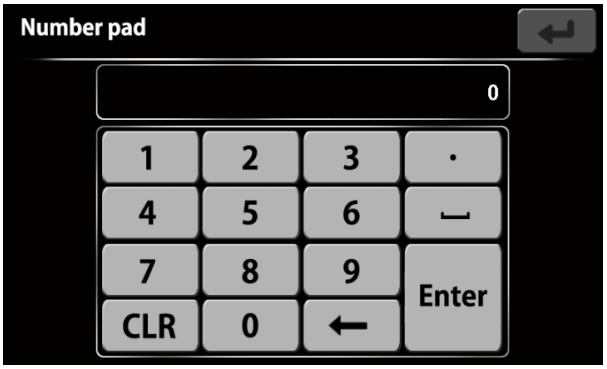
The function to enter the counting result manually.

1) ADD DENOM: Enter the quantity of the desired denominations and add it to the count result.



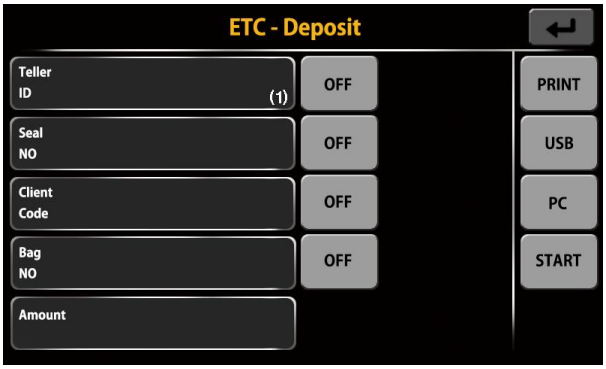
After enter the quantity of the desired denominations, click “SAVE”.

2) ADD COIN: Enter the desired coin value directly and add it to the count result.
(Can be up to 2 decimal places)



After enter coin value, click “Enter” button.

5-9. Deposit



This function helps you to calculate the count result by teller.

Teller ID, Seal No, Client Code, and Bag No can be specified.

-PRINT: Display information about the whole bundle in the Finished state.

In the Continue state, only information about the current bundle is printed

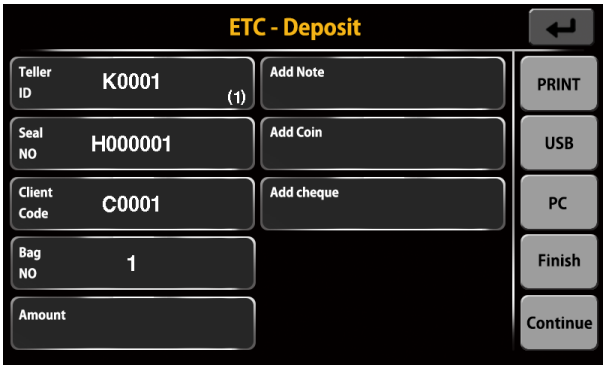
-USB: Save information to USB memory stick.

-PC: Transfer information to ENET

-START: Press START to turn the deposit function ON.

After enter the information of Teller ID, Seal No, Client Code, and Bag No, when press "START" button, the screen is changed as below.

This information can also be entered with a barcode scanner.



- Amount: The amount entered in the current bundle is subtracted and settled.

- Add Note: The quantity for the entered denomination is added and settled.

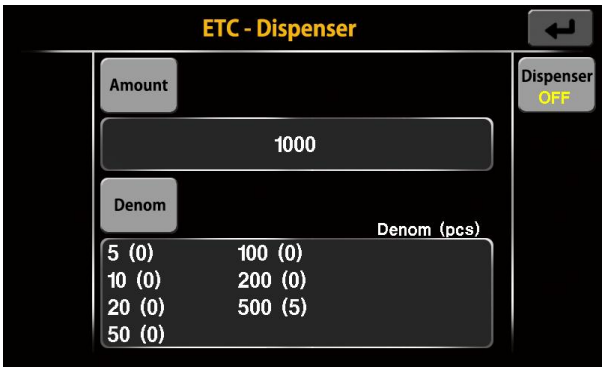
- Add Coin: Add the entered coin value and settled (up to 2 decimal places)

- Add cheque: The entered quantity of cheque is added and settled.

