

Shutting Off Power to EZTouch Panel

Removing power from the EZTouch Panel does not normally cause a loss of the user program that is stored in the panel unless the battery voltage is low or the battery has been removed. A low battery can be programmed to a hard-coded system alarm that will display a message on all user-programmed screens.* It is recommended that you back up your user program on multiple PC disks and/or install a flash option card, which will provide a nonvolatile storage of the user program.

The steps to install a Flash option card and to load the user program onto a Flash option card are as follows:

1. Run the EZTouch Programming Software and connect the PC serial port to **COM1** on the panel. Power up the panel.
2. If the user program is not stored on the connected PC, then “Transfer the program from the panel.” See the instructions below, “To save program to computer disk, ...”
3. Then save the user program to disk by performing the following steps:
 - a. Power down panel.
 - b. Install Flash option card (see page 50).
 - c. Power up panel.
 - d. Transfer saved program to the panel.
4. From the Start Screen (**Project Information, Step 1**), under **SELECT ACTION**, click on **Edit Program ON-LINE**. Click **Panel > Flash > RAM to Flash**.
5. The user program will now be stored to both the Flash and RAM memory.
6. Each time the panel is powered with the Flash card installed, the user program will load from the nonvolatile Flash option card to the battery-backed user RAM. ***This is a very useful feature for performing field upgrades or changes to user programs. OEMs can send updated Flash cards to field locations for operators to upgrade their systems without using a PC!***

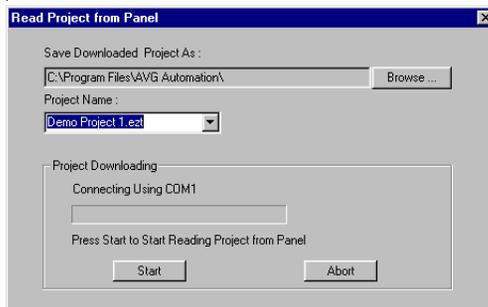
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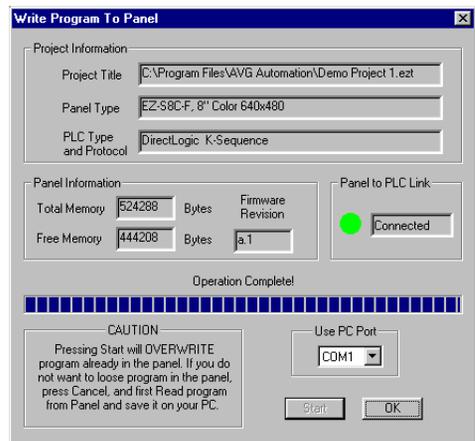
* A low battery sets a System Attribute that may be programmed to display an alarm. You must program the attribute and alarm for this to happen. See EZTouch Programming Help or Manual, Project Attributes > Panel to PLC > Low Battery.

To save a program to computer disk, perform the following steps:

1. Have programming computer connected to the panel and EZTouch Programming Software running.
2. From the Start Screen (Project Information, Step 1) under **SELECT ACTION**, click on **Read Program from Panel and Edit OFF-LINE**. The screen shown below will appear.



3. Save the project to the computer hard drive or a floppy disk by clicking on the **Browse** Button and navigating to the directory and folder where you want to save the project. Click on the **Start** button.
4. Shut off power and perform maintenance task.
5. Reapply power to panel and with programming software running, click on **Edit Program OFF-LINE** and select the saved project file.
6. Click on **File > Transfer to Panel**. The **Write Program to Panel** screen, shown to the right, will appear. Click on the **Start** button to transfer the program to the EZTouch Panel.



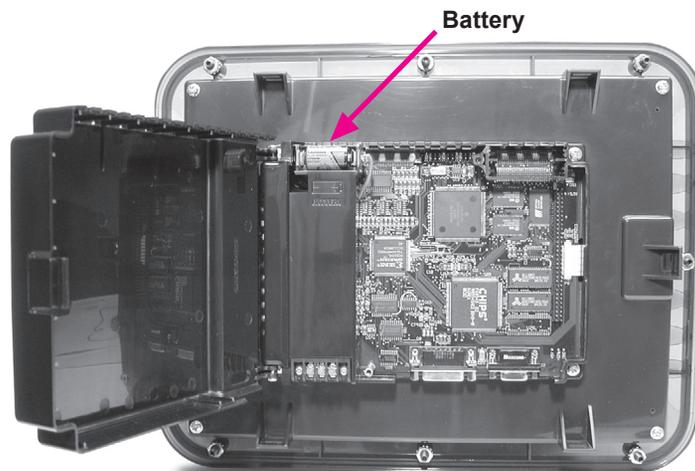
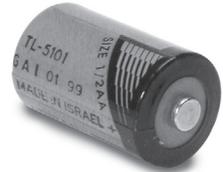
Lithium Battery Replacement

