Electronic Price Change Unit 3.0 User Instructions Revision 2.0

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Section 1: Economy Remote User Menu

User Menu Summary

The following tasks can be accomplished from the USER menu:

- Update prices
- Set the clock on the sign
- Set a timer that can turn the sign off at night and back on in the morning
- Set a timer that controls the sign brightness level during the day and night
- Set the day-time brightness level
- Set the night-time brightness level
- Temporarily override the timers
- Blank out product if desired

Enter User Menu (USEr)

When the sign is displaying prices or blanked out:

- Type the 4 digit user code to enter USEr menu
- The User Code is unique for each site and is written on Econo Remote sticker

Exit User Menu

When sign is displaying $U5E_{r}$:

• press 💿 💿 to exit to price display or wait for the USEr mode timeout.

Set Price

- Enter USEr Menu
- Press 🚯 then 🕕 to enter the Set Price sub menu
 - All products accept one are shut off
- The selected digit will flash
- Update the price by pressing buttons **0 9** on the remote
 - When a number (0 9) is pressed, the next digit is selected
 - After the last digit in the price is updated, the first is selected again
- Press on to save current price and move on to the next price
 - \circ After the last price has been updated and saved, the sign returns to the USEr menu

Enable / Disable Products

Products (ex. Unleaded, Premium, Diesel) can be enabled (operate normally) and disabled (blank)

- Enter USEr Menu
- - All products will display \forall E5 (product is enabled) or $\neg \Box$ (product is disabled)
- The selected product will flash
- Press **()** to change between YE5 and no if desired
- Press on to save this setting and move to next product
 - \circ After the last product has been saved, the sign returns to <code>USEr</code> menu

Section 1: Economy Remote User Menu

Set Clock

Sets the signs internal clock which is used for the timers.

- Enter USEr Menu
- Press 🕥 then 🕘 to enter the Set Clock sub menu
 - Sign displays [E, then the current time in 24 hour format HHMM

| 12 Hour | 24 Hour | 12 Hour | 24 Hour |
|----------|---------|----------|---------|
| 12:00 AM | 00:00 | 12:00 PM | 12:00 |
| 1:00 AM | 01:00 | 1:00 PM | 13:00 |
| 2:00 AM | 02:00 | 2:00 PM | 14:00 |
| 3:00 AM | 03:00 | 3:00 PM | 15:00 |
| 4:00 AM | 04:00 | 4:00 PM | 16:00 |
| 5:00 AM | 05:00 | 5:00 PM | 17:00 |
| 6:00 AM | 06:00 | 6:00 PM | 18:00 |
| 7:00 AM | 07:00 | 7:00 PM | 19:00 |
| 8:00 AM | 08:00 | 8:00 PM | 20:00 |
| 9:00 AM | 09:00 | 9:00 PM | 21:00 |
| 10:00 AM | 10:00 | 10:00 PM | 22:00 |
| 11:00 AM | 11:00 | 11:00 PM | 23:00 |

- The selected digit will flash
- Update the time by pressing buttons **0 9** on the remote
 - \circ When a number (0 9) is pressed, the next digit is selected
 - After the last digit in the price is updated, the first is selected again
- Press on to save time and move on to date
 - Sign displays [d, then the date can be entered with the format MMDD
 - o ex. Feb. 24 would be entered as 0224 (only valid dates are accepted)
- Press on to save date and move on to year
 - \circ Sign displays [4, then the year can be entered with the format YY starting at 2000
 - The max year that can be entered is 2099
- Press on to save year and return to the USEr menu



Section 1: Economy Remote User Menu

Sign On / Off Timer

Used to turn the sign off at night and on in the morning. To keep the sign on 24 hours a day set both the an and DFF times to 0.

- Enter USEr Menu
- Press 🚯 then 😉 to enter the Sign On / Off Timer sub menu
 - Sign displays and for a short period, then the time when the sign will turn on in 24 hour format HHMM
- The selected digit will flash
- Update the time by pressing buttons **0 9** on the remote
 - When a number (0 9) is pressed, the next digit is selected
 - After the last digit in the time is updated, the first is selected again
- Press 🐼 to save the time
 - Sign displays *DFF* for a short period, then the time when the sign will turn off in 24 hour format HHMM
- Press on to save the time and return to the USEr menu

Sign Bright Timer

Controls when the sign changes between day and night light levels. If the sign should not change light levels, set both $b_{\Gamma}H_{I}$ and $b_{\Gamma}L_{D}$ to 0, and use Night Light Level to control the sign's brightness.

