BioStation Firmware Revision Notes

Version 1.5



Revision Notes

Firmware Version 1.5

Build Number V1.5 081005

2008-10-05

- Support BioStar, a new access control software of Suprema.
 - Key differences of BioStar over BioAdmin in terms of BioStation firmware are as follows:
 - Door configuration
 - ◆ One device can control only one door, i.e., 'two door' mode is not supported. Activating an additional relay is possible, though.
 - ◆ "Door relay" can be set as the device's own relay, other device's relays or SIO's relays in the same RS485 network. (SIO means Secure I/O)
 - ◆ "RTE" or "Door sensor" can be set as the device's own input of SIO's input in the same RS485 network. (SIO means Secure I/O)

■ RS485 network

- ◆ In a RS485 network, a host device should be unique and the number of slave devices is up to 7, among which 4 SIOs can be included by maximum.
- ◆ If a host device is connected to PC by LAN, it is possible to access data of RS485-networked slave devices from PC. It means, LAN connection is not necessary between PC and slave devices.
- ◆ Except "Door configuration", it is not possible to control or monitor other device's relay or input ports in a RS485 network.

■ Zone configuration

- ◆ Access Zone, Alarm Zone and Fire Alarm Zone are newly supported.
- ◆ In Access Zone, user data, logs and time information can be synchronized among a master and member devices.
- ◆ In Alarm Zone, any device can be set as a Arm or Disarm device and monitor any 'intrusive' action by specified input ports, and make alarming actions on

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that occasion.

- ◆ In Fire Alarm Zone, the devices monitor a specified input sensor and forcibly open all doors or do alarming action in case of fire alarm.
- Four zones can be configured at the same time.
- BioStation can connect to BioStar server without SSL.
- BioStation can be searched by UDP. IP configuration can be modified by UDP as well.
- In 1:1 authentication, 'ID/CARD + FINGER +PIN' mode is added.
- A bug is fixed so that BioStation shall retry the connection to the server when it fails to connect.

Firmware Version 1.42

Build Number V1.42_080521

2008-05-21

- 'Enhanced Privacy Option' is added. With this option set, fingerprint templates are encrypted and user agreement step is added before enrolling fingerprints.
- Added an option to detect a fake fingerprint. This option enhances security level by detecting fake fingerprint input but does not guarantee 100% detection.
- Added an option to use ISO template format. Users can select template format between Suprema's own format(default) and ISO19794-2 standard format.
- Added an option to control a detailed wiegand output timing.
- Mifare Card is supported. (BioStation Mifare versions)
 - A fingerprint template can be saved on a mifare card instead of internal memory of BioStation CSN(Card Serial Number) of a mifare card can be used as an ID to verify a user for 1 to 1 match.
 - 1KB and 4KB cards are supported.
- An icon is added to display the connection status between biostation and PC.
- When using T&A Auto Change, T&A Manual Change or T&A Fixed, the current T&A mode is displayed.
- The Following bugs are fixed.
 - When enrolling a user, the last(second) fingerprint image is not displayed.
 - When trying APB via RS-485, the admin authentication is checked by the APB rule.
 - When enrolling over 9720 fingerprint templates, the free scan is enabled on an entering admin menu dialog.

Firmware Version 1.4

Build Number V1.4_071105

2007-11-05

- Added a function to reset the master password of BioStation. using BioAdmin.
- A process of receiving IP address is changed to run background.
- A status of TCP/IP connection is indicated by a graphical icon on LCD.
- Some options of T&A mode setting are added.
 - Auto Change T&A mode is changed by a selected time schedule automatically.
 - Manual Change T&A mode is changed and kept as the last T&A key input.
 - Fixed T&A mode is fixed by a selected mode. Changed manually by menu.
- Added an option to check duplicated fingers in enrollment.
- Added an option to change maximum identification time. Default is 3 seconds.
- Added a function to calibrate TC sensor.
- Added an option of changing 1:1 and 1:N authentication mode automatically by schedule.
- Added entrance limit functions like setting authentication interval or limiting number of entrance in a time period.
- Zone configuration is supported where a group of devices in a zone share user and log data for synchronization and support global anti-passback and entrance limit functions in a zone.
 - One of the devices in a group set as a master device gathers data such as user information, log information and time.
 - Sub zones can be set for anti pass back or entrance limit functions.
 - A zone can have maximum 32 devices(BioStation, BioEntryPlus) and 16 subzone.
- The I/O functions can be extended trough RS485 network.
 - For increased security, external Secure I/O or another BioStation can be used for door relay by an encrypted RS485 communication.
 - Up to 2 devices (BioStation/BioEntry Plus) and 4 Secure I/Os can be connected in

a single RS485 loop.