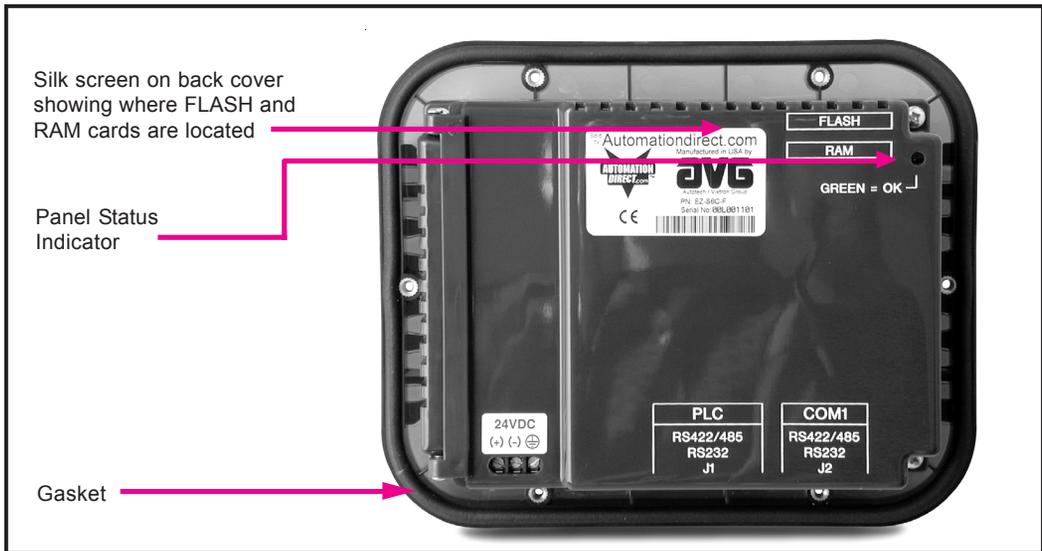


BEFORE REMOVING BATTERY, back up the user program and save in accordance with the instructions on page 45.

Typical battery life is 5 years.

- a. Connect EZTouch Panel to a computer and, following instructions on the pages 45 and 46 to **save the user program to disk.**
- b. Disconnect power source.
- c. Open back cover (shown open in figure below) to access the battery.
- d. The battery is located in the upper-left hand corner as shown in the figure below. Remove old battery and replace with a new 1/2 AA, 3.6 V Lithium Battery (Part Number EZ-BAT).
- e. Close rear cover and ensure that the door latches.
- f. Reconnect power source, connect to PC, run EZTouch Panel Programming Software, and follow instructions to transfer the user program that was previously saved to disk.





Gasket Replacement

The standard gasket may need to be replaced if it becomes damaged or worn. To replace the gasket (P/N **EZ-TOUCH6-GSK**, **EZ-TOUCH8-GSK**, or **EZ-TOUCH10-GSK**) perform the following steps:

1. Ensure that all pieces of old gasket have been removed from the gasket slot.
2. Remove the new replacement gasket from its plastic bag and position over the gasket slot.
3. Press the gasket into the slot. Friction between the slot and gasket will hold it into place during installation.

6-, 8-, 10-, and 15- inch Slim Bezel Gasket Replacement (P/N's **EZ-6SLIMF-GSK**, **EZ-8SLIMF-GSK**, **EZ-10SLIMF-GSK**, or **EZ-15SLIMF-GSK**)

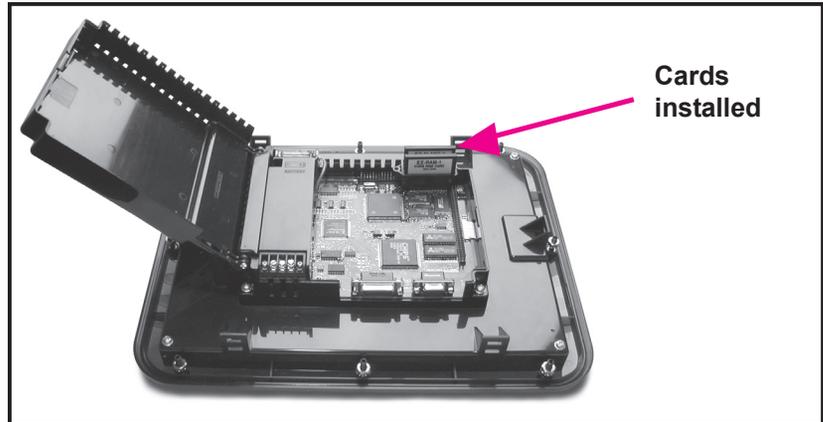
Please note that this gasket is **NOT REUSABLE**. If you remove the panel from its mounting surface for any reason, discard the old gasket and **REPLACE** with a new gasket to remount the panel.