- Enter USEr Menu
- Press 🚯 then 👩 to enter the Sign Bright Timer sub menu
 - Sign displays *brH*, for a short period, then the time when the sign switches from Night Light Level to Day Light Level in 24 hour format HHMM
- The selected digit will flash
- Update the time by pressing buttons **0 9** on the remote
 - When a number (0 9) is pressed, the next digit is selected
 - After the last digit in the time is updated, the first is selected again
- Press 🐼 to save the time
 - Sign displays bries for a short period, then the time when the sign switches from Day Light Level to Night Light Level in 24 hour format HHMM
- Press or to save the time and return to the USEr menu



Manual Light Level

Used to override the current light level set by the timers and turns the sign lights on and off. These changes do not take effect until sign exits the $U5E_{r}$ menu and is displaying prices

- Enter USEr Menu
- Press 🚯 then 👩 to enter the Manual Light Level sub menu
- - RULD Sets light level according to the timers
 - \circ dRy- Sets light level to day and turns the sign lights off
 - o n *E* Sets light level to night and turns the sign lights on
 - \Box FF- Blanks out sign and turns sign lights off (Sign is not powered off, typing user code will still take the sign to the \Box SEr menu)
 - Press 💿 to save the Manual Light Level and return to U5Er menu
 - o Manual Light Levels do not take effect until the sign returns to displaying prices

Day Light Level

Day Light Level is the sign brightness when the sign is in day mode.

- Enter USEr Menu
- Press 🚯 then 🔞 to enter the Day Light Level sub menu
- The selected digit will flash
- Update the light level by pressing buttons **0 9** on the remote
 - Valid light levels are between 00 99
 - \circ When a number (0 9) is pressed the next digit is selected
 - o After the last digit in the light level is updated, the first is selected again
- Press 💿 to save light level and return to USEr menu

Night Light Level

Night Light Level is the sign brightness when the sign is in night mode.

- Enter USEr Menu
- The selected digit will flash
- Update the light level by pressing buttons **0 9** on the remote
 - Valid light levels are between 00 99
 - \circ $\;$ When a number (0 9) is pressed the next digit is selected
 - After the last digit in the light level is updated, the first is selected again
- Press 💿 to save light level and return to USEr me

Section 2: Economy Remote Summary

User Menu Type User Code to Enter User Menu User Code _ _ _ _ Save & Advance **OK OK** Exit User Menu Set Price(s) Type New Price 2 Enable/Disable Products Set Clock (24hour) time: [] HHmm date: [d MMdd year: [IJ YY Sign On/Off Timer 6 Sign Bright Timer Day: brH HHmm Night: brLo HHmm Manual Light Level Range:00 - 99 Sight Light Level Range:00 - 99



The PricePad is used to wirelessly update the prices and settings of LED gas price signs (EPCU 3.0).

3.1 PricePad Setup

- 1. Attach the antenna to the PricePad.
- 2. If the POS option has been ordered. Connect the supplied USB or RS-232 POS cable to the PricePad and the POS system.
- 3. Plug the AC adaptor into an outlet and connect it to the PricePad.

3.2 PricePad Operation

The PricePad is equipped with a color touch screen allowing prices and settings to be updated with just a few taps on the screen with a finger.

Note: The screen will automatically shut off after 5 minutes without use. Tapping anywhere on the screen will turn it back on.



Arrow to next page



Menu Navigation:

- Tap items on screen to enter the corresponding menu or to edit a value.
- To return to the previous menu, press the "Back" button in the bottom left of the screen.
- There are 3 main types of edit screens.
 - Number entry Allows a number to be updated.
 Change the value by using the onscreen keypad.
 The arrow keys will move the cursor left and right.
 - Text entry Allows text to be entered. The shift key will switch the keyboard between lowercase and uppercase letters. The insert key ins will switch between insert and overwrite text entry mode. The backspace key will delete the previous character.
 - Spinners Allow settings to be selected from a list of possible options. (Example a date) To change the value touch and drag up or down over the value.
 - After editing a setting, tap the "Save" button to save the changes. Tap the "Back" button to cancel any changes.
 - During the saving process, a busy indicator will spin in the upper right hand corner of the screen.
 - If there are more than 6 items in a menu, arrow keys will appear on the left, right, or both sides of the screen allowing navigation between menu pages.

Section 3: PricePad Operation

3.3 Startup



3.4 Changing Prices



3.5 Signal Strength



Note: If the PricePad is used to control multiple signs, the green bars in the upper right corner will indicate the lowest signal strength of any sign.

The Loading screen is displayed when the PricePad is first powered on. After communication has been successfully established, the "Price" menu will be displayed.

Price Menu:

- This is the main screen and will be shown after loading has completed.
- To change a price:
 - Tap the price or name of the product that needs to be changed.
 - Edit the value using the keypad.
 - Tap "Save" to update the price on all signs.
 - When the price screen returns, all signs will have been successfully updated to the new price.

