AGP3750T Sales Demo Manual

Version Information

Use this document with:

File name: AGP3750 Sales Demo.prx
Date: 1/15/2007
Revision: v2.00
Software: GP-Pro EX v2.00 or newer

Index

Changing the Touch Buzzer

To turn the Touch Buzzer ON or OFF follow the steps below:

1) Go to the AGP Offline menu
2) Go to “Main Unit Settings”, “Operation Settings”
3) Set “Touch Buzzer Sound” to “Enable” or “Disable” as required.

Adjusting the Standby Mode time

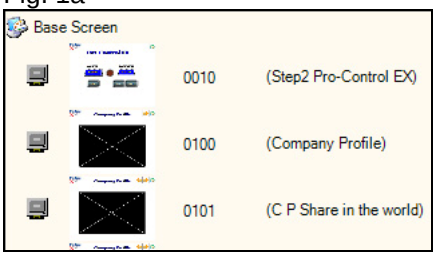
To adjust the Standby Mode time follow the steps below:

1) Go to the AGP Offline menu
2) Go to “Main Unit Settings”, “Screen Settings”
3) In “Standby Mode Time” enter the number of minutes until the AGP goes into standby mode

Installing the demo application on the AGP3750T

1) Use your web browser to connect to the Pro-face Partners Login and download the latest version of the “AGP3750 Sales Demo v200.zip” and “AGP3750 Sales Demo Manual.pdf” using the “Pro-face Demo Applications”, “AGP Sales Demo” links. After the download completes extract the files and folders from the zip file.
2) Ensure you are using the latest version of GP-Pro EX, Version 2.00 is required.
3) When you first open the demo project the CF Card Output Folder might not point to the CF Card folder that came with the demo distribution files. If the Screen List in GP-Pro EX looks like Fig. 1a below you will need to correctly set the CF Card Output Folder. (note that you may have to use the “change display mode” icon at the top of the screen list to show the screen preview) If the Screen List looks like Fig. 1b you can skip this step and go to Step 4

Fig. 1a



CF Card Folder not selected

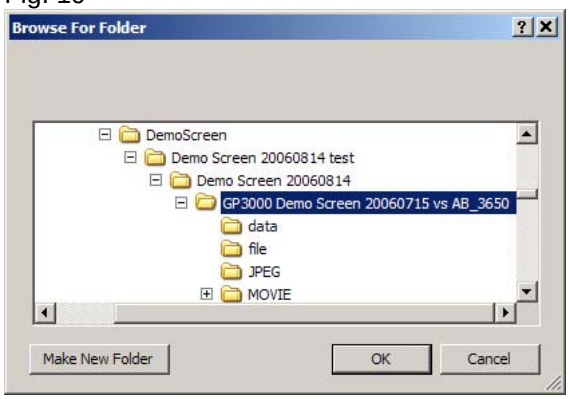
Fig. 1b

CF Card Folder set correctly

To change the CF Card Output Folder go to “Project”, “Properties”, “CF-Card Output Folder”, use the “Reference” button to open the “Browse For Folder” screen (Fig. 1c) and select the folder that contains folders called “data”, “file”, “JPEG” and “MOVIE”. Click “OK” to continue.

Note that you will now have to save the project, shutdown GP-Pro EX completely and restart it for the CF Card Folder change to take effect.

Fig. 1c



4) Use the “Transfer Project” icon or go to “Project”, “Transfer Project” to download the project.
5) Copy the contents of the JPEG and MOVIE folders manually into the folders as shown in Fig. 1c. Not all of the images and movies in these folders are copied to the CF Card during a regular download.

   The reason for this is that a number of these files were added to be used for display purposes only and are not linked to any specific object in GP-Pro EX (which would cause them to be included in a regular download) You can copy the folders to the CF Card in a number of ways

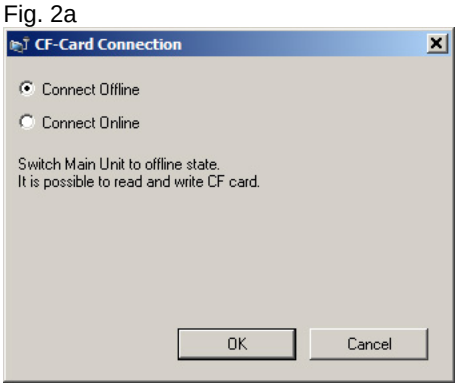
Method 1: Using an external CF Card reader

Power down the AGP remove the CF Card, place it in a card reader connected to your PC. (You can use a USB card reader, a PCMCIA CF Card adapter or a CF Card slot in a printer) After the CF Card is recognized by your PC as a removable drive or device use Windows Explorer to copy the files from the "CF3750" folder to the CF Card. Remove the CF Card from the reader and place it in the AGP.

Method 2: Using the CF-Card Connection in GP-Pro EX

An easier although slower way in which you do not have to use a special card reader is to connect to the AGP using the transfer window after you finish downloading the project file. After the download completes close the "Send Project" screen but do not close the "Transfer Tool". Click the [CF Card Connection] button , select the "Connect Offline" option (Fig. 2b) and click [OK].

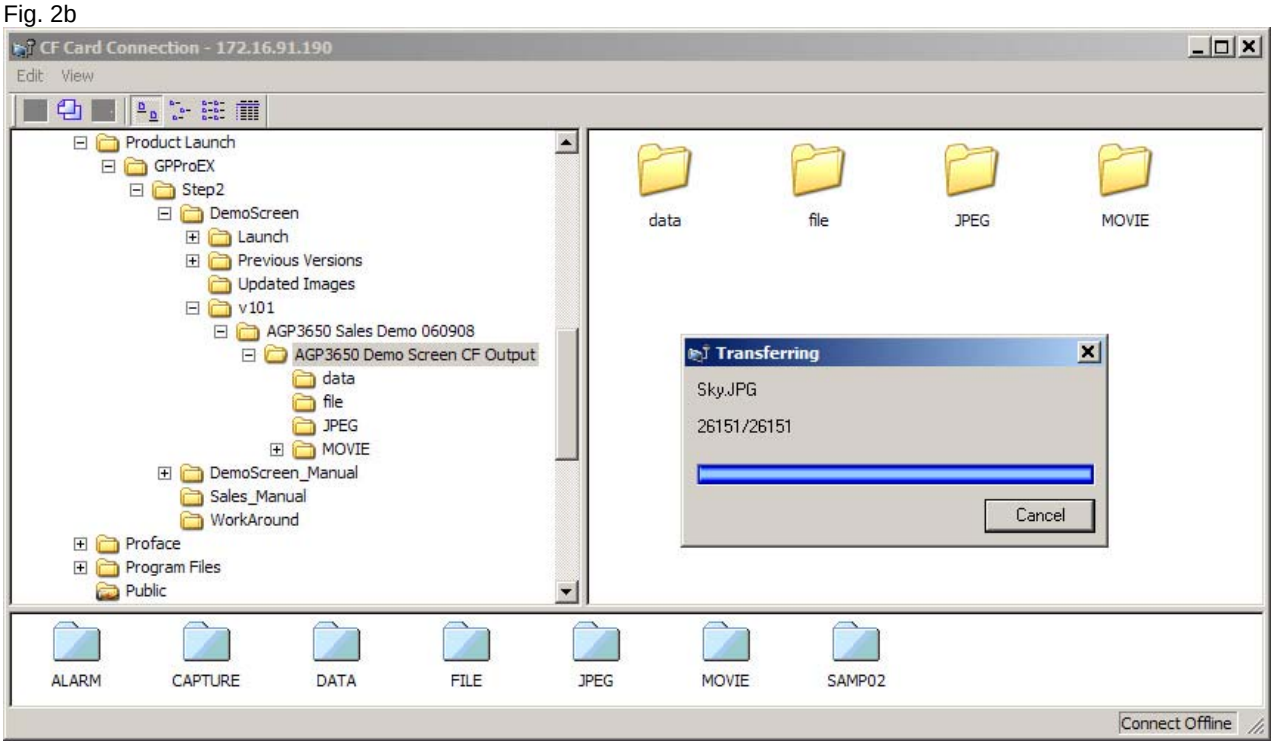
Fig. 2a



Select the IP address of the AGP that you want to connect to and wait until the AGP Screen displays the "Data Transfer" message.

The CF Card Connection window (Fig. 2b) is automatically opened on your PC. In the upper left hand portion of the screen browse to the folder called "CF3750", when you click on this folder the upper right hand side of the windows should display the folders as seen in Fig. 2b.
Select both the JPEG and MOVIE folder and drag them to the lower portion of the window which represents the files on the CF Card in the AGP. When asked to overwrite existing files click "yes all" and wait for the transfer to finish. Click the [X] in the upper right hand corner of the window to disconnect from the AGP.

Fig. 2b



Screen Background General

Screen 900 – Main Menu	
Gives access to the 5 major portions of the Sales Demo: - Company Profile - Hardware (H/W) functions - Software (S/W) functions - Key Features - Application Examples	
Screen 1999 – Stand-by Mode	
The stand by mode screen is shown after a preset timer elapses if there has been no touch, no alarm and no communication error. If any of these event occur the timer will reset itself. Click the screen to return to the last page that was displayed before the time out. Go to the Offline Menu, “Main Unit Settings”, “Screen Settings” to change the “Standby Mode Time”. A Screen saver is not required for the AGP but you can use this function to return to a preset mane after a certain time or to show your company logo (optionally animated)	

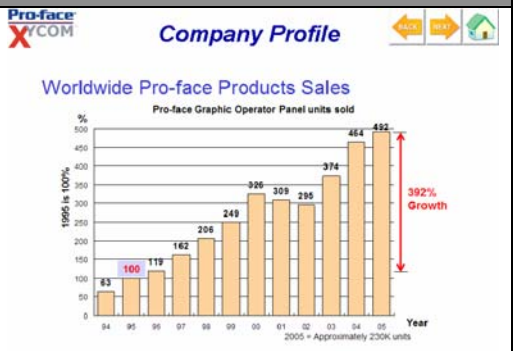
Screen Background – Company Profile

Screens without additional information		
Screen	Section	Title
B0100	Company Profile	Introduction
B0101	Company Profile	Pro-face #1 Market Share
B0102	Company Profile	Pro-face market Share by Area
B0104	Company Profile	Expansion of Development Offices
B0105	Company Profile	Worldwide Sales & Support
B0107	Company Profile	Worldwide Support Offices

Screen 103 – Worldwide Pro-face Product Sales

If 1995 is take as base year Pro-face has grown its number of products sold by 392% in 10 years.

Note that this graph shows % growth in units sold and not a number of units.



Screen 106 – Worldwide Support Services

If exporting product is important Pro-face offers the same services, from sales and support to training and repair wherever you buy a Pro-face HMI. The same software, hardware and part numbers are used worldwide guaranteeing consistency.

Wherever you deploy a Pro-face panel you have local replacement parts and support in the local language in place.

Screen 108 – Agency Approvals

If customer exports to Europe, RoHS (pronounced "*Row-hass*") compliance is very important.

