FlexosealPRO

Operations Manual

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Manual Rev Date: 11/2020
Software Version: C030

This manual written and designed at Valco Cincinnati, Inc., 411 Circle Freeway Drive, Cincinnati, Ohio 45246.

Part Number: MC063

Printed in the USA in the original language of English (US)

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Declaration of Conformity

(According to EN 45014)

CE

The following declaration is issued under the sole responsibility of the manufacturer:

Manufacturer:	Valco Melton A division of Valco Cincinnati, Incorporated 411 Circle Freeway Drive Cincinnati, OH 45246 USA	
Authorized Representatives in Europe:	Valco Cincinnati, Ltd. Unit 7-8 Hortonwood 32 Telford TF1 7YN England	Melton S.L.U. Pol. Industrial Agustinos calle G, n. 34 31160 Orcoyen Navarra, Spain

declares that the product:

Product Name:	FlexosealPro System Serial Numbers 09090001 and higher

complies with the following Council Directives:

Safety of Machinery:	2006/42/EC
Low Voltage Equipment:	2014/35/EU
EMC:	2014/30/EU
Reduction of Hazardous Substances (RoHS)	2011/65/EC

and conforms to the following standards:

Safety:	EN60204-1:2006 EN13849-1
Risk:	ISO12100:2010
EMC Emissions:	EN61000-6-4:2007 EN61000-4-2
EMC Immunity:	EN61000-6-2:2005 EN61000-4-3 EN61000-4-4 EN61000-4-5 EN61000-4-6 EN61000-4-8 EN61000-4-11
Place and Date:	Cincinnati, Ohio USA CE Mark first fixed 2006
Signature:	Cincinnati, OH USA David H. Swedes, Vice President of Engineering & Manufacturing

This Declaration of Conformity has been generated electronically and is legally binding without signature

VALCO MELTON™

TABLE OF CONTENTS

SECTION 1 - INTRODUCTION

System Description

The FlexosealPRO System from Valco Cincinnati provides operators with an easy-to-use interface for today's gluing and inspection applications. The system features the MCP-12 Control, the OT-12 Touchscreen, and Valco's FlexosealPRO software.

Components

MCP-12 Control

- Mounts remotely
- Displays "real-time" diagnostic information
- Provides easy access to circuit boards
- Features Motorola microcontroller and Toshiba CPU technology

The MCP-12 Control Unit

Components - Continued

OT-12 Touchscreen

- Easy-to-recognize buttons and switches
- Multi-level password protection
- LEDs to indicate activity/inactivity
- Icon-based screen elements for setup and application adjustments
- Direct entry via numeric keypads
- Continuous display of parent machine speed and product counter information

The OT-12 Touchscreen

Flexoseal Pro Software

- System access levels for security
- Customize accesses according to needs/preferences
- Multiple language settings
- Time zone configuration settings
- Enhanced data collection with the use of VisiPro Software (Version A011 and higher), including continual server connection attempts even if a server was not detected upon startup.

SECTION 2 - SAFETY AND USE

Read Thoroughly Before Handling Equipment

Warning!

Read and follow all safety precautions, warnings, cautions, and other recommendations in this manual. OTHERWISE, DEATH, PERSONAL INJURY OR EQUIPMENT DAMAGE COULD OCCUR.

Read this entire section before handling the equipment.

Symbols

The following symbols may be used on the equipment and/or in this manual.

This symbol represents a **Caution** or a **Warning**. *Cautions* draw special attention to anything that could damage equipment or cause the loss of data. *Warnings* draw special attention to anything that could injure or kill the reader. Both Cautions and Warnings are placed before the step they apply to.

This symbol represents a **Hot Surface**.

This symbol represents a **Puncture Risk.** It is usually used in regard to nozzle cleaning appliances and other sharp instruments that can cause puncture wounds and risk exposure to bloodborne pathogens and other debris.

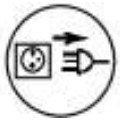
This symbol means that **Working Gloves** are required.

This symbol means that **Goggles** are required.

This symbol indicates a **Shock Hazard**. There is a presence of non-insulated dangerous voltage within the product's enclosure. This voltage may cause electrical shock or fire.

Continued next page

Symbols - Continued



This symbol indicates the need to **Unplug/Disconnect All Power Sources** and to let them de-energize before attempting any type of work or maintenance. Remember that there can still be energy in equipment, cords, and wires even when unplugged/ disconnected.

This symbol indicates the need to **Lock Out All Power Sources** and to let them de-energize before attempting any type of work or maintenance. If power is not locked out, the person working on the equipment may be injured or killed if someone unknowingly switches on the power to the equipment.

This symbol indicates a **Note**. Notes point out something of special interest or importance to the reader. They give tips, hints, and information in addition to what is necessary for the step preceding it.

Owner Responsibilities

The owner of the equipment is under obligation to manage all safety information. Some examples include:

- Examine all safety materials and documents as well as jurisdictional laws and make certain all laws, recommendations, and other safety/hazard laws, certification requirements, training, and instructions are followed and kept current.
- Maintain all safety materials including tags, labels, documents, and MSDS information. Make certain they are distinct and can be read/understood. Replace any that are dirty, worn, or unreadable.
- Make sure all personnel who will handle, install, maintain, operate, fix, and work around the equipment have ready access to the safety information, training, and equipment according to jurisdictional authorities.

The owner of the equipment is under obligation to make certain that all instructions, requirements, and jurisdictional laws are met. Some examples include:

- Make sure there are regular inspections of equipment and safety devices.
- Have regular safety drills and inspections supervised by the proper authorities.
- Provide all required safety items, first aid equipment, and training.

The owner of the equipment is under obligation to make certain that all personnel who will handle, install, maintain, operate, fix, and work around the equipment are qualified, trained, and up-to-date with all information regarding the equipment. Some examples include:

- Make sure all personnel have the proper safety training, equipment, education, and abilities necessary for the job function according to safety instructions and all jurisdictional laws and regulations.
- It is strongly advised that personnel receive first-responder medical care training in case of burns, medical emergencies, or other injuries. Training should be kept up to date.
- Make sure all personnel understand and can follow safety policies and procedures for the organization as well as for the specific equipment.
- Make sure that all personnel are consistently trained, evaluated, free of alcohol and medications that may impair judgment and reflexes, and are tested for banned substances according to jurisdictional authorities.

Limitations of Use

Read this document and all information regarding the equipment before handling the equipment. The intended use of the equipment is stated in Section 1 of this manual.

Do not use this equipment for anything other than its intended use. Do not modify, change, or alter the equipment in any way. If you are unsure of the intended use and the limitations of use for the equipment, contact your Valco Melton Representative before handling the equipment.

Installation/ Startup/Use Safety Information

Valco Melton hot melt units, cold glue units, controllers, inspection systems and all related accessories have the following universal safety precautions (this is not intended to be an exhaustive list; follow all instructions and safety precautions for the specific type of equipment involved):

Warning!

Only qualified personnel should install the equipment. Valco Melton strongly recommends that a Valco Melton Technician install all equipment. OTHERWISE, DEATH, PERSONAL INJURY, OR DAMAGE TO EQUIPMENT COULD OCCUR.

Warning!

The equipment should be installed so that it can be turned off at a location **away** from the equipment in case of injury, electrical problems, or malfunction. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

Properly route all electrical wires. Never tamper with equipment. Only use approved and correct voltage, type of current, fuses, and other power supplies. Replace worn cords, hoses, etc. immediately. FAILURE TO OBSERVE WARNING MAY RESULT IN DEATH, PERSONAL INJURY, AND/OR EQUIPMENT DAMAGE.

Warning!

Poor ventilation, smoking, and open flames can cause overheated hot melt to ignite. Adequate ventilation must be provided. Smoking should be prohibited in the immediate vicinity of the molten adhesive. Open flames must be kept away from the area around molten adhesive. OTHERWISE, DEATH, PERSONAL INJURY, OR DAMAGE TO EQUIPMENT COULD OCCUR.

Warning!

Never use any Valco Melton equipment in an explosive environment. Explosive environments include, but are not limited to, solvent-based cleaners or adhesives, explosive materials, radioactive materials, etc. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

Equipment will start automatically when remotely controlled by triggering devices. Be sure to disable all triggering devices, carefully release hydraulic pressure, and disconnect air pressure before servicing or working near guns, valves, and other triggered devices. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Shut Down Safety Information

Valco Melton hot melt units, cold glue units, controllers, inspection systems and all related accessories have the following universal safety precautions (this is not intended to be an exhaustive list; follow all instructions and safety precautions for the specific type of equipment involved):

Warning!

Purge the fluid pressure and the air pressure from the system before disconnecting/disabling any part of the system. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

Disconnect and lock out all power before maintenance or other need to open the equipment. Only qualified personnel should open and service the control. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

Equipment may still be energized even if unplugged! When making adjustments or performing checkout procedures, stay clear of any moving mechanical parts and do not touch exposed electrical equipment or electrical connectors. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

Disconnect/disable all mechanical and/or electrical devices that send activation signals to the gun(s), valve(s), melter pump(s), etc. This includes pattern controls, timers, input/output signals, etc. Only qualified personnel should open and service the control. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

Disable all triggering devices, relieve all residual pressure (hydraulic and air) and allow adhesive to cool before attempting to disconnect guns, hoses, valves, etc. Only qualified personnel should open and service the control. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

Never point an adhesive dispensing gun, valve, hose, air hose, or anything else at yourself or another person. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Hot Melt Specific General Safety Information

Valco Melton hot melt units have the following universal safety precautions **in addition to all other universal precautions previously mentioned** (this is not intended to be an exhaustive list; follow all instructions and safety precautions for the specific type of equipment involved):

Warning!

Never process any polyurethane reactive (PUR) hot melt or solvent-based material in a Valco Melton unit unless you are certain that the unit is compatible and is marked “PUR”! Read all instructions and MSDS sheets carefully, following manufacturer’s instructions, especially regarding heat levels. If you have any question as to the compatibility of a Valco Melton unit for PUR hot melt, call your Valco Melton Representative before attempting to use the unit for PUR or solvent-based materials. OTHERWISE, HAZARDOUS FUMES, EXPLOSION, DEATH, OR PERSONAL INJURY COULD OCCUR.

Warning!

Keep pump cover and electrical enclosures closed except during setup, service, and checkout procedures. OTHERWISE, DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

People with respiratory problems (e.g., asthma, bronchitis, etc.) should not work in the vicinity of molten adhesive. RESPIRATORY PROBLEMS MAY BE AGGRAVATED BY THE FUMES. Do not wear a face mask when working around molten adhesive. THE MASK MAY TRAP THE FUMES AND DEATH OR PERSONAL INJURY COULD OCCUR.

Warning!

Keep hot melt hoses away from walkways and the moving parts of hot melt systems. OTHERWISE, PERSONAL INJURY OR EQUIPMENT DAMAGE COULD OCCUR.

Warning!

Hot surfaces! Do not touch! Use extreme caution when refilling the unit by hand. OTHERWISE, PERSONAL INJURY COULD OCCUR.

Warning!

Wear protective gloves and goggles at all times around all machinery, especially hot melt. OTHERWISE, SERIOUS PERSONAL INJURY COULD OCCUR.

Warning!

Never use an open flame to heat hot melt components or adhesive. OTHERWISE, DEATH, PERSONAL INJURY, OR DAMAGE TO EQUIPMENT COULD OCCUR.

What to Do if Contact with Hot Adhesive Occurs

If hot adhesive comes in contact with the skin, do the following:

Warning!

Do not attempt to remove heated hot melt adhesive from the skin. OTHERWISE, SEVERE PERSONAL INJURY AND DEATH COULD OCCUR.

1. Immediately immerse the contacted area in clean, cold water.

   It is strongly recommended that a source of clean, cold water be provided near the hot melt work area.

2. Cover the affected area with a clean, wet compress and call the emergency medical response system (such as 911) immediately.

3. Watch for and treat the subject for signs of shock while waiting for professional help to arrive.

What to Do if Inhalation of Adhesive Fumes Occurs

If adhesive fumes are inhaled, immediately follow these steps:

1. Take the victim away from the immediate work area.

2. Provide victim with fresh air.

3. Call the emergency medical response system (such as 911) immediately.

What to Do if Adhesive-Related Fire or Explosion Occurs

During the heating and melting process, the surface of the adhesive will be exposed to air. The mixture of polymer fumes and air can catch fire if the hot melt is overheated.

Warning!

Poor ventilation, smoking, and open flames can cause overheated hot melt to ignite. Adequate ventilation must be provided. Smoking should be prohibited in the immediate vicinity of the molten adhesive. Open flames must be kept away from the area around molten adhesive. OTHERWISE, DEATH, PERSONAL INJURY, OR DAMAGE TO EQUIPMENT COULD OCCUR.

Warning!

Exposed arcing may ignite the fume/air mixture. Shield all electrical equipment from melt fumes to avoid exposed arcing. OTHERWISE, PERSONAL INJURY OR EQUIPMENT DAMAGE COULD OCCUR.

Warning!

Do not use a water extinguisher to extinguish the fire! OTHERWISE, PERSONAL INJURY OR EQUIPMENT DAMAGE COULD OCCUR.

If the hot melt adhesive ignites, promptly perform the following steps:

1. Sound a fire alarm.
2. Evacuate the immediate area.
3. Turn off all local electrical equipment at the source.
4. Leave the area immediately if conditions are unsafe.

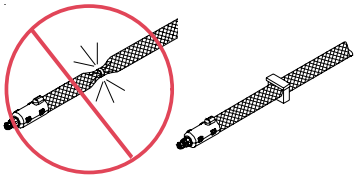
   If you feel you can fight the fire **safely**, do ***one*** of the following:

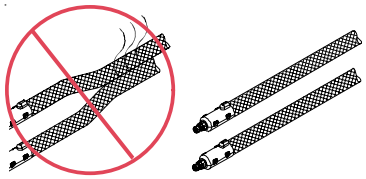
   - Smother the fire with a fire blanket.
   - Aim a CO_2 fire extinguisher at the base of the flames.
   - Aim a dry-powder fire extinguisher at the base of the flames.

Hose Safety Information

Do not use bindings, wire ties, or unapproved fasteners around the hoses.

Do use approved wrapping (P/N KAP0434), making sure the wrapping is slightly snug but not tight.



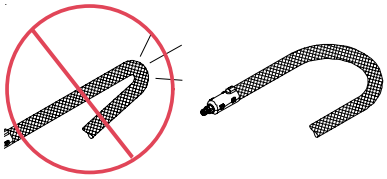


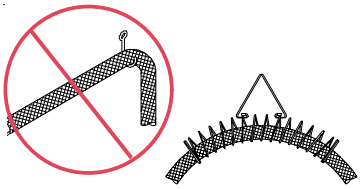
Do not place hoses close together.

Do allow at least 2 inches (5.1 cm) between hoses for proper ventilation.

Do not bend hoses sharply. **Do not** allow kinks or indentations in the hoses.

Do use a minimum bend radius of 10 inches for a 20-inch diameter coil hose.



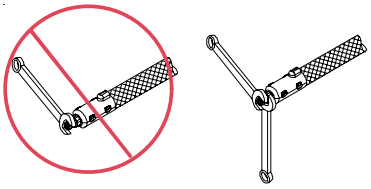


Do not use unapproved hooks to hang hoses. **Do not** wrap hoses over or around objects.

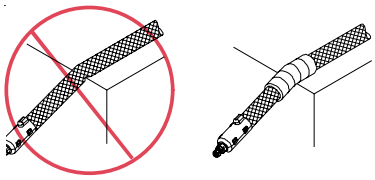
Do use a hose hanging kit (P/N 781xx827).

Do not use the “one handed/one wrench” technique to attach or remove hoses. **Do not** wrench on any surface other than the large hexagon swivel nuts.

Do use two hands and two wrenches to tighten or loosen connections on hoses. **Do** wrench only on large hexagon swivel nuts.



Hose Safety Information - Continued

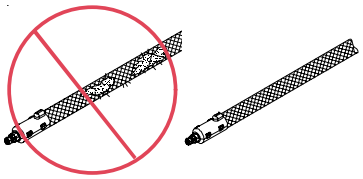


Do not allow hoses to rub against objects or to come into contact with sharp edges or points.

Do wrap the hoses in approved padding (P/N 795xx549) if the hoses must be installed where they will come into contact with objects.

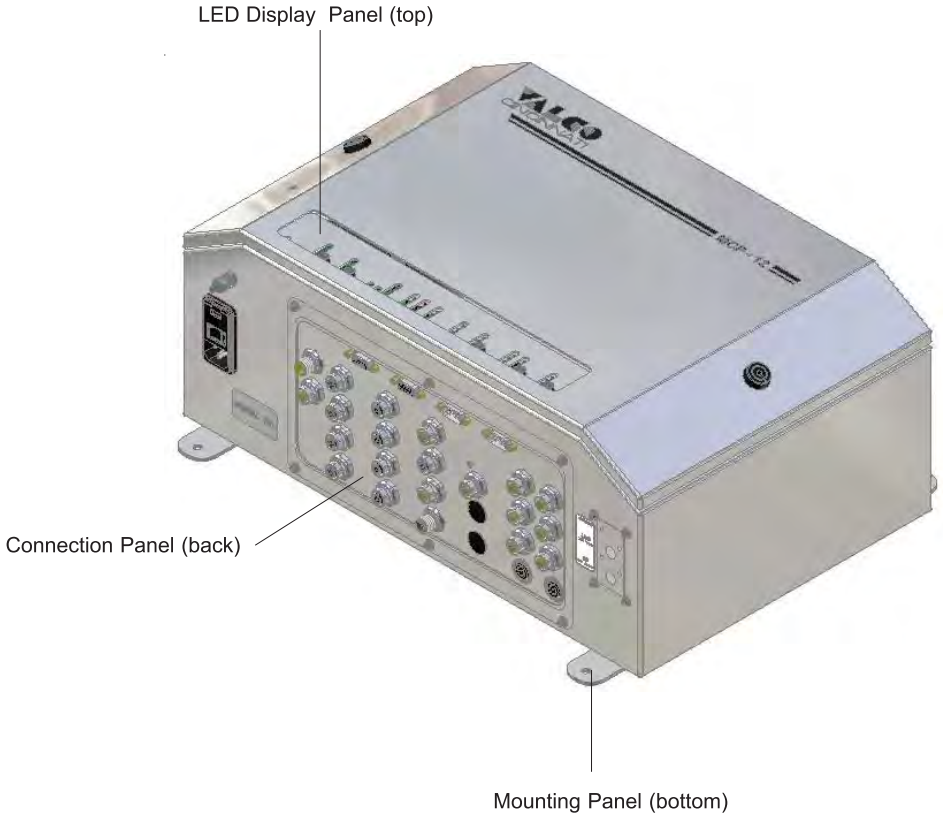
Do not use worn, damaged, or bent hoses.

Do inspect all hoses regularly for damage and/or wear and replace damaged or worn hoses immediately.



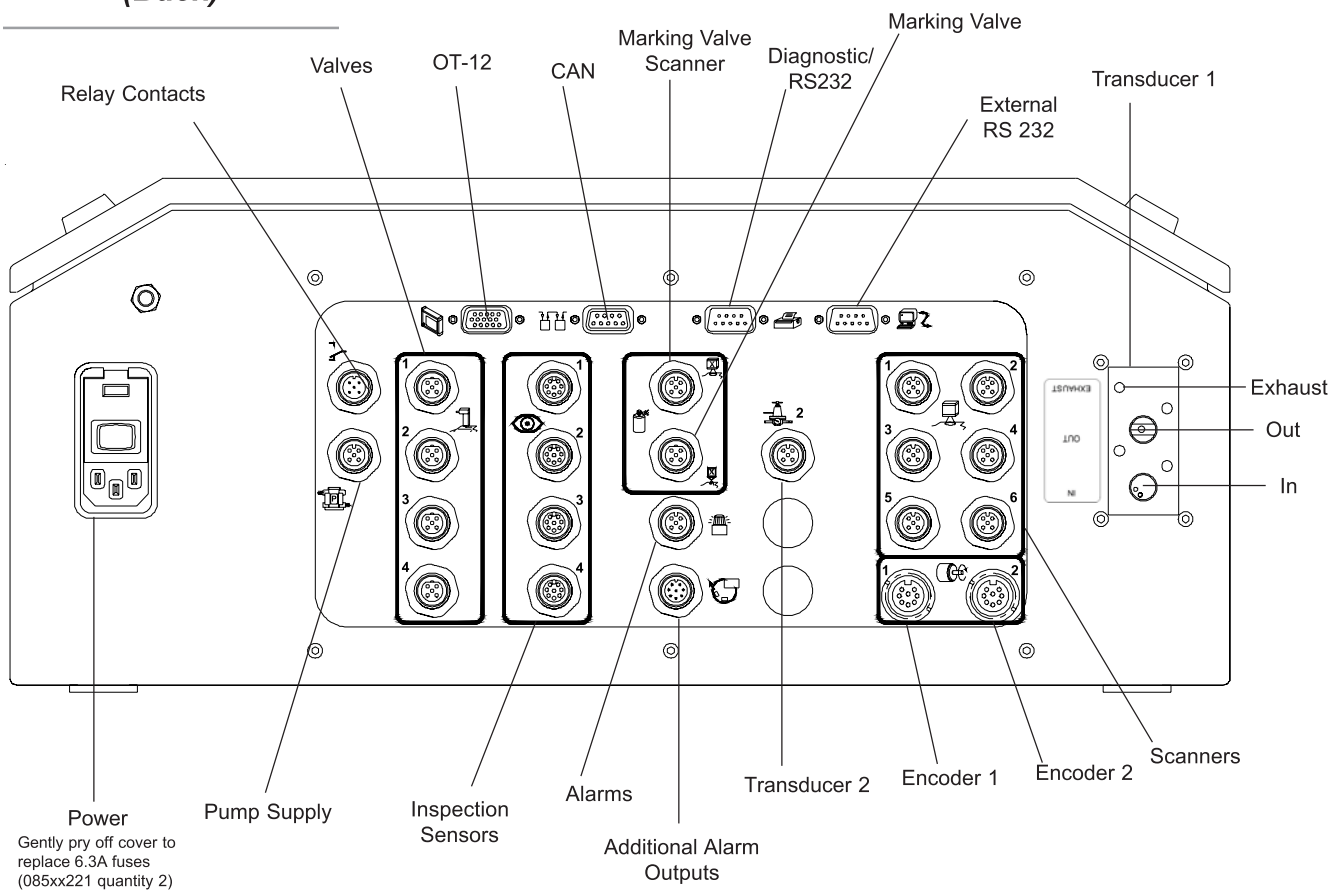
SECTION 3 - BASIC FEATURES

MCP-12 Control



The MCP-12 Control Unit - Panels

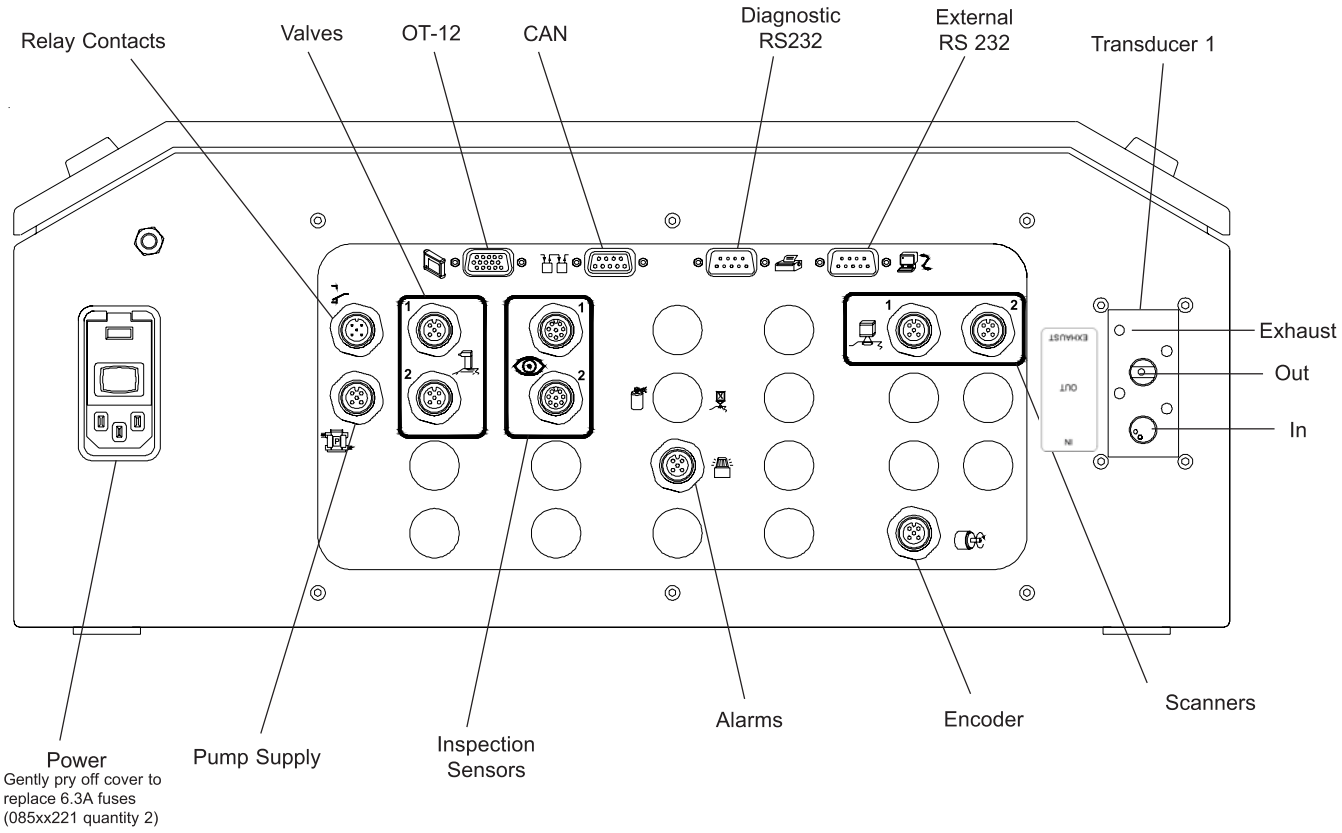
MCP-12/4 Connection Panel (Back)



Model MCP-12/4 Control Unit - Connection Panel (Back)

For Connector Pinouts, see *Appendix B*.

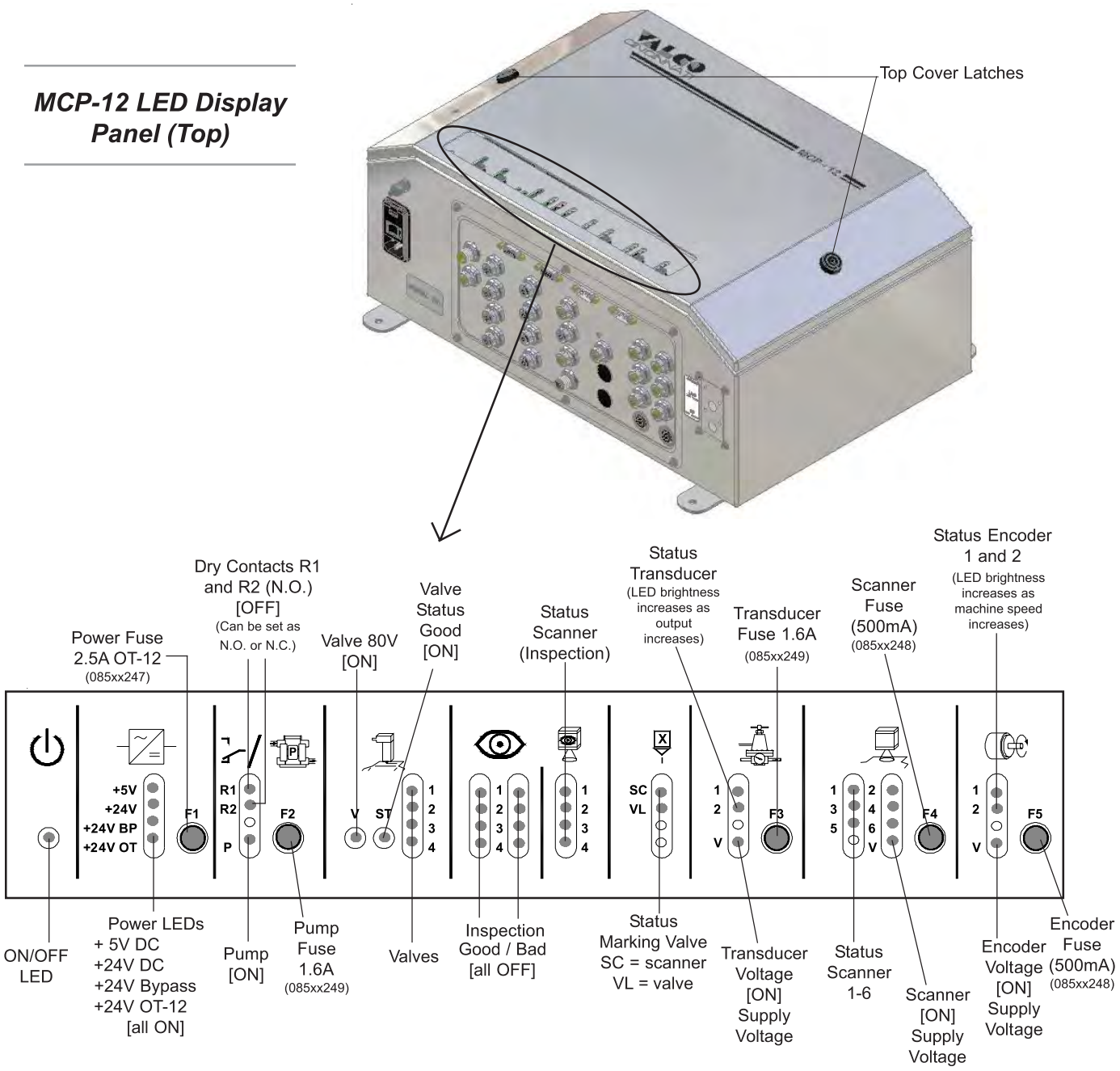
MCP-12/M Connection Panel (Back)



Model MCP-12/M Control Unit - Connection Panel (Back)

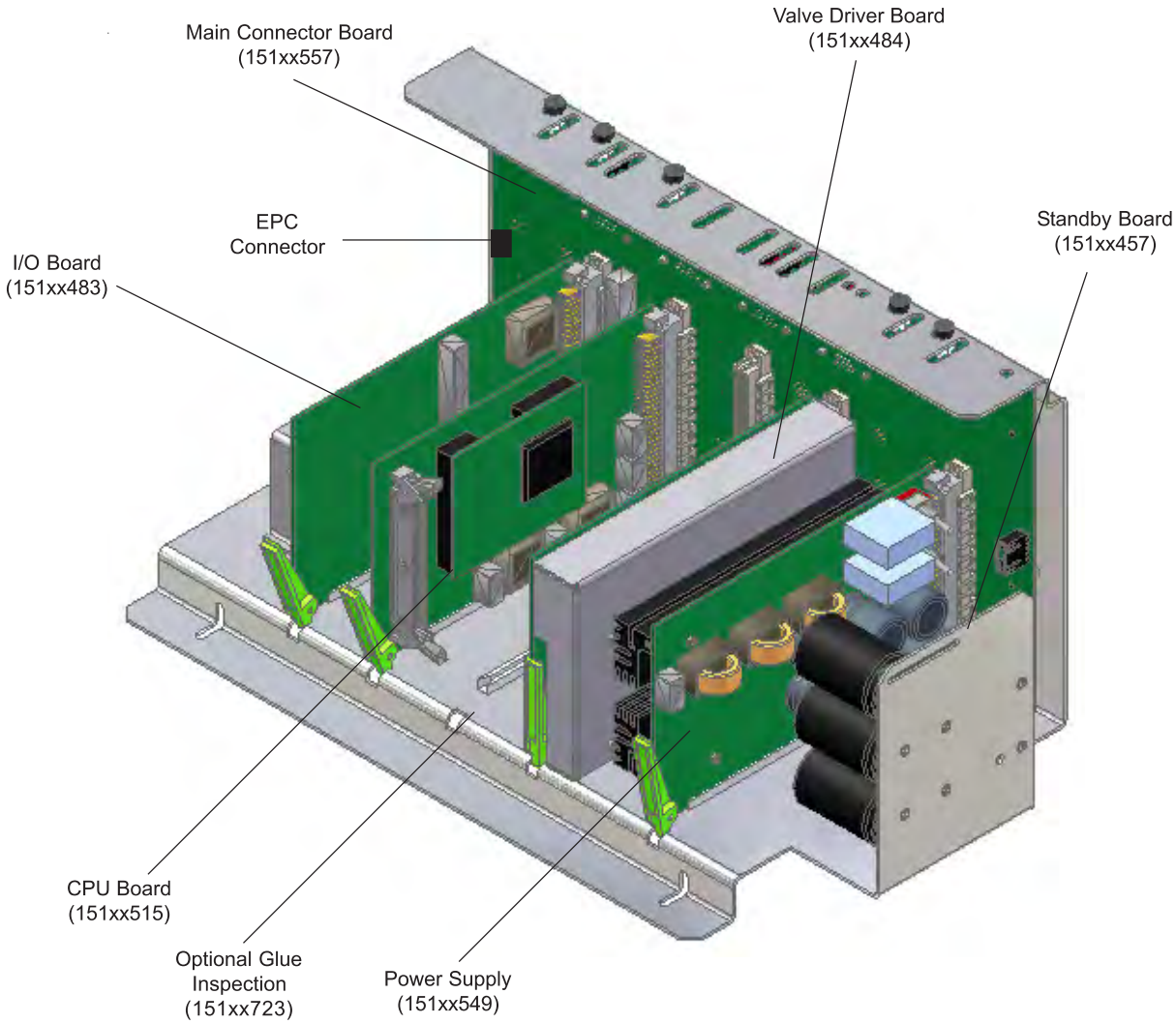
For Connector Pinouts, see *Appendix B*.

MCP-12 LED Display Panel (Top)



The fuses in the MCP-12 LED display are located under the top cover. Use a 4mm hex wrench to loosen the latches (see illustration above) and remove the top cover. The fuses lift out/drop in. Replace the top cover and tighten the latches after replacing fuses.

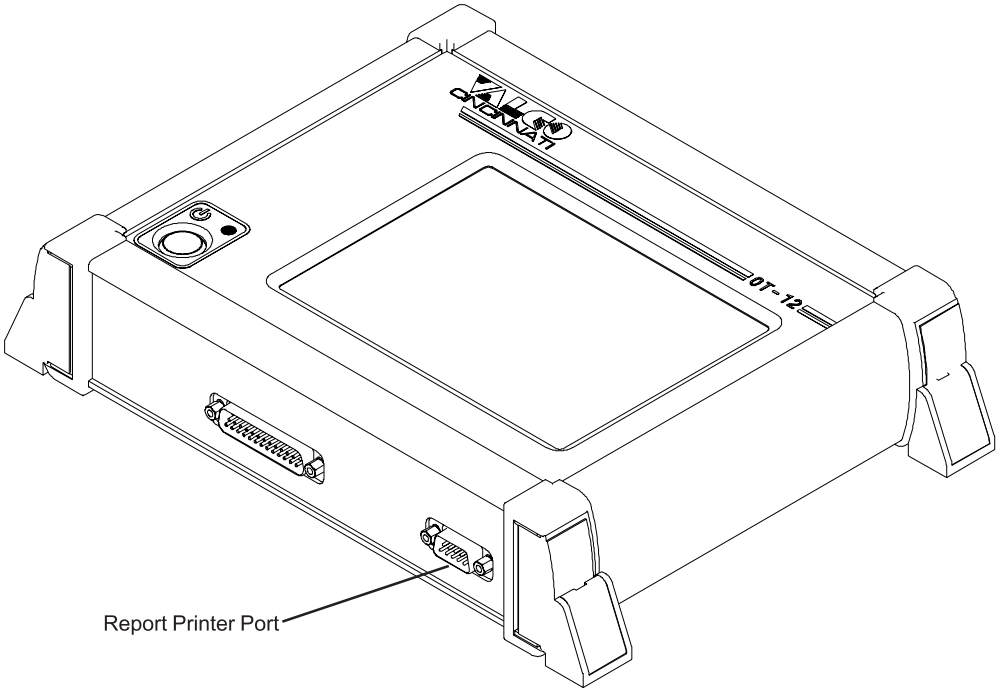
MCP-12 Control Circuit Boards



OT-12 Touchscreen

OT-12 Features:

- Graphical touchscreen interface between the MCP-12 Control and Valco's exclusive FlexosealPRO software
- Easy-to-learn, easy-to-use
- Dedicated graphics controller
- 6.4" display 640 x 480 resolution, capable of 16 million colors
- Single cable connection for power and control interface
- Rugged case encloses display and boards
- Optional stand available



OT-12 Touchscreen

SECTION 4 - INSTALLATION

Installation of the MCP-12 Control

Valco Cincinnati, Inc. recommends that all mounting and installation of the Flexoseal PRO System is performed by qualified Valco service personnel. Mounting and installation is done in three steps: Installation of the MCP-12 Unit, Installation of the OT-12 Touchscreen, and the Initial Set Up and Programming for the client's system.

An installation mounting kit (582xx626) is available to mount the Valco MCP-12 control to almost any flat surface on the operator side of the parent machine.

Mounting Requirements

The control should be positioned with sufficient space to easily access the control. It should also be placed in a location with a minimum amount of vibration. The control should require less than 25 feet of wiring to reach the glue station, sensor, and encoder. Note that the mounting kit contains extra hardware for mounting in locations other than a machine wall.

When routing low-voltage leads, follow these guidelines:

- Do not route low-voltage leads in the same conduit as wires carrying a high-current load.
- Do not route low-voltage leads adjacent to, or across wires carrying a high-current load. If low-voltage leads must cross or run parallel to wires carrying high current, keep the leads at least 6" (152 mm) from high-current wires.
- Do not splice or solder leads.
- If wirable connectors have been purchased for installation, trim all leads to the required length. Leads should be only as long as necessary for installation.
- All wiring should be in conduits or wireways.

Instructions

To install the control, complete the following mounting instructions:

1. Install the two mounting plates to the machine wall using the four vibration mounts, ¼" flat washers, lock washers, and nuts (Illustration A). The vibration mounts should be positioned between the machine wall and the mounting plates. Refer to the detail (Illustration B) for complete orientation of hardware. Make sure that the mounting plates are the appropriate distance apart by checking the vertical distance between the mounting holes on the MCP-12 control (Illustration A).
2. Mount the MCP-12 unit to the mounting plates using four SHCS ¼ -20 x ¾ bolts, and ¼" flat washers, lock washers, and nuts (Illustration A).

Instructions - Continued

Illustration A

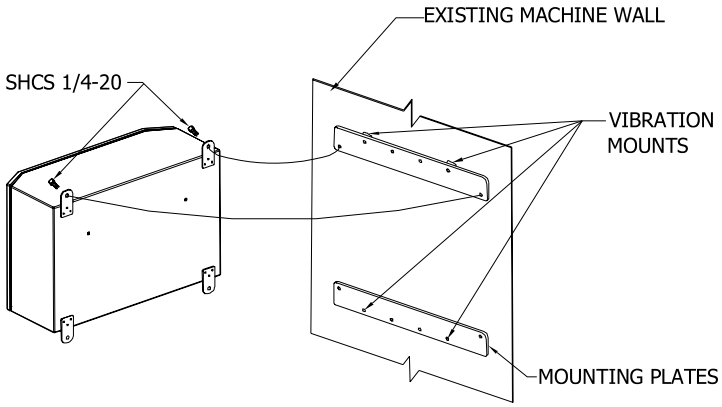
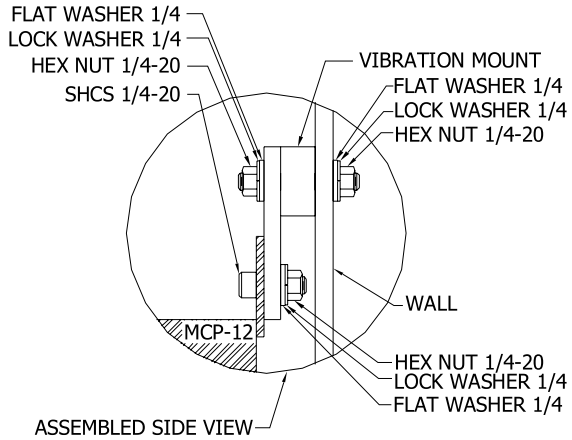


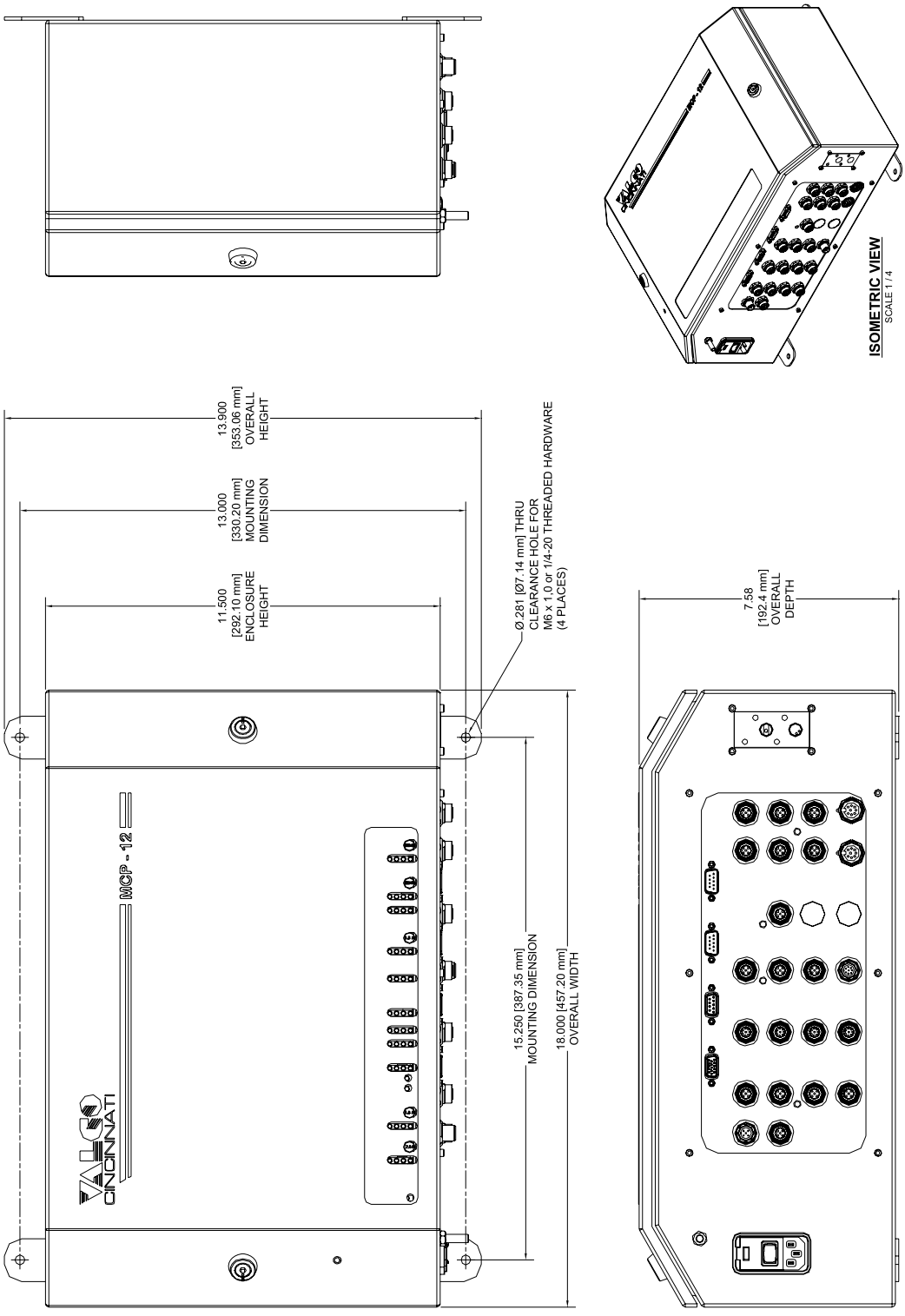
Illustration B



TAJ0046

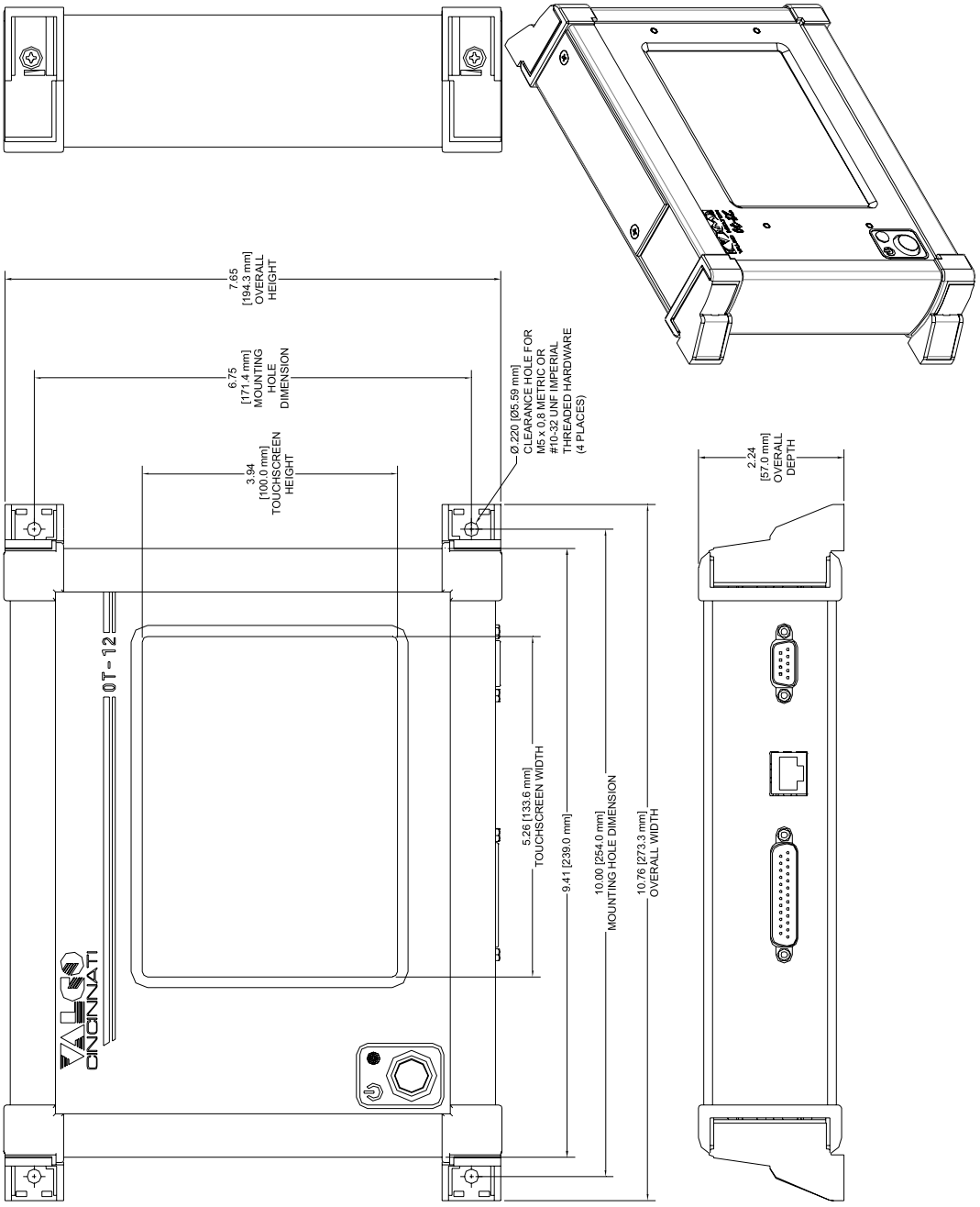
Mounting the MCP-12 Control Unit

Installation of the MCP-12



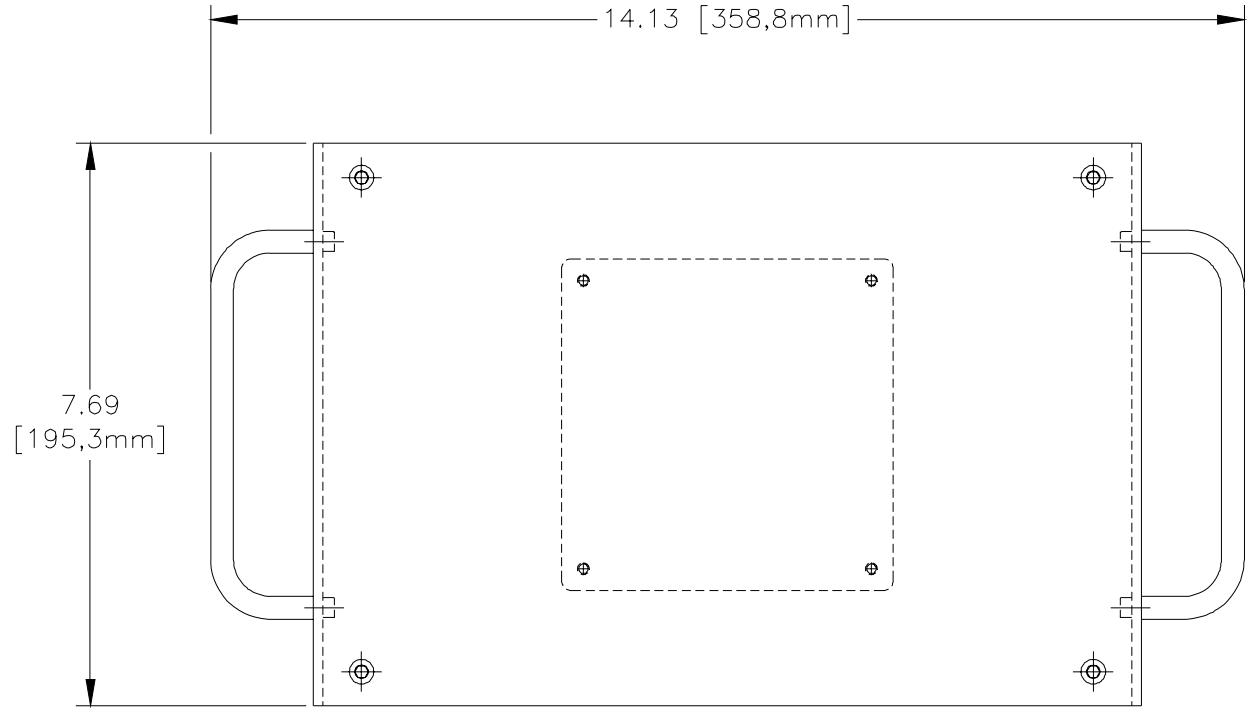
Installation of the OT-12 Touchscreen

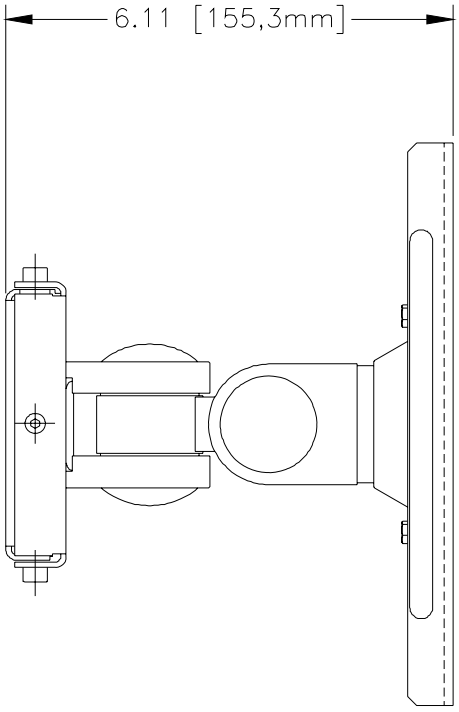
Refer to the following illustrations for OT-12 wall mounting (138xx010) and swivel mounting (579xx356) dimensions.