Signal Strength:

- Signal strength is indicated by the green bars in the upper right corner of the screen. Tapping these bars will display the "Signal" menu.
- The "Signal" menu displays the signal strength of each sign bound to the PricePad.
- Signal strength ranges from 0 to 4 bars.
 - \circ 3 or 4 bars indicate good signal strength.
 - 2 bars indicate low signal strength.
 - 1 bar indicates very low signal strength. With one bar it may take longer to update the sign and communication errors may occur.
 - $\circ \quad$ 0 bars indicate the sign is out of range.

Section 3: PricePad Operation

3.6 Settings

Touch to enter Settings menu

| March 9, 2017 9:28:24 AM | Price | \$ |
|-----------------------------|----------------------|-------------------|
| Product 1 | Pro | oduct 2 |
| 2.75 ⁹ | 3 | 3.22 ⁹ |
| Product 3 | Pro | oduct 4 |
| 3.19 ⁹ | 3 | 3.09 ⁹ |
| Product 5 | Pro | oduct 6 |
| 2.85 ⁹ | 2 | 2.79 ⁹ |
| Blair Compan | ies PricePad for EPC | :U 3.0 v1 |

| March 9, 2017 9:39:10 AM | ettings |
|-----------------------------|----------------------------|
| Products | Clock |
| Brightness | Timers |
| Info | Advanced |
| Back Blair Companies | s PricePad for EPCU 3.0 v1 |

| March 9, 2017 9:39:22 AM | Proc | ducts | |
|-----------------------------|----------------------|---------------------------|---------|
| Prod | uct 1 | Product 2 | |
| Prod | uct 3 | Product 4 | |
| Prod | uct 5 | Product 6 | |
| Back Blair | Companies Pri | cePad for EPCU 3.0 v1 | |
| March 9, 2017 9:42:53 AM | Proc | luct 1 | - |
| Enable Yes | ed? 5 | Product Name Product 1 | |
| Price N | ame | Price Name | |
| Back Blair | 2 1 Companies Pri | Frice Z | |
| March 9, 2017 | Edit | Value | 6 |
| 9:43:15 AM | | - Circle | |
| | Ena | bled? | |
| | | | |
| | T | 65 | |
| | | | |

Blair Companies PricePad for EPCU 3.0 v1

To enter the Settings Menu:

• Tap the gear in the upper right corner of the screen.

Settings Menu:

The "Settings" menu contains the following sub menus.

- **Products** Rename, enable, or disable products.
- **Clock** Set the time and date.
- **Brightness** Change the sign brightness and light mode.
- **Timers** Setup timers to turn the sign on or off and dim the sign at night.
- Info Display PricePad and sign information.
- Advanced Access advanced settings.

Products Menu: 🔹 → Products

The "Products" menu is used to enable or disable products, to name products, and to name prices.

- Tap the product that needs to be changed. In this menu, tap a setting to change its value.
 - Enabled? : Turns the product on or off on all signs.
 - **Product Name:** Sets the product name to be used on the PricePad. (ex. Regular, Premium, Diesel)
 - Price Name: Sets the price name to be used on the PricePad. Price names are only displayed if the product has multiple prices. (ex. Cash / Credit toggle)

| March 9:43:31 | Edit Value | | | | | | | - | | | | | | | | | |
|------------------|------------|---|---|--------------------|-----|----------|---|-------|----------|---------|-------------------|---|---|---|----|----|---|
| | | | | | Pr | od rc | | | an :t | ne 1 | | | | | | | |
| 1 | 1 | 2 | 3 | 3 4 | 4 5 | | | 5 6 7 | | | 7 8 | | | 9 | | 0 | |
| q | V | V | e | • | r | - | t | J | 1 | I | ı | i | | C | > | p | , |
| 1 | a | S | | d | f | | g | 1 | ł | 1 | j | | k | (| | | |
| | | Z | | X | C | | ١ | 1 | k |) | n | | n | 1 | | | |
| Ba | ck | < | | $\mathbf{\hat{v}}$ | In | S | S | pa | ac | е | $\langle \rangle$ | × | | | Sa | Ve | |

Section 3: PricePad Operation

3.6 Settings (continued)



March 9, 2017 9:45:20 AM Stightness Sight Brightness 99 49 Light Mode Photocell Blair Companies PricePad for EPCU 3.0 v1





