BSD

*G*alaxy A9
Semi-automated Punch Instrument

Nine Plate Capacity
Innovative Design
Dual Imaging Systems
Open Systems Integration

A9 SR | Online

START

FLEXIBILITY · AUTOMATION · THROUGHPUT

The BSD Difference

BSD Robotics has over 30 years' experience providing innovative biosample punch instruments for life science applications. The BSD brand represents a dedication and specialisation in the design, manufacture and lifetime support of sample preparation instruments.

Supporting life science laboratories worldwide, our highly experienced service team provides assurance for supreme instrument performance and workflow efficiency. BSD Products are proudly recognised worldwide as the gold standard in forensic databasing laboratories and as the preferred alternative in newborn screening.

GALAXY A9

Featuring a capacity to prepare up to 9 microplates simultaneously, the Galaxy A9 is designed to work with a wide range of sample cards and labware for preparation of biochemical and molecular assays.

It has also been designed to ensure optimal sample integrity throughout the punching process and provides the flexibility   and connectivity you need to meet the demands of evolving workflows and informatics.

Technology Reimagined

Developed for progressive and evolving life-science laboratories, the Galaxy A9 is a feature-packed instrument built on the reliability and performance of field-proven BSD core technology. Traditional features include fast dual punch positioning, programmable punch tool cleaning, internal humidifier and paper dust extraction. New enhancements include LED illumination, digital imaging and recording, intuitive touch-screen operation, improved static mitigation and new data automation software.

Galaxy A9

Experience our most compact, high-capacity punch instrument.

Design Innovation

The BSD Galaxy A9 challenges traditional punch instrument design to provide superior usability and ergonomics. Incorporating nine plates traditionally results in a large instrument footprint with a large working envelope, compromising user comfort, serviceability and laboratory space. The Galaxy A9 design uses a compact turntable to greatly reduce the size for compatibility with standard benches, improved working comfort and easy access.

Creating time efficient operations to put the user in control, and have the ability to inspect plates between each punch run.
The Galaxy A9 incorporates transparent covers and has LED backlight illumination for each plate, for quick and easy viewing throughout the punching process.

FLEXIBILITY
AUTOMATION
THROUGHPUT

Freedom Of Choice

- A core value of BSD Robotics is to provide customers with more choice. The Galaxy A9 offers the freedom of unrestricted access to software functions, enables open system interfaces and comes with the option for BSD service provision for your instrument.

- Design the tests, configure the instrument and make the changes you need at any time to meet the demands of daily operations and to foster continuous improvement. Comprehensive user permissions are provided to ensure appropriate access for each operator.

- Enjoy the freedom of open systems integration providing a new world of possibilities to interface with laboratory information systems and analytical instruments.

- Choose from a range of support options and receive the attention and dedication of our BSD Services team to ensure your instrument is maintained to highest level of operation and longevity.

Assurance You Can Depend On

- Get the results and support you need, backed by the renowned reliability and operational lifetime of BSD instruments.

- Comprehensive results are recorded for each punch run with the ability to select the data and format to suit current and future information requirements. Each punch can be tracked and recorded for complete traceability through a comprehensive panel of variables and images from the sample and each receiving well.

- Two image processing systems are used to display and capture images of the punch area and plate wells. Punch site selection is performed by assessing sample image metrics in real time to reduce operator decision making and help to improve assay results.

Galaxy A9
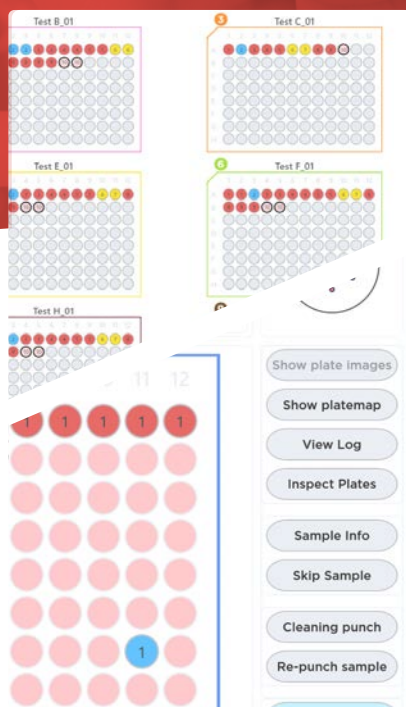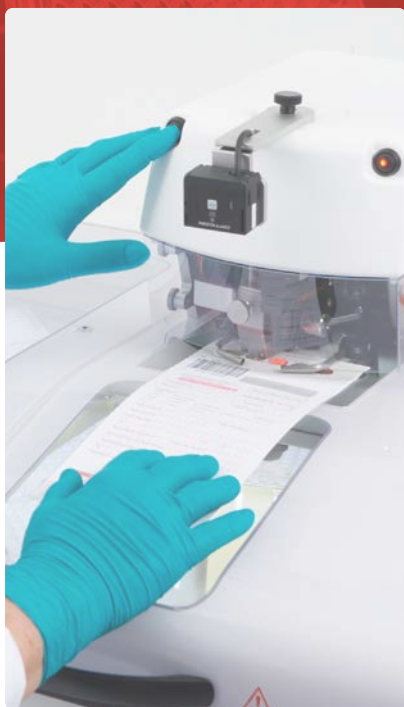
More Flexibility

