BioStation

Firmware Revision Notes

Version 1.94

EN 301.00.BST V1.94

suprema
Biometrics & Security

Firmware Version 1.94 (Build No.1.94_150627)

Release: 2015-07-06

1. Improvements
   1.1. The stability of the network communication (UDP, RS-485, and Wiegand) has been improved.
2. Bug Fixes
   2.1. Authentications may be delayed when the server is down. This only occurs when using the server mode.
   2.2. Private message displays incorrectly.

Firmware Version 1.93 (Build No.1.93_140228)

Release: 2014-02-28

1. Save logs when card authentication fails
2. Relay Off log added
3. Control authentication results and LED/Beep using Input port
4. Card ID Wiegand Bypass feature
5. Set Custom ID range when setting Wiegand
6. Available to set whether to use Wiegand Fail Output and support Output Value settings
7. Improved the Mifare sector key update
8. Support Farsi (Persian) and multilingual localization
9. Available to save other logs when entering the menu
10. Support Exit button interlock motion, apply priorities with FireAlarm
11. Save BioStar administrator ID logs when opening a door using BioStar
12. Unlock Time start trigger settings
13. Added call button event and available to save images
14. The 'Double Mode' authentication by user + administrator
15. 1-second interval in 1 minute using Time Sync between server and device
16. Changed the ID matching method of BSH card
17. The following bugs are fixed.
    17.1. Wiegand Alternative Value (FC fixed number) was not output.
    17.2. Only settings changed when rebooting is cancelled after changing language settings.

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Release: 2014-02-28

18. Save logs when card authentication fails
19. Relay Off log added
20. Control authentication results and LED/Beep using Input port
21. Card ID Wiegand Bypass feature
22. Set Custom ID range when setting Wiegand
23. Available to set whether to use Wiegand Fail Output and support Output Value settings
24. Improved the Mifare sector key update
25. Support Farsi (Persian) and multilingual localization
26. Available to save other logs when entering the menu
27. Support Exit button interlock motion, apply priorities with FireAlarm
28. Save BioStar administrator ID logs when opening a door using BioStar
29. Unlock Time start trigger settings
30. Added call button event and available to save images
31. The 'Double Mode' authentication by user + administrator
32. 1-second interval in 1 minute using Time Sync between server and device
33. Changed the ID matching method of BSH card
34. The following bugs are fixed.
    - 34.1. Wiegand Alternative Value (FC fixed number) was not output.
    - 34.2. Only settings changed when rebooting is cancelled after changing language settings.
    - 34.3. Device is rebooted when loading 5000 users after entering the main menu.
    - 34.4. Icon-afterimages occurred while BioStation is connected.
    - 34.5. Wiegand did not outputted when BSH server matching is operated.
    - 34.6. Wiegand setting changed after rebooting a device.

Firmware Version 1.92 (Build No.1.91_120326)

Release: 2012-03-26

1. Support OC4 fingerprint sensor.
2. Support 7Byte CSN Mifare Card.
   2.1. 7byte CSN is now fully read.
   2.2. In the last version, although a Mifare Card had 7byte CSN, only first 4byte CSN was read.

Firmware Version 1.91 (Build No.1.91_120220)

Release: 2012-02-20

1. Support BST H/W V08A.
2. The following bugs are fixed.
   2.1. Private message and image were not deleted.
   2.2. After verification with ID/Card+PIN, always fail message box was shown.
   2.3. Under the lock time schedule, the door was opened by RTE.

Firmware Version 1.9 (Build No.1.9_110224)

Release: 2011-02-24

1. Support Interlock Zone.
   1.1. It is possible to configure two doors as an interlock zone.
2. Support Mifare Plus Card.
   2.1. Support reading CSN.
   2.2. Support reading data which is saved in each sectors of Mifare Plus Card.
   2.3. Support writing data to each sectors of Mifare Plus Card.
3. Support Mifare Desfire and Ultralight card
   3.1. Support reading CSN only.
4. Fingerprint algorithm is upgraded.
   4.1. Extracting algorithm is improved.
   4.2. Matching algorithm is improved.
5. Support ANSI378 fingerprint template format.
6. The following bugs are fixed.
   6.1. When using HID card, no validation about card data length.
   6.2. When using Unlock Time, forced open event do not occur.

Firmware Version 1.8 (Build No.1.8_091214)

Release: 2009-12-14

1. Support extended alarm zone operation.
   1.1. It is possible to configure any input port of BioStation as an external sensor input for extended alarm zone.
   1.2. It is possible to configure any input port of BioStation as an external arm/disarm input for extended alarm zone.
   1.3. It is possible to configure any output port of BioStation as an arm/disarm status output for extended alarm zone.
2. Support arm/disarm initiation on alarm zone by pre-defined keypad.
3. Support a turnstile-type door.
   3.1. It is possible to configure BioStation to close door upon sensing door status input within door open time.