■ Local anti pass back function is supported among devices in a RS485 network.

Firmware Version 1.3

Build Number V1.3 070618

2007-06-18

- Individual verification display function is supported. In verifications success, photos of the individual or a message to him/her can be displayed in the LCD of BioStation.
- T&A function key is effective in 'Bypass' RF card and 'Card Only' option which was not possible in earlier versions.
- Setting the expiration date of the specified user is supported. When the current date is
 over the expiration date the authentication of the user is limited.
- Sound items are extended. 'Finger Only', 'PIN Only', 'Card Only', 'Finger or PIN', 'Finger or Card', 'F1', 'F2', 'F3', 'F4' items is added.
- The following functions are changed.
 - The displayed date format is configurable, 'DD/MM' or 'MM/DD'.
 - In a log save, the authentication method (card, fingerprint, PIN) is also recorded.
 - 'Auto' item is added on 'Fingerprint'-'Fast Mode' menu. It is recommended to use this Automatic Fast Mode because it maintains the same level of identification speed irrespective of the size of the enrolled fingerprints.
 - "1:N delay" setting menu is added. It is a delay time between each fingerprint identification.
 - In 'Door Relay' menu, configuration menu about whether or not the door relay is driven by authentication is added on.
 - In a wiegand setting of 'I/O', one can now select 'Wiegand Card ID' or 'Wiegand User ID'. Wiegand Card ID means the usual wiegand code of a card while the Wiegand User ID means the wiegand code generated by the user ID.
- The following bugs are fixed.

- The RS232 connection gets unstable when changing the baudrate configuration in BioStation.
- WLAN does not work when not using an encryption in wireless connection.

Firmware Version 1.21 Build Number V1.21_070222 2007-02-22

- The following bugs are fixed.
 - Lock System function does not work when the tamper switch is on.
 - The system might reset when displaying user names longer than 30 characters.

Firmware Version 1.2 Build Number V1.2_070124 2007-01-24

- RF card is supported.*
 - 1:1 verification can be processed with RF card. "Card ID" field is added in the user information.
 - "Card only" mode is also added in 1:1 verification.
 - Bypass card is supported.
- Communication with BioAdminServer through Ethernet is supported.
 - Secure communication is supported using SSL.
 - Realtime storing of log records at BioAdminServer is supported.
 - Automatic time synchronization is supported.
- Access control functions are enhanced.
 - Timed anti-passback is supported.
 - Limitation on the number of daily access is supported.
 - User disable function is supported.
- The following functions are changed.
 - Timeout for popup message is configurable. $(0.5 \sim 5\text{sec})$
 - Timeout for ID/Password window is added.
 - In resetting to factory default, resource files are not changed.
 - Fingerprint enrollment process is changed to support retrial of finger touch at the

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failure of enrollment.

- In enrollment, warning of ID duplication is supported.
- Accuracy of time is improved.
- The following bugs are fixed.
 - In importing from a USB memory stick, some resource files are not copied.
 - Abnormal termination of resetting to factory default process might cause system boot failure.

Firmware Version 1.11 Build Number V1.11_061025 2006-10-25 Firmware Version 1.11W Build Number V1.11W_061025 2006-10-25

- Multiple clients can connect to a BIOSTATION terminal through Ethernet/WLAN.
 Maximum connection can be specified in TCP/IP menu.
- The following bugs are fixed
 - In some cases, the last character in the T&A greeting message is overlapped with window border.
 - After resetting to factory default, the Fingerprint options remain unchanged.
 - Wireless 1.11W The blue LED might not be turned on after system reset.

Firmware Version 1.1 Build Number V1.1_060922 2006-09-22 Firmware Version 1.1W Build Number V1.1W 060922 2006-09-22

- USB memory stick can be used for transferring data between the host PC and BIOSTATION terminals.
- Wiegand I/O is supported. Up to 64 bit Wegand formats can be defined. The only constraint is that each field is limited to 32 bits.
- RS485 communication is supported.

^{*} These features are available only if the hardware revision is V02 or later.

- Intercom is supported.*
- The template capacity is increased to 50,000 for 1:1 matching and 9,720 for 1:N matching.*
- The socket type is changed to TCP from UDP. As a result, BioAdmin V3.0 cannot connect to BIOSTATION with firmware V1.1 through Ethernet. You should use BioAdmin V3.1 or later.
- Template encryption is supported. When this option is on, all the fingerprint templates are transferred and saved in encrypted form.
- Locking/unlocking communication channels is supported. To unlock communication channels, users should provide 16 byte master password.
- Log filtering is supported.
- Time can be set in Display setup menu.

^{*} These features are available only if the hardware revision is V01 or later. These are not supported if the hardware revision is Rev. E or Rev. F.