OT-12 Wall Mounting Dimensions

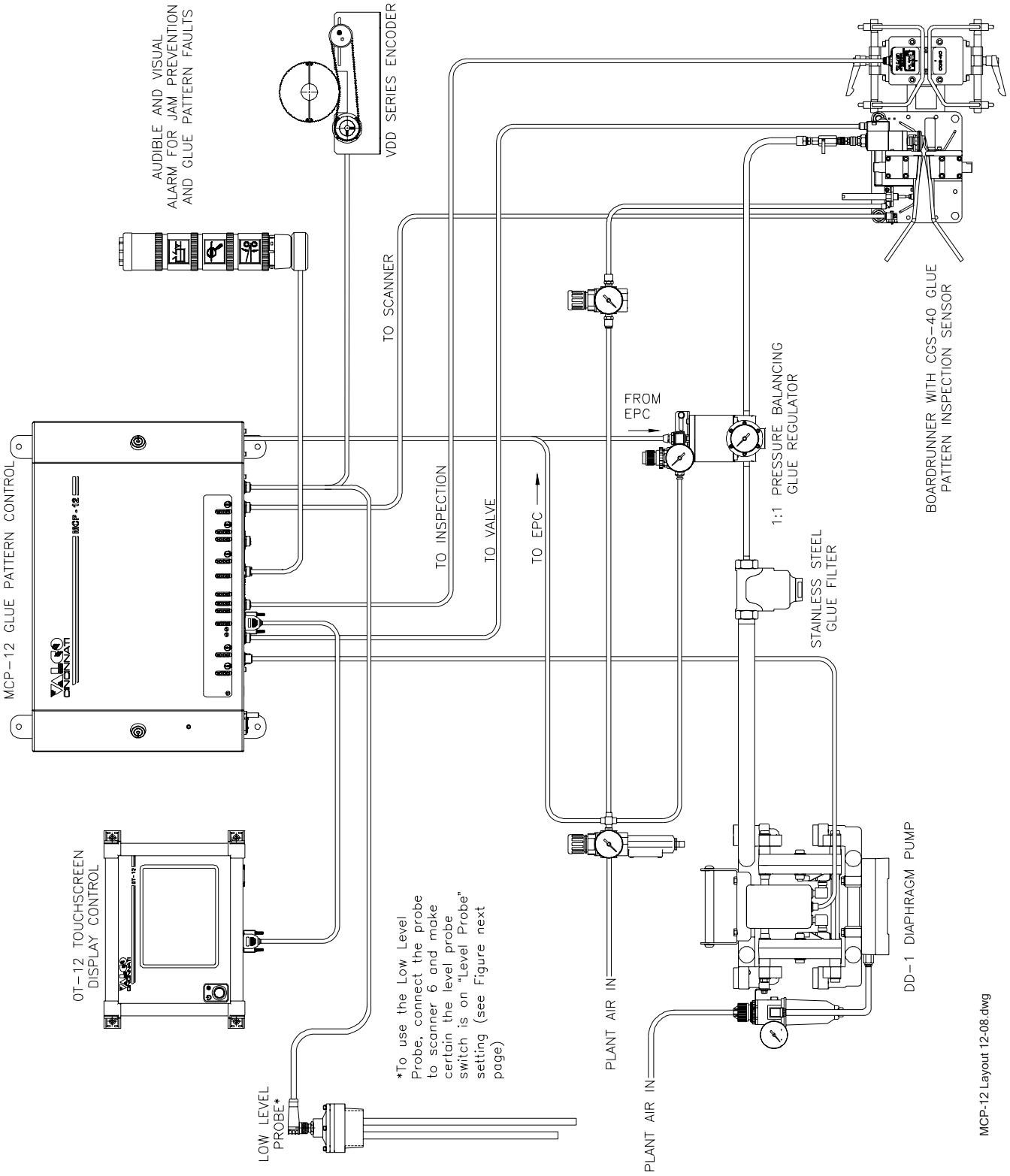
Mounting the OT-12 - Continued





OT-12 Swivel Mounting Dimensions

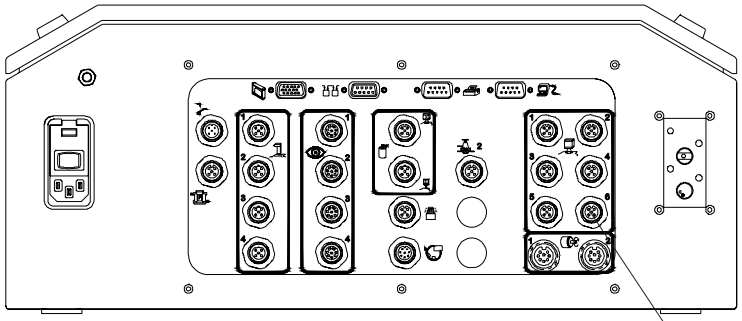
Typical Flexoseal System Layout



Use of Low Level Probe

To use the Low Level Probe, do the following:

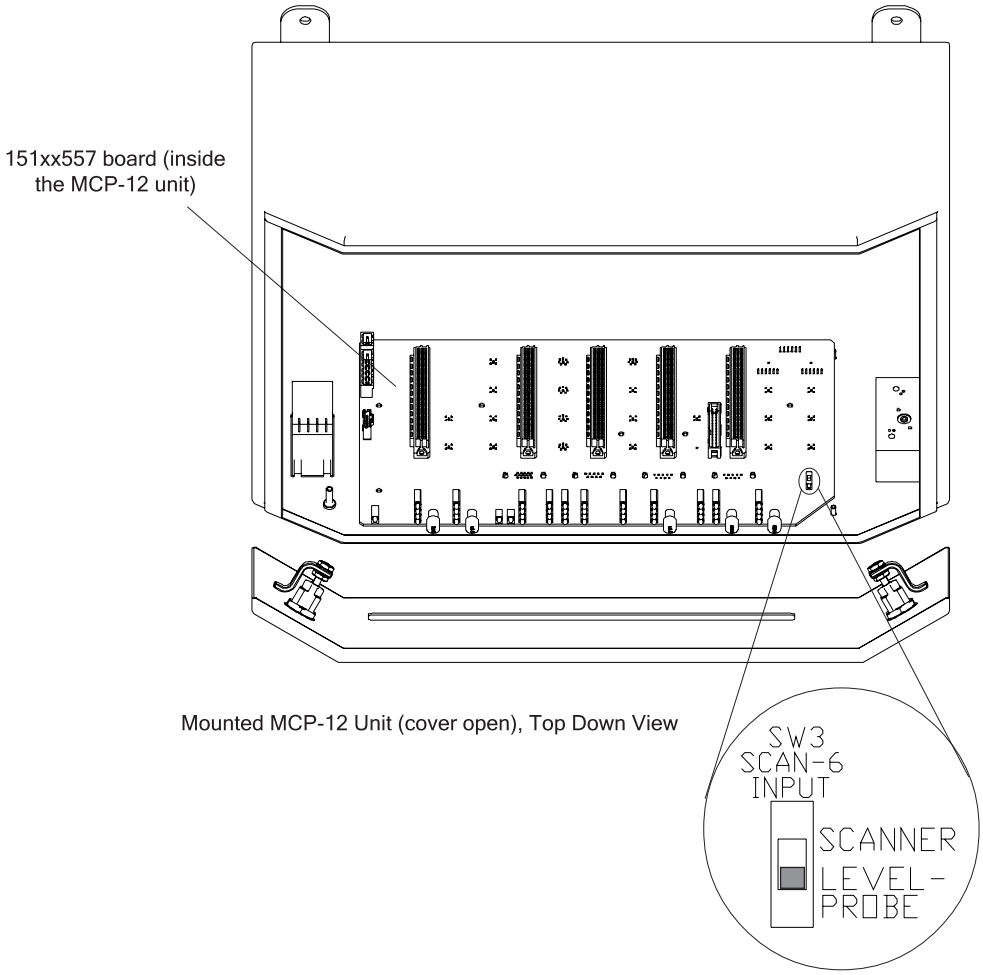
1. Connect the probe to the scanner 6 connection on the back of the unit.



MCP-12 Unit, Bottom Up View

Scanner 6 Connection

2. Move the level probe switch on the 151xx557 board to the “Level Probe” setting.



Mounted MCP-12 Unit (cover open), Top Down View

Be sure the switch is in the “Level Probe” position (down)

098xx886.dwg & 151xx557.dwg

Setting the Powerup-Selection Switch

The powerup-selection switch is located on the power-supply board. It can be set to either ***standby mode*** or ***direct-on mode***. ***Standby mode*** means that when the unit is turned on, the unit will be in standby until the standby/power button is pressed. Standby mode is indicated by an orange LED on the standby/power button. ***Direct-on mode*** means that the unit will power up as soon as power is supplied. A green LED on the standby/power button indicates that the power is on.

To set the powerup-selection switch, follow these steps:

1. Turn off all power to the unit.
2. Open the door of the unit.
3. Remove the power-supply board.
4. Set the powerup-selection switch.

Jumpers:

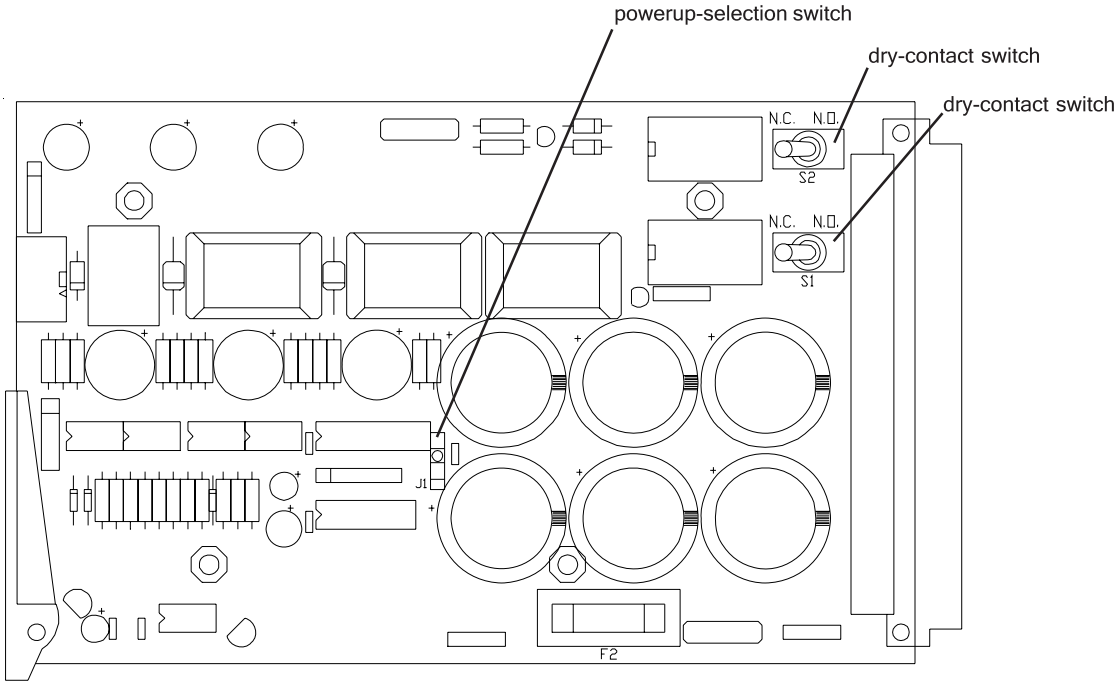
Pins 1,2 = ***standby mode***

Pins 2,3 = ***direct-on mode***

Switches:

Switch in up position = ***standby mode***

Switch in down position = ***direct-on mode***



Main Board DIP Switch Configuration

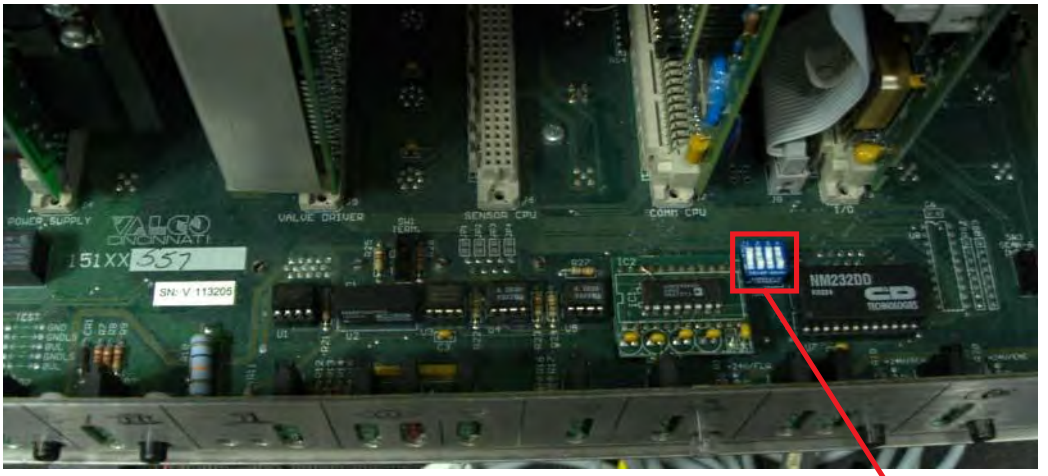
The four switches of SW2 are divided into 2 sections:

The Switches 1-3 will set the OEM configuration;

Switch 4 will set the unit of measurement inside the MCP-12.

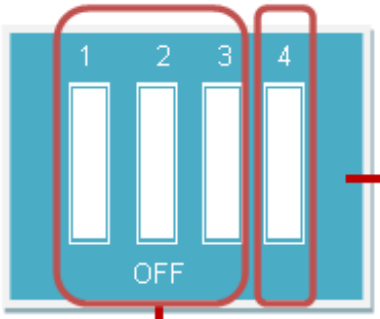
The Switch 4 setting is only used if one of the OEM modes is selected. If the switch settings are changed, the unit will be re-configured on the next power-up.

CAUTION! All values in the control / CPU will be overwritten without any confirmation.



DIP Switches on the Main Board

Main Board DIP Switch Configuration - Continued



Unit of Measurement (Parameter 1006)	SW2-4
INCH	OFF
METRIC	ON

OEM Configuration (Parameter 1065)	SW2-1	SW2-2	SW2-3
No Change	OFF	OFF	OFF
No Change	ON	OFF	OFF
MARTIN	OFF	ON	OFF
EMBA	ON	ON	OFF
MHI	OFF	OFF	ON
WARD	ON	OFF	ON
OEM_ASCII	OFF	ON	ON

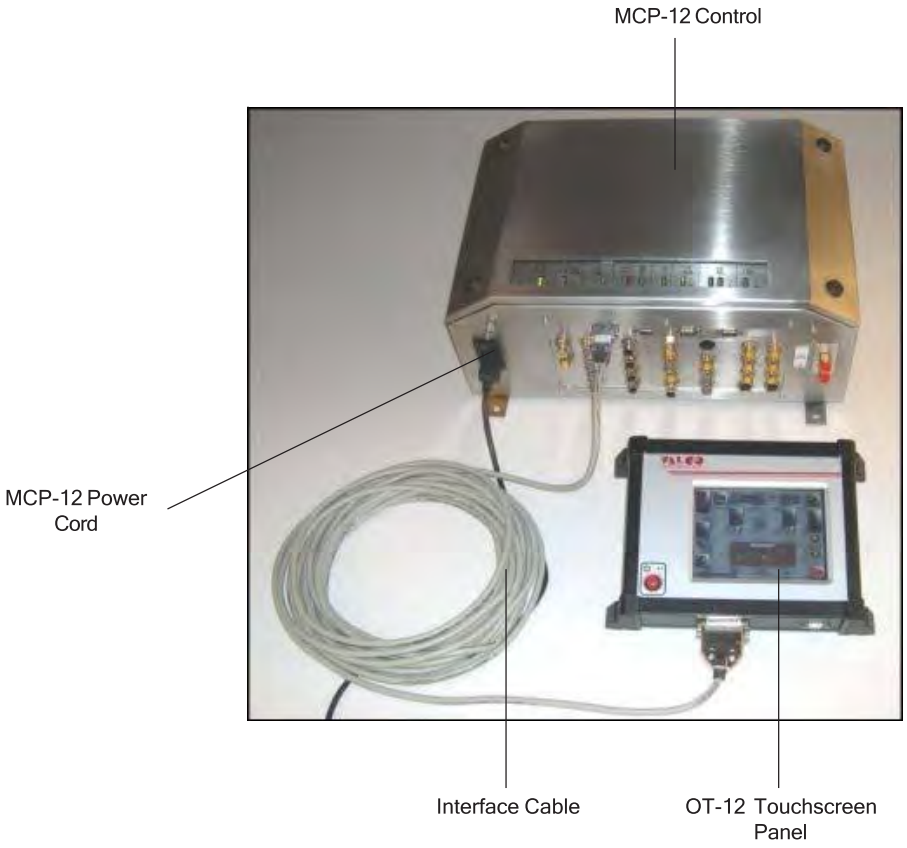
The option OEM_ASCII is only available with software version C072 or higher.

Initial Set Up and Programming

Connection

To connect the two units, do the following:

1. Locate the power supply.
2. Plug the power cord into the back panel of the MCP-12 Control unit.
3. Connect the interface cable between the MCP-12 Control and the OT-12 Touchscreen Panel.



Connecting the MCP-12 Control and OT-12 Touchscreen

Connect to Parent Machine

To connect the system to the parent machine, do the following:

> Do not turn on either unit. This will happen in Section 5 - Operation.

1. Stop the parent machine.
2. With the supply hose removed from the glue valve, run adhesive through the system until no air is present at the shutoff valve.
3. Switch the regulator air supply to “purge” and then back to “EPC”.
4. Using the shutoff valve, purge all glue until no more glue is visible.
5. Repeat both steps 3 and 4 **two (2) more times**.
6. Install the glue hose with shutoff valve onto the glue valve.

Set Air Pressure

Table 4-1. Air Pressure Settings

Component	Contact Extrusion
Marker-valve tank	1.5 bar/20 psi
DD-1 pump	6.5 bar/80 psi
Adhesive flow control (EPC)	6.5 bar/80 psi
Glue valves	6.5 bar/80 psi

> The pressures listed in Table 4-1 indicate the minimum pressure settings while the parent machine is idle. Actual pressure may vary slightly depending on glue viscosity.

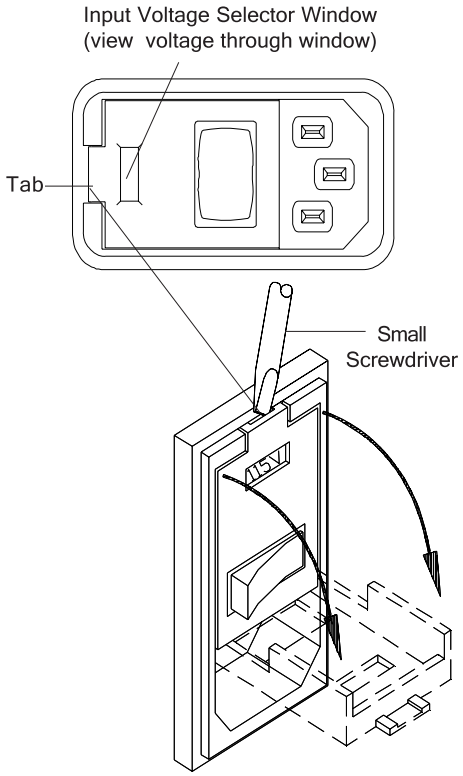
Input Voltage Selector

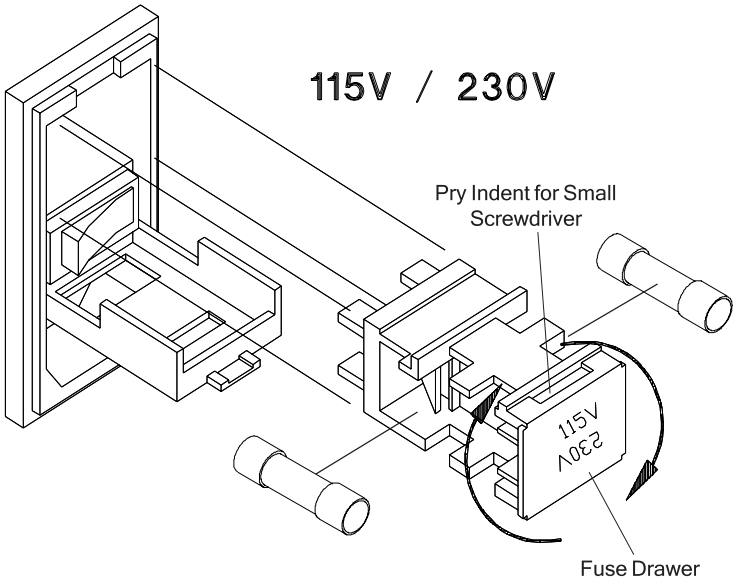
Changing the Voltage

WARNING! The setup may vary, depending on the country of installation. It is the purchaser's responsibility to ensure that all local, county, state, and national codes, regulations, rules, and laws relating to safety and safe operating conditions are met and followed. OTHERWISE, DEATH, PERSONAL INJURY, OR DAMAGE TO EQUIPMENT COULD OCCUR.

To change the voltage input, do the following:

1. Make certain the unit is OFF and unplugged.
2. Carefully open the input voltage selector compartment cover by prying up on the tab with a small screwdriver.
3. Remove the fuse drawer and make sure the fuse(s) in the holder remain in place.
4. **If the control will be connected to 115VAC**, rotate the drawer so that 115V will show through the door opening. **If the control will be connected to 230VAC**, rotate the drawer to the 230V position.





SECTION 5 - OPERATION

Activate the System

After the mounting and the initial set up procedures (outlined in *Section 4 - Installation*) are done, the Flexoseal PRO system is ready to perform!

Begin by turning on the MCP-12 Unit and the OT-12 Touchscreen Control.

1. Turn on the MCP-12 Unit by pressing the rocker switch on the Connection Panel (back) of the unit to the “ON” position.

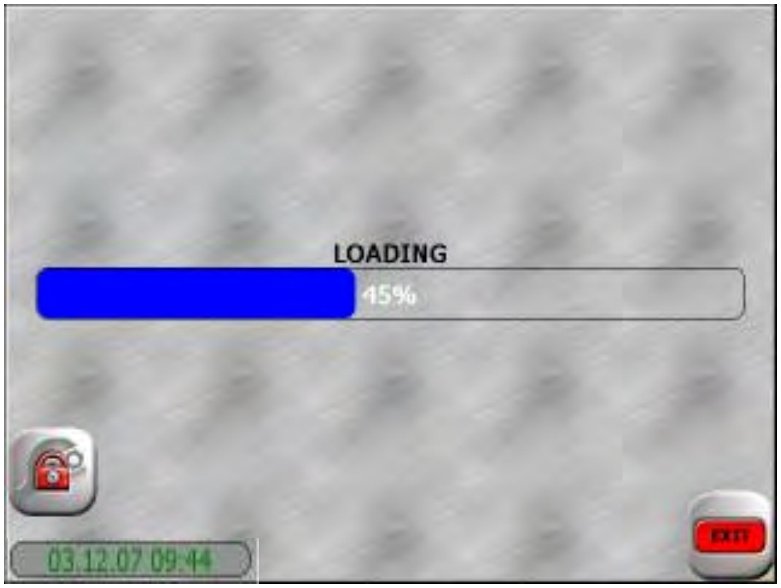
MCP-12 Unit

2. Turn on the OT-12 Touchscreen Control by pressing the red “ON/OFF” button.

OT-12 Touchscreen

Activate the System - Continued

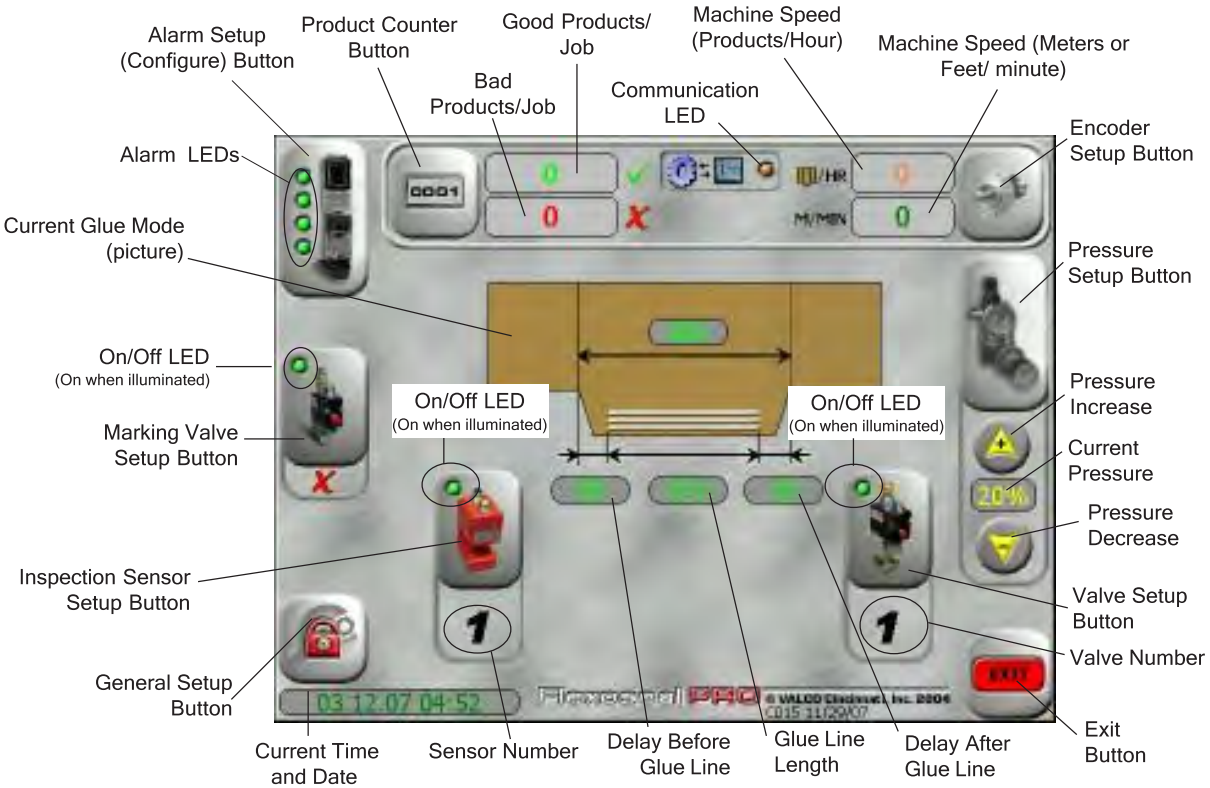
3. The OT-12 Touchscreen will “boot up” and show the Loading Screen as it prepares for operation.



Loading Screen

The Main Menu Screen

4. The OT-12 Touchscreen is ready when the “Main Menu Screen” appears.



Main Menu Screen

The Main Menu Screen - Continued

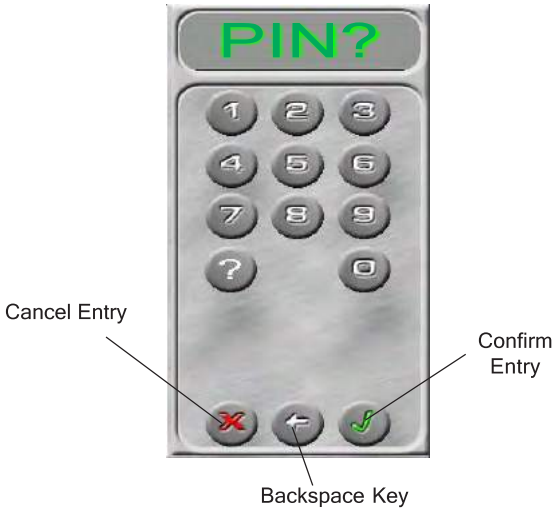
Name	Use
Product Counter Button	Print and reset the product counter by shift and by job.
Good Products/Job	Displays the number of good products for the job.
Bad Products/Job	Displays the number of bad (rejected) products for the job.
Communication LED	Illuminates green when communication is detected between machines.
Machine Speed (Products/Hour)	Displays the number of products done per hour.
Machine Speed (Meters or Feet/Minute)	Displays the speed of the machine in meters or feet per minute.
Current Glue Mode (picture)	The picture of the box with a glue mode pattern shows the current glue mode. To change the glue mode, press on an unmarked area of the box.
Delay After Glue Line	Length of the area without glue after the glue valve fires.
Glue Line Length	Length of the glue (length the glue valve fires).
Delay Before Glue Line	Length of the area without glue before the valve fires.
Alarm Setup (Configuration) Button	Setup alarm beacon and buzzer for low glue level, inspection, and jam detection.
Valve Setup Button	Setup glue valve information. Displays the current glue valve selected as a number value under the picture of the valve.
General Setup Button	Setup system parameters. Password protected levels define access permissions.
Inspection Sensor Setup Button	Setup inspection tolerances such as glue volume and glue position.
Marking Valve Setup Button	Setup the marking valve parameters, turn marking valve off and on, purge valve.
Encoder Setup Button	Setup the encoder pulse information and values associated with product lengths.
Pressure Setup Button	Setup the purge pressure; enter the glue curve values based on minimum encoder speed associated with minimum pressure and maximum encoder speed associated with maximum pressure.
Pressure Increase	Increases the glue pressure.
Current Pressure	Displays the current glue pressure in percentage.
Pressure Decrease	Decreases the glue pressure.
Current Time and Date	Displays the current day and time.
Exit Button	Power Down (Exit) the Flexoseal PRO system. Confirmation is necessary after pressing this button.

Entering a PIN

The FlexosealPRO System is designed with programmable security levels to protect settings. Any buttons that are “grayed out” require a higher security level Personal Identification Number (PIN) for access. For detailed information on these security levels, see *Section 6 - Configuring the FlexosealPRO*.

To enter a PIN, do the following:

1. Press the “Locked” General Setup Button with the stylus. A keypad will appear asking for your PIN.

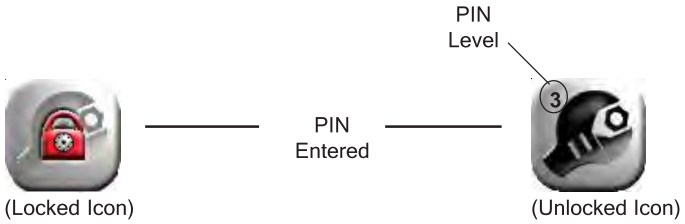


PIN Keypad

Caution!

Always use the stylus to press and select buttons on the OT-12 Touchscreen. Otherwise, damage to the unit can occur.

2. Enter your PIN on the keypad and press the Confirmation Checkmark. The main Menu Screen will appear, but with your PIN level on the General Setup Button.



PIN level on the General Setup Button

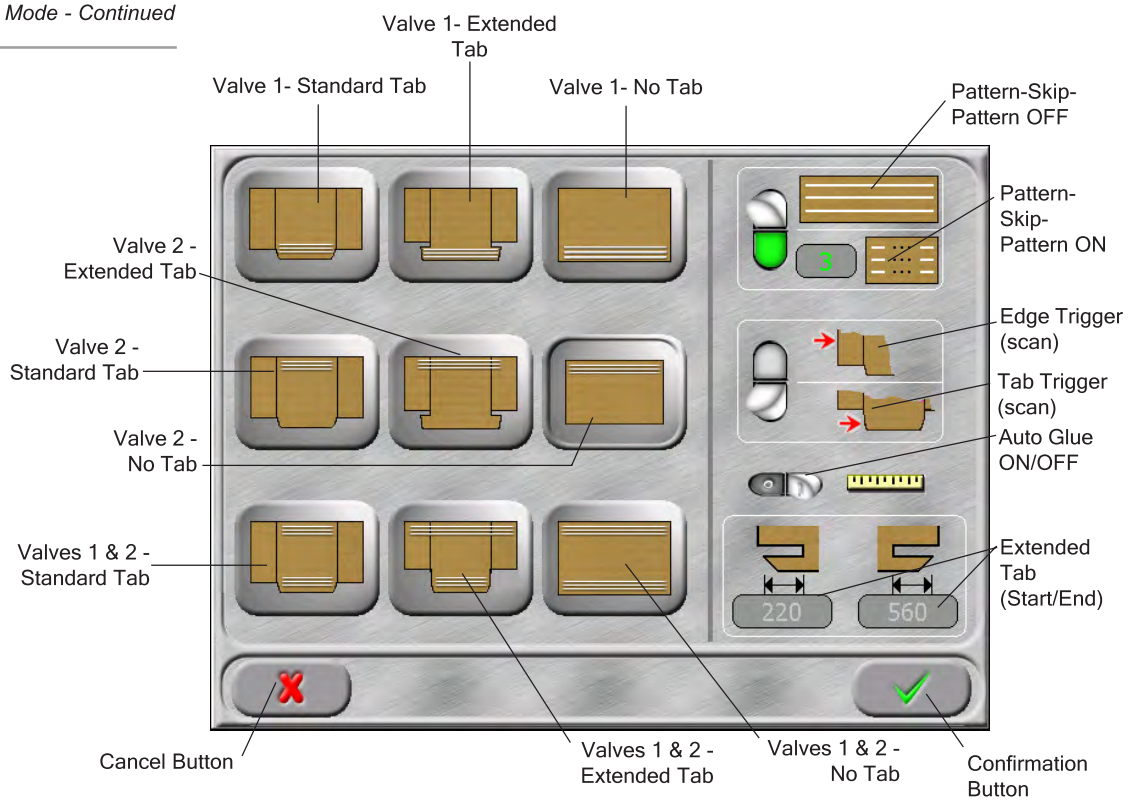
Selecting a Glue Mode

To select a Glue Mode, do the following:

1. From the Main Menu Screen, touch any corner of the box in the picture with the stylus. The Glue Mode Selection Screen appears.

Main Menu Screen

Selecting a Glue Mode - Continued



Glue Mode Selection Screen

1 - IDC_AUTOGLUESW
2 - IDC_EDGESELECTIONSW
3 - IDC_PSPSW
4 - IDC_VALVE1STDTAB
5 - IDC_VALVE1EXTTAB
6 - IDC_VALVE1NOTAB
7 - IDC_VALVE2STDTAB
8 - IDC_VALVE2EXTTAB
9 - IDC_VALVE2NOTAB
10 - IDC_VALVE12STDTAB
11 - IDC_VALVE12EXTTAB
12 - IDC_VALVE12NOTAB

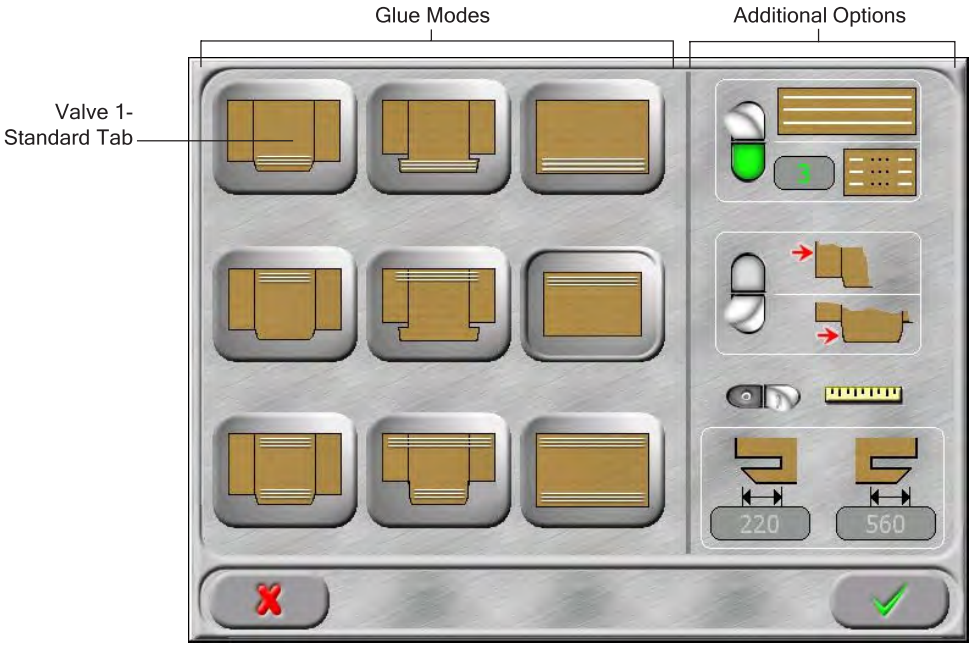
Glue Mode Selection Controls (Ref.)

Selecting a Glue Mode - Continued

Name	Use
Valve 1- Standard Tab	Valve 1 (operator side) applies glue in a standard tab pattern.
Valve 1- Extended Tab	Valve 1 applies glue in an extended tab pattern.
Valve 1- No Tab	Valve 1 applies glue in a no tab pattern.
Valve 2 - Standard Tab	Valve 2 applies glue in a standard tab pattern.
Valve 2 - Extended Tab	Valve 2 applies glue in an extended tab pattern.
Valve 2 - No Tab	Valve 2 applies glue in a no tab pattern.
Valves 1 & 2 - Standard Tab	Valves 1 & 2 apply glue in a standard tab pattern.
Valves 1 & 2 - Extended Tab	Valves 1 & 2 apply glue in an extended tab pattern.
Valves 1 & 2 - No Tab	Valves 1 & 2 apply glue in a no tab pattern.
Pattern-Skip-Pattern ON/OFF	Turn Pattern-Skip-Pattern setting on or off. The machine may be set to multiple pattern gluing.
Edge Trigger/Tab Trigger	Either the edge or the tab will trigger the sensor, depending on the setting.
Auto Glue ON/OFF	Switch between Auto Glue (ON) setting and Manual Glue (OFF) setting.
Extended Tab Start/End	Adjust the length of the start tab and the end tab for extended tab settings.
Confirmation Button	Press to enter the new settings. (No settings are changed until this is pressed.)
Cancel Button	Cancel the new settings and return to the previous settings. (Use before pressing the Confirmation Button.)

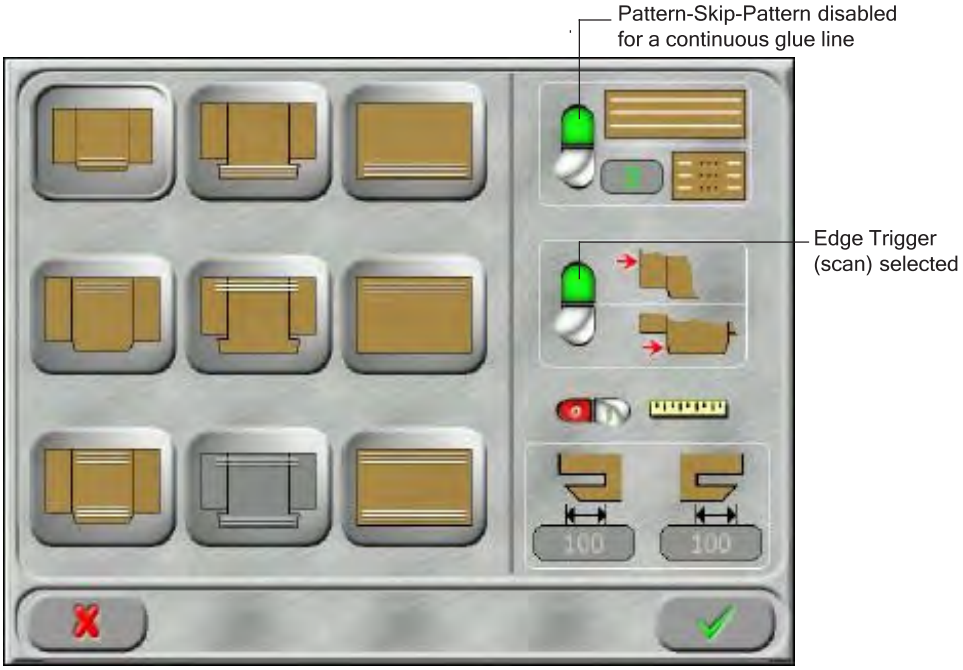
Selecting a Glue Mode - Continued

2. Choose a glue pattern. For example, choose Valve 1 Standard Tab.



Glue Mode Selection Screen

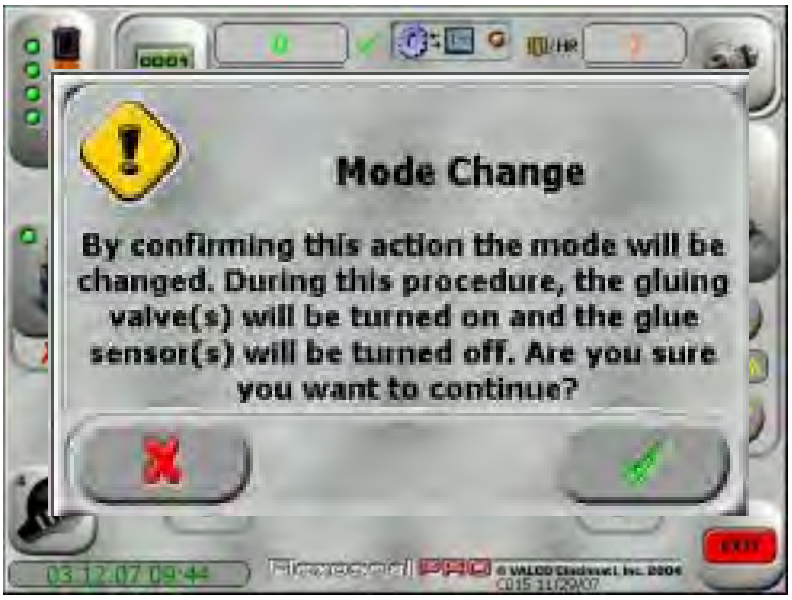
3. The additional option buttons on the Glue Mode Selection Screen will be enabled or disabled depending on the mode selected. For example, in the Valve 1 Standard Tab Mode, all buttons except the Extended Tab Start/End Values can be selected and changed.



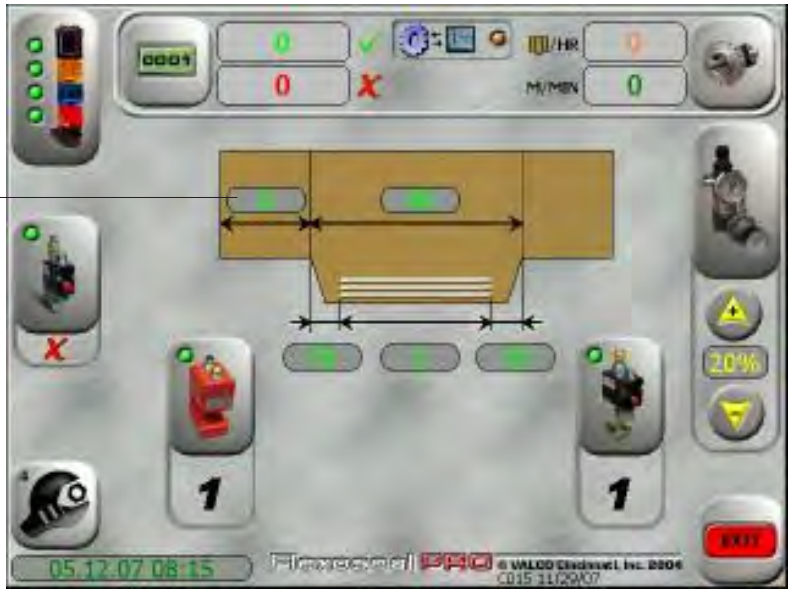
Glue Mode Selection Screen

Selecting a Glue Mode - Continued

4. When all desired information and settings are entered, press the Confirmation Button. A Mode Change Screen will appear. Confirm your choices by pressing the Confirmation Button. The Main Menu Screen will appear.



Mode Change Screen



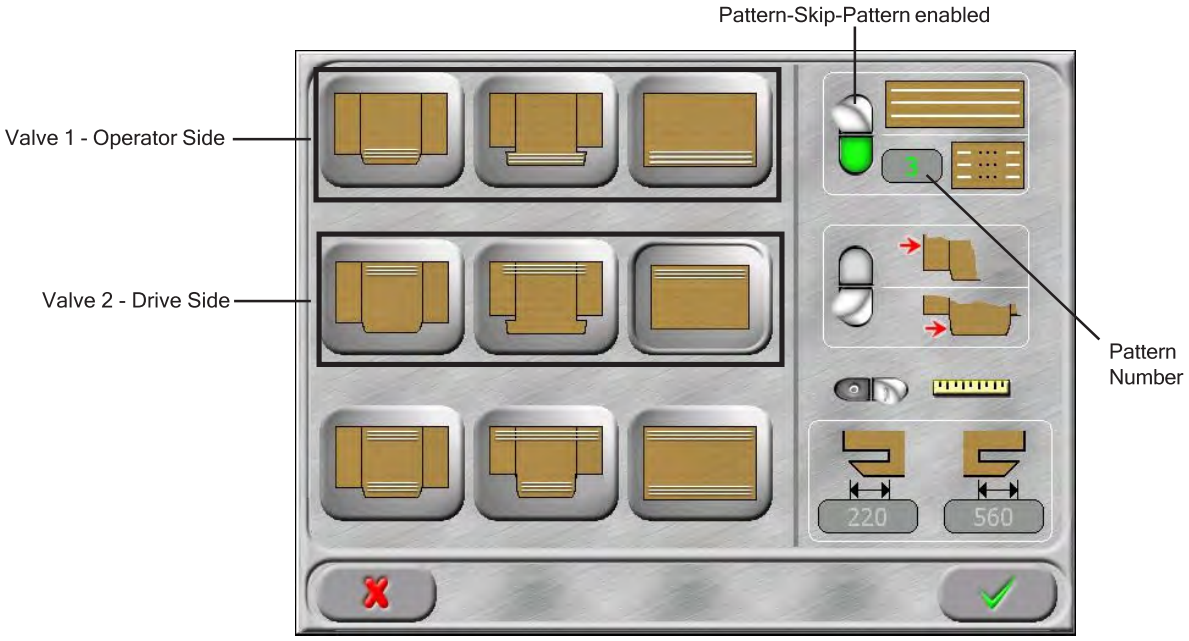
Main Menu Screen After Mode Change

5. After a Mode Change, the Main Menu Screen may have different features and look slightly different. The example above shows the Leading Edge to Tab Measurement that is not shown when the mode is set on “Tab Trigger (Scan).”

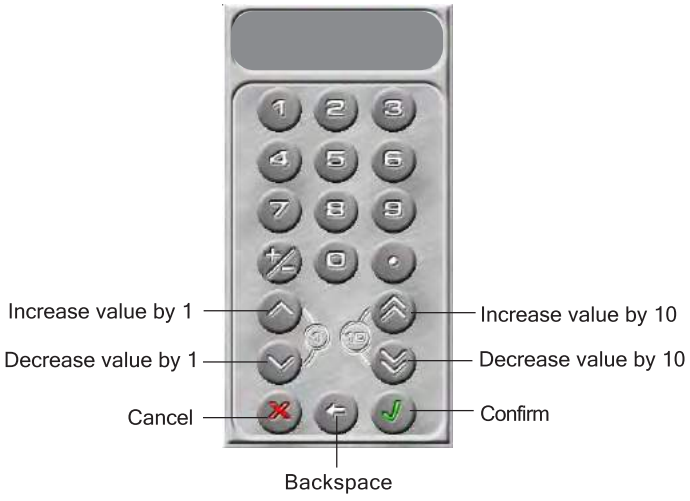
Multiple Pattern Gluing

The machine may be set for multiple pattern gluing.

1. Set the switch for Skip-Pattern.
2. Select the carton-end type for the desired valve.
   a. Valve 1 is for the Operator Side.
   b. Valve 2 is for the Drive Side.
2. Click on the pattern number to select the number of glue patterns. A numeric Keypad will open.