- Finish: Deposit completed.

- Continue: Move to next bundle (currently max 50)

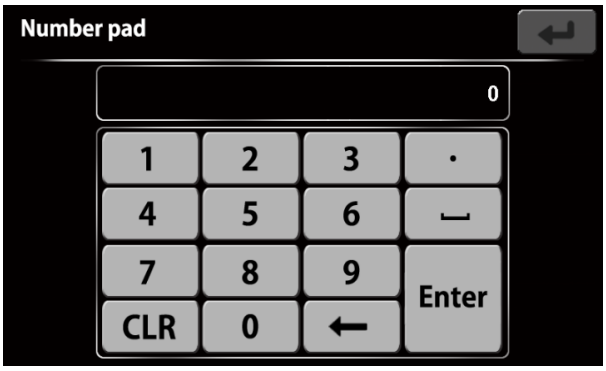
5-10. Dispenser



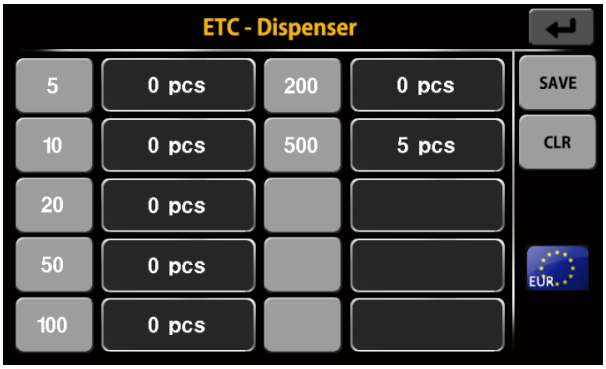
Function where only the specified amount or quantity can be counted.

- Dispenser: When press the butoon, Amount, Denom, Off are changed in order.

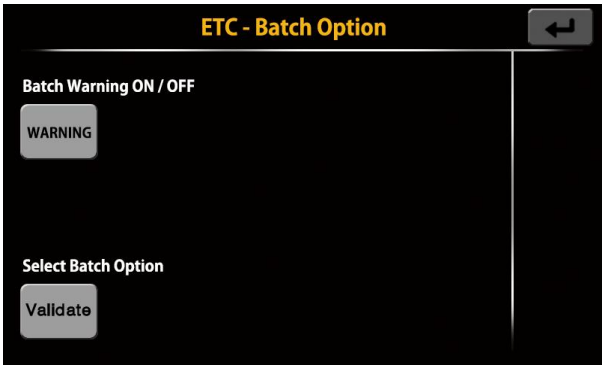
- Amount: When press button, you can enter the amount



- Denom: Denom button allows you to enter the quantity for each denomination.



5-11. Batch option



1) Batch Warning ON/OFF

If the banknote is removed from the stacker pocket when the batch is not completed, a beep sounds.

2) Select Batch Option (Validate)

Only counting results for which Batch is completed are saved and displayed on the screen.

A total of four operations are possible depending on the use of ADD function.

- ADD OFF + Validate OFF

The counting result is retained until all notes are removed from the Hopper and Stacker. When all banknotes are removed and counted again, the count result becomes '0', and the final counting information is not accumulated.

- ADD OFF + Validate ON

The counting result is retained until all notes are removed from the Hopper and Stacker.

After completion of counting, the counting information for banknotes by the uncompleted batch is not accumulated.

When counting again after removing all notes, the starting count becomes '0' and the final counting information is not accumulated.

- ADD ON + Validate OFF

The counting result is retained until all notes are removed from the Hopper and Stacker.

After removing all notes, when counting again, the count becomes '0' and the final counting information is accumulated.

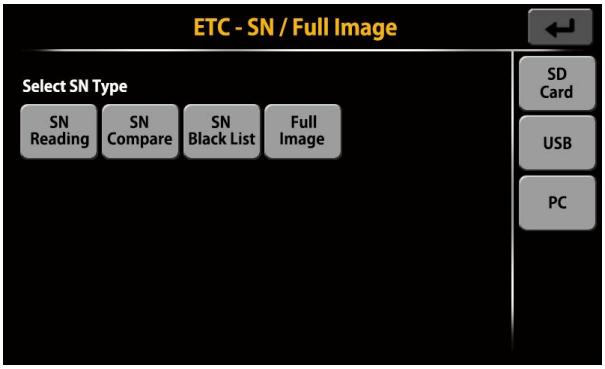
- ADD ON + Validate ON

The counting result is retained until all notes are removed from the Hopper and Stacker.