Panel Status Indicator Light

The Status LED provides an indication of unit status. It will illuminate as RED or GREEN. If the LED does not light, this indicates that there is NO POWER to unit or the power supply failed. Check or replace 24 VDC power supply. If ok, send unit back to factory for repair. If the LED turns RED and stays RED, your power supply may be too small (see page 55.) If the LED flashes RED and turns GREEN that indicates normal operation. For more information, see the *Troubleshooting* Chapter of this manual.



DO NOT REMOVE THE RAM OR FLASH CARD WHILE POWER IS APPLIED TO THE PANEL. TO DO SO WILL IRREPARABLY DAMAGE THE CARD. BACK UP YOUR USER PROGRAM AND REMOVE POWER TO THE UNIT BEFORE REMOVING A MEMORY CARD. SEE PROGRAM BACKUP INSTRUCTIONS, PAGE 45.



RAM Upgrade

User RAM memory of all standard units, except the 6" Monochrome Model P/N EZ-S6M-R, can be upgraded. The 6-, 8-, and 10-inch models are 512K standard. If your program requires more than the standard 512K memory, you can upgrade to 1 MEG of memory from the standard 512K by inserting the optional 512K RAM Card (P/N EZ-RAM-1), or you can upgrade to 1.5 MEG by inserting the optional 1 MEG RAM Card (P/N EZ-RAM-2). The 15-inch model is 1 MEG standard. You can upgrade to 1.5 MEG by inserting the optional 512K RAM Card, or upgrade to 2 MEG with the optional 1 MEG RAM Card. To install card, perform the following steps:



Please Note: Your FLASH Program Backup must match or be larger than your RAM memory to ensure all of your program is saved. See next page (50).

1. Back up your user program (see page 45) and **REMOVE POWER TO THE UNIT.**
2. Open back cover to access RAM card slot (upper right hand corner, bottom slot).
3. Simply insert the new card, being careful to seat the card properly into the backplane connector. (Do not force the card, it should connect easily if properly aligned.)
4. Close back cover and reapply power to the panel.
5. Upload saved user program.



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2) USE ONLY AUTOMATIONDIRECT.COM FLASH CARDS IN THE EZTOUCH PANEL. USE OF ANOTHER CARD WILL DAMAGE THE UNIT AND WILL VOID WARRANTY.

FLASH Program Backup

All the EZTouch Panels, except the 6" Monochrome Model P/N EZ-S6M-R, can have Flash Program Backup Cards. This feature allows you to store your user program into nonvolatile memory. The FLASH Card is easily installed in the slot provided in the back of the unit. Depending upon the size of your program, choose from three available memory sizes — 512K (P/N EZ-FLASH-1), 1 MEG (P/N EZ-FLASH-2), and 2 MEG (P/N EZ-FLASH-3). *Note: the user RAM size must match your user Flash size: 512K RAM = 512K Flash, 1 MEG RAM = 1 MEG Flash, 1.5 MEG RAM = 2 MEG Flash (must be larger, use 2 MEG), and 2 MEG RAM = 2 MEG Flash.* With the panel connected to a programming PC and the EZTouch Programming Software running, click on Panel >Flash > RAM to FLASH from the main menu. Once the program is backed up onto the card, you can use it to load the program into different units — no programming computer is necessary. To install either card:



1. Back up your user program and **REMOVE POWER TO THE UNIT.**
2. Open back cover to access FLASH card slot (upper right hand corner, upper slot).
3. Simply insert the new card, being careful to seat the card properly into the backplane connector. (Do not force the card, it should connect easily if properly aligned.)
4. Close back cover and reapply power to the panel.
5. Upload saved user program.
6. In EZTouch Programming Software click on Panel > FLASH > RAM to FLASH.

Fuse Reset

The internal fuse does not require replacement. It is reset by removing power for 5 minutes and then reapplying power to the unit.

Fluorescent Backlight Bulb Replacement

Generally, backlight bulb life far exceeds the manufacturer’s expected life. (The manufacturer’s expected half-life rates are provided in the table below.)

