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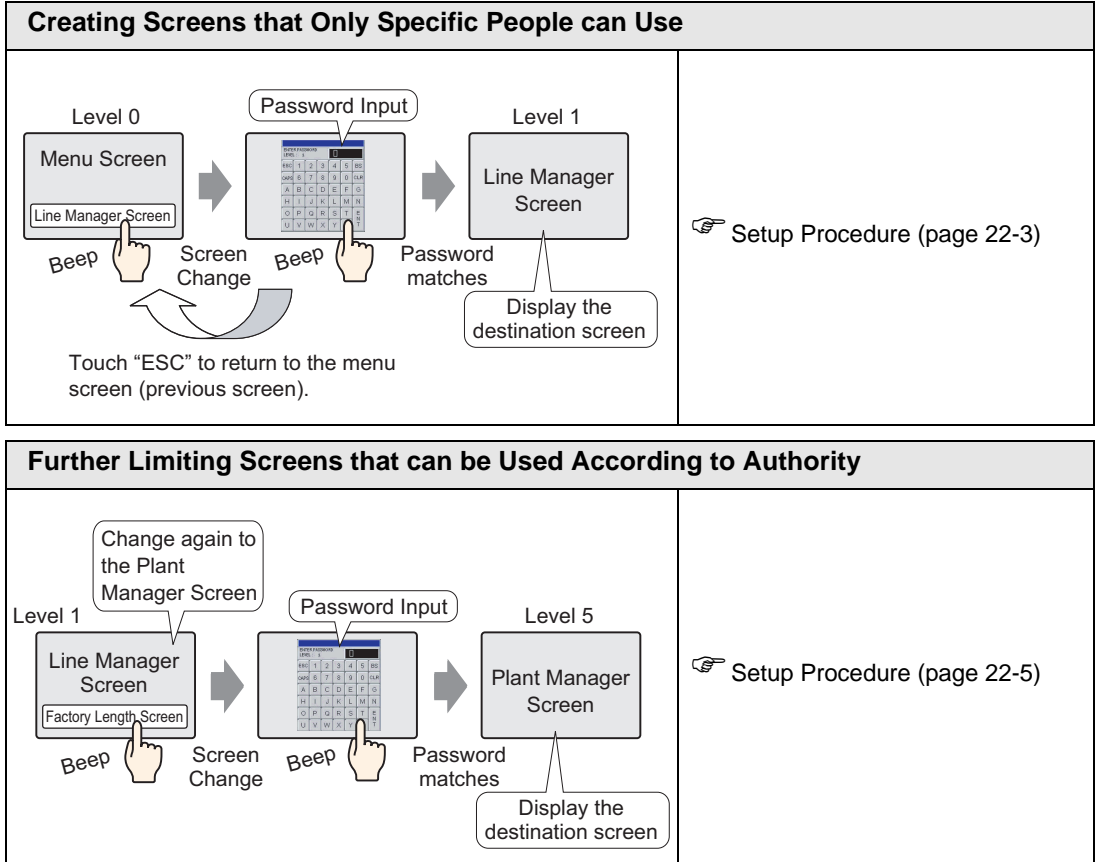
Protecting Screens with Passwords

This chapter explains about “Protecting Screens with Passwords” in GP-Pro EX and the basic functions used to change settings.

Please start by reading “22.1 Settings Menu” (page 22-2) and then turn to the corresponding page.

