








amnimo X/G/R Series
Release Notes








How to confirm compatible models

This document corresponds to multiple models of Edge Gateway/IoT Router. The following shows the icons of the compatible models.

	amnimo X Series Indoor-Type AI Edge Gateway
	amnimo G Series Indoor-Type Edge Gateway
	amnimo R Series Indoor-Type IoT Router
	amnimo G Series Outdoor-Type Edge Gateway
	amnimo R Series Outdoor-Type IoT Router

Firmware of Edge Gateway Series

A device of each Edge Gateway Series has its own dedicated firmware*¹. Be careful when you update the firmware by full update*².

Model	URL for latest firmware
 Indoor-Type AI Edge Gateway	https://(account):(password)@package.amnimo.com/firmware/ax11.amf
 Indoor-Type Edge Gateway	https://(account):(password)@package.amnimo.com/firmware/ag10.amf
 Indoor-Type IoT Router	https://(account):(password)@package.amnimo.com/firmware/ar10.amf
 Outdoor-Type Edge Gateway	https://(account):(password)@paSckage.amnimo.com/firmware/ag20.amf
 Outdoor-Type IoT Router	https://(account):(password)@package.amnimo.com/firmware/ar20.amf

*1 For how to check the version of the main part, refer to "2.4.1 Displaying the firmware version" in the "[amnimo Gateway Series CLI User's Manual](#)".

*2 For how to update the firmware by full update, refer to "2.4.4 Updating the firmware (Full update)" in the "[amnimo Gateway Series CLI User's Manual](#)".

*3 If you access each firmware, you will be required an account and password. Please contact our support team.

Chapter 1 Release Notes

The following shows the new functions added and the changes made since the first release.



→ For the restrictions and known problems, refer to "2.1 Restrictions and known problems".

1.1 Latest version

1.1.1 Ubuntu 20.04 based

■ Version 2.4.2 (April 1, 2024)

Upgrade, functions added, specification changed, and bug fixes have been implemented.

TARGET DEVICE




- amnimo X Series Indoor-Type AI Edge Gateway
- amnimo G Series Indoor-Type/Outdoor-Type Edge Gateways
- amnimo R Series Indoor-Type IoT Routers Indoor*¹

UPGRADE*



- Ubuntu Packages (20.04 20240111) 

* AI Edge Gateway remains unchanged from V2.4.1.








FUNCTIONS ADDED

- Added amnimo VMS function. 
- The communication duration has been added to the display parameters of the mobile communication status display function in the CLI and GUI functions. 
- User defined settings (user-define) have been added to the schedule setting function in the GUI function. 





SPECIFICATION CHANGED

- Changed the default value of proxy ARP to disabled. 
- In the schedule function, the execution action (PPP/mobile) of the general-control setting has been changed to reconnect when the action destination is always connected. 

BUG FIXES

- Fixed a bug that prevented PTZ operation in the eVMS. (No.98) 
- Fixed a bug in the eVMS that prevented some search results from being displayed if there were more than 1000 motion detections within the period shown on the timeline bar. (No.100) 
- Fixed a bug in the enhanced video management system(eVMS) that caused the camera to go offline after the device was restarted. (No.101) 
- In the CLI function, a bug was fixed in which settings related to account were not displayed in the show config command. (No.102) 
- Fixed a bug in the GUI function where PPP service was not stopped after removing PPP settings from the Advanced Settings. (No.103) 
- Fixed a bug that could cause the communication module to hang in SIM failure state when changing mobile settings. (No.104) 
- Fixed a bug in the amlog function where the amlog show command or the amlog read command would display the entire log. (No.105) 

URLs for firmware for full updates

model	Referred URL
	https://(account):(password)@package.amnimo.com/firmware/ax-2.4.2-b62175.amf
 	https://(account):(password)@package.amnimo.com/firmware/ag-2.4.2-b62171.amf
	https://(account):(password)@package.amnimo.com/firmware/ar-2.4.2-b62167.amf

1.1.2 Ubuntu 18.04 based


■ Version 1.9.9 (December 14, 2023)

Bug fixes have been implemented.


TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway

Functional Enhancements

- In the eVMS, the architecture of time-lapse video creation, media file retrieval flow, and event notification flow has been improved, and the thumbnail update flow has been improved. 

BUG FIXES

- Fixed a bug in the eVMS that caused the camera to go offline after the device was restarted. (No.101) 

URLs for firmware for full updates

model	Referred URL
 	https://(account):(password)@package.amnimo.com/firmware/ag-1.9.9-b59060.amf

1.2 Versions released in the past

1.2.1 Ubuntu 20.04 based


■ Version 2.4.1 (March 15, 2024)

amnimo X Series Indoor-Type AI Edge Gateway has been released.

TARGET DEVICE



- amnimo X Series Indoor-Type AI Edge Gateway

UPGRADE*

- Ubuntu Packages (20.04 20240111) 



*This is a difference from the firmware of the other products.

FUNCTIONS ADDED*

- Added amnimo VMS function. 
- The communication duration has been added to the display parameters of the mobile communication status display function in the CLI and GUI functions. 


*This is a difference from the firmware of the other products.

SPECIFICATION CHANGED*

- Changed the default value of proxy ARP to disabled. 
- In the schedule function, the execution action (PPP/mobile) of the general-control setting has been changed to reconnect when the action destination is always connected. 

*This is a difference from the firmware of the other products.

URLs for firmware for full updates

model	Referred URL
	https://(account):(password)@package.amnimo.com/firmware/ax11-2.4.1-b61483.amf

Version 2.1.0 (November 7 and 27, 2023)




Updated to Ubuntu 20.04 base environment.

TARGET DEVICE


- amnimo G Series Indoor-Type/Outdoor-Type Edge Gateways
- amnimo R Series Indoor-Type IoT Routers Indoor^{*1}

*1 Ubuntu 20.04 based firmware for amnimo R series IoT Routers Outdoor will be released next year.






UPGRADE

- Ubuntu Packages (20.04 20230417) 
- Nx Witness (5.1.1.37512) 
- remote.it (3.0.34) 

FUNCTIONS ADDED

- In the schedule type "general-control" of the schedule function, a function has been added that allows you to perform software reboot and hardware reboot by setting the random execution wait time and startup elapsed time.
- Added a command (show device storage format) to display storage format information. 

SPECIFICATION CHANGED

- Changed the maximum value of the MTU setting for the interface feature from 9676 to 9668. 
 - Changed so that even if the interface is disabled, the associated DHCP server can be configured. ^{※2}

- *2 If the interface is disabled, the associated DHCP server cannot be started.
- In the account function, it has been changed so that only single-byte numbers cannot be specified for the account name and group name. ^{※3} 
- *3 If you specify a character string with only single-byte numbers in version 1.x.x, if you upgrade to this version or later, the user or group will not be available and will not start properly. This is [a limitation of Ubuntu 20.04](#).
- Changed the network management software from netplan to amnimo software and Quagga. 
 - In the CLI function, the "optional" setting of the interface function has been removed. As a setting, it does not wait for the link up of the target interface at startup. ("optional" is fixed as the enabled setting.) 

1.2.2 Ubuntu 18.04 based





Version 1.9.8 (October 24, 2023)

Bug fixes have been implemented.




TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Bug fix

- Fixed a bug in the firmware differential update function that sometimes caused an error to occur at the stage of the differential update package of the remote.it and fail when the amount of package diff is large. (No.90) 
- Fixed a bug in the Device Management System that the activation process may not be completed due to a communication error between the device and the cloud during device activation. (No.91) 
- Fixed a bug in the Device Management System that displayed success even though remote.it device registration failed. (No.92) 
- Fixed a bug In the eVMS, that error messages such as "panic: runtime error" and "signal SIGSEGV" were periodically output to syslog when the device time is off by more than 5 minutes. (No.93) 

URLs for firmware for full updates

model	Referenced URL
	https://(account):(password)@package.amnimo.com/firmware/ag-1.9.8-b55915.amf
	https://(account):(password)@package.amnimo.com/firmware/ar-1.9.8-b55920.amf
	https://(account):(password)@package.amnimo.com/firmware/ar20-1.9.8-b55925.amf



Version 1.9.7 (September 29, 2023)

A Bug fix have been implemented.





TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Bug fix

- Fixed a bug that the remote.it may not start normally when the power supply is started. (No.89)  

URLs for firmware for full updates

model	Referenced URL
 	https://(account):(password)@package.amnimo.com/firmware/ag-1.9.7-b53876.amf
	https://(account):(password)@package.amnimo.com/firmware/ar-1.9.7-b53896.amf
	https://(account):(password)@package.amnimo.com/firmware/ar20-1.9.7-b53906.amf







Version 1.9.6 (August 9, 2023)

The version of some software programs has been upgraded.





TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Functional improvements

- In the eVMS, the design implementation of thumbnail update and camera status notification functions has been reviewed and availability has been improved.  
- The A/D converter control driver for temperature and voltage sensors has been updated.    

URLs for firmware for full updates

model	Referenced URL
 	https://(account):(password)@package.amnimo.com/firmware/ag-1.9.6-b52324.amf
	https://(account):(password)@package.amnimo.com/firmware/ar-1.9.6-b52315.amf
	https://(account):(password)@package.amnimo.com/firmware/ar20-1.9.6-b52303.amf


Version 1.9.5 (July 24, 2023)

The version of some software programs has been upgraded, and the bugs have been fixed.




TARGET DEVICE


- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

UPGRADE

- remote.it (3.0.33)" 

URLs for firmware for full updates

model	Referenced URL
	https://(account):(password)@package.amnimo.com/firmware/ag-1.9.5-b51399.amf
	https://(account):(password)@package.amnimo.com/firmware/ar-1.9.5-b51403.amf
	https://(account):(password)@package.amnimo.com/firmware/ar20-1.9.5-b51405.amf

	<p>*If you use remote.it 3.0.33, there are some restrictions. → For details, refer to "2.7 Restrictions on using remote.it 3.0.33"</p>
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Version 1.9.4 (June 1, 2023)

Bug fixes have been implemented.




TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Functional improvements and bug fixes

- Fixed an issue in the Device Management System where an error would always occur despite success when performing an overall firmware update from the cloud side. (No.87) 
- Fixed an issue in the Device Management System where stopping the device management system service on the edge side with “service dms stop” command would sometimes result in a timeout or error. (No.88) 
- Enhanced thread monitoring of the communication module control program. 

URLs for firmware for full updates

model	Referenced URL
	https://(account):(password)@package.amnimo.com/firmware/ag-1.9.4-b44769.amf
	https://(account):(password)@package.amnimo.com/firmware/ar-1.9.4-b44775.amf
	https://(account):(password)@package.amnimo.com/firmware/ar20-1.9.4-b44794.amf




Version 1.9.2 (May 11, 2023)

Bug fixes have been implemented.






TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router




Functions added

- Added fail-safe functionality for DHCP servers. (CLI only) 
- Audio output functionality has been added to the eVMS. 
- A batch download function (beta version) has been added to the device management system. 

Functional improvements and bug fixes

- Regarding the GUI function, when updating the mobile module information using the update button, the information on the SIM1 side was not updated. (No.83) 
- In the Device Management System (DMS), the keep-alive timing of the fail-safe function has been improved. 
- Fixed a problem in the eVMS in which the timeline bar did not display when a large number of motions were detected in Smart Search. (No. 84) 
- Fixed a problem in which the eVMS could not detect cameras with names containing multibyte characters. (No. 85) 
- Fixed a rare problem in the eVMS where VMS authentication information was not saved. (No. 86) 

URLs for firmware for full updates

model	Referenced URL
	https://(account):(password)@package.amnimo.com/firmware/ag-1.9.2-b43499.amf
	https://(account):(password)@package.amnimo.com/firmware/ar-1.9.2-b43540.amf
	https://(account):(password)@package.amnimo.com/firmware/ar20-1.9.2-b43527.amf





Version 1.8.4 (April 5, 2023)

Bug fixes have been implemented.

TARGET DEVICE





- amnimo G Series Edge Gateway Indoor Type
- amnimo G Series Edge Gateway Outdoor Type
- amnimo R Series IoT Router Indoor Type
- amnimo R Series IoT Router Outdoor Type

Improved functions and fixed bugs

- Fixed a problem in which reconnecting an Ethernet port, reconnecting a mobile line, or reconnecting PPPoE would restart the DNS server even when the DNS option (using the IP address of the DNS server in the DHCP option set delivered by the destination) is not enabled. (Detailed specifications below) (No.80)    

Reconnection Interface	DNS Server Restart Conditions
Ethernet port	DHCP client settings are enabled and DNS options are enabled
mobile line	Mobile line is active and DNS option is active
PPPoE line	PPPoE enabled and DNS option enabled

URLs for firmware for full updates

model	Referenced URL
 	https://(account):(password)@package.amnimo.com/firmware/ag-1.8.4-b40075.amf
	https://(account):(password)@package.amnimo.com/firmware/ar-1.8.4-b40078.amf
	https://(account):(password)@package.amnimo.com/firmware/ar20-1.8.4-b40102.amf




Version 1.8.3 (February 10, 2023)

The bugs have been fixed.




TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Improved functions and fixed bugs

- Regarding the CLI function and the GUI function, fixed the bug in which when the mobile communication function is stopped after configuring the mobile communication settings (peer) and the session settings (session), if you delete the session settings of the mobile communication settings, an error will occur on the device information screen. (No.77) 
- Fixed the bug in which if configuring the FQDN settings of the FQDN blacklist control of the proxy function, the URL whitelist control will be enabled unintentionally. (No.78) 
- Fixed the bug in which when disconnecting a mobile line or a line such as PPPoE or changing the routing such as connections, the previous connection tracking rules will be maintained and a packet communication cannot be performed on the intended route. (No.79) 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.8.3-b36400.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.8.3-b36438.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar20-1.8.3-b36426.amf

Version 1.8.2 (January 13, 2023)

The functions have been added and the bugs have been fixed.








TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router






UPGRADE

- A group of Ubuntu packages (18.04 20221130) 




Functions added

- Added the alias definition settings to the DNS function. 
- Added the pass-through settings to the IPsec function. 
- Added the DHCP relay function. 
- Added the proxy server function. 
- Added the group authority setting function for accounts. 
- Supports the terminal function that enables you to enter a command line from Device Management System. 
- Regarding eVMS, added the function for playing audio from a camera with audio input enabled in Direct mode. 