After completion of counting, the counting information for banknotes by the uncompleted batch is not accumulated.

When all banknotes are removed and counted again, the starting count becomes '0' and the final counting information is accumulated.

5-12. SN / Full Image



Set Serial Number and Full Image Transfer.

Serial number and full image data can be saved in SD-Card(in the machine), USB port and PC.

Test the conditions of 3 LEDs.

1) SN Reading

Turn ON/OFF the serial number recognition function.

If SN Compare and SN Black List function is selected, SN Reading is automatically turned on.

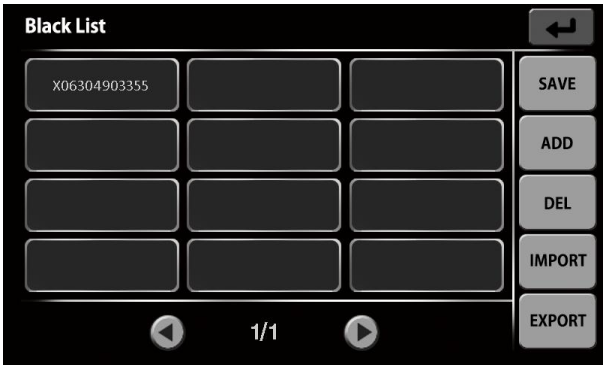
2) SN Compare

Turn ON/OFF SN Compare function.

You can set the number of characters to compare by Compare SN User level

3) SN Black List

Turn ON/OFF Black List function.



If the set Black List and the recognized serial number are the same, reject processing is performed.

If you type '-', the character is considered to be the same.

Compare by the number of set characters.

For example, if you set only 'X', all notes that start with 'X' are rejected.

After selecting the registered Black List, press and hold the screen to edit.

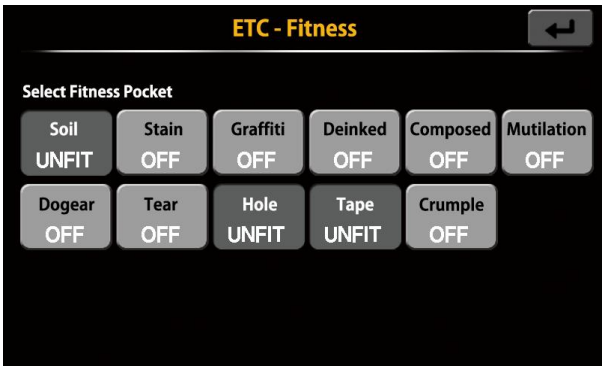
You can enter and delete black list, export black lists entered into the machine to USB, or import black list from USB.

4) Full Image

Turn ON/OFF the Full Image transfer function

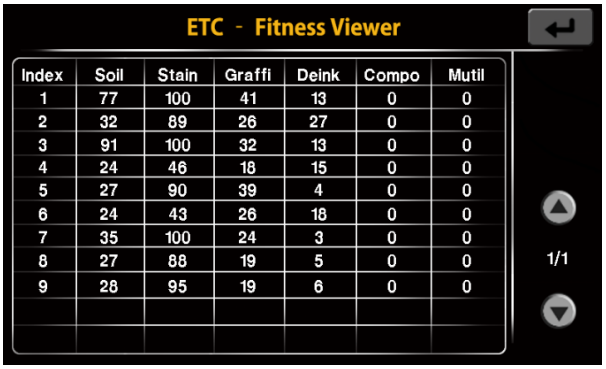
TOP, BOT and RGB images are sent and the file format is JPEG.

5-13. Fitness



Each item of fitness Parameters can be set to Unfit recognition, Reject processing, or OFF (not detected).