The main purpose of this new standard is to eliminate certain materials like lead from the production process. (RoHS stands for *R*estriction *o*f *H*azardous *S*ubstances)

All AGP panels are RoHS compliant, for a full list of Pro-face products and RoHS compliancy visit: www.pro-face.com/ /company_e/proface/environment/index.htm

Screen Background – Hardware Functions

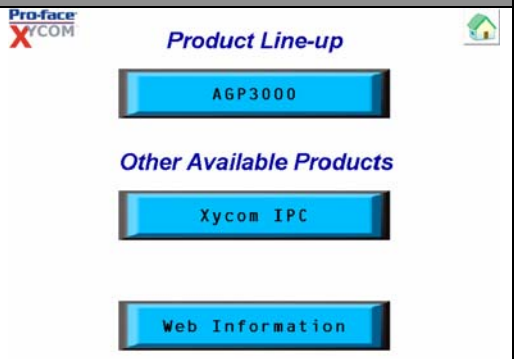
Screens without additional information		
Screen	Section	Title
B0201	Hardware Functions	GP-3000 Line Up
B0205	Hardware Functions	ST Series
B0206	Hardware Functions	LT Series
B0207	Hardware Functions	Industrial PC
B0210	Hardware Functions	Display / High Color Display
B0211	Hardware Functions	Sample JPEG Image
B0212	Hardware Functions	Sample JPEG Image
B0213	Hardware Functions	Sample JPEG Image
B0214	Hardware Functions	Sample JPEG Image
B0215	Hardware Functions	Sample JPEG Image
B0219	Hardware Functions	Symbolic Parts
B0220	Hardware Functions	Sign Images
B0221	Hardware Functions	Image Objects
B0230	Hardware Functions	Hardware Interfaces
B0235	Hardware Functions	Interface / Other
B0240	Hardware Functions	Hardware Capability
B0241	Hardware Functions	Up to 4 simultaneous drivers
B0242	Hardware Functions	High Speed screen refresh
B0250	Hardware Functions	Cutout Compatibility 1
B0251	Hardware Functions	Cutout Compatibility 2

Screen 200 – Product Line-up

The main function of this screen is to give access to the AGP3000 Series Hardware features.

In addition use it for cross selling with some target products like the Xycom 3115, 3117, 4600 and 4700 Series IPC Products.

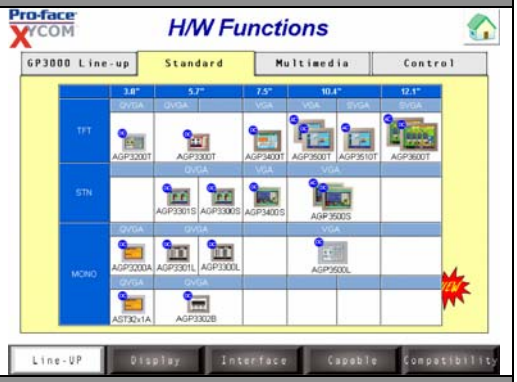
Web Information shows you links to the Xycom, Pro-face and Otasuke Pro! (Pro-face Support) websites.



Screen 202 – Standard HMI

Standard HMI
Any 3x0x AGP without Multimedia or Control.
NEW: AGP3200T, AGP3200A & AGP3510T
- “Without Multimedia” means no built-in video input and no sound input. Sound output and the 4 channel video module is available on select units

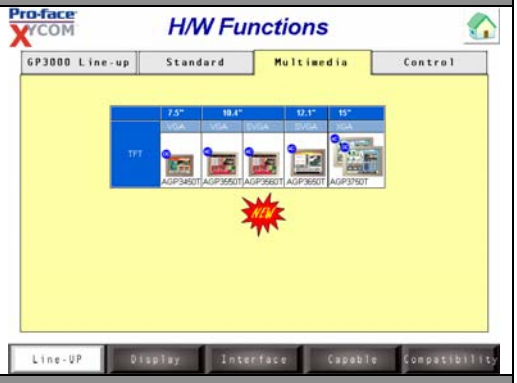
- “Without control” means no FlexNetwork or Built-in I/O, you CAN use the GP-Pro EX Logic with any Serial or Ethernet driver. No other HMI offers this flexibility and power



Screen 203 – HMI + Multimedia

Standard HMI + Multimedia (Video/Sound)
Any 3x50 AGP with Multimedia without Control
NEW: AGP3560T
- “With Multimedia” means there is one built-in video input and a sound input jack. Sound output and the 4 channel video module can also be used on select units

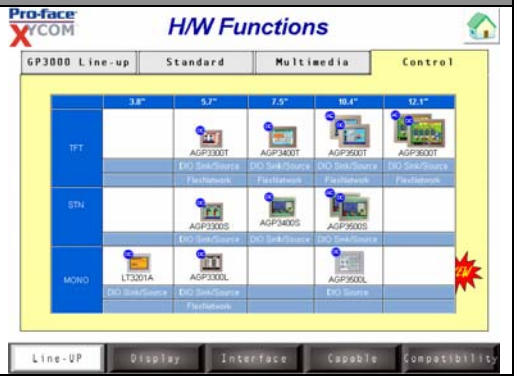
- “Without control” means no FlexNetwork or Built-in I/O, you CAN use the GP-Pro EX Logic with any Serial or Ethernet driver. No other HMI offers this flexibility and power



Screen 204 – HMI + Control

Standard HMI + Control (Flex / Built-in I/O / Modules)
Any 3x0x AGP and LT3200 without Multimedia.
NEW: LT3201A
- “Without Multimedia” means no built-in video input and no sound input. Sound output and the 4 channel video module is available on select units

- “With Control” means the AGP has a connector for Modules, FlexNetwork or Built-in I/O, you use the GP-Pro EX Logic to control the I/O while Serial or Ethernet driver are still available.



Screen 208 – Links

Visit www.xycom.com for Product information

Visit www.pro-face.com and www.pro-face.com/otasuke for technical information like manuals and software updates.

"Otasuke" means "Help" (it helps to explain this, because the Otasuke link and name can also be found in our software Help menus to provide our customers with a quick and easy link to the latest support information.)

Screen 217 – High Quality Parts & Objects

This screen displays some of our pre made Switch and Lamp parts including 2 state pumps, motors, blowers, valves and tanks.

This is the only place where the demo links to Image Objects (warning signs) and Equipment (high quality machine part drawings.)

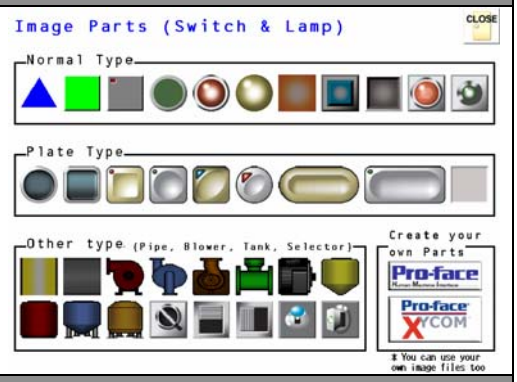
Symbolic parts are a great way to convey a message that is understood in any language. Symbolic Parts & Sign Images (Warning) can be used on lamps or switches.

Screen 218 – Image Parts (Switch & Lamp)

This screen displays some of our pre made Switch and Lamp parts including 2 state pumps, motors, blowers, valves and tanks.

It also shows how you can make you own switches using your own images for up to 16 button states + an interlock state.

(Touch any object to change states)



Screen 231 – COM / USB

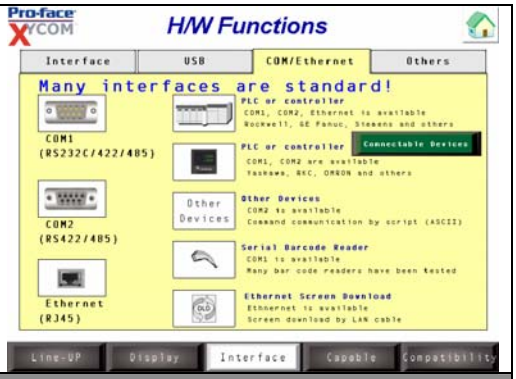
This screen displays the possible devices that can be connected to the USB port(s) on the 3000 series.

NEW: USB Memory can now be used for the same items already available for the CF Card. (Data Logging, Recipes, Trend Data, Alarm Logs, Movies, JPEG, Project Downloads, etc)

Screen 232 – COM / Ethernet

Use the “Connectable Devices” switch to display a list of available drivers.

(See screen 237 below)

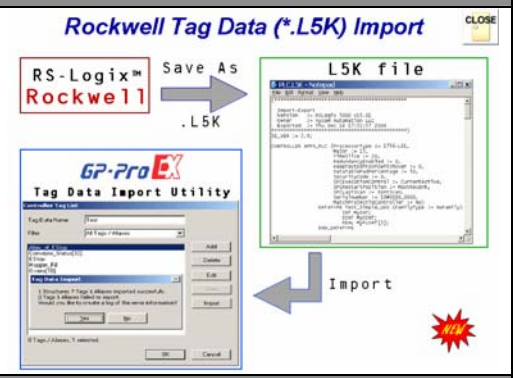


Screen 236 – Rockwell Tag List (*.csv) Import

L5K and CSV files created using the RSLogix5000 PLC programming software can be imported into GP-Pro EX.

These files contain structure and configuration of all “registers” (Native tags) that are setup in the ControlLogix or Compact-Logix PLC for use with the AB EtherNet/IP Native Tag driver.

NEW: Importing L5K files takes away the need to manually add structures in the Tag Data File. This function requires a beta test agreement, contact Scott Kortier or Bjorn den Dunnen

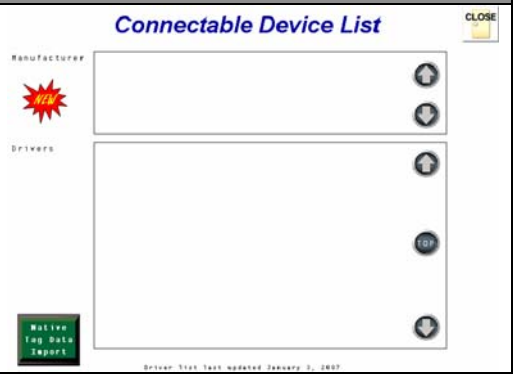


Screen 237 – Connectable Device List

For the latest updates visit www.pro-face.com/otasuke.

New driver can be downloaded for free from this website
And can easily be installed in current versions of GP-Pro EX

NEW: Use the top list to select a PLC manufacturer to have all available drivers displayed in the list below



Screen Background – Software Functions

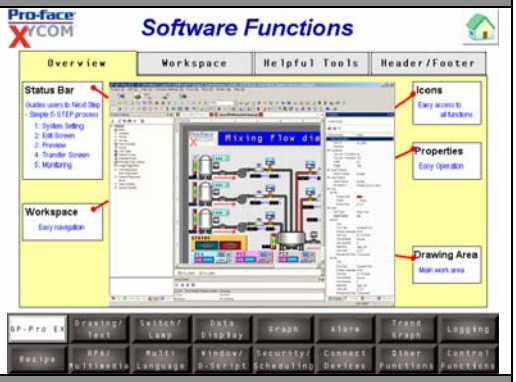
Screens without additional information		
Screen	Section	Title
B0321	Software Functions	Word Switch
B0322	Software Functions	Multi Function & Interlock
B0323	Software Functions	Other Switches
B0330	Software Functions	Numeric Display
B0333	Software Functions	Date, Time & Statistical Data Displays
B0340	Software Functions	Bar & Tank Graph
B0341	Software Functions	Meter & Pie Graph
B0342	Software Functions	Statistical Graph
B0354	Software Functions	Alarm CF File Manager
B0373	Software Functions	Logging CF File Manager
B0382	Software Functions	Recipe CF File Manager
B0383	Software Functions	Recipe Edit Data 1
B0384	Software Functions	Recipe Edit Data 2
B0396	Software Functions	Movie CF File Manager
B0397	Software Functions	VM 4 Channel Display
B0400	Software Functions	Multi Language Available Fonts
B0401	Software Functions	Multi Language Direct Text
B0402	Software Functions	Multi Language Text Table
B0412	Software Functions	D-Script
B0413	Software Functions	Special Scripts
B0421	Software Functions	Data Protection
B0422	Software Functions	Maintenance Screen
B0423	Software Functions	Manager Screen
B0431	Software Functions	CSV on CF
B0432	Software Functions	JPEG on CF
B0433	Software Functions	Movie on CF
B0434	Software Functions	Free Space on CF
B0441	Software Functions	Moving Object
B0443	Software Functions	Screen Capture
B0444	Software Functions	Animation for B440
B0450	Software Functions	HMI & Logic Editor Combined
B0452	Software Functions	Drag & Drop

Screen 300 – Editor Overview

The screen list, dock able lists and function windows and tab based screen selection make for a very easy to use editor interface.