Improved functions and fixed bugs

- Regarding the CLI function, in the packet dump function, when an interface is not specified, an unintended interface is selected, and the specification has been changed to specify an interface. (No.30) 
- Fixed the bug in which after changing the time zone, it will not be reflected to the schedule function until the device is rebooted. (No.57) 
- Regarding the CLI function, fixed the bug in which the character string of the IKE pre-shared key setting of the IPsec function is "pre-shard-key". (It is supposed to be "pre-shared-key".) (No.71) 
- Fixed the bug in which when performing a differential update for the firmware from a version earlier than 1.6.1 to Version 1.6.1, the boot area will be changed. (No.75) 
- Regarding eVMS, fixed the bug in which after the IoT communication between the cloud and the Edge Gateway is unexpectedly interrupted, it will not be restored and updating thumbnails, acquiring clips ,and playing live images cannot be performed. (No.76) 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.8.2-b35486.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.8.2-b35492.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar20-1.8.2-b35504.amf




Version 1.6.1 (November 15, 2022)

The bugs have been fixed.




TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Improved functions and fixed bugs

- Fixed the bug in which the device will be restarted when installing an Edge Gateway or IoT Router that is not the end point of IPsec on the IPsec route and if packets of IPsec pass there. (No.72) 
- Fixed the bug in which if starting the Edge Gateway, you may fail to load configuration data of Nx Witness 5.0.0.35270. (No.73) 
- Changed the stage at which the management application of the Edge Gateway is judged to be running successfully when starting the power supply, which is the condition for switching to a redundant area, from "when initramfs ends" to "when rc.local ends". (No.74) 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.6.1-b32332.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.6.1-b32335.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar20-1.6.1-b32337.amf



Version 1.6.0 (October 18, 2022)

The version of some software programs has been upgraded, and the bugs have been fixed.















TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router





UPGRADE


- Nx Witness(5.0.0.35270)"  

Improved functions and fixed bugs

- Fixed the bug in which if resetting the power supply to a communication module, rcu_preempt will detect stalls, an internal communication error will occur, and the device will be restarted on rare occasions. (No.1)    
- Fixed the bug in which if an authentication error state of a communication carrier continues while the non-communication monitoring timer is being enabled, after disconnecting the line, the device will be restarted without stopping the program. (No.66)    
- Fixed the bug in which fast playback will not function when performing VOD playback in direct mode of a Panasonic camera (WV-S3510) by eVMS. (No.67)  
- An improvement has been made to eVMS to display an error message when a direct mode connection fails due to a time difference of 5 minutes or longer between the Edge device and the cloud. (No.68)  
- The performance of eVMS has been improved for video playback in direct mode, VOD playback, and skip playback of Smart Search results. (No.69)  

URLs for firmware for full updates

Model	Referenced URL
 	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.6.0-b29027.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.6.0-b29036.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar20-1.6.0-b29045.amf

	<p>*If you use Nx Witness 5.0.0.35270, there are some restrictions.</p> <p>➔ For details, refer to "2.6 Restrictions when using x Witness 5.0.0.35270".</p>
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■ Version 1.5.3 (July 28, 2022)

The bug has been fixed.

TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Improved functions and fixed bugs

- Fixed the problem in which from a SIM card that has an MSISDN, the MSISDN may not be obtained by the mobile control function. (V1.5.0~V1.5.2) 

Restrictions about update

In this version, you can only perform a differential update of the firmware. (There is no firmware for full updates.)

When using a redundant area of the firmware as well, after performing a differential update of the firmware, synchronize it to the redundant area by using the firmware area sync command*.

*Refer to "2.4.5 Synchronizing redundant areas of firmware" in the "[amnimo Gateway Series CLI User's Manual](#)".


Version 1.5.2 (July 15, 2022)

The bugs have been fixed.




TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

UPGRADE

- remote.it (1.8.8) 

Improved functions and fixed bugs




- Fixed the problem in which the playback time may become 1970/01/01 00:00:00 during live streaming in direct mode on eVMS. 
- Fixed the problem in which if the Edge device side is ahead of the cloud side by 60 minutes or more on DMS you will fail to perform a full update of the firmware, collect syslog files, and collect and download configuration files. 
- Fixed the problem in which regarding the mobile control function, received packets that are not monitored by the no communication detection function are different. 

Also, the specifications of received packets not to be monitored have been changed as follows:

Before the change (V1.1.0~1.5.1)	After the change (V1.5.2~)
<ul style="list-style-type: none"> ● The following ICMP packets: destination unreachable, echo request ● The following UDP packet: DHCP 	<ul style="list-style-type: none"> ● The following ICMP packets: destination unreachable, echo request ● The following UDP packets: DNS, DHCP, NTP, SSDP ● IGMP packets ● SYN packets <p>Packets with an Ethernet type number other than IPv4</p>

- Fixed the problem in which the fail-safe retry counter will not be reset when keep-alive is performed successfully by the scheduling function. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.5.2-b23886.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.5.2-b23895.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar20-1.5.2-b23904.amf


Version 1.5.1 (June 15, 2022)

The function has been improved.





TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Improved functions and fixed bugs

- Changed the default value set for the CPU operation frequency from ondemand to the fixed value of 1000MHz. 

URLs for firmware for full updates

Model	Referenced URL
 	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.5.1-b22563.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.5.1-b22574.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar20-1.5.1-b22649.amf


Version 1.5.0 (May 19, 2022)

The functions have been added and the bugs have been fixed.





TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router



UPGRADE





- Ubuntu packages (18.04 20220406) 

Functions added





- The function for checking the history of changes made to contacts by the GUI 
- The DHCP lease function by the GUI 
- The function for collecting detailed information of devices on Device Management System (CPU usage rate, supply voltage, temperature, mobile communication-related information, network interface, storage usage). 
- Added the function to automatically correct the time when connected to a mobile line. 

Improved functions and fixed bugs

- Fixed the problem in which a SIM of a specific carrier may not be recognized. 
- Regarding the GPS control function of Version 1.3.0 or later, fixed the bug in which the time adjustment function by the GPS may not work immediately after the device is started after resetting the hardware. 
- Fixed the bug in which when starting the device offline, some of the packages required for remote.it will not be installed. 
- Regarding the GUI function, improved the function for displaying the operation dialog on the storage screen. 
- Regarding the GUI function, fixed the problem in which the login screen may not be displayed while the loading screen remains displayed when the GUI is opened after updating the firmware. 
- Fixed the bug on Device Management System in which an error will occur if performing a differential update of the firmware of a device connected to Device Management System via mobile communication. 
- Made an improvement to notify an event at the same time as it occurs and upload an event clip with a delay on eVMS. 
- Fixed the bug in which live streaming cannot be started if special letters such as @ and ? are included in a password of Nx VMS on eVMS. 
- Fixed the bug in which an error may occur when taking video clips and snapshots even though there are no abnormal factors such as communication errors on eVMS. 
- Made an improvement to accept VOD streaming playback of offline cameras on eVMS. 
- Fixed the bug in which an error will occur during live streaming in cloud mode due to a time difference of 5 minutes or more between the cloud and the Edge device on eVMS/Cloud Video Recorder System. 
- Fixed the phenomenon in which Freezing Execution may be output when executing systemctl and you may fail to execute it. 
- Regarding the CLI function, fixed the bug that will remain unless the bridge interface is restarted, even though the interface settings related to the bridge interface have been deleted. 
- Regarding the CLI function, fixed the bug in which an error will occur if the IP address of the corresponding interface is changed when router, dns, and ntp of the DHCP function have been set to auto. 
- Regarding the CLI function, fixed the problem in which settings including '_' cannot be configured for the interface function, if '_' is included in the peer name of the PPPoE function. 
- Regarding the GUI function, fixed the problem in which the system error screen will be output at the time when you complete performing a differential update to upgrade the firmware version 1.2.3 to the

firmware version 1.3.2 or later.    

