

Safety Controllers



Safety Controller Highlights

- Intuitive icon-based drag-and-drop configuration via free PC software
- 10 input, 26 input, and expandable models available
- Communicates over industrial ethernet
 - 80 virtual non-safe inputs
 - 256 virtual non-safe status outputs



Safety Relays and Controllers

Industrial safety controllers and relays provide an interface between safety devices and the machines and processes those devices monitor for a complete and easy-to-use safety control solution.



Expandable Safety Controller

Expandable for Complex Safety applications where 3 or more safety relays are typically used

- PC Configurable: Flexible and easy-to-use
- Safety Inputs: 26 (base unit) up to 154
- Independently controlled Safety Outputs: up to 68, 0.5A to 6A each
- Convertible Safety Inputs: 8 (Base Unit) up to 40
- LCD Display for easy troubleshooting
- Industrial Ethernet



Hybrid Safety Controller plus 2 Safety Relays

Flexible and cost effective solution for machines typically using 2 Safety Relays

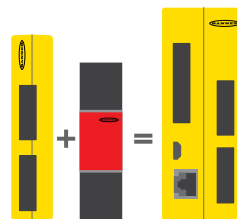
- PC Configurable: Flexible and easy-to-use
- Safety Inputs: up to 10; up to 14 using Automatic Terminal Optimization (ATO)
- Independently controlled Safety Outputs: 2, 6A each
- Convertible Safety Inputs: 4
- Terminal LEDs for easy troubleshooting
- Industrial Ethernet



Safety Relays

Cost effective for simple safety circuits

- Pre-set Functionality: Configuration not required
- Safety Inputs: 1
- Independently controlled Safety Outputs: 1, 4 to 7A



Configurable Safety Controllers

Pre-configured Safety Relay Modules



XS26 SC26 SC10 SR IM ES UM GM SM AT Two-Hand MMD

Series		XS26	SC26	SC10	SR	IM	ES	UM	GM	SM	AT Two-Hand	MMD
# of Input Terminals		up to 154*	up to 26	10*	1	1	1	1	1	1	2 STB	2
Independently Controlled Safe Outputs		up to 68*	2	2	1	1	1	1	1	1	1	1
Max.Safety Output Rating		0.5A, 6A* ea.	0.5A ea.	6A ea.	6A	6A	7A	7A	6A	6A	6A	6A
E-Stop		✓	✓	✓			✓	✓				✓
Rope Pull		✓	✓	✓			✓	✓				✓
Light Curtain/Scanner		✓	✓	✓				✓				✓
Light Curtain/Scanner with EDM		✓	✓	✓	✓	✓		✓				✓
Gate Switch (Complimentary Outputs ie. NC/NO)		✓	✓	✓					✓			
Gate Switch (Similar Outputs ie. NC/NC)		✓	✓	✓			✓	✓				✓
Safety Mat		✓	✓	✓						✓		
Two-Hand Control		✓	✓	✓							✓	
Muting		✓	✓	✓								✓
ON/OFF Delay		✓	✓	✓								

NOTE: Up to Cat. 4 PL e. per EN ISO 13849-1; SIL 3 per IEC 61508 and IEC 62061. See www.bannerengineering.com for additional information.

* Expandable input and output modules available

Build System and Select Equipment

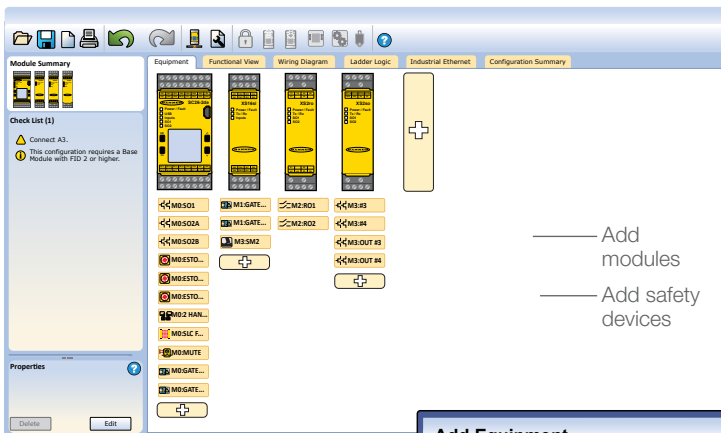
Start using the free software today. Go to bannerengineering.com/safetycontroller