The 5 step main toolbar guides you through (1) System Settings, (2) Screen Editing, (3) Preview, (4) Download and optional (5) Ladder monitoring.

Note that the preview function shows a static image, there is no runtime simulation in the current version of GP-Pro EX.



Screen 301 – Workspace

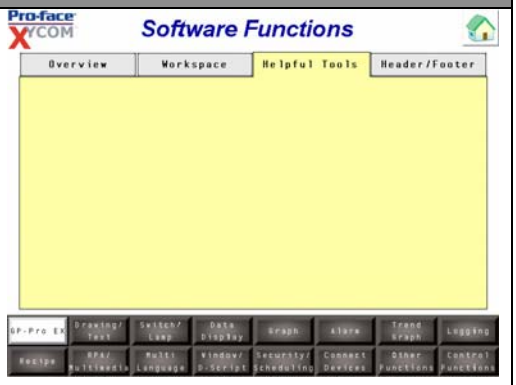
The screen thumbnails can be double clicked to open individual screens for editing (Screen List)

Address Mapping
Drag any register from the address list onto an object to easily add or replace an address. Red items in the list indicate the address is currently being used in the application.

Screen 302 – Helpful Tools

Auto Document
The images in this document were created by using our Project / Print function, when send to Rich Text File (RTF) all project data including all screen shots can be edited in MS Word or similar text editors. This feature makes it very easy to create comprehensive operation and maintenance manuals. Any item (like ladder logic or cross reference lists) can be printed to printer instead of a file as well.

NEW: The Helpful Tools section is now expanded to 3 screens, use the Next and Prev buttons to navigate. Added tools are: Full Text Search, Parts Toolbox, PID Monitor and PC Simulation.



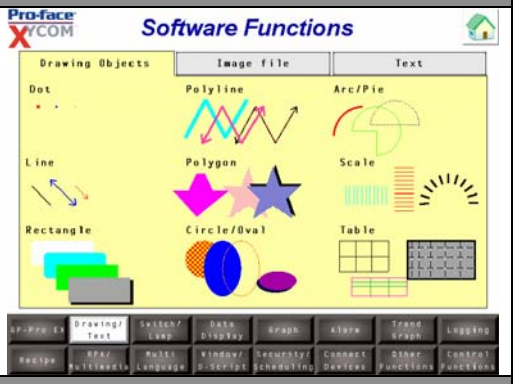
Screen 303 – Header / Footer

Templates: an OEM can make templates for the most comprehensive machine and register any of the parts in that project as a template for use on similar machines saving time and providing a consistent look.
The Header & Footer function help quickly create title and menu bars with great ease of use to provide a consistent look across all project screens.
A “Package” (library in GP-Pro C03) can be used to store a group of objects in order to reuse it in different projects. These “packages” show up on the toolbar as an icon with tooltip.

Screen 310 – Drawing

The table part allows you to easily create a table like grid display without having to draw multiple lines.

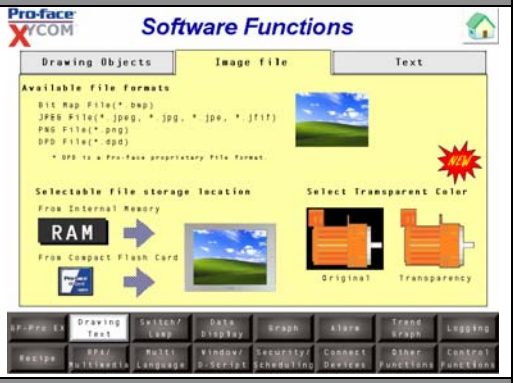
Note: this part is not linked to data in any way, you can use it to create individual data displays in each of the table's "cells"



Screen 311 – Image File

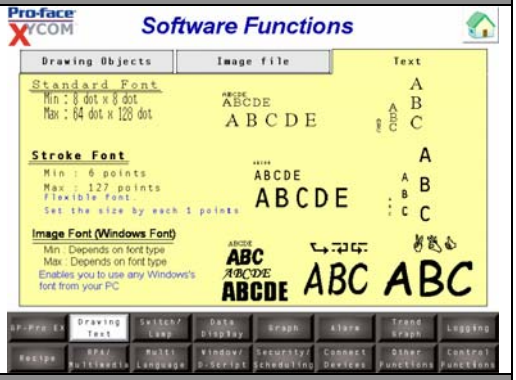
The Image File screen shows that images can be included in the project in several ways:

1) Image Placement, an image is selected and placed on a screen directly without assigning a number to it.
   NEW: A transparent color can now be selected when using Image Placement.
2) Image Registration, Images are assigned a number and can be stored in either Internal Memory (project memory) or on a CF Card. (Note that most images in this demo are loaded from CF Card giving a good indication of how fast they load)



Screen 312 – Fonts

Standard font is always available.
Stroke font requires the download of specific language fonts (System Settings, Font Settings); These fonts are downloaded into a special font memory area of 4Mb. When more language stroke fonts are added this 4Mb might not be sufficient to store all the stroke fonts, in this case programming memory will be used to store the additional fonts.
Windows fonts are converted to images before download and will thus take up a lot of programming memory. (they do not use the special font memory area)

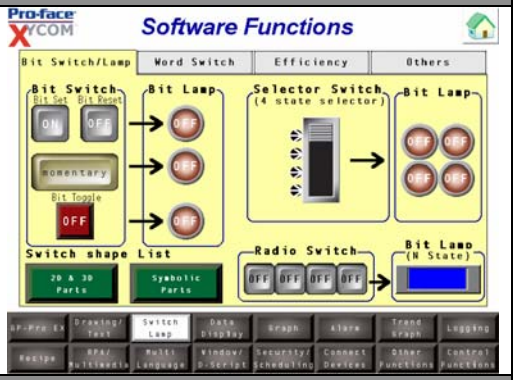


Screen 320 – Bit Switch / Lamp

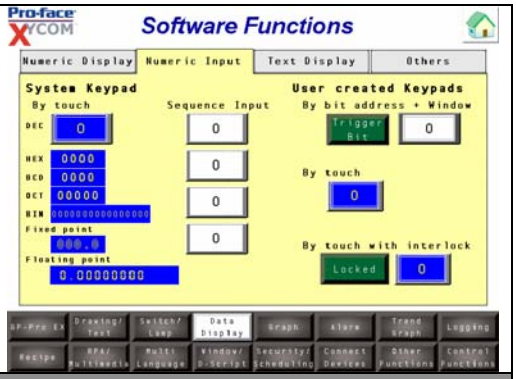
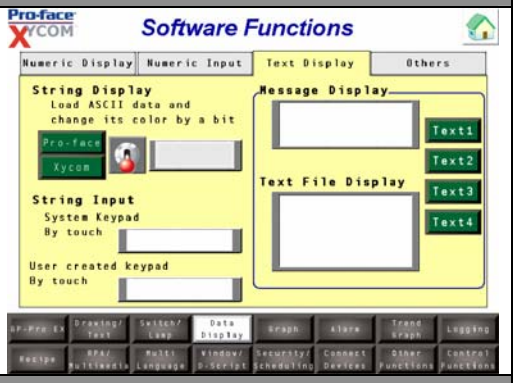
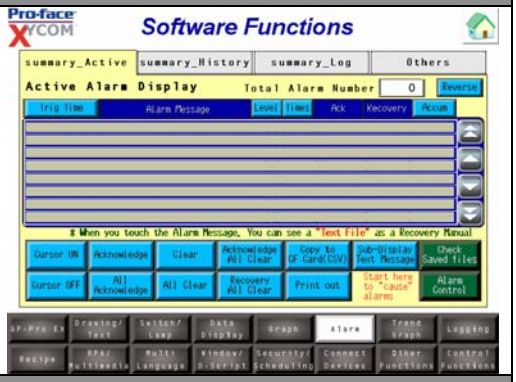
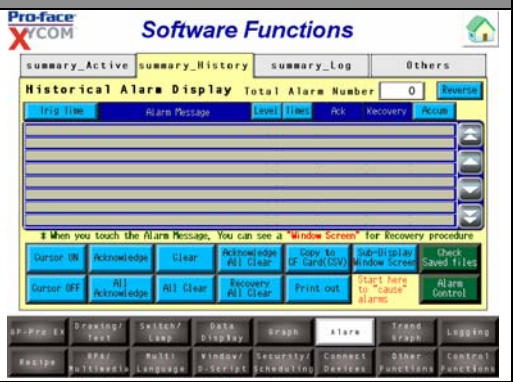
Note that the "Selector Switch" is not a slider.

You need to touch it in different locations (4) to "slide"

There are no sliders in GP-Pro EX at this moment.



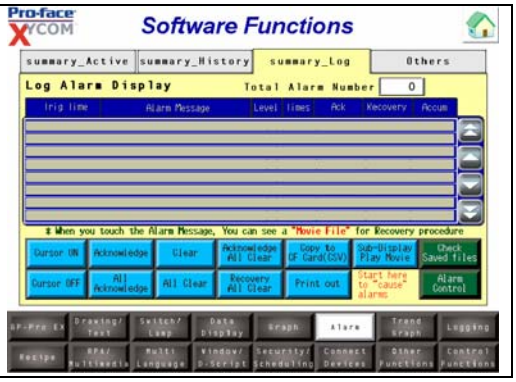
Screen 331 – Numeric Input

Touch the various numeric displays to bring up a variety of different numeric popup keypads (also see the S/W Functions, Text Display screen to show examples of alphanumeric keypads)	
Screen 332 – Text Display & Input	
Touch the various text displays to bring up a variety of different alphanumeric popup keypads (also see the S/W Functions, Numeric Input screen to show various examples of numeric keypads)	
Screen 350 – Alarms Active	
Active Alarms: Shows only alarms that are currently active, recovered alarms drop from the list. Use “Alarm Control” switch to bring up an alarm simulation Touch any Alarm Message in this screen to display a Text Sub-display. (for example: recovery manual) Using sub displays can reduce support calls, eliminate easily lost or soiled paper machine side manuals and prevent operator errors by providing visual aids.	
Screen 351 – Alarms History	
Historic Alarms: Shows alarms in the order in which they occurred and shows trigger, acknowledge and recovery time one the same line for each alarm. Use “Alarm Control” switch to bring up an alarm simulation Touch any Alarm Message in this screen to display a Popup Sub-display. (for example: image showing tank levels) Using sub displays can reduce support calls, eliminate easily lost or soiled paper machine side manuals and prevent operator errors by providing visual aids.	
Screen 352 – Alarms Log	

Log Alarms: Shows alarms in the order in which they occurred but shows in chronological trigger, acknowledge and recovery times as different events (lines) in the display.

