DSS™

Digital Switch System

Reliability & Efficiency in Horizontal Completions

YELLOW JACKET®
Oil Tools

ELEVATING HORIZONTAL COMPLETIONS

YELLOW JACKET'S ADVANCED COMMUNICATIONS PROTOCOL ALLOWS FOR COMMUNICATION SPEEDS UP TO THREE TIMES FASTER THAN STANDARD SWITCHES.

Enhanced Communication Speeds
- DSS™ is faster when inventorying switches downhole & also offers a speed advantage when programming & testing the gun string at surface

Certified RF-Safe
- Certified by industry-standard independent testing lab Franklin Applied Physics

Eliminates Potential For Duplicate Switch ID's
- DSS™ switches are manufactured without a unique identifier programmed into each switch; ID is programmed by the Test Box at surface

Robust Switch Design
- Tested to extreme temperatures & shock conditions to ensure durability

Gun String Protection
- Additional circuit protection built into each switch to prevent component failure in the event of an over- voltage on the wireline

Powers Yellow Jacket's Full Gun String
- Qualified for every Yellow Jacket perf gun, power safe device (PSD) & PSFH cartridge

Compatible With All Industry Standard Detonators & Igniters

DSS™ Offers Software Flexibility
- Yellow Jacket's proprietary DSS™ software is intuitive, user-friendly & works like a smartphone app
- DSS™ switches are fully compatible with Warrior's UniFire™ software or can be run in conjunction with DataCan Linewise™

BALLISTIC RELEASE TOOL COMING IN 2023

COMING SOON! FIRST STRING M1+ PLUG-SET COMBO

M1+

POWER SAFE DEVICE

DSS™
Digital Switch System

REUSABLE PLUG SHOOT FIRING HEAD

COMPLETE LINE OF YELLOW JACKET GUN SYSTEMS

CONFIRMED SET PLUG SHOOT FIRING HEAD

UNLOCK THE FULL POWER OF DSS™ SOFTWARE: EMBRACE THE SWITCH.

➕ Smartphone-Inspired User Interface
- User-friendly & intuitive software with a sleek smartphone app-like interface
- DSS™ offers single screen functionality, instead of dividing focus between pop-up windows & the firing panel

➕ Custom Programming for Specific Switch Function
- DSS™ has the ability to program each switch based on its intended function (Safety Sub, Release Tool, Perforating Gun, Plug Shoot Firing Head)

➕ Customizable Shot Windows
- User-programmable shot windows reduce the potential for shooting outside of the desired depth target

➕ Enhanced Shoot-On-The-Fly Capabilities
- Animated, colored graphics assist the wireline engineer to effortlessly know when approaching the shot window
- Ability to easily adjust shot depths on-the-fly in the event of a misfire, skipped gun, or missed shot window

➕ Robust Data Reporting Features
- Scalable shot plots clearly identify the voltage & duration of firing events
- Printable shot sheets

➕ Comprehensive Troubleshooting Capabilities
- As downhole conditions change, sophisticated in-job logic warns users about potential issues
- Live diagnostic capability without having to exit the software

➕ Cutting-Edge Database Infrastructure
- Database infrastructure ensures reliable storage & logging of all job data
- Ability to open pre-programmed jobs from CSV files & open previous jobs for review of data from each stage

➕ Compatibility Options
- Compatible with both Warrior UniFire™ & DataCan Linewise™ for depth information
- Ability to choose between Imperial & Metric units

➕ Seamless Recovery
- In the event of a computer or software crash, can seamlessly resume an in-progress job from right where you left off

➕ Digital Power Supply
- DSS™ software & shooting panel can automatically handle the power ramp-up, voltage/current limit, amplitude, duration, & shut down based on pre-programmed profiles for industry-standard detonators & igniters

VISUALIZE DSS™

ARM & FIRE

CONFIRMATION OF DETONATION

RATINGS AND DIMENSIONS

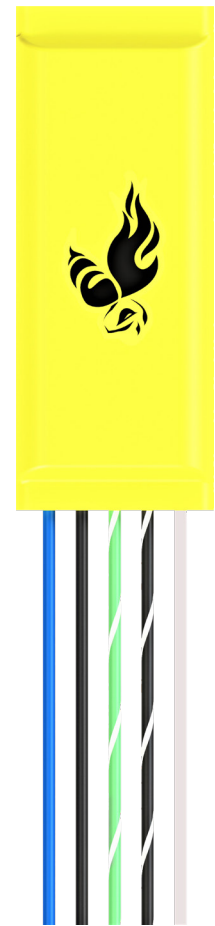|	
Dimensions (LxWxH)	1.8 x .75 x .33 in
Housing	Heat Shrink
Strain Relief	Wires integrally strain relieved to PCB
Temp Range	-58°F to 392°F
Operating Temp Range	-20°F to 347°F
Switches Per String	Up to 40