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22.1 Settings Menu

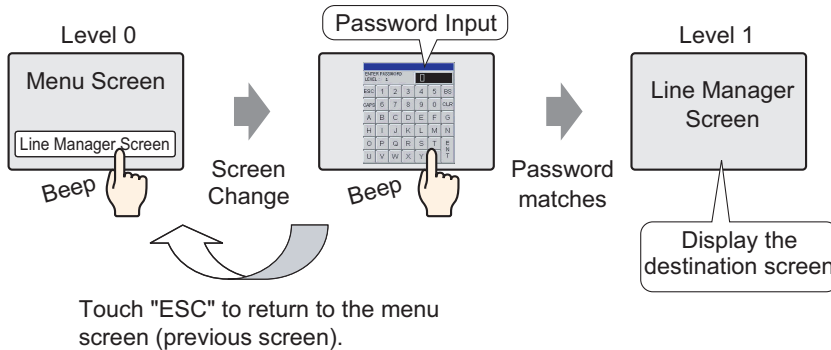


22.2 Creating Screens that Only Specific People can Use


22.2.1 Setup Procedure

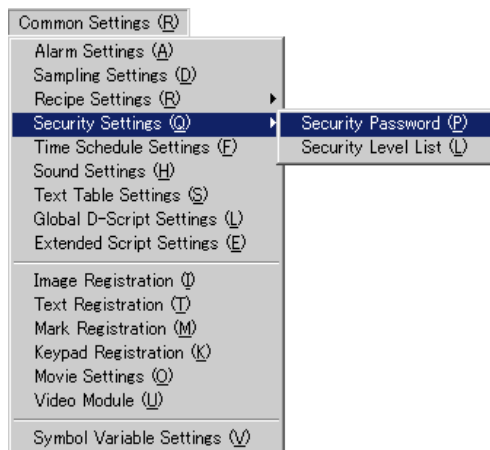
NOTE • Please refer to the settings guide for details.
 ☞ “22.5 Common Settings Guide (Security Settings)” (page 22-9)

Sets a Line Manager Screen (Screen No.: B2) with security level 1 and a password (1111).

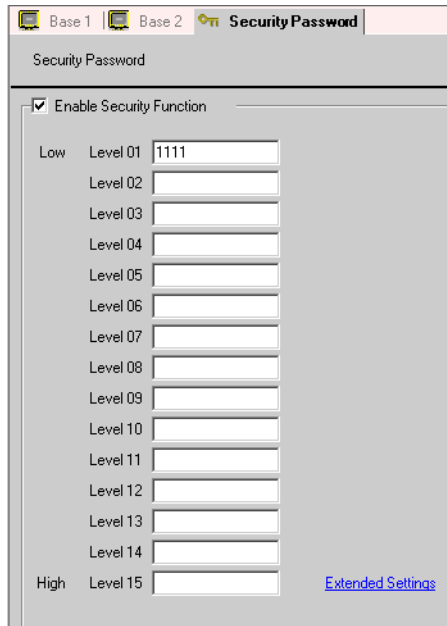


NOTE • Security level 0 means no security is set.

1 Select the [Common Settings (R)] menu - [Security Settings (O)] command - [Security Password (P)] option, or click  from the toolbar.

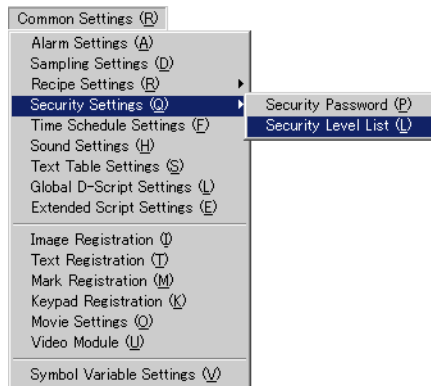


2 The Password Settings screen opens. Put a check mark next to the [Enable Security Function] box, and input the password “1111” in [Level 01].



NOTE • Please set a password of up to 8 characters.

3 Select the [Common Settings (R)] menu - [Security Settings (O)] option - [Security Level List (L)] command.



4 Set the Line Manager screen’s (Screen No.: B2) [Security Level] to “1” and the process is complete.

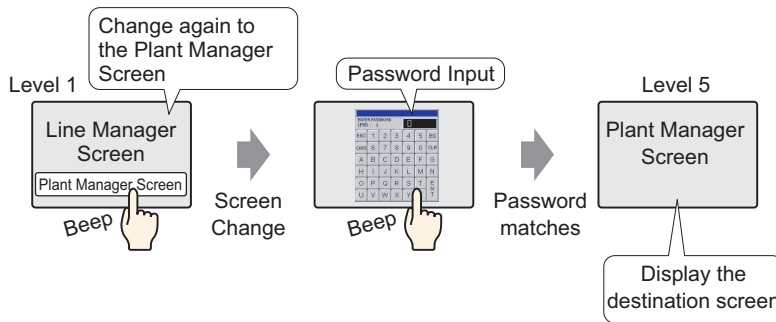
Screen No.	Security Level	Title
B1	0	Menu Screen
B2	1	Line Manager Screen


