



 (313) 335-1788

 www.switchweld.com

NAVIGATOR

Your guide to cobot welding.

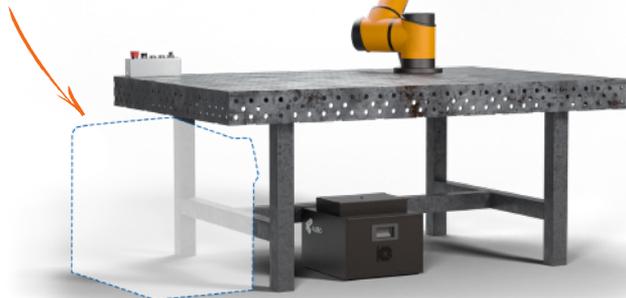


**SwitchWeld Navigator
Welding System**

Product Overview

NAVIGATOR

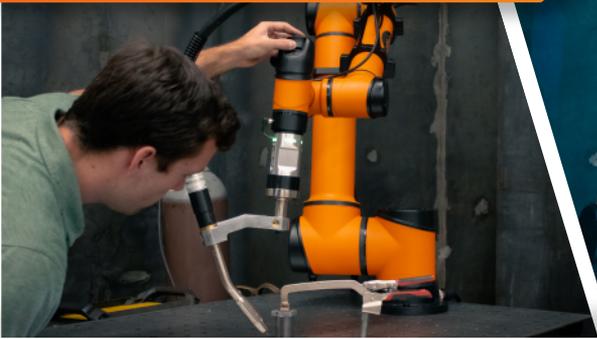
Use your welding
power supply!



Simplify automated welding Using just **one system.**

The SwitchWeld Navigator™ is an enterprise ready cobot-based metal working solution designed for users with minimal cobot welding experience. It makes the robotic welding process simple, quick, and safe through a unique end effector puck that enables precise robot positioning without using a teach pendant.

The Navigator is universally compatible with all popular welding power sources and leverages an AUBO Collaborative robot for safe operation. The system supports easy swap out for all standard welding attachments, allowing you to use your existing welding tools and workflow making it the ultimate all-in-one solution to start automating your welding process painlessly.



Enterprise Ready.



All-in-one

We've included all the hardware and custom software you'll need to get your welding tools, power supply, and cobot communicating right out of the box. The SwitchWeld software is specifically designed for AUBO Cobot so you can get started with cobot-based metal working without the headache of additional third-party plugins, and unreliable software integrations.



Versatile

The SwitchWeld Navigator™ works universally with your existing welding tools and most popular welding power sources. Thanks to the included hardware and software, with SwitchWeld, you can use your existing welding tools and power sources, save on costs associated with proprietary welding hardware systems, and always have the freedom to choose.



Easy to Use

We designed the Navigator™ to be a hands-on user experience. Operators do not need previous cobot, welding, or complex programming experience. Simply use the point, arc, orient, and free drive buttons on the end effector puck to quickly program the cobot's trajectory by hand. The joystick enables high-precision adjustments for the welding tool so you can ditch jogging joints without losing control over your welding process.



Portable

The SwitchWeld cobot welding system is designed to be portable, allowing your team to adopt a flexible workflow. The entire system can be redeployed to new job sites by hand. Our included robotic welding base enables your team to mount different surfaces quickly and effortlessly, even in horizontal orientation. SwitchWeld enables your team to bring the power of cobot welding anywhere on the shop floor.



SwitchWeld Navigator Puck Simplifies Operation

It only takes three buttons to program an entire welding project with the SwitchWeld Navigator puck, and we've engineered the process to be hands-on, making it perfect for welders and operators with no training or cobot experience. Just drag the cobot using the free-drive system, record your welding points with the buttons on the face of the puck, and start welding.



Joystick for Precision Torch Tip Adjustment

Most cobot welding systems require jogging and extensive programming. Not ours. We've included an intuitive joystick for precise movement in 6 degrees of freedom, allowing the operator to quickly translate or rotate the cobot and welding tool without touching the teach pendant or jogging points. The Joystick enables accurate torch tip adjustments for more precise welds.