Brightness Menu: 🏟 -> Brightness

- Tap a setting to change its value.
 - **Day Brightness:** Changes how bright the LED's are on the sign during the day. Then sign needs to be brighter during the day to be readable in sunlight.
 - **Night Brightness:** Changes how bright the LED's are on the sign at night. The sign should be dimmer at night to be readable.
 - Note: The default Day Brightness is 99. The default Night Brightness is 49. Lower brightness values make the sign dimmer.
 - Light Mode:
 - Timers Sign power will be controlled with the On/Off timer and brightness will be controlled with the Day/Night timer.
 - Photocell Sign power will be controlled with the On/Off timers and brightness will be controlled with a photocell.
 - Note: The sign must be equipped with a photocell for this mode to work correctly. If a photocell is not present the sign will always stay at the night brightness level.
 - Day Sign will stay at day brightness. Timers and photocell input will be ignored.
 - Night Sign will stay at night brightness. Timers and photocell input will be ignored.
 - *Off* Sign will stay off. Timers and photocell input will be ignored.

Section 3: PricePad Operation

3.6 Settings (continued) Timers Menu: ♣→ Timers Tap a setting to change its value. March 9, 201 9:51:12 AM Timers **On/Off Timer:** Controls when the sign automatically turns on and off. On/Off Sign on 24 Hours?: Setting this to "Yes" will keep the sign on 24 hours a day and hide the "Sign On" and "Sign Off" times from the menu. Day/Night • **Sign On:** The time the sign will turn on. (store open time) Back nies PricePad for FPCU 3.0 v • **Sign Off:** The time the sign will turn off. (store close time) Day/Night Timer: arch 9, 201 :53:49 AM On/Off • Day Start: Time when the digits change from night Sign On Sign Off brightness to day brightness and the sign's lights shut off. 6:00 AM 10:00 PM • **Night Start:** The time when the sign goes from day Signs on 24 hours? brightness to night brightness and the sign's lights turn on. No Note: The Day/Night timer will not be available if the light mode Back PricePad for EPCU 3.0 v is set to Photocell. March 9, 201 9:51:46 AM Day/Night **Edit Value** arch 9, 201 :52:11 AM arch 9, 20 :54:09 AM Edit Value Day Start Signs on 24 hours? Sign On 8:00 AM **Night Start** No 6-00 6:00 PM



Info Menu: 🌼 → Info

Back

The Info menu displays PricePad and sign information, and allows sign names to be changed.

Back

• The following PricePad information is displayed:

Save

- PricePad startup time and date.
- PricePad serial number.
- \circ $\;$ All signs currently bound and their signal strengths.
- To view sign specific info, tap the desired sign.
- The sign address, controller firmware version, and sign name is displayed.
- The sign name can be changed by tapping it, then using the onscreen keyboard to enter a new name. This is useful if there are multiple signs.

Back

Save

Section 3: PricePad Operation

3.7 Error Screens

| March 9, 2017 11:57:34 AM | Error | ¢, |
|--------------------------------------|--|----|
| Canno | ot communicate with Sign 1 Retries:3 | |
| Back | Blair Companies PricePad for EPCU 3.0 v0 | |
| Extern | al radio selected and not responding | |
| Back March 9, 2017 11:59:57 AM | Blair Companies PricePad for EPCU 3.0 v0 | ¢, |
| Intern | al radio selected and not responding | |
| Back | | |



Communication Errors

All errors will self clear 60 seconds after the error condition is removed. Pressing the Back button will immediately clear the error. **Causes for Errors:**

Cannot communicate with Sign:

- The sign is powered off.
- The PricePad radio is out of range of the sign.
- The antenna on the PricePad or sign is damaged or not present.
- The sign side radio is not working properly.

External radio selected and not responding:

- Radio Mode is set to "external" and the external radio is not securely plugged into the *COM* connector on the PricePad.
- Radio Mode is set to "external" and external radio is not working properly.

Internal radio selected and not responding:

- Radio Mode is set to "internal" and the PricePad is not equipped with an internal radio.
- Radio Mode is set to "internal" and the internal radio is not working properly.

Sign Busy Errors

Sign is busy in economy remote menu:

• This error will go away after exiting the economy remote menu.

Sign is busy performing factory reset:

- This error will go away after the factory reset is complete. Sign is busy testing power supplies:
- This error will go away after the 1 minute supply test has completed.

Sign is busy testing digits:

• Dipswitch 3 is in the on position on the master controller causing the sign to perform a digit test.

| March 9, 2017 1:23:07 PM | Error | (| March 9, 2017 1:24:00 PM | Error | |
|-----------------------------|--|----------|-----------------------------|--|---------|
| Sig | n 1 is busy testing power supplies | | | Sign 1 is busy testing digits | |
| Back | Blair Companies PricePad for EPCU 3.0 v0 | | Back | Blair Companies PricePad for EPCU 3.0 v0 | |