22.3 Further Limiting Screens that can be Used According to Authority

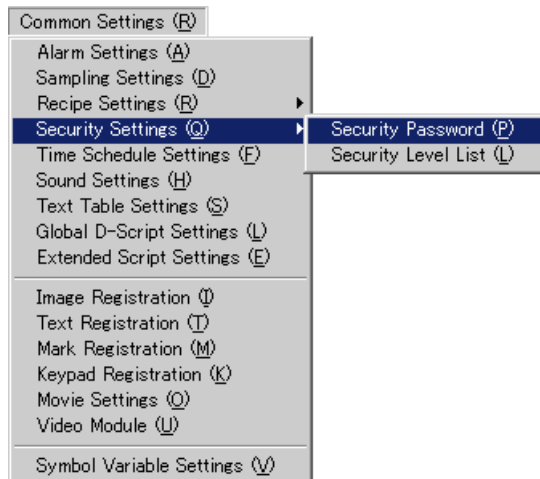
22.3.1 Setup Procedure

NOTE • Please refer to the settings guide for details.
 ☞ “22.5 Common Settings Guide (Security Settings)” (page 22-9)

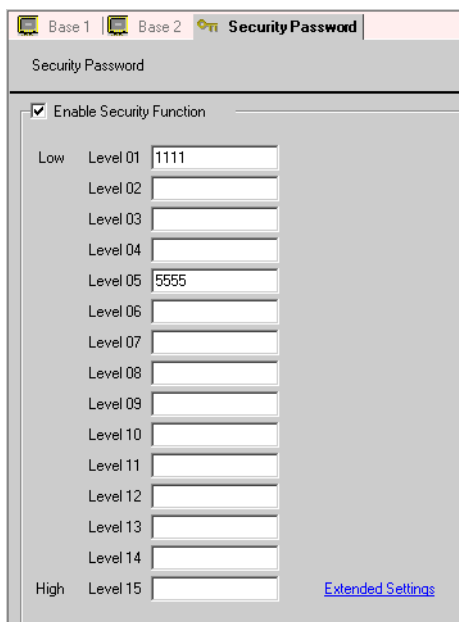
Sets a Plant Manager Screen (Screen No.: B3) with security level 5 and a password (5555).



- 1 Select the [Common Settings (R)] menu - [Security Settings (O)] command - [Security Password (P)] option, or click  from the toolbar.

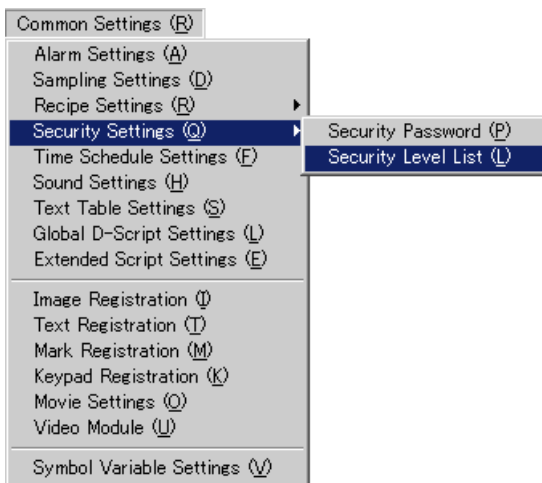


2 The Password Settings screen opens. Put a check mark next to the [Enable Security Function] box, and input the password “1111” in [Level 01], and input the password “5555” in [Level 05].



NOTE • Please set a password of up to 8 characters.

