Restroom Valet

(RESTTX)

User Manual

LEE TECHNOLOGY KOREA CO., LTD.

email sales@leetek.org

website www.leetekorea.com

NOTICE

This manual, software and electronic circuitry are copyrighted. All rights reserved. Under the copyright laws, this manual, software and electronic circuitry may not be copied, in whole or in part without written prior consent of Lee Technology.

All information provided in this document is carefully prepared and offered in good faith as a guide in the installation, use and servicing of our products. Installers must ensure that the final installation operates satisfactorily within the relevant regulatory requirements. Lee Technology accepts no responsibility for incorrect installation. Lee Technology reserves the right to change products, specifications and installation data at any time without notice.

Lee Technology makes certain limited warranties with respect to defective diskettes, documentation and electronic circuitry. Please see the associated information contained on this page.

LIMITED WARRANTY

IMPORTANT SAFETY INFORMATION

FCC Caution

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Caution

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

Industry Canada Statement

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

1) This device may not cause interference.

2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Cet appareil radio est conforme au CNR-210 d'Industrie Canada. L'utilisation de ce dispositif est autorisée seulement aux deux conditions suivantes : (1) il ne doit pas produire de brouillage, et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

Safety Precautions

1. Avoid exposing this product to direct sunlight for extended periods of time, and keep it away from heat sources.

2. These is a risk of malfunction if product is used in places where sudden or extreme temperature changes occur.

3. Applying excessive force or impact to this product may result in product damage, and will void warranty.

4. Never attempt to disassemble or service this product yourself. Doing so can result in electrical shock and void warranty.

RF Exposure Information

The antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Caution:

1. Battery may explode if replaced with an incompatible battery. Dispose the used batteries according to the instructions.

2. Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be touched during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

Environmentally friendly disposal and recycling

To protect the environment, dispose this product separately from household waste once it has reached its end of life, or take it to your local electronic waste disposal center.

1. SYSTEM INTRODUCTION

 1) SYSTEM SUMMARY

   Counting the number of restroom use, RESTTX is a monitoring system that transmits a message notifying janitors or staffs of the facility checkup. There are two sensor types to choose from for the RESTTX unit.

   One of the types is a magnetic sensor consisting of 2 pieces. Mounting the pieces close to each other, place one on the upper corner of door and the other one on the door frame. It counts as one and the number increases when each piece gets far from each other as the door opens.

   The other types is an infrared sensor that detects a person passes through a doorway. It is for a door-less restroom and counts the number of users come in and out.
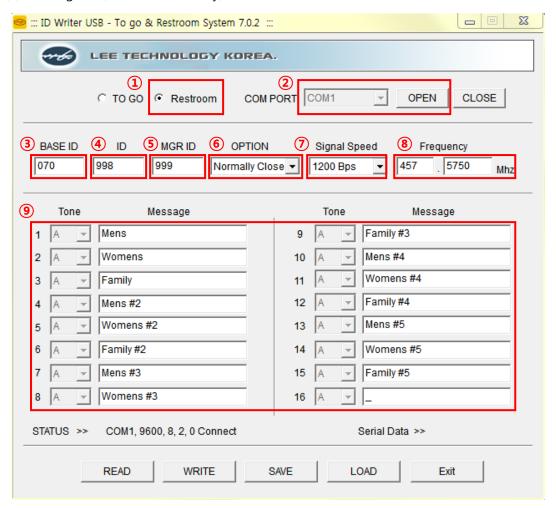
   The RESTTX transmits a message when the count reaches a certain level, and it can be set to 1, 20, 40, 60, 80, 100, 120, and 140.

 2) SPECIFICATION

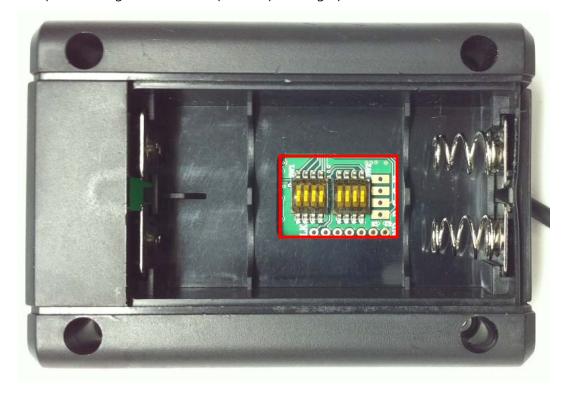| FEATURE	BENEFIT
TECHNOLOGY	° UHF Technology (450.0250 ~ 469.9750MHz) ° Perfect for large restaurant, Café and Bar ° Wireless Paging System
TRANSMITTER	° POCSAG Code ° Operate in FM mode on UHF ° 2 functional keys (Service / Cancel) ° Output Power: 40mW below ° Dimension: W(53) X D(76) X H(32) ° Weight: TBD ° PC Programmable (ID, Frequency, Restroom Name) ° Battery operate (XENO 3.6V x 2EA, AA size)
Alpha PAGER	° POCSAG Code ° 1 kinds of pager (Belt Type) ° Belt Type – Rechargeable (with own charger base) ° Automatic Back Light ° Various Alert Type (Vibe / Beep / Flash) Selectable ° Auto Delete ° Staff & Manager Pager Available
RESTAURANT SYSTEM ID	° Unique Base ID to eliminate overlapping message
APPLICATION	° Restaurant, Café and Hotel