Glue Mode Selection Screen



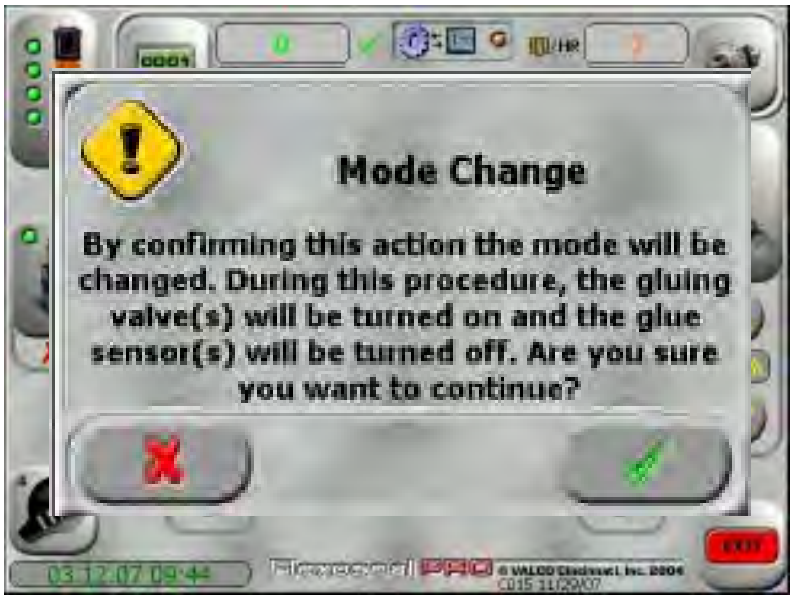
Numeric Keypad

Multiple Pattern Gluing - Continued

3. Enter the desired value on the keypad and confirm.

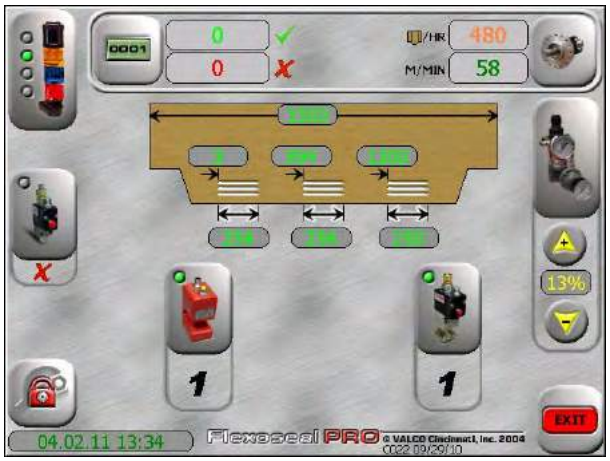
4. If changes are desired on the other valve, select the proper carton-end type for that valve, and continue as described above.

5. When all desired information and settings are entered, press the Confirmation Button on the Glue Mode Selection Screen. A Mode Change Screen will appear. Confirm your choices by pressing the Confirmation Button. The Main Menu Screen will appear.

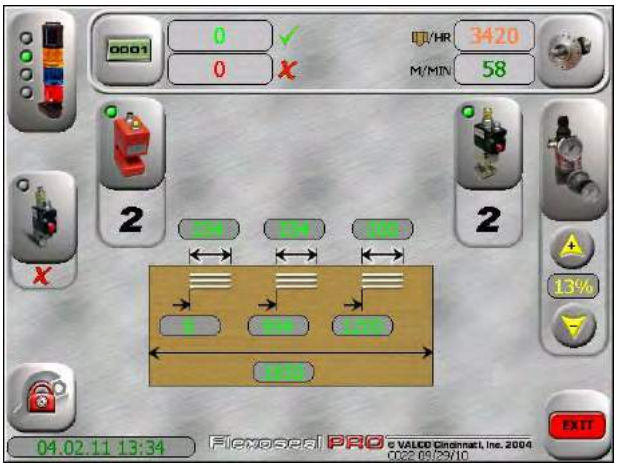


Mode Change Screen

6. After a Mode Change, the Main Menu Screen may have different features and look slightly different. The illustrations below show examples of Operator side and Drive side patterns for three (3) glue patterns.



Operator Side

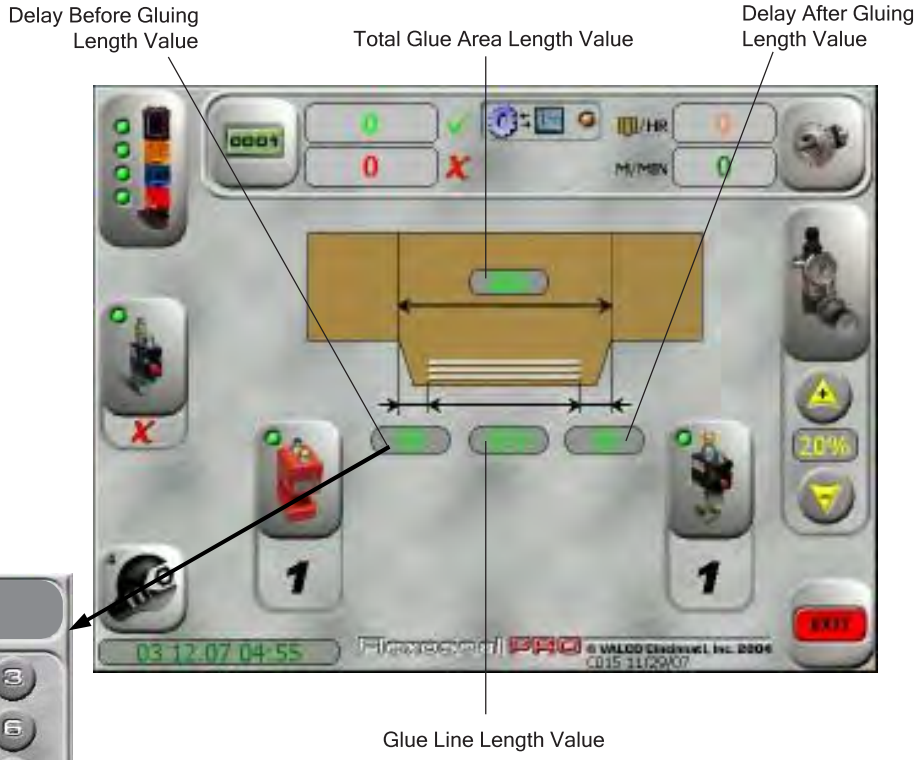


Drive Side

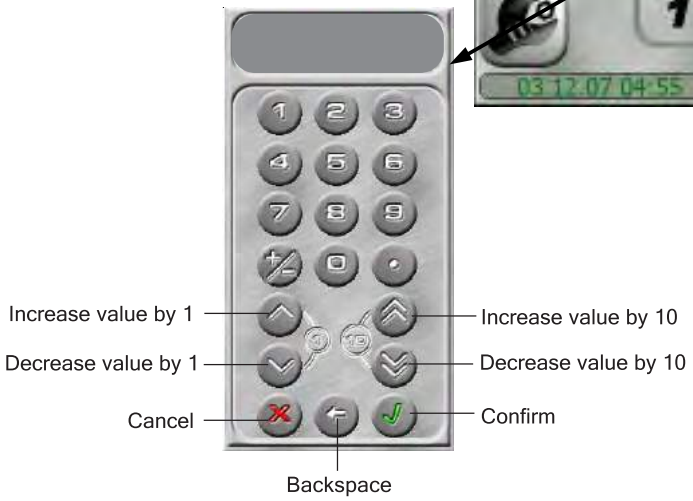
Enter Tab and Glue Lengths

To enter the tab and glue lengths, do the following:

1. On the Main Menu Screen, press a length value with the stylus and a keypad will appear. Enter the desired value and confirm. Continue until all values are set for the job. Some values are automatically calculated by the unit.



Main Menu Screen



Numeric Keypad

If you are operating in auto glue mode, you can only change start delay and end delay values.

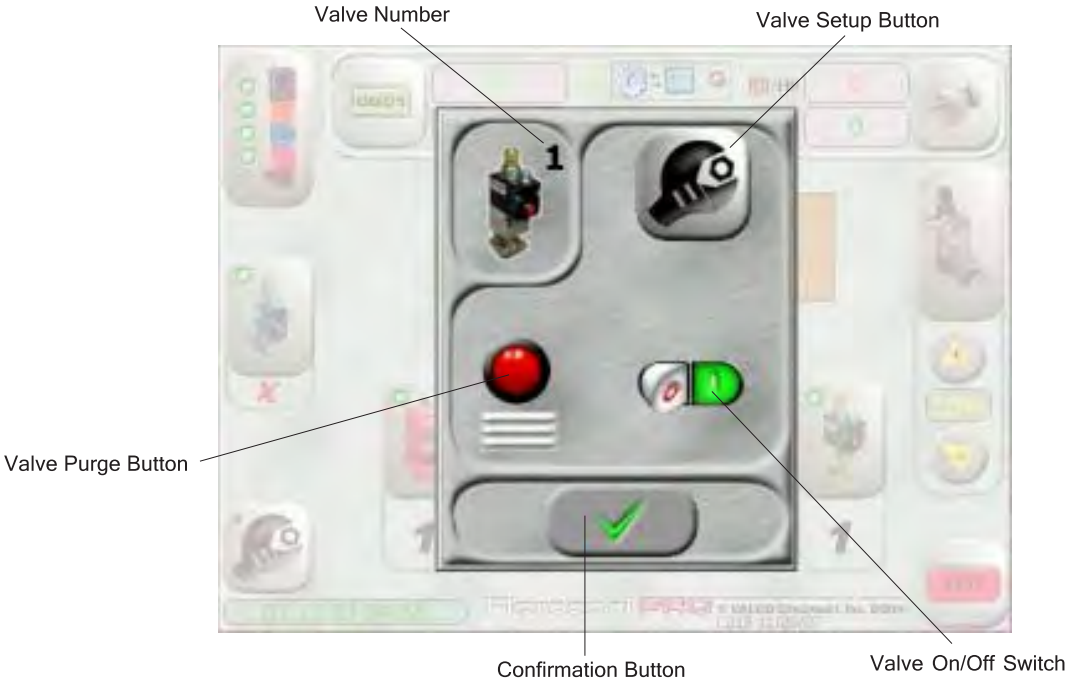
If you have specified a starting point at the product edge, you can also enter a length for the flap.

Configure the Glue Valves

To Configure the Glue Valves, do the following:

1. On the Main Menu Screen, press the Valve Setup Button. The Valve Configuration Screen will appear.

Main Menu Screen

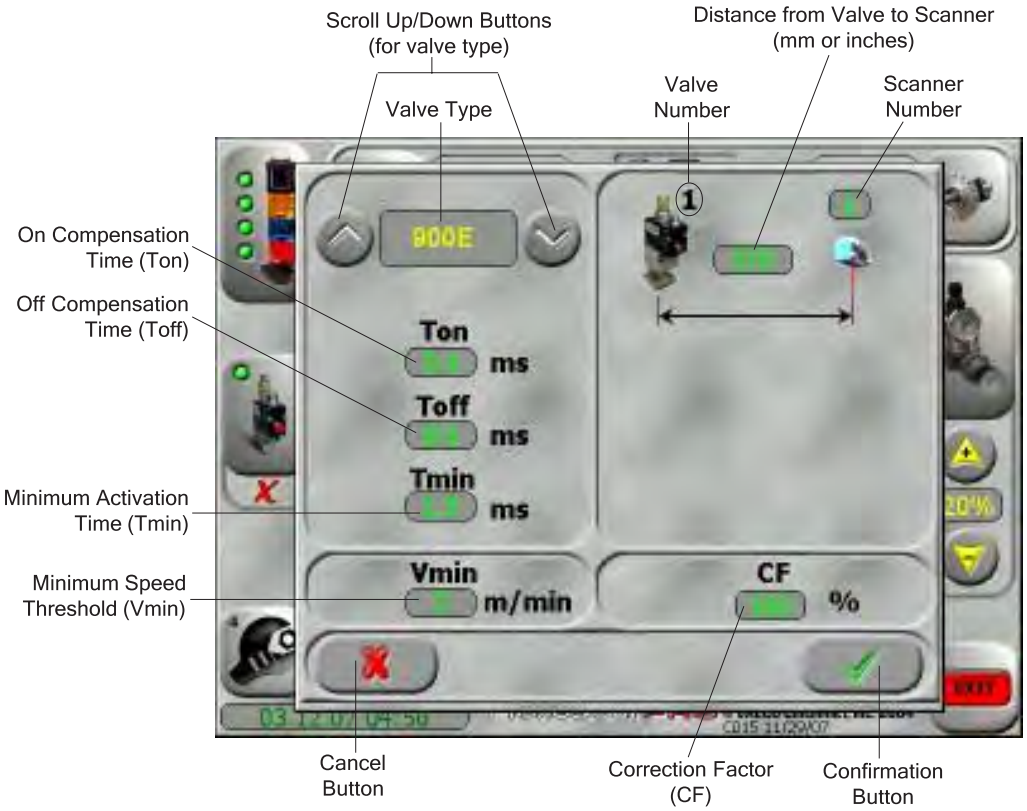


Valve Configuration Screen
(Background faded out for emphasis)

Configure the Glue Valves - Continued

2. On the Valve Configuration Screen, you can turn the valve on or off, access the Valve Setup Screen, or purge the valve as desired.

3. Press the Valve Setup Button on the Valve Configuration Screen. The Valve Setup Screen appears.



Valve Setup Screen

Configure the Glue Valves - Continued

Name	Use
Scanner Number	Displays the number of the scanner that is assigned.
Valve Number	Displays the number of the valve that is assigned.
Valve Type	Displays the type of valve used. Select type by pressing the up and down arrows and press on your choice from the list displayed.
Distance from Valve to Scanner	Displays the distance (in millimeters or inches) between the valve and the scanner.
Minimum Speed Threshold	The minimum speed the product must reach before glue is applied.
Minimum Activation Time (Tmin)	The minimum peak valve activation signal (for dot patterns).
Off Compensation Time (Toff)	The amount of time (in ms) that passes from when a valve is turned off and when it stops applying glue.
On Compensation Time (Ton)	The amount of time (in ms) that passes from when a valve is activated and it begins to apply glue.
Correction Factor	For right angle machines or 2 machines running at different speeds. The correction factor allows for synchronization.
Confirmation Button	Press to enter the new settings. (No settings or values are entered until this is pressed.)
Cancel Button	Cancel the new settings and return to the previous settings. (Use before pressing the Confirmation Button.)

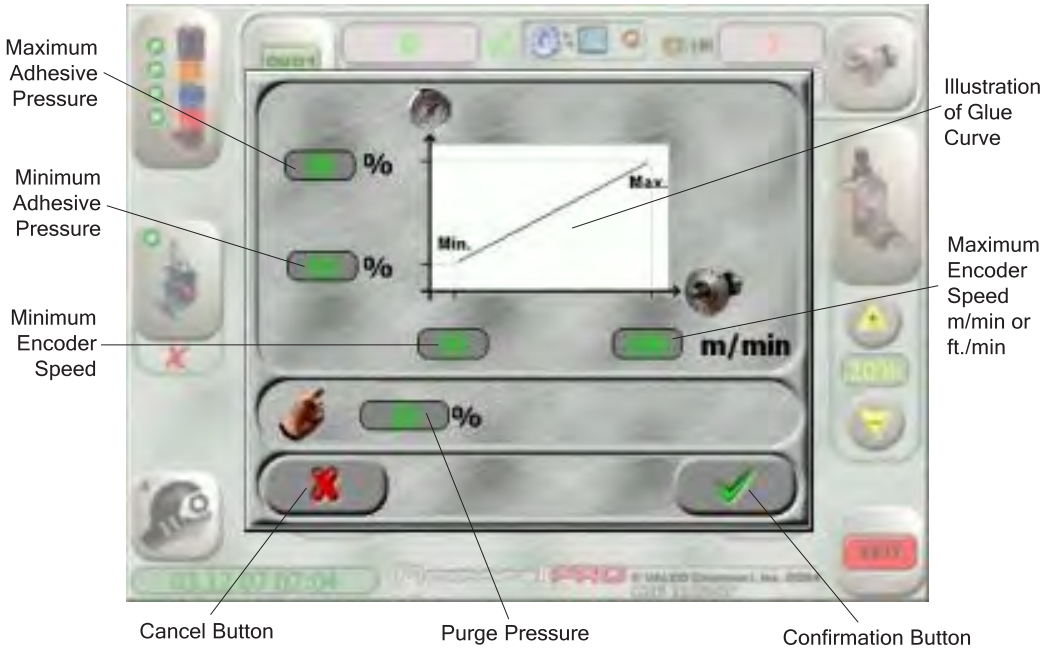
Pressure Setup

To change the pressure setup configuration, do the following:

1. On the Main Menu Screen, press the Pressure Setup Button.

Main Menu Screen

2. On the Pressure Setup Screen, you can use the screen to increase or decrease the minimum and the maximum glue pressure, set the purge pressure, and adjust the glue curve. Press the Confirmation Button to save changes and return to the Main Menu Screen.



Pressure Setup Screen
(Background faded out for emphasis)

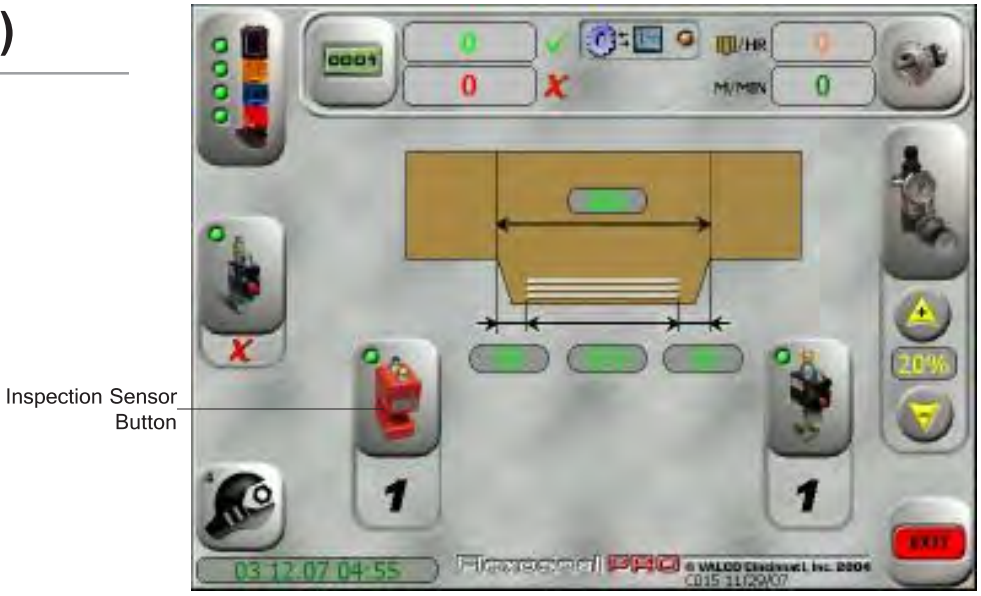
Pressure Setup - Continued

Name	Use
Maximum Adhesive Pressure	The valve pressure that is applied at the parent machine's maximum speed.
Minimum Adhesive Pressure	The valve pressure that is applied at the parent machine's minimum speed.
Purge Pressure	The valve pressure that is applied when the parent machine is sitting still (0 speed).
Maximum Encoder Speed	The parent machine's highest running speed.
Minimum Encoder Speed	The parent machine's slowest running speed.
Glue Curve	The proportional relationship between parent machine speed and valve pressure. Calculated by the unit using the minimum and maximum settings entered by the user.
Confirmation Button	Press to enter the new settings. (No settings are changed until this is pressed.)
Cancel Button	Cancel the new settings and return to the previous settings. (Use before pressing the Confirmation Button.)

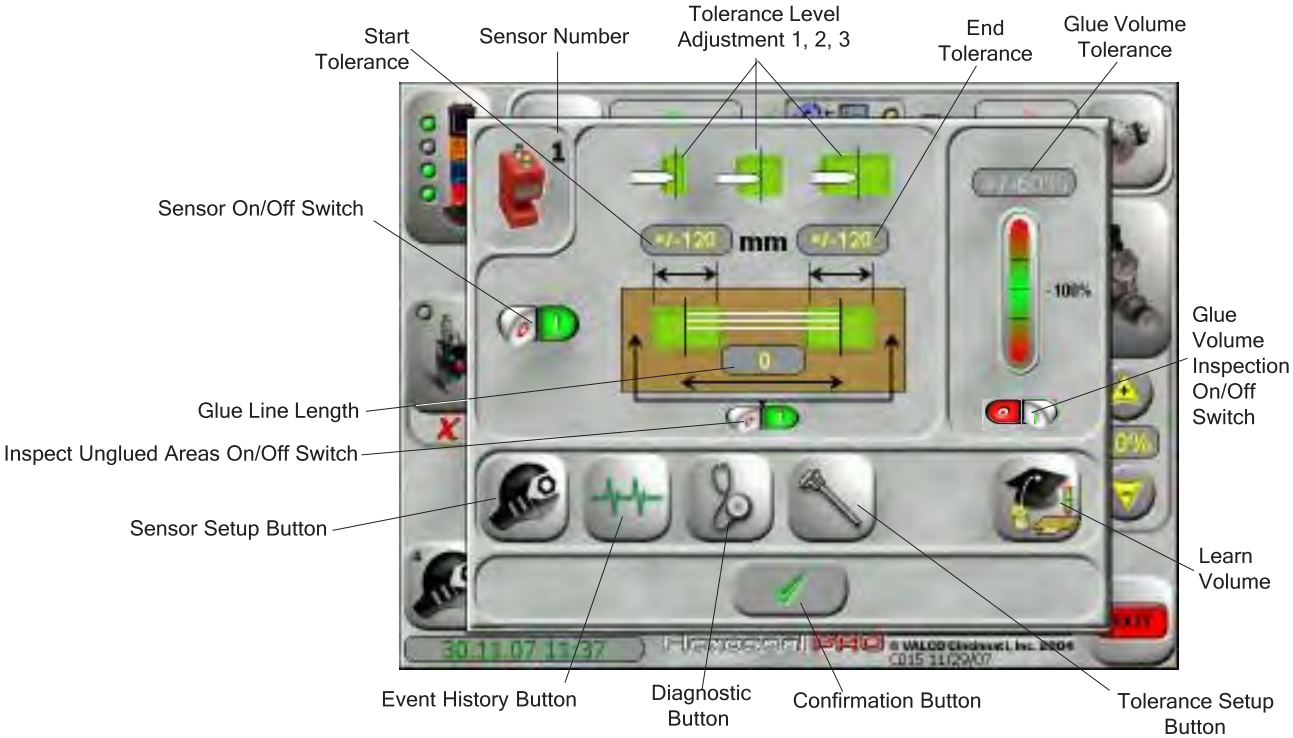
Configure the Inspection Sensor(s)

To configure the inspection sensor(s), do the following:

1. On the Main Menu Screen, press the Inspection Sensor Button. The Inspection Sensor Configuration Screen appears.



2. On the Inspection Sensor Configuration Screen appears, you can set different tolerances. Press the tolerance you want to change and a keypad will appear. Enter the desired tolerance and press the Confirmation Button on the keypad to return to the Inspection Sensor Configuration Screen.



Inspection Sensor Configuration Screen

Configure the Inspection Sensor(s) - Continued

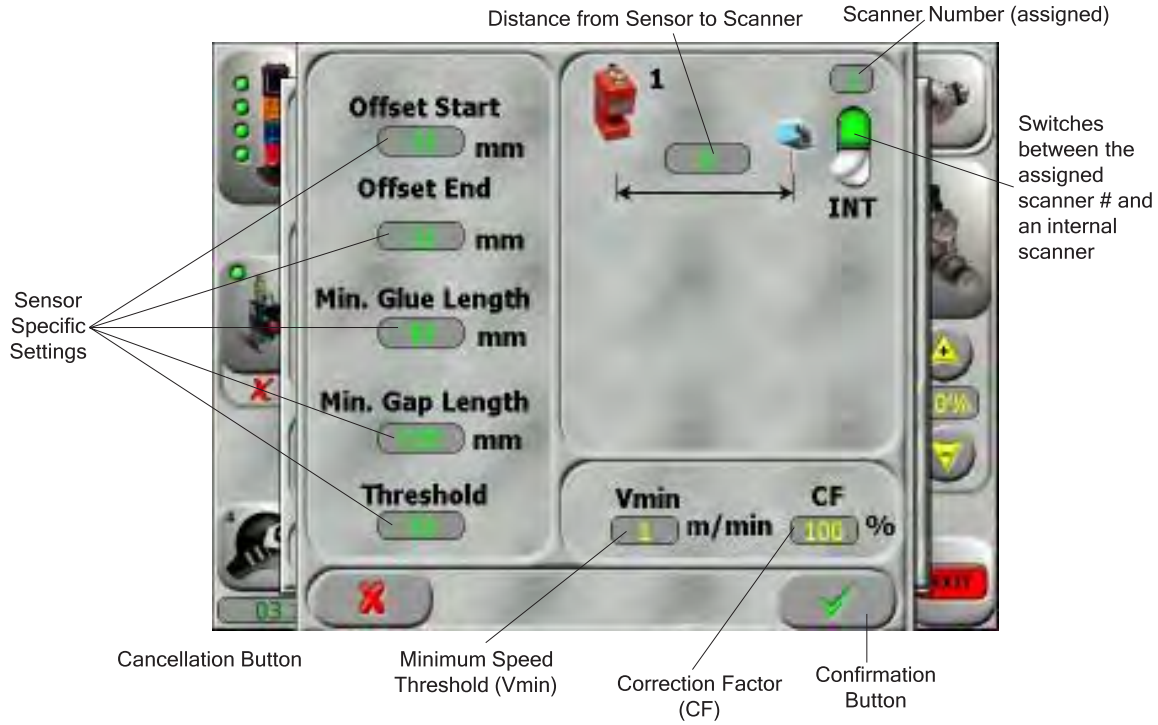
Name	Use
Sensor Number	Displays the number of the current inspection sensor.
Start Tolerance	The inspection tolerance for the start of the glue line. (Changes with the tolerance level.)
End Tolerance	The inspection tolerance for the end of the glue line. (Changes with the tolerance level.)
Tolerance Level Adjustment (1, 2, 3)	Quickly adjusts the inspection tolerance to a small amount (1), a medium amount (2), or a large amount (3).
Inspect Unglued Areas On/Off Switch	When on, the inspection sensor will inspect these unglued areas according to the tolerances entered. When off, these areas are ignored.
Glue Volume Inspection On/Off Switch	Turn the Glue Volume Inspection on or off. The sensor will not inspect the glue volume if this switch is off.
Glue Volume Tolerance	The inspection tolerance for the amount of glue on the product (not available if the Glue Volume Inspection Switch is off). (Changes with the tolerance level.)
Sensor On/Off Switch	Switches the inspection sensor off and on. If bad products are going through without being sensed, check to make sure this switch is on.
Glue Line Length Sensor	Displays the length of the glue line (appears blank if the Inspection Valve is turned off).
Sensor Setup Button	Press to make adjustments to the sensor.
Event History Button	Press to view the list of events for the sensors. This is covered in *Section 6 – Customize the FlexosealPRO.*
Tolerance Setup Button	Press to fine-tune the inspection tolerances. This is covered in *Section 6 – Customize the FlexosealPRO.*
Learn Volume	Press to “teach” the sensor the glue volume while glue is being applied. This is covered in *Section 6 – Customize the FlexosealPRO.*
Diagnostic Button	Press to use the Diagnostics. This is covered in *Section 6 – Customize the FlexosealPRO.*
Confirmation Button	Press to enter the new settings and go back to the Main Menu.

Configure the Inspection Sensor(s) - Continued

3. On the Inspection Sensor Configuration Screen, press the Sensor Setup Button. The Sensor Setup Screen appears.

Inspection Sensor Configuration Screen

4. On the Sensor Setup Screen, change the settings as necessary for your job. Make sure the correct scanner is selected (assigned scanner or an internal scanner). Press the Confirmation Button to save your settings. The Inspection Sensor Configuration Screen appears.



Sensor Setup Screen

Configure the Inspection Sensor(s) - Continued

Name	Use
Sensor Number	Displays the number of the current inspection sensor.
Scanner Number (assigned)	Use to assign a scanner for inspection when the internal scanner is not being used. (Make certain the scanner switch is flipped to this setting when used.)
Scanner Switch	Use to switch the inspection scanner from the internal scanner (INT) to an assigned scanner (see Scanner Number-assigned.)
Distance from Sensor to Scanner	The distance from the inspection sensor to the scanner being used for inspection.
Minimum Speed Threshold	The minimum speed necessary for the inspection sensor to inspect the glue lines.
Correction Factor	This function adapts individual sensors to variations in parent machine speed. The CF can be used when sensors are placed on a section of the parent machine that experiences variations in line speed. It is often used on right angle machines.
Offset Start	Used to adjust the start of the glue line due to sensor width. (A positive number forces an earlier start and a negative number forces a later start.)
Offset End	Used to adjust the end of the glue line due to sensor width. (A positive number forces a later end and a negative number forces an earlier end.)
Min. Glue Length	The minimum length of glue the sensor will be allowed to detect.
Min Gap Length	The minimum gap (without glue) the sensor will be allowed to detect. Gaps smaller than this will appear as glue.
Threshold	Used to influence the inspection to look for glue at percentage levels of the sensors output signal. A higher threshold percentage is used to require a higher glue output signal for the sensor to recognize glue. Often a higher percentage is used when inspecting boxes that have printing.
Confirmation Button	Press to enter the new settings and go back to the Main Menu.
Cancel Button	Cancel the new settings and return to the previous settings.

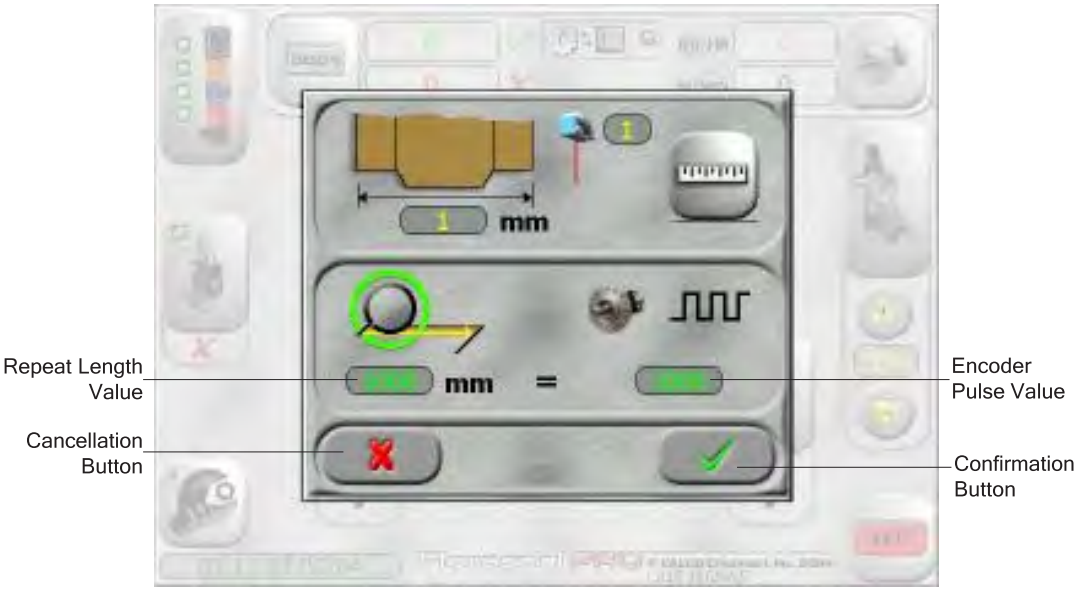
Encoder Setup

To setup the encoder, do the following:

1. On the Main Menu Screen, press the Encoder Setup Button. The Encoder Setup Screen appears.

Main Menu Screen

2. On the Encoder Setup Screen, press the Repeat Length Value and/or the Encoder Pulse Value to change a value. When the keypad appears, enter the desired value and press the Confirmation Button on the keypad.



Encoder Setup Screen

(Background faded out for emphasis)

Encoder Setup - Continued

Name	Use
Repeat Length Value	Length of one revolution of the measuring wheel.
Encoder Pulse Value	Number of pulses per one revolution of the measuring wheel.
An encoder must be installed in order for the control to determine the speed of the parent machine. You can use either a wheel-driven VDD encoder and a measuring wheel or a hollow shaft encoder. For optimal results, use a VDD-1000 encoder for one of the following resolutions: a 10 inch wheel = 100 pulses/inch; a 250mm wheel = 4 pulses/mm.	
Confirmation Button	Press to enter the new settings. (No settings or values are entered until this is pressed.)
Cancel Button	Cancel the new settings and return to the previous settings. (Use before pressing the Confirmation Button.)

Configuring the Marking Valve

To configure the marking valve, do the following:

1. On the Main Menu Screen, press the Marking Valve Button . The Marking Valve Configuration Screen appears.

Main Menu Screen

2. When the Marking Valve Configuration Screen appears, you can use the screen to turn the marking valve on or off, purge the marking valve, and access the Marking Valve Setup Screen via the Marking Valve Setup button.

Marking Valve Configuration Screen

(Background faded out for emphasis)

Configuring the Marking Valve - Continued

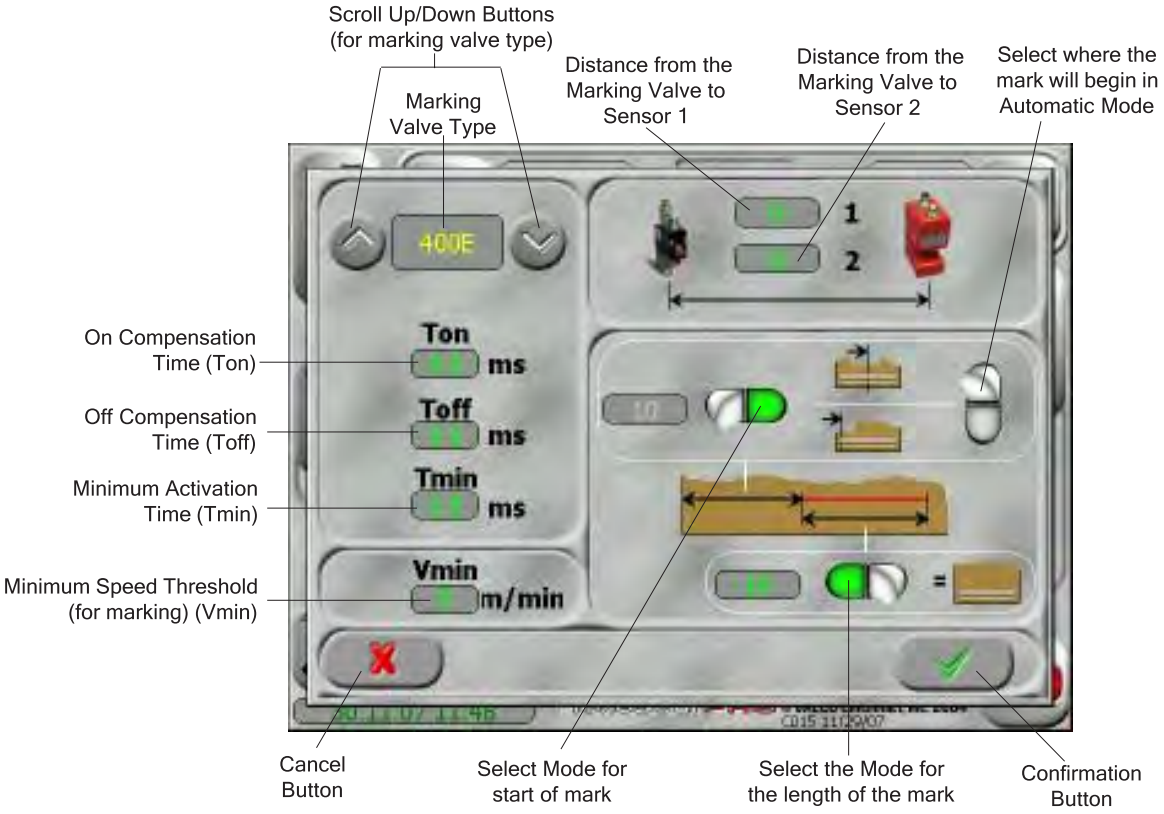
Name	Use
Marking Valve Purge Button	Press this button to purge the marking valve.
Marking Valve On/Off Button	Use this button to turn the marking valve on (the valve will mark “bad” products) or off (no marking).
Marking Valve Setup Button	Press this button to go to the Marking Valve Setup Screen.
Confirmation Button	Press to enter the new settings and return to the Main Menu Screen.

3. To access the Marking Valve Setup Screen, press the Marking Valve Setup button on the Marking Valve Configuration Screen.

Marking Valve Configuration Screen
(Background faded out for emphasis)

Configuring the Marking Valve - Continued

4. On the Marking Valve Setup Screen, you can configure the marking valve to fit your production needs.



Marking Valve Setup Screen

Configuring the Marking Valve - Continued

5. Use the following table to assist with setting up the marking valve. When done, press the Confirmation Button to return to the Main Menu Screen.

Name	Use
Marking Valve Type	Displays the type of the Marking Valve. Select valves by scrolling with the up and down arrows. (Currently not supported)
Distance from the Marking Valve to Sensor 1	Displays the distance (in millimeters or inches) between the valve and sensor 1.
Distance from the Marking Valve to Sensor 2	Displays the distance (in millimeters or inches) between the valve and sensor 2.
Select the mode for the start of the mark	Automatic Mode allows the operator to select between the mark starting at the start of the glue line or at the center of the glue line. Manual Mode allows the operator to enter a specific length value for where the mark will start.
Select where the mark will begin in Automatic Mode	In Automatic Mode, you can select if the mark will begin at the start of the glue line or at the center of the glue line.
Select the mode for the length of the mark	In Automatic Mode, the mark will be the length of the glue line; in Manual Mode, the operator can manually enter a length.
Minimum Speed Threshold for Marking	The minimum speed the product must reach before the mark is applied.
Off Compensation Time (Toff)	The amount of time (in ms) that passes from when a valve is turned off and when it stops applying glue.
On Compensation Time (Ton)	The amount of time (in ms) that passes from when a valve is activated and when it begins to apply glue.
Minimum Activation Time (Tmin)	The minimum valve activation signal.
Confirmation Button	Press to enter the new settings. (No settings or values are entered until this is pressed.)
Cancel Button	Cancel the new settings and return to the previous settings. (Use before pressing the Confirmation Button.)

Configuring the Alarm

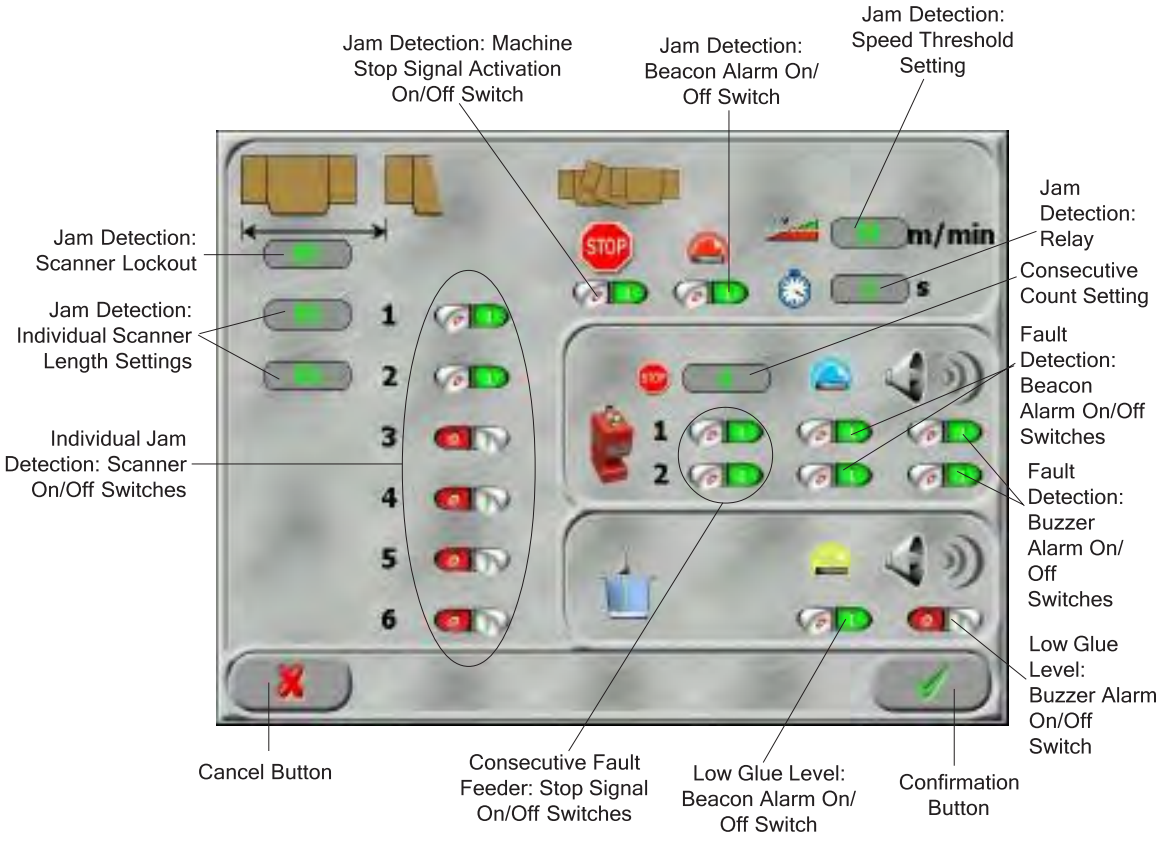
To Configure the alarm, do the following:

1. On the Main Menu Screen, Press the Alarm Setup (Configure) Button. The Alarm Configuration Screen appears.

Main Menu Screen

2. The Alarm Configuration Screen allows you to configure audible alarms (buzzer) and/or visual alarms (beacon) for multiple scanners. Press the Confirmation Button when done.

Configuring the Alarm - Continued



Alarm Setup (Configuration) Screen

Configuring the Alarm - Continued

Name	Use
Jam Detection: Individual Scanner Length Settings	Set an individual detection length for each active scanner. When the scanner detects any product longer than this length, it will signal a jam. Up to six scanners can be programmed.
Jam Detection: Scanner Lockout	Set the same detection length for every active scanner. When a scanner detects any product longer than this length, it will signal a jam.
Individual Jam Detection: Scanner On/Off Switches	Switches the indicated scanner On (active) or Off. Only active scanners can detect jams.
Jam Detection: Machine Stop Signal Activation On/Off Switch	When this switch is “On,” a stop signal will be activated when an active scanner detects a jam. The signal stops the machine and is released after the specified amount of time after the stop.
Jam Detection: Beacon Alarm On/Off Switch	When this switch is “On,” a beacon alarm will be activated when an active scanner detects a jam.
Jam Detection: Speed Threshold Setting	The active scanners will not scan for jams until the machine is running at or above this speed. The speed is measured in meters per minute or feet per minute.
Jam Detection: Relay	This value determines how many seconds the machine stop signal will remain active after an active scanner detects a jam and the machine is stopped. NOTE: This feature will only work if the Jam Detection: Machine Stop Signal Activation On/Off Switch is “On.”
Fault Detection: Beacon Alarm On/Off Switches	When “On,” a beacon alarm will be activated when a scanner detects a bad product (a ‘fault’). This function can be switched on individually for each sensor.
Fault Detection: Buzzer Alarm On/Off Switches	When “On,” a buzzer alarm will be activated when a scanner detects a bad product (a ‘fault’). This function can be switched on individually for each sensor.
Consecutive Fault Feeder: Stop Signal On/Off Switches	When “On:” When the Consecutive Count Setting is reached, a stop signal is activated and the corresponding belt will stop.
Consecutive Count Setting	The total number of bad products (‘faults’) that must be detected in a successive row before the stop signal is activated and the belt stops. NOTE: This feature will only work if at least one Consecutive Fault Feeder: Stop Signal On/Off Switch is “On.”
Low Glue Level: Buzzer Alarm On/Off Switch	When “On,” a buzzer alarm will be activated when a low glue level is detected in the glue tank.
Low Glue Level: Beacon Alarm On/Off Switch	When “On,” a beacon alarm will be activated when a low glue level is detected in the glue tank.
Confirmation Button	Press to enter the new settings. (No settings are changed until this is pressed.)
Cancel Button	Cancel the new settings and return to the previous settings. (Use before pressing the Confirmation Button.)

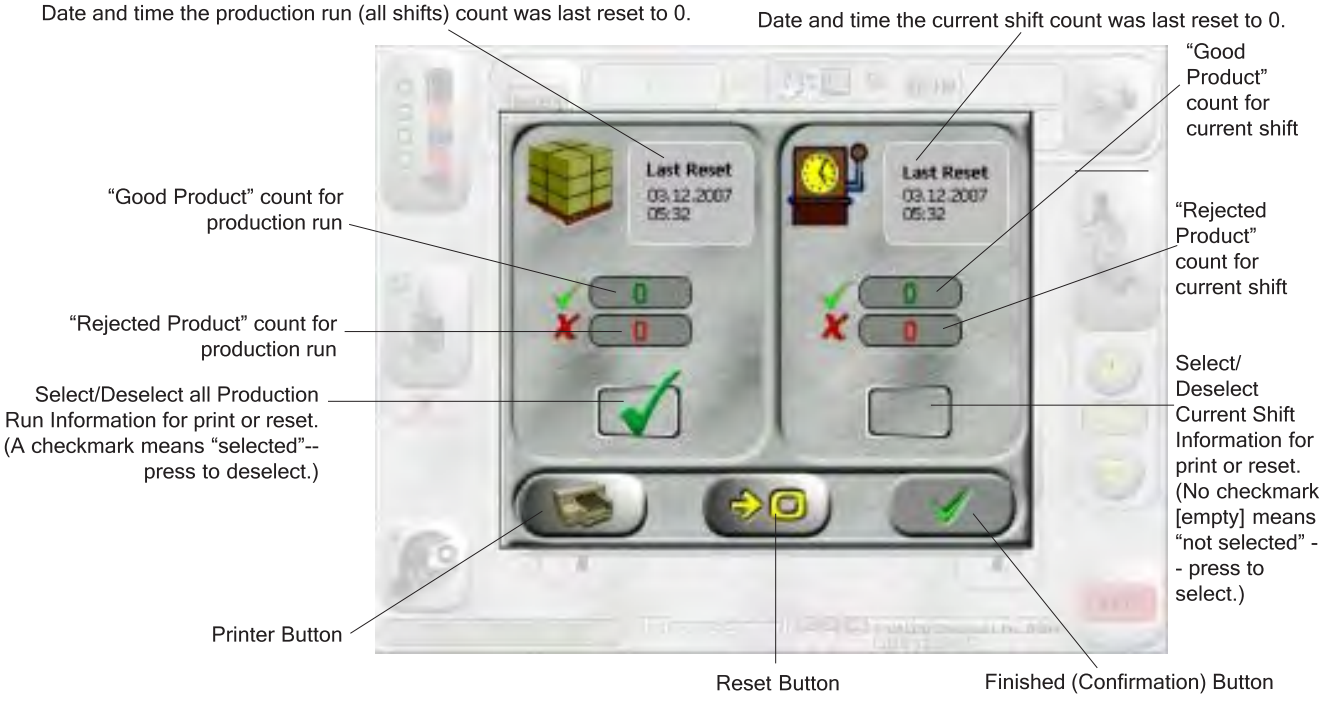
View/Reset Product Counts

To view/reset the product counts, do the following:

1. On the Main Menu Screen, Press the Product Counter. The Product Counter Summary Screen appears. (Note: Glue Inspection must be active.)

Main Menu Screen

2. The Product Counter Summary Screen allows you to view, print, and reset the production (job) run information and the current shift information.



Product Counter Summary Screen (Background faded out for emphasis)

View/Reset Product Counts - Continued

Name	Use
Date and time the production run (all shifts) count was last reset to 0.	Shows the date and time for the last reset of all production run information.
“Good Product” count for production run	The total number of good products for the production run (all shifts) since the count was last reset to 0.
“Rejected Product” count for production run	The total number of rejected products for the production run (all shifts) since the count was last reset to 0.
Select/Deselect all Production Run Information for print or reset.	Check this box to print or reset all production run information for all shifts.
Date and time the current shift count was last reset to 0.	Shows the date and time for the last reset of the current shift’s production information.
“Good Product” count for current shift	The total number of good products for the current shift since the count was last reset to 0.
“Rejected Product” count for current shift	The total number of rejected products for the current shift since the count was last reset to 0.
Select/Deselect Current Shift Information for print or reset.	Check this box to print or reset all production run information for the current shift.
Printer Button	Press to print the selected information.
Reset Button	Press to reset the selected information.
Done (Confirmation) Button	Press to close the Product Counter Summary Screen.

Reset Count Information

To reset information, do the following:

1. On the Product Counter Summary Screen, select the information you want to reset (Production Run and/or Current Shift).

   - To select your choices, press the Select/Deselect box for the information you wish to reset until a green checkmark appears. A selected box has a green checkmark in it. An unselected box does not.

   > Make sure the information you want to keep is not selected (no checkmark)!

2. When you have selected/deselected the information as desired, press the Reset Button.

3. A Confirmation Screen will appear, asking, “Are you sure you want to reset the selected counters?” Press the Confirmation Button to confirm your choice. The Main Screen appears.

   > In earlier software versions, the Product Counter Summary Screen appears again, with the selected information reset.

Print Count Information

To print count information, do the following:

1. On the Product Counter Summary Screen, select the information you want to print (Production Run and/or Current Shift).

