

BSD NOVA M4

Four-Plate Biosample Puncher

A semi-automatic punch instrument for newborn screening.

Increase throughput with 4 plates

The BSD Nova M4 is a four-plate semi-automated punch instrument, developed for newborn screening laboratories.

The BSD Nova M4 punches dried blood spots into standard 96-well microplates. It is compatible with framed and unframed filter paper. Its simplified design built on proven BSD technology makes it perfect for everyday routine operation. A computer with Windows 10 OS is required to run the software and operate the punch instrument.

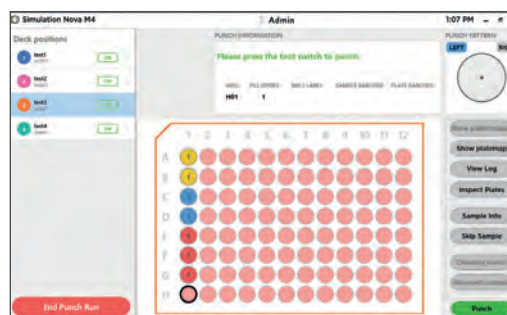


Test loading screen in software.

Software

The software is versatile, robust and user friendly. The software will scan and track sample barcodes, generate platemaps and output data files. There are many features in the software from basic punch operations to advanced configurations. Security feature is built in to allow users with different levels of access to different software functions.

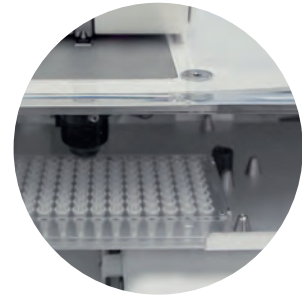
- Save and resume punch runs.
- Save test templates for frequently used tests.
- Configurable output data fields for LIMS integration.
- Save in .csv, .txt, .dat or .xml formats.
- Assign different access levels to users.
- Assign standard and control wells.
- Buttons are compatible with a touchscreen monitor as well as a mouse device.



Features

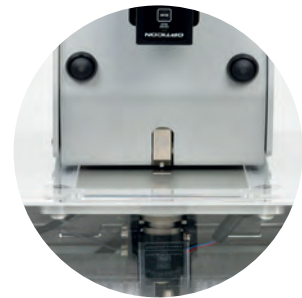
Four Plate Capacity

- Load one to four standard 96-well microplates in a single punch run.
- Programmable cleaning punch.



Punch Size

- Quick and seamless punching. Choose from a broad range of punch sizes from 1.0, 1.2, 1.5, 2.0, 3.0, 3.2, 3.8, 4.0, 4.7 or 6.0mm diameter.
- The punch head is precision engineered using long-life steel.



Auto-trigger Function

- Automatic punch function (auto-trigger) detects the presence of a sample card through an integrated sensor located on the card platform and activates the punch after a pre-set time delay.



Air Humidification System

- Humidified air aims to reduce static electricity effects on the punched paper disks.
- Positive air pressure is passed through anti-static tubing within the instrument to the punch mechanism.



Sample Barcode Reader

- Integrated sample barcode reader for scanning of sample card barcodes and traceability.
- Scanned barcodes can be included in the output files or used to prompt samples for imported worklist files.



SPECIFICATIONS

SAMPLE COMPATIBILITY	Compatible with all sample collection filter paper. Dried samples on filter paper, framed or unframed cards. e.g. Whatman FTA Card, FTA PlantSaver Card, Protein Saver Card, Guthrie card, Bode Buccal DNA Collector.
PLATE DECK	4 plate capacity, standard 96-well microplates.
PUNCH HEAD	Single fixed punch head. Size selections from 1.0, 1.2, 1.5, 2.0, 3.0, 3.2, 3.8, 4.0, 4.7 or 6.0mm.
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.
CLEANING PUNCH	A programmable function to perform multiple cleaning punches into a dedicated cleaning container.
PUNCH ACTIVATION	4 ways to punch: 1) Footswitch, (2) Push button, (3) Software control screen or (4) Auto-trigger function.
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.
AIR HUMIDIFICATION SYSTEM	An external air pump provides positive air flow to assist the passage of punched disks. The air is humidified to minimize the effects of static electricity.
SAMPLE BARCODE READER	An integrated barcode reader positioned above the card platform for quick scanning of card barcodes.
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.
HARDWARE	Windows PC with Windows 10 OS required. Note: Computer is not supplied.
SOFTWARE	Includes one license copy of BSD Nova M4 Software.
POWER SUPPLY	External 110-240V power adaptor.
PHYSICAL DIMENSIONS & WEIGHT	650 W x 440 D x 350 H mm; Weight: 18kg / 39 lbs

BSD Nova M4 may not be available in all regions. For product availability please contact BSD Robotics.



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