URLs for firmware for full updates

機種 Model	Referenced URL
 	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.5.0-b21467.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.5.0-b21475.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar20-1.5.0-b21483.amf





Version 1.4.5(February 21, 2022)

An arrangement has been made to support Outdoor-Type IoT Router, and the bugs have been fixed.




TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router
- amnimo R Series Outdoor-Type IoT Router

Improved functions and fixed bugs

- Improved the error handling processing for the control sequence of communication modules. 
- Fixed the problem in which the Device Management System agent may be restarted when using the video clip function on eVMS of Version 1.2.2 or later. 
- Fixed the problem in which video clips generated by the event function may be shortened on eVMS of Version 1.2.1 or later. 
- Fixed the problem in which live playback cannot be performed in DIRECT mode with Google Chrome 98 or later on eVMS. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.4.5-b17222.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.4.5-b16609.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar20-1.4.5-b17216.amf



Version 1.4.4(January 18, 2022)

An arrangement has been made to support Outdoor-Type Edge Gateway, and the bug has been fixed.


TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo G Series Outdoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router




UPGRADE

- remote.it (1.7.60)  

Improved functions and fixed bugs

- Regarding the camera detection function of eVMS of Version 1.4.2/1.4.3, fixed the phenomenon in which if deactivating and activating an activated gateway or camera in succession, the camera cannot be activated successfully and the functions related to the target camera will not work properly. 

URLs for firmware for full updates

Model	Referenced URL
 	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.4.4-b16122.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.4.4-b16130.amf





Version 1.4.3(December 24, 2021)

The bugs have been fixed.


TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router

Improved functions and fixed bugs

- Fixed the problem in which the automatic kitting function of Device Management System cannot be used in Version 1.4.2.  
- Fixed the problem in which communication with Device Management System is disconnected and then reconnected even though the network connection is normal in Version 1.2.0~1.4.2.  

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.4.3-b15726.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.4.3-b15717.amf



Version 1.4.2(December 6, 2021)

The bugs have been fixed.


TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router

Improved functions and fixed bugs

- In Version 1.4.0/1.4.1, fixed the problem in which the line will not be disconnected when the device detects a situation in which radio waves cannot be received. 
- In Version 1.3.0a~1.4.1, fixed the problem in which while Device Management System is being enabled, even though the communication module is not registered to DMS if you check communication with DMS and if it turns out to be poor, the communication module will be reset. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.4.2-b14946.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.4.2-b14952.amf


■ Version 1.4.1(October 27, 2021)

The bug has been fixed.



TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router

Improved functions and fixed bugs

- Fixed the problem in which loopback communication of a RS232 port cannot be performed in Version 1.4.0. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.4.1-b14336.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.4.1-b14346.amf




Version 1.4.0(October 22, 2021)

The bugs have been fixed.



TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router

Improved functions and fixed bugs

- Reduced the processing time to control switching between the SIM cards. 
- Fixed the problem in which when connecting to the line, the SNAT rule will not be applied, and the packet processing will not be switched. 
- Fixed the problem in which if the APN is not specified, communication may not be performed successfully. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag-1.4.0-b14264.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar-1.4.0-b14268.amf

■ Version 1.3.2(October 4, 2021)

The bug has been fixed.



TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router

Improved functions and fixed bugs

- Fixed the problem in which the communication module control program leaks memory.  

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag10-1.3.2-b13714.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar10-1.3.2-b13719.amf






Version 1.3.1(September 10, 2021)

The bugs have been fixed.



TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router

Improved functions and fixed bugs

- Optimized the hardware control process of the boot loader. 
- Regarding the CLI function, fixed the problem in which after enabling the settings of dynamic-snat4 of the PPPoE function, if you restart the relevant service, the settings of dynamic-snat4 will be disabled. 
- Regarding the GUI function, fixed the problem in which while starting Nx Witness that uses the storage function, if you register the storage mount function settings, an error will be displayed. 
- Regarding the GUI function, fixed the problem in which if you perform area synchronization on the firmware update screen, a dialog saying "Unknown error has occurred." will be output. 
- Improved the function for displaying the issuer of each event in the cloud service history. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag10-1.3.1-b13330.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar10-1.3.1-b13326.amf

Version 1.3.0(September 6, 2021)

The functions have been added and the bugs have been fixed.






TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router













UPGRADE

- remote.it (1.7.26)  
- Nx Witness(4.2.0.32480)  
- Ubuntu packages (18.04 20210625)    



Functions added

- Enhanced the setting and display functions of the GUI  
- The network check function of the CLI  
- Ubuntu-related package update  
- Ubuntu-related package update  

Improved functions and fixed bugs

- Took a measure for mitigating the phenomenon in which rcu_preempt detects stalls.  
- Fixed the problem in which the temperature monitoring process misreads the temperature inside the enclosure.  
- Fixed the failure in which if the device mobile sim command is executed while the power supply to the communication module is being turned off, the command will time out.  
- Fixed the bug in which while the mobile connection settings are being set, if you update the firmware and restart the device, the LEDs of ANT and MOB that indicate the mobile connection status will not light up.  
- Fixed the problem in which if performing a differential update, and if it takes 10 minutes or longer to process it, the differential update command being executed will stop in the middle of the process due to a timeout.  
- Improved the function for displaying the issuer of each event in the cloud service history.  

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag10-1.3.0-b13138.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar10-1.3.0-b13142.amf




Version 1.2.3(July 5, 2021)

The functions have been added and the bugs have been fixed.







TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router



Functions added

- Cloud service remote.it configuration 
- Cloud service Nx Witness smart search linkage 
- Cloud service recording record display 

Improved functions and fixed bugs

- Fixed the failure in which the camera status of the UI of eVMS is not updated to the one of the actual device. 
- Fixed the failure in which multiple thumbnail images are uploaded in one cycle of eVMS. 
- Fixed the failure in which after updating the firmware on eVMS, the camera settings will be deleted. 
- Improved the performance of playing video clips on eVMS. 
- Fixed the problem in which ACTIVE mode of the FTP does not operate successfully. 
- Took a measure for mitigating the phenomenon in which rcu_preempt detects stalls. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag10-1.2.3-b94541.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar10-1.2.3-b94571.amf


Version 1.2.2(May 18, 2021)

The bug has been fixed.



TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router

Bug fixed

- Fixed the bug in which even if no enable is set for the high and low temperature protection setting function, it will remain enabled. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag10-1.2.2-b80531.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar10-1.2.2-b80571.amf

Version 1.2.1 (April 28, 2021)

The functions have been added and the bugs have been fixed.









TARGET DEVICE

- amnimo G Series Indoor-Type Edge Gateway
- amnimo R Series Indoor-Type IoT Router



Functions added

- The setting function by the GUI 
- The remote.it setting function 
- Added the eVMS feature of Device Management System 
- Ubuntu-related package update 

Improved functions and fixed bugs

- Fixed the bug in which if PoE reset is performed repeatedly by the schedule function, the PoE monitoring daemon will be restarted and it will restart the PoE receiver. 
- Regarding the CLI function, improved the description of each help display function.  
- Regarding the GUI function, fixed the bug in which if '/' exists in the host name in the package repository settings, repository data cannot be deleted. 
- Regarding the GUI function, fixed the bug in which a timeout will occur when upgrading the package. 
- Regarding the GUI function, fixed the bug in which if entering data on the NTP setting tab and clicking the setting button, a dialog saying "Unknown error has occurred." will be displayed. 
- Regarding the GUI function, fixed the bug in which an error will occur if you set the time to the past by the manual setting and try to synchronize it with the NTP server. 
- Regarding the GUI function, fixed the bug in which a communication error will occur while updating the firmware area. 

