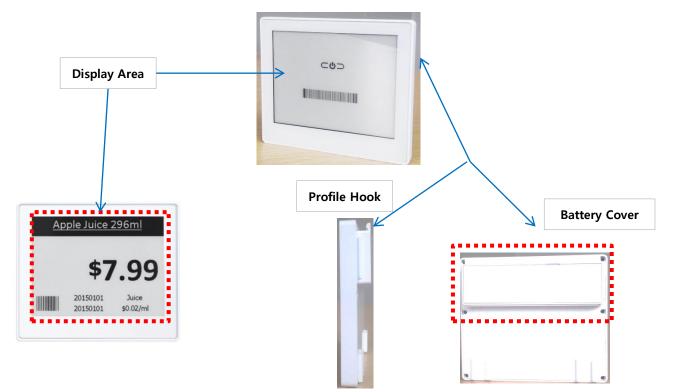
2015.04.19

#### ELS 4.2 Mono Graphic Type Manual

Ver. 0.1

# 1. ELS Description & Key Function

- Remote control device provides customer with several functions as below
- ✓ Waking Tag up from sleep mode
- ✓ Updating new purchase image on Tag
- ✓ Deleting purchase image on Tag
- ✓ Returning a Tag to be factory settings



#### Remo-con description



- LED : One of any buttons is pushed, green led turns on.
  After sending some data to a Tag, green led will turn off.
- Registration : Updating New Purchase Information on Tag
- Release : Deleting Purchase Information on Tag
- Reset : Returning a Tag to be factory settings
- Keep Alive : Waking Tag up from sleep mode

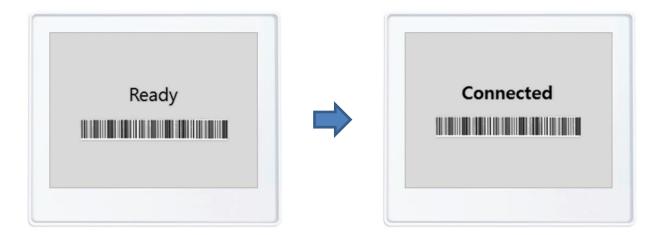
   This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
   (1) This device may not cause harmful interference, and
   (2) This device must accept any interference received, including interference that may cause undesired operation.
   Caution: Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void user's authority to operate the equipment.

  This appliance and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.

A minimum separation distance of 20  $_{\rm CM}$  must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.



## 2. "Registration" Key Function





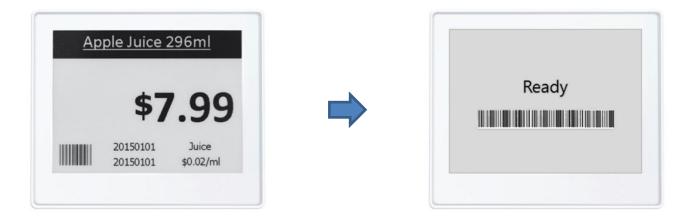
To change purchase information on Tag, perform the following steps :

- 1. Put remote controller near center of Tag's display
- Press and hold 'Registration' button on remote controller until green LED off (about 0.5 seconds)
- When Tag is successfully received 'Registration' data from remote controller, Tag's display will be changed to "Connected" for a few minutes. That means Tag hides purchase image to read Tag's IEEE MAC address through the Barcode scanner
- 4. In NMS Client, download new purchase image to the Tag in registration status
- 5. When image downloading is finished successfully,

Tag's display will be changed to new purchase image



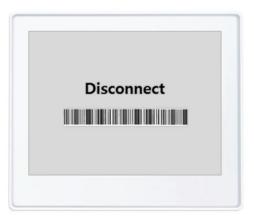
3. "Release" Key Function H네한





To release(delete) purchase information on Tag, perform the following steps :

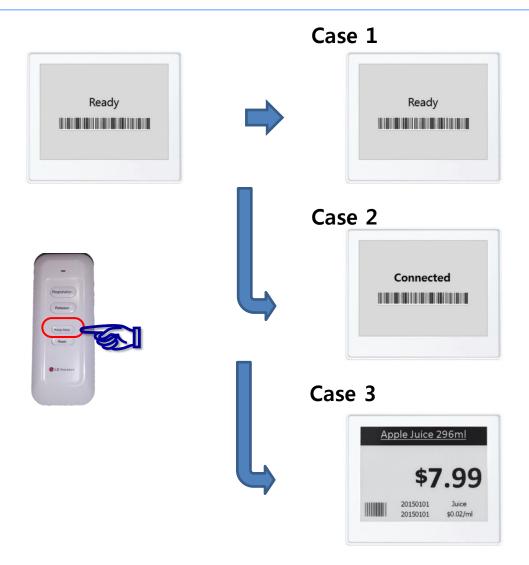
- 1. Put remote controller near center of Tag display
- 2. Press and hold 'Release' button until green LED off (about 0.5 seconds)
- If Tag was received 'Reset' command from remote controller, Tag will delete purchase information and Tag's display will be changed to "Ready"
- 4. After step.3, Tag goes to deep sleep mode and doesn't communicate with gateway until receiving 'Keep Alive' or 'Registration' data from remote controller







## 4. "Keep Alive" Key Function



To wake Tag up from sleep mode, perform the following steps :

- 1. Put remote controller near center of Tag display
- 2. Press and hold 'Keep Alive' button until green LED off (about 0.5 seconds)
- Tag will wake up and goes to next step. It's depends on connection information with gateway case1) If this Tag wasn't connected with a gateway before sleep mode, go to 4-1 case2) If this Tag was connected with a gateway before sleep mode, go to 4-2
- 4-1. Searching gateway and goes to the next step. it's depends on searching results case1) If Tag was successfully connected, Tag's display will be changed to "Ready" case2) If Tag wasn't connected, Tag's display(may be "Ready") will be refreshed
- 4-2. Sending 'Keep Alive' packet to gateway and Tag will go to sleep mode again





To make a Tag to be factory reset status, perform the following steps :

- 1. Put remote controller near center of Tag display
- 2. Press and hold 'Reset' button until green LED off (about 0.5 seconds)
- 3. If Tag was received 'Reset' command from remote controller,

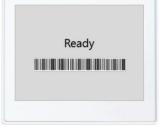
Tag goes back to factory settings and Tag's display will be changed to "Ready"

4. After step.3, Tag goes to deep sleep mode and doesn't communicate with gateway until receiving 'Keep Alive' or 'Registration' data from remote controller



#### 6. Status Display





Deep Sleep mode



Connected to gateway



Disconnected to gateway



No Battery

Image downloading fail

Battery is dis-charged (to need changing battery)