Firmware Version 1.72 (Build No.1.72_091130)

Release: 2009-11-30

1. For OC versions, there were cases when the optical sensor failed to scan fingerprints due to improper initialization. This symptom occurs randomly when the device's operation mode – identification, menu invocation, etc – is changed. Most devices do not suffer this anomaly during normal operation, as the failing mode is device dependent and the probability of the failure is low.

Firmware Version 1.71 (Build No.1.71_091008)

Release: 2009-10-08

1. Following bugs are fixed
   1.1. When the BioStar Access Zone configuration have been changed, a member BioStation of the Access Zone try to synchronize users with the master device, although the user information of the other devices was not changed.

Firmware Version 1.7 (Build No.1.7_090821)

Release: 2009-08-21

1. Maximum number of user is extended to 200,000 in HW Version 05.(In previous HW Version, maximum number of user is still 25,000.)
2. Maximum number of template is extended to 400,000 in HW Version 05.(In previous HW Version, maximum number of template is still 50,000.).
3. Fast ID Matching is supported.Fast ID Matching means that identify is processed in users whose id is started with the inserted id.
4. USB Virtual Terminal which is exported form F/W version V1.7 can not be supported in BioAdmin. (We recommend to use BioStar)
5. Sending configuration to BioStation by USB Connection can be failed in BioAdmin. (We recommend to use BioStar)

Firmware Version 1.6 (Build No.1.6_090604)

Release: 2009-06-04

1. Wiegand Extend Mode is added.
2. Changing Card Id Format to save and display is added.
3. The card reader to be connected with the fingerprint reader through Wiegand Extend Mode can be included in BioStar Zones.
4. The card reader to be connected with the fingerprint reader through Wiegand Extend Mode can be included in BioStar Doors.
5. Auto Changing To Local Matching, when the disconnection with PC occur in using server matching, is added.
6. Following bugs are fixed
   6.1. The TCP/IP connection between BioStation and PC is disconnected by Session Time Out of firewall.
   6.2. When TCP/IP connection of BioStation to PC need over 3 seconds, BioStation can't connect to PC.

Firmware Version 1.51 (Build No.1.5_081210)

Release: 2008-12-10

1. Log Cache Size is changed to 128 from 64.
2. When the synchronization with SIO has succeeded , BioStatoin plays the success sound.
3. Server matching by Wiegand Card Input is added.
4. Arm/Disarm by Wiegand Card Input is added.
5. Following bugs are fixed
   5.1. When enrolling to the module has failed, the log has remained as success.
   5.2. When an error occurs in enrolling to the internal module, the log remains as the success.
   5.3. When the auth mode is 'ID/CARD + FINGER +PIN', the server identification log does not remain.
   5.4. When the auth mode is 'ID/CARD + FINGER +PIN', the server identification is not restricted by auth limit conditions.
   5.5. After placing a card is canceled, the verify success log always remains as 'CARD+FINGER'.

Firmware Version 1.5 (Build No.1.5_081005)

Release: 2008-10-05

1. Support BioStar, a new access control software of Suprema.
   1.1. Key differences of BioStar over BioAdmin in terms of BioStation firmware are as follows:
   1.2. Door configuration
      1.2.1. One device can control only one door, i.e., 'two door' mode is not supported. Activating an additional relay is possible, though.
      1.2.2. "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)
      1.2.3. "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)
   1.3. RS485 network
      1.3.1. 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.
      1.3.2. 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.
      1.3.3. Except "Door configuration", it is not possible to control or monitor other device's relay or input ports in a RS485 network.
   1.4. Zone configuration
      1.4.1. Access Zone, Alarm Zone and Fire Alarm Zone are newly supported.
      1.4.2. In Access Zone, user data, logs and time information can be synchronized among a master and member devices.
      1.4.3. 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 that occasion.
      1.4.4. 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.
      1.4.5. Four zones can be configured at the same time.
2. BioStation can connect to BioStar server without SSL.
3. BioStation can be searched by UDP.IP configuration can be modified by UDP as well.
4. In 1:1 authentication, 'ID/CARD + FINGER +PIN' mode is added.
5. A bug is fixed so that BioStation shall retry the connection to the server when it fails to connect.

Firmware Version 1.42 (Build No.1.42_080521)

Release: 2008-05-21

1. 'Enhanced Privacy Option' is added.With this option set, fingerprint templates are encrypted and user agreement step is added before enrolling fingerprints.
2. Added an option to detect a fake fingerprint.This option enhances security level by detecting fake fingerprint input but does not guarantee 100% detection.
3. Added an option to use ISO template format.Users can select template format between Suprema's own format(default) and ISO19794-2 standard format.
4. Added an option to control a detailed wiegand output timing.
5. Mifare Card is supported.(BioStation Mifare versions)
   5.1. 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.
   5.2. 1KB and 4KB cards are supported.
6. An icon is added to display the connection status between biostation and PC.
7. When using T&A Auto Change, T&A Manual Change or T&A Fixed, the current T&A mode is displayed.
8. The Following bugs are fixed.
   8.1. When enrolling a user, the last(second) fingerprint image is not displayed.
   8.2. When trying APB via RS-485, the admin authentication is checked by the APB rule.
   8.3. When enrolling over 9720 fingerprint templates, the free scan is enabled on an entering admin menu dialog.