URLs for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag10-1.2.1-b72881.amf
	https://(Account):(Password)@package.amnimo.com/firmware/ar10-1.2.1-b72911.amf

Version 1.2.0 (March 31, 2021)

amnimo R Series Indoor-Type IoT Router has been released.


Target

- amnimo R Series Indoor-Type IoT Router

Functions added

- The setting function by the GUI 
- The remote.it setting function 
- Added the agent feature of Device Management System 

URL for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ar10-1.2.0-b65671.amf




Version 1.1.2 (December 15, 2020)

The bugs have been fixed.


Target

- amnimo G Series Indoor-Type Edge Gateway

Bugs fixed

- Fixed the bug in which the DHCP server will not be started if starting the power supply to the Edge Gateway. 
- Fixed the bug in which if a communication error occurs after rebooting the Edge Gateway from the amnimo cloud side, the Edge Gateway will remain rebooting. 
- Fixed the bug in which if the communication is disconnected while downloading/uploading firmware and configuration files from the amnimo cloud side, they will be retained in a state of being processed while restoring the communication. 

URL for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag10-1.1.2-b45261.amf


■ Version 1.1.0 (October 6, 2020)

amnimo G Series Indoor-Type Edge Gateway first release.
































Target

- amnimo G Series Indoor-Type Edge Gateway

URL for firmware for full updates

Model	Referenced URL
	https://(Account):(Password)@package.amnimo.com/firmware/ag10-1.1.0-b36431.amf

1.3 Version correspondence table of firmware and related software

FW Version	Ubuntu	Nx Witness*	remote.it	Target device	
2.4.2	Ubuntu 20.04 (20240111)	5.1.1.37512	3.0.34		
2.4.1					
2.1.0	Ubuntu 20.04 (20230417)				
1.9.8	Ubuntu 18.04 (20221130)	5.0.0.35270	3.0.33		
1.9.7					
1.9.6					
1.9.5					
1.9.4					
1.9.2					
1.8.4					
1.8.3					
1.8.2	Ubuntu 18.04 (20220406)	4.2.0.32480	1.8.8		
1.6.1					
1.6.0					
1.5.3					
1.5.2					
1.5.1					
1.5.0					
1.4.5					
1.4.4					
1.4.3				Ubuntu 18.04 (20210625)	4.1.0.31398
1.4.2					
1.4.1					
1.4.0					
1.3.2					
1.3.1					
1.3.0					
1.2.3	Ubuntu 18.04 (20200831)	4.1.0.31398	1.6.36		
1.2.2					
1.2.1					
1.2.0					
1.1.2				-	
1.1.0				-	











*AI Edge Gateway and Edge Gateway only..
























Chapter 2 Important Notices

This chapter describes the important notices when using this device.













2.1 Restrictions and known problems












2.1.1 Restrictions and known problems related to the latest version














No.	Details	Range of influence	Target device
112	In the interface function, when multiple IP addresses are configured for one interface, the configuration process may fail and routing information may be lost when changing the interface function settings. ➔ Please reconfigure the <input checked="" type="checkbox"/> interface function.	2.1.0~	
111	Amnimo monitoring application device reboots after 10 minutes after the DHCP server failsafe is disabled from the enabled state.	2.4.1	
110	In the GUI function, an error occurs when partitioning is interrupted and then partitioned again.	1.3.0~	
109	In the NTP function, the NTP server is restarted when linking up interface functions that are not set to sync-interface.	2.1.0~	
108	When NTP is started when the interface is disabled and then the interface is enabled, ntp.nict.jp may be displayed with IPv6 address. *Time synchronization with ntp.nict.jp with IPv6 address is not performed, so there is no harm done.	1.1.0~	
107	In the PPP function of the CLI function, the PPP service is not stopped after deleting the peer by the no ppp peer command. ➔ Please disable the PPP interface if you want to stop the PPP service.	1.1.0~	
106	In the interface function, when dhcp mtu is enabled, the value of mtu is not set. ➔ If you want to use the MTU set by yourself in the DHCP client configuration, delete "dhcp4 mtu" (no dhcp4 mtu).	1.1.0~	
99	Regarding eVMS, video clips cannot be acquired on some camera models. ● List of cameras that have confirmed this phenomenon at us Dahua DH-IPC-EB5541N ➔ Please use Ubuntu18.04 base (1.9.x) environment.	2.1.0~	
97	When the CPU frequency is set to something other than 1 000 MHz, the GUI function does not work. ➔ Set the CPU operating frequency to 1000MHz.	2.1.0~	
82	In the keep-alive setting of the schedule function, the switching time to be set when there are two ping destinations is originally only the random wait time when switching ping destinations (ping wait), but in addition, the interval between sending ping requests (ping interval) and 1 second This time is added to the ping interval.	1.1.0~	














No.	Details	Range of influence	Target device
70	In Nx Witness 5.0.0.35270, the automatic detection function of some cameras does not work properly. For details, refer to "2.6 Restrictions when using Nx Witness 5.0.0.35270" described on another page described on another page.	1.6.0	
56	Nx Witness may be rebooted due to an abnormal termination during recording. → This problem may be alleviated by fixing the CPU operation frequency to 1000MHz.	1.1.0~	
49	There are cases where Freezing Execution may be output when executing systemctl and you may fail to execute it.	1.1.0~	   
34	For Indoor IoT Router of Version 1.3.2 or earlier, if it is updated to this version by a full update, the number of partitions will be changed. → For details, refer to "2.3 Changing the eMMC partition of an IoT Router of Version 1.4.0 or later" described on another page.	1.4.0~	
30	Regarding the CLI function, when using the packet dump function, if the interface is not specified, an unintended interface may be selected.	1.3.0~	   
14	→ If you create a bridge interface and reboot the device without saving the settings, the bridge interface will remain.	1.2.0~	   
6	Regarding the CLI function, if you enable the bridge interface and start the service of the DHCP function with the relevant bridge and then disable the bridge interface, you will not be able to set the DHCP function of the relevant bridge.	1.1.0~	   
1	On rare occasions, rcu_preempt may detect stalls, an internal communication error may occur, and the device may be restarted. → This problem may be alleviated by fixing the CPU operation frequency to 1000MHz. → In V1.6.0, fixed this incident that is triggered by resetting the communication module.	1.1.0~	   






