Using the Screen Saver feature should significantly extend the life of the fluorescent backlight bulb! (Refer to the EZTouch Programming Software Help or Manual. To program the Screen Saver feature, go to EZTouch Programming Software’s main menu item **Objects > System Objects > Screen Saver.**)

EZTouch Panel Model	Manufacturer's Expected Bulb Half-Life
6" Monochrome	25,000 hours
6" Color	25,000 hours
8" Color	10,000 hours
10" Color	50,000 hours
15" Color	50,000 hours

Precautions

To ensure the longevity and effectiveness of the EZTouch Panel please take note of the following precautions:



- Do not press sharp objects against the screen.
- Do not strike the panel with hard objects.
- Do not press the screen with excessive force.
- Once the panel is mounted and has power applied, do not place any objects over the ventilation slots. This will result in heat buildup and may damage the unit.

Touchscreen/Chemical Compatibility

Standard Bezel The **6-, 8-, and 10-inch plastic (standard) bezel models' touchscreen has a polyester surface.** The following list is provided to make you aware of the general compatibility between chemicals that may be present in your work environment and the polyester surface of the touchscreen. Use the chart to determine those chemicals that are safe to use around your EZTouch Panel and those that may harm the touchscreen. The list rates these chemicals as **E—Excellent, G—Good, F—Fair,** and **N—Not Recommended.** Because the ratings are for ideal conditions at 57°C, consider all factors when evaluating your application.

<u>Chemical</u>	<u>Rating</u>	<u>Chemical</u>	<u>Rating</u>
Acetone	G	Aniline	G
Auto fuel	E	Auto lubricants	E
Auto Hydraulics	E	Bromine (wet)	N
Butyl Cellosolve	E	Butyl Ether	G
Chloroform	G	Clorox	E
Coffee	E	Cupric Sulfate	E
Cyclohexanone	N	Cyclohexanol	E
Downy	E	Diethyl Ether	G
Diocetyl Phthalate	G	Ethyl Acetate	E
Ethanol	E	Ethylene Chloride	G
Fantastic	E	Formula 409	E
Grape Juice	E	Heptane	E
Hexane	E	Hydrogen Peroxide	N
Isopropyl Alcohol	E	Ketchup	E
Lemon Juice	E	MEK	F
Methylene Chloride	N	Mineral Acids (dilute)	E
Mineral Acids (strong)	G	Mr. Clean	E
Mustard	G	Naphtha	G
Phenol	N	Sodium Hydroxide (dilute)	G
Sodium Hydroxide (strong)	F	Sodium Hypochlorite	E
Spray 'N Wash	E	Tea	E
Toluene	E	Tomato Juice	E
Top Job	E	Trichloroacetic acid	F
Triethanolamine	G	Vinegar	E
Wisk	F	Xylene	E
Zinc Chloride	E		

Slim Bezel The **6-, 8-, 10-, and 15-inch slim bezel models' touchscreen has a polycarbonate surface.** The following list is provided to make you aware of the general compatibility between chemicals that may be present in your work environment and the polyester surface of the touchscreen. Use the chart to determine those chemicals that are safe to use around your EZTouch Panel and those that may harm the touchscreen. The list rates these chemicals as **E—Excellent, G—Good, F—Fair,** and **N—Not Recommended.** Because the ratings are for ideal conditions at 57°C, consider all factors when evaluating your application.