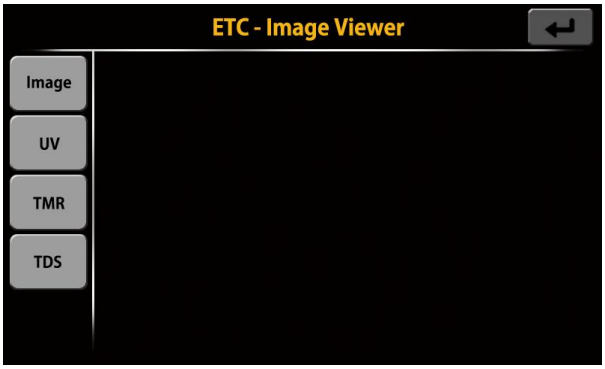
5-14. Fitness Viewer



You can see the fitness status of the inserted banknotes as a value (0 ~ 100).

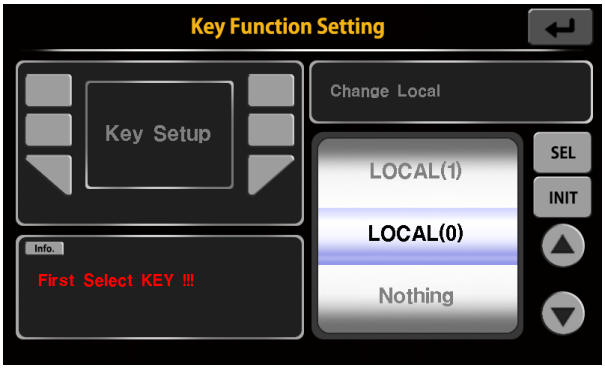
Multiple notes can be counted simultaneously..

5-15. Image Viewer



This function checks the image and CF data of the inserted banknote.

5-16. Key Function Setting



This function is for setting key as user wants.

Touch the key you want to change on the screen displayed in the red area or press the key directly to select it.

Press the arrow button in the yellow area to select the desired function and then press the "SEL" button to save the changes.

Press the "INIT" button to return to the default setting.

- Changeable Key Function Description

LOCAL(0)	Change Local Currency.
LOCAL(1)	Go to Select Local screen.
MODE(0)	Change Counting Mode.
MODE(1)	In SG Mode, go to SELECT DENOM screen. In USER Mode, go to POCKET OPTION screen.
MANUAL STOP	Key to stop the machine manually.
INIT COUNT	Initialize the counting result.
CF(0)	Turn on/off all CF functions.
CF(1)	Go to ETC –> CF function screen.
VER(0)	Turn on/off Version separation function.

VER(1)	Go to ETC –> Version function screen.
DIR(0)	If you press the button, it changes in the order of DIR Face-> DIR Ori-> OFF.
DIR(1)	Go to ETC –> Direction function screen.
BATCH(0)	If you press the button, it change the stacker's batch value to 100-> 200-> 300 in order.
BATCH(1)	Go to BATCH setting screen.
SPEED(0)	If you press the button, the speed is changed in units of 100 notes/min.
SPEED(1)	Go to SPEED setting screen.
PRINT	Print the receipt of the current counting result.
MENU	Go to MENU screen.
ETC	Go to ETC screen.
ADD	Turn on/off ADD function
FITNESS	Select Operation Mode. (VALUE, PreFIT, ATM, FIT, ATM+FIT)

6. Specifications

Currency		Up to 32 currencies including Mix & CNT (Mix & Multi up to 16 currencies)
Operating Speed	Counting	Max. 1,300 Notes/min
	Value/ Fitness Counting	Max. 1,200 Notes/min
	Serial Number Recognition & Printing	Max. 1,000 Notes/min
Pocket Capacity	Hopper	Max. 1,000 Notes
	Stacker x 2	Max. 300 Notes (Mint condition)
	Reject Pocket x 1	Max. 200 Notes (Mint condition)
Display		480 x 272 TFT LCD(5 inch), Touch Screen
Dimension		382 (W) x 417 (D) x 340 (H) mm
Weight		Approx. 21 Kg
User Interface		LAN, USB(Serial) x 2, USB(host), RS232C x 3
Power Supply		100 - 240V ~ 50/60Hz
Sensor Information		Full Color Dual CIS Reflection(R, G, B, IR, UV) x 2, Transmisson(IR)

	Magnetic Sensor(Full Line)
	Thickness Detection Sensor(12 Channel)
	UV Reflection, Transmission (8 Channel)
Options	External LCD Display, Thermal Printer
Operation Temperature	5 – 35 °C