Use “Alarm Control” switch to bring up an alarm simulation Touch any Alarm Message in this screen to display a Video Sub-display. (for example: material load tuition video)

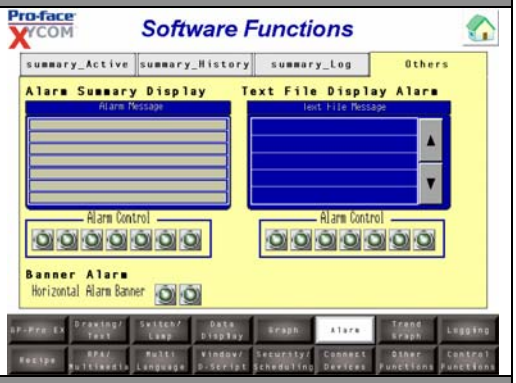
Using sub displays can reduce support calls, eliminate easily lost or soiled paper machine side manuals and prevent operator errors by providing visual aids.



Screen 353 – Other Alarms

These alternative alarm systems are mostly used for backward compatibility (with GP-Pro PBIII projects) but can be used in addition to the Alarm Summary (Active/History/Log) to provide a status or message display.

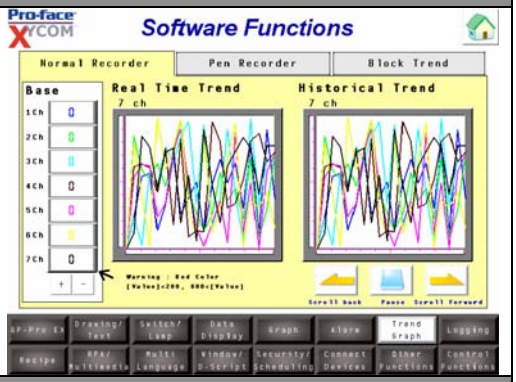
Note that the scrolling alarm will finish scrolling across the bottom of the screen even if the alarm condition is resolved.



Screen 360 – Trend: Normal Recorder

The Normal recorder fills the graph window with new data, when a window is filled the contents are shifted a number of steps to provide some history and some blank space that will be filled by newer data samples.

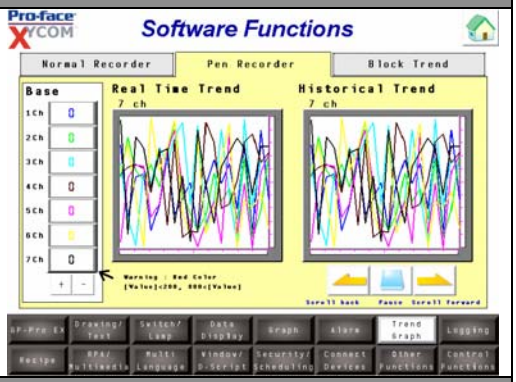
Use “Pause” to start the live update of the graph to allow scrolling of historic data



Screen 361 – Trend: Pen Recorder

The Pen Recorder displays data by adding 1 new data sample at the end of the graph and shifting the graph only one sample (the oldest displayed sample) off on the other side of the graph.

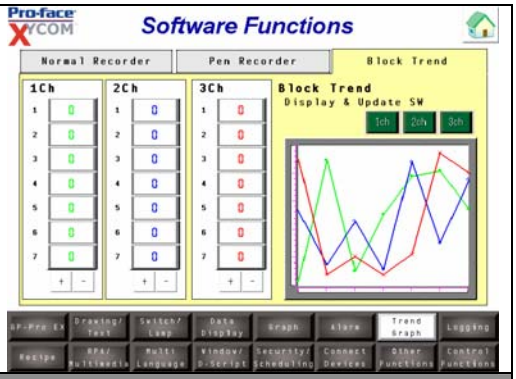
Use “Pause” to start the live update of the graph to allow scrolling of historic data



Screen 362 – Trend: Block Trend

The Block Trend allows you to load blocks of consecutive data into the trend window and use the data points as points creating a single line.

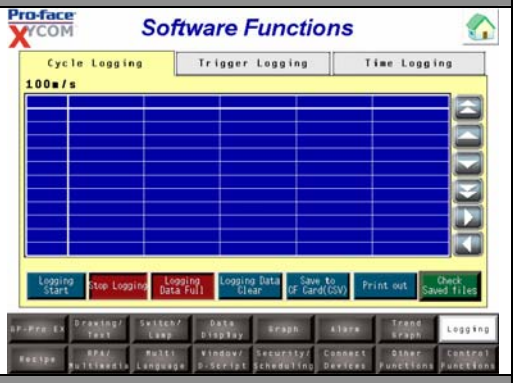
Use the Channel 1 – 3 buttons to load the 3 individual blocks of data into the graph



Screen 370, 371 & 372 – Data Logging

Cycle: Continuously log data samples into SRAM at a set interval, a trigger is available to enable or disable logging. (example: logging process data)
Trigger: Save one data sample into SRAM on an upper edge of the trigger. (example: when an alarm occurs)
Time: Save sample data to SRAM at preset intervals starting and ending at preset times (example: start & end shift times)

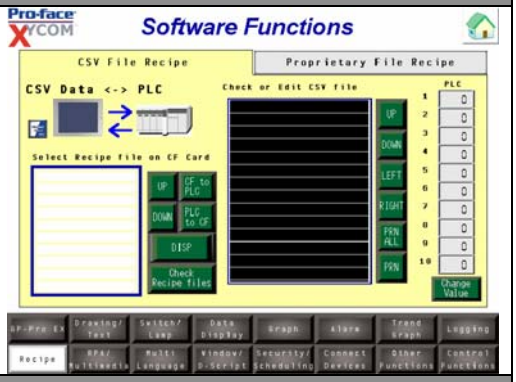
All log data can be saved to optional CF Card



Screen 380 – CSV Based Recipes

Use of CSV recipes has its main benefit in that it stores its recipes files in CSV format on the CF Card and is easy to edit in software like MS Excel.

Use the “Select Recipe..” switches to browse recipes, load them to the PLC or save data back to CF card from PLC. Use the “DISP” switch to display the CSV data in the CSV display Window. Touch a Recipe in the “Check or Edit CSV file” window to edit its contents.
NEW: USB Memory can now be used like a CF Card

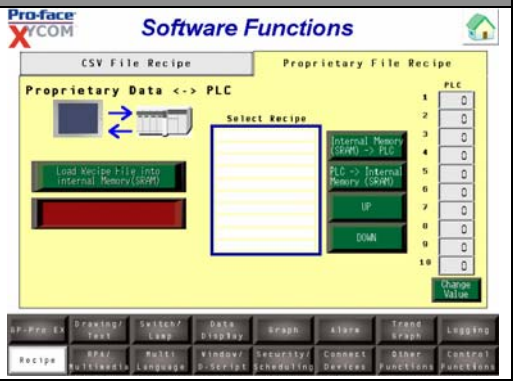


Screen 381– Proprietary Recipe Function

The internal recipe function stores data on CF Card or in AGP SRAM which makes it suitable for use on AGP’s without CF Card I/F (3302)

Recipes can be used for any kind of product setup or machine configuration setting, it is not as may seem from the examples in this demo and sometimes understood by customers for food & beverage industries only.

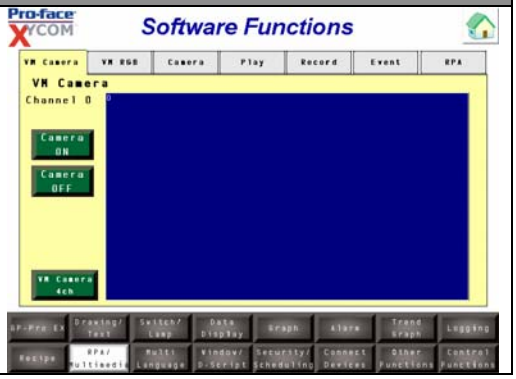
NEW: USB Memory can now be used like a CF Card



Screen 390 – Video Module

IMPORTANT: This screen is made for the 10.4” AGP35x0T and 12.1” AGP36x0T models that support the GP2000-VM41 external Video Module.

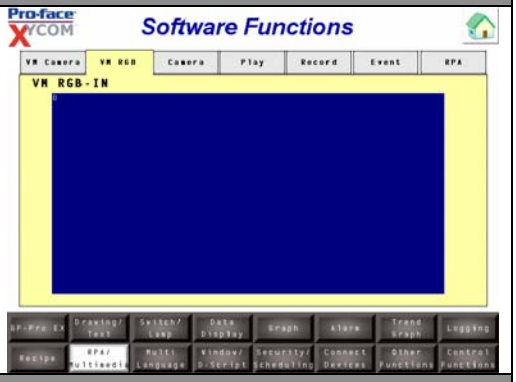
This module is no supported by the AGP3750



Screen 391 – Video Module RGB IN

IMPORTANT: This screen is made for the 10.4” AGP35x0T and 12.1” AGP36x0T models that support the GP2000-VM41 external Video Module.

This module is no supported by the AGP3750

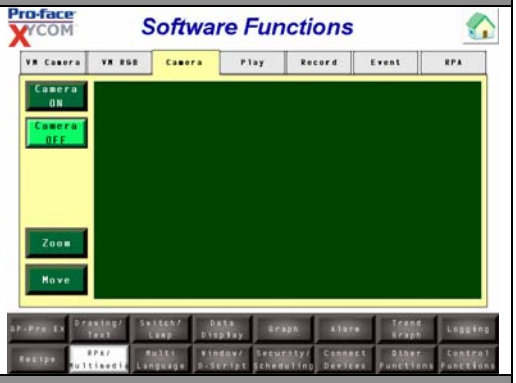


Screen 392 –AGP 3x50 Built-in Video Input

This screen only works with the built-in video input on 3x50

Use Camera ON / OFF to start the video display

Use Move to pan the video image

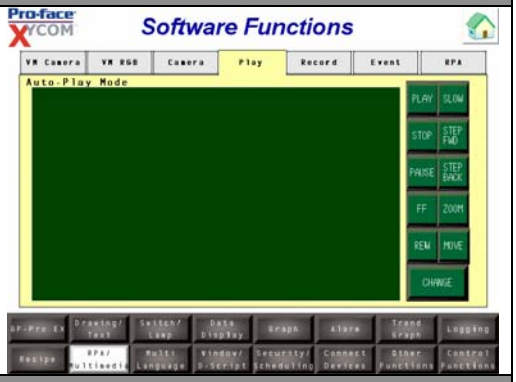


Screen 393 – Video Play Back

This screen only works with the AGP-3x50 series

Click Play to play the first video file, the “Change” button can be hit repeatedly to cycle through 5 additional movies.

This is a great feature for customers who have instruction videos or even product videos to aid operators use a machine.

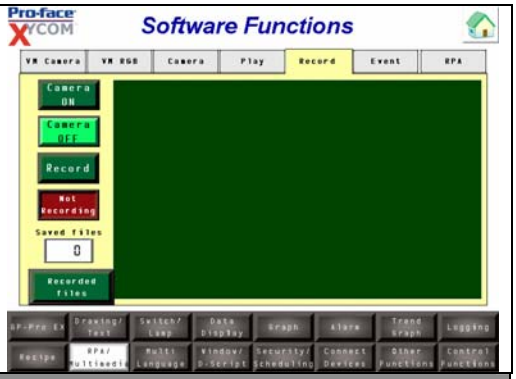


Screen 394 – Recorder

This screen only works with the built-in video input on 3x50

Use this screen to record video to CF Card (or FTP Server) The Grandtec CMS1000 video camera provided by Xycom has a built-in microphone that can be used to record sound with the video.