2.1.2 List of bugs fixed for the latest version






























No.	Details	Range of influence	Target device
105	When using the amlog function, all logs may be displayed by using the amlog show command or the amlog read command.	1.1.0~	
104	Communication module may hang up in SIM failure state when changing mobile settings. Please restart the equipment if this issue occurs.	1.1.0~ 2.1.0	
103	In GUI function, PPP service does not stop after deleting PPP setting from advanced settings.	1.2.0~ 2.1.0	
102	In the CLI function, account settings are not displayed in the show config command.	1.8.2~ 2.1.0	
101	Regarding eVMS, the camera goes offline after the device restarts. Recovery is possible by saving the VMS credentials again.	1.2.0 ~ 1.9.8, 2.1.0	
100	Regarding eVMS, if there are more than 1000 motion detections within the time period displayed on the timeline bar, some of the search results are not displayed. Please use Ubuntu18.04 base (1.9.x) environment.	2.1.0	
98	Regarding eVMS, PTZ operation is not possible. ➔ PTZ operation is possible by changing the settings on the Nx Witness server side on the device side. Please refer to the following URL for detailed procedures. https://amnimo.com/docs/cloud/ja/restriction/enable_ptz.pdf	2.1.0	
96	The process of hooking changes according to the low-voltage detection status and the associated log output does not work.	1.1.0 ~ 1.9.x ※	
95	Regarding GUI functions, interface eth0 settings are not always reflected in the simple setting screen. ➔ After implementing the simple setting, switching the enable/disable of eth0 from the advanced setting - interface will reflect the setting value and the system will operate normally.	1.1.0~ 1.9.x※	
94	Regarding the CLI function, a bug has been corrected in which the command history was shared between administrator and user modes.	1.1.0~ 1.9.x※	
93	In the eVMS, error messages such as "panic: runtime error", "signal SIGSEGV", etc. are periodically output to syslog when the device time is off by 5 minutes or more. error messages such as "panic: runtime error", "signal SIGSEGV", etc. are periodically output in the syslog. ➔ Please set the device time to the correct time using the manual setting function or NTP function.	1.9.6~ 1.9.7	
92	Device integration management feature shows success even though remote.it device registration failed.	1.9.4~ 1.9.7	












No.	Details	Range of influence	Target device
91	In the DMS the activation process may not complete due to communication errors between the device and the cloud during device activation. → After registering the remote.it device, press the Refresh button on the remote.it tab to check the current registration status. If it is not registered, please register again.	1.1.0~1.9.7	
90	In the firmware differential update function, if the amount of package diff is large, an error may appear at the stage of the remote.it differential update package and the differential update may fail. → Use full update instead of incremental update. If the differential update fails, there is a high possibility that you will not be able to log in at the time of restart, so you need to switch the startup surface and restart. (Please refer to "4.2 Troubleshooting for Cases of Startup Failure" in " Developer's Manual .")	1.1.0~1.6.1	
89	Remote.it may not start properly when starting the power supply.	1.9.5~1.9.6	
86	In rare cases, VMS credentials are not stored in the eVMS. → Save the settings from the device management system or eVMS again, or reboot the device.	1.1.0 ~ 1.8.4	
85	Unable to detect cameras with names containing multibyte characters in the eVMS.	1.1.0 ~ 1.8.4	
84	In the eVMS, when there are many motion detections in Smart Search, they are not displayed in the timeline bar.	1.1.0 ~ 1.8.4	
83	Regarding the GUI function, when updating the mobile module information with the update button, the information on the SIM1 side is not updated.	1.5.0~ 1.8.4	
81	If the ethernet port is not linked up, it may take more than 2 minutes to start up.	1.8.2 ~ 1.9.x ※	
80	Reconnecting the Ethernet port, reconnecting the mobile line, or reconnecting PPPoE will also restart the DNS server if the DNS option (using the IP address of the DNS server in the DHCP option set delivered by the destination) is not enabled.	1.1.0 ~ 1.8.3	
79	When disconnecting a mobile line or a line such as PPPoE or changing the routing such as connections, the previous connection tracking rules will be maintained and a packet communication cannot be performed on the intended route. (No.79)	1.1.0~1.3.2, 1.5.0~1.8.2	
78	If configuring the FQDN settings of the FQDN blacklist control of the proxy function, the URL whitelist control will be enabled unintentionally. → If configuring the FQDN settings of the FQDN blacklist, check the setting for enabling/disabling the URL whitelist control, and set it to disable.	1.8.2	

No.	Details	Range of influence	Target device
77	Regarding the CLI function and the GUI function, fixed the bug in which when the mobile communication function is stopped after configuring the mobile communication settings (peer) and the session settings (session), if you delete the session settings of the mobile communication settings, an error will occur on the device information screen. → If you do not use a mobile communication, delete the mobile line not the session settings.	1.2.0~1.8.2	
76	Regarding eVMS, after the IoT communication between the cloud and the Edge Gateway is unexpectedly interrupted, it will not be restored and updating thumbnails, acquiring clips, and playing live images cannot be performed.	1.2.1~1.6.1	
75	When performing a differential update for the firmware from a version earlier than 1.6.1 to Version 1.6.1, the boot area will be changed.	1.6.1	
74	The stage at which the management application of the Edge Gateway is judged to be running successfully when starting the power supply, which is the condition for switching to a redundant area, is "when initramfs ends" not "when rc.local ends". (Different from the description in "Conditions for switching redundant areas" in the "amnio Gateway Series Developer's Manual.")	1.1.0~1.6.0	
73	There are cases where if starting the Edge Gateway, you may fail to load configuration data of Nx Witness 5.0.0.35270.	1.6.0	
72	When installing an Edge Gateway or IoT Router on the IPsec route that is not the end point, and if packets of IPsec pass there, the device will be restarted.	1.4.0~1.6.0	
71	Regarding the CLI function, the character string of the IKE pre-shared key setting of the IPsec function is "pre-shard-key". (It is supposed to be "pre-shared-key".)	1.1.0~1.6.1	
69	By using eVMS, video playback in direct mode, VOD playback, and skip playback of Smart Search results cannot be performed.	1.2.1~1.5.3	
68	An improvement has been made to eVMS to display an error message when a direct mode connection fails due to a time difference of 5 minutes or more between the Edge device and the cloud. 	1.2.1~1.5.3	
67	Fixed the bug in which fast playback will not function when performing VOD playback in direct mode of a Panasonic camera (WV-S3510) by eVMS.	1.2.1~1.5.3	
66	Fixed the bug in which if an authentication error state of a communication carrier continues while the no communication monitoring timer is being enabled, after disconnecting the line, the device will be restarted without stopping the program.	1.1.0~1.5.3	
65	There are cases where from a SIM card that has an MSISDN, the MSISDN may not be obtained by the mobile control function.	1.5.0~1.5.2	

No.	Details	Range of influence	Target device
63	There are cases where the playback time may become 1970/01/01 00:00:00 during live streaming in direct mode on eVMS.	1.2.1~1.5.1	
62	If the Edge device side is ahead of the cloud side by 60 minutes or more on DMS you will fail to perform a full update of the firmware, collect syslog files, and collect and download configuration files.	1.1.0~1.5.1	
61	Regarding the mobile control function, packets that are not monitored by the no communication detection function are different.	1.1.0~1.5.1	
60	For an Edge Gateway and IoT Router, the fail-safe retry counter will not be reset when keep-alive is performed successfully by the scheduling function.	1.1.0~1.5.1	
57	After changing the time zone, it will not be reflected to the schedule function until the device is rebooted.	1.1.0~1.6.1	
55	In remote.it Version 1.7.6 (Edge Gateway 1.4.4 or after), when running the add option of the remoteit command, the following problems will occur: <ul style="list-style-type: none"> ● A list of service types will not be output correctly. ● If you try to register a service type by name, it will become "disable" and cannot be registered. For details, refer to "2.4 Problems in the remote.it version 1.7.6 (Edge Gateway version 1.4.4 or later) and how to avoid them" described on another page.	1.4.4~1.5.1	
54	Regarding the GUI function, the login screen may not be displayed from the firmware of Version 1.4.5 or earlier, or you may not be able to return to the firmware screen. ➔ For details, refer to "2.5 Problems that will occur when updating the firmware from the GUI function of Version 1.4.5 or earlier and how to avoid them" described on another page.	1.2.0~1.4.5	
53	A SIM of a specific carrier may not be recognized.	1.1.0~1.4.5	
52	Regarding the GPS control function, the time adjustment function by the GPS will not work immediately after the device is started after resetting the hardware.	1.3.0~1.4.5	
51	When starting the device offline, some of the packages required for remote.it will not be installed.	1.2.0~1.4.5	
50	On DMS an error will occur if performing a differential update of the firmware of a device connected to Device Management System via mobile communication.	1.2.0~1.4.5	
48	Regarding the CLI function, the bug will remain unless the bridge interface is restarted, even though the interface settings related to the bridge interface have been deleted.	1.2.0~1.4.5	
47	Live streaming cannot be started if special letters such as @ and ? are included in a password of Nx VMS on eVMS.	1.2.1~1.4.5	