7. Error code

No.	Error Code	Error Message	Explanation
1	E1001	Chain Error	Chain Error.
2	E2001	Skew Error	Note is skewed to the left.
3	E2002	Skew Error	Note is skewed to the right.
4	E3001	No DM Result	There is no result from DM part.
5	E3002	Outline Error	Did not find the outline of the note. (Case 1)
6	E3003	Outline Error	Did not find the outline of the note. (Case 2)
7	E3004	Outline Error	Did not find the outline of the note. (Case 3)
8	E3005	Outline Error	Did not find the outline of the note. (Case 4)
9	E3006	X Size Error	X Size Error
10	E3007	Y Size Error	Y Size Error
11	E3008	XY Size Error	XY Size Error
12	E3009	Not Rec Error	Recognition Error
13	E300A	Different Denom	Different Denomination is counted.
14	E300B	Different Currency	Different Currency is counted.
15	E300C	WaterMark Error	WaterMark Error
16	E3014	DM Error	DM Error
17	E4001	Batch Full Error	Batch Full Error
18	E4002	Different Case	
19	E4003	Dispenser Error	Dispenser error
20	E4004	Pocket Error	Pocket Error
21	E5001	DBL	Double Error
22	E5002	IR	IR Error
23	E5003	UV	UV Error (Spot UV Error)
24	E5004	MG	MG Error

25	E5005	UVF	UVF Error (CIS UV Error)
26	E5006	MT	Metal Thread Error
27	E5007	UVP	UVP Error
28	E6001	So	Soil
29	E6002	St	Stain
30	E6003	De	Deinked

No.	Error Code	Error Message	Explanation
31	E6004	Gr	Graffiti
32	E6005	Co	Composed
33	E6006	Mu	Mutilation
34	E6007	Do	Dogear
35	E6008	Te	Tear
36	E6009	Ho	Hole
37	E600A	Tape	Tape X
38	E600B	Tape	Tape Y
39	E600C	Cr	Crumple
40	E7001	Compare SN	Compare SN
41	E7002	Black List	Black List Error

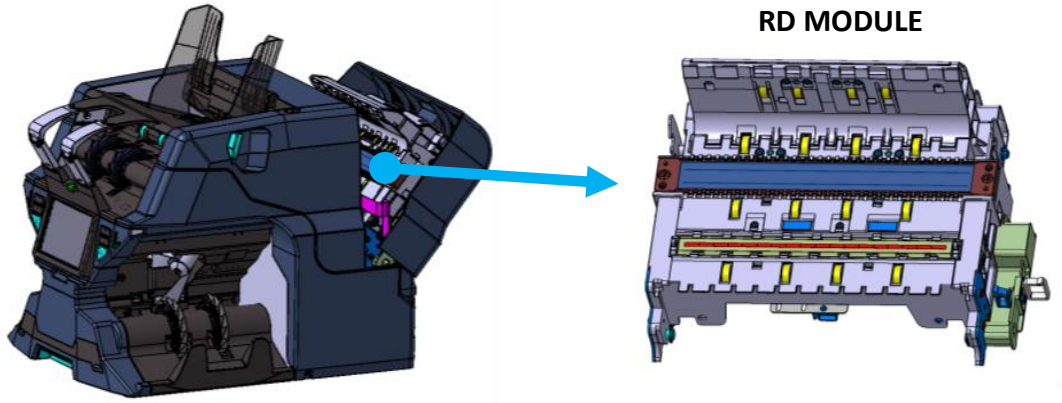
8. Maintenance

The machine has many sensitive sensors to perform high technology functions, for example counterfeit detection, denominations, etc.