Use the “Recorded Files” button to display the File Manager.



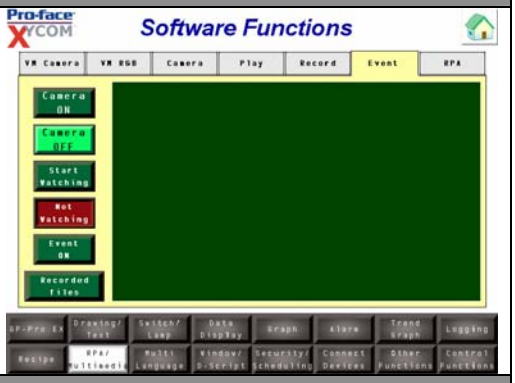
Screen 395 – Event Recorder

This screen only works with the built-in video input on 3x50

“Start Watching” will get the AGP into a monitoring mode (it starts movie recording and waits for the event to trip)

Click “Event ON” to trigger the event while in monitoring mode

Use the “Recorded Files” button to display the File Manager.



Screen 398 – Remote PC Access (RPA)

NEW: Remote PC Access

To demo the RPA function make sure UltraVNC is installed on the PC you want to connect to. The VNC password should be “xycom” and the PC IP Address should be 192.168.225.103 with Subnet Mask 255.255.255.0

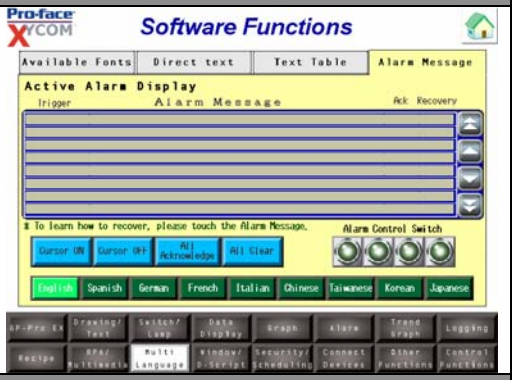
To adapt the demo to your PC settings instead open the demo project in GP-Pro EX v2.00 or newer. Open screens 398 and 399 and adjust the “Remote PC Access Display Window” Server and Password settings to match your PC

Note that the popup keypad is disabled on this screen, it is enabled when showing the Full Screen version

Screen 403 – Multi Language Alarms

This screen shows that even Historic alarm messages are displayed in the language currently selected.

Even if the operator was using English when an error occurred (and saw the error message in English) a service contractor can change the language to Spanish without restarting the AGP and show even historical alarms in Spanish.



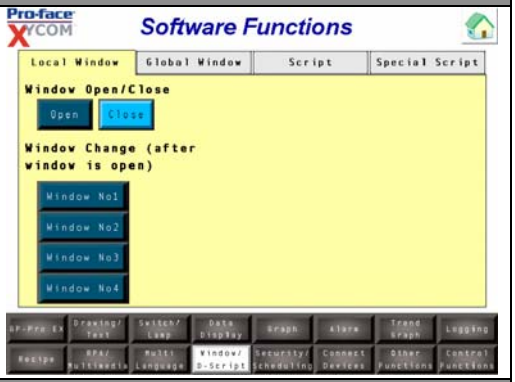
Screen 410 & 411 – Local & Global Window

Local Windows are popups that only display on the screen on which they are programmed to be triggered.

Global Windows are the same popups but can be shown regardless of the screen that is being displayed on the AGP.

Windows can contain any object other than the CSV fie display and file manager and popup keypads.

Windows can be opened and closed or assigned dynamically and even moved by X & Y coordinates in 16bit registers.

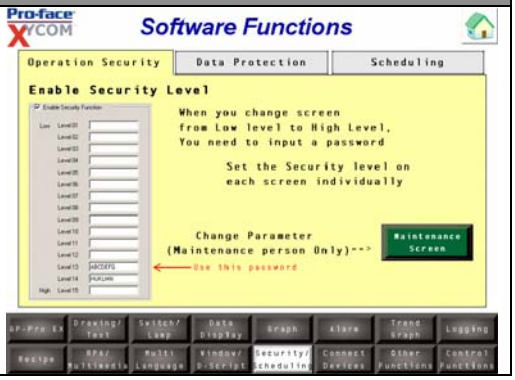


Screen 420 – Security

AGP Security is level based, setup up to 15 different numeric or alphanumeric passwords (one for each level)

Use password “ABCDEFG” to gain access to the Maintenance screen.

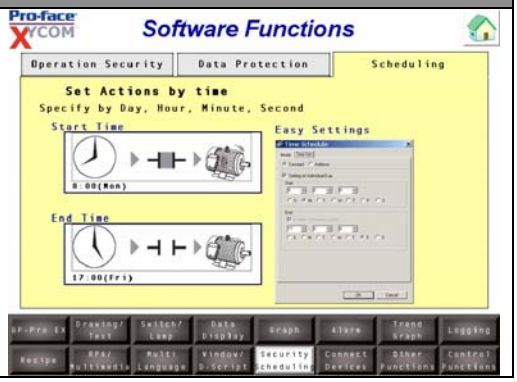
On the Maintenance screen use password “HIJKLMN” to gain access to the Manager screen.



Screen 424 – Time Schedule

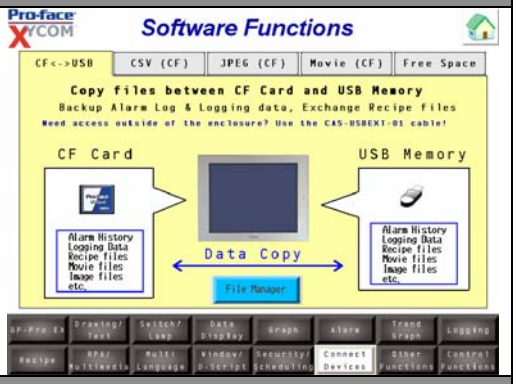
Trigger various actions on certain dates or at certain times at specified intervals.

Use this function for scheduled maintenance or for example end of shift reporting.



Screen 430 – CF to USB file transfer

NEW: USB Memory now supports the same functions already available for the CF Card



Screen 440 – Object Display

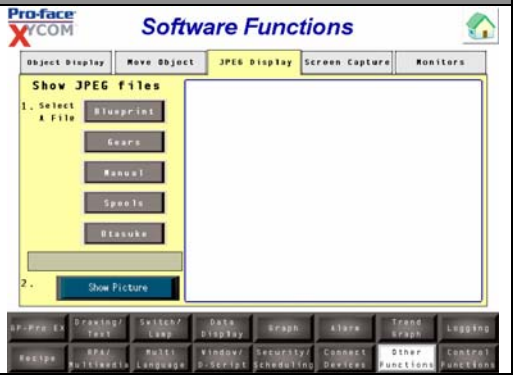
The right side of this screen shows a sequence of images (stored in internal memory or on CF Card) loaded based on an integer value

The left side shows the ability to show or hide registered images based on a discrete value.

Screen 442 – JPEG Display

Note: If you do not see any images check the CF Card for a folder called “JPEG”, you need to manually transfer this folder.

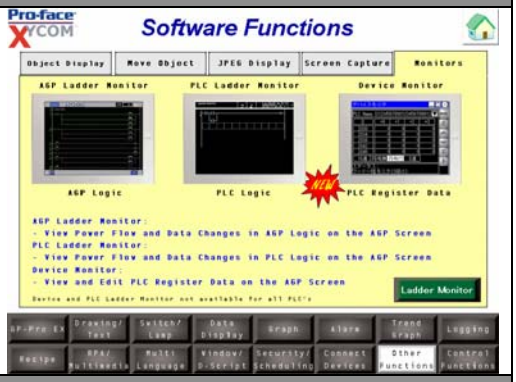
On this screen JPEG files are loaded from CF Card by writing the folder and file name as ASCII characters to a number of consecutive addresses in PLC or internal memory.



Screen 445 – Monitors

NEW: PLC Logic Monitor for Mitsubishi Q Series PLC's and the Device Monitor to look at and change register values without having to create I/O screens for maintenance manually.

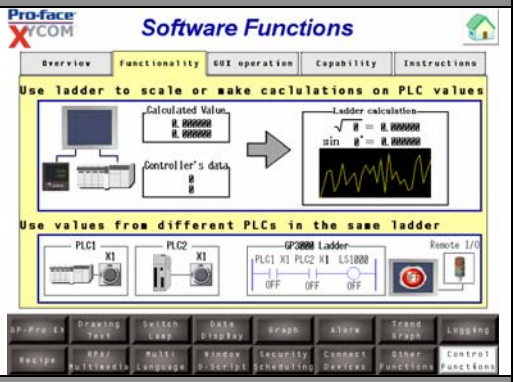
Important: make sure to check the documentation to see which PLC's are supported by the device monitor function



Screen 451 – Math in Ladder

Note that you do NOT need an AGP with I/O or FlexNetwork in order to use the Ladder Logic.

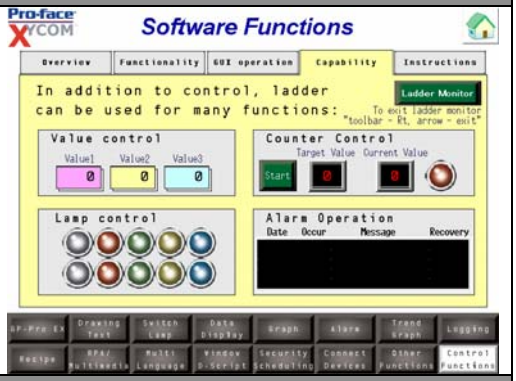
Use Ladder to make precision calculation and even bridge values from one device to another device even if they use different serial or Ethernet protocols.



Screen 453 – Counter Control

To view running Ladder Logic and Logic Variable list use the Ladder Monitor switch.

(See the "Ladder Monitor" Section at the end of this manual for Ladder Monitor operation)



Screen 454 – Logic Instructions

NEW: The Instructions Tab is a set of 10 screens showing all 103 Instructions available in AGP Ladder Logic. Use the Next and Prev buttons to navigate

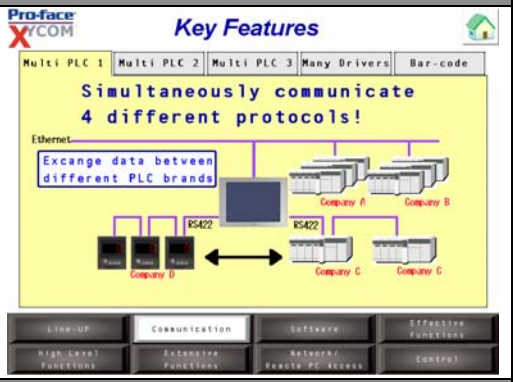
Screen Background – Key Features

Screens without additional information		
Screen	Section	Title
None		

Screen 510 – Multiple PLC Screen 1 (Simultaneous Drivers)

Use a combination of 2 serial, 1 Fieldbus and 1 or more Ethernet protocols to use simultaneously.
2 or 4 drivers means you can **use 2 or 4 different Protocols** (Modbus RTU, Control Logix Ethernet/IP, Siemens MPI, etc)
Depending on the driver selected each of these protocols can in turn communicate to up to 16 devices. (for example 5 Modbus temperature controller AND 1 ControlLogix & 4 SLC5/05 on Ethernet AND 10 Yaskawa Drives on Memobus)

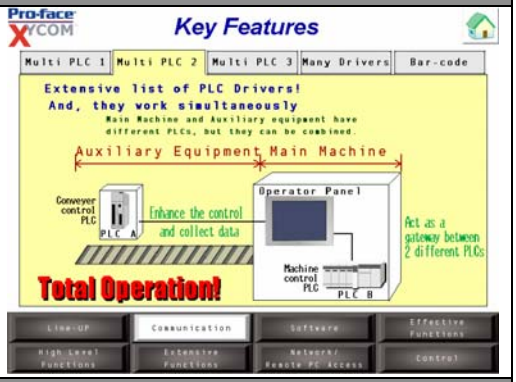
Note: 5.7" AGP: 2 simultaneous drivers
7.4" AGP & up: 4 simultaneous drivers



Screen 511 – Multiple PLC Screen 2 (Gateway)

Use this multi protocol feature to bridge machines or simply share data between equipment from various manufacturers without the need of special gateways or communication modules saving time and cabinet space.