Firmware Version 1.4 (Build No.1.4_071105)

Release: 2007-11-05

1. Added a function to reset the master password of BioStation.using BioAdmin.
2. A process of receiving IP address is changed to run background.
3. A status of TCP/IP connection is indicated by a graphical icon on LCD.
4. Some options of T&A mode setting are added.
   4.1. Auto Change – T&A mode is changed by a selected time schedule automatically.
   4.2. Manual Change - T&A mode is changed and kept as the last T&A key input.
   4.3. Fixed – T&A mode is fixed by a selected mode.Changed manually by menu.
5. Added an option to check duplicated fingers in enrollment.
6. Added an option to change maximum identification time.Default is 3 seconds.
7. Added a function to calibrate TC sensor.
8. Added an option of changing 1:1 and 1:N authentication mode automatically by schedule.
9. Added entrance limit functions like setting authentication interval or limiting number of entrance in a time period.
10. 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.
    10.1. One of the devices in a group set as a master device gathers data such as user information, log information and time.
    10.2. Sub zones can be set for anti pass back or entrance limit functions.
    10.3. A zone can have maximum 32 devices(BioStation, BioEntryPlus) and 16 subzone.
11. The I/O functions can be extended trough RS485 network.
    11.1. For increased security, external Secure I/O or another BioStation can be used for door relay by an encrypted RS485 communication.
    11.2. Up to 2 devices (BioStation/BioEntry Plus) and 4 Secure I/Os can be connected in a single RS485 loop.
    11.3. Local anti pass back function is supported among devices in a RS485 network.

Firmware Version 1.3 (Build No.1.3_070618)

Release: 2007-06-18

1. 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.
2. T&A function key is effective in 'Bypass' RF card and 'Card Only' option which was not possible in earlier versions.
3. 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.
4. Sound items are extended.'Finger Only', 'PIN Only', 'Card Only', 'Finger or PIN', 'Finger or Card', 'F1', 'F2', 'F3', 'F4' items is added.
5. The following functions are changed.
   5.1. The displayed date format is configurable, 'DD/MM' or 'MM/DD'.
   5.2. In a log save, the authentication method (card, fingerprint, PIN) is also recorded.
   5.3. '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.
   5.4. "1:N delay" setting menu is added.It is a delay time between each fingerprint identification.
   5.5. In 'Door Relay' menu, configuration menu about whether or not the door relay is driven by authentication is added on.
   5.6. 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.
6. The following bugs are fixed.
   6.1. The RS232 connection gets unstable when changing the baudrate configuration in BioStation.
   6.2. WLAN does not work when not using an encryption in wireless connection.

Firmware Version 1.21 (Build No.1.21_070222)

Release: 2007-02-22

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

Firmware Version 1.2 (Build No.1.2_070124)

Release: 2007-01-24

1. RF card is supported. Note
   1.1. 1:1 verification can be processed with RF card. "Card ID" field is added in the user information.
   1.2. "Card only" mode is also added in 1:1 verification.
   1.3. Bypass card is supported.
2. Communication with BioAdminServer through Ethernet is supported.
   2.1. Secure communication is supported using SSL.
   2.2. Realtime storing of log records at BioAdminServer is supported.
   2.3. Automatic time synchronization is supported.
3. Access control functions are enhanced.
   3.1. Timed anti-passback is supported.
   3.2. Limitation on the number of daily access is supported.
   3.3. User disable function is supported.
4. The following functions are changed.
   4.1. Timeout for popup message is configurable.(0.5-5sec)
   4.2. Timeout for ID/Password window is added.
   4.3. In resetting to factory default, resource files are not changed.
   4.4. Fingerprint enrollment process is changed to support retrial of finger touch at the failure of enrollment.
   4.5. In enrollment, warning of ID duplication is supported.
   4.6. Accuracy of time is improved.
5. The following bugs are fixed.
   5.1. In importing from a USB memory stick, some resource files are not copied.
   5.2. Abnormal termination of resetting to factory default process might cause system boot failure.

Note
These features are available only if the hardware revision is V02 or later.

Firmware Version 1.11 (Build No.1.11_061025)

Release: 2006-10-25

Firmware Version 1.11W (Build No.1.11W_061025)

Release: 2006-10-25

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

Firmware Version 1.1 (Build No.1.1_060922)

Release: 2006-09-22

Firmware Version 1.1W (Build No.1.1W_060922)

Release: 2006-09-22

1. USB memory stick can be used for transferring data between the host PC and BIOSTATION terminals.
2. 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.
3. RS485 communication is supported.
4. Intercom is supported. Note
5. The template capacity is increased to 50,000 for 1:1 matching and 9,720 for 1:N matching. Note
6. 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.
7. Template encryption is supported.When this option is on, all the fingerprint templates are transferred and saved in encrypted form.
8. Locking/unlocking communication channels is supported.To unlock communication channels, users should provide 16 byte master password.
9. Log filtering is supported.
10. Time can be set in Display setup menu.

Note

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.

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