2. When you have selected/deselected the information as desired, press the Print Button.

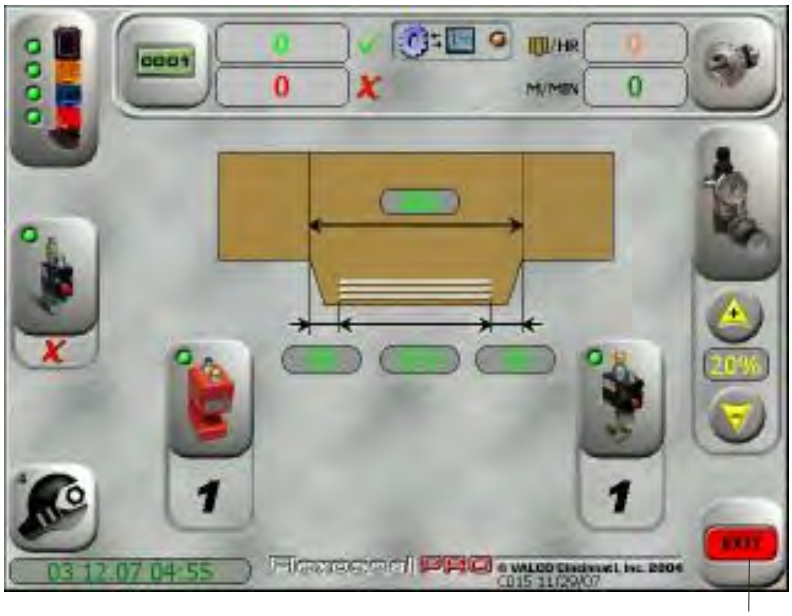
3. If a job is selected: a keypad will appear, asking for the job number. Enter a job number from your records and press the Confirmation Button to confirm your choice. Your information is printed.

4. When done, press the Confirmation Button on the Product Counter Summary Screen to return to the Main Menu Screen.

Exit and Shutdown

To exit and shutdown the Flexoseal PRO System, do the following:

1. On the Main Menu Screen, press the Exit Button. A Confirmation Screen will appear.



Main Menu Screen

2. On the Confirmation Screen, press the Cancel Button to cancel the exit and go back to the previous screen, or press the Confirmation Button to exit the FlexosealPRO program.

Exit FlexosealPRO Confirmation Screen
(Background faded out for emphasis)

Exit and Shutdown - Continued

3. After the screen goes blank, press the red On/Off Button on the OT-12.

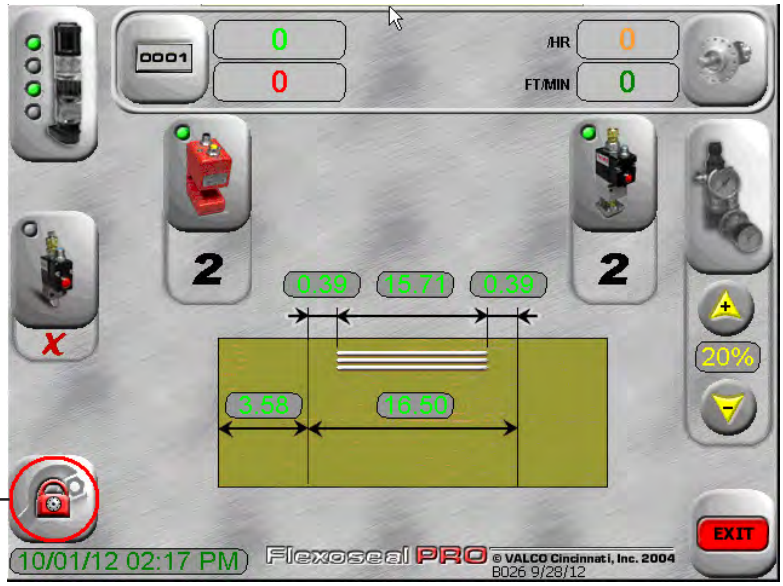
OT-12 Touchscreen

4. Press the On/Off Switch on the back of the MCP-12 Unit to turn off the system.

MCP-12 Unit

Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface

1. After the OT-12 has powered on, and the Main Dialog is loaded into the FlexosealPro application, press the Main Config Dialog button.



Main Config Dialog Button (locked)

The Password Dialog (keypad) will display:

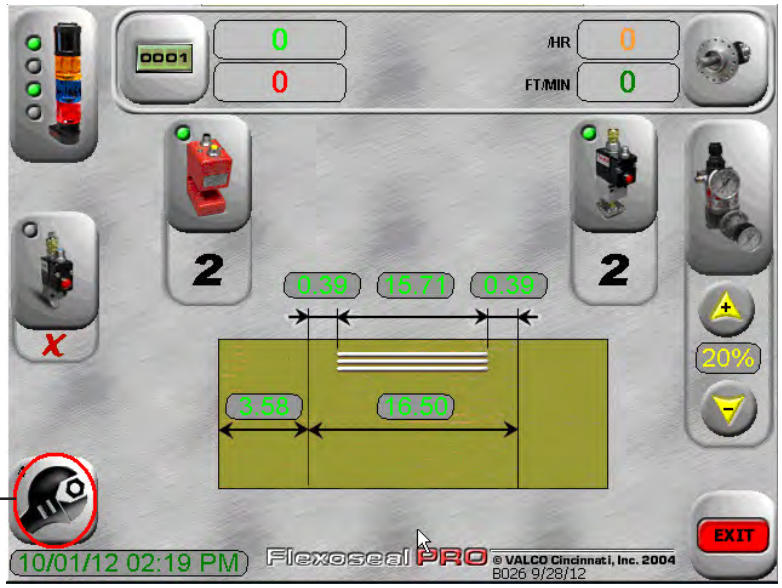
Confirm Button

2. Enter the Level 4 password (151298), and then press the Confirm Button.

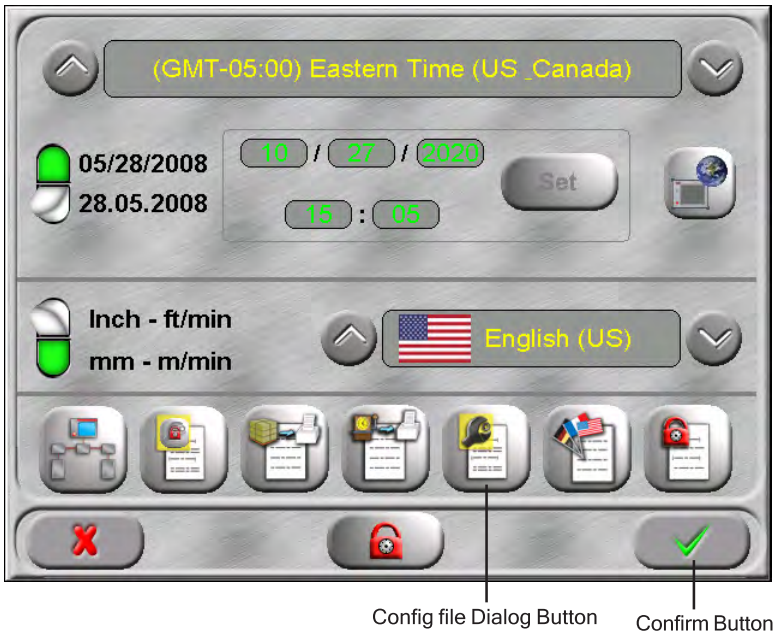
   The Main Config Dialog button is now unlocked.

3. Press the Main Config Dialog button to load the Main Config Dialog.

Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface - Continued



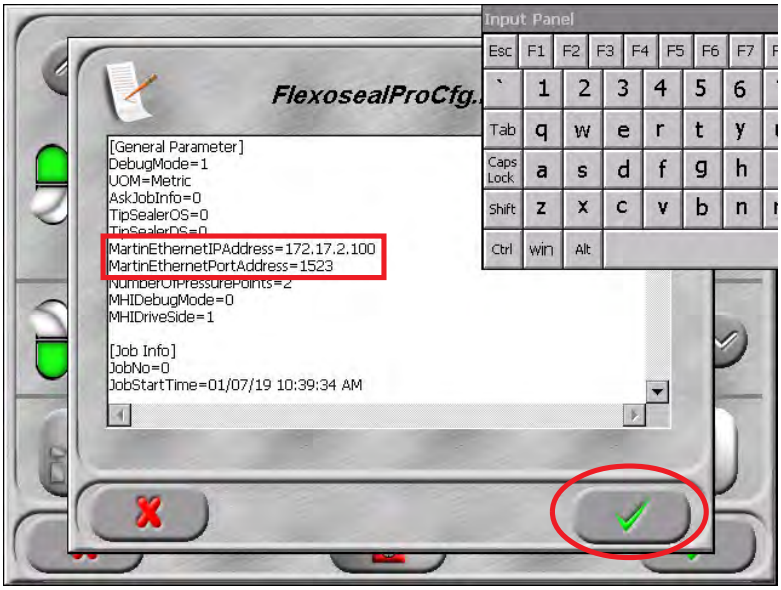
4. In the Main Config Dialog, press the Config File Dialog button.



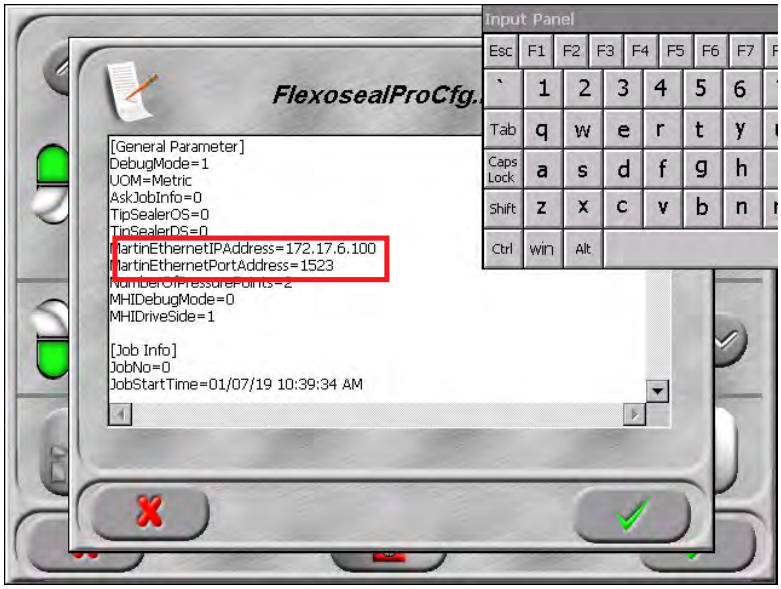
Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface - Continued

5. In the Config File Dialog, set the *MartinEthernetIPAddress* to the IP address of the Server. Set the *MartinEthernetPortAddress* to the Port number of the Server, and press the Confirm button.

   a. If the OT is communicating with a Bobst FFG8.20 machine, the IP address is 172.17.2.100.

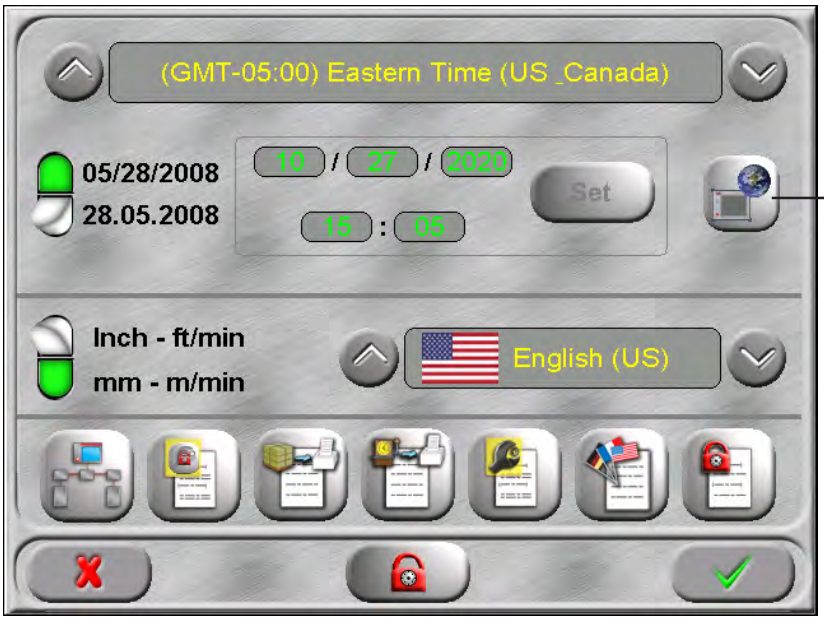


   b. If the OT is communicating with any other type of Bobst machine, the IP address is 172.17.6.100.



Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface - Continued

6. In the Main Config Dialog, press the Config IP Address Dialog button*.



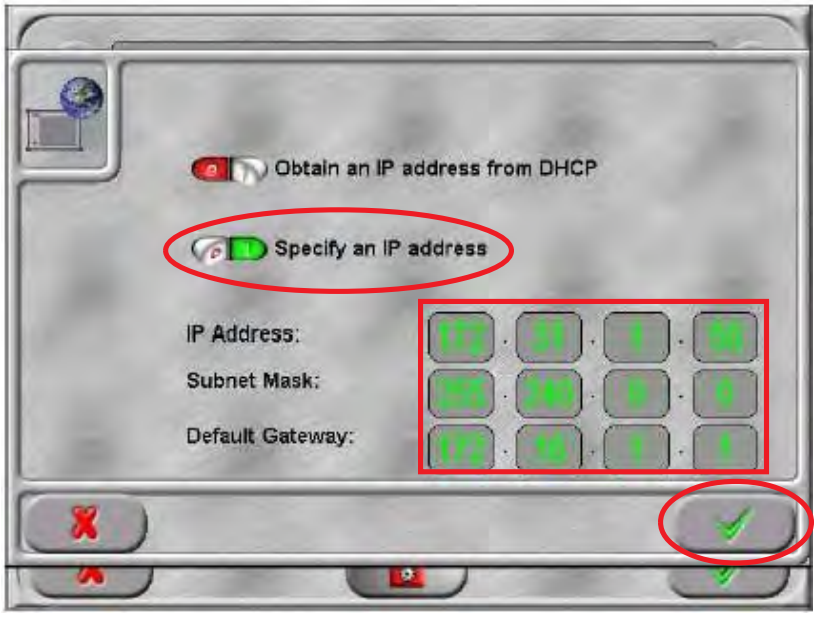
7. Input the *IP address, Subnet Mask* and *Default Gateway values:*

   IP Address: 172.31.1.50

   Subnet Mask: 255.240.0.0

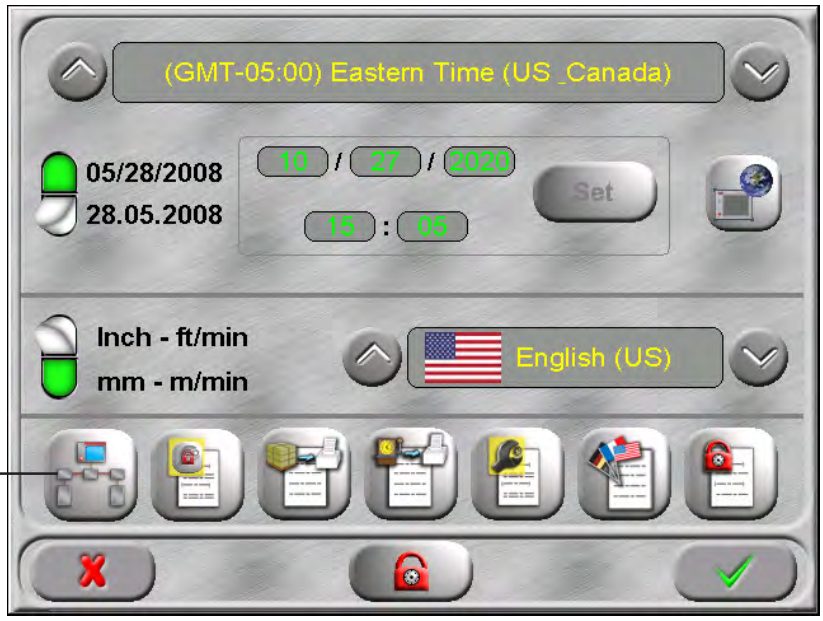
   Default Gateway: 172.16.1.1

8. Press the Check button to confirm changes.



Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface - Continued

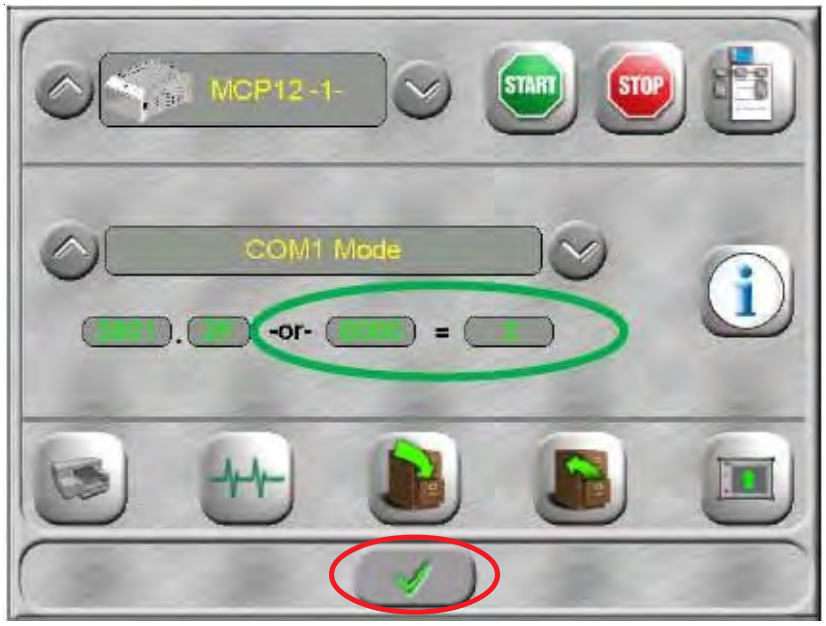
9. In the Main Config Dialog, press the CAN Network Dialog button.



10. Set the configuration object value to 6000. Set the value of the object to either 3 or 10.

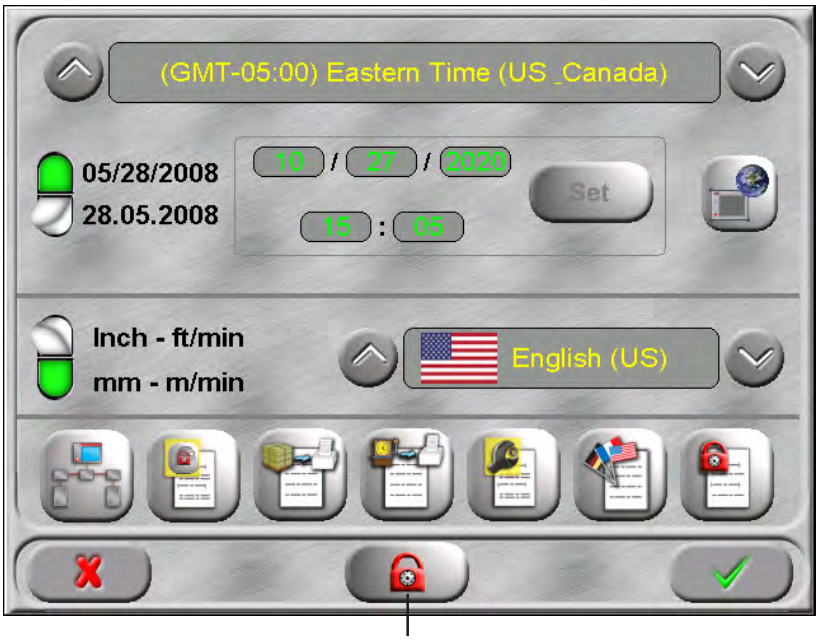
> These values will both turn on the Ethernet Interface along with the Serial Interface. Both modes can work concurrently.

11. Press the Confirm button to confirm changes.



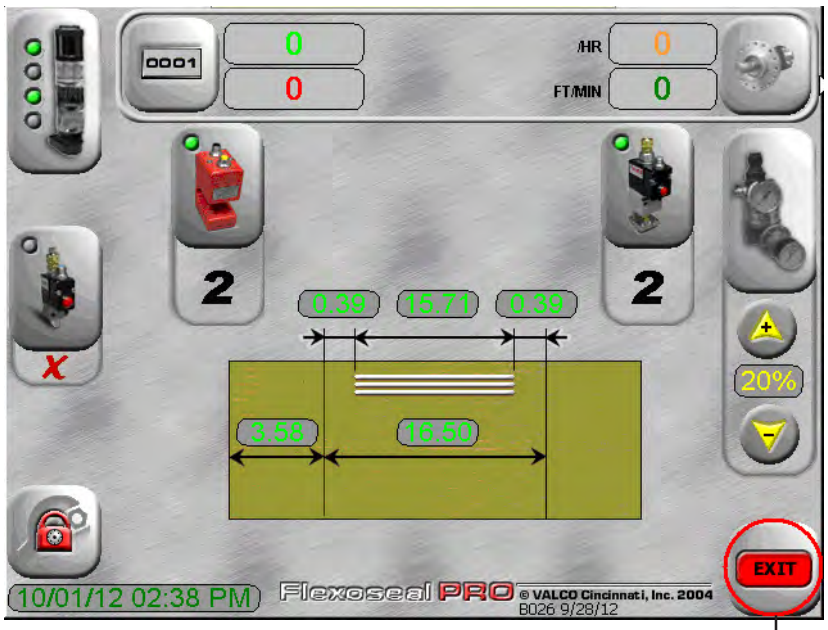
Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface - Continued

12. In the Main Config Dialog, press the Lock button to exit the Main Config Dialog and lock the system to level 0.



Lock Button

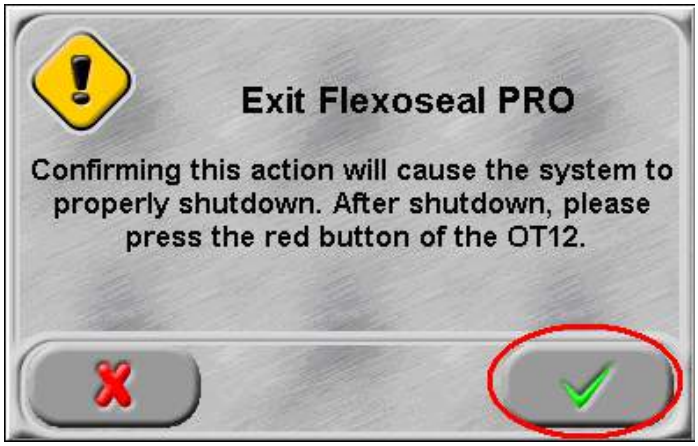
13. In the Main Dialog, press the Exit button.



Exit Button

Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface - Continued

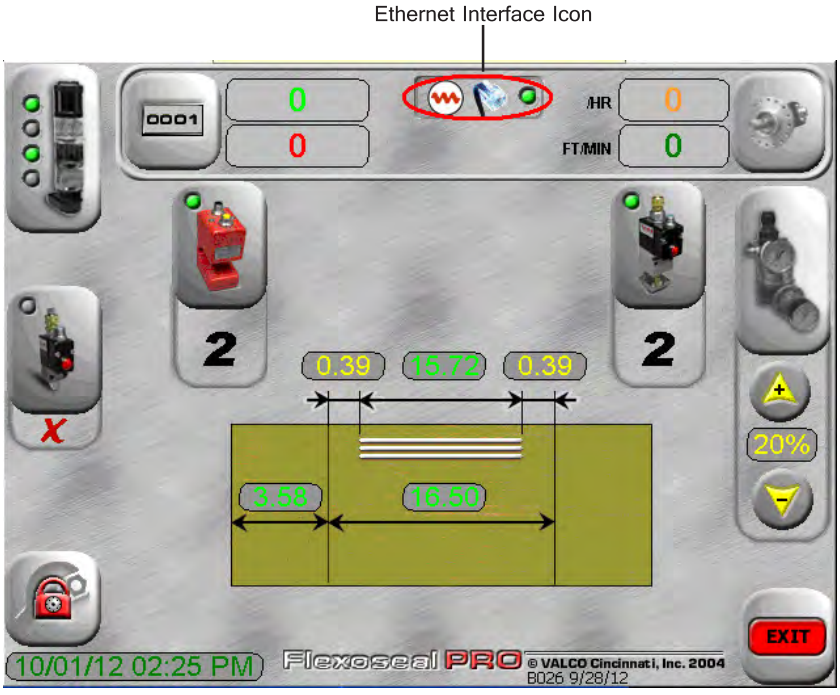
14. Press the Confirm button to exit the application.



15. Press the PHYSICAL RED BUTTON on the OT-12 to shutdown the OT-12.

16. Press the PHYSICAL RED BUTTON on the OT-12 to power-on the OT-12.

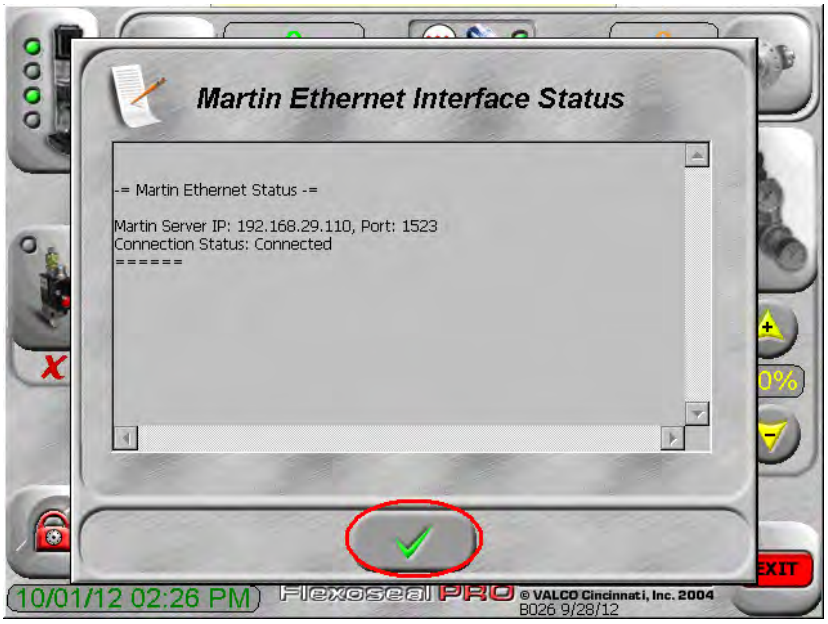
After the Main Dialog is loaded in the FlexosealPro application, the Ethernet Interface icon should display with a GREEN LED to indicate that a connection has been established, and data has been received from the Bobst Server and processed. Press the icon to load the Status Dialog



Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface - Continued

The Status Dialog will display the IP Address and Port Number of the Server along with the last connection status.

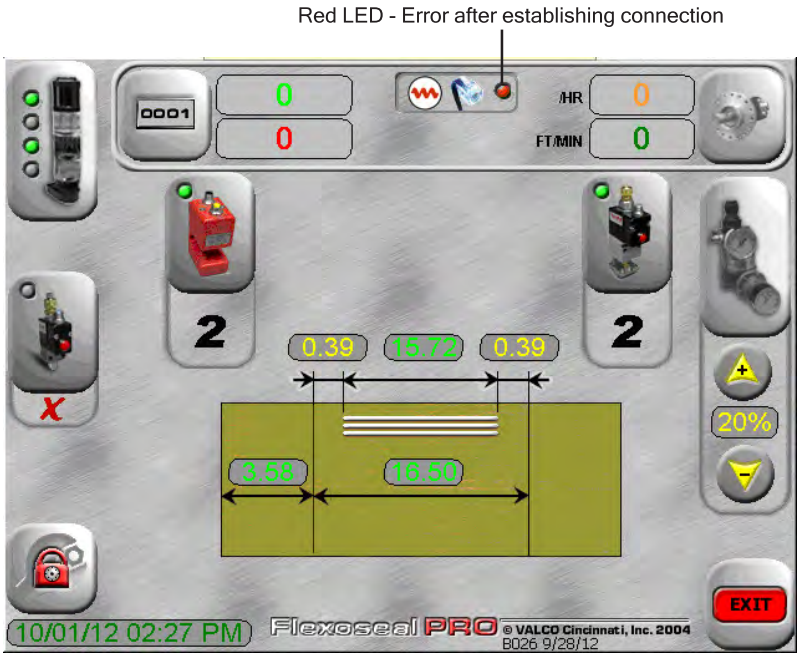
17. Press the Confirm button to close the Status Dialog and return to the Main Dialog.



The Ethernet Interface icon will display a GRAY LED, if a connection failed to establish.

Configuring FlexosealPro (OT-12 138xx010) for the Bobst Ethernet Interface - Continued

The Ethernet Interface icon will display a RED LED, if an error occurred after a connection was established.

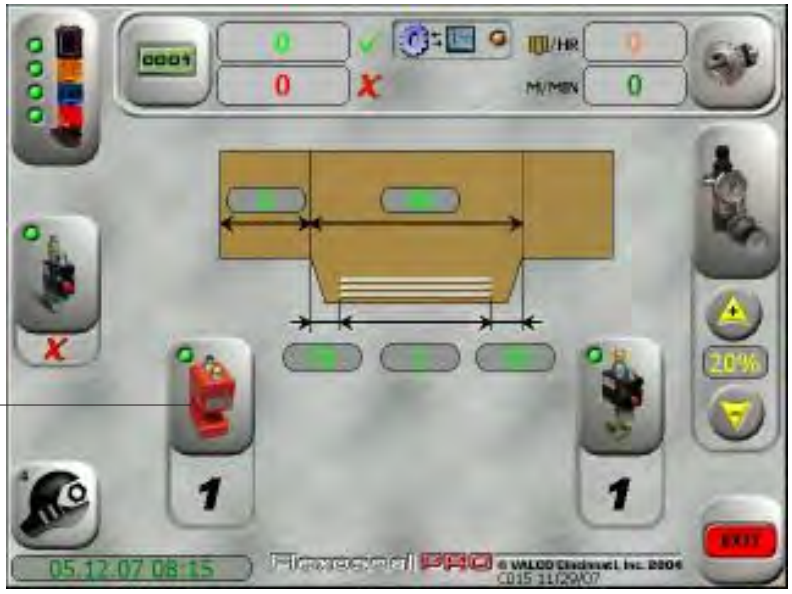


SECTION 6 - CUSTOMIZE THE SETTINGS

Sensor Diagnostics

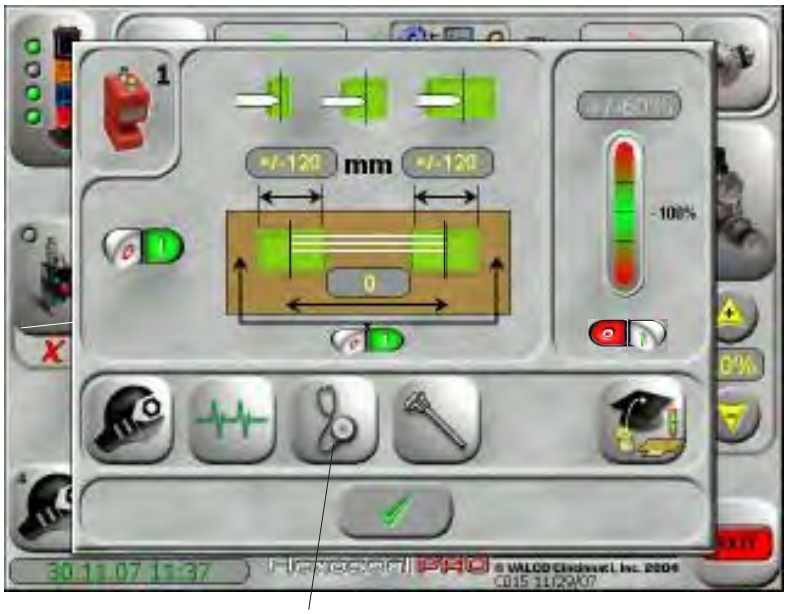
To see the current readings for the selected sensor, do the following:

1. On the Main Menu Screen, press the Inspection Sensor Setup Button. The Inspection Sensor Configuration Screen appears.



Main Menu Screen

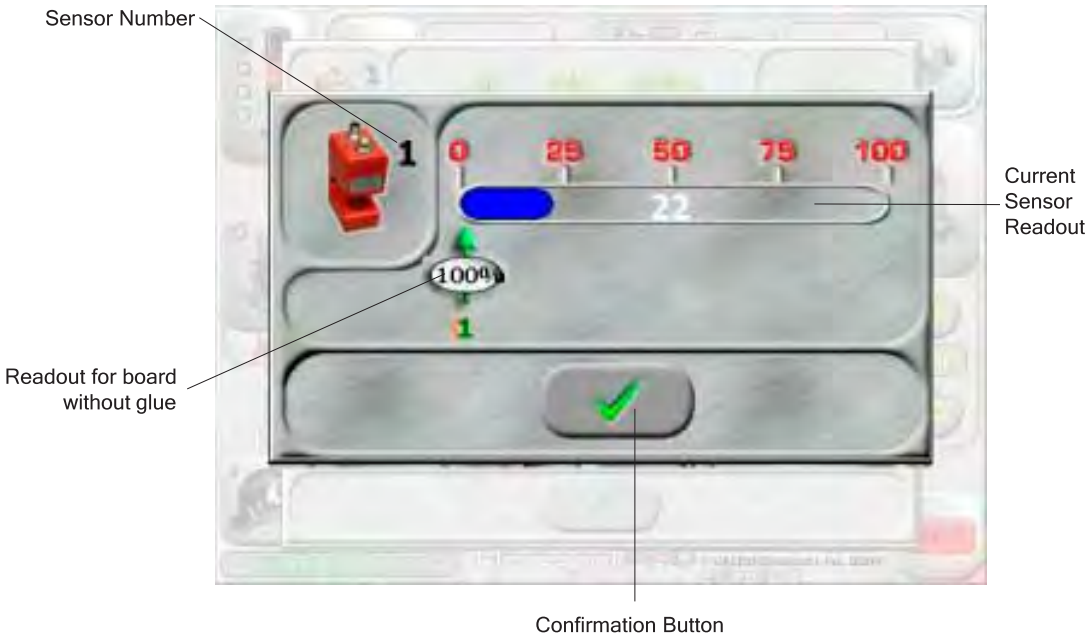
2. On the Inspection Sensor Configuration Screen, press the Diagnostic Button. The Diagnostic Screen is displayed.



Inspection Sensor Configuration Screen

Sensor Diagnostics - Continued

3. On the Sensor Diagnostics Screen, you can view the diagnostics for the selected sensor, as follows:



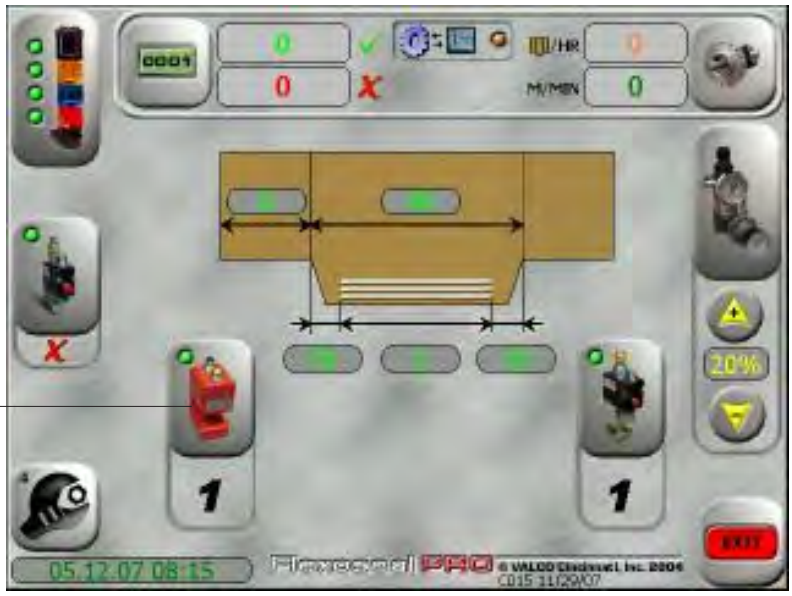
Sensor Diagnostics Screen
(Background faded out for emphasis)

4. When you are done, press the Confirmation Button on the Sensor Diagnostics Screen (shown above). The Inspection Sensor Configuration Screen appears. Press the Confirmation Button on the Inspection Sensor Configuration Screen to return to the Main Menu Screen

Inspection Sensor Tolerance Setup

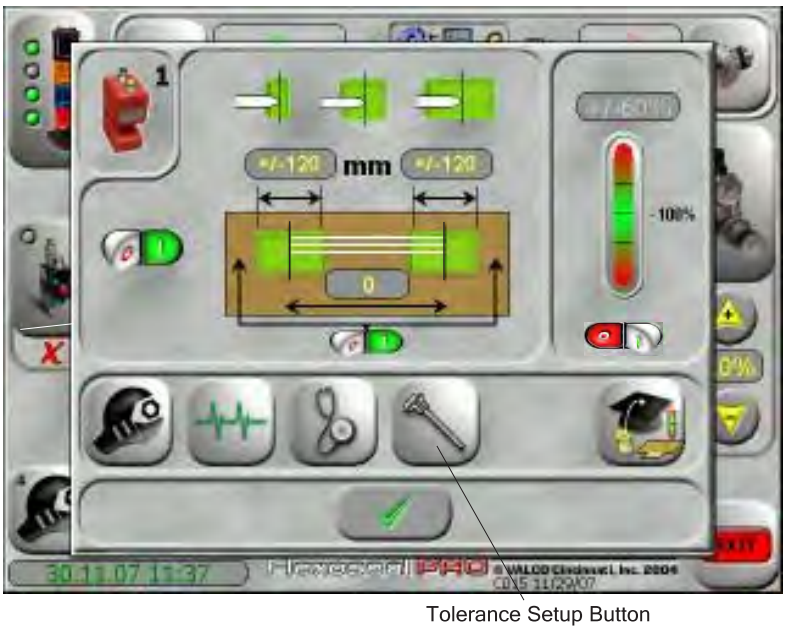
To adjust the Inspection Sensor Tolerance, do the following:

1. On the Main Menu Screen, press the Inspection Sensor Setup Button. The Inspection Sensor Configuration Screen appears.



Main Menu Screen

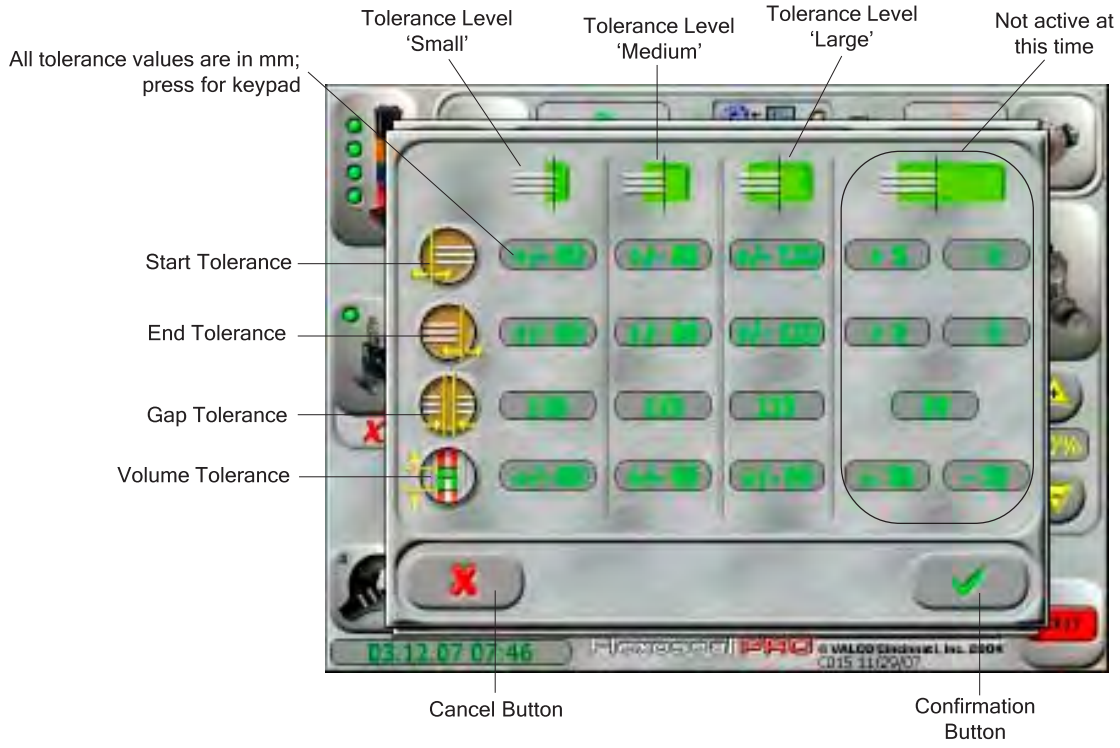
2. On the Inspection Sensor Configuration Screen, press the Tolerance Setup Button. The Tolerance Setup Screen is displayed.



Inspection Sensor Configuration Screen

Inspection Sensor Tolerance Setup - Continued

3. On the Tolerance Setup Screen, you can define the tolerances for the 3 different levels (small, medium, and large)--each level has an individual setting. You can set the tolerances for the glue line start, the glue line end, the gaps between the glue lines, and the volume. Just press on a tolerance value, and a keypad will appear.

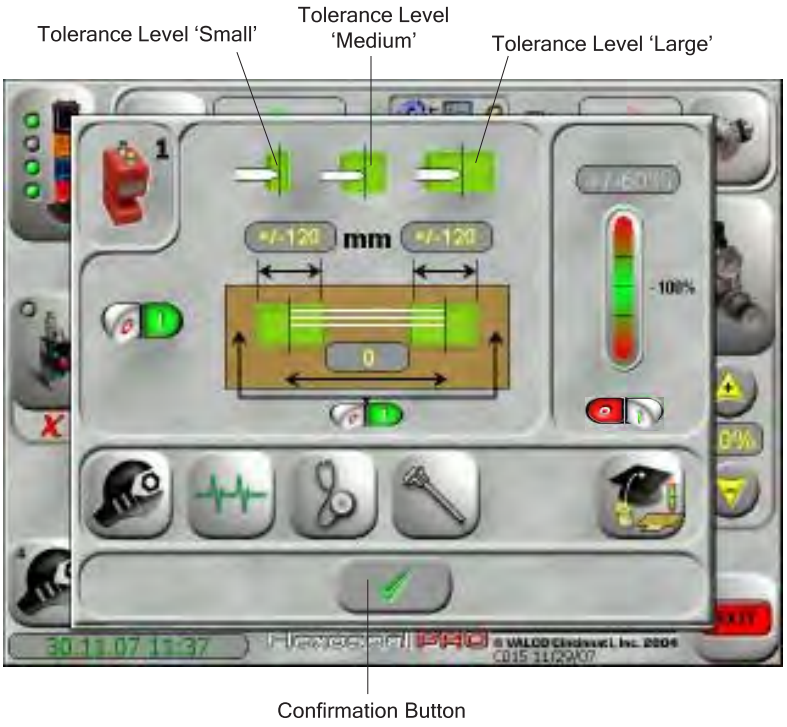


Tolerance Setup Screen

4. When the keypad appears, enter the desired value and press the keypad Confirmation Button. Continue this same process with each value until all changes are made.

Inspection Sensor Tolerance Setup - Continued

5. When the tolerances have been defined, press the Confirmation Button. Then, set the inspection sensor to use the small, medium, or large tolerances. Press the corresponding tolerance picture and the values automatically change to the programmed values! Press the Confirmation button to return to the Main Menu Screen.

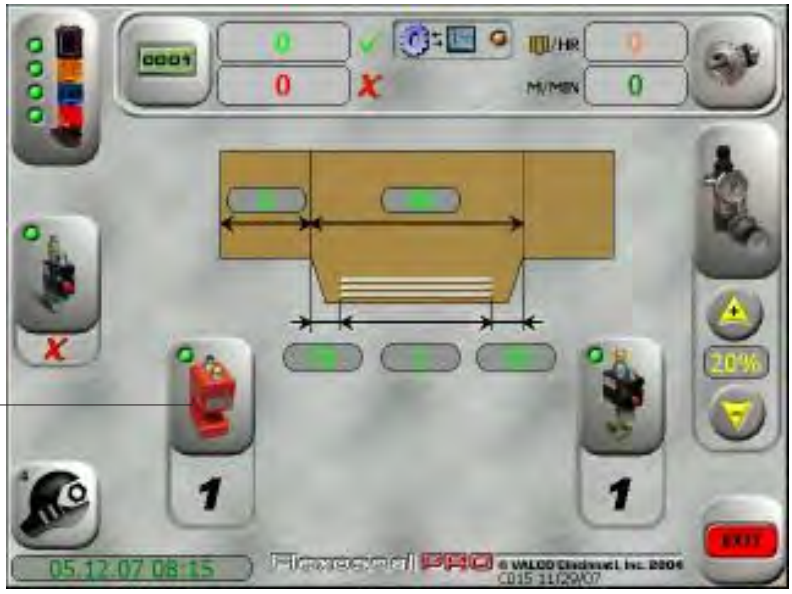


Inspection Sensor Configuration Screen

Inspection Sensor Event History

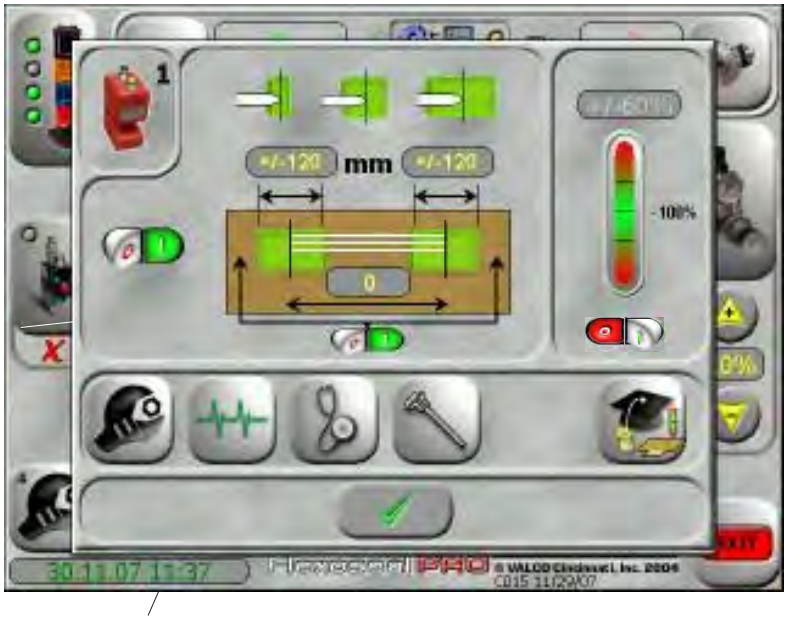
To view the event history for the inspection sensor(s), do the following:

1. On the Main Menu Screen, press the Inspection Sensor Button. The Inspection Sensor Configuration Screen appears.



Main Menu Screen

2. On the Inspection Sensor Configuration Screen, press the Event History Button. The Inspection Sensor Event History Screen appears.



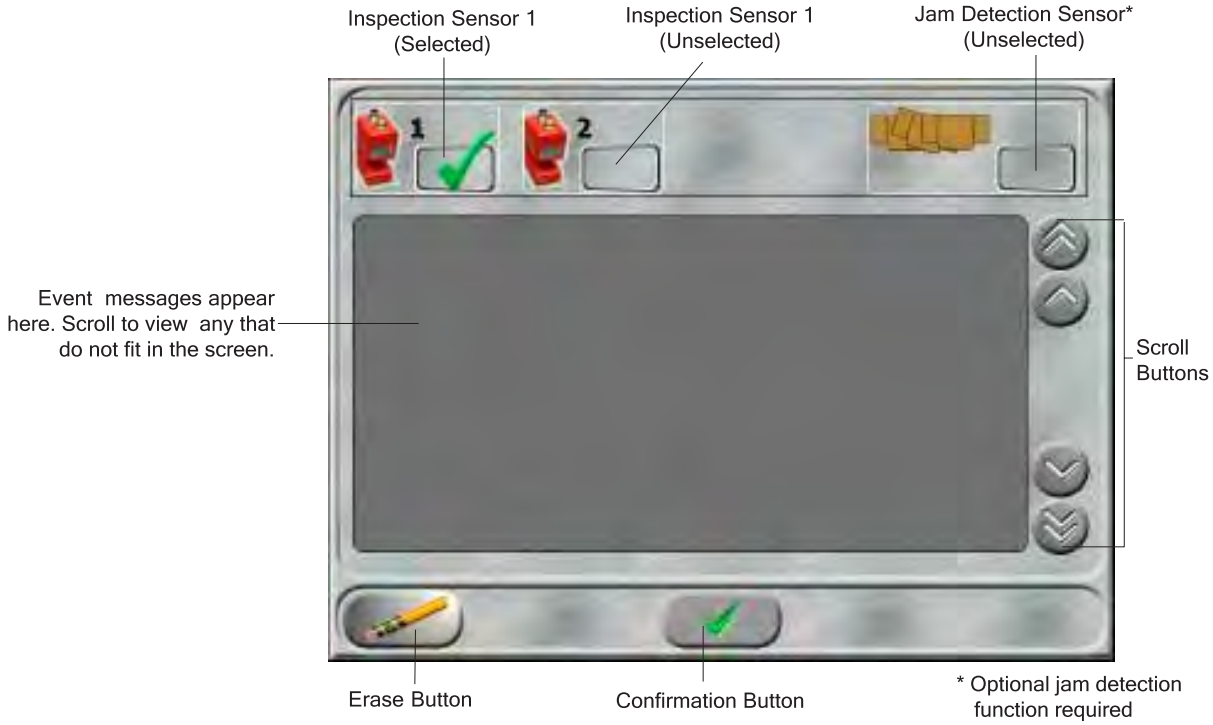
Inspection Sensor Configuration Screen

Inspection Sensor Event History - Continued

3. On the Inspection Sensor Event History Screen, you can view events that have occurred for the sensors. Select the desired sensor by pressing the box next to it. A checkmark will appear in the selected sensor's box.

> Events are only stored permanently when a memory card is installed in the OT-12. Otherwise, all events are erased when the system is shut off. (Memory cards are available wherever computer supplies are sold.)

4. If desired, selected messages can be erased by using the stylus. Use the stylus to highlight the message(s) you want to delete and then press the Erase Button.