The feature-rich SC10 and SC/XS26 safety controller software provides a seamless user interface for setting up and managing safety systems. The software features an intuitive icon-based, drag-and-drop user interface to reduce the learning curve and speed up commissioning.

- Complex configurations made easy
- Simulate configurations before implementation
- Auto configure industrial ethernet for remote monitoring and diagnostics

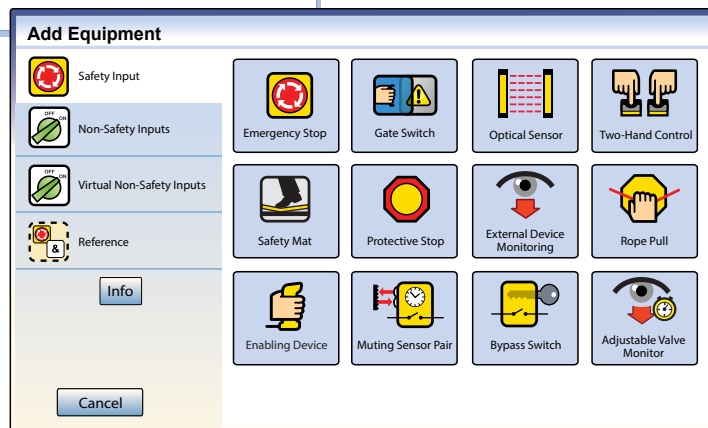


1. Choose Controller

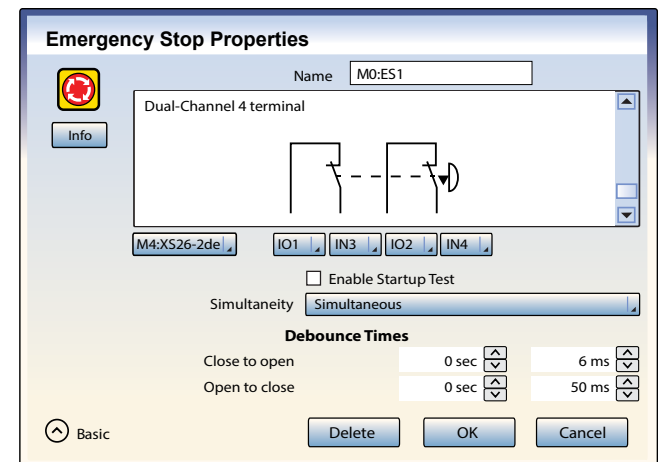


2. Equipment View

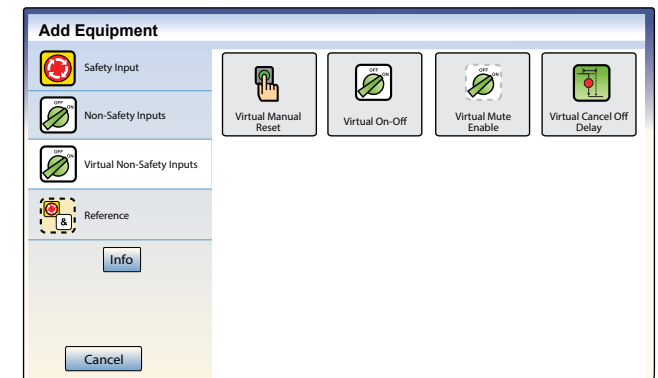
3. Add safety devices



4. Select safety device properties



5. Add virtual non-safety inputs



6. Configure Your System in Minutes

Simulation View

Assorted View Menus

Module Summary and Configuration Checklist

Function Block Logic Block

Inputs

Split Output

Simple Drag-and-Drop Connections

Wiring Diagram in Live Mode

Ladder Logic

Module Summary

Equipment Functional View Wiring Diagram Ladder Logic Industrial Ethernet Configuration Summary Simulation Mode

