Freedom of Integration

Increased Traceability

Minimize Human Error

Controlled Comfort

BSD® *Galaxy A9*

Semi-automated Punch Instrument

FLEXIBILITY • AUTOMATION • THROUGHPUT

The BSD Galaxy A9

Backed by the reliability and performance of field-proven BSD core technology, the BSD Galaxy A9 offers superior flexibility to prepare multiple tests for biochemical and molecular assays. With advanced documentation capabilities and increased connectivity, the BSD Galaxy A9 inspires confidence and provides certainty for your workflow.

BSD Technology Reimagined

Developed with the needs of evolving newborn screening laboratories in mind, the BSD Galaxy A9 showcases a unique turntable design housed in a compact benchtop solution, greatly reducing the overall footprint and allowing seamless integration into your workflow.

Boasting greater capacity to prepare up to 9 plates simultaneously, the BSD Galaxy A9 has been designed to offer the compatibility to work with most plate types and sample collection mediums.

The Galaxy A9 is built on established BSD technology used in newborn screening and forensic DNA laboratories with advanced features to ensure sample integrity throughout the punching process.

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Manufactured in Australia by Microelectronic Systems now trading as BSD Robotics.

BSD Galaxy A9 Highlights

FLEXIBILITY

Controlled comfort

You can enjoy completing your workflow with ease and precision without compromising on personnel comfort and safety.

- Quieter and adaptable punch operation coupled with ergonomic monitor arm and low working height allow for increased user comfort suited to your preferred workstation requirements.
- Transparent covers and plate deck illumination provide a high degree of visualisation for monitoring throughout the punching process.

OPEN SYSTEM

Freedom of choice

Enjoy the freedom of open systems integration providing a new world of possibilities to interface with laboratory information systems and downstream analytical instruments. The BSD Galaxy A9 offers flexibility of choice and maximum efficiency in one instrument.

- Customisable punching protocols, flexible punch control and highly configurable output options for automated system integration.
- Compatible with a wide range of sample cards and collectors allowing you to use the sample collection method that suits your requirements.
- Compatibility with most plate types including 96-well standard, PCR, ELISA, deep well and tubes (up to 44mm).

BSD Galaxy A9 Highlights

TRACEABILITY

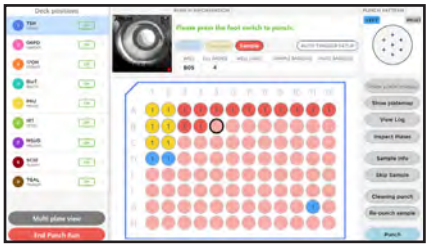
Assurance you can depend on

Take the uncertainty out of your workflow with increased traceability features aimed to reduce the risk of processing errors and provide greater visibility throughout your punch run. The addition of security protocols allows complete control of instrument setup and assurance of punching protocols.

- Images of wells or tubes are displayed in real time and can be recorded before and after each punch saving vital information such as: barcodes, timestamp and well information.
- Punch site selection is performed by a card imaging system to reduce operator decision making and sample variation.
- Increased independence of laboratory personnel due to customisable security levels streamlining daily punching practices.

BSD Studio Software

The BSD Studio software has been created to ensure ease of navigation and overall usability from initial setup to the very last punch. The new BSD Studio offers an intuitive, easy-to-use design featuring an integrated touchscreen interface for simplified sample preparation.



Real time punch display

System Compatibility

BSD Studio software is packaged with the new BSD Integrator plugin providing a greater degree of flexibility to streamline your workflow. This highly configurable worklist file conversion software allows for open systems integration.

Nine plate view

- Ability to produce multiple output file formats from each test.
- Output file processing runs automatically from the BSD Studio software.

Workflow Compatibility

BSD Studio offers a high level of flexibility by allowing the user to configure tests to suit laboratory operating procedures. The test editor allows detailed configuration of individual plate maps, punching protocols, barcoding and test details.

Test Editor

Features & Specifications

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.
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.
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.
PUNCH ACTIVATION	Three 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.
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.
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.
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.
OUTPUT FILES	Generate output files with logs of selectable fields. Output files saved as .csv / .txt / .dat / .xml formats.
WORKLIST FILES	A worklist may be imported to fill plates according to sample barcodes.
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.
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 H. Weight: 47 kg / lbs