Inspection Sensor Event History Screen

5. Press the Confirmation Button to return to the Inspection Sensor Configuration Screen. Press the Confirmation Button on the Inspection Sensor Configuration Screen to return to the Main Menu Screen.

Learn Volume Procedure

To make the FlexosealPRO System learn the glue volume, first make sure the glue line the system is producing on the product is satisfactory. Then, do the following:

1. On the Main Menu Screen, press the Inspection Sensor Setup Button. The Inspection Sensor Configuration Screen appears.

Main Menu Screen

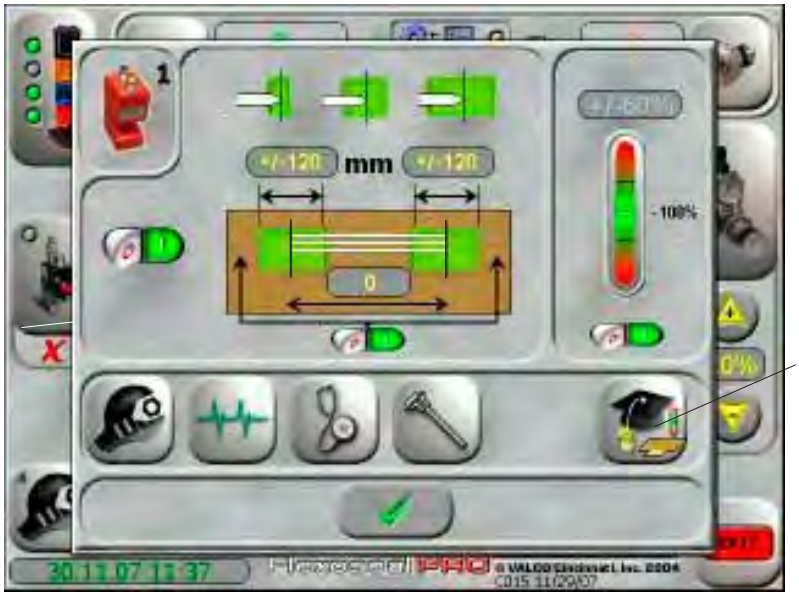
> The recommended default setting for the Volume Inspector Switch is OFF. Turn it ON only when performing the system Learn Glue Volume procedure.

2. On the Inspection Sensor Configuration Screen, make sure the Volume Inspection switch is “ON” and the Inspection Sensor Switch is “ON.”

Inspection Sensor Configuration Screen

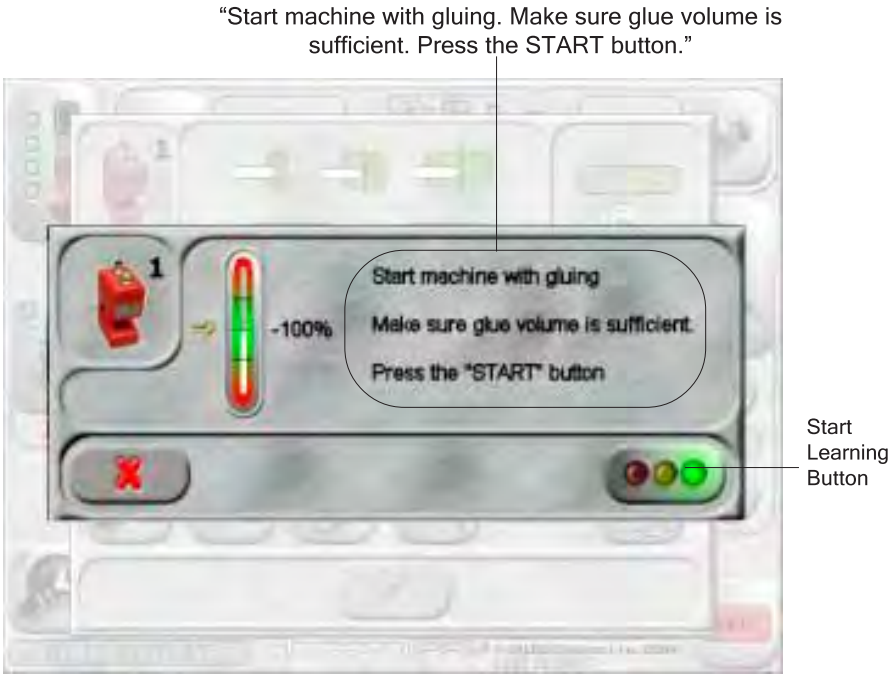
Learn Volume Procedure - Continued

3. On the Inspection Sensor Configuration Screen, press the Learn Volume Button. The Learn Volume Screen is displayed.



Inspection Sensor Configuration Screen

4. When the Learn Volume Screen appears, follow the directions on the screen.



Learn Volume Screen

(Background faded out for emphasis)

Learn Volume Procedure - Continued

5. When the FlexosealPRO System is processing and learning the glue volume, an hourglass window will appear. Please wait while the machine processes your request.

Learn Started Screen
(Background faded out for emphasis)

To cancel the request, press the Cancel button.

6. After processing, the FlexosealPRO System will display one of the following messages:

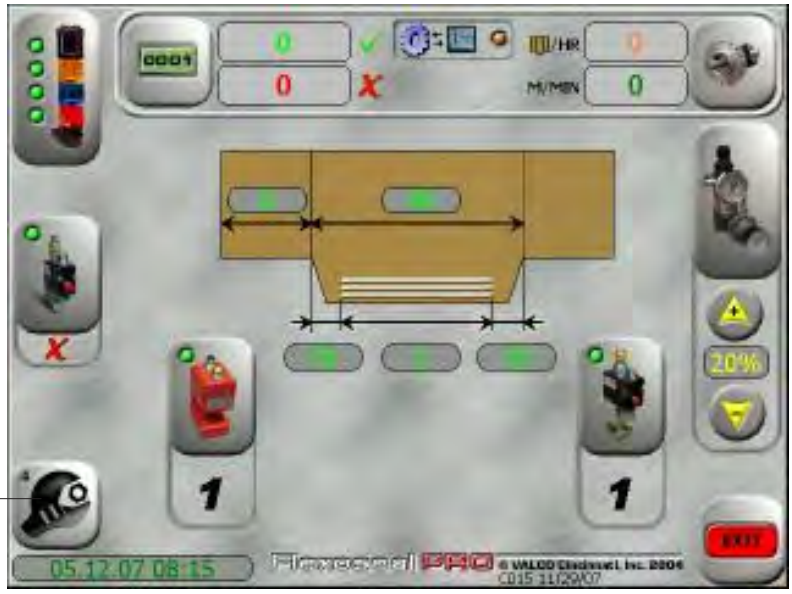
Message Displayed	Information
Learn Impossible!	The system cannot learn; the machine may not be running or the Volume Inspection switch may be off.
Learn in Process!	The system is processing the glue volume information; please wait
Learn Successful!	The system has successfully learned the glue volume.
Learn Failed!	The system did not learn the glue volume.
Timeout!	The system timed out before learning the glue volume. The learn was not successful; try again.
Learn Cancelled!	The system has received your cancellation and has cancelled the learning request.

7. When finished, press the Confirmation Button to return to the Inspection Sensor Configuration Screen. Press the Confirmation Button on the Inspection Sensor Configuration Screen to return to the Main Menu Screen.

Device Status Information

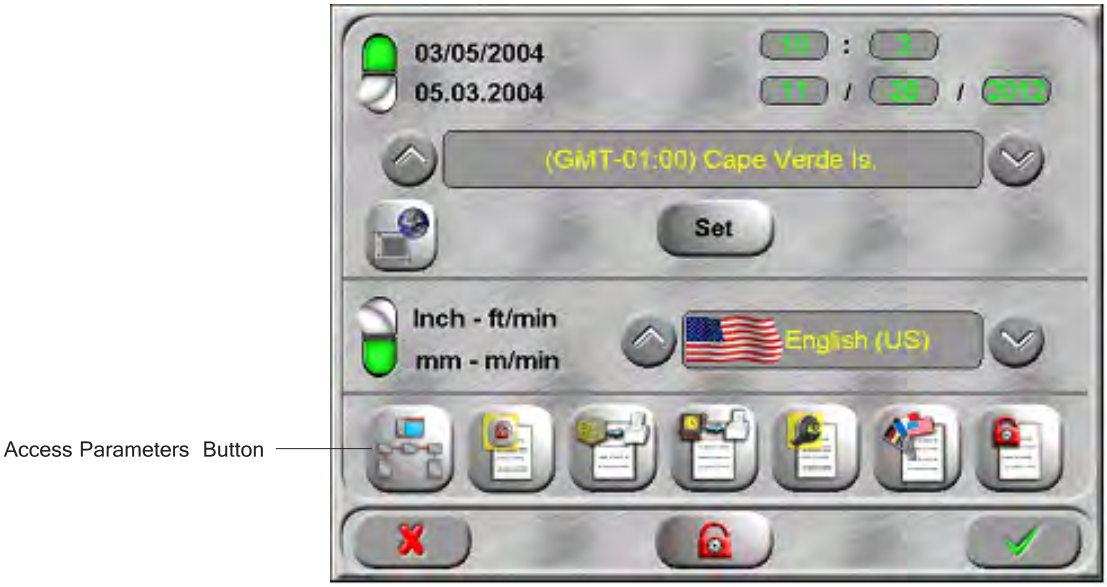
To check on the version, revision, and other information regarding your device and software applications, a Device Status Information Screen is available. To access this feature, do the following:

1. On the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.



Main Menu Screen

2. On the General Setup Screen, press the Access Parameters Button. The Parameter Setup Screen appears.



General Setup Screen

Device Status Information - Continued

3. Press the Device Status Information Button on the Parameter Setup Screen. (This screen is explained in detail later in this section, under “Access Parameters.”)

Parameter Setup Screen

4. The Device Status Information Screen will appear.

Device Status Information Screen

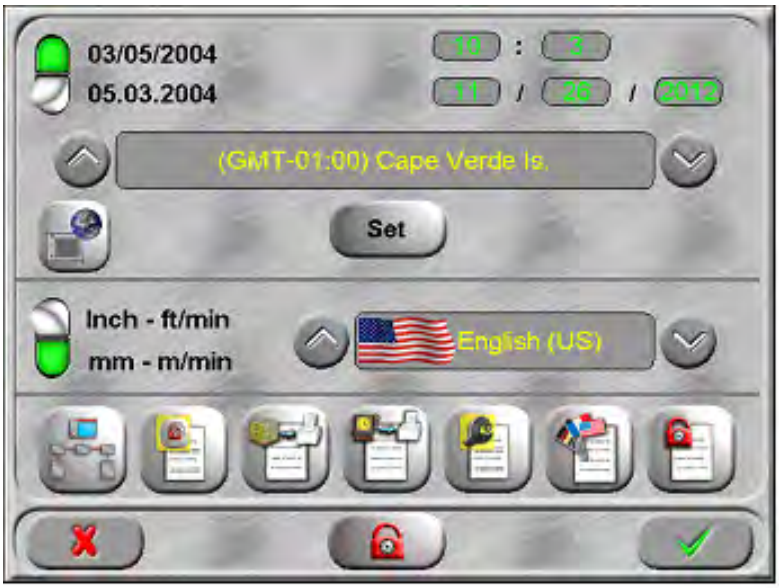
5. When done, press the Confirmation Button on each screen until the Main Menu Screen appears.

Configure the Language

To change the language of operation, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen



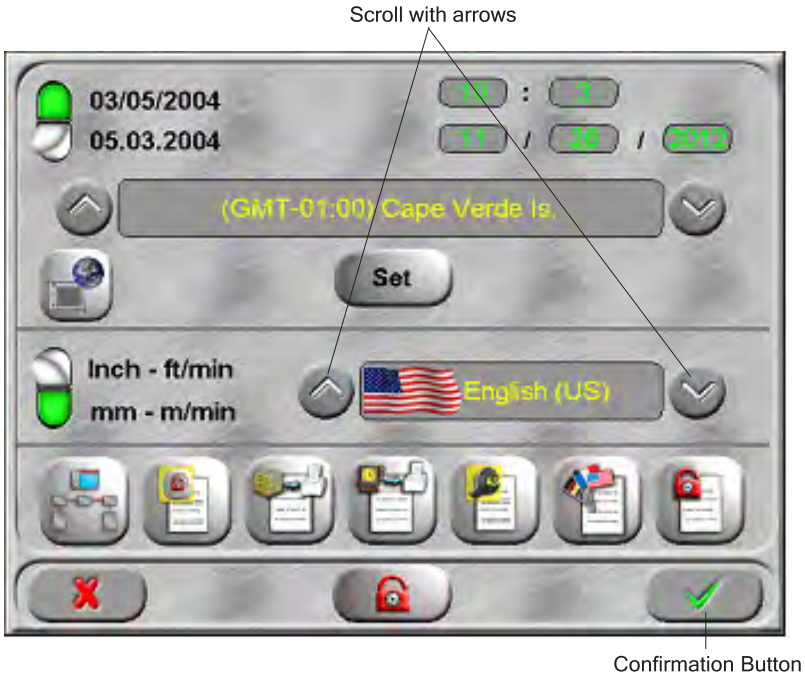
General Setup Screen

Configure the Language - Continued

2. Choose one of two methods:

   Method 1:

   -On the General Setup Screen, scroll through the languages with the up and down arrow keys until the desired language is highlighted and then press the Confirmation Button.

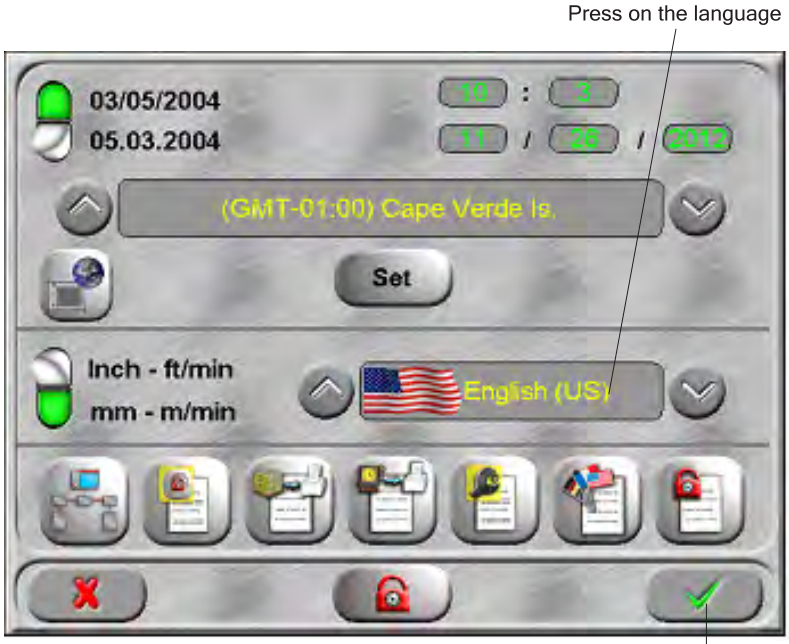


General Setup Screen

Configure the Language - Continued

Method 2:

-On the General Setup Screen, press the current language. You will see a list of languages you can choose by pressing your selection. Then press the Confirmation Button.



General Setup Screen

List of Languages Screen

3. After finishing, press the Confirmation Button on the General Configuration Screen to return to the Main Menu Screen.

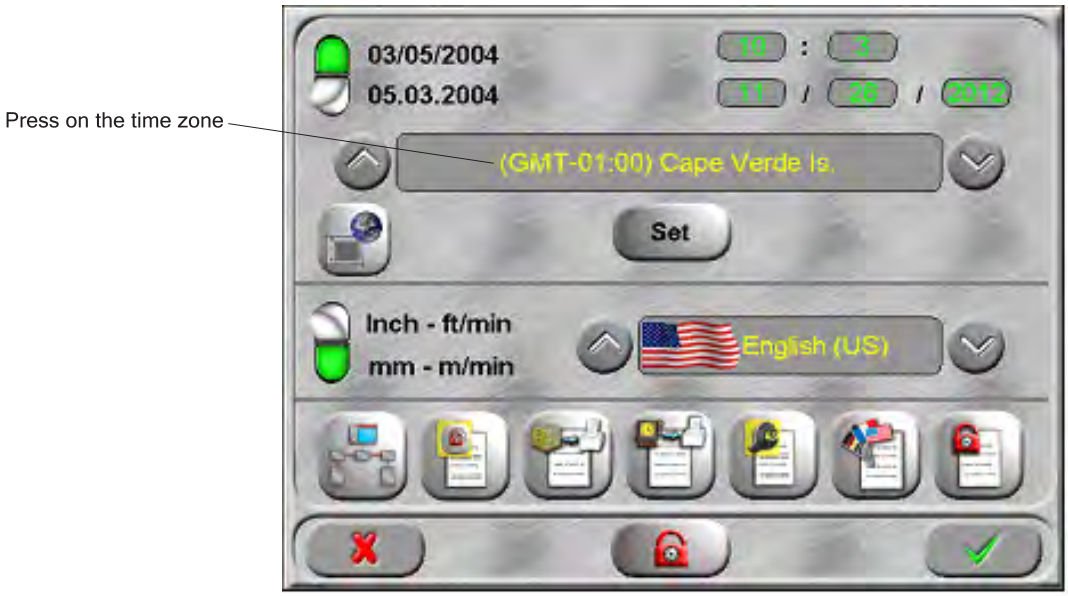
Configure the Time Zone

To configure the time zone, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

2. On the General Setup Screen, press the time zone. A list of time zones will appear.



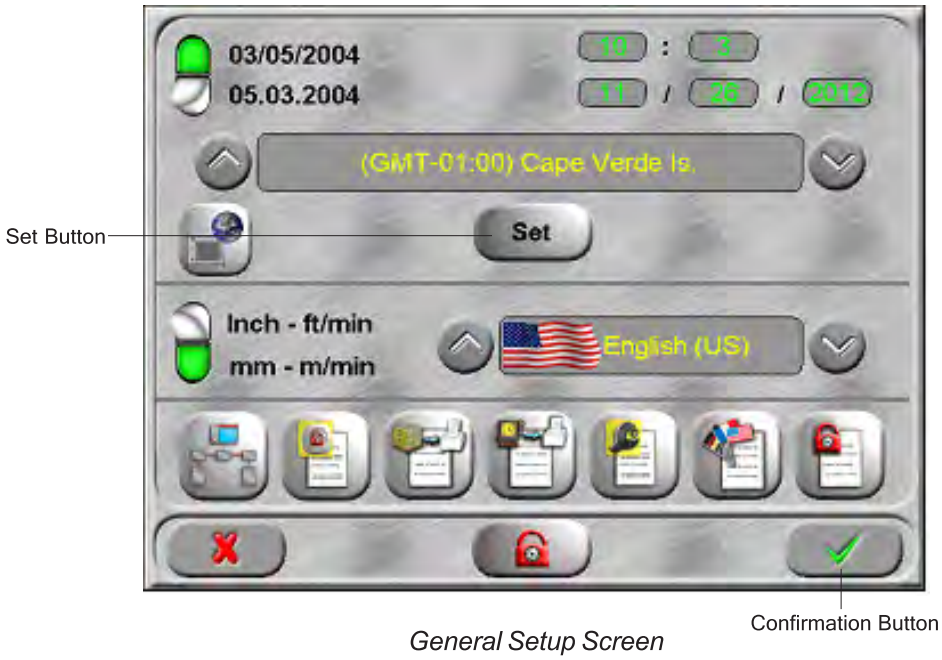
General Setup Screen

Configure the Time Zone - Continued

3. On the list of time zones, scroll until you find your time zone, and then press your choice to highlight it. Then, press the Confirmation Button to return to the General Setup Screen.

List of Time Zones Screen

4. Press the Set Button. This must be done or your changes will not take effect.



General Setup Screen

5. After finishing, press the Confirmation Button on the General Configuration Screen to return to the Main Menu Screen.

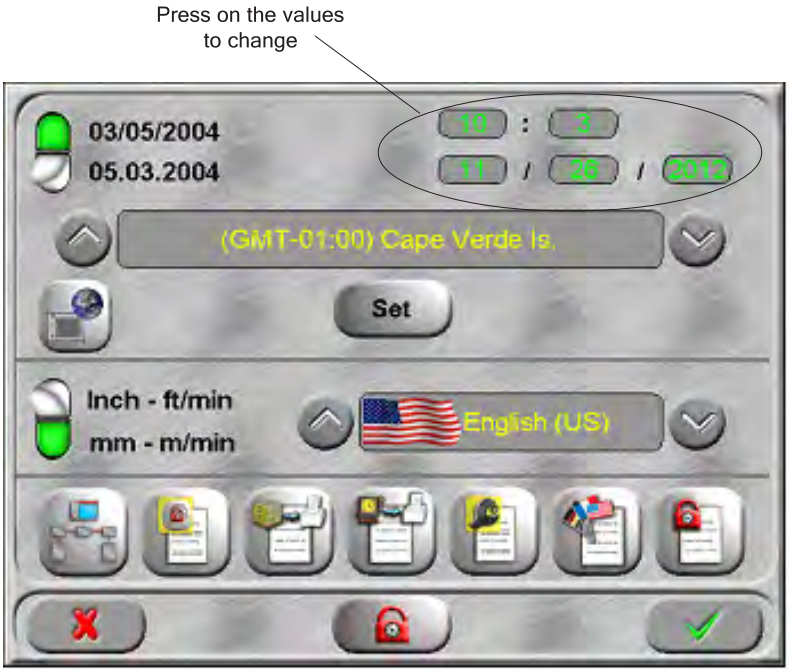
Change and Format the Time/Date

To change and format the date and time, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

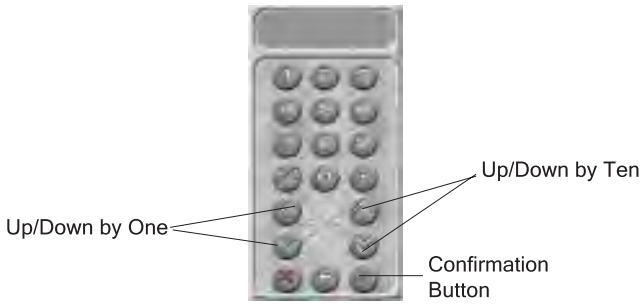
2. On the General Setup Screen, press the time and date value you wish to change. A keypad will appear.



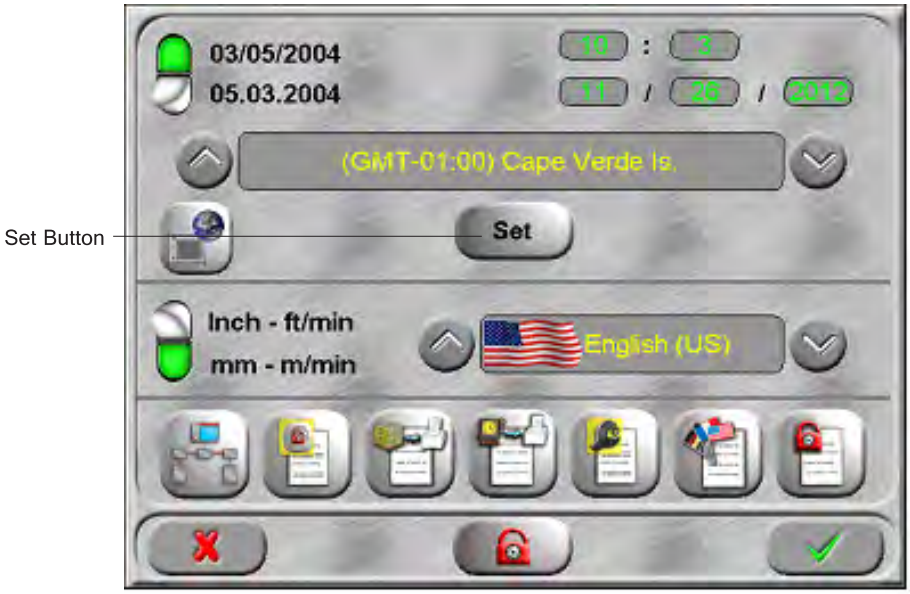
General Setup Screen

Change and Format the Time/ Date - Continued

3. When the keypad appears, enter the desired value and press the keypad Confirmation Button. Continue this same process with each value until all changes are made.



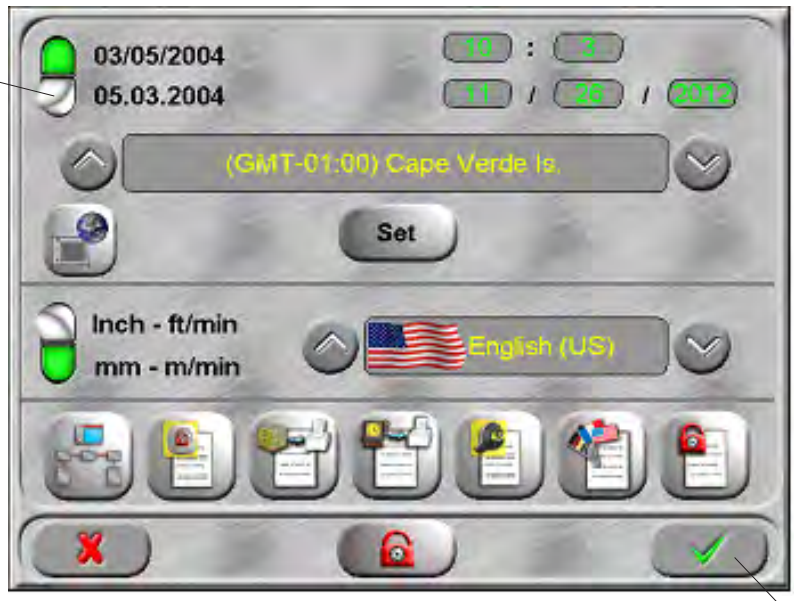
4. Press the Set Button. This must be done or your changes will not take effect.



General Setup Screen

Change and Format the Time/ Date - Continued

5. When done, choose the format of the display with the Date Format Switch. Then press the Confirmation Button to return to the Main Menu Screen.



General Setup Screen

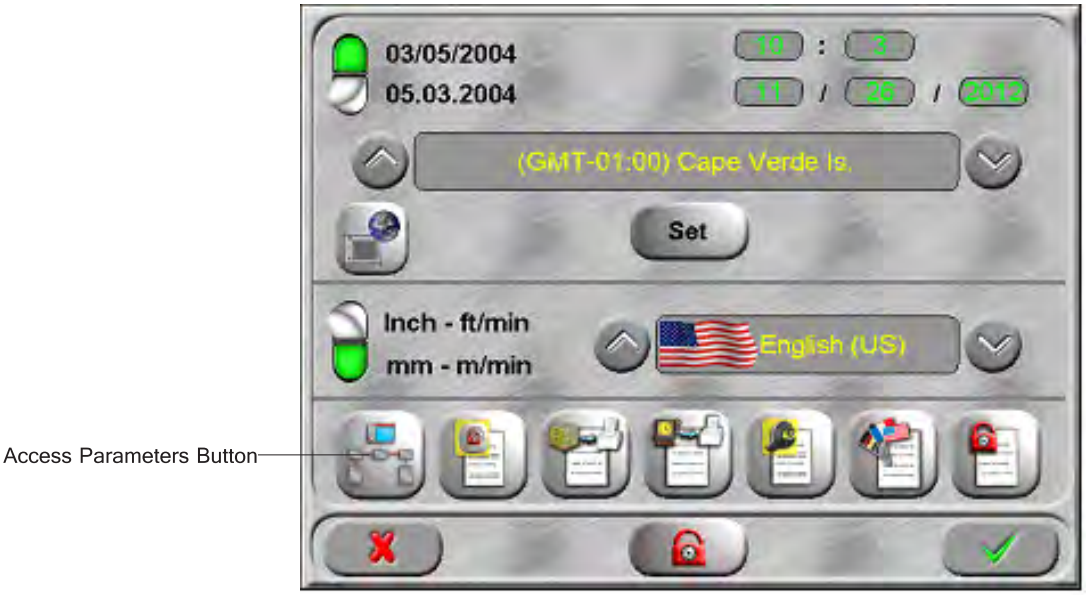
Access Parameters

To access parameters, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

2. On the General Setup Screen, press the Access Parameters Button. The Parameter Setup Screen will appear.



General Setup Screen

Access Parameters - Continued

3. On the Parameter Setup Screen, use one of the following methods to access the parameters:

Method 1:

-Enter an MCP parameter number in the Edit Field. The other fields will be filled out with the applicable data to this specific parameter.

Parameter Setup Screen

Method 2:

-Enter two “new” numbers in the Dual Edit Fields.

Parameter Setup Screen

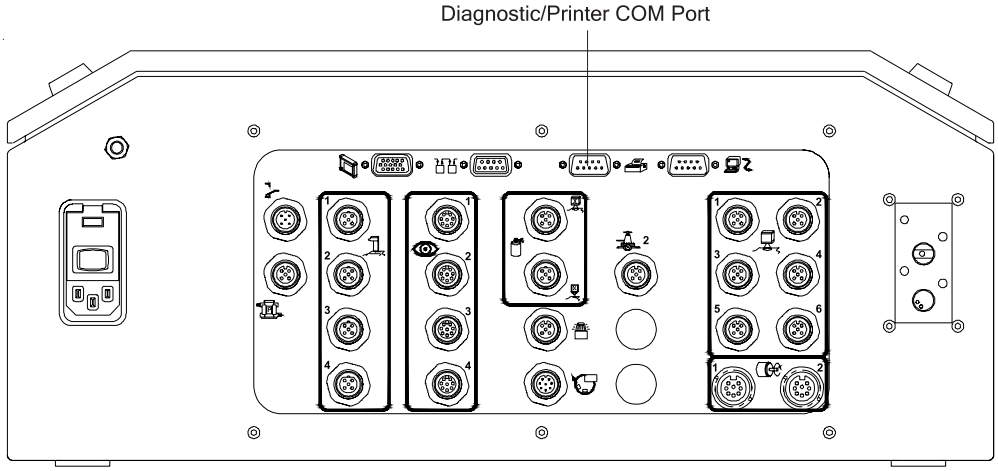
Access Parameters - Continued

A user may scroll to the desired parameter using the up/down arrows located next to the current parameter selection or click on the current selection to access a list of all possible parameters.

Print/Capture Parameter Values

To print/capture the parameter values, do the following:

1. Connect a computer or a printer to the COM port on the MCP-12 Unit.



Model MCP-12/4 Control Unit - Connection Panel (Back)

2. On the Parameter Setup Screen, press the Printer Button. Press the Confirmation Button to return to the Main Menu Screen.

Parameter Setup Screen

Access Password Configuration Files

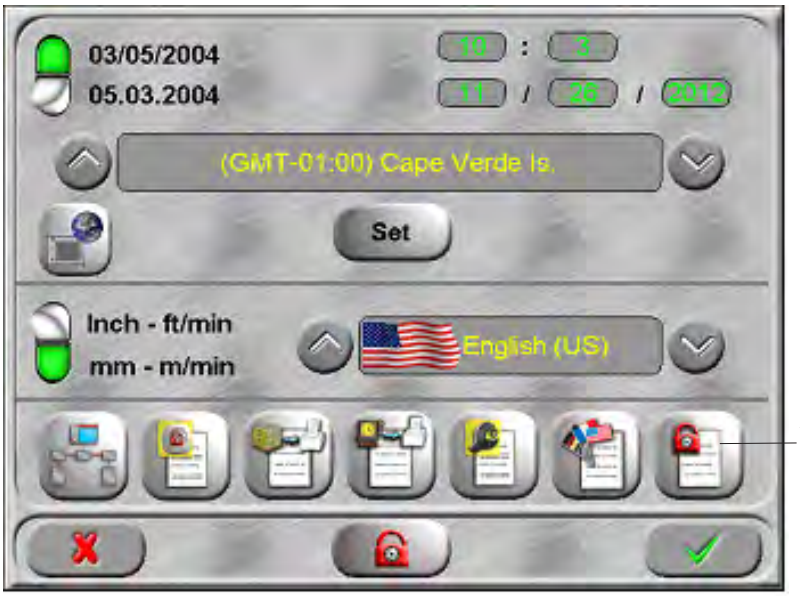
To access password configuration files, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

> Password access can be customized. See the topic “Access General Configuration Files” in this Section for more information.

2. On the General Setup Screen, press the Access Password Files Button.



General Setup Screen

Access Password Configuration Files - Continued

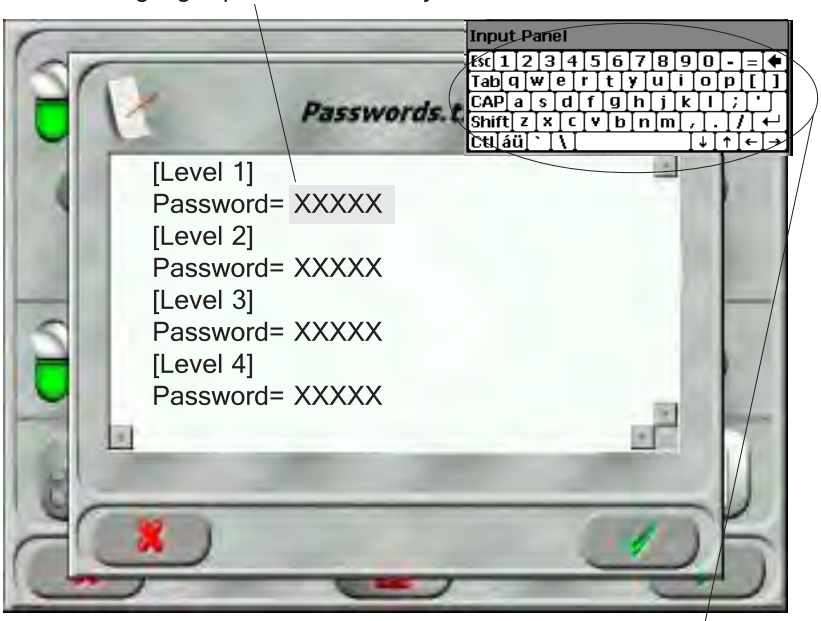
3. The Password Configuration Screen will appear.

Password Configuration Setup Screen

Access Password Configuration Files - Continued

4. Use the stylus to highlight the object you wish to change. Use the Input Panel like a keyboard to enter data. For example:

-Highlight password with stylus



Password Configuration Setup Screen

Input Panel (Keyboard)

Warning!

Use ONLY NUMBERS for the password! The system only uses passwords in all number form.

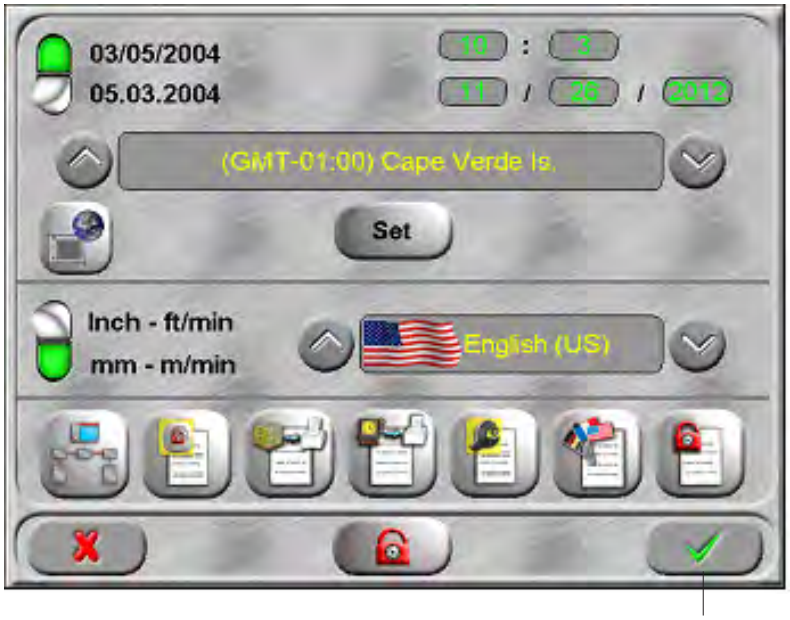
-"Type" in a new password with the stylus, and then press the Enter Key.

Access Password Configuration Files - Continued

5. When done, press the Confirmation Button on the screen. The General Setup Screen appears.

Password Configuration Setup Screen

6. On the General Setup Screen, press the Confirmation Button to return to the Main Menu Screen.



General Setup Screen

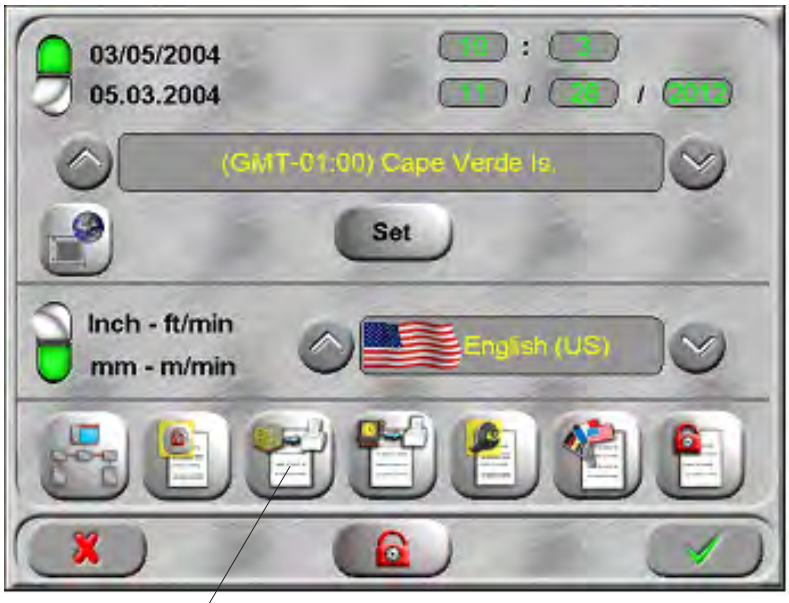
Job Configuration Files - Production Report Printout - By Job

To access job files, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

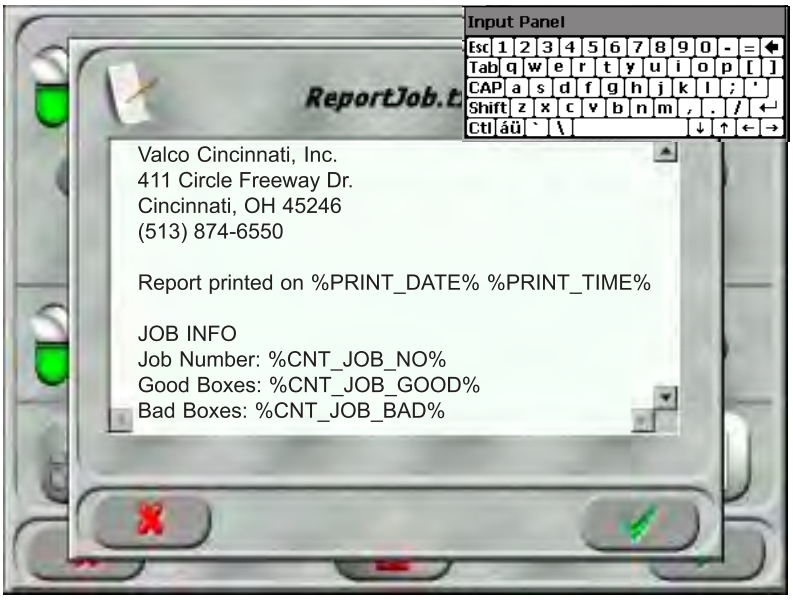
2. On the General Setup Screen, press the Access Production Report Printout Button.



General Setup Screen

Job Configuration Files - Production Report Printout - By Job - Continued

3. The Job Files Configuration Screen will appear.



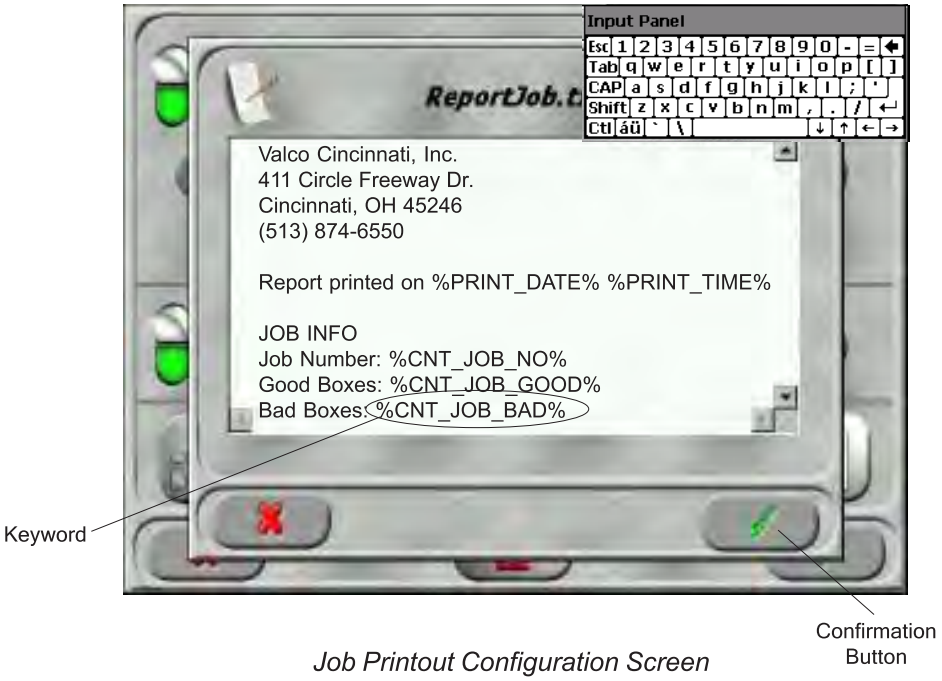
Job Files Configuration Screen

4. Use the stylus and the Input Panel to change the printout template to the desired format. Change the company name and address, for example. What is seen on the screen will be the format for the job printout.

Input Panel (Keyboard)

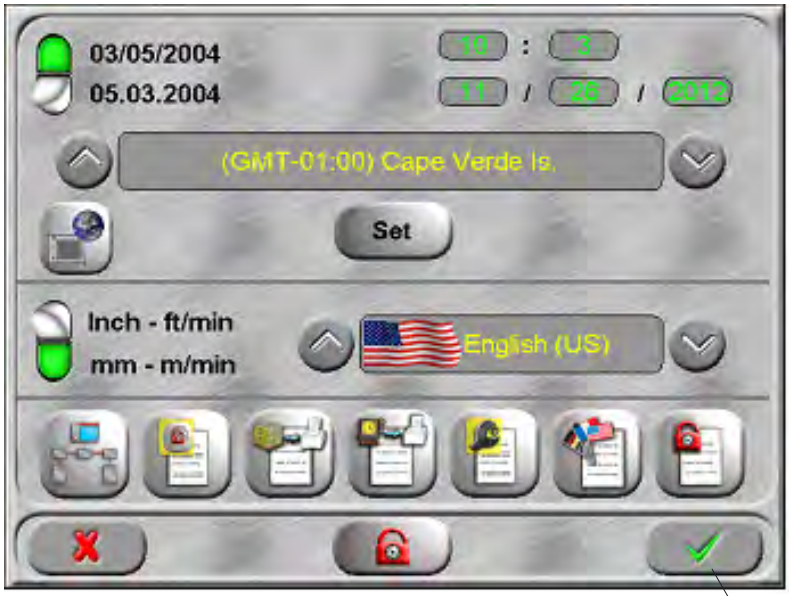
Job Configuration Files - Production Report Printout - By Job - Continued

5. When done, press the Confirmation Button on the screen. The General Setup Screen appears.



Job Printout Configuration Screen

6. On the General Setup Screen, press the Confirmation Button to return to the Main Menu Screen.



General Setup Screen

Job Configuration Files - Production Report Printout - By Job - Continued

The following keywords will represent the individual counter values when the report is printed. The keywords start and end with %.

Keyword	Meaning
%PRINT_DATE%	Date report printed
%PRINT_TIME%	Time report printed
%CNT_SHIFT_GOOD%	Good products during the current shift
%CNT_SHIFT_BAD%	Bad products during the current shift
%CNT_JOB_GOOD%	Good products produced during current job
%CNT_JOB_BAD%	Bad products produced during current job
%CNT_JOB_SCRAP%	Scrap products during current job
%CNT_SHIFT_SCRAP%	Scrap products during current shift
%CNT_JOB_NO%	Number of current job
%CNT_JOB_ERR_START%	Number of start errors during current job
%CNT_JOB_ERR_GAP%	Number of gap errors during current job
%CNT_JOB_ERR_END%	Number of end errors during current job
%CNT_JOB_ERR_UNGLUED%	Number of unglued errors during current job
%CNT_JOB_ERR_VOLUME%	Number of volume errors during current job

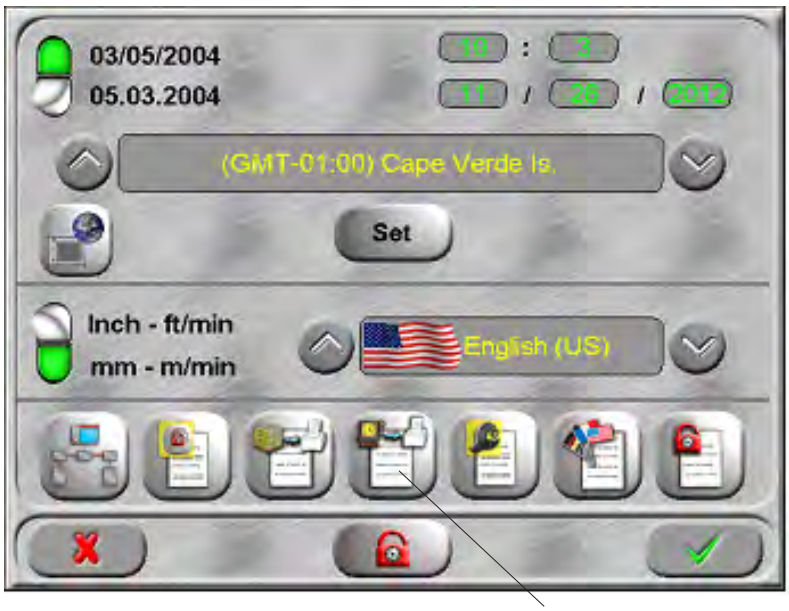
Job Configuration Files - Production Report Printout - By Shift

To access shift report files, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

2. On the General Setup Screen, press the Access Shift Files Production Report Printout Button.



General Setup Screen

Production Report Printout - By Shift - Continued

3. The Shift Files Report Printout Screen will appear.

Shift Files Report Printout Screen

4. Use the stylus and the Input Panel to change the printout template to the desired format.

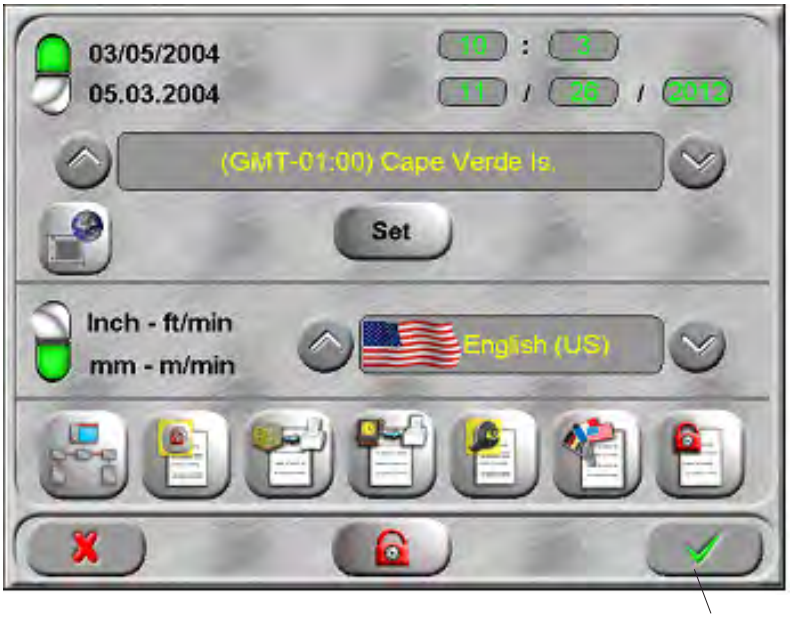
Input Panel (Keyboard)

Production Report Printout - By Shift - Continued

5. When done, press the Confirmation Button on the screen. The General Setup Screen appears.

Shift Files Report Printout Screen

6. On the General Setup Screen, press the Confirmation Button to return to the Main Menu Screen.



General Setup Screen

Access/ Change Language Translation Files

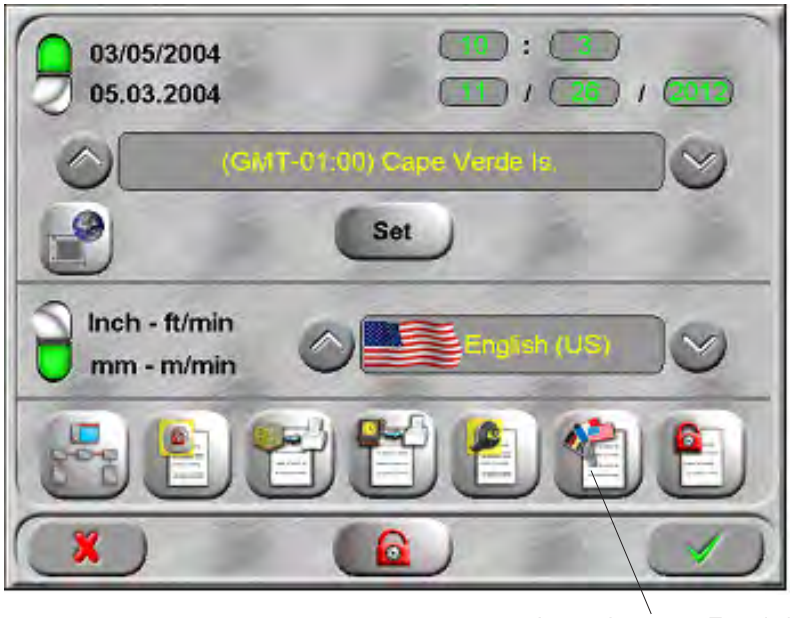
The translation of one language to another may vary depending on dialect and region. If the translations from English to your preferred language are not what you would like, you can change the translation files.

