

SIGNAL SIMULATOR X



BACK NUMBERING



COMPREHENSIVE REDESIGN OF THE SIGNAL SIMULATOR LEGACY EDITION



SUPPRESSES EARLY SENSOR TRIGGER PULSES

The system actively suppresses early sensor trigger pulses to prevent printing faults.



3 COLOUR AUDIBLE BEACON STACK.

Built in buzzer to notify pulse insertions, reverse web tracking and Sig-Sim status.



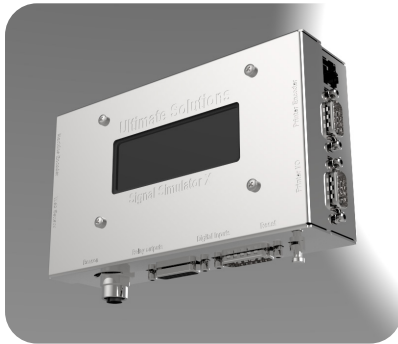
STAINLESS STEEL BODY

Enhancing the device's durability and resistance to wear with high tensile strength, excellent corrosion and rust resistance.



UP TO 8 OPTO ISOLATED I/O'S

Up to 8 opto-isolated inputs (12-24V DC) via a male 15-way D-sub connector.



VERSION X

At Ultimate Solutions we have developed an automatic solution to stop double numbering issues called the Signal Simulator X.

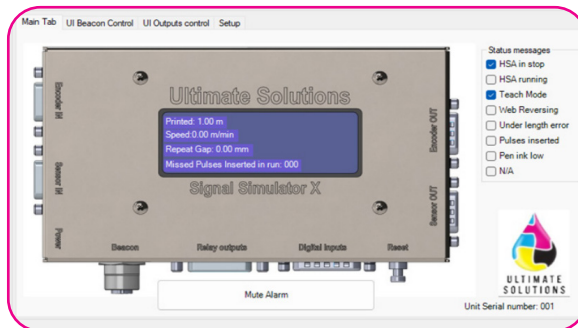
This device suppresses early or false triggers so that you only get one print per label, regardless of any false sensor pulses / triggers seen.

We catch these early along with additional trigger pulses and pulses inserted due to missing labels and log them into a file for future reference.

HMI DISPLAY (HUMAN MACHINE INTERFACE)

The HMI (Human Machine Interface) LCD screen provides real-time data including running speed, run length, inserted pulse count, label repeat and web reverse position.

The HMI is supported by companion software, offering a PC-based UI version that mirrors all system information, as shown in the image below.



TECHNICAL SPECIFICATIONS

OPTO-ISOLATED INPUTS

- Up to 8 opto-isolated inputs (12-24V DC) via a male 15-way D-sub connector.
- Up to 7 volt-free relay outputs (maximum 48V, 1 amp) via a female 15-way D-sub connector.

3 COLOUR BEACON STACK

- Configurable 3-colour beacon stack output is available via M12 5-pole female connector. This output
- Software is accessible through the PC user interface, allows for programmable beacon functionality.

FEATURES



ON MODULE ALARM

Built in buzzer to notify pulse insertions, reverse web tracking and Sig-Sim status during updates. The tri-colour beacon stack simultaneously provides audible alerts and system status for easy recognition



OPTIONAL GUARDIAN SOFTWARE

Produces summary reports at the end of each job detailing number of splices / missing labels detected, event positions within the roll, dates / times and full job set up details.



PRINTABLE PASS OR FAIL

The summarised job report can be configured and sent to an optional printer, allowing for a pass / fail label to accompany completed work, tailored to your customers needs.



FIELD UPGRADABLE / FUTURE PROOF

System firmware can be easily upgraded on-site or remotely via TeamViewer.



FULL WEB TRACKING

Web movement is tracked via encoder A and B clocks, ensuring printing occurs only in forward motion and with precise positioning.



CONFIGURABLE ALARM AND AUTO STOP CONDITIONS

Can be configured via the USB interface to auto stop the line and prevent transport from running if multiple errors are seen and ignored by the operator.



ON MODULE LCD SCREEN

Showing real time run length, inserted pulse count and web reversed position.



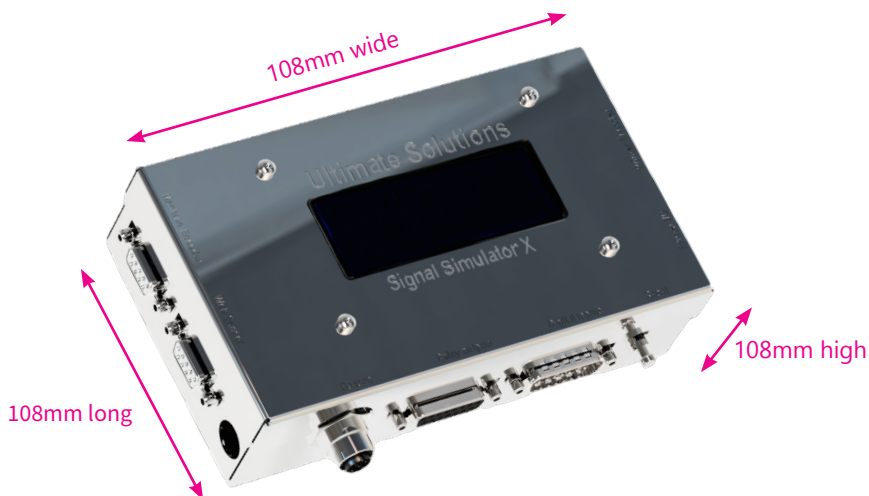
FULLY OPTO ISOLATED

Sensor and encoder inputs along with isolated input and outputs.



DEDICATED 24V POWER SOURCE

Enabling unrestricted hardware options



ADVANTAGES



FULL PIN-TO-PIN BACKWARD COMPATIBLE WITH EXISTING SYSTEMS

Enabling easy field upgrades.
This ensures customers can immediately benefit from the enhanced features of the new system.



HMI DISPLAY (HUMAN MACHINE INTERFACE)

The HMI Display LCD screen provides real-time data including running speed, run length, inserted pulse count, label repeat and web reverse position.



UPGRADABLE ELECTRONIC SIGNAL INTERFACING

OPTO isolation of sensor / encoder in noisy / electrical environments thanks to it's fully OPTO-isolated design.



SUPPORT FOR EXTERNAL PROCESS AUTOMATION

Via the fully integrated / OPTO isolated I/O controller.
For example, drive external IR and full cure LED dryers.



ABILITY TO DRIVE AN IR OR FULL CURE LED DRYING SYSTEM

0 - 10v analog speed control. Fully automated when the correct ink type is selected.



MULTIPLE ISOLATED INPUT AND OUTPUT RELAYS

Ideal for automating IR and full cure dryers.



ENHANCED FUNCTIONALITY

Real time telemetry and feedback of events such as run length and missed pulses via the on-board LCD display/USB interface.



AUDIBLE ALARM WHEN A PULSE IS INSERTED.

On module buzzer to notify pulse insertions, reverse web tracking and Sig-Sim status during updates.



I/O CONTROLLERS CAN ALSO OPERATE ANTI-STATIC BARS

Can be automated to turn on when assigned inks are selected.

DISCLAIMER:

Specifications are subject to change without notice. The information provided herein may be updated or modified in future releases. While we strive to ensure accuracy, all details are provided "as is" and may change as improvements are made.



WE WORK WITH COMPANIES AROUND THE WORLD

Our global network spans multiple countries, featuring a diverse range of companies we work with. The interactive map highlights these locations, showcasing the reach of our operations and the strength of our international connections. Explore the map to see where we work and connect with our global presence

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