Chemical	Rating	Chemical	Rating
Acetaldehyde	N	Acetamide	N
Acetic Acid @ 5%	G	Acetic Acid @ 50%	G
Acetone	N	Acetonitrile	N
Acrylonitrile	N	Adipic Acid	E
Alanine	N	Allyl Alcohol	F
Alum. Hydroxide	N	Aluminum Salts	G
Amino Acids	E	Ammonia	N
Ammonium Acetate	E	Ammonium Glucate	F
Ammonium Hydroxide @ 5%	N	Ammonium Hydroxide @ 30%	N
Ammonium Oxalate	E	Ammonium Salts	G
n-Amyl Acetate	N	Amyl Chloride	N
Aniline	N	Benzaldehyde	N
Benzene	N	Benzoic Acid	G
Benzyl Acetate	G	Benzyl Alcohol	G
Bromine	F	Bromobenzene	N
Bromoform	N	Butadiene	N
n-Butyl Acetate	N	n-Butyl Alcohol	F
sec-Butyl Alcohol	F	tert-Butyl Alcohol	F
Butyric Acid	N	Calcium Hydroxide	N
Calcium Hypochlorite	N	Formaldehyde @ 40%	G
Formic Acid @ 3%	G	Formic Acid @ 50%	G
Formic Acid @ 99%	F	Fuel Oil	G
Gasoline	F	Glacial Acetic Acid	N
Glycerin	E	n-Heptane	G
Hexane	N	Hydrochloric Acid @ 5%	E
Hydrochloric Acid @ 20%	F	Hydrochloric Acid @ 35%	N
Hydrofluoric Acid @ 5%	F	Hydrofluoric Acid @ 48%	N
Hydrogen Peroxide @ 5%	E	Hydrogen Peroxide @ 30%	E
Hydrogen Peroxide @ 90%	E	Isobutyl Alcohol	G
Isopropyl Acetate	N	Isopropyl Alcohol	E
Isopropyl Benzene	N	Kerosene	E
Lactic Acid @ 3%	G	Lactic Acid @ 85%	G
Methoxyethyl Oleate	N	Methyl Alcohol	F
Methyl Ethyl Ketone	N	Methyl Isobutyl Ketone	N
Methyl Propyl Ketone	N	Methylene Chloride	N
Mineral Oil	G	Nitric Acid @ 10%	G
Nitric Acid @ 50%	F	Nitric Acid @ 70%	N
Nitrobenzene	N	n-Octane	F
Orange Oil	F	Ozone	G
Carbazole	N	Carbon Disulfide	N
Carbon Tetrachloride	N	Cedarwood Oil	F
Cellosolve Acetate	N	Chlorine @ 10% in air	G
Chlorine @ 10% moist	F	Chloroacetic Acid	N
p-Chloroacetophenone	N	Chloroform	N
Chromic Acid @ 10%	N	Chromic Acid @ 50%	N
Cinnamon Oil	F	Citric Acid @ 10%	G
Cresol	N	Cyclohexane	G
Decalin	N	o-Dichlorobenzene	N
p-Dichlorobenzene	N	Diethyl Benzene	N
Diethyl ether	N	Diethyl Ketone	N

Chemical	Rating	Chemical	Rating
Diethyl Malonate	N	Diethylene Glycol	F
Diethylene Glycol Ethyl Ether	N	Dimethylformamide	N
Dimethyl Sulfoxide	N	1, 4-Dioxane	F
Dipropylene Glycol	F	Ether	N
Ethyl Acetate	N	Ethyl Alcohol	G
Ethyl Alcohol @ 40%	G	Ethyl Benzene	N
Ethyl Benzoate	N	Ethyl Butyrate	N
Ethyl Chloride Liquid	N	Ethyl Cyanoacetate	N
Ethyl Lactate	N	Ethylene Chloride	N
Ethylene Glycol	F	Ethylene Glycol Methyl Ether	N
Ethylene Oxide	N	Fluorides	E
Fluorine	F	Formaldehyde	G
Perchloric Acid	N	Perchloroethylene	N
Phenol Crystals	N	Phosphoric Acid @ 5%	E
Phosphoric Acid @ 85%	G	Pine Oil	E
Potassium Hydroxide @ 1%	N	Potassium Hydroxide conc.	N
Propane Gas	N	Propylene Glycol	F
Propylene Oxide	F	Resorcinol sat.	F
Resorcinol @ 5%	F	Salicylaldehyde	F
Salicylic Acid Powder	G	Salicylic Acid sat.	G
Salt Solutions Metallic	E	Silver Acetate	G
Silver Nitrate	E	Sodium Acetate sat.	G
Sodium Hydroxide @ 1%	N	Sodium Hydroxide @ 50%+	N
Sodium Hypochlorite @ 15%	F	Stearic Acid Crystals	G
Sulfuric Acid @ 6%	E	Sulfuric Acid @ 20%	G
Sulfuric Acid @ 60%	F	Sulfuric Acid @ 98%	N
Sulfur Dioxide Liquid	G	Sulfur Dioxide dry	G
Sulfur Salts	N	Tartaric Acid	G
Tetrahydrofuran	N	Thionyl Chloride	N
Toluene	N	Tributyl Citrate	N
Trichloroethane	N	Trichloroethylene	N
Triethylene Glycol	G	Tripropylene Glycol	G
Turpentine	N	Undecyl Alcohol	F
Urea	N	Vinylidene Chloride	N
Xylene	N	Zinc Stearate	E

Touchscreen Cleaning

The EZTouch Panel touchscreen has a scratch resistant coating. This adds a slight chemical barrier to the screen, but the coating's primary purpose is to protect the screen from abrasion. The EZTouch Panel touchscreen should be cleaned as needed with warm, soapy water.