To change the translation files, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

2. On the General Setup Screen, press the Access Language Translation Files Button.



General Setup Screen

Access/Change Language Translation Files - Continued

3. The Language Translation Files Configuration Screen will appear. (The following is only an example.)

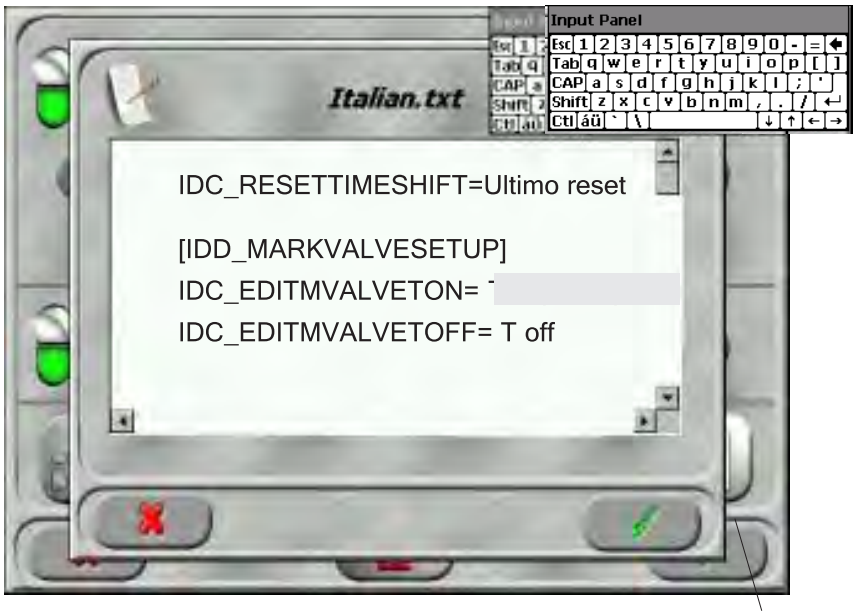
Language Translation Files Configuration Screen

4. Use the stylus and the Input Panel to change the printout template to the desired format. For example, “Ton” is not a term you could easily remember. You would prefer the Italian translation to read “Tempo Sopra.” Therefore, highlight the term “Ton” with the stylus.

Language Translation Files Configuration Screen

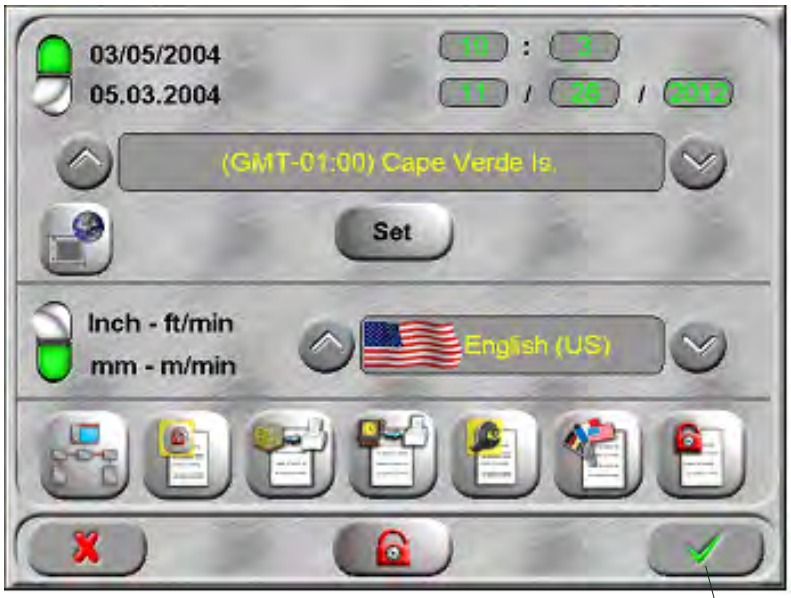
Access/Change Language Translation Files - Continued

5. Use the keypad to type in Tempo Sopra.



Language Translation Files Configuration Screen

6. Press the Confirmation Button. The General Setup Screen appears. Press the Confirmation Button on the General Setup Screen to return to the Main Menu Screen.



General Setup Screen

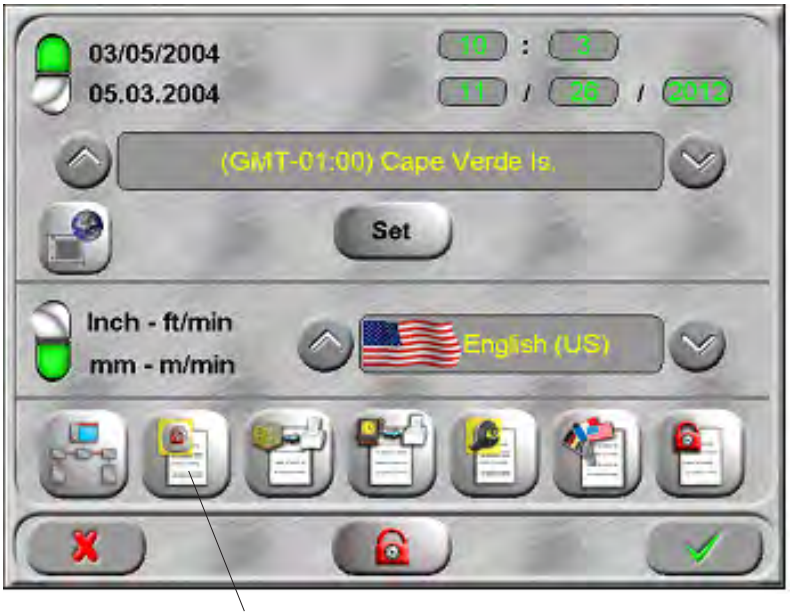
Access Configuration File

To access the configuration file, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

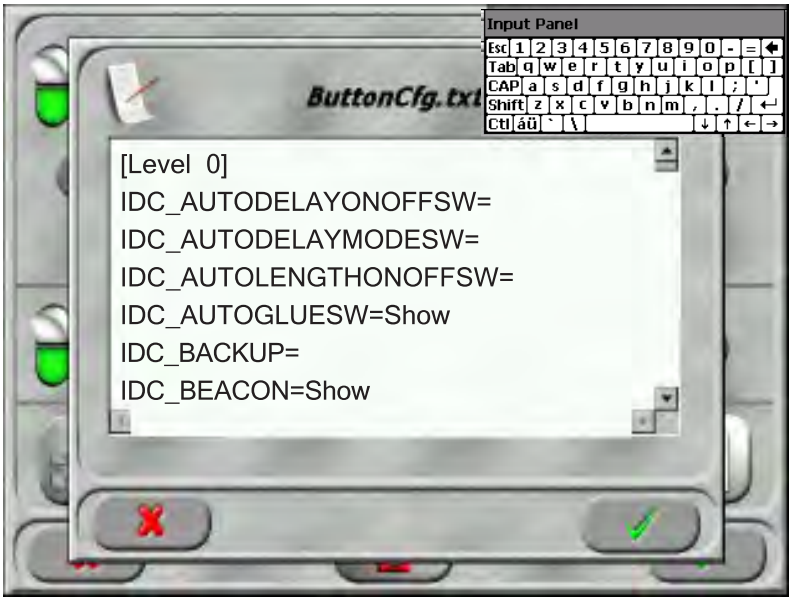
2. On the General Setup Screen, press the Access Configuration File Button.



General Setup Screen

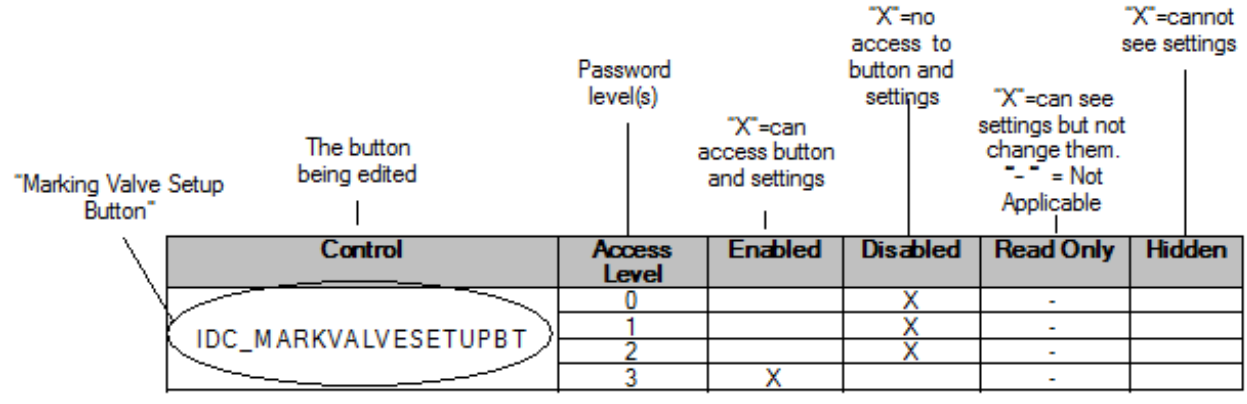
Access Configuration File - Continued

3. The Access Configuration Screen will appear.



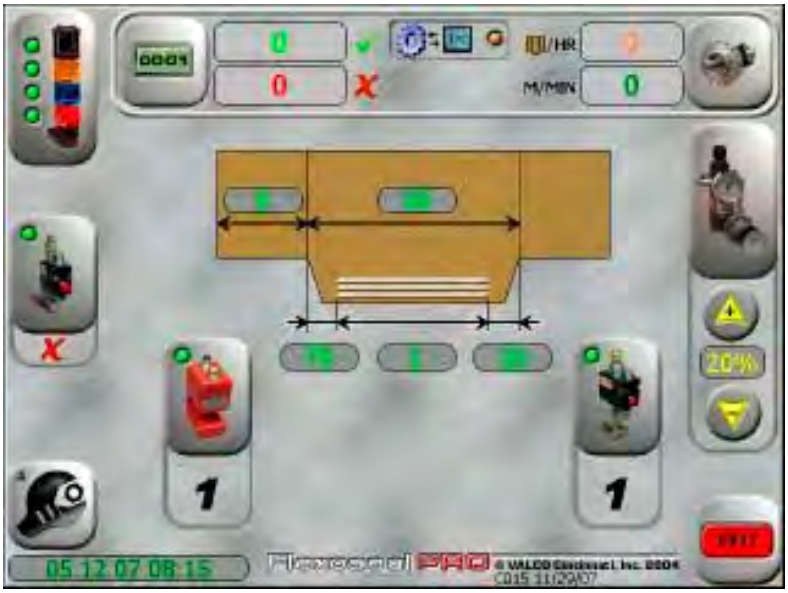
Access Configuration Screen

4. Use the stylus and the Input Panel to change the access the passwords will activate, the buttons that will be inactive, seen, changed, etc. For example:



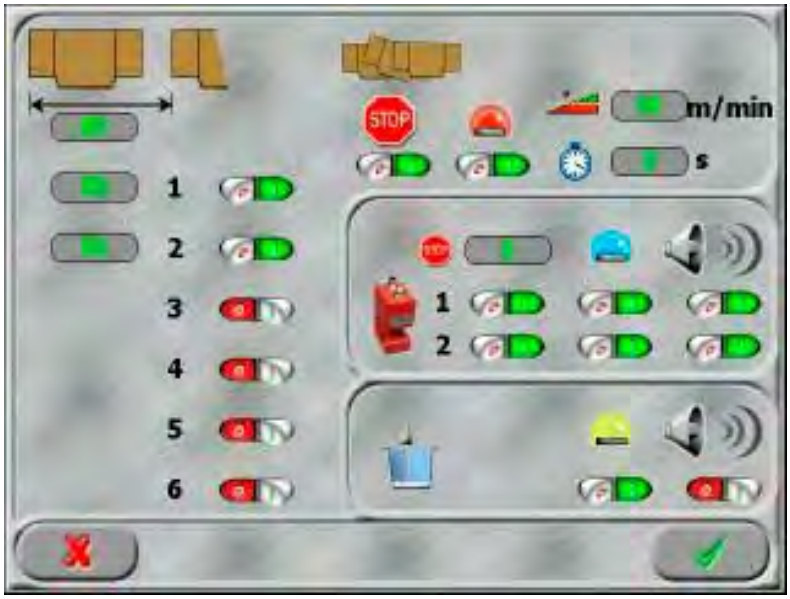
In the above example, the Marking Valve Setup Button is disabled for passwords at levels 0, 1, and 2. These levels cannot access the button (the button is “grayed out”) or see the settings for the button. However, a level 3 password can access the button for the settings, see the settings, and change the settings.

Main Menu Default Settings



Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_BEACON	0	X		-	
IDC_COUNTER	0		X	-	
	1	X		-	
IDC_ENCODER	0		X	-	
	1		X	-	
	2		X	-	
	3	X		-	
IDC_BUTTONMARKVALVE	0	X		-	
IDC_BUTTONSENSOR1	0	X		-	
IDC_BUTTONSENSOR2	0	X		-	
IDC_BUTTONVALVE1	0	X		-	
IDC_BUTTONVALVE2	0	X		-	
IDC_REGUBUTTON	0		X	-	
	1	X		-	
IDC_SOURCEPLUS	0	X			
IDC_SOURCEMINUS	0	X		-	

Alarm Configuration Default Settings



Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_EDITPRODUCTDISTANCE	0	X			
IDC_EDITJAMSCANNER1..6	0	X			
IDC_JAM1ONOFFSW (1..6)	0		X	-	
	1	X		-	
IDC_MACHINESTOPONOFFSW	0		X	-	
	1		X	-	
	2	X		-	
IDC_JAMLIGHTONOFFSW	0		X	-	
	1		X	-	
	2	X		-	
IDC_TEXTSPEEDTHRESHOLD	0			X	
	1			X	
	2	X			
IDC_EDITTIME	0			X	
	1			X	
	2	X		-	
IDC_EDITCONSECUTIVEFAULTS	0	X		-	
IDC_CONSECFAULTSSENSOR1	0	X		-	
IDC_CONSECFAULTSSENSOR2	0	X		-	
IDC_GLUELIGHT1ONOFFSW	0		X	-	
	1		X	-	
	2	X		-	
IDC_GLUELIGHT2ONOFFSW	0		X	-	
	1		X	-	
	2	X		-	
IDC_GLUEBUZZER1ONOFFSW	0	X		-	
IDC_GLUEBUZZER2ONOFFSW	0	X		-	
IDC_LLDLIGHTONOFFSW	0	X		-	
IDC_LLDBUZZERONOFFSW	0	X		-	

Marking Valve and Valve Configuration Default Settings

Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_MARKVALVESETUPBT	0		X	-	
	1		X	-	
	2		X	-	
	3	X		-	
IDC_MARKVALVEPURGEBT	0	X		-	
IDC_MARKVALVEONOFFSW	0		X	-	
	1		X	-	
	2		X	-	
	3		X	-	
	4	X		-	
IDC_VALVESETUPBT	0		X	-	
	1		X	-	
	2		X	-	
	3	X		-	
IDC_PURGEBT	0	X		-	
IDC_VALVEONOFFSW	0	X		-	

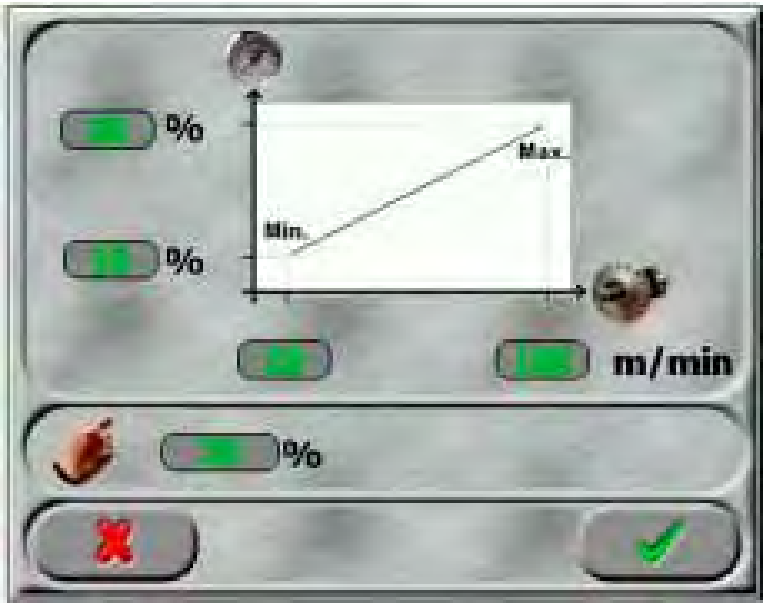
Marking Valve Setup Default Settings

Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_EDITMVALVETON	3	X			
IDC_EDITMVALVETOFF	3	X			
IDC_EDITMVALVETMIN	3	X			
IDC_EDITDISTANCETOSENSOR1	3	X			
IDC_EDITDISTANCETOSENSOR2	3	X			
IDC_EDITMVALVEDELAY	3	X			
IDC_AUTODELAYONOFFSW	3	X		-	
IDC_AUTODELAYMODESW	3&4		X	-	
IDC_EDITMVALVELENGTH	3	X			
IDC_AUTOLENGTHONOFFSW	3	X		-	

Valve Setup Default Settings

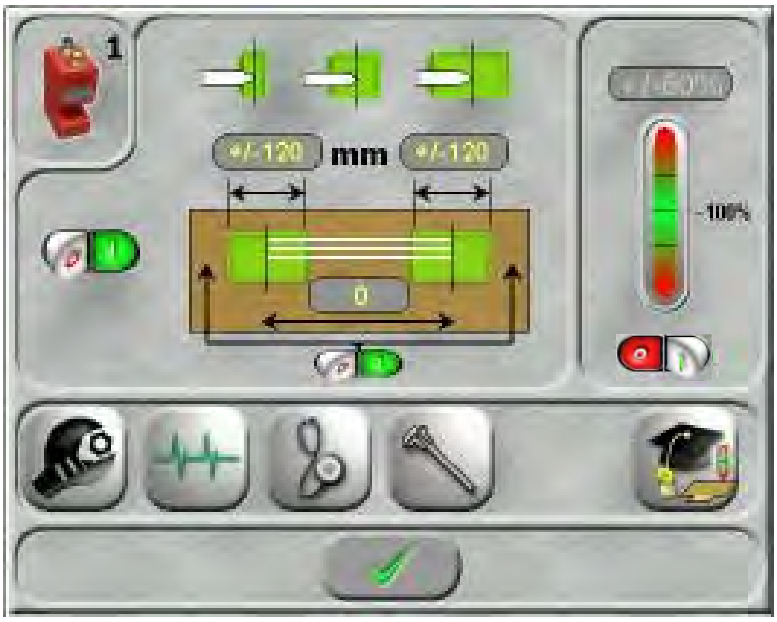
Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_EDITTON	3	X			
IDC_EDITTOFF	3	X			
IDC_EDITTMIN	3	X			
IDC_EDITVMIN	3	X			
IDC_EDITSCANNERVALVE	3	X			
IDC_EDITCF	3	X			

Pressure Curve Setup Default Settings



Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_PRESSUREMAX	0			X	
	1			X	
	2	X			
IDC_PRESSUREMIN	0			X	
	1			X	
	2	X			
IDC_SPEEDMIN	0			X	
	1			X	
	2	X			
IDC_SPEEDMAX	0			X	
	1			X	
	2	X			
IDC_PRESSUREPURGE	0			X	
	1			X	
	2	X			

Inspection Sensor Configuration Default Settings



Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_TOLERANCE10BT	0	X		-	
IDC_TOLERANCE15BT	0	X		-	
IDC_TOLERANCE30BT	0	X		-	
IDC_SENSORONOFFSW	0	X		-	
IDC_UNGLUEDAREAONOFFSW	0		X	-	
	1		X	-	
	2	X		-	
IDC_VOLUMEONOFFSW	0		X	-	
	1		X	-	
	2	X		-	
IDC_SENSORSETUPBT	0		X	-	
	1		X	-	
	2		X	-	
	3	X		-	
IDC_SENSORDIAGNOSTICBT	0	X		-	
IDC_SENSORTOLERANCEBT	0		X	-	
	1		X	-	
	2		X	-	
	3	X		-	
IDC_SENSORLEARNBT	0		X	-	
	1		X	-	
	2		X	-	
	3		X	-	
	4	X		-	

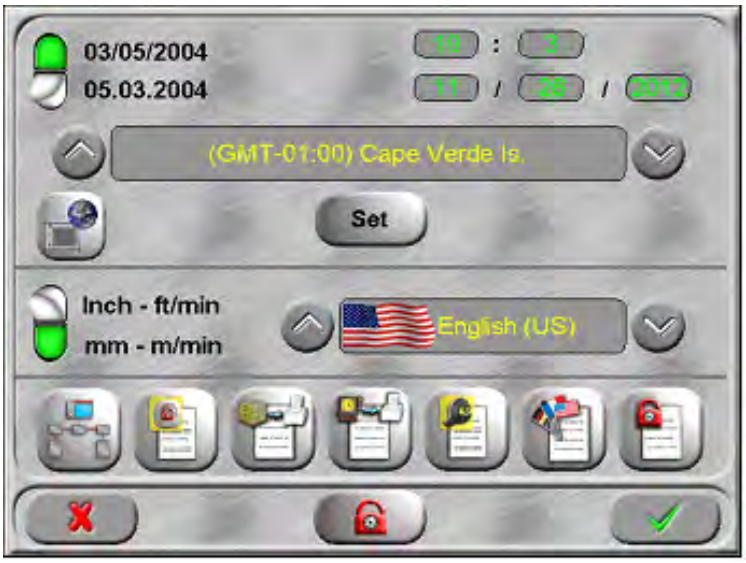
Sensor Setup Default Settings

Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_EDITOFFSETSTART	3	X			
IDC_EDITOFFSETEND	3	X			
IDC_EDITMINGLUELENGTH	3	X			
IDC_EDITMINGAPLENGTH	3	X			
IDC_EDITTHRESHOLD	3	X			
IDC_EDITSENSORTOSCANNER	3	X			
IDC_SCANNERTYPESW	3	X		-	
IDC_EDGESELECTIONSENSORSW	3	X		-	

Sensor Tolerance Default Settings

Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_EDITTOLMINSTART	3	X			
IDC_EDITTOLMINEND	3	X			
IDC_EDITTOLMINMIDDLE	3	X			
IDC_EDITTOLLEARNMIN	3	X			
IDC_EDITTOLMEDSTART	3	X			
IDC_EDITTOLMEDEND	3	X			
IDC_EDITTOLMEDMIDDLE	3	X			
IDC_EDITTOLLEARNMED	3	X			
IDC_EDITTOLMAXSTART	3	X			
IDC_EDITTOLMAXEND	3	X			
IDC_EDITTOLMAXMIDDLE	3	X			
IDC_EDITTOLLEARNMAX	3	X			
IDC_EDITTOLCUSTOMLSTART	3	X			
IDC_EDITTOLCUSTOMLEND	3	X			
IDC_EDITTOLCUSTOMMIDDLE	3	X			
IDC_EDITTOLLEARNCUSTOML	3	X			
IDC_EDITTOLCUSTOMRSTART	3	X			
IDC_EDITTOLCUSTOMREND	3	X			
IDC_EDITTOLLEARNCUSTOMR	3	X			

General Setup Default Settings



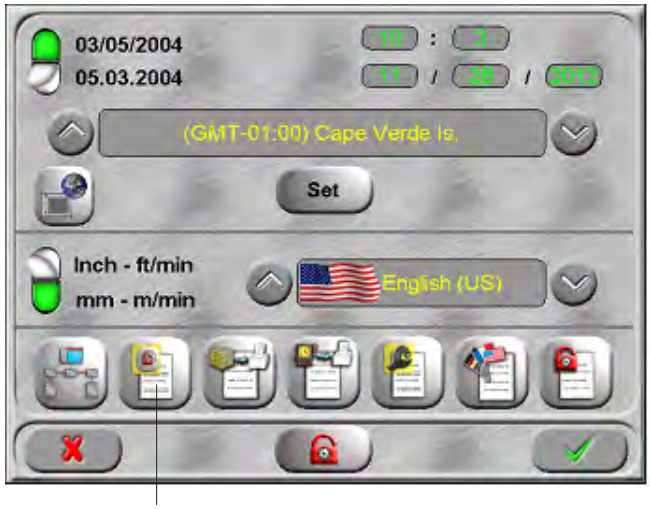
Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_TIMEFORMATSW	1		X	-	
	2	X			
IDC_HOUR	1	X			
IDC_MINUTE	1	X			
IDC_DATEFIRSTFIELD	1	X			
IDC_DATESECONDFIELD	1	X			
IDC_YEAR	1	X			
IDC_CONFIRMTIMEZONE	1	X			
IDC_UNITSELECTIONSW	1		X	-	
	2	X		-	
IDC_LANGSELECTCOMBO	1	X			
IDC_TIMEZONECOMBO	1	X			
IDC_NETWORKCONFIG	1		X	-	
	2		X	-	
	3	X		-	
IDC_BTCONFIG	1		X	-	
	2		X	-	
	3		X	-	
	4	X		-	
IDC_RPTCONFIG	1		X	-	
	2		X	-	
	3		X	-	
	4	X		-	
IDC_RPTSHIFT	1		X	-	
	2		X	-	
	3		X	-	
	4	X		-	
IDC_BTLANGUAGE	1		X	-	
	2		X	-	
	3		X	-	
	4	X		-	
IDC_BTPASSWORD	1		X	-	
	2		X	-	
	3		X	-	
	4	X		-	

Parameter Setup Default Settings

Control	Access Level	Enabled	Disabled	Read Only	Hidden
IDC_STARTNODE	3	X		-	
IDC_STOPNODE	3	X		-	
IDC_EDITDEVICELIST	3	X		-	
IDC_PARAMNAME	3	X			
IDC_EDITINDEX	3	X			
IDC_EDITSUBINDEX	3	X			
IDC_EDITOLDNUMBER	3	X			
IDC_EDITVALUE	3	X			
IDC_PRINTOD	3	X			
IDC_BACKUP	3	X			
IDC_RESTORE	3	X			
IDC_INIT	3	X			

Setting Button Access Levels

Pressing the Button Access Configuration Button, on the General Setup Screen, opens a dialog (Config.txt) that allows the programmer to set access level for the function buttons (Enabled; Disabled; Hidden).



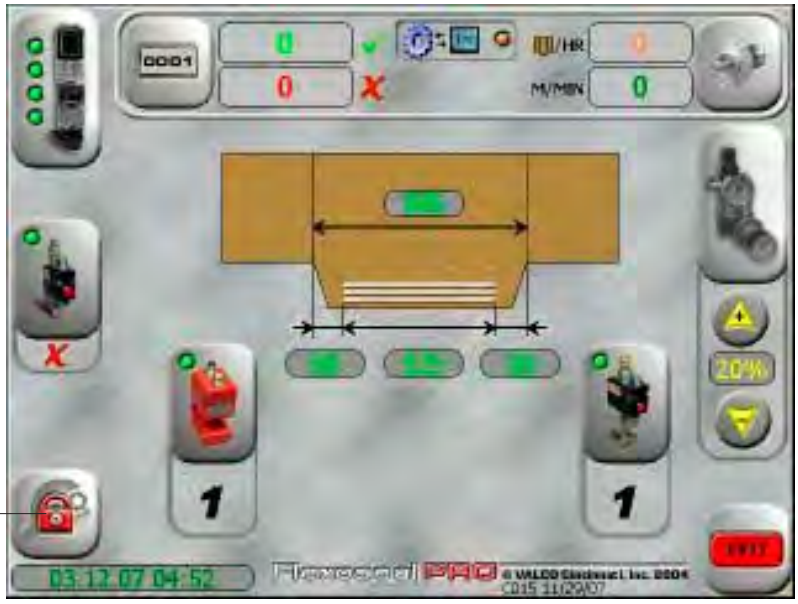
Button Access Configuration Button

General Setup Screen

Forgotten Passwords

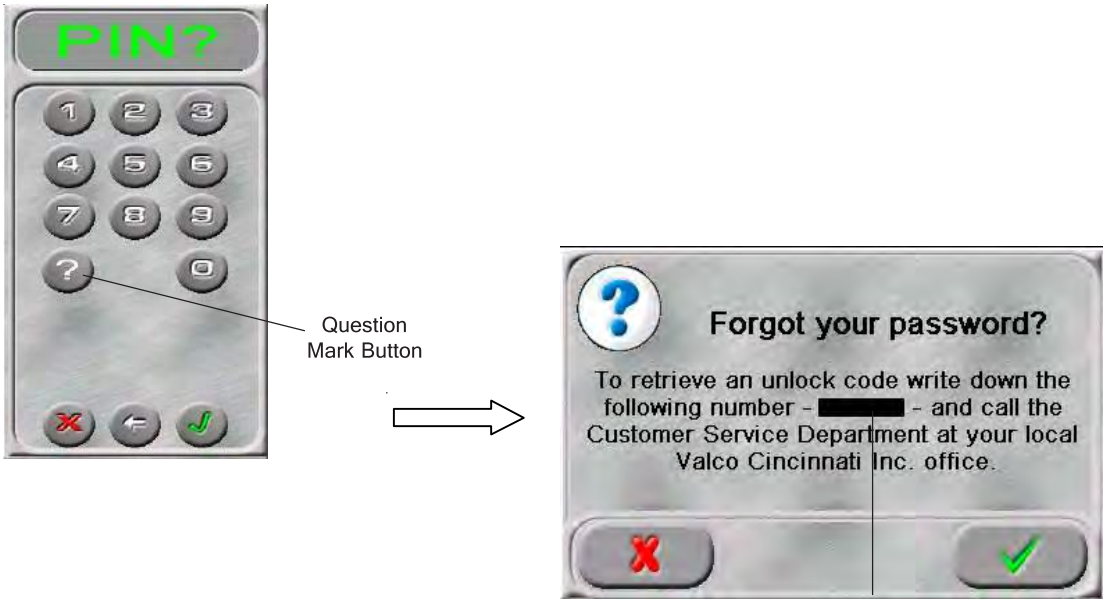
It is possible that the Administrator password may be lost. In this case, an Administrator needs to regain access to the system by obtaining a new Administrator password. To regain access, do the following:

1. On the Main Menu Screen, press the General Setup Button with the lock on it.



Main Menu Screen

2. When the keypad appears, press the question mark button to retrieve a special number. Be sure to write this number down.



Forgotten Passwords - Continued

3. Call your local Valco representative and be ready to give the special number to the service personnel. You will receive a special PIN code that will allow the Administrator's password to be changed.

4. Press the Confirmation Button. The keypad will appear.

The old Administrator password will not be retrieved. Instead, the old Administrator password will be changed to whatever the user is told to enter.

5. Enter the PIN code given by the Valco representative and press the Confirmation Button. A new keypad saying "Enter New PIN" appears.

Forgotten Passwords - Continued

6. On the “Enter New PIN” keypad, enter a new Administrator password--a password you choose--and press the Confirmation Button. Be sure to keep this new password in a safe place!

7. When the Password Changed Screen appears, the password change was successful. The Administrator password has been permanently changed.

At this point, the Administrator password has been changed and it can be used to gain *Administrator* privileges. Note that once the Administrator password has been changed, the special access PIN code that allows a user to change the Administrator password will be rendered invalid. If the Administrator password is lost again, the procedure for obtaining a special access PIN code for change of the Administrator password needs to be repeated.

Forgotten Passwords - Continued

8. Press the Confirmation Button to return to the Main Menu Screen.

Confirmation Button

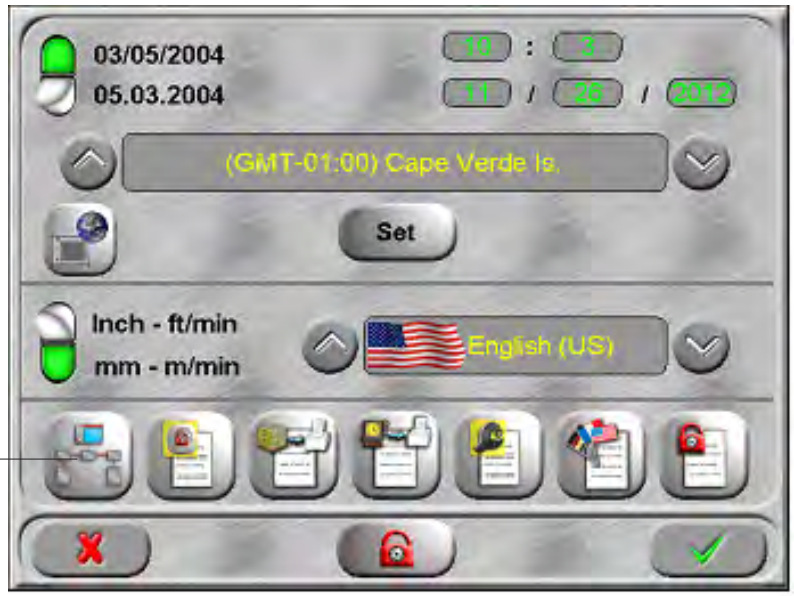
System Event History

To view the system event history, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

2. On the General Setup Screen, press the Access Parameters Button. The Parameter Setup Screen will appear.



General Setup Screen

System Event History - Continued

3. On the Parameter Setup Screen, press the System Event History Button. The System Event History Screen appears.

Parameter Setup Screen

3. The System Event History Screen lists all system events for the period requested. On this screen you can scroll through events in a past number of hours, or see events that occurred between specified dates.

System Event History Screen

System Event History - Continued

4. When checking for events between dates, enter the dates by pressing on the editable number for a keypad. Once the dates are entered, press the confirmation button to the right of the dates to see the list of events for the specified time period.

System Event History Screen

5. When finished, press the Confirmation Button on the System Event History Screen to return to the General Setup Screen. Press the Confirmation button on the General Setup Screen to return to the Main Menu Screen.

System Event History Screen

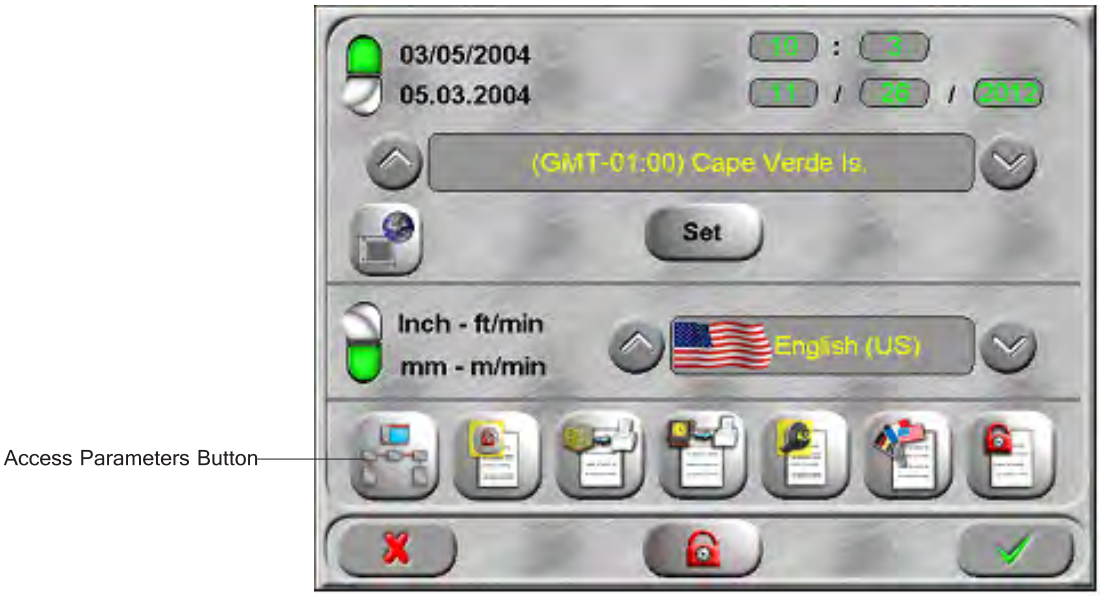
System Backup

To backup the system settings, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

2. On the General Setup Screen, press the Access Parameters Button. The Parameter Setup Screen will appear.



General Setup Screen

System Backup - Continued

3. On the Parameter Setup Screen, press the System Backup Button. The System Backup Confirmation Dialog appears.

Parameter Setup Screen

4. On the System Backup Confirmation Dialog, press the Confirmation Button to continue the backup, or press the Cancel Button to exit back to the Parameter Setup Screen.

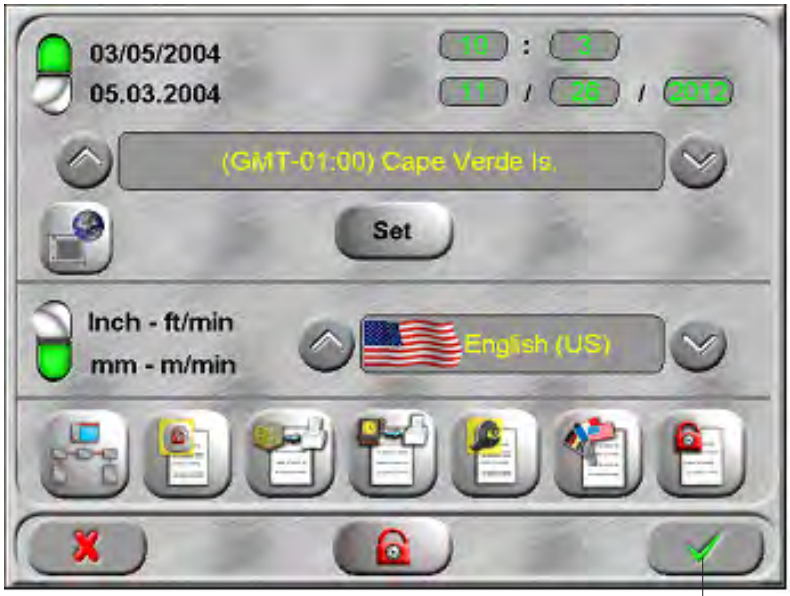
System Backup Confirmation Dialog
(Background faded out for emphasis)

System Backup - Continued

5. When the backup is finished, the screen will return to the Parameter Setup Screen. Press the Confirmation Button to return to the General Setup Screen.

Parameter Setup Screen

6. Press the Confirmation Button on the General Setup Screen to return to the Main Menu Screen.



General Setup Screen

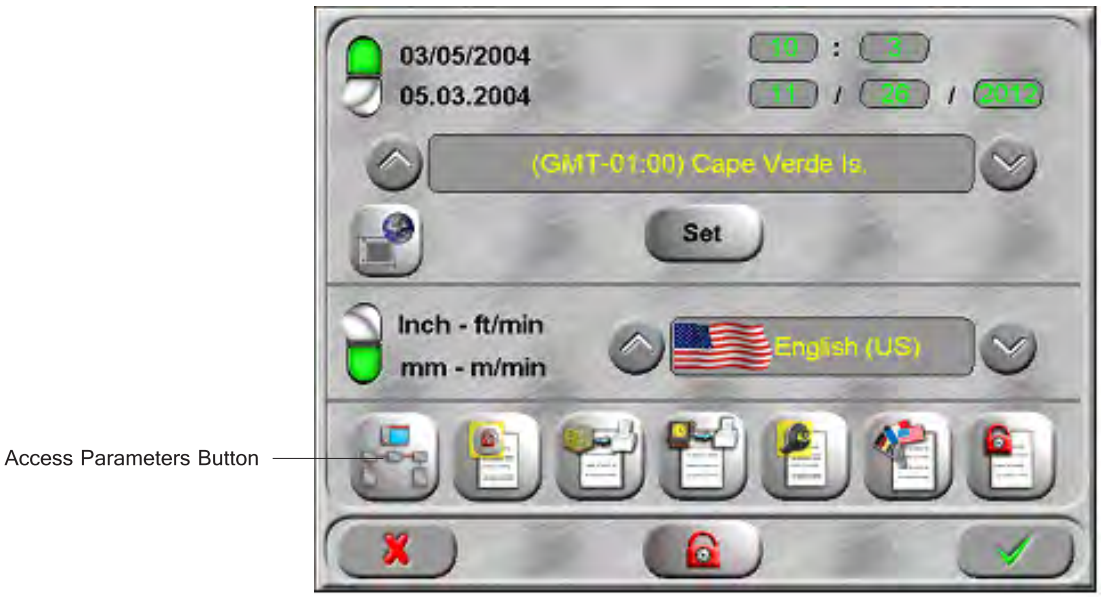
System Restore

To restore the system settings from a previous backup, do the following:

1. From the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

2. On the General Setup Screen, press the Access Parameters Button. The Parameter Setup Screen will appear.



General Setup Screen

System Restore - Continued

3. On the Parameter Setup Screen, press the System Restore Button. The System Restore Confirmation Dialog appears.

Parameter Setup Screen

4. On the System Restore Confirmation Dialog, press the Confirmation Button to continue the restore, or press the Cancel Button to exit back to the Parameter Setup Screen.

System Restore Confirmation Dialog

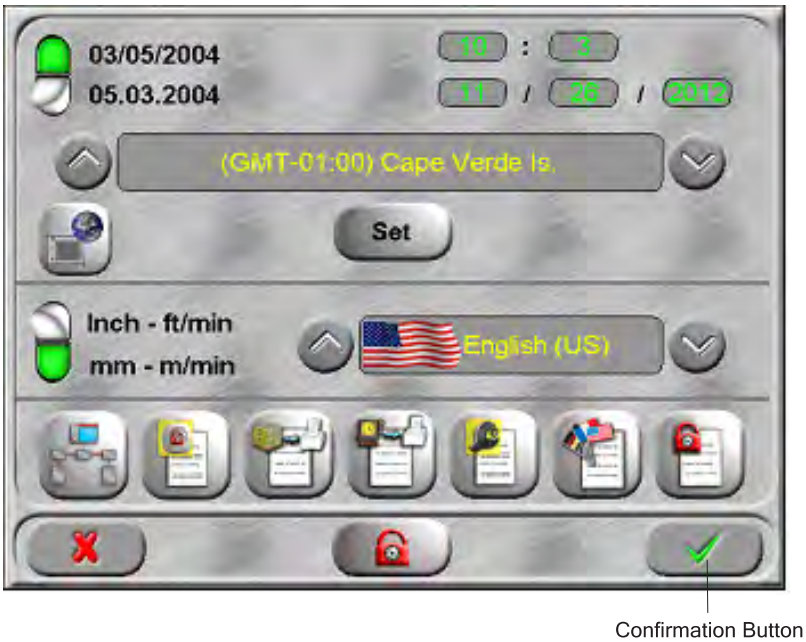
(Background faded out for emphasis)

System Restore - Continued

5. When the restore is finished, the screen will return to the Parameter Setup Screen. Press the Confirmation Button to return to the General Setup Screen.

Parameter Setup Screen

6. Press the Confirmation Button on the General Setup Screen to return to the Main Menu Screen.



General Setup Screen

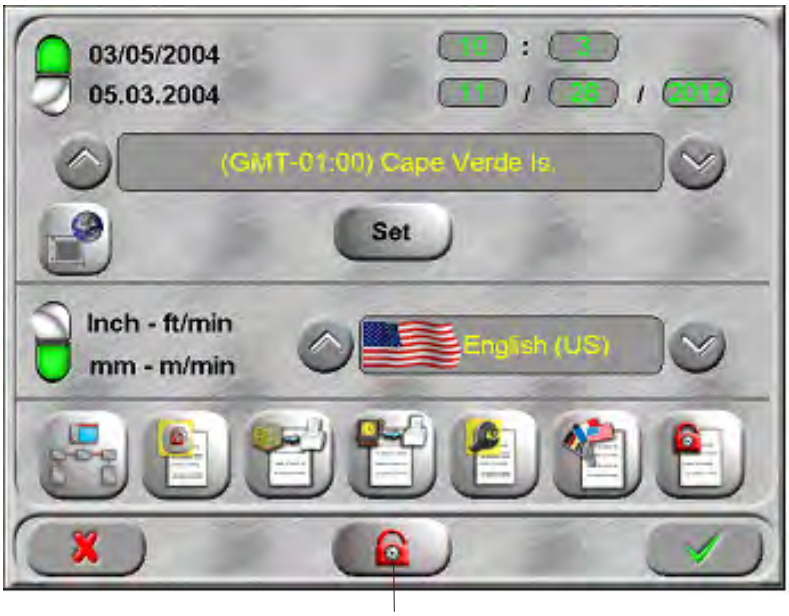
Lockout Configuration Access

To signout and lockout the system (so that correct passwords must be re-entered for configuration changes), do the following:

1. On the Main Menu Screen, press the General Setup Button. The General Setup Screen appears.

Main Menu Screen

2. On the General Setup Screen, press the Exit Level and Lock Button. The Main Menu Screen will appear with a locked General Setup Button.



General Setup Screen

Lockout Configuration Access - Continued

Main Menu Screen with Locked General Setup Button

OT-12 Operating System/Software Update for Updated Assembly Units

OT-12 (138xx017)

System and Tool Requirements

- Flash drive containing the correct folder structure with the software packages needed. This item will be referred to as a “flash drive” throughout these instructions.
- 2.5 mm hex wrench

Installation/Update Procedure

1. Place the OT-12 unit upright with the screen facing the user.
2. Remove the two flat head screws with the 2.5 mm hex wrench. Lift off the access cover. Keep the screws and the access cover for later use.

Installation/Update Procedure - Continued

3. If there is a flash drive installed in the unit, remove it. Keep the drive for later reinstallation.

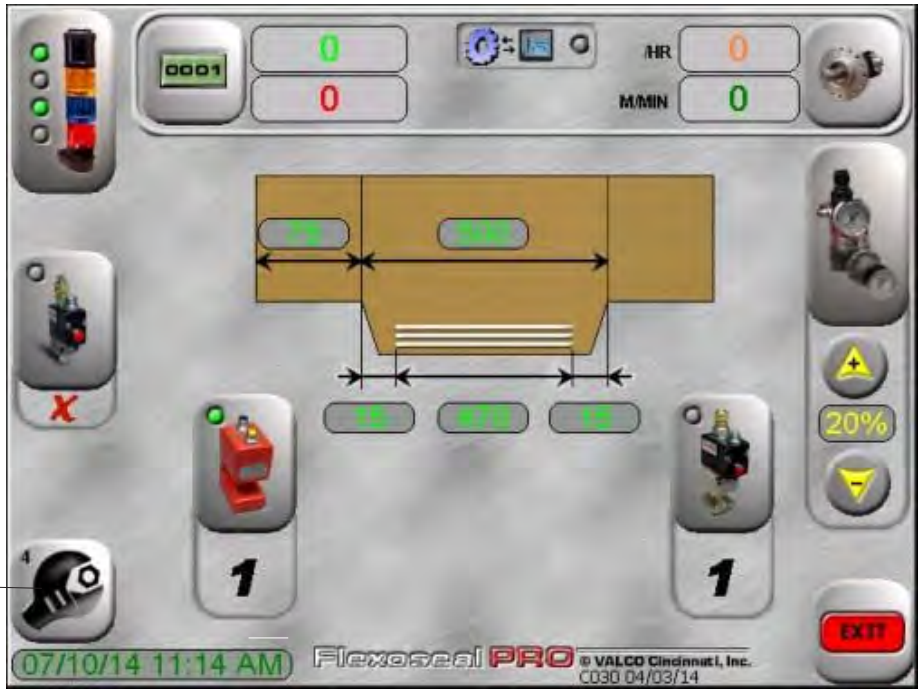
WARNING! Do not force the new flash drive into the slot. The flash drive must be inserted correctly or damage to the unit may result.

4. Hold the new flash drive as shown below. Insert the new flash drive into the port and gently press it until it “clicks” into place.

> The flash drive may be inserted at any time, and Vinstall is launched from Flexoseal.

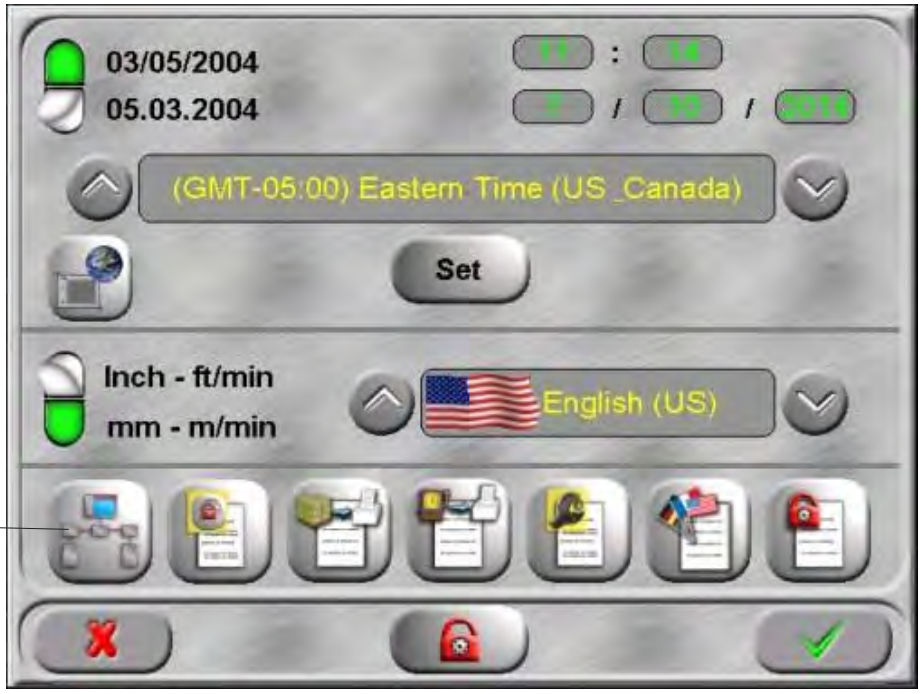
5. On the Main Menu, press the General Configuration Button to access the General Configuration Menu.