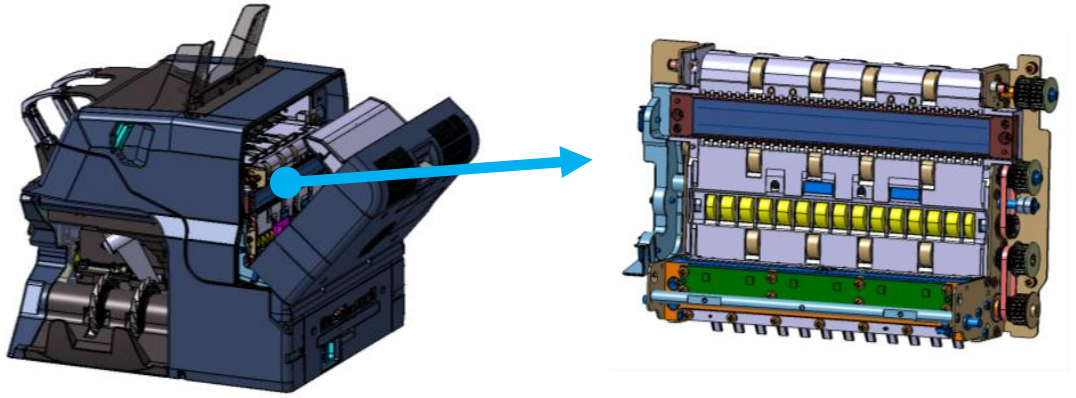
Users are recommended to clean the machine sensors at least once a day.

Refer to following section and clean the machine regularly.

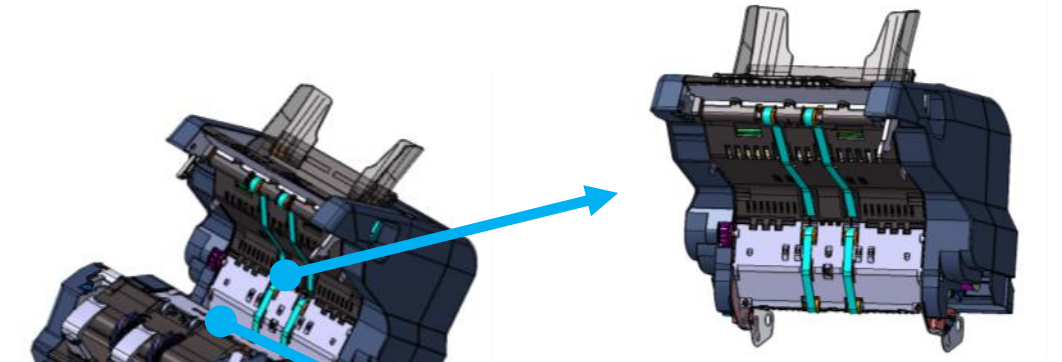
※ Please turn the power off before cleaning the machine.