3 Select the [Common Settings (R)] menu - [Security Settings (O)] option - [Security Level List (L)] command.



4 Set the Line Manager screen’s (Screen No.: B2) [Security Level] to “1”, set the Plant Manager screen’s (Screen No.: B3) level to “5”, and the process is complete.

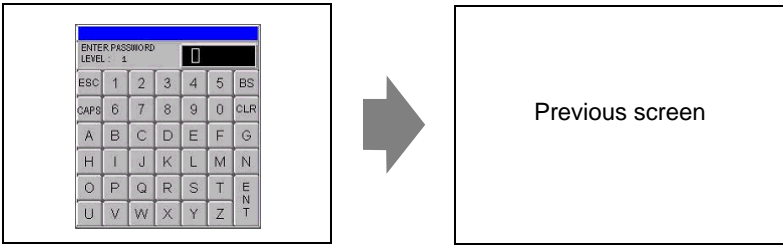

Screen No.	Security Level	Title
B1	0	Menu Screen
B2	1	Line Manager Screen
B3	5	Plant Manager Screen

22.4 Password Input Window


22.4.1 Introducing the Password Input Window

The password input window automatically appears when you try to display a screen with a higher security level than the one that is currently displayed. A password appears as asterisks (*) when being inputted.



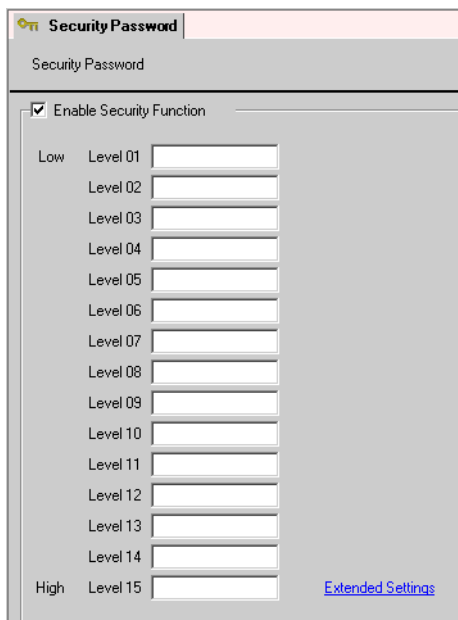
Display	Description
ESC	<p>Canceling the password input will close the password input window.</p> <div style="text-align: center;">  </div> <p>NOTE</p> <ul style="list-style-type: none"> When changing screens both by touch and from the device, confirm that there is a check mark next to the System Settings Window's [Main Unit Settings] - [Display Settings] tab - [Reflect in Device/PLC] option. If there is no check mark, when there is a change screen request from a device/PLC, the [ESC] key can not cancel even if pressed. <p> "5.13.6 [System Settings Window] Settings Guide ■ [Main Unit Settings] Settings Guide ◆ Display Settings • Screen Settings" (page 5-100)</p>
CAPS	<p>Changes between uppercase and lowercase letters. When the [CAPS] key is displayed in the reverse color (black), it will input lowercase letters.</p> <p>NOTE</p> <ul style="list-style-type: none"> Even if you change between uppercase and lowercase letters, the keypad will only display in uppercase letters.
ENT	<p>Confirm the inputted password.</p>


Continued

Display	Description						
<p>LEVEL (Request Level Display)</p>	<p>Shows the security level of the screen you are trying to display.</p>  <p>NOTE</p> <ul style="list-style-type: none"> The current level and the request level can be seen from the internal device addresses. The values are stored in the following internal device addresses. <table border="0" data-bbox="484 575 971 639"> <tr> <td>LS9301</td> <td><input type="text"/></td> <td>Current Level</td> </tr> <tr> <td>LS9302</td> <td><input type="text"/></td> <td>Request Level</td> </tr> </table> <p>LS9301 and LS9302 are read-only. When there is a password request in LS9302, the security level is stored and the value returns to 0 when the password input is complete.</p>	LS9301	<input type="text"/>	Current Level	LS9302	<input type="text"/>	Request Level
LS9301	<input type="text"/>	Current Level					
LS9302	<input type="text"/>	Request Level					