Configure your tests to suit your needs and start punching in minutes.

Created to ensure ease of navigation and overall usability from initial setup to the very last punch. BSD Studio software combines functionality with usability. Whether you need to punch sequentially, via barcodes or by plate maps, BSD Studio software allows you to have full control over your sample punching process.

More Integration

Connect to the systems you need with ease.

BSD Studio software is packaged with the new BSD Integrator providing a greater degree of flexibility to streamline and automate your workflow. This highly configurable worklist file conversion software allows for open systems integration with LIMS, liquid handlers, analytical instrumentation and genetic analysers.

Ability to produce multiple output file formats from each test.

Output file processing runs automatically after each punch run.

More Support

High quality instrumentation backed by expert service and support.

Investing in BSD, gives your laboratory benefits from high-quality product performance coupled with peace of mind for the lifetime of your instrument. BSD is committed to assuring both durability and reliability through expert service knowledge and support to ensure maximum productivity for your laboratory.

Features & Specifications

Instrumentation

Plate Deck
Nine plate capacity. Suits any combination of standard, deep well, PCR, ELISA microplates or tube racks up to 44mm height. Nine plate adaptors included.

Punch Head
Dual (two punch sizes) manufactured from high precision steel. Custom size selections from 1.0, 1.2, 1.5, 2.0, 3.0, 3.2, 3.8, 4.0, 4.7 to 6.0mm combinations. Quick release for easy cleaning or changing punch size.

Mobile Chute
An electronically controlled two-piece assembly that connects to the plate and guides the path of paper disks to fall directly into a well.

Punch Activation
Four ways to punch: (1) Footswitch, (2) Auto-trigger function, (3) Software control screen or (4) Push button.

Auto-trigger Function
An automatic punch function senses the card on the card platform and activates the punch. A footswitch can be used in parallel with the auto-trigger turned on or off.

Physical

Hardware
Windows mini PC with Windows 10 Pro OS and 15 inch touchscreen monitor.

Software
Includes one license copy of BSD Studio Software and BSD Integrator plugins.

Power Supply
External 100-240V low leakage medical grade power adaptor. The instrument is internally powered from 24V DC.

Physical Weight & Dimensions
855 W x 575 D x 385 H mm. Work height 215mm.
Weight: 47 kg / 103 lbs.

System

Disk Detection System
A high-speed optoelectronic sensor is used to validate the passage of punched disks through the mobile chute.

Decontamination
Programmable cleaning punch used to perform multiple cleaning punches into a dedicated cleaning container. Multiple cleaning punches may be programmed between samples. The dust extraction system reduces the amount of paper dust gathered around the punch site.

Light Targeting System
Precise LED illumination of punch location. Position the sample card to the most desirable location under the programmed light pattern.

Pattern Punching
Punch multiple disks from any one sample. Programmable pattern to punch up to 7 disks with the aid of light guides. Ability to punch combinations from two different punch sizes in the same punch run.

Sample Compatibility
Compatible with all sample collection filter paper, dried samples on filter paper and framed or unframed cards. E.g. Guthrie cards, Whatman FTA cards, FTA PlantSaver cards Protein Saver cards and Bode Buccal DNA collectors.

Static Control
Static electricity is mitigated by the Ionizer system in combination with the Air Humidification system. An electronically controlled internal micropump provides positive air flow to assist the passage of punched disks and considerably reduce punch disk errors. The Ionizer can be turned off for biochemical assays.

Documentation

Barcode Readers
An integrated barcode reader positioned above the card platform for quick scanning of card barcodes. Plate barcodes are scanned using an internal reader.

Plate Validation Camera
Image is displayed prior to and after each punch to verify correct placement of each disk in the well. Text data specific to the well is saved with each image.

Worklist Files
A worklist may be imported to fill plates according to sample barcodes.

Output Files
Generate output files with logs of selectable fields. Output files saved as .csv / .txt / .dat / .xml formats.

Galaxy A9

Manufactured in Australia by BSD Robotics.