ELECTRICAL SPECIFICATION

Operating Voltage	-20VDC to -600VDC
Max Voltage	600V (Transient Voltage Forward/Reverse)
Max Firing Current	Forward (Nominal) 1A for 12 seconds* Forward (Maximum) 1.5A for 5 seconds*
Standby Current	0.5mA
Comms Current	20mA Surface / 20mA Downhole
Dets/Ignitors/Set	50Ω or Higher
Radio Frequency	1 MHz – 1000 MHz ESD
ESD Safety Rating	Safe to 25,000V**

*At maximum operating temperature
**ESD safety rating in accordance with MIL-DTL-23659 Es*

PART NUMBER   SW.DSS.W

DSS™ PANELS ARE POWERED BY Probe®

➕ Yellow Jacket Oil Tools partnered with Probe to integrate DSS™ logic & componentry into an industry-standard Probe panel.

➕ Don't have a Probe panel? Or need to upgrade your panel to be DSS™ compatible? We have loaner panels to get you started while you upgrade or purchase a panel.

DSS™ SURFACE TESTER

➕ Optimizes process of programming & testing armed perforating gun strings at surface, ensuring speed & safety.

➕ Robust design with intuitive controls allows for easy use in the field

➕ Single push-button operation allows for simple user interface

➕ Offers the ability to detect & alert users if an open-circuit condition occurs in the detonator connection

➕ Designed to be used with gloved hands for ease of use in all climates

AMERICA'S PLUG & PERF POWERHOUSE

Yellow Jacket Oil Tools is the FIRST & ONLY Provider of a Top-To-Bottom Modular Gun String

FROM TOP TO BOTTOM
WE HAVE YOU COVERED!

Warehouse Locations | Convenient Distribution

When you need tools, you need them fast. Major U.S. & Canadian shale plays are served by the Yellow Jacket Oil Tools warehouses shown on the maps below.

U.S. Sales Manager
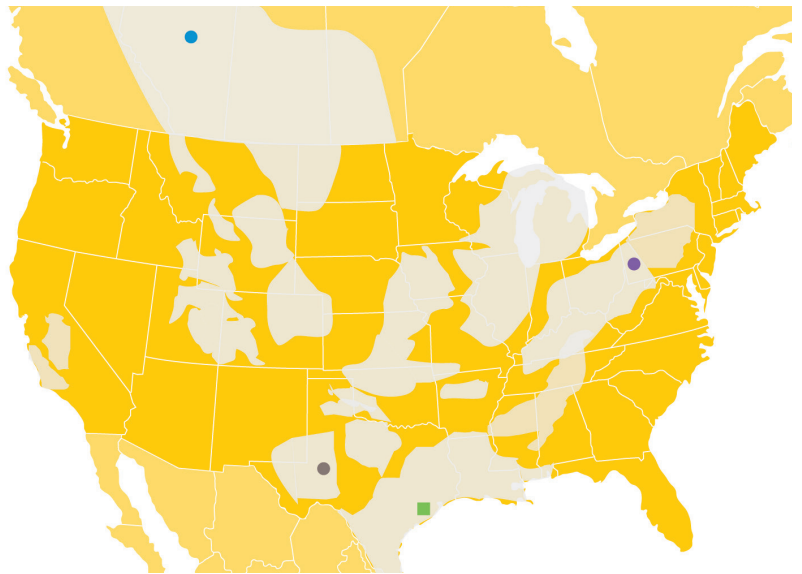Jerry Cobb
jcobb@ghdiv.com
817-559-2943

Sales Manager, Completions
Josh Magill
jmagill@ghdiv.com
972-896-9984

Operations Manager, Canada
Matt Hunter
mhunter@ghdiv.com
780-220-3261

● **Canada**
Edmonton, AB

● **West - USA**
Odessa, TX

● **Northeast - USA**
Eighty Four, PA

■ **Headquarters**
Houston, TX

Scan the QR code to learn more.

YELLOW JACKET Oil Tools

yjoiltools.com