No.	Details	Range of influence	Target device
46	An error may occur when taking video clips and snapshots even though there are no abnormal factors such as communication errors on eVMS.	1.2.1~1.4.5	 
45	There are cases where VOD streaming playback of offline cameras may not be accepted on eVMS.	1.2.1~1.4.5	 
44	An error will occur during live streaming in cloud mode due to a time difference of 5 minutes or more between the cloud and the Edge device on eVMS/Cloud Video Recorder System.	1.2.1~1.4.5	  
43	Regarding the CLI function, an error will occur if the IP address of the corresponding interface is changed when router, dns, and ntp of the DHCP function have been set to auto.	1.3.0~1.4.5	   
42	There are cases where video clips generated by the event function may be shortened on eVMS.	1.2.1~1.4.4	 
41	Live playback cannot be performed in DIRECT mode with Google Chrome 98 or later on eVMS.	1.2.1~1.4.4	 
40	There are cases where the Device Management System agent may be restarted when using the video clip function on eVMS of Version 1.2.2 or later.	1.2.2~1.4.4	 
39	Regarding the camera detection function of eVMS, if deactivating and activating an activated gateway or camera in succession, the camera cannot be activated successfully and the functions related to the target camera will not work properly.	1.4.2, 1.4.3	
38	There are cases where communication with Device Management System may be disconnected and then reconnected even though the network connection is normal.	1.2.0~1.4.2	 
37	The automatic kitting function of Device Management System cannot be used.	1.4.2	 
36	While Device Management System is being enabled, even though the communication module is not registered to DMS if you check communication with DMS and if it turns out to be poor, the communication module will be reset.	1.3.0~1.4.1	 
35	The line will not be disconnected when the device detects a situation in which radio waves cannot be received.	1.4.0, 1.4.1	 
33	Loopback communication of a RS232 port cannot be performed.	1.4.0	
32	When connecting to the line, the packet processing will not be switched.	1.1.0~1.3.2	 
31	If the APN is not specified, communication may not be performed successfully.	1.1.0~1.3.2	 
30	Regarding the CLI function, when using the packet dump function, if the interface is not specified, an unintended interface may be selected.	1.3.0~1.6.1	   
29	The communication module control program leaks memory.	1.1.0~1.3.0	 

No.	Details	Range of influence	Target device
28	Regarding the GUI function, while starting Nx Witness that uses the storage function, if you register the storage mount function settings, an error will be displayed. (The settings are registered normally.)	1.2.1~1.3.0	
27	Regarding the GUI function, if you perform area synchronization on the firmware area update screen, a dialog saying "Unknown error has occurred." may be output.	1.2.1~1.3.0	 
26	Regarding the CLI function, there are cases where after enabling the settings of dynamic-snat4 of the PPPoE function, if you restart the relevant service, the settings of dynamic-snat4 may be disabled.	1.2.0~1.3.0	 
25	The temperature monitoring process may misread the temperature inside the enclosure as 125°C.	1.2.0~1.2.3	 
24	There are cases where if performing a differential update, and if it takes 10 minutes or longer to process it, the differential update command being executed may stop in the middle of the process due to a timeout.	1.2.0~1.2.3	 
23	Regarding the CLI function, if '_' is included in the peer name of the PPPoE function, you will not be able to configure interface function settings including '_'.	1.1.0~1.2.3	 
22	If the device mobile sim command is executed while the power supply to the communication module is being turned off, the command will time out.	1.1.0~1.2.3	 
21	While the mobile connection settings are being set, if you update the firmware and restart the device, the LEDs of ANT and MOB that indicate the mobile connection status will not light up.	1.1.0~1.2.3	 
20	If performing a differential update with the apt server of v1.3.0 or higher, the differential update process will be interrupted. For the workaround for this problem, refer to "2.2 How to prevent an interruption from occurring while performing a differential update" described on another page.	1.1.0~1.2.3	 
19	The camera status of the UI of eVMS is not updated to the one of the actual device.	1.2.1,1.2.2	
18	Even if no enable is set for the high and low temperature protection setting function, it will remain enabled.	1.2.2	 
17	Multiple thumbnail images are uploaded in one cycle of eVMS.	1.2.1,1.2.2	
16	After updating the firmware on eVMS, the camera settings will be deleted.	1.2.1,1.2.2	
15	ACTIVE mode of the FTP does not operate successfully.	1.1.0~1.2.2	 
14	If you create a bridge interface and reboot the device without saving the settings, the bridge interface will remain.	1.2.0~1.9.x ※	   
13	Regarding the GUI function, if '/' exists in the host name in the package repository settings, repository data cannot be deleted.	1.2.0	

No.	Details	Range of influence	Target device
12	Regarding the GUI function, a timeout will occur when upgrading the package.	1.2.0	
11	Regarding the GUI function, if entering data on the NTP setting tab and clicking the setting button, a dialog saying "Unknown error has occurred." will be displayed.	1.2.0	
10	Regarding the GUI function, an error will occur if you set the time to the past by the manual setting and try to synchronize it with the NTP server.	1.2.0	
9	Regarding the GUI function, a communication error will occur while updating the firmware area.	1.2.0	
8	When upgrading Version 1.2.0 to Version 1.2.1 or later, the GUI setting may change from enabled to disabled.	1.2.0	
7	If PoE reset is performed repeatedly by the schedule function, the PoE monitoring daemon will be restarted and it will restart the PoE receiver.	1.1.0,1.1.2	
6	Regarding the CLI function, if you enable the bridge interface and start the service of the DHCP function with the relevant bridge and then disable the bridge interface, you will not be able to set the DHCP function of the relevant bridge.	1.1.0~1.9.x ※	
5	When using an Edge Gateway of Version 1.1.x, with the Nx Witness function disabled, if performing a differential update to upgrade the current version to Version 1.2.1 or later, the Nx Witness function will be enabled. If you reboot the device, the Nx Witness function will be disabled. (Without being limited to this restriction, it is recommended to reboot the device after performing an update.)	1.1.0,1.1.2	
4	The DHCP server will not be started if starting the power supply to the Edge Gateway.	1.1.0	
3	If a communication error occurs after rebooting the Edge Gateway from the amnimo cloud side, the Edge Gateway will remain rebooting.	1.1.0	
2	If the communication is disconnected while downloading/uploading firmware and configuration files from the amnimo cloud side, they will be retained in a state of being processed while restoring the communication.	1.1.0	

※It has been fixed and improved in the environment based on Ubuntu 20.04 or later, but it has not been fixed or improved in the Ubuntu 18.04 based environment.