Installation/Update Procedure - Continued



General Configuration Button

6. On the General Configuration Menu, press the CAN Network Dialog (Parameter Access) Button to access the CAN Network Dialog.



CAN Network Dialog Button

Installation/Update Procedure - Continued

7. On the CAN Network Dialog, press the OT Update Button. An OT Upgrade prompt will appear.

OT Update Button

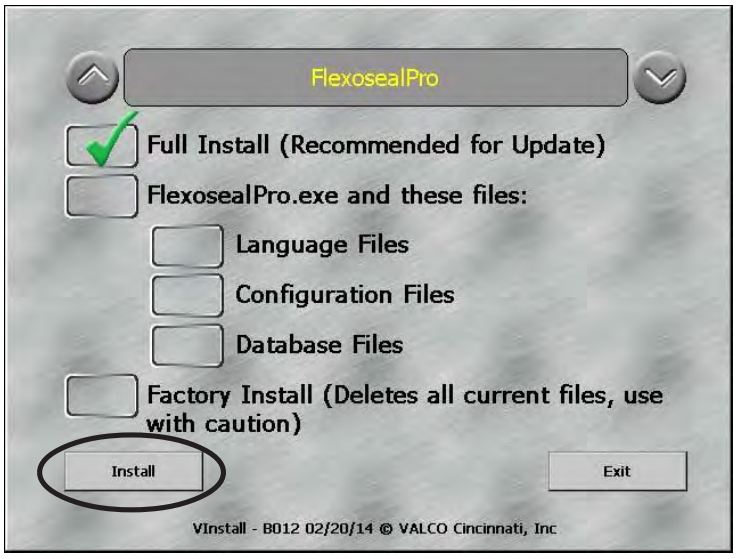
Cancel

Confirm (OK)

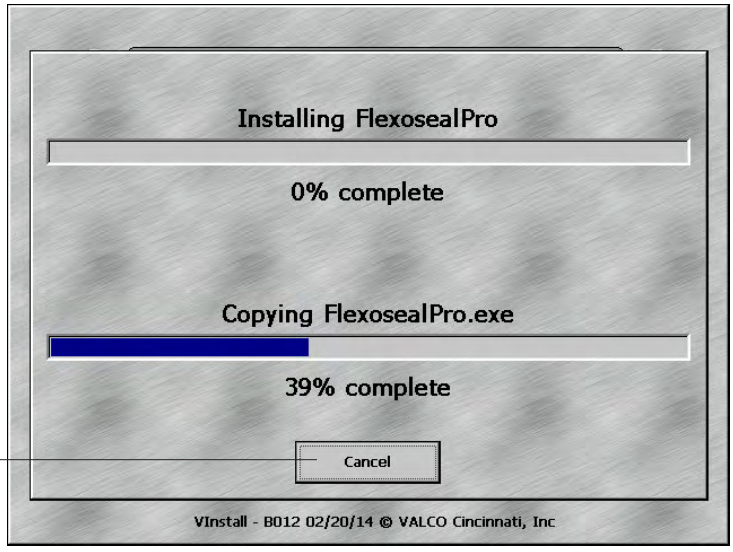
Installation/Update Procedure - Continued

8. Press “Confirm” (OK) to permit the upgrade, or “Cancel” to exit the upgrade.

9. At the Installation prompt, select “Full Install” and press the “Install” button.



10. At this point, progress information will be displayed in the following way (see below; the appearance of the screen may vary depending on the version of software installed):



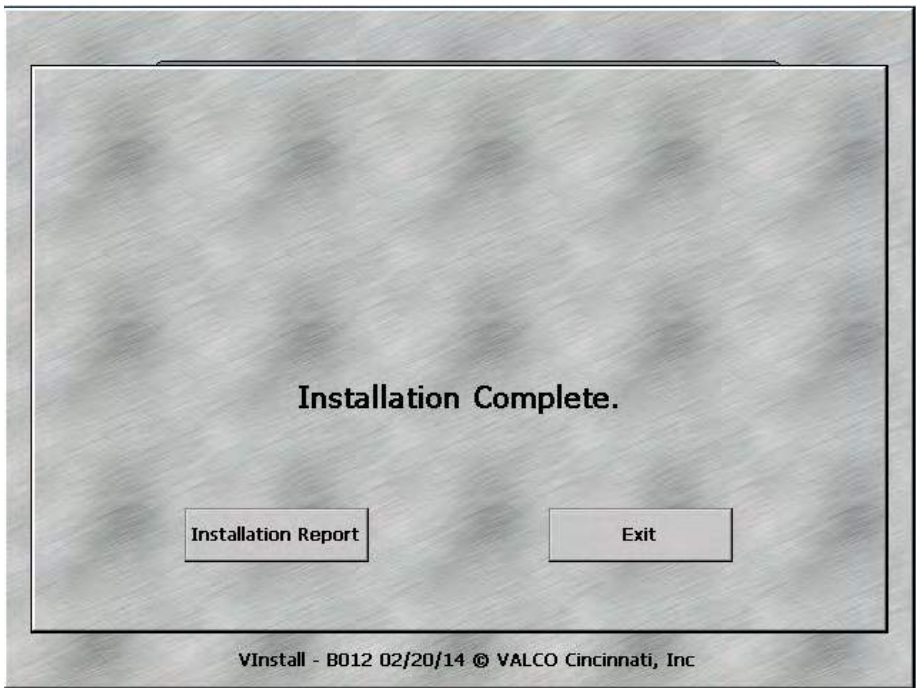
Press to cancel (exit) the installation

Installation/Update Procedure - Continued

Installation status information may not show on the screen. Wait at least 2 minutes for the “Installation Complete” message to show on the screen. Do not touch the unit during the installation. If the “Install Complete” message does not appear after a full 2 minutes, you may call Valco Cincinnati Inc. for technical assistance at (513) 874-6550.

All software package buttons are disabled during the installation process. It is now possible to install multiple packages simultaneously. Only the “Exit Installation” button is enabled so the user can abort the installation if necessary.

11. After the installation is completed, the following screen displays (The appearance of the screen may vary depending on the version of software installed):



12. The installation is complete. Press the “Exit” button.

13. Pressing “Exit” returns the user to the Installation Prompt screen. Upon pressing “Exit” at that screen, the operator is asked if he wishes to disable the power. Pressing “OK” (Confirm) sets the OT in ‘suspend’ mode.

Installation/Update Procedure - Continued

14. Turn off the OT-12 terminal by pressing the “ON/OFF” button.

15. After the above steps have been completed, the flash drive must be removed from the OT-12. Follow Step 3 to remove the flash drive.

16. Replace the access cover and the two screws that were removed in Step 2.

The OT-12 terminal is now ready to operate with the newly installed operating system and software package.

OT-12 (138xx003 and 138xx010)

System and Tool Requirements

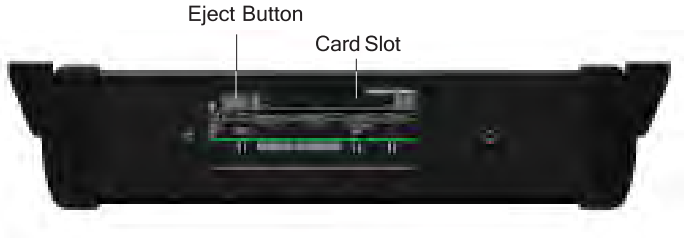
- PCMCIA adapter with flash drive (119xx194), containing the Windows CE image and the correct folder structure that contains the software packages needed. This item will be referred to as a “flash drive” throughout these instructions.
- 2.5 mm hex wrench

Installation/Update Procedure

1. Be sure the unit is off. Place the OT-12 unit upright with the screen facing the user.
2. Remove the two flat head screws with the 2.5 mm hex wrench. Lift off the access cover. Keep the screws and the access cover for later use.

Installation/Update Procedure - Continued

3. If there is a flash drive installed in the unit, remove it by pressing down on the eject button (see below). After the card is ejected, grasp it and slide it out of the unit. Keep the card for later reinstallation.



WARNING! Do not force the new flash drive into the slot, and do not drop it into the access opening. The flash drive must be inserted correctly or damage to the unit may result.

4. Hold the new flash drive as shown below. Insert the new flash drive into the card slot and gently press it until it “clicks” into place.

Installation/Update Procedure - Continued

5. Turn on the OT-12 by pressing the “ON/OFF” button. The VInstall screen will show if an OS upgrade is necessary.

-If an upgrade is necessary, follow these steps:

- Press “OS Upgrade”
- The upgrade starts and progress shows on the screen.
- When the upgrade is completed, press “Restart.”
- Turn the unit off.
- Turn the unit on. Wait for the calibration screen to appear (up to three minutes).
- When the calibration screen appears, follow the calibration instructions displayed on the screen.
- The calibration is complete when a confirmation of a successful OS update is shown on the screen.

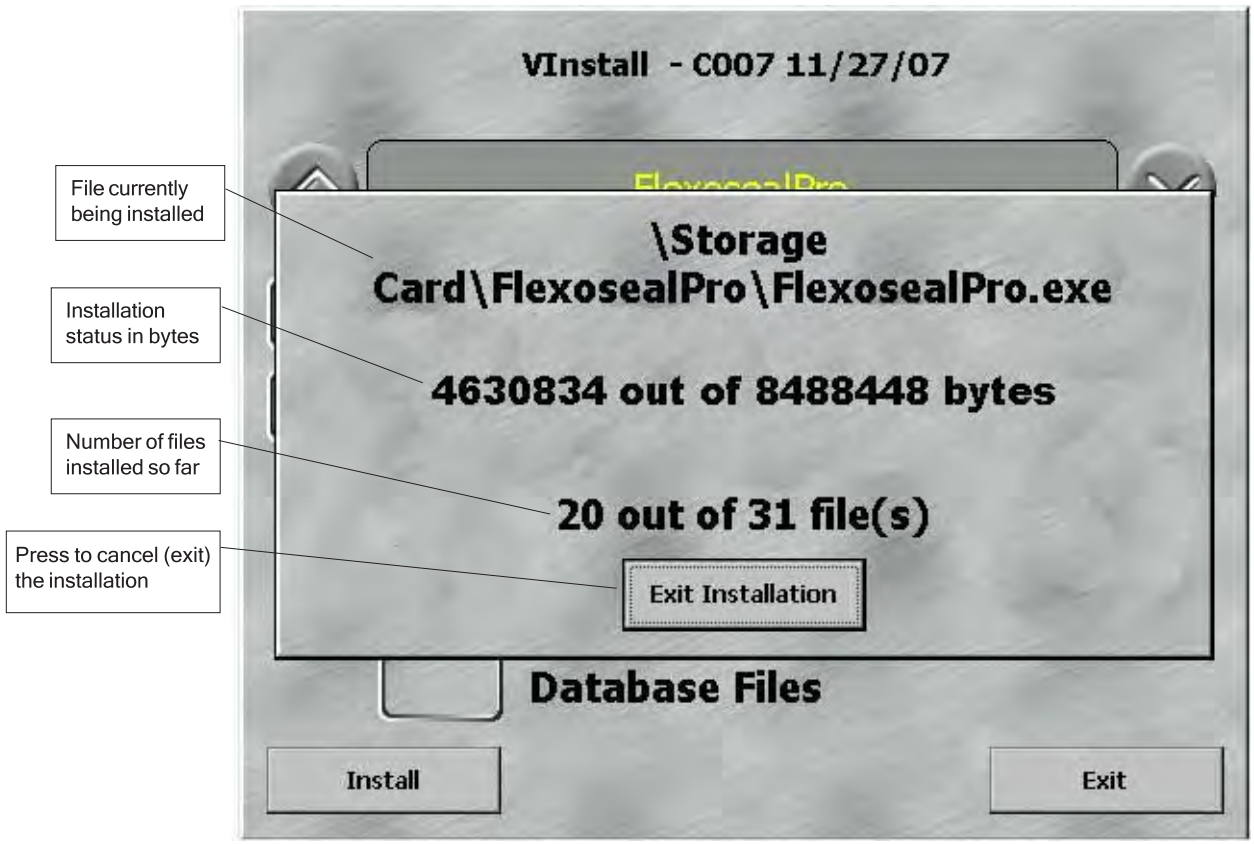
Installation/Update Procedure - Continued

6. After calibration (if calibration was necessary), the user may select an application to be installed. On the application install screen, click the application software package to be installed.

> For all updates from earlier versions, the "Full Install" option is recommended. The option "FlexosealPro.exe and Optional Files" is only used in special cases.
>
> All files that are overwritten will be copied into a "Backup" folder on the flash drive.

Installation/Update Procedure - Continued

7. At this point, progress information will be displayed as shown below (The appearance of the screen may vary depending on the version of software installed):

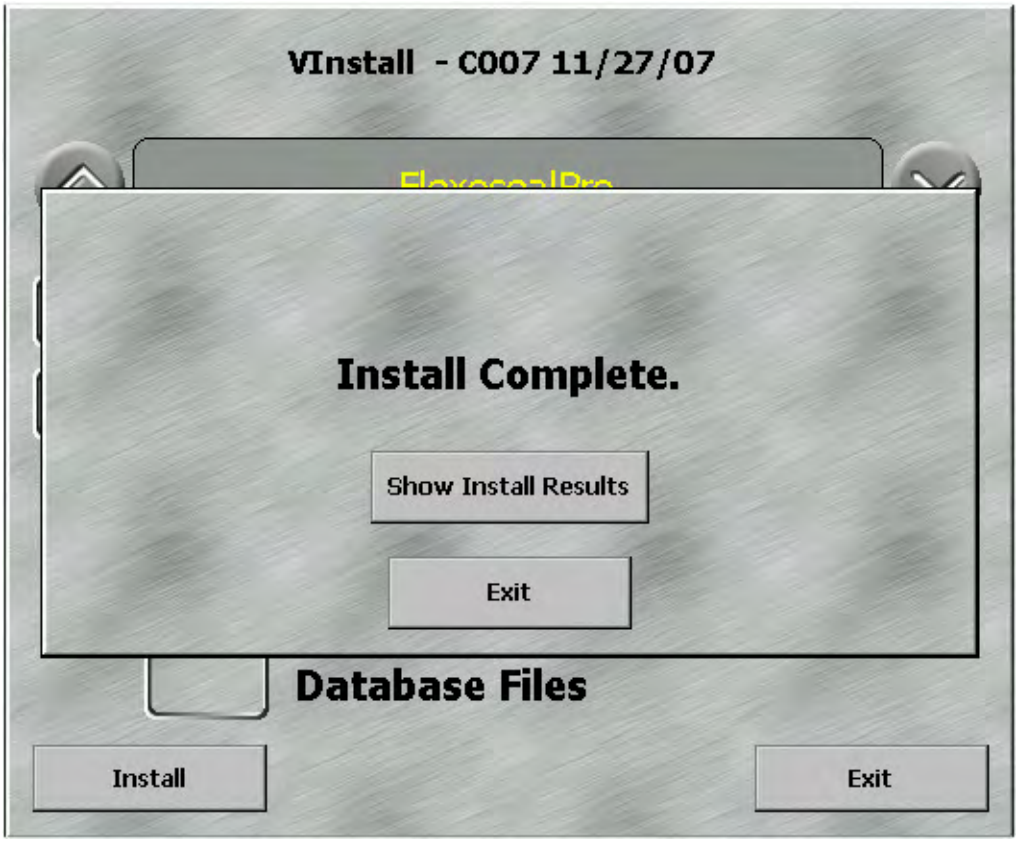


Installation status information may not show on the screen. Wait at least 2 minutes for the “Installation Complete” message to show on the screen. Do not touch the unit during the installation. If the “Install Complete” message does not appear after a full 2 minutes, you may call Valco Cincinnati Inc. for technical assistance at (513) 874-6550.

All software package buttons are disabled during the installation process. It is not possible to install multiple packages simultaneously. Only the “Exit Installation” button is enabled so the user can abort the installation if necessary.

Installation/Update Procedure - Continued

8. After the installation is completed, the following screen displays (The appearance of the screen may vary depending on the version of software installed):



9. At this point, the installation is complete. The user can press the "Exit" button to return to Windows CE.

10. "Tap" the lowest line of the touchscreen to activate the taskbar (if not already visible). Press "Start" and then select "Suspend."

11. Turn off the OT-12 terminal by pressing the "ON/OFF" button.

12. After the above steps have been completed, the flash drive must be removed from the OT-12. Follow Step 3 to remove the flash drive.

> If a previously installed flash drive was removed in Step 3, be sure to replace it before going on to Step 13.

13. Replace the access cover and the two screws that were removed in Step 2.

The OT-12 terminal is now ready to operate with the newly installed operating system and software package.

Optional

If progress information is desired while installing the operating system (Windows CE), the OT-12 must be connected to a PC / Laptop through a serial cable.

Please observe the following requirements for this operation:

- PC / Laptop with Windows 98 / 95, Windows NT, Windows 2000 or Windows XP
- HyperTerminal application installed on the PC / Laptop
- Null Modem Cable

After installing the flash drive and before turning on the OT-12, connect the serial cable from the PC / Laptop to the OT-12 and open the HyperTerminal application. Use the setting 38400 baud, no parity, 8 data bits, 1 stop bit (38400,8,N1) with no handshaking, and set the Terminal emulation mode to TTY.

Proceed with the steps outlined in this instruction sheet and observe the progress information while the Windows CE operating system is being installed.

SECTION 7 - MAINTENANCE

This section contains maintenance procedures for the Flexoseal PRO system. A regular maintenance program helps ensure longer life and efficient operation of your system. A few minutes spent on maintenance greatly reduces downtime. For detailed information on component maintenance (DD-1 Pump, Glue Station, Balancing Regulator, 900 Valve, Fluid Filter, Check Valve, Beacon/Alarm, Marking Valve), refer to Valco's *Flexoseal Adhesive Delivery and Application System* manual (MY023).

Checking the Settings

At the beginning of each shift, follow these steps:

1. Check all air pressure settings.
2. Check all glue pressure settings.

Purging the Adhesive

The system should be purged of air at every startup or shift change. To purge the system, follow these steps:

1. Install the applicator head onto the contact glue valve.
2. Purge adhesive until no air is present and the glue flows evenly.

The glue valves can be purged manually using an activator located on the valve itself, by a solenoid-operated air valve, or they can be purged using the touchscreen panel and control.

When using any valve in the top-down position for the first time, it might be necessary to remove the valve and hold it so that the applicator head is at the top. The fluid pressure should then be set to 4 bar, and the solenoid should be fired until all the air is out and a flow of glue is present.

Performing Downtime Maintenance

During short periods of downtime, such as order changeover, follow these steps:

1. Apply lithium grease or petroleum jelly to the orifice of the applicator head (contact extrusion valve) to prevent dried adhesive from clogging the valve.
2. Wipe the valve clean before restarting production.

For longer periods of downtime, follow these steps:

1. Remove the applicator head from the contact glue valve.
2. Install a stopper onto the contact glue valve in place of the applicator head.
3. Flush the applicator head with clean water.

If the system is idle for 30 days or longer, follow these steps:

1. Flush the entire glue supply system (including the pump or tank) with clean water (see *Flushing the Adhesive System* in this section).

Flushing the Adhesive System

A mild vinegar-and-water solution (1 part vinegar, 10 parts water) should be used to flush the system. Water alone can be used when you are simply changing adhesives or preparing the system for an extended period of downtime.

The entire system must be flushed when the following conditions apply:

- A new adhesive formula is not compatible with the present formula.

Always consult your adhesive supplier regarding compatibility between adhesive formulas.

- System shutdown exceeds 30 days.
- Glue-line buildup causes an excessive pressure drop.
- Excessive filter screen maintenance is required due to contaminated adhesive.

Lubricating the System

To lubricate the system, do the following:

- Use lithium grease on all machined threads and fittings when servicing the system.
- Grease quick-disconnect fittings frequently to prevent dried glue from causing excessive wear.

Cold Glue System Maintenance Schedules

The following maintenance procedures are for cold-glue systems only. **If used on hot-melt units, damage to the equipment may occur.**

Daily, weekly, 3-month, 6-month, and 12-month maintenance schedules should be followed consistently to reduce poor performance and possible downtime of the system.

The following maintenance logs can be copied and used for maintenance recording.

Daily Maintenance

Daily Maintenance Procedure: 1. Clean the exterior portion of the glue valves, nozzle tips, glue heads, etc. 2. Purge the glue valves if necessary, and be sure the glue is flowing properly. 3. Make sure that air and glue pressure settings are correct. 4. If using glue inspection: a. Make sure the sensor is clean. The lens must be clean and clear with no scratches. b. Check the sensor for proper height adjustment. c. If available and necessary, adjust the sensor for proper sensitivity. 5. Record maintenance date, shift, and initials on this maintenance record form.	Date	Shift	Initials

Weekly Maintenance

Weekly Maintenance Procedure:	Date	Shift	Initials
1. Clean the glue filter thoroughly with water. 2. Model 585 non-contact valves only: Disassemble the fluid section of the glue valve and clean all parts thoroughly with water. 3. Replace the valve spring. 4. Lubricate the valve with Teflon oil. 5. Reassemble the fluid section. 6. Purge all air from the system using the 3-way purge valve on the output of the glue filter. 7. Purge each valve in the system. Approximately 1-2 ounces of glue should be purged for proper glue flow. 8. Check for any glue leakage or drips on the needle seat. Replace the needle/plunger and the seat if leaks or dripping is found. 9. When using a single, or multi orifice nozzle, apply a small amount of lithium grease to the flat surface area of the nozzle seat before attaching the retaining nut. 10. Check all quick disconnect fittings for dried glue or swelling that may restrict the glue flow. Replace or rebuild fitting with a new o-ring and seal if necessary. 11. Lubricate each quick-disconnect fitting with lithium grease. 12. Record maintenance date, shift, and initials on this form.			

Monthly Maintenance

Monthly Maintenance Procedure:	Date	Shift	Initials
1. Encoder Mounting:			
a. Check timing belt, gear, and pulley teeth. Check for proper timing belt tension.			
b. If using a measuring wheel, check for wear and proper wheel tension on machine belt.			
c. If using direct drive encoder, check coupling and rotation of shaft for proper alignment.			
2. Glue Valves: Electric Only, including Models 300, 400, and 900 Boardrunner (Contact and Non-contact types):			
Note: For air operated glue valves, such as Valve Model 366, refer to the 3-month maintenance schedule.			
Glue Heads/ Nozzle Tips:			
a. Check Glue Head/ Nozzle tips for wear or corrosion around orifices.			
b. Check o-ring and seal in quick disconnect fitting for wear or swelling. Replace if necessary.			
Gauges:			
c. Check all air and glue pressure gauges for proper operation; check settings.			
3. Cables: Valve, Scanner, Encoder, etc.			
a. Check all cables for any unusual wear or cuts. Check for defective connectors and broken male pins inside the connector. Replace cable if necessary.			
4. Air lines/Glue lines:			
a. Check all air lines and glue lines for cracks or kinks which would restrict proper air or glue flow. Check shut off valves on glue lines for proper operation. Replace any of the above items if found defective.			
5. Perform Daily and Weekly Maintenance.			
6. Record maintenance date, shift, and initials on this form.			

3-Month Maintenance

3-Month Maintenance Procedure: 1. For Model 366 Contact Valves Only. Disassemble, clean, and rebuild each individual glue valve. 2. Perform the Weekly Maintenance Procedure: 3. Perform the Monthly Maintenance Procedure. 4. Record maintenance date, shift, and initials on this maintenance record form.	Date	Shift	Initials

6-Month Maintenance

6-Month Maintenance Procedure: 1. Flush the entire glue system when a separate pump is used on each machine with a 1:10 vinegar and water solution (1 gallon vinegar to 10 gallons water). Not required on central pumping systems. 2. Perform the Weekly Maintenance Procedure. 3. Perform the Monthly Maintenance Procedure. 4. Perform the 3-Month Maintenance Procedure. 5. Record maintenance date, shift, and initials on this maintenance record form.	Date	Shift	Initials

12-Month Maintenance

12-Month Maintenance Procedure:	Date	Shift	Initials
1. Flush the entire glue system, including the central pumping system if possible with a 1:10 vinegar and water solution (1 gallon vinegar to 10 gallons water). 2. Disassemble, thoroughly clean, and rebuild each individual fluid regulator assembly and glue valve assembly. 3. Perform the Weekly Maintenance Procedure: 4. Perform the Monthly Maintenance Procedure. 5. Perform the 3-Month Maintenance Procedure. 6. Perform the 6-Month Maintenance Procedure. 7. Record maintenance date, shift, and initials on this maintenance record form.			

SECTION 8 - TROUBLESHOOTING

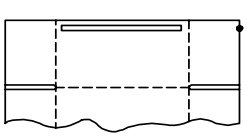
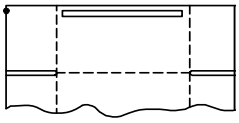
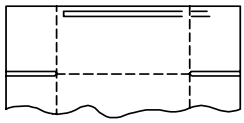
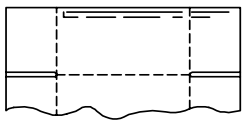
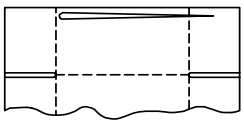
Illustration	Defect	Reason	OT- 12 Message
	A drop of glue at the end of the product	Contact valve: - No vacuum - Defective o-ring in 366 valve - Too much guide spring tension on combi station (product is moving too much at the glue station) - Reduce air pressure to the Boardrunner (not enough contact pressure)	- Extra Glue Line - Late End
	A drop of glue at the beginning of the product	Contact valve: - Poor guiding ensure better contact during the entire application length - Reduce air pressure to the Boardrunner	- Extra Glue Line - Early Start
	An interruption of the glue pattern on the perforation of the product.	- Glue pattern is too close to the perforation. Shorten the glue pattern. - If the pattern is for extended tabs, increase glue pressure or use non-contact gluing to fill in the perforations	- Late End
	Poor glue pattern	- Air bubbles are in the glue system. Run the adhesive through the glue line. Purge air from the glue line. Flush system if necessary.	- Gap Error - Early End - Too Little Volume
	Glue pattern begins thick and then trails off.	Combi station: - Angle of the applicator head is too steep. Adjust angle to 35 degrees. - Air pressure to 3-way valve is too high. Lower to 25 psi (2.7 bar) higher than the highest operating glue pressure. Boardrunner: - Reduce air pressure to Boardrunner to increase contact pressure. - Improve guiding so board stays in contact with the head during the entire gluing cycle.	- Early End - Too Little Volume

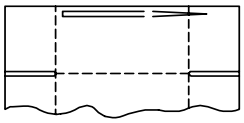
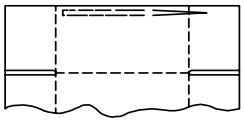
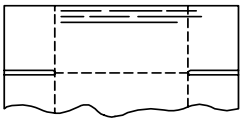
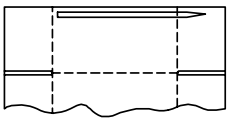
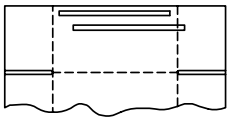
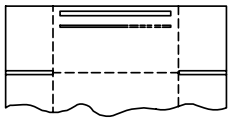
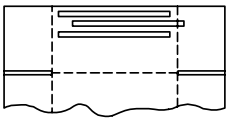
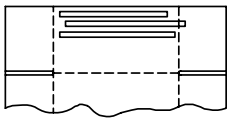
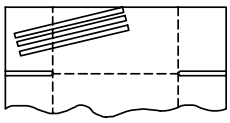
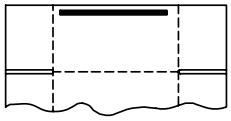
Illustration	Defect	Reason	OT- 12 Message
	Normal glue pattern start with training at the end.	Combi station: - Angle of applicator head is not steep enough. See above. - Worn o-ring in the swivel fitting. Replace. Boardrunner: - Check 900 valve plunger and spring for wear	- Late End - Too Little Volume
	Glue pattern consists of drops of glue with trailing.	- Contact between the product and the spring guide is poor. Combi station: - Increase the tension of the spring. Boardrunner: - Decrease the air pressure to the Boardrunner to improve contact	- Gap Error - Too Little Volume
	Differences in glue stripes.	- The glue lap crusher setting is too narrow. - The glue station is not in line with the product.	- Gap Error - Too Little Volume - Missing Glue Line
	Good pattern with trailing	- Glue pressure is too high. Set the pressure to 10- 15 psi (1.7-2 bar). - Valve shutoff is slow. Change spring. Boardrunner: - Board contact poor. Decrease air to Boardrunner	- Late End
	Good pattern position at slow parent machine speed. Delayed pattern at higher speed.	Combi station: - Glue may be present in the air solenoid valve. Change the air solenoid. Boardrunner: - Valve may need maintenance. Check plunger and spring. Control: - Check Ton/Toff – increase Ton to move start forward at higher speed	- Late Start - Late End

Illustration	Defect	Reason	OT- 12 Message
	Good pattern at slow parent machine speed. Thin pattern at higher speed (not enough glue).	- Increase the EPC pressure across the speed range at the control - EPC increase solenoid may be clogged. Check it.	- Too Little Volume
	Pattern length is acceptable but the pattern position shifts.	- Adjust the sensitivity of the product scanner. - Check position of the scanner. - Scanner may detect a machine's sheet transporter instead of the product.	- Late Start - Late End
	Pattern length and position vary.	- Encoder belt is loose. - Gear is loose. - Parent machine drive is faulty. - Encoder is damaged. - Slippage of disks between the folding belts.	- Early Start - Late Start - Early End - Late End
	Pattern skewed and positioned too close to the leading edge of the product.	<u>Combi station:</u> - Guide spring tension is too high. <u>Boardrunner:</u> - Air pressure on Boardrunner set too low. Iincrease air to take weight off the board. - Not enough pressure between folding belts. - Loose glue station. - Low panel boxes with deep slots are deforming the product.	- Early Start - Early End
	Too much glue after the parent machine is stopped and restarted.	- Glue pressure regulator may not close properly. - Check ball and seat for dirt. - Repair regulator. - Change regulator to pressure balancing regulator	- Too Much Volume

Glue-Related Problems

Problem	Possible Cause	Possible Solution
Glue Pattern Problems		
1. At low speed, the pattern length is too short or too long.	1a. Either the "delay" or the "pattern" value is incorrect. 1b. Ratio compensation is incorrect.	1a. Ensure that the "delay" and "pattern" values have been correctly entered. 1b. Ensure that ratio compensation has been correctly entered.
2. At low speed, the delay is too short or too long before the pattern starts.	2a. "Delay" value is incorrect. 2b. Ratio compensation is incorrect. 2c. Cell-to-gun value is incorrect.	2a. Ensure that the "delay" value has been correctly entered. 2b. Ensure that the ratio compensation has been correctly entered. 2c. Ensure that the cell-to-gun value has been correctly entered.
3. At high speed, the pattern length is too short or too long.	3a. Either the "delay" or the "pattern" value is incorrect. 3b. Pattern length is incorrect at low speed. 3c. Either the on or off compensation is incorrect.	3a. Ensure that the "delay" and "pattern" values have been correctly entered. 3b. Ensure that the pattern length is correct at low speed. 3c. Ensure that the on and off compensations have been adjusted properly.
4. At high speed, the delay is too short or too long before the pattern begins.	4a. "Delay" value is incorrect. 4b. "Delay" position is incorrect at low speed. 4c. "On" compensation is incorrect.	4a. Ensure that the "delay" value has been correctly entered. 4b. Ensure that the "delay" position is correct at low speed. 4c. Ensure that the "on" compensation has been correctly entered.
5. There is a drop of glue at the end of the product	5a. Air in glue line 5b. Glue viscosity too low 5c. Defective O-ring 5d. Too much guide-spring tension (too much product movement at the glue station)	5a. Purge air from glue line. 5b. Increase glue viscosity to 1500-2000 cps. 5c. Replace O-ring. 5d. Decrease guide-spring tension.

Problem	Possible Cause	Possible Solution
6. There is an interruption of the glue pattern on the perforation of the product.	6a. Glue pattern is too close to the perforation	6a. Shorten the glue pattern.
7. Glue pattern is poor.	7a. Air bubbles are present in the glue system.	▪ Run adhesive through the glue line to purge air from the system ▪ Flush system
8. The glue pattern begins thick, but then trails off.	8a. Air pressure to the 3-way valve is too high.	8a. Lower the air pressure to 80 psi (6.5 bar) higher than the highest operating glue pressure.
9. The glue pattern begins normally, but then trails off.	9a. There is a worn O-ring in the swivel fitting.	9a. Replace O-ring.
10. The glue pattern consists of drops of glue with trailing.	10a. Contact between the product and the spring guide is poor.	10a. Increase the tension of the spring.
11. There are differences in glue stripes.	11a. The glue lap crusher setting too narrow.	11a. The glue station is not in line with the product.
12. Good pattern with trailing.	12a. Glue pressure is too high.	12a. Decrease glue pressure.
13. Trailing (glue pattern is applied past the point of desired shutoff).	13a. Shutoff point not set correctly 13b. Air is present in glue lines 13c. Applicator head O-ring is missing or worn 13d. Dirty solenoid air valve	13a. Adjust glue dimensions on touchscreen. 13b. Purge air from glue lines. 13c. Replace O-ring 13d. Clean the solenoid air valve.
14. Good pattern position at slow parent machine speed. Delayed pattern at higher speed.	14a. Glue may be present in the air solenoid valve.	14a. Change air solenoid. Reset settings.
15. Good pattern at slow parent machine speed; thin pattern (not enough glue) at higher speed.	15a. Insufficient glue pressure.	15a. Increase glue pressure.
16. Pattern length is acceptable but the pattern position shifts.	16a. Scanner may be detecting a machine's sheet transporter instead of the product.	16a. Adjust the sensitivity of the product scanner to detect product a maximum of 2 inches below normal product travel.

Problem	Possible Cause	Possible Solution
17. Pattern length and position vary.	17a. Encoder belt loose. 17b. Gear is loose. 17c. Parent machine drive is faulty. 17d. Encoder is damaged. 17e. Slippage of discs between the folding belts.	17a. Tighten encoder belt. 17b. Tighten gear. 17c. Repair or replace parent machine drive. 17d. Repair or replace encoder. 17e. Tighten folding belts.
18. Pattern skewed and positioned too close to the leading edge of the product.	18a. Guide spring tension too high. 18b. Not enough pressure between folding belts. 18c. Loose glue station. 18d. Low panel boxes with deep slots may be deforming the product. 18e. (BOARDRUNNER) Top cartridge too heavy.	18a. Decrease guide-spring tension. 18b. Increase pressure between folding belts. 18c. Tighten glue station. 18d. Adjust belt tension. 18e. Increase air pressure.
19. Too much glue after the parent machine is stopped then restarted.	19a. Glue pressure regulator may not be closing properly.	19a. Check ball and seat for dirt. 19b. Repair regulator. 19c. Add a dump valve.
20. There is insufficient glue at high speed.	20a. Air system leak. 20b. Air system obstruction. 20c. Defective air valve in the transducer. 20d. Defective EPC card.	20a. Repair the leak. 20b. Clean the air system. 20c. Repair or replace air valve. 20d. Replace EPC card.
21. There is insufficient glue at any speed.	21a. Glue flow set too low. 21b. Fluid pressure regulator set too low or too high. 21c. Low air pressure supplied to pump. 21d. Obstruction in the glue system. 21e. Obstruction in the glue line. 21f. Dirty applicator head. 21g. Glue pressure too high (actuating air cannot overcome the glue pressure). 21h. Viscosity of the glue is too high.	21a. Increase glue flow. 21b. Adjust the fluid pressure regulator. 21c. Increase air pressure. 21d. Clean the glue filter. 21e. Flush the glue supply system. 21f. Clean applicator head. 21g. Reduce glue pressure or increase air pressure at the solenoid valve. 21h. Use glue with 1500-2100 cps viscosity.

Problem	Possible Cause	Possible Solution
22. Glue is not present on product.	22a. Valve selector switch (front panel of control) is in the wrong position.	22a. Set switch to proper position.
	22b. Not enough air pressure at the glue pump	22b. Increase air pressure and check the air supply.
	22c. Obstruction in glue supply line or pressure regulator	22c. Clean the glue supply
	22d. Low glue supply or no glue	22d. Replenish the glue
	22e. Defective pump	22e. Repair or replace pump
	22f. Filters are clogged	22f. Clean the filters
	22g. Control has not been turned on	22g. Turn on control.
	22h. Defective power switch	22h. Replace power switch/module.
	22i. Defective control fuse	22i. Replace control fuse.
	22j. Defective valve circuit fuse	22j. Replace valve circuit fuse.
	22k. Damaged valve cable	22k. Replace cable.
	22l. Loose cable connections	22l. Tighten cable connections.
	22m. Glue pressure is too high (the air required to operate the valve cannot overcome the glue pressure.)	22m. Decrease the glue pressure.
	22n. Dirty or defective fluid pressure regulator	22n. Clean or replace the regulator.
	22o. Defective solenoid air valve	22o. Repair or replace the solenoid air valve.
	22p. Obstruction in the glue valve	22p. Clean or repair the glue valve.
	22q. Obstruction in the applicator head	22q. Remove the applicator head and flush with water. Remove the side screws and flush with water.
23. Intermittent glue pattern.	23a. Air is present in the glue lines	23a. Purge air from the glue lines.
	23b. Loose air solenoid valve connection	23b. Tighten connection.
	23c. Applicator head does not touch the product	23c. Adjust tension spring.
24. Too much glue on one side of pattern.	24a. Applicator assembly is either too high or too low	24a. Adjust height of glue station.

SECTION 9 - PART NUMBER LIST

How to Order Parts

To order parts, please contact your closest Valco office by mail, phone, or Email:

USA:

Valco Cincinnati, Inc.
497 Circle Freeway Drive
Suite 490
Cincinnati, OH 45246
Tel: (513) 874-6550
Fax: (513) 874-3612
Email: sales@valcomelton.com
Web: http://www.valcocincinnatiinc.com

England:

Valco Cincinnati Limited
Hortonwood 32
Telford, TFI 7YN, England
Tel: (+44) 1952-677911
Fax: (+44) 1952-677945
Email: sales@valco.co.uk
Web: http://www.valco.co.uk

Germany:

Valco Cincinnati GmbH
Bonnerstrasse 349
40589 Dusseldorf-Benrath, Germany
Tel: +49 211 984 798-0
Fax: +49 211 984 798-20

Spain:

Melton S.L.U.
Pol. Industrial Agustinos
calle G, n. 34
31160 Orcoyen, Navarra, Spain
Tel: (34) 948-321-580
Fax: (34) 948-326-584

France:

Valco Melton France
Technoparc des Hautes Faventines
32 Rue Jean Bertin
26000 Valence
Tel: +33 (0)4 75 78 13 73
Fax: +33 (0)4 75 55 74 20

MCP-12/4 Control (098xx066)

098xx066 - Continued

Description	Part Number	Qty
Enclosure	026xx129	1
Enclosure Cover	026xx128	1
Bracket	582xx681	1
Gasket	763xx136	100
Compression Latch - Small	091xx501	2
Clamp, PCB Retaining	026xx127	1
Hex Nut	798xx299	5
Lock Washer	784xx308	8
Terminal	091xx453	2
Wire Terminal, Female	075xx078	3
Wire Terminal, Ring	075xx075	3
Wire, Green/Yellow	540xx090	39
Installation Kit	091xx561	1
Cable Assembly	029xx133	1
Insulator	101xx011	1
PCB Assembly, CAN CPU	151xx515	1
PCB Assembly, with Spike Adjustment	151xx484	1
PCB Assembly	151xx483	1
PCB Assembly, Power Supply	151xx549	1
PCB Assembly, MCP-12	151xx557	1
PCB Assembly, Standby Adapter Brd	151xx457	1
Ribbon Cable Assy	033xx154	1
Card Guide	091xx560	5
Transformer	550xx132	1
Power Entry Module	086xx055	1
Fuse, 6.3 AMP	085xx221	2
Ty-rap	067xx007	4
Tie Mounts	067xx003	2
Cable Assy	029xx138	1
EPC Assembly	753xx432	1
Hole Plug	781xx228	2
Screw Lock, Female	091xx514	4
Flat Washer	798xx753	7
Stud, Ground	091xx519	1
Screw	784xx259	13
Screw	784xx310	1
Gasket	746xx111	1
Receptacle	091xx570	1
Stud	091xx571	1
Retaining Ring	091xx572	1

098xx066 - Continued

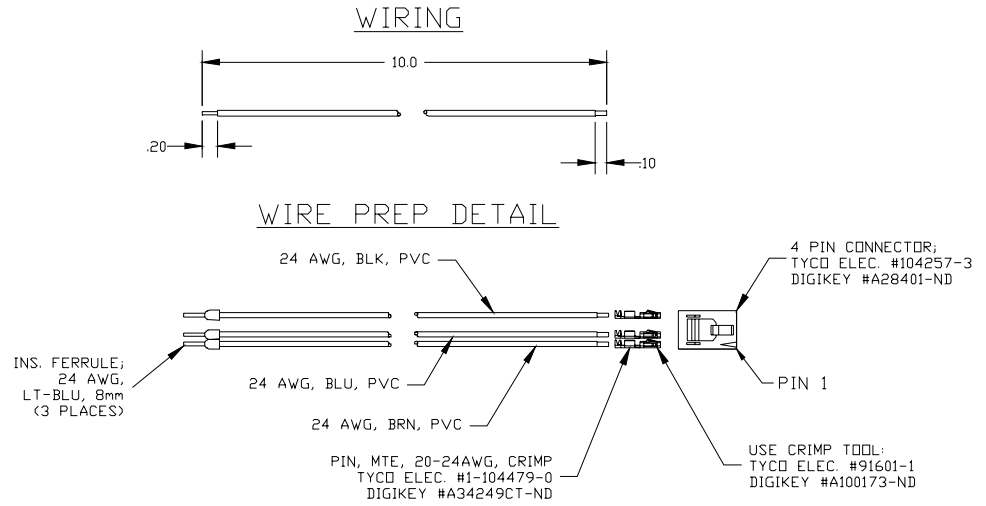
Description	Part Number	Qty
Flat Washer	784xx183	1
Split Lock Washer	798xx593	1
Lock Washer	784xx375	2
Nut	793xx491	1
Screw	784xx112	7
Connector, Plug	070xx080	1
Screw	784xx395	1
Nut	798xx489	1
Label	781xx433	1
Flat Washer	784xx435	5
Label	781xx780	1
Label	781xx820	1
Split Lock Washer	798xx382	3
Insulator	101xx012	1
Lock Washer	784xx315	3
Ty-rap	067xx005	1
Wire Tie	067xx096	1

OT-12 Touchscreen (138xx017)

(138xx017) - Continued

Description	Part Number	Qty
SBC,OMAP3703,800MHZ,512M DDR	151XX704	1
LCD ASSY; 6.5" TFT/TOUCH-PANEL	137XX021	1
PCB ASSY, INTERFACE, OT-12	151XX710	1
CABLE ASSY; LVDS PNL, 330MM	029XX716	1
PLATE, FRONT, OT-12 CONTROL	026XX366	1
PLATE, BACK, OT-12 CONTROL	026XX365	1
MOUNTING BRACKET DISPLAY	583XX500	2
GASKET,OT-12 TOUCHSCREEN SEAL	746XX110	1
ENCLOSURE ALTERATION	026XX364	1
CABLE ASSY, OT, SWITCH	029XX713	1
BRACKET;WALL MT,ALUPLAN ENCL	582XX614	1
LENS; LED, CLEAR, 5MM	105XX341	1
CABLE; LED, 6", 3P, WHT/BLK/R	029XX717	1
LED;RED/GRN,5MM,C/C,PCB	107XX045	1
CABLE ASSY, OT-12 BACKLIGHT	029XX715	1
NUT,HEX M3 ZINC	884XX219	4
BHCS M3 X 6 SS	784XX541	12
LOCK WASHER M3	784XX360	16
STANDOFF; F/F, M3, 13MM LG	091XX707	4
SHCS; M2 X 3MM, BLACK	884XX361	4
SOFTWARE,LICENSE WINDOWS CE	119XX154	1
LABEL STOCK, SILVER	781XX780	1
ILLUSTRN DWG,OT-12 WALL MOUNT	999XC138-01	0
SCREW,SELF-TAP X 14MM W/TORX	784XX898	4
SLW M4 ZINC	798XX382	4
LOCK WASHER #8 ZINC	798XX731	4
ACCESS COVER; FLASH CARD	782XX511	1
GASKET- ACCESS COVER; OT-12	782XX512	1
FHSS M4 X 10 SS	784XX190	2
SHCS M5 X 12 SS	784XX125	4
SHCS M5 X 25 SS	784XX409	4
NUT,HEX M5 SS	798XX726	4
SLW M5 ZINC	784XX475	4
FLAT WASHER M5 SS	784XX185	8
SOFTWARE, ENVELOPE PRO	119XX264	1
SOFTWARE, FLEXOSEAL PRO	119XX265	1

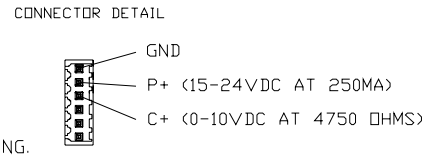
EPC Flow Control (753xx432)

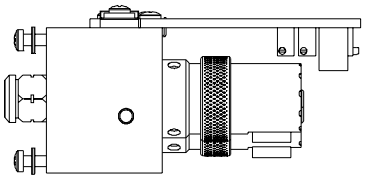


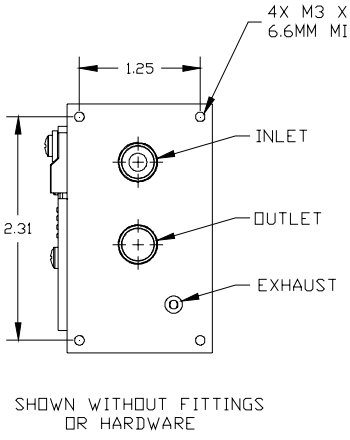
WIRING CHART			
BOARD CONN.	SIGNAL	COLOR	4 PIN CONNECTOR
PIN 1	GND	BLU	PIN 2
PIN 2	+24V	BRN	PIN 1
PIN 3	SIGNAL	BLK	PIN 4

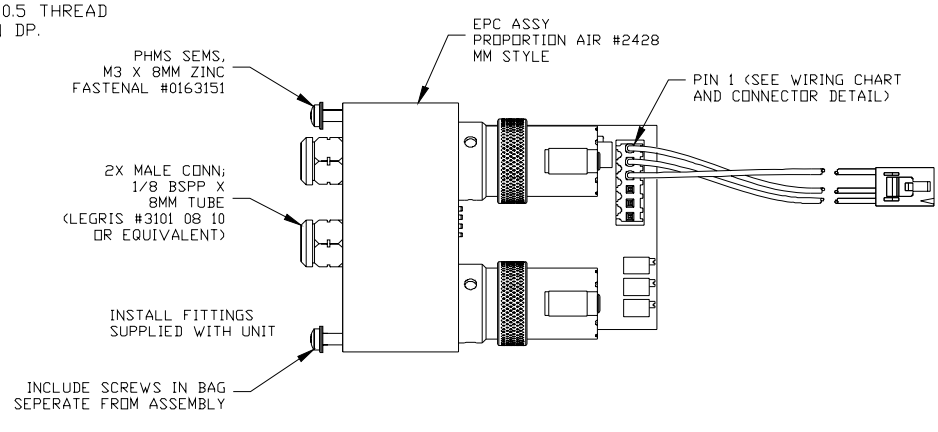
TEST PROCEDURE:

1. CALIBRATE EPC: 10V = 100 PSI
2. ATTACH EPC TO TEST FIXTURE FD0632 OR EQUIVALENT.
3. ATTACH SHOP AIR TO EPC (MINIMUM OF 90 PSI).
4. CONNECT 755XX528 TUBING 3 FT MAX LENGTH,
   8MM OD, 5MM ID, POLYURETHANE, SMC #TU0805-BU-100.
5. ATTACH PRESSURE GAGE AND TRANSDUCER AT END OF TUBING.
6. APPLY 0V. OUTPUT SHOULD BE 0 PSI
7. APPLY 2.5V. OUTPUT SHOULD BE 25 PSI +/- 3 PSI
8. APPLY 5V. OUTPUT SHOULD BE 50 PSI +/- 3 PSI
9. APPLY 7.5V. OUTPUT SHOULD BE 75 PSI +/- 3 PSI
10. APPLY 10V. OUTPUT SHOULD BE INPUT PRESSURE +/- 3 PSI







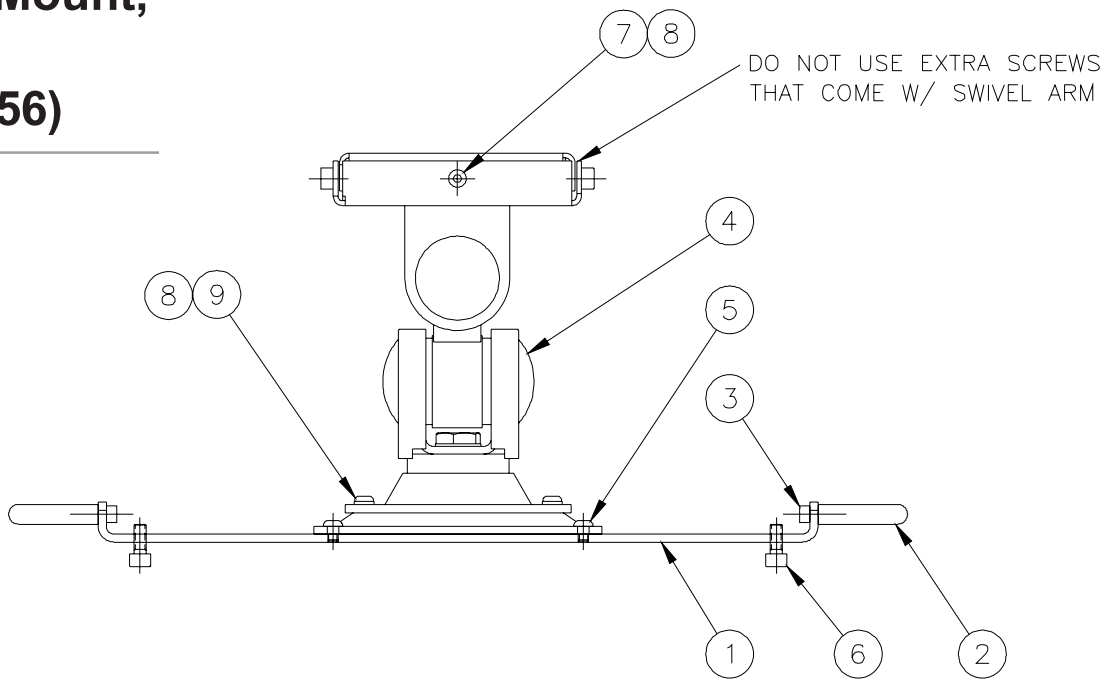


Cable Options

Description	Part Number
Remote Cable, 5m	029XX126
Remote Cable, 10m	029XX147
Remote Cable, 15m	029XX159
Remote Cable, 20m	029XX160
Remote Cable, 2m	029XX331

These cables connect the OT-12 to the MCP-12.