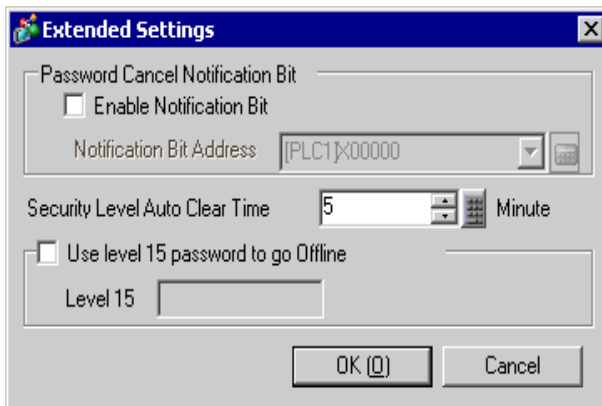
22.5 Common Settings Guide (Security Settings)

22.5.1 Password Settings



Setting	Description
Enable Security Function	Select whether or not to use the security function.
Level 01 - Level 15	<p>Set the password for security level 1 to 15. Password must be 1 to 8 single-byte characters. Passwords are case-sensitive.</p> <p>Passwords can be set only for needed security levels. It is not necessary to set a password for all levels.</p> <p>NOTE</p> <ul style="list-style-type: none"> • The same password can not be used for multiple security levels. • By setting a password in security level 15, you can change all security level passwords on the GP (offline mode).
Extended Settings	<p>Displays the [Extended Settings] dialog box.</p> <p> " ■ Extended Settings" (page 22-10)</p>

■ Extended Settings




Setting	Description								
Enable Notification Bit	Specify this when you will use the notification function of canceling the password input window that appears when you change screens from the device with the [ESC] key. This will not work when changing screens by touch.								
Notification Bit Address	When you cancel a password input window with the [ESC] key, the designated Notification Bit Address turns ON. When you cancel a password input window with the [ESC] key, the designated Notification Bit Address turns ON.If you haven't set the System Settings Window's [Main Unit Settings] - [Display Settings] tab - [Reflect in Device/PLC] option, observe this Notification Bit ON, and return the [Change-To Screen No.]*1 to the same number as [Current Screen No.] in the device. If the original screen number is returned, the password input window will automatically close.								
Security Level Auto Clear Time	<p>This feature sets the length of time required before the security level status returns to "0" assuming no GP unit operations/screen changes are performed.The time can be set from 1 to 60 minutes.</p> <p>NOTE</p> <ul style="list-style-type: none"> • If "0" is entered for the min. value, the security level status will not be automatically cleared. • When the LS9300's 0 bit goes from OFF to ON by performing the internal device address's bit action, the security level is cleared and the current security level stored in LS9301 becomes 0. After the Security Level Clear occurs, please return LS9300's 0 bit to OFF. (LS9301 is read-only.) <div style="text-align: center; margin-top: 10px;"> <p>0</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="border: none;">LS9300</td> <td style="border: 1px solid black; padding: 2px;">Reserved (0)</td> <td style="border: none;">+</td> <td style="border: none;">Security Level Clear Bit</td> </tr> <tr> <td style="border: none;">LS9301</td> <td style="border: 1px solid black; padding: 2px;"></td> <td style="border: none;">+</td> <td style="border: none;">Stores the current security level</td> </tr> </table> </div>	LS9300	Reserved (0)	+	Security Level Clear Bit	LS9301		+	Stores the current security level
LS9300	Reserved (0)	+	Security Level Clear Bit						
LS9301		+	Stores the current security level						