2.2 How to prevent an interruption from occurring when performing a differential update

When trying to perform a differential update for the apt server to upgrade from Version 1.1.2 to Version 1.3.0 or later, the following error will occur and the differential update will be interrupted.

```
amnimo# firmware package upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
You might want to run 'apt --fix-broken install' to correct these.
The following packages have unmet dependencies:
libag-cfg : Depends: unbound:all
E: Unmet dependencies. Try 'apt --fix-broken install' with no packages (or specify a
solution).s
===== CAUTION =====
amsh is now stopped to reload the upgraded packages.
Please restart amsh.
Killed
```

If this incident occurs, execute the following commands from bash to repair the package and update the current version to the latest one.

```
admin@amnimo:~$ sudo apt --fix-broken install
admin@amnimo:~$ sudo apt upgrade -y --with-new-pkgs
```

2.3 Changing the eMMC partition of an IoT Router of Version 1.4.0 or later

For an IoT Router of Version 1.4.0 or later, in order to be ready for future enhancements of features, if you perform a full update with both of the redundant areas specified, the partition of your IoT Router will be changed. Note that there are patterns in which the firmware cannot be updated to an older version due to the effect from this.

Older eMMC partitions of an IOT Router of Version 1.3.2 or earlier

Device file	Mount point	Volume	File system	Redundant area ^{*1}	Usage
/dev/mmcblk0boot0	/mnt/config/area0	2.9MB	ext4	AREA0	Setting saving area
/dev/mmcblk1boot0	/mnt/config/area1	2.9MB	ext4	AREA1	Setting saving area
/dev/mmcblk0p1	/	1.4GB	ext4	AREA0	rootfs area
/dev/mmcblk0p2	/	1.4GB	ext4	AREA1	rootfs area
/dev/mmcblk0p3	/opt/local	689MB	ext4	AREA0	userfs area
/dev/mmcblk0p4	/opt/local	689MB	ext4	AREA1	userfs area
/dev/mmcblk0p5	/mnt/share	589MB	ext4	-	Common area

Checking the partition

To identify the partition, start amsh, and run the show firmware command.

```
amnimo$ show firmware
amnimo R series AR10 version 1.4.0 build 14245
Kernel: 4.19.195-03791-g5cb3a77f0cb #1 SMP PREEMPT Tue Oct 5 12:29:31 UTC 2021
Bootloader: g88baf9249d (Oct 05 2021 - 12:26:52 +0000)
BootArea: 0
Partitions: 5 ← "5", for the old partition before the change. "3", for the new partition after t
he change.
```

■ New eMMC partitions of an IoT Router of Version 1.4.0 or later

The userfs area and the rootfs area have been combined, and the size of the rootfs area has been expanded. If you update the firmware of a device of Version 1.3.2 or earlier to Version 1.4.0 or later twice or more, the current partition will be changed to one of the following ones. Be careful that the userfs area will be deleted. Also, the common area will be retained.

Device file	Mount point	Volume (After the change)	File system	Redundant are ^{*1}	Usage
/dev/mmcblk0boot0	/mnt/config/area0	2.9MB	ext4	AREA0	Setting saving area
/dev/mmcblk1boot0	/mnt/config/area1	2.9MB	ext4	AREA1	Setting saving area
/dev/mmcblk0p1	/	2.1GB	ext4	AREA0	rootfs area
/dev/mmcblk0p2	/	2.1GB	ext4	AREA1	rootfs area
/dev/mmcblk0p3	/mnt/share	589MB	ext4	-	Common area

■ Restrictions on the combinations of a firmware upgrade method and a version for full update

- A full update can be performed for a double-sided update of the firmware regardless of the version.
- There are cases where a full update may not be performed for a single-sided update of the firmware depending on the combination of a partition and a version as shown in the following table.

Whether or not the single-sided update function can be performed depending on the combination of a partition and a version

Partition	To Version 1.3.2 or earlier	To Version 1.4.0 or later
Older partition	Can be upgraded	Can be upgraded
New partition	Cannot be upgraded	Can be upgraded



Regarding configuration data, this product does not guarantee backward compatibility of product versions. Therefore, If you downgrade the version, this product may not work properly. If you downgrade the version to a lower one, it is recommended to save the configuration data as a file with a different name and perform a full update of the firmware.

2.4 Problems in the remote.it version 1.7.6 (Edge Gateway version 1.4.4~1.5.1) and how to avoid them

For the remote.it version 1.7.6 (Edge Gateway version 1.4.4~1.5.1), the following problems will occur when running the add command of remote.it.

- A list of service types will not be output correctly.
- If you try to register a service type by name, it will become "disable" and cannot be registered.

To avoid the above problems, after registering the device, run "execute remoteit agent restart" once.

2.5 Problems that will occur when updating the firmware by the GUI function of Version 1.4.5 or earlier and how to avoid them

- After updating the firmware, if you access the GUI, the screen may remain loading and the login screen may not be displayed. After updating the firmware, clear caches on the browser you are using and access the GUI.
- On the firmware screen, if you perform a "package update(differential update)", the screen may remain loading and you may not return to the firmware screen. Log in to the system by using the CLI and confirm that the version has been upgraded. After that, clear caches on the browser you are using and access the GUI.

2.6 Restrictions when using Nx Witness 5.0.0.35270

2.6.1 Downgrading to Nx Witness 4.2.0.32480

Configuration data of Nx Witness 5.0.0.35270 and that of Nx Witness 4.2.0.32480 are not compatible with each other. If you downgrade the version, be careful of the following:

- If you use Nx Witness 4.2.0.32480, use the firmware of Edge Gateway of V1.5.3 or earlier.
- For configuration data of Nx Witness that can be saved by the CLI/GUI, when the settings of Nx Witness 5.0.0.35270 have been saved, if downgrading the version to Nx Witness 4.2.0.32480, Nx Witness Server will not be started successfully.

If downgrading the version of the Edge Gateway to V1.5.3 or earlier, delete the backup file of the database* (By default, /mnt/share/nxwitness/database/file.db) in advance.

*If you save a backup of the database at the time of 4.2.0.32480 with a different name and make it available for version downgrades, it will be possible to roll back to a previous state.

2.6.2 Workarounds for cameras not working properly

- ① For some Panasonic cameras (ONVIF vendor information: Panasonic), the camera automatic detection function of Nx Witness does not work properly. e.g.) WV-S6110, WV-S3510
 - Even if you enter the credentials, "UNAUTHORIZED" will remain displayed and a camera image will not be displayed.
 - The following shows the combinations of a camera and a camera firmware version in which annimo has confirmed the occurrence of this incident.

Camera	Camera firmware version
Panasonic WV-S3510	V4.22
	V5.01
Panasonic WV-S6110	V4.80

- ➔ By deleting the camera once and registering it from "Add device" manually, the camera automatic detection function of Nx Witness will work properly.

- ② For some i-PRO cameras (ONVIF vendor information: i-PRO), the camera automatic detection function of Nx Witness does not work properly.
 - Even if you enter the credentials, "UNAUTHORIZED" will remain displayed and a camera image will not be displayed.
 - Even if registering a camera manually, a camera image cannot be displayed. Use the version of V1.5.3 or earlier for your Edge Gateway.
 - The following shows the combination of a camera and a camera firmware version in which annimo has confirmed the occurrence of this incident.

Camera	Camera firmware version
i-PRO WV-S1135V	V1.20
	V2.10



- Network Optix, the developer of Nx Witness, has published the workarounds for these incidents. For details, contact annimo