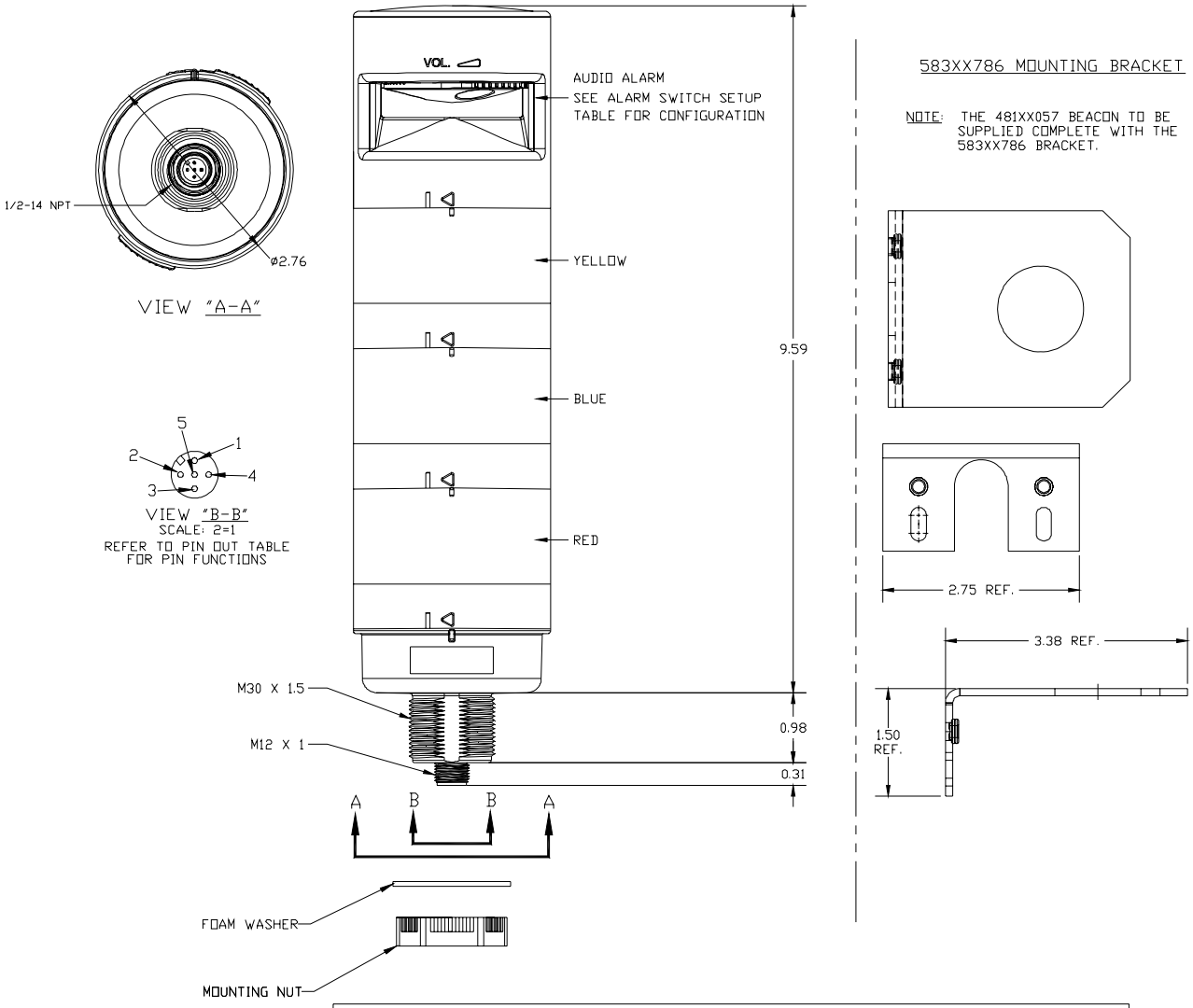
Swivel Mount, OT-12 (579xx356)



Item	Description	Part Number	Qty
1	PLATE-MOUNTING OT-12	582XX798	1
2	HANDLE	581XX875	2
3	SCREW	798XX031	4
4	MOUNT;MNTR,TLT/SWVL & ROTATE	582XX799	1
5	SCREW	798XX500	4
6	SCREW	784XX125	4
7	SCREW	784XX359	4
8	LOCK WASHER	784XX308	8
9	SCREW	798XX494	4

Alarm Beacon (481xx057)

TOWER LIGHT (BANNER #TL70RBYALQ-96245)



ALARM SWITCH SETUP				
ALARM SETTING	DIP SWITCH 7	DIP SWITCH 8	DIP SWITCH 9	DIP SWITCH 10
STEADY TONE	OFF	OFF		
PULSE TONE 1.5 HZ	ON	OFF		
SIREN TONE 1.5 HZ	OFF	ON		
CHIRP TONE 1.5 HZ	ON	ON		
LOW SOUND INTENSITY			OFF	OFF
MEDIUM SOUND INTENSITY			ON	OFF
MEDIUM HIGH SOUND INTENSITY			OFF	ON
HIGH SOUND INTENSITY			ON	ON

PIN OUT	
PIN	FUNCTION
1	GND
2	BLUE LIGHT (MODULE 2)
3	RED LIGHT (MODULE 1)
4	AUDIBLE ALARM (MODULE 4)
5	YELLOW LIGHT (MODULE 3)

ITEM	*PART#*	*QTY.*	*DESCRIPTION*
1	481XX057	1	ALARM BEACON ASSY
2	998IS781	1	LABEL
3	583XX786	1	MOUNTING BRACKET

SECTION 10 - WARRANTY

Warranty Information

Valco Cincinnati, Inc. warrants its equipment worldwide against defects in material and workmanship as outlined in this section.

Liability of the company is limited to repair of the product, or replacement of any part shown to be defective, and does not extend to defects caused by accidents, misuse, abuse, neglect, tampering or deterioration by corrosion. This warranty does not cover those items determined by Valco Cincinnati, Inc. to be normal wear items such as seals, O-rings, diaphragms, springs, etc.

Reconditioned equipment, unless specified otherwise at the time of purchase, will be warranted as described above for a period of ninety (90) days from the date of shipment by Valco Cincinnati.

Components purchased by Valco Cincinnati, Inc. from others for inclusion in its products are warranted only to the extent of the original manufacturer's warranty. In no event shall Valco Cincinnati, Inc. be liable for indirect or consequential damages arising out of the use of Valco Cincinnati products.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to Valco Cincinnati, Inc. for examination and verification. If claimed defect is verified, repairs or replacements will be made F.O.B. Cincinnati, Ohio, U.S.A. or ex-works Telford, U.K. If the inspection of the equipment does ***not*** disclose any defect of workmanship or material, any necessary repairs will be made at a reasonable charge and return transportation will be charged.

This is the only authorized Valco Cincinnati, Inc. warranty and is in lieu of all other expressed or implied warranties, representations or any other obligations on the part of Valco Cincinnati, Inc.

Cold Glue Equipment and Electronic Controls

The warranty for cold glue equipment and electronic controls for a period of one (1) year from the date of shipment by Valco Cincinnati, Inc.

Hot Melt Units, Hoses, Valves, Guns, and Related Equipment

All hot melt components except cast-in heating elements are warranted for a period of six (6) months from the date of shipment by Valco Cincinnati. Cast-in heaters carry an additional, pro-rated warranty not to exceed three (3) years from the date of shipment by ValcoMelton, a Valco Cincinnati, Inc. company.

SECTION 11 - SERVICE

If a problem with your system persists, contact a ValcoMelton Technical Support representative. If your need is urgent, we encourage you to contact our corporate office in Cincinnati, Ohio, U.S.A. at (513) 874-6550. If the problem cannot be resolved, Valco Cincinnati, Inc. will promptly arrange to have a technical representative visit your facility. Any charges for a service call will be quoted at that time. Any part that fails during the warranty period shall be returned prepaid to Valco Cincinnati, Inc. by the customer for disposition.

Upon request, ValcoMelton personnel are available to repair or replace such parts at the customer's facility. Charges for this service include travel time and expenses.

If an equipment problem is the result of customer abuse, improper installation or operation, all travel time, labor, parts, and expenses will be charged to the customer.

If the responsibility for a problem cannot be absolutely determined, the customer will be charged for travel time and expenses only. No charge will be made for parts and labor.

APPENDIX A - REMOTE OPERATION

VTerminal Software

Installing the VTerminal Software

As the new **CAN CPU 151xx515** does not have EPROM's anymore, new Software has to be programmed with a Laptop or Desktop computer connected to the RS-232 diagnostic port of the MCP-25 or MCP-25/MS(FS).

In the unlikely event of a failure of the OT-12, communication with the MCP control can be performed with the following items:

- A PC running under Windows 95/98 ME or 2000
- A free RS232 COM port that can support data transfer rates of at least 38400 Baud (see PC User manual)
- The terminal software 'VTerminal' has to be installed.
- A RS232 'Null-Modem' cable, 9PIN F/ 9PIN F (030xx794)

The installation software for 'VTerminal' is available on and can be ordered under the P/N 119xx130 (2 disks, 1.44MB) or P/N 119xx138 (CD together with 'Grafix' software)

To install the software, run 'SETUP.EXE' on Disk 1 and follow the instructions of the installation program.

When the installation is finished, start 'VTerminal' by clicking the shortcut on the desktop, which is generated automatically during the installation.

VTerminal Shortcut on Desktop

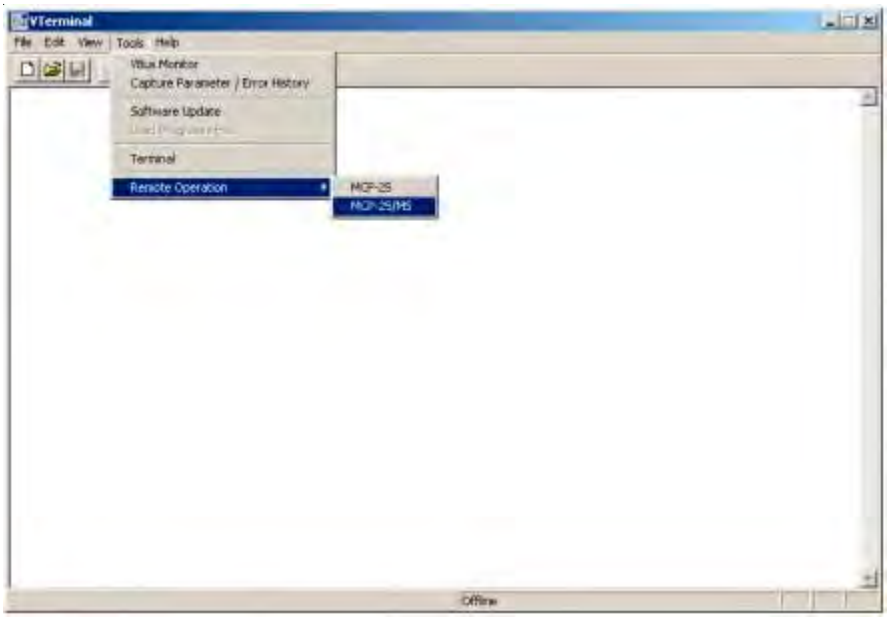
Change the COM Port

VTerminal uses COM1 as the default communication port. If COM1 is not available or used for other devices, the COM port can be changed by adding a parameter to the command line. Therefore change the properties of the shortcut as follows:

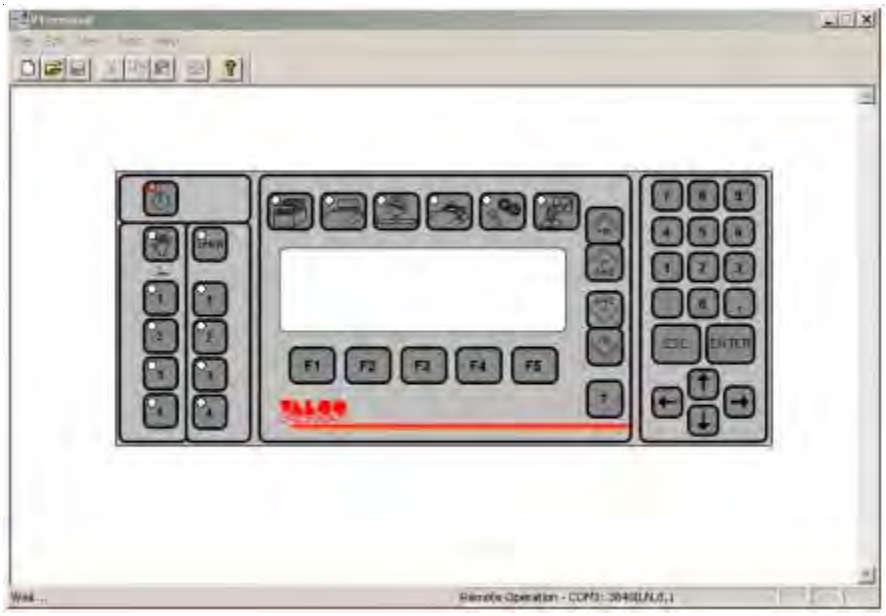
Using VTerminal for Remote Operation

To operate an MCP-25 or MCP-25/MS(FS) without a display or operator terminal, VTerminal can be used to emulate a keyboard and a display.

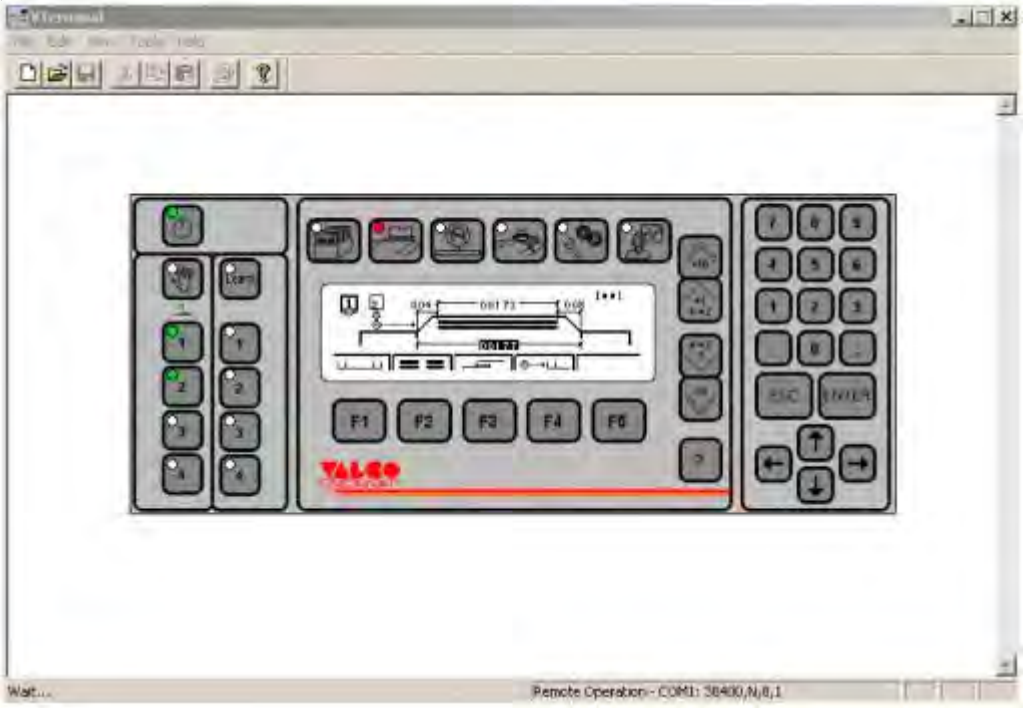
- Switch the MCP unit off.
- Connect the PC /Laptop to the diagnostic port of the MCP-12 with a NULL-Modem cable.
- Start VTerminal and select the option ‘Remote Operation / MCP-25 or MCP-25/MS’ in the ‘Tools’ menu.



- VTerminal is now waiting for a connection

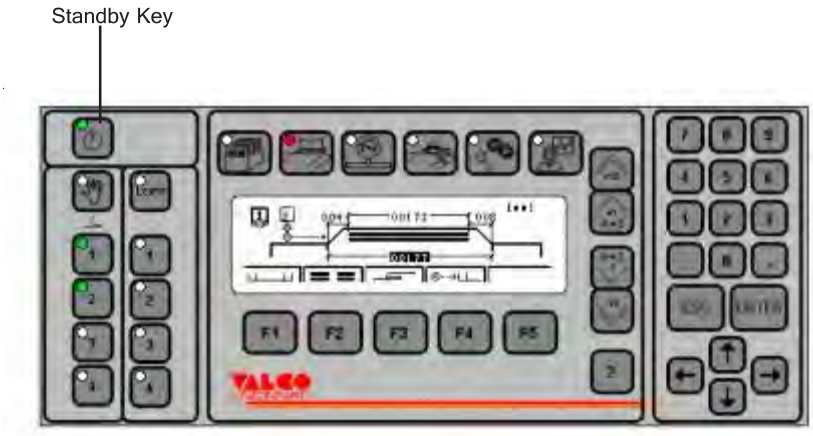


- After the connection is established, the control can be operated like an MCP-25 / MCP-25/MS by clicking the button symbols.



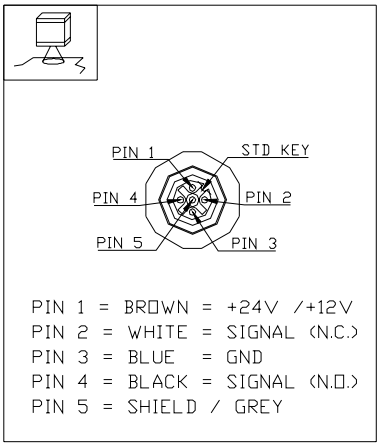
Key strokes and display changes are slightly delayed. Make sure that the buttons are not pressed in a slower sequence.

- To end the Remote Operation press the Standby Key

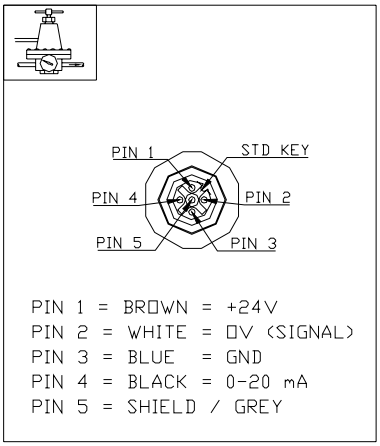


APPENDIX B - CONNECTOR PINOUTS

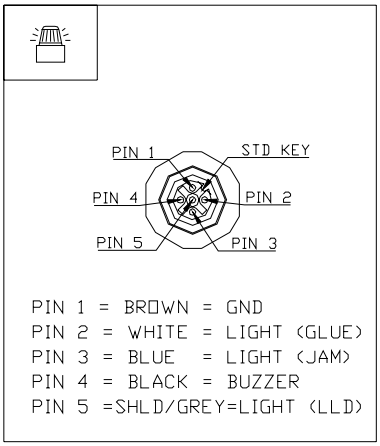
TURCK



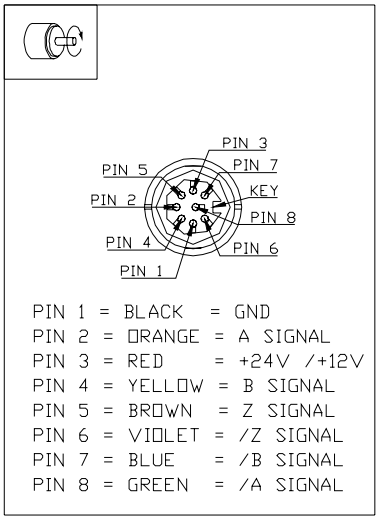
"SCANNER" CONNECTOR (STANDARD)



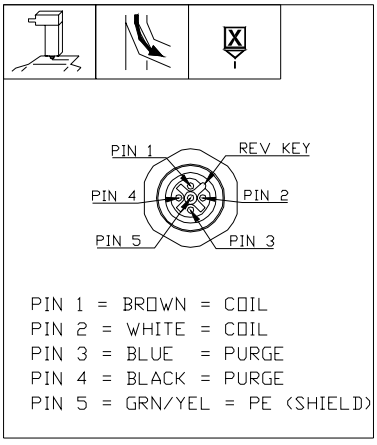
"EPC-J" CONNECTOR (STANDARD)



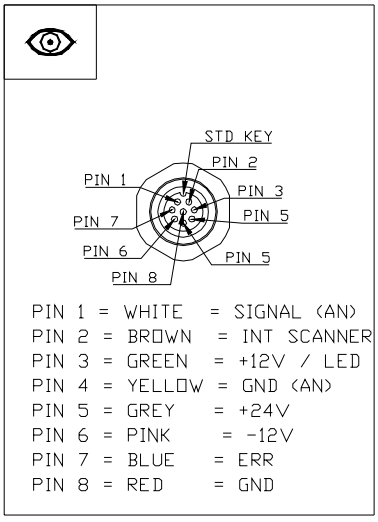
"BEACON" CONNECTOR (STANDARD)



"ENCODER" CONNECTOR (STANDARD)



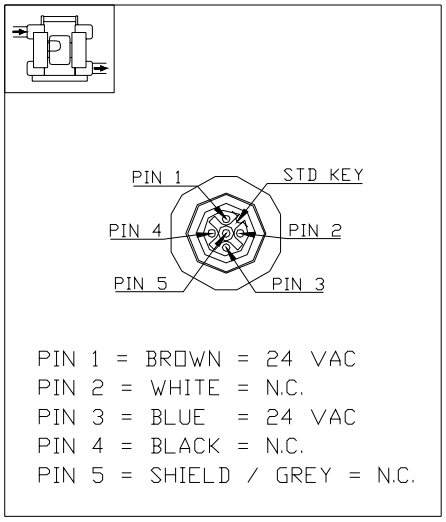
"VALVE" CONNECTOR (STANDARD)



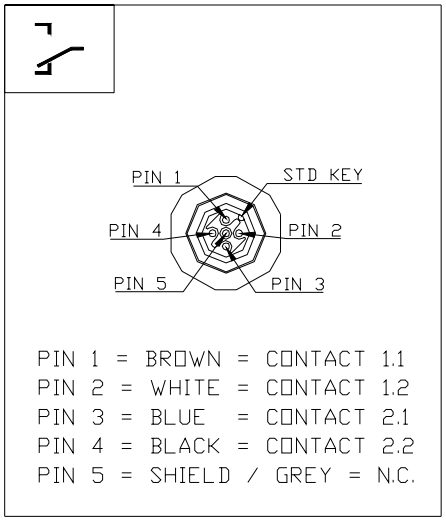
"SENSOR" CONNECTOR (STANDARD)

TURCK Connector
Pinouts

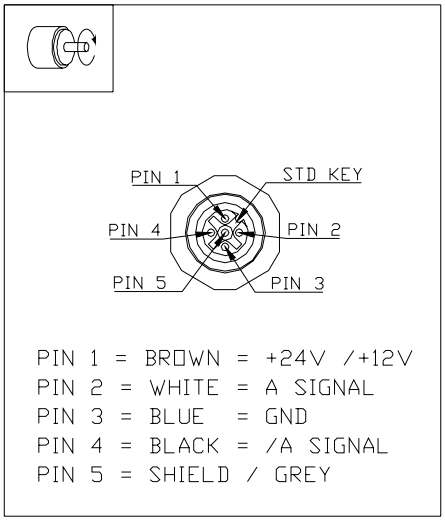
TURCK - Continued



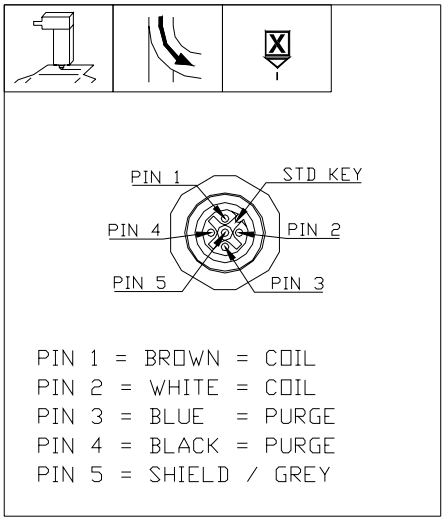
"PUMP" CONNECTOR (STANDARD)



"MACHINE STOP" CONNECTOR (STANDARD)



"ENCODER" CONNECTOR (BOBST)



"VALVE" CONNECTOR (BOBST)

APPENDIX C - FUNCTION BUTTONS

FlexosealPRO Button Reference

All function buttons are viewable. At times, some functions may only be accessible based on password access level. The system configuration can be changed by authorized Valco Cincinnati service personnel.

Valve Button (1 or 2) – Press this button to display the information associated with gluing valves. Allows you to change valve setup information. Lower left LED flashes when unit is gluing. Lower right LED illuminates when the associated scanner is active.

Pressure Regulator Setup Button – Provides access to the pressure regulator setup screen. Use this screen to set the purge pressure and enter glue curve values based on minimum encoder speed associated with minimum pressure and maximum encoder speed associated with maximum pressure.

Glue Pressure Buttons – Press the Increase (up arrow) or Decrease (down arrow) button to raise or lower the current adhesive pressure. Note that the glue curve values change when the pressure percentage changes. These buttons can only be used when the machine is running.

Sensor Button (1 or 2) – Information associated with channel glue inspection. Provides access to the inspection screen and the sensor configuration screen. Displays current position of glue within tolerances and also shows glue volume. Lower left LED flashes when unit is sensing. Lower right LED illuminates when the associated scanner is active.

Encoder Setup Button – Provides access to the encoder setup screen, where you can set encoder pulse information and enter values associated with product lengths.

Setup Button – Depending on the context of the button's location, you can press this button to access various configuration windows (system, valve, marking valve, sensor). At the system level, press this button to enter or change system parameters. Current access level appears in top-left.

Setup Button (password protected) – At the system level, you can press this button, enter a password, and gain access to the system setup screen.

FlexosealPRO Button Reference - Continued

Communication LED – Illuminates green when communication is detected between machines.

Alarm Beacon Button – Provides access to alarm settings and the jam prevention screen to control low glue level detection, glue integrity sensing (inspection), and jam prevention. Allows you to specify whether the beacon light and/or warning sound is to be triggered. Illuminated LEDs indicate activation of the lamp(s) and/or buzzer.

Marking Valve Button – The LED in the top left corner indicates whether the valve is active or inactive. This button provides access to a configuration window where the valve can be activated/deactivated and purging can be triggered.

Event History Button – On the Parameter Setup Screen, the Event History Button provides access to a list of system events within the selected time frame. On the Inspection Sensor Configuration Screen, the Event History Button provides access to a list of events on the inspection sensor of choice.

Diagnostic Button – Provides access to individual sensor diagnostic information based on sensor feedback and sensor specific settings.

Learn Button – Provides access to the learn volume procedure screen. In order to use this procedure, the volume inspection switch must be ‘ON’.

Tolerance Button – Provides access to tolerance configuration screen. You can use this screen to set tolerance values for four different modes.

Product Counter Button – Provides access to shift and total job product count information window. Product counts can be reset to 0 for the shift, total job, or both. Also shows last counter reset dates and times.

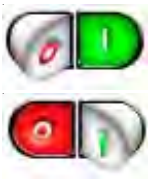
System Exit Button – Press this button to exit the FlexosealPRO system. Once the button is pressed, the operator must confirm the intention to exit the system. Afterwards, the system components can be powered off.

Learned Glue Length Button – Only appears when you are in auto glue mode. Used to set learned glue lengths according to dimensions.

FlexosealPRO Button Reference - Continued

Confirmation Button – Appears throughout the FlexosealPRO system. Press this button to confirm your intention to have the system accept screen information as entered.

Cancellation Button – Appears throughout the FlexosealPRO system. Press this button to have the system disregard screen information that has been entered.



ON/OFF Toggle Button – This button is used to switch on/off various functions throughout the FlexosealPRO system. After the button is pressed to activate a function, you must confirm your intention.

Purge Button – This button is used to stop the gluing process and purge glue from the valve.

Printer Button – This button is used to print production reports.

Reset Button – This button is used to reset counters.

Device Status Information Button – This button provides access to the Device Information Screen, where information regarding the device name, part number, program software revision, etc. can be found.

Backup Button – This button is used to back up the system settings.

Restore Button – This button is used to restore the system to the settings that were saved during the last backup.

APPENDIX D - SKEW DETECTION

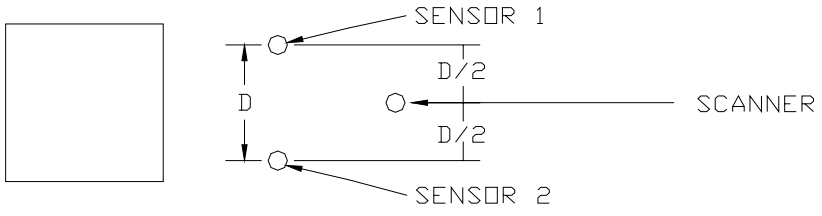
Installation

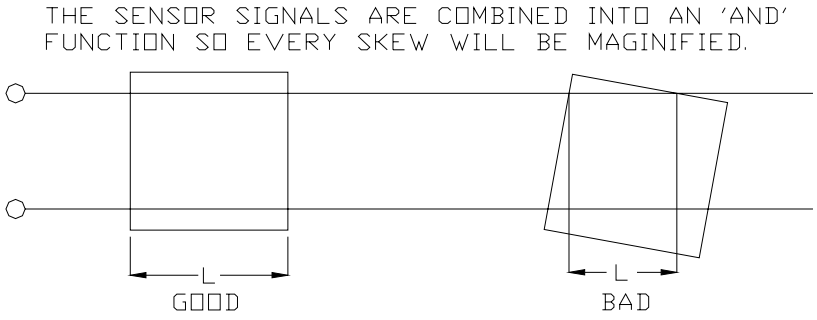
Starting with the A012 release, the FlexosealPRO software application supports Skew Detection. In order to take advantage of this feature, the MCP-12 needs to be equipped with a Skew Detection sensor module 151xx540. In the standard configuration the module will be plugged into sensor slot #3. To support Skew Detection in conjunction with the OT-12 and VisiPRO it is also necessary to install the following software in the MCP-12: CANCPU C047, SensorCPU C036.

To measure box skew with the highest precision, 3 scanners have to be installed inside the machine. To achieve the best possible accuracy it is very important that the two detection scanners and the trigger scanner are mounted correctly as follows:

- The two detection scanners have to be mounted exactly parallel. In other words they have to see an ideal box at the same time.
- The detection sensors need to be mounted as far as possible to the outside of the machine. They also need to see the full length of the product on both side. (No cutout, tabs etc.)
- The trigger scanner should be mounted 25mm (1 inch) away from the center of the box (flap slots) so it also sees the full length of the box.

The three scanners are connected to a junction box 098xx039. Besides diagnostic LEDs for each scanner there is switch where the scanner on the drive side of the machine can be disabled in case the size of the box is different on one side or if there are unique cutouts.





Operation

If the MCP-12 is configured correctly the main menu of the FlexosealPro program will display a button with the Skew Detection icon in the bottom left corner as shown in Figure 1, below.

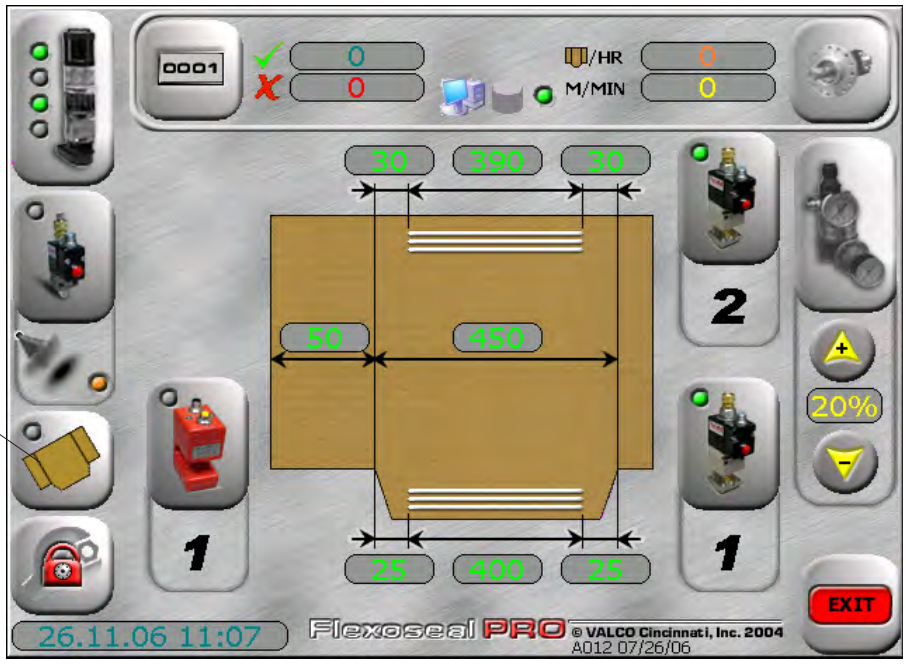


Figure 1 - Main FlexosealPro Screen

If the button is pressed the Skew Detection menu will be displayed. In order to use the Skew Detection feature, an operator only needs to enter the total length of the box. Figure 2 shows the Skew Detection menu.

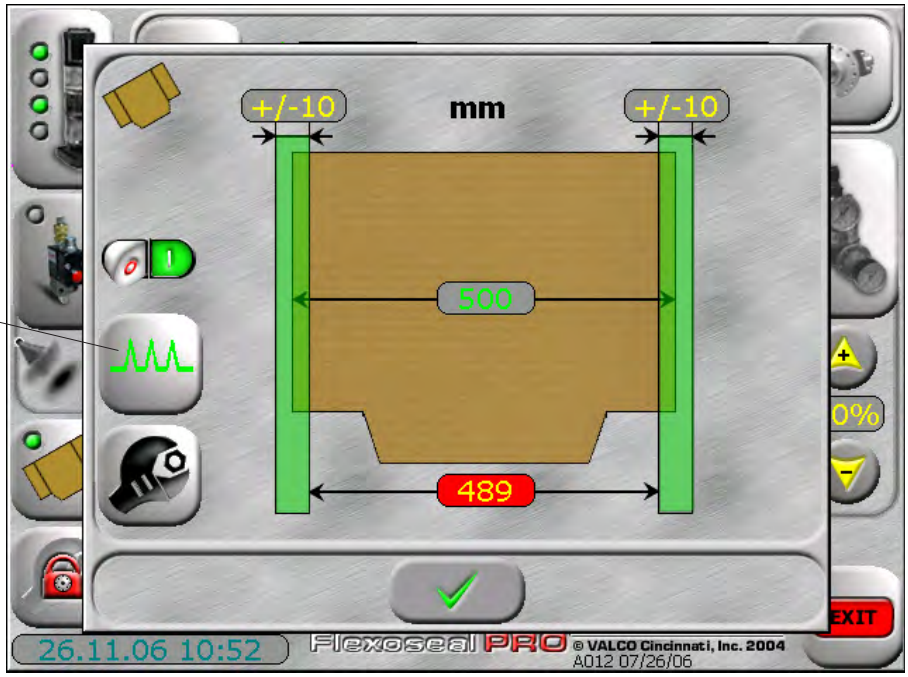


Figure 2 - Skew Detection Menu

Operation - Continued

1. The green edit field represents the total length of the box and thus this is the place where the user would enter the global length of the box that is required for proper Skew Detection.

2. The bottom yellow field (in this case having a value of '49') is the box length readout from the inspection system. Please note that this value, ideally, should match the total box length (the green field) but it can also vary directly proportional to the amount of jamming.

3. The green areas illustrate the tolerance zones at the front and the back of the product. For example, in the picture above, the tolerance is currently set at +/- 5 mm. The tolerance settings can be set in the Skew Detection setup menu (see Figure 3).

4. The toggle switch is used for turning on or off the Skew Detection function. The switch can be protected by password if necessary.

5. To review a list with details of the last inspection fault press the diagnostic button.

6. All other parameters that are necessary for the initial setup can be modified in the Skew Detection setup menu. To access the menu press the button with the wrench. The button is usually password protected.

If the user presses the Diagnostic button, the Skew Diagnostic Screen (Figure 3) displays:

Figure 3 - Skew Diagnostic Screen

Operation - Continued

By default, when the user accesses the diagnostic screen from a skew configuration screen, the errors presented are only the ones related to skewing (i.e., sensor module 3 is checked by default.)

It is important to note that the information presented is sorted by time of occurrence, having the first entry as the most recent error that occurred in the system, in this case, a skew error with a difference of 11 mm from the ideal length of the box.

> If the system is not connected to VisiPro it keeps track of the last 32 products with errors. If more than 32 products have problems, the storage will roll over. If the system is connected to a VisiPro server all faults will be logged into the database.

Figure 3 shows that the system detected four products with problems (i.e., product 1, 2, 4, and 8 having their associated difference from their ideal length shown to the left of the word “Amt” (“Prod” stands for “Product” and “Amt” stands for “Amount”.)

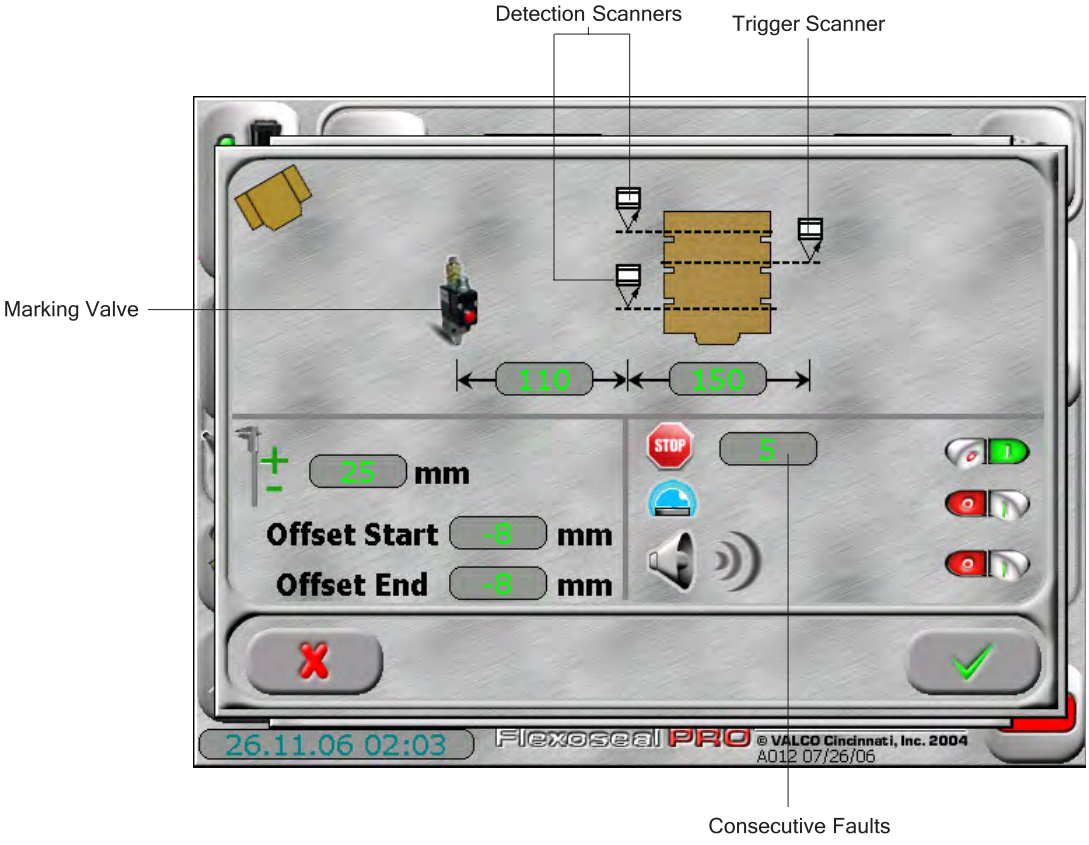


Figure 4 - Skew Detection Setup Menu

Operation - Continued

Figure 4 shows the Skew Detection Setup Menu. The following settings can be modified:

1. Distance between the detection scanners and the marking valve. In case the marking valve should be disabled for Skew Detection the distance has to be set to zero.

   > The marking valve will be switched on globally for all sensors from the main menu.

2. Distance between the two detection scanners and the trigger scanner.

3. The tolerance for skewing is set by changing the edit field next to the calipers.

4. Offset Start and Offset End for the Skew Detection sensor. Adjusting the settings allows a installer to fine tune the Skew Detection process in case there are tolerances inside the scanner signals

5. The consecutive faults alarm can be enabled by using its associated toggle switch.

6. In a similar fashion, the light and the buzzer alarm indicators can be turned on or off by using their associated toggle switches.

Changing one of the settings will take effect immediately. If the ‘Cancel’ button is pressed to close the dialog box, all changes will be overturned.

APPENDIX E - SCREEN CALIBRATION

Calibration Procedure

A keyboard is required, particularly if the calibration is clearly far off. If you are unable to re-calibrate successfully, the touch surface of the touchscreen may need to be replaced.

1. Turn the power of the OT-12 system off.
2. Connect a Keyboard:

   For 138xx003 & 138xx010: PS2 Keyboard;

   for 138xx017: USB Keyboard
3. Turn the power back on and wait until the FlexosealPro software is running
4. Press the Key and use the Cursor keys (←→↑↓) to select 'Settings->Control Panel'
5. Press the Enter key to open the 'Control Panel' Window.
6. In the 'Control Panel' Window use the Cursor keys (←→↑↓) to select 'Stylus' icon.
7. Press the Enter key to open the Touchscreen calibration program.
8. Press the Tab key to high light the 'Double Tap' tab in the calibration program.
9. Press the Cursor key (→) to select the 'Calibration' tab.
10. Press the Cursor key (↓) to select the 'Recalibrate' button.
11. Press the Enter key to start the calibration process.
12. Follow the instructions.

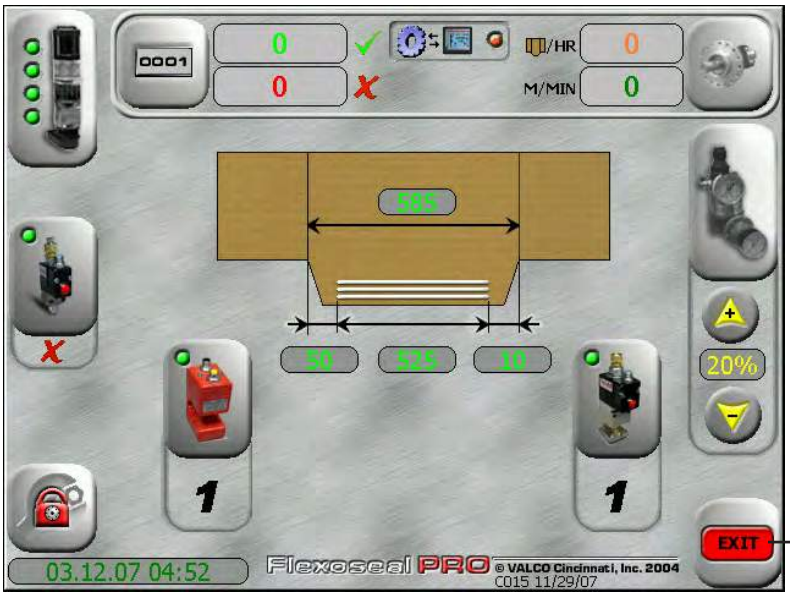
CAUTION! If possible, use a stylus pen to push on the calibration points. **Do not** use sharp items, like screwdrivers or knives, for the calibration.

Calibration Without a Keyboard

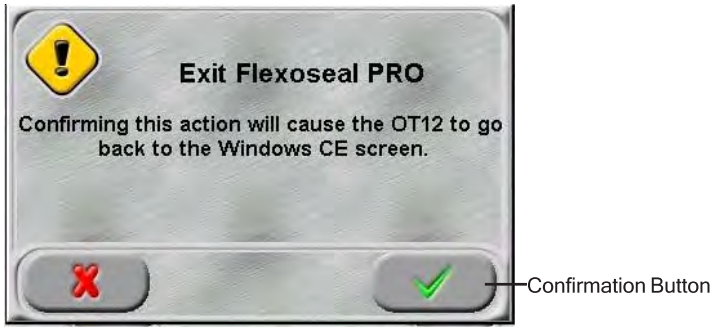
An alternate method for calibrating, without the keyboard, is possible if the touchscreen buttons are still active:

1. Enter the Settings Screen using Password 151298 (level 4).

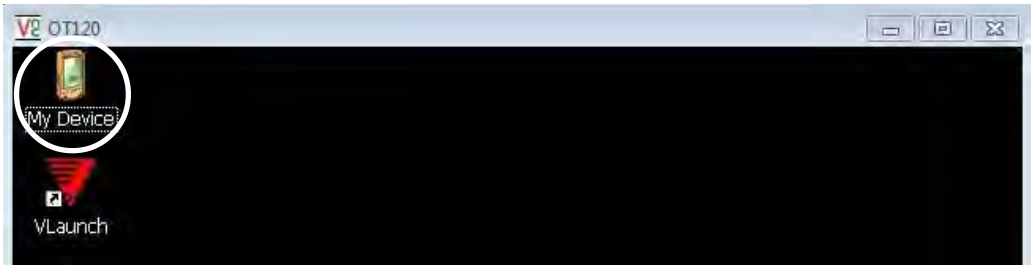
2. From the Home Screen, with access set to level 4, press the Exit button. An exit prompt will open.



3. Press the Confirmation Button. The control will exit to Windows.

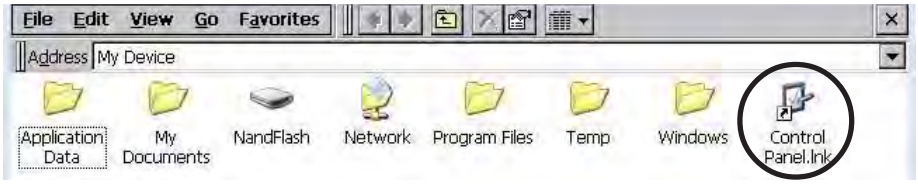


4. From the Windows screen, click on the “My Device” icon. You will see an icon for the Control Panel.

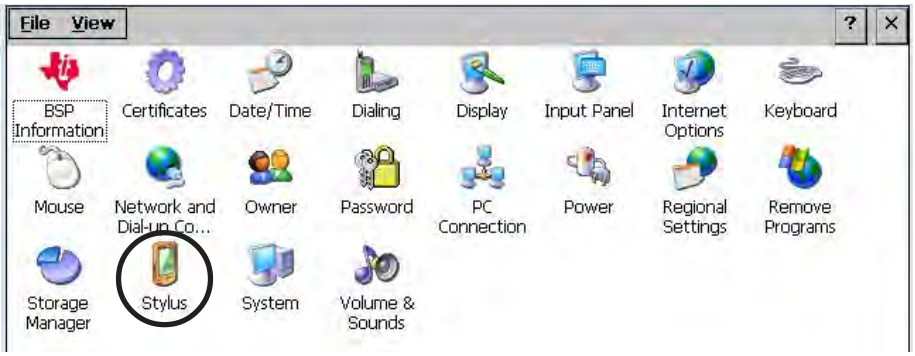


Calibration Without a Keyboard - Continued

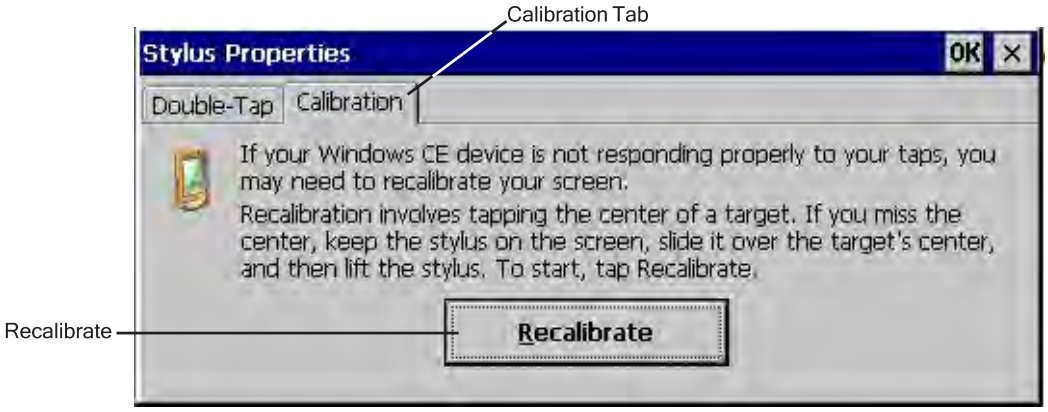
5. Click the Control Panel icon.



6. From the Control Panel screen, find the icon called “Stylus” and click on it.



7. On the screen that appears, select the “Calibration” Tab.



8. Touch the “Recalibrate” function, and follow the instructions.

CAUTION! If possible, use a stylus pen to push on the calibration points. **Do not** use sharp items, like screwdrivers or knives, for the calibration.