1 Normal Usage

Linking Pricer Label

1. Press and hold the Link button ⊘ . (The scanner beam is turned on.)
2. Scan the label barcode. The green link LED ⊘ starts flashing and a beep/vibration confirms the scan.
3. Press and hold the link button again to scan the item barcode. The green link LED will be on for 1 s and a double beep/vibration confirms a successful link.
4. Scanning order can be reversed, i.e. scanning first item and then label is also possible.
5. If any other button is pressed after the first scan the link action is aborted and the scanned item/label is deleted.
6. Scanner beam automatically switches off after three seconds if the scanning fails. Release the link button and press again to activate the scanner.

Other actions

1. Press and hold any of the action buttons. (The scanner beam is turned on.)
2. Scan a barcode. Successful scan is confirmed by a beep/vibration.
3. To select a different action simply press and hold the corresponding button and scan like in step 2.

Which action that is associated with which button is configured in the Pricer Server integration middleware.

Note: The Shelf Controller supports EAN13, EAN7 and Code128 (17 characters) barcodes.

Outbox

After a successful link or scan the task is stored in the Shelf Controller Outbox and the outbox LED ⊡ will flash blue until the command is successfully transferred to the server. The Shelf Controller can be used even if a wifi connection is missing. All tasks will then be stored in the Outbox and transferred once the Shelf Controller gets network access again.

- Single blue flash: No Wi-Fi coverage at the moment.
- Double blue flash: Has Wi-Fi connection but cannot connect to server, or the server does not respond with status code 2xx.
- When in sleep mode, the outbox LED will beep and give a short blue flash every five seconds indicating that there are unsent tasks. This will continue for 30 minutes, after that the beep and flash is repeated once every 30 minutes.
- The outbox can store 200 scans. A full outbox is indicated by three beeps and the outbox LED flashes red. Scanning is then disabled. To be able to scan again, empty the outbox either by connecting to the server so the commands can be transferred or go to AP mode and delete the outbox.

Important! Make sure all actions in Outbox have been transmitted before ending work session. Otherwise actions may be transmitted after deadline.

Low battery

When the battery level is low, the battery LED ▭ will flash red to indicate that the Shelf Controller should be charged. The Shelf Controller can still be used for a while but is then disabled in order to protect the batteries. If the Shelf Controller has stored scans in the Outbox those scans will be kept and transmitted once the Shelf Controller is charged.

Charging

To charge the Shelf Controller, connect it to a PC or mobile charger using a USB-C cable. During charging the battery LED flashes green. Once the Shelf Controller is fully charged the battery LED turns steady green.

Configure sound and vibration

The Shelf Controller gives feedback on actions using LEDs, sound and vibration. Default sound and vibration settings are configured in the web interface.

- During normal operation it is possible to toggle sound (Off, low, high) by pressing buttons 12 and 9 for 1 s.
- During normal operation it is possible to toggle vibration (Off, On) by pressing buttons 12 and 10 for 1 s.

- The Shelf Controller returns to the default sound and vibration settings after 8 hours of inactivity.

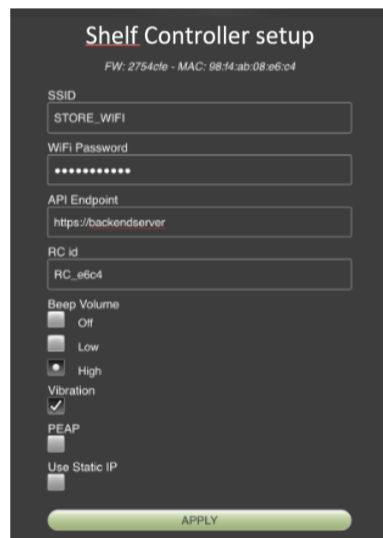# 2 Configuring the Shelf Controller

Enter AP mode

- An unconfigured Shelf Controller will automatically enter Access-Point (AP) mode when pressing one of the action buttons.
- A configured Shelf Controller can be reconfigured by putting it in AP mode by pushing Button 1 and Button 2 simultaneously for 5 seconds. One beep will sound and then the outbox LED starts flashing white.
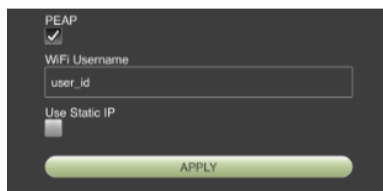
Configure in AP mode

- With the Shelf Controller in AP mode, use your laptop or phone to search for the Shelf Controller wifi network Pricer_Remote_xxxx and connect using a web browser to address 192.168.4.1. In the web browser, you will find different settings like Wi-Fi network name / Password, Backend server address and Sound/vibration settings.
- The Shelf Controller is default configured to acquire IP address via DHCP. For static address, check the Use Static IP checkbox and enter your data.
- The Shelf Controller supports WPA2 Personal and WPA Enterprise (PEAP-MSCHAPv2) networks. For Enterprise, check the PEAP checkbox and enter a username.