Simulator

00:00:04:12:532

Simulation Speed 100 %
Step Interval 4 ms

Inputs

Properties

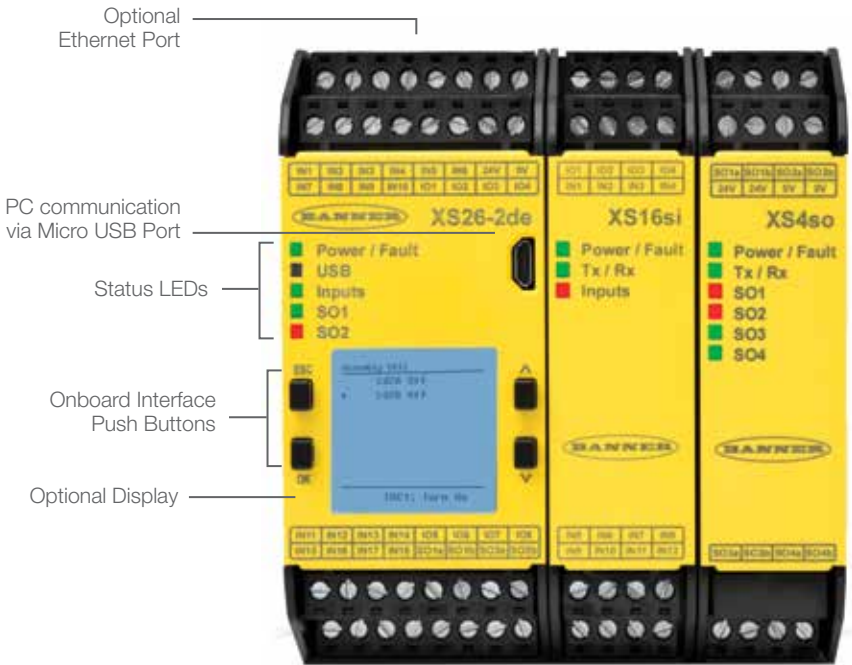
Name	Value
Name	SLC FRONT
Module	M0
Circuit Type	Dual-Channel PNP
Terminals	M0