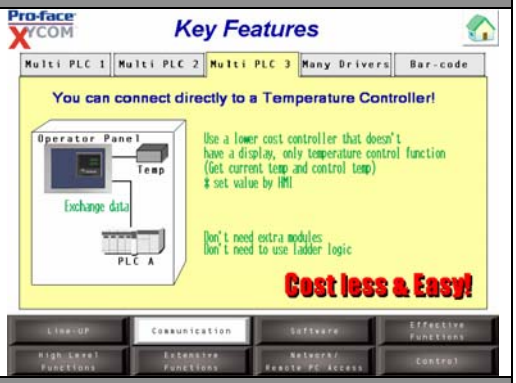
Have a machine without or with obsolete HMI or no Ethernet collection on the floor that you need to collect data from?
It's easy with Pro-face: Use any available port on the new machines Pro-face HMI to **quickly get your older equipment connected** to your plant or office network.



Screen 512 – Multiple PLC Screen 3 (Money Saving Solutions)

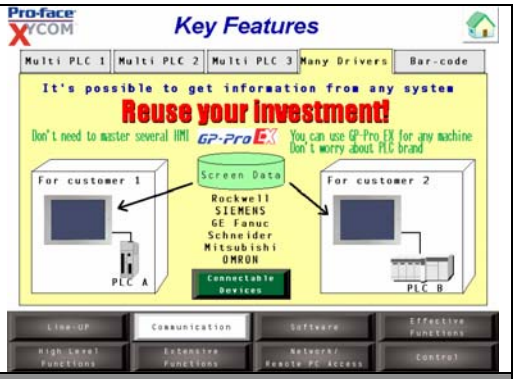
Because you can now use multiple drivers simultaneously you can easily connect temperature controllers and other control equipment to an available port on your Pro-face HMI without loosing your PLC connectivity.

Save money by choosing Temperature Controllers without individual control panels, the Pro-face HMI can be used to get status information, read current values and change configuration data like set points. (depends on type of temp. controller used)



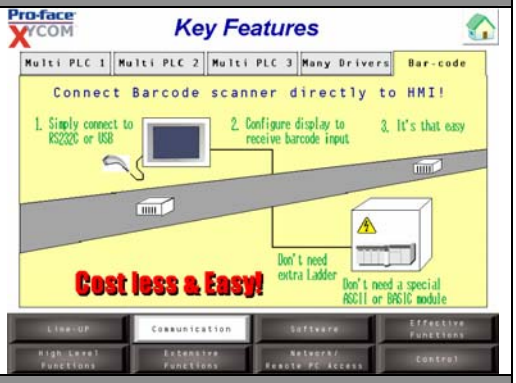
Screen 513 – Many Drivers

GP-Pro EX and the AGP support many different communication protocols and Pro-face is dedicated to continuously updating and increasing the number of **drivers available to you free of charge**.
Having many drivers that work with all AGP hardware in one software package allows you to standardize on Pro-face as your HMI supplier and always be ready for your next project **regardless of the PLC used**.



Screen 514 – Barcode

- **Save Time**: Easy programming, barcode input can be setup within 5 minutes.
- **Save Money**: No need for expensive PLC ASCII modules (typically in the $600-$800 range) and no need to use Ladder Logic to handle your barcode.
- **Always available**, Serial port & USB barcode readers can be hooked up even after the machine is deployed without any hardware investment (other than barcode reader itself)
- **Flexible**: Use with 2D or Linear barcodes or ASCII based magnetic card readers for access control or RFID.



Screen 520 – Header / Footer

Use header and footers to quickly create **consistent looking title and menu bars** for your projects.
Pro-face realizes that you might need more than one type of menu or title bar so **20 headers and footers are available** for your use.
Efficient Editing: Create a header or footer and use it on as many screens as required. Need to make a change? Edit the header and all screens will automatically update.

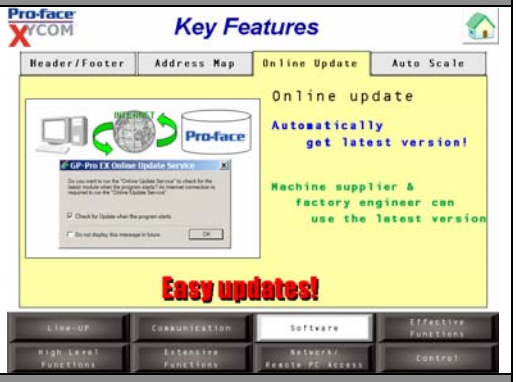
Screen 521 – Address Mapping

The Address Mapping window gives you a graphical representation of what PLC or Internal Memory addresses you have used in your Pro-face HMI application by **highlighting used addresses in Red**.
View Integer or Discrete registers and **simply drag any address** from the Mapping window onto an object to assign it's address without the possibility of making a typing mistake.
This tool is a great addition to the GP-Pro EX Cross Reference function that is also available for your use.

Screen 522 – Online Update

Getting your **Free Pro-face GP-Pro EX updates** could not be easier: Every time GP-Pro EX starts you can have it automatically check the Pro-face Website for available updates of both Software and Manuals. (requires internet connection)

If you **need full control** over software updates you can turn this feature off and simply go to www.pro-face.com/otasuke to download the latest updates at your convenience.

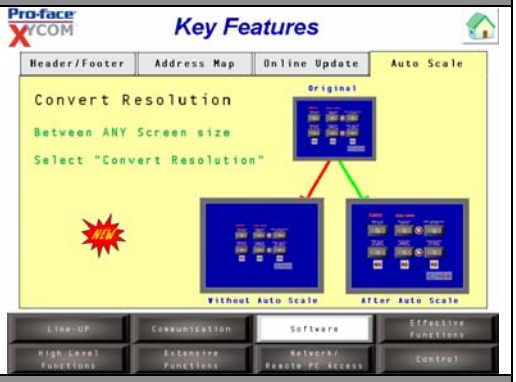


Screen 523 – Auto Scale (Resolution Conversion)

NEW: **Convert projects automatically** between **any screen resolution** (XGA, SVGA, VGA, and QVGA).

This **time saving feature** gives the customer the **flexibility** to reuse existing projects even if a larger or smaller screen size is needed for the next job.

Minimal changes may have to be made to Images and some font alignment only drastically lowering cost by **greatly reducing application engineering time.**



Screen 530 – Multi Function Switch

Tired of writing ladder logic, scripts or even stacking buttons on top of each other to perform a variety of functions to for example initialize a new product run?
The Multi Function switch allows you to **combine up to 16 functions in a single switch**. Change discrete and integer values and move to the next screen or prompt the operator for input with the push of one button.
Fast and Easy to edit, Transparent: related functions are all found in one object that does not leave you guessing as to where certain functions are triggered from (script or logic).

Screen 531 – Double Click Switch

Easy to use safety feature built into the editor

Prevent operators from **accidentally starting your machine**, the Double Click function found on the Switch object in GP-Pro EX requires the operator to touch a switch twice to execute the actions you programmed. After the first touch the switch will change its appearance to indicate it needs confirmation.
Only a **second touch within the standby time** (1 to 30 seconds) will execute the (up to 16) assigned action(s)

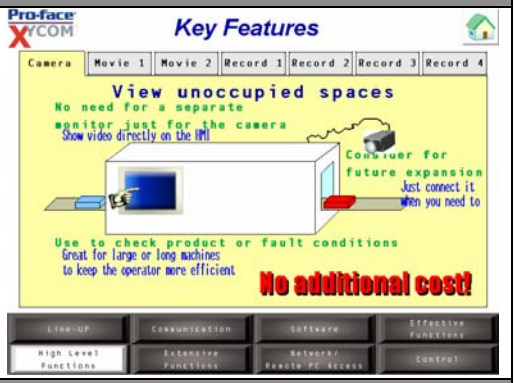
Screen 532 – Visible Function

All switch objects in GP-Pro EX have an Interlock function. When used for **Access Control** you can lock a switch (prevent it from functioning) by choosing a bit (internal, logic or PLC) and selecting which state allows touch (bit on or off) Use this to lock switches that are only available to select users.
An alternative way of using interlock is as a **visibility feature**. The interlock state can be assigned its own image to depict the lock state. When this image is the same color as the application background you have a disabled and invisible switch.

Screen 540 – Camera

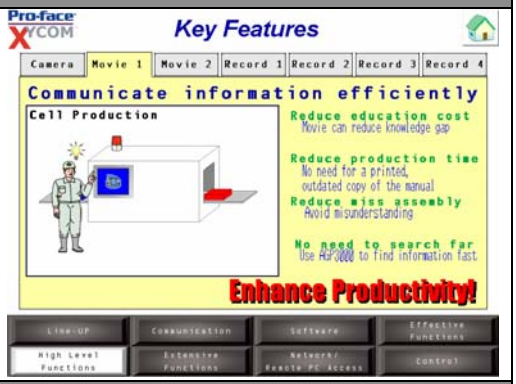
Save time and money by **adding live video feeds and the ability to record video and sound** directly on your HMI. No additional hardware (other than camera) is needed. This is a great **"Add On" solution** to your machine

Possible Applications:
Gantry & Robot enclosures, dangerous areas where expensive shutdown is required for inspection, multi story installations, long production lines, processes happening behind the operators back, outdoor security / access cameras integrated into already existing HMI application, Loading Dock monitoring



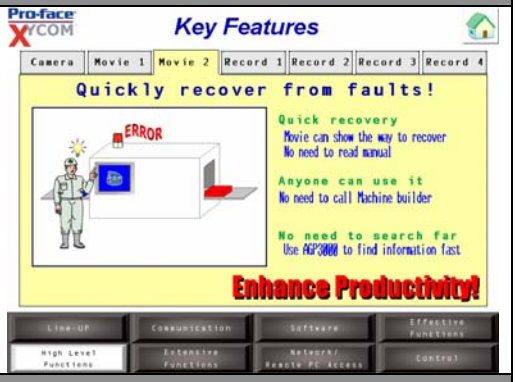
Screen 541 – Movie Screen 1

Play movies on the AGP.
This is a great function to **reduce training costs**, **reduce down time** and to **prevent production mistakes**.
- Complex products with many options and variations? Show a video of the end product as the operator should make it.
- Instruction Manuals for simple service tasks? Ass a video that allows anyone to see and listen to how to accomplish the task without the need for printed manuals.
- Mistakes from wrong loading of material? Make a video to show how it is done.