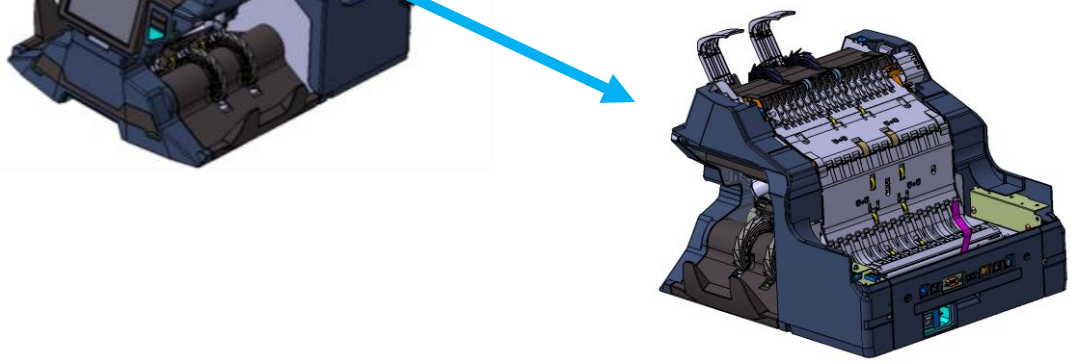
RD MODULE



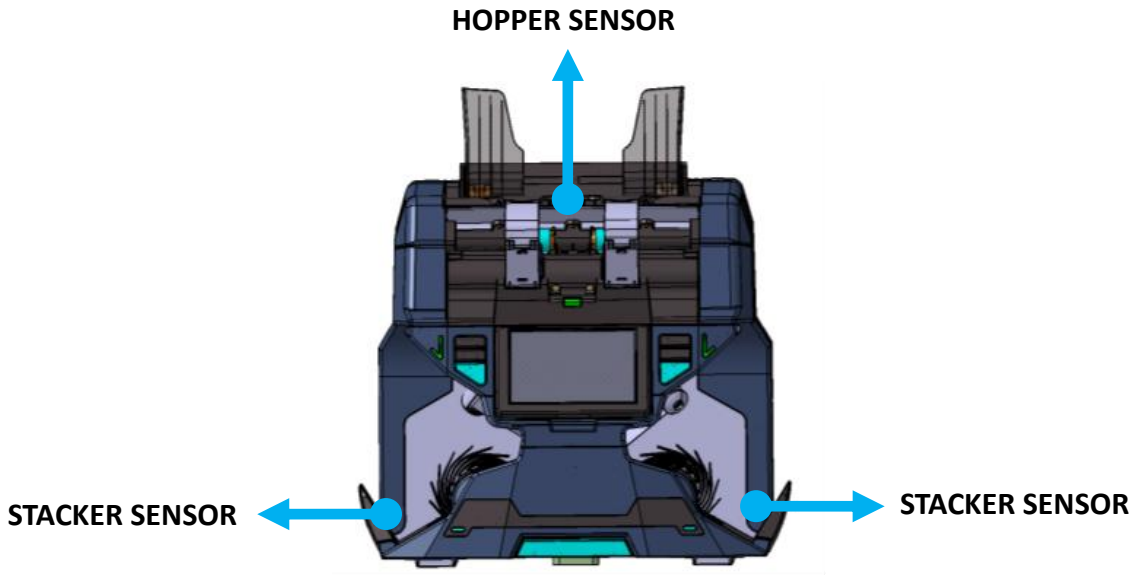
FD MODULE

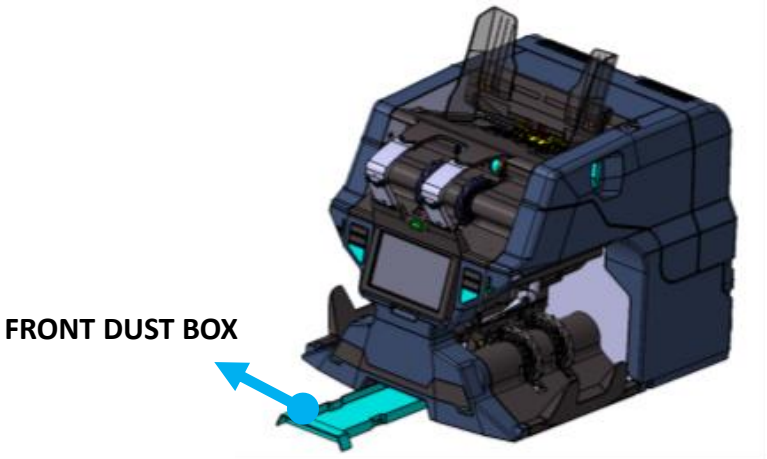


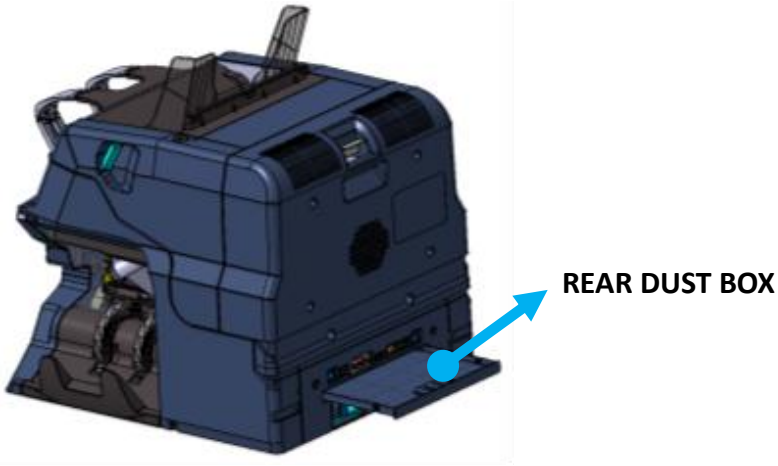
UP BODY 2 and 3 ASM



LOWER BODY 2 and 3 ASM


HOPPER SENSOR
STACKER SENSOR
STACKER SENSOR


FRONT DUST BOX


REAR DUST BOX

HITACHI
Inspire the Next

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