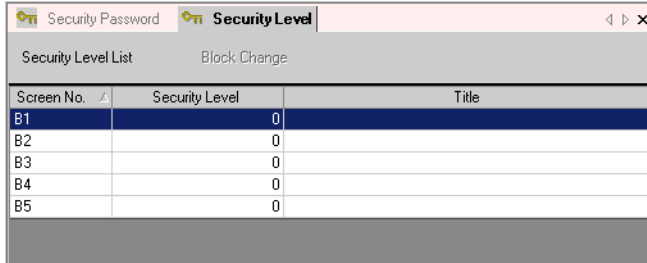
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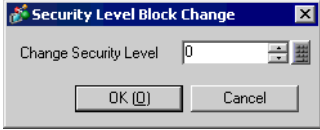
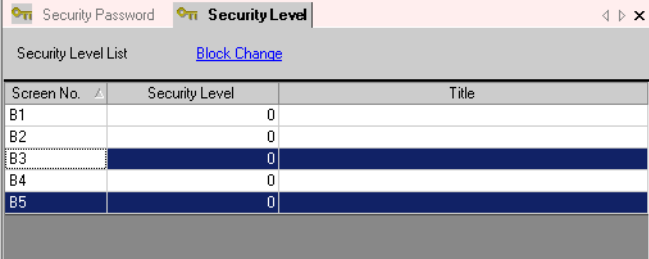
Setting	Description
Use level15 password to go Offline	<p>When you change to OFFLINE mode, the password input window will appear on the GP display and request the security level 15 password.</p> <div data-bbox="392 258 478 297" style="border: 1px solid black; padding: 2px; width: fit-content;">NOTE</div> <ul style="list-style-type: none"> • When you change back to online mode, the security status level will change back to “0”, indicating no password is required.
Level 15	Set the password for security level 15.

*1 [Change-To Screen No.], set it up in the System Data Area.

 “5.13.6 [System Settings Window] Settings Guide ◆ System Area Settings” (page 5-120)

22.5.2 Security Level List



Setting	Description
Screen No.	Displays the screen number.
Security Level	<p>Set each screen's security level.</p> <p>NOTE</p> <ul style="list-style-type: none"> When setting multiple screens to the same security level, please use [Block Change].
Comment	Displays each screen's title.
Block Change	<p>Mass update the selected security levels. Select multiple screens to change, and click on [Block Change]. A security level dialog box will appear and allow you to change the settings.</p>  <p>NOTE</p> <ul style="list-style-type: none"> To select multiple screens, drag the cursor or select rows while holding down the Ctrl key. 

22.6 Restrictions

22.6.1 Restrictions for a Password Input Window

- The password input window cannot be edited.
- Passwords cannot be entered using a device/PLC.
- Passwords cannot be entered using a Bar-Code Reader.
- If the Trigger Bit of a Local Window or Global Window turns ON while the password input window is displayed, the Local or Global Window will only be displayed after the password input window closes.
- On window parts that are used to call window screens set with a security level, make sure not to set [Continuous Read]. Even if it is set, the password input window will not be displayed on the GP and the security function will not work.
- If you set a security level that has no registered password to a screen, that screen cannot be displayed unless you input a password for a security level higher than that screen. If there is no higher security level with a registered password, you will not be able to change to that screen.

e.g. 1) When the passwords are set as follows and the screen changes to a level 4 screen

Level 1	AAAA
Level 2	BBBB
Level 3	CCCC
Level 4 to 14	None
Level 15	ZZZZ

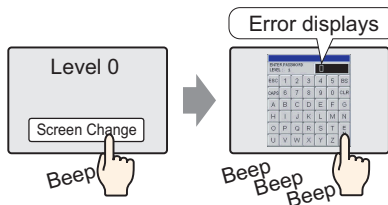


Input the level 15 password

There is a password higher than level 4, so the screen change is permitted

e.g. 2) When the passwords are set as follows and the screen changes to a level 4 screen

Level 1	AAAA
Level 2	BBBB
Level 3	CCCC
Level 4 to 15	None



Even if you have inputted something, pressing the [ESC] key will return to the previous screen.

There is no password higher than level 4, so the screen change is not permitted

- If you set a security level to the screen which first shows up when the GP is powered on (initial screen), the initial screen will operate even while the password input window is displayed in order to display the password input window after the initial screen is displayed. Also, you cannot cancel the displayed password input window with the [ESC] key. You need to input the correct password.

Memo