Delete Edit

Wiring Diagram in Live Mode

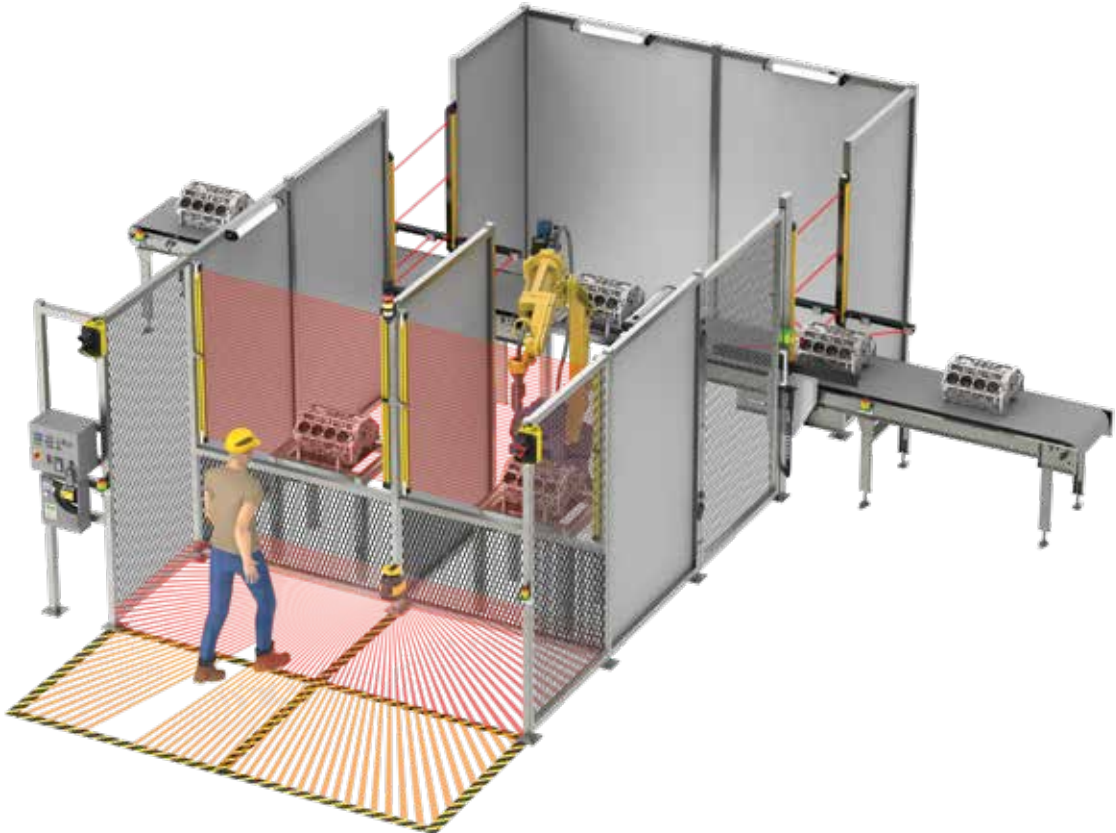
Ladder Logic

XS26 Expandable Safety Controller



Base Controller (shown with LCD and ethernet)

- Optional display screen allows local diagnostics for efficient troubleshooting
- Up to eight expansion I/O modules can be added as automation requirements grow or change
- Choose from six expansion module models with a variety of safety inputs, solid-state safety outputs and safety relay outputs
- Controller and input modules allow safety inputs to be converted to status outputs for efficient terminal use