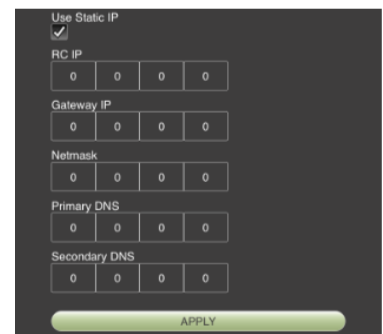Note1 – The Backend server (API Endpoint) address must start with http:// or https://.

AP mode view
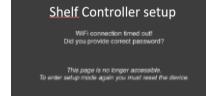

AP mode view – PEAP checked:

AP mode view – Use Static IP checked

Save configuration

Once the user configuration is submitted the Shelf Controller control will attempt to connect to provided network and go to sleep. The config page will display the result of the connection test:
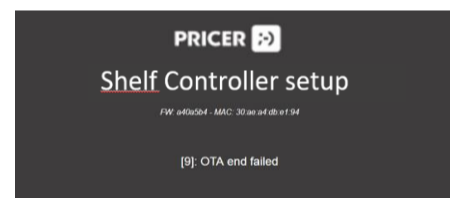

- Even if the test fails the config is saved. This means that configuration can be done in advance at a location where the wifi is not present.
- If the Shelf Controller control is left unconfigured the user can manually put it to sleep to save battery by pushing any of the buttons except Button 1 and Button 2.
- In AP mode, the outbox can be cleared by pressing buttons 3 and 4 for 5 seconds. The command is acknowledged by two short beeps and the Outbox LED flashes green. No other configuration is affected.
- In AP mode, Factory reset can be obtained by pressing buttons 7 and 8 for 5 seconds. The command is acknowledged by three short beeps. Factory reset will clear all configuration and delete any left items in the outbox.

3 Firmware update

The Shelf Controller supports Over the air (OTA) updates.

- Enter AP by pushing Button 1 and Button 2 simultaneously for 5 seconds. One beep will sound and then the outbox LED starts flashing white.
- Press buttons 5 and 6 simultaneously for 5 seconds. One beep will sound, and the outbox LED will start flashing yellow.
- The Shelf Controller will connect to the customer server address configured in the Shelf Controller and look for new update in the /ota folder.

Successful update is indicated by the outbox LED turns green for 5 seconds and two beeps. If update fails, the outbox LED will turn red instead for 5 seconds and three beeps will sound. After a failed update attempt, an error code is displayed on the Shelf Controller's config page which can give a hint of what went wrong.

4 Technical support

Additional information about the Pricer Shelf Controller and its integration with the Pricer Server can be found at *partner.pricer.com*.

5 Battery and charging

The internal rechargeable battery is not intended to be replaced during the service life time of the Shelf Controller.

Any external power supply used for charging the Shelf Controller shall comply with relevant regulations and standards applicable in the country of intended use. The power supply should provide 5Vdc and a minimum rated current of 0.4A.

6 Disposal

Waste of electrical and electronic equipment must not be disposed as unsorted municipal waste (RoHS and WEEE). Dispose the product separately in accordance with applicable federal, state and local regulations.

7 Compliance

FCC compliance statement

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC's RF radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada certification/Certification Industrie Canada

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

This equipment complies with Canada radiation exposure limits set forth for uncontrolled environments. This equipment should be installed and operated with a minimum distance of 20cm （may be adjusted according to actual calculation result） between the radiator and your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Déclaration d'IC sur l'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux radiations définies par le Canada pour des environnements non contrôlés. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre l'antenne et votre corps.
Cet émetteur ne doit pas être installé au même endroit ni utilisé avec une autre antenne ou un autre émetteur.

CE

This equipment is not suitable for use in locations where children are likely to be present.

8 Certification

The Shelf Controller complies with the European Radio Equipment Directive 2014/53/EU.

FCC ID: 2ACC86617010

IC: 20234-6617010

This device contains FCC ID: 2AC7Z-ESPWROOM32D.

9 Specifications

- Model: Pricer Shelf Controller
- Article number: 66170-10
- Size: 150 x 42 x 22 mm
- Weight: 90 g
- Charge connector: USB C
- Supply voltage: 5.0Vdc, 0.35A
- Operating temp.: +5 °C – +40 °C

10 Manufacturer information

Pricer AB
Västra Järnvägsgatan 7
SE-111 64 Stockholm, Sweden
www.pricer.com

**Pricer
Shelf Controller
User manual**