2. INSTALLATION

1) EQUIPMENT SETUP

(1) PC Program (Manufacturer Only)

① Select "Restroom".

② Select COM PORT number and click "OPEN".

③ Setup base ID (base ID should match to pagers'), (001~200, Max 3 digits)

④ Setup staff ID (paging starts when counts reach the previously set number), (1~1249, Max 4 digits)

⑤ Setup manager ID (For paging a manager) (1~1249, Max 4 digits)

⑥ Option (Deciding whether to start counting when door opens or closes)

⑦ Signal Speed: 1200bps or 512bps

⑧ Frequency setup: 430.0250 ~ 469.9750 MHz

⑨ Restroom name assignment (Up to 16 letters including spaces)

(2) RESTTX Option Setting

The option setting must be done prior to powering up.

As shown in the photo above, there are two option switches inside the battery tray. The switch on the left is to select a facility among the 16 restrooms assigned in the PC program, and the one on the right is to add additional options.

The three left pins of the switch on the right are for setting up the use number for transmission, and the last pin is for the manager option (ON/OFF)

As shown in the photo above, default set of each switch is "0000", "0000".

To assign a certain facility among the 16 restrooms, make following combinations by switching each pin of the left switch.

"0000" (#1), "0001" (#2), "0010" (#3), "0011" (#4), "0100" (#5), "0101" (#6), "0110" (#7), "0111" (#8), "1000" (#9), "1001" (#10), "1010" (#11), "1011" (#12), "1100" (#13), "1101" (#14), "1110" (#15), "1111" (#16)

To set up the use number for transmission, make following combinations by switching the left three pins of the right switch. "000" (#1), "001" (#20), "010" (#40), "011" (#60), "100" (#80), "101" (#100), "110" (#120), "111" (#140)

The 4th pin from the left of the switch on the right is to turn on or off the manager option. "0" is "off", and "1" is "on".

(3) RESTTX Installation

Insert batteries properly when the option setup above is complete. Two 3.6V special XENO batteries should be used, and the batteries last at least 1 year under the condition of paging 20 times a day. Those batteries are not available to purchase in the local markets.

A message "Startup Complete" will appear on each pager when the power is switched on. (Ensure batteries have been properly installed if no message appears on pager displays. Try to power off and on the unit again.)

Receiving the message "Startup complete" means the system is ready for operation.

Position and install the RESTTX unit on a desired place.

It is strongly recommended to avoid any running water, humidity, and hot temperature when installing. These may cause the unit malfunctioning. Installing the unit outside the restroom door or doorway is recommended.

3. OPERATION

1) CANCEL Button

When the counting reaches the pre-set use number, the unit transmit a message to a pager.

A janitor or a staff holding the pager with transmitted message is required to go to the restroom and push "Cancel" button.

Pushing the "Cancel" button only reset the count of the use. This function is to confirm the facility checkup. With the manager option on, also a manager pager holder will get a message when "Cancel" button is pushed.

RESTTX sends messages to pagers every 90 seconds but up to 3 times.

The count gets reset to 0 upon pushing "Cancel" button.

Note – Pushing and holding down the "Cancel" button for 3 seconds clears up the count, and the red LED light turns on). Ensure the light turns on with an incoming message.)

2) SERVICE Button

The "SERVICE" button is for a manager in charge of the facility. The manager pushes the "SERVICE" button whenever a facility checkup is needed.

The red LED light turns on, and the unit pages a staff when the button is pushed and held down for 3 seconds. When the facility checkup is done, the staff is required to

push and hold down the "Cancel" button for 3 seconds to reset the count.
(Pushing button for 3 seconds to active each function is to avoid any abuse.

4. HOW TO USE

 1) Restaurant, Hotel, Café

  (1) Direction for Use

    - For calling staffs (a person in charge of cleaning)

  (2) Process

    - Install RESTTX after setting up the facility name and the count. A staff in charge of cleaning reports to the facility when paged.

  (3) Merits

    - Facility check can be effectively managed based on the actual number of facility use. The system helps manager monitor facilities easily and keep them clean all time.