Screen 542 – Movie Screen 2

Reduce support calls and down time.
Use the "Sub display" feature in the GP-Pro EX Alarm system to simply add a video (or text, dynamic objects or images) to all or some alarm messages.
Take your top 10 faults or support calls for a specific installation or machine and determine if adding a video with fault recovery steps or explanation will **save you time**.
The quicker the operator can resolve the issue the quicker you or your customer can go back to making product.

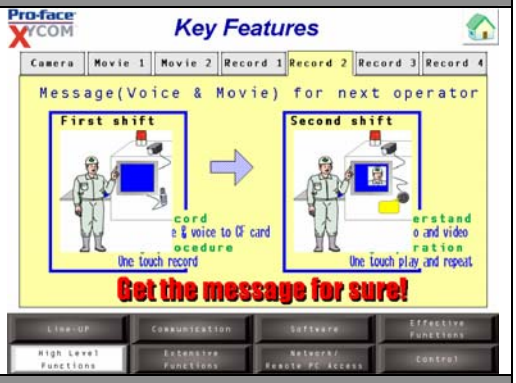


Screen 543 – Record Screen 1

Reduce time spend on site, traveling and trouble shooting..
Use a camera to monitor and record (video and sound) of the actual events leading to machine problems.
The End User can take the **recorded movie** off the CF Card and **email it to the machine builder** to analyze. The movie could even be recorded to an FTP site directly for the engineer to look at. The person troubleshooting the system now has Video and Audio that might **help prevent going onsite**.

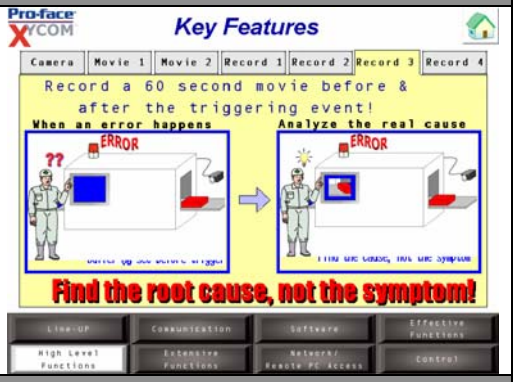
Screen 544 – Record Screen 2

Use the record function to save an **end-of-shift message** from Shift #1 that can now be quickly reviewed at the beginning of the next shift.
Record either Video and Audio or just use the sound input on the Multimedia AGP3x50 to record a voice message.
For **ease of use** the operator only has to press one button to record and another to play back the recorded message.



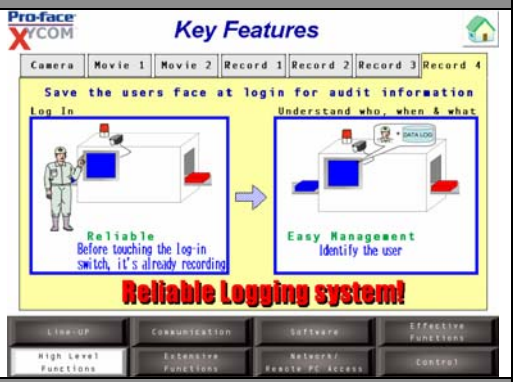
Screen 545 – Record Screen 3

Find the root cause of a problem quick instead of monitoring its symptoms.
The Event Recorder allows you to **continuously buffer up to 60 seconds** of video from the Built-in Video I/F on the AGP3x50. Set up a “Watch State” (for example a PLC process start bit) to have the AGP start it’s buffer.
Setup events (triggers, alarms) that when triggered while the AGP is on the watch state will record and save up to 60 seconds before and up to 60 seconds after the trigger time allowing you to see what happened **before the error occurred**.



Screen 546 – Record Screen 4

Use the Movie Recording feature to record **who is operating** the machine at any moment or to simply **monitor the functions** that were performed by the operator in order to analyze and **optimize the way the machine works**.
The recorded video time and date could be checked against the date stamp in our data logging system which could be used to store for example security (password logon) information.



Screen 550 – Multi Language Screen 1

The Multi Language feature is very easy to use, in spreadsheet style editor (or exported to CSV file) **up to 16 languages** can be entered, the columns each representing a language and each row with a word or line or lines of text and its translations. For each language the **codepage can be set** allowing for correct display of ASCII (Western), Cyrillic, Japanese, Chinese, Korean and Thai characters.
This feature can be used for **Export but also in regions where multiple languages are spoken** (English & Spanish, or English and French)

Screen 551 – Multi Language Screen 2

Up to 16 different languages can be configured n GP-Pro EX and downloaded to the AGP. There is **no need to shutdown or reset** to change a language: Simply writing Integer value 1 to a predefined register will display language 1, writing 3 will display the language configured 3rd in our editor.

Even **historical alarm logs** will change to display messages in the currently selected language on the fly allowing both the English speaking Service engineer and the French speaking operator to work with the same screens seamlessly.

Screen 552 – Scripting

Powerful D-Script can be used on a single screen or as Global D-Script in the entire project file regardless of the screen that is being displayed.

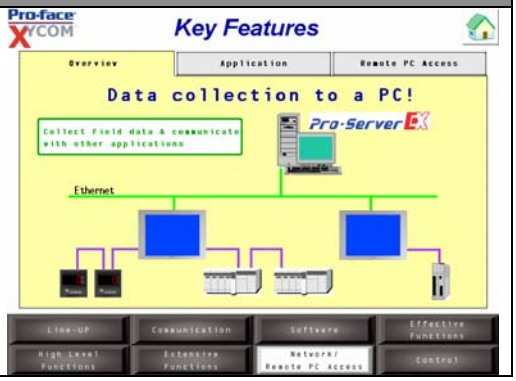
Create your own functions, math, loops and if/else statements. Initialize, Shift, Search through or Compare memory areas (between or within PLC's or internal memory) Print ASCII data to a USB printer and manipulate data stored in CSV files on the CF Card. Scripts are also a great way of **sharing data between different protocols as a gateway** function.

Screen 560 – Network / Overview

Pro-Server EX is a **Data Collection and Sharing** software package.

Pro-Server retrieves data from AGP's over an Ethernet network to either process it for logging, emails, recipe handling or to share it with other PC software packages.

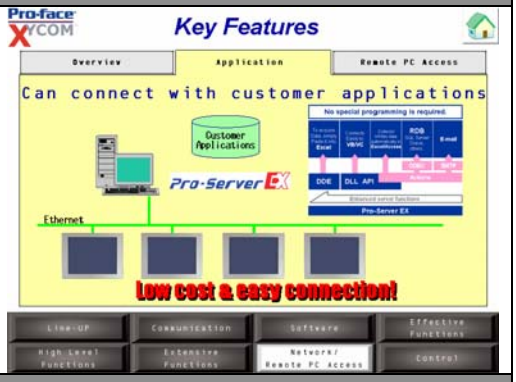
There is **no tag limit** in Pro-Server EX and one runtime license can be used to poll all AGP on the plant floor.



Screen 561 – Network / Application

Use Pro-Server EX to collect data and share the data with applications such as Access Databases, ODBC Databases, Excel Sheets for storage or to automatically generate reports. Several Actions in Pro-Server EX help you quickly setup these data sharing connections and the way (trigger, time, event base) that you want to execute these functions.

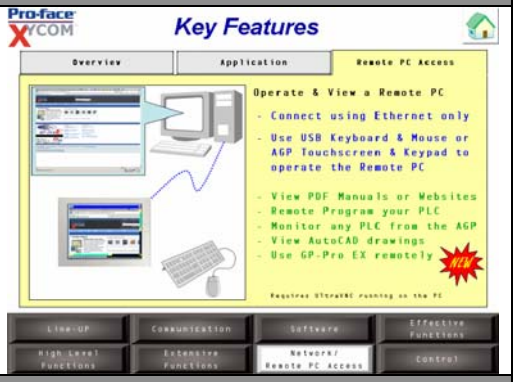
This **low cost gateway between Office and Plant environments** is a very powerful addition to the AGP with GP-Pro EX



Screen 562 – Remote PC Access

NEW: Remote PC Access (**RPA**) allows you to **control a PC using the AGP Touch Screen and Popup Keyboard** or (optional) connect a USB Mouse and Keyboard to the AGP. All data (screens and commands) are transmitted using a **standard Ethernet connection**, no other cables are needed.

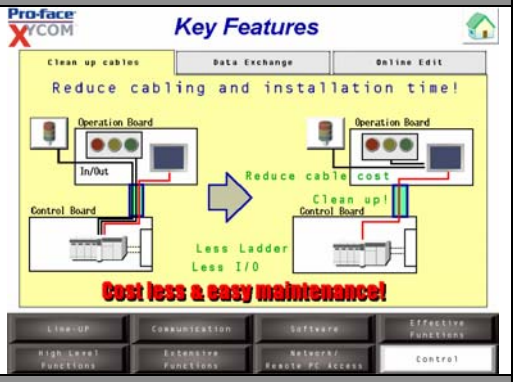
Possible uses: **Websites**, Email, Remote **Programming and Monitoring of PLC**, Remote Programming of the AGP (on the AGP), **PDF Manuals**.



Screen 570 – Control / Clean up cables

Use the internal Logic on any AGP3xx0 panels to **reduce cost by saving on wiring** and cable runs to various devices connected to a central PLC.

Use the AGP series with Control to **free up valuable cabinet space** by using a smaller or no PLC and relying on the compact Pro-face FlexNetwork modules instead

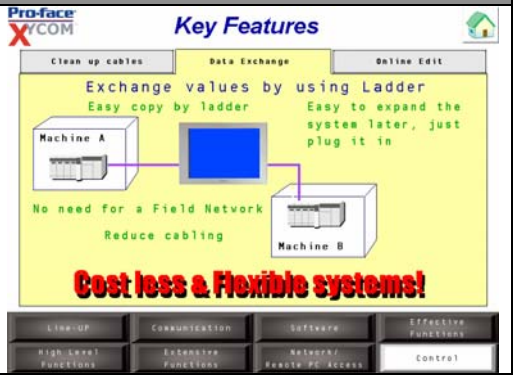


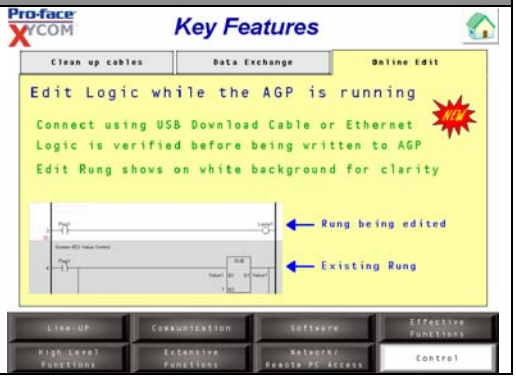
Screen 571 – Control / Value Exchange

Even on AGP's without built-in I/O the Ladder Logic in GP-Pro EX can be used.

Use it with either Internal Variables or manipulate data on PLC's, temperature controllers and serial ASCII devices.

The Logic can be used to **glue together the various components** in your application using the AGP as control gateway.



Screen 572 – Online Logic Edit	
NEW: Online Logic Edit Connect the GP-Pro EX PC to the AGP and edit the logic **while the panel is running** using a **USB or Ethernet connection** to **save time** spend downloading the application to test changes. While online the **new logic can be created, tested and verified for errors and warnings** before being written to the AGP.	