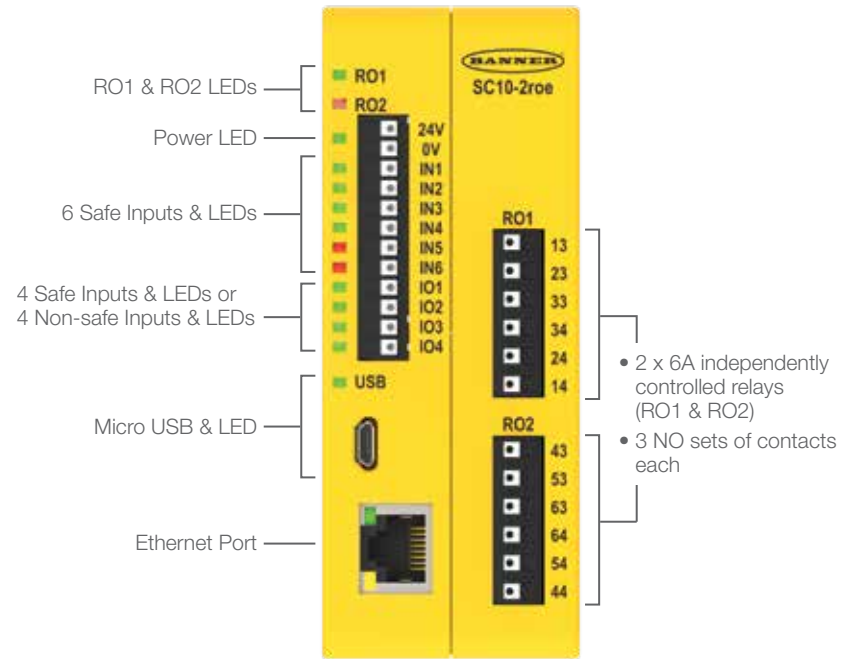
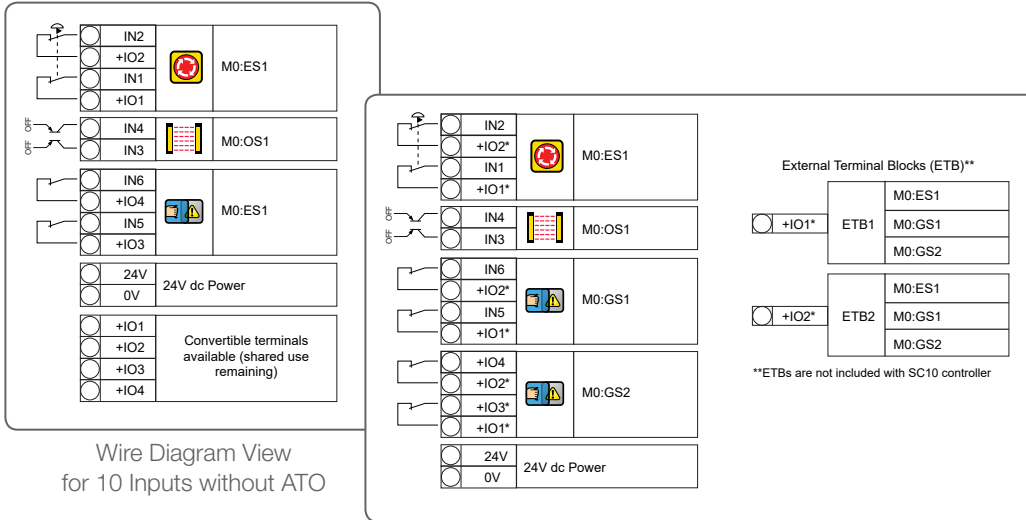
SC26 Safety Controller

- Base Controller allows eight of the 26 inputs to be configured as outputs for efficient terminal use
- Two independent pairs of safe outputs at 0.5A each
- Models available with optional ethernet and display

SC10 Safety Controller

Automatic Terminal Optimization (ATO)

Allows for an increase from 10 to 14 inputs



SC-XM3

Fast Programming and Swapout

- Backup copy of configuration, password, network settings
- Download configuration without a PC; Save time during panel build
- Fast swapout to minimize downtime at swapout



Model*	Description	Inputs/ Convertible	Independently Controlled Safe Outputs	Max.Safety Output Rating
XS26-2d XS26-2de	Base Controller with LCD	26/8	2	0.5A PNP @24 V dc
XS26-2 XS26-2e	Base Controller	26/8	2	0.5A PNP @24 V dc
XS8si	Safety Input Module	8/2	NA	NA
XS16si	Safety Input Module	16/4	NA	NA
XS2so	Safety Output Module	NA	1	0.75A PNP @24 V dc
XS4so	Safety Output Module	NA	2	0.5A PNP @24 V dc
XS1ro	Safety Relay Output Module	NA	1	6A; 2 NO, 1 NC aux
XS2ro	Safety Relay Output Module	NA	2	6A; 2 NO, 1 NC aux

* Models operate at 24 V dc +/- 20%

Model*	Description	Inputs/ Convertible	Independently Controlled Safe Outputs	Max.Safety Output Rating
SC26-2d SC26-2de	Base Controller with LCD	26/8	2	0.5A PNP @24 V dc
SC26-2 SC26-2e	Base Controller	26/8	2	0.5A PNP @24 V dc
SC10-2roe	Base Controller	10/4	2	6A; 3 NO



Accessories



SC-USB2
USB Cable



SC-XM2
Memory Card



SC-XM3
Memory Card



SC-XMP2
SC-XM2/3 Configuration Tool

Additional accessories are available at bannerengineering.com

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