Simple and Friendly User Interface

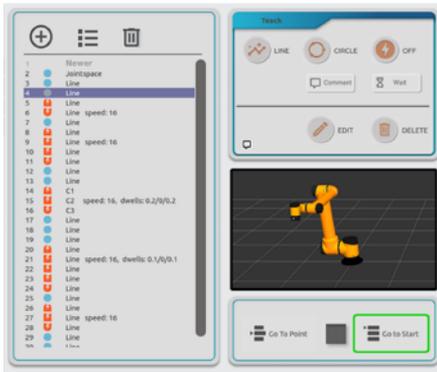
The SwitchWeld UI was designed in a way that is intuitive and simple for anyone to understand – regardless of robotic experience or training. We've specifically designed this software with welding professionals and welding projects in mind. Putting everything you need to fine-tune your robotic welding settings at your fingertips, and minimizing software interaction.



Easy Setup Plugin Box

The brains of the operation. We've taken the headache out of setup: no complex wiring diagrams, no software loopholes, and no third-party add-ons or hardware. The plugin box enables communication between the AUBO Cobot and your desired welding equipment. The plugin box is universally compatible with any welding power supply through adapters.

Intuitive, Visually Clear, Easy to Understand UI



Configure Tool and Cobot Settings Quickly



The SwitchWeld User Interface (UI) was designed in a way that is intuitive and simple for anyone to understand – regardless of robotic experience or training. We’ve specifically designed this software with welding professionals and welding projects in mind by placing everything you need to fine-tune your cobot welding settings at your fingertips and minimizing software interaction.

The SwitchWeld UI was designed for welding applications from the ground up. Welding professionals and newcomers alike will feel quickly acquainted, thanks to easy access to important weld settings. Users can quickly adjust weld or tool parameters, edit points, fine-tune cobot settings, and more with a glance.

On the main screen users are welcomed by an intuitive programming interface which features a real-time cobot visualizer that accurately simulates the real-time pose of the cobot on screen, providing an additional visual element to the welding process that helps users understand their welding program.

Additional panels allow a deep dive into fine settings like dwell, gas flow, weave, and more.



A major hurdle in welding is the skill and experience required to create consistently great welds. This introduces two key challenges to the welding process, a trial-and-error workflow that eats up precious project time, and months if not years of time to train a skilled welder. For any business, these challenges add complexity and increase investment.

That's why we've created the SwitchWeld ArcAdvisor™, a specially designed SwitchWeld Feature that takes the guesswork out of the welding process and eliminates the need for years of refined welding experience - decreasing the gap between new operators and seasoned welders, while saving time for all users and simplifying the welding process.

Our innovative tool significantly reduces the overall welding knowledge required for collaborative welding. How?

ArcAdvisor Prompts Users to Input Known Welding Parameters



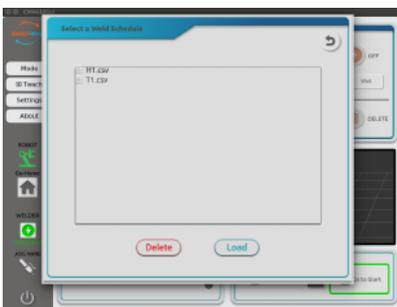
ArcAdvisor Calculates Consistent Weld Settings



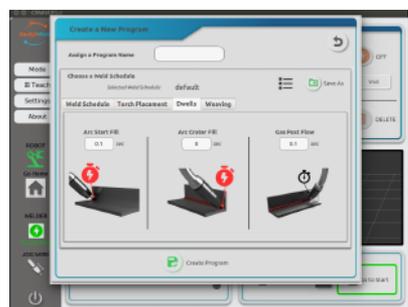
ArcAdvisor™ calculates the best welding parameters for the welding job from an extensive tested database of hundreds of thousands of welding schedules and allows you to import them directly into your program. Weld Speed, Gas Flow, Voltage - all in a matter of minutes.

When users create a new program, ArcAdvisor™ will ask a series of questions about factors you know, such as metal material and power supply manufacturer for example. Afterward, ArcAdvisor suggests a weld schedule based on your project to yield great welding results.