Screen Background – Application Example

Screens without additional information		
Screen	Section	Title
B0801	Application Example	Mixing Flow Diagram
B0801	Application Example	Mixing Flow Diagram

Using the File Manager

On any File Manager screen click the “Load from CF Card” button to display the File Manager. Navigate the CF Card folders by using the up and down arrows. Folders on a CF Card are shown as <DIR>; to display the contents of a folder use the “DISP” or “=” button (depending on the file manager used)

Different files (Movie, Log, Recipes, etc) are stored in different default folders and under default names. Note that JPEG and Movie files that were copied to the CF Card without using GP-Pro EX (by using a card reader with windows explorer for example) do not have to follow any predefined naming format.

If you are trying to locate log data or event recorder data keep in mind that you have to save this data at least once using the applicable screen in the demo application, if for example the “ALARM” folder does not show up in your File Manager you will have to go to any of the alarm screens first to save an Alarm Log file. This will automatically create the folder if needed.

Fig. 2a

Fig. 2b

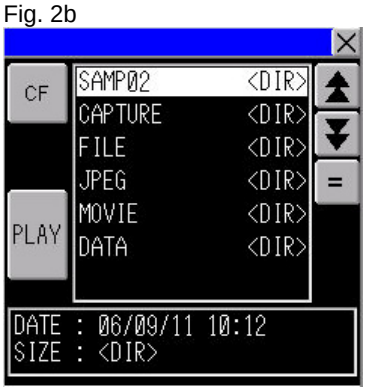


Fig. 2c

Figures 2a through 2c show some of the different available file managers, note that the file manager in Fig. 2c can be used to transfer data between USB Memory and CF Card, both File Managers displayed in Fig. 2a and 2c can be used to delete files from the CF Card. (See Key Features, Connect Devices, CF <> USB)

File locations used in the demo:

Alarm Summary Active	:	\ALARM\Z1#####.CSV
Alarm Summary History	:	\ALARM\Z2#####.CSV
Alarm Summary Log	:	\ALARM\Z3#####.CSV
Logging Data (Cycle)	:	\SAMP02\SA#####.CSV
Logging Data (Trigger)	:	\SAMP03\SA#####.CSV
Logging Data (Time)	:	\SAMP04\SA#####.CSV
Recipes (Proprietary)	:	\FILE\ZR#####.CSV
Movies	:	\MOVIES\No#\file name.SDX
Movies Event Recorder	:	\MOVIES\ER\EXdate_time.SDX
Movie Recorder	:	\MOVIES\PF\PFdate_time.SDX
Pictures	:	\JPEG\file name.JPG
Screen Captures	:	\CAPTURE\#.JPG

Using the Ladder Monitor

Access the Ladder Monitor by navigating to screen S\W Functions, Control Functions, Capability. Key feature of the Ladder Monitor is that it is automatically generated by GP-Pro EX, the customer does not have to program anything but the button to open the screen.

The Ladder Monitor screen shows the Logic program currently running on the AGP, use the “MAIN” or “INIT” switch (fig. 3a) to change the display between MAIN and INIT routines. The Step number display can be used to jump to a different location in the logic quickly. Use the Arrow buttons to navigate the logic.

Click any instruction on the screen to show a “close up” of the instruction and its current state. (for demonstration the ADD and SUB instructions in Rungs 2 and 3 show well because you can see actual data changes. Click the screen again to return from “close up” mode to the regular logic display.

Use the Toolbar button to display the toolbar as displayed at the bottom of Fig. 3a, this gives you access to the Exit button as well as the search function and Instruction List (not shown, this list allows you to select an instruction which will then be highlighted in the logic display)

Fig. 3a

The “Addr Mtr” button (see Fig. 3a) takes you to the Address List screen as shown in Fig. 3b. Use this display to view all configured Logic Variables. Note the “HEX” / “DEC” button to change the numeric display format.

Fig. 3b

The Right Arrow button (lower right hand corner of both Logic and Address List screens) takes you to the toolbar as shown in Fig. 3c. Use this toolbar to exit the Ladder Monitor or use the “STOP” button to stop and restart logic execution.

Fig. 3c

Frequently Asked Questions

Q: Some screens with images load extremely slow
A: Reformat CF Card to FAT if using your own or (recommended) use the 512Mb SanDisk Card supplied to you.

Q: Video does not play when in S/W Functions / Multimedia / Play or on the “Movie File Check” screen in the S/W Functions / Multimedia section but you can see the camera image.
A: Go to the S/W Functions / Multimedia / Camera or Record or Event screens and turn the camera off, the movie on the “Play” screen should now automatically play
Note: this issue was corrected in Demo v1.02

Q: Image does not display on the S/W Functions / Other Functions / JPEG Display screen
A: “JPEG” folder was not manually copied to CF Card, see instructions in “Installing the demo application on the AGP3750T” at the beginning of this manual.

Q: How do I use the “Sales Demo AB Native Tag Import Sample.csv” file to demo the AB Native Tag import utility to my customer?
A: 1) Open GP-Pro EX v1.10 and create a new project
2) Add the Rockwell Automation, Inc EtherNet/IP driver
3) In the “System Settings Window” go to “Device/PLC Settings”
4) Click the [Settings] button behind “PLC1” and select “ControlLogix/CompactLogix Series Native”
5) Type a name in “IOI File” (for example “Demo”) and click [New]
6) Click [OK] on all popup messages until the “Controller Tag List” window is displayed
7) Click [Import] and select the CSV file.
8) You can now save the IOI file by clicking [OK] and move to the screen editor.

Q: How can I load the demo project files on my CF Card into my AGP3750T?
A: 1) Make sure your CF Card is inserted and the CF Card door is closed
2) Touch the upper right hand, then lower left hand corners of the AGP to display the toolbar down the bottom of the screen ([Offline] [CF starting] [Error] [Reset])
3) Select [CF Starting] and click “Download” (if the page shows up in Japanese first select English From the dropdown menu
4) After the download is complete click [Exit] to reset the AGP

Screen Navigation

Company Profile
- Introduction
- No. 1 Market Share in the World
- Market Share by Area
- Worldwide Product Sales
- Development Offices
- Worldwide Sales & Support
- Worldwide Support Services
- Worldwide Support Offices
- Agency Approvals

H/W Features
- Product Line-up
  - AGP3000
    - Line-up
      - GP3000 Line-up — Updated v2.0
        - Standard — Updated v2.0
        - Multimedia — Updated v2.0
        - Control — Updated v2.0
    - Display
      - High Color Display
        - Industrial Image 1 — Updated v2.0
        - Industrial Image 2 — Updated v2.0
        - Industrial Image 3 — Updated v2.0
        - Industrial Image 4 — Updated v2.0
        - Industrial Image 5 — Updated v2.0
      - High Quality Parts & Objects
        - 2D & 3D Parts
        - Symbolic Parts
        - Image Objects (Warning)
        - Image Objects (Equipment)
    - Interface
      - Interface
      - USB — Updated v2.0
      - COM/Ethernet
        - Connectable Device List Part 1 — Updated v2.0
          - Rockwell Native Tag Import — Updated v2.0
      - Others
    - Capable
      - Capability
      - Communication
      - High Speed
    - Compatibility
      - Our Commitment
      - Panel Cutout
  - Xycom IPC — Updated v2.0
  - Websites

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- GP-Pro EX
  - Overview
  - Workspace
  - Helpful Tools
    - Fix Pins, Copy, Address Map, Guidelines, Error Check
    - Text Search, PID Monitor, Parts Toolbox — New v2.0
    - PC Simulation — New v2.0
  - Header / Footer
- Drawing / Text
  - Drawing Objects
  - Image File — Updated v2.0
  - Text
- Switch / Lamp
  - Bit Switch / Lamp
    - 2D & 3D Parts
    - Symbolic Parts
  - Word Switch
  - Efficiency
  - Others
    - Offline Menu
    - Reset
- Data Display
  - Numeric Display
  - Numeric Input
  - Text Display
  - Others
- Graph
  - Bar / Tank Graph
  - Circle / Meter Graph
  - Statistics Graph
- Alarm
  - Summary Active
    - Text Sub Display
    - Alarm File Check
  - Summary History
    - Object Sub Display
    - Alarm File Check
  - Summary Log
    - Video Sub Display
    - Alarm File Check
  - Others
- Trend Graph
  - Normal Recorder
  - Pen Recorder
  - Block Trend
- Logging
  - Cycle Logging
    - Logging File Check
  - Trigger Logging
    - Logging File Check
  - Time Logging
    - Logging File Check
- Recipe
  - CSV File Recipe
    - Change Recipe
    - Recipe File Check
  - Proprietary File Recipe
    - Change Recipe

S/W Features (continued)

- Multimedia
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    - VM Camera 4 Channel
  - VM RGB IN
  - Camera
  - Play
  - Record
    - Movie File Check
  - Event
    - Movie File Check
  - Remote PC Access — New v2.0
    - Remote PC Access (Full Screen) — New v2.0
- Multi Language
  - Available Fonts
  - Direct Text
  - Text Table
  - Alarm Message
- Window / D-Script
  - Local Window
    - Window No 1
    - Window No 2
    - Window No 3
    - Window No 4
  - Global Window
    - Window No 1
    - Window No 2
  - Script
  - Special Script
- Security / Scheduling
  - Operation Security
    - Maintenance Screen (Password ABCDEFG)
      - Managers Screen (Password HIJKLMN)
  - Data Protection
  - Scheduling
- Connect Devices
  - CF < - > USB
  - CSV (CF)
  - JPEG (CF)
  - Movie (CF)
  - Free Space
- Other Functions
  - Object Display — Updated v2.0
  - Move Object
  - JPEG Display — Updated v2.0
  - Screen Capture
  - Device & PLC Monitors — New v2.0
- Control Functions
  - Overview
  - Functionality
  - GUI Operation
  - Capability
    - Ladder Monitor
      - Address Monitor
      - Instruction List

S/W Features (continued)

- Control Functions (continued)
  - Logic Instruction Set — New v2.0
    - Bit and Program Control — New v2.0
    - Comparison — New v2.0
    - Date and Type Conversion — New v2.0
    - Timer and Counter — New v2.0
    - Function Control — New v2.0
    - Arithmetic — New v2.0
    - Logical and Move — New v2.0
    - Shift and Rotation — New v2.0
    - Time manipulation — New v2.0
    - Date manipulation — New v2.0

Key Features

- Line-up
  - GP3000 Series — Updated v2.0
- Communication
  - Multiple PLC 1
  - Multiple PLC 2
  - Multiple PLC 3
  - Many Drivers
    - Connectable Device List Part 1 — Updated v2.0
      - Rockwell Native Tag Import — Updated v2.0
  - Barcode
- Software
  - Header / Footer
  - Address Mapping
  - Online Update
  - Auto Scale (Resolution Conversion) — New v2.0
- Effective Functions
  - Multi Function Switch
  - Double Click Switch
  - Visible Function
- High Level Functions
  - Camera
  - Movie 1
  - Movie 2
  - Record 1
  - Record 2
  - Record 3
  - Record 4
- Extensive Functions
  - Multi Language 1
  - Multi Language 2
  - Scripting
- Network (PRO-SERVER EX)
  - Overview
  - Application
  - Remote PC Access (RPA) — New v2.0
- Control
  - Clean Up Cables
  - Value Exchange
  - Online Logic Edit — New v2.0

Application Example

- Mixing Flow Diagram
- Chemical — New v2.0