Import Suggested Schedule & Produce Great Weld Results



Quickly Setup Important Weld Settings on Program Creation



Additional system configuration options are available with the purchase of a SwitchWeld Cobot Welding System, selectable options for cobot payload capacities, and example power source options & brands are listed below.

Available AUBO i-Series Cobots

AUBO i5



5kg Payload
625mm Reach
±0.02mm Repeatability

AUBO i10



10kg Payload
1350mm Reach
±0.03mm Repeatability

AUBO i20



20kg Payload
1650mm Reach
±0.1mm Repeatability

Popular Power Supply Manufacturers



In the tables below, you'll find an example tested list of power supplies per use case. Since the SwitchWeld Navigator Welding System™ connects to welding power supplies using the same electrical connections as a handheld torch it is compatible with most welding power supplies. Due to the sheer number of compatible devices, we cannot list them all. If you do not see your welder on the list below, it is likely still compatible, reach out to our support team for more information on specific compatibility.

Heavy Industrial Fabrication Examples

Brand Part #	Model	Rated Output Amp/ Duty Cycle	Functionality
Miller® 951792001	Deltaweld® 350 MIGRunner w/ Intelx	350A/60% DC 3 Phase	MIG, Pulse
Lincoln Electric® K4487-1	Power Wave® 300C Standard	300A/29V/100% DC 1 or 3 Phase	MIG, Pulse
ESAB® 0558102696	Warrior 400i MV	400A/34V/60% DC 3 Phase	MIG, Pulse
Fronius® 49,0400,0039	TranSteel 3500 C	300A/60%DC 3 Phase	MIG
OTC WB-P502L	Welbee II P500L	500A/60%DC 3 Phase	Low Splatter: MIG, Pulse

Moderate Industrial Fabrication Examples

Brand Part #	Model	Rated Output Amp/ Duty Cycle	Functionality
Miller® 907808	Millermatic® 355	310A/29.5V/60% DC 1 or 3 Phase	MIG, Pulse
Lincoln Electric® K4487-2	POWER MIG® 360MP	320A/30V/60% DC 1 Phase	MIG, Pulse
ESAB® 0558102559	Warrior 300i MIG Package	230A/25.5V/60% DC 1 or 3 Phase	MIG, Pulse
Fronius® 49,0400,0019	TranSteel 3000 C Pulse	280A/60% DC 3 Phase	MIG, Pulse
OTC WB-P402	Welbee II P400	400A/60% DC 1 or 3 Phase	MIG, Pulse

Light Industrial Fabrication Examples

Brand Part #	Model	Rated Output Amp/ Duty Cycle	Functionality
Miller® 907734	Millermatic® 255 MIG	230A/25.5V/60% DC 1 Phase	MIG, Pulse
Lincoln Electric® K3068-2	POWER MIG® 256	250A/26V/40% DC 1 Phase	MIG
ESAB® 0558012702	Rebel™ EMP 285ic	220A/25V/60% DC 1 Phase	MIG
Fronius® 49,0400,0035	TranSteel 2700 C	215A/60% DC 1 Phase	MIG
OTC WB-M352	Welbee II M350	350A/60% DC 1 or 3 Phase	MIG



Every SwitchWeld cobot welding bundle comes standard with all you'll need to start welding, including:

- AUBO i-Series Cobot
- AUBO Control Box
- AUBO Teach Pendant
- AUBO Cobot Cables and Adapters
- ATTC Lightning, Air Cooled MIG Welding Torch
- Welding Torch Mount
- SwitchWeld Navigator Puck & Cable
- SwitchWeld Mounting Tophat
- SwitchWeld 6 Depth of Field Joystick
- SwitchWeld Plugin Box & Labeled Wires
- SwitchWeld Safe Operation Console
- Safe Operation Console Connection Cables
- SwitchWeld Safety Whip Clamps
- SwitchWeld Welding Power Supply Connection Cable & Adapter
- SwitchWeld EZ Mount Base Plate
- SwitchWeld Installation Instructions
- SwitchWeld Software USB Hub & Flash Drive
- WiFi Hub for Software Installer



11701 Metro Airport Center Drive,
Suite 110
Romulus, MI 48174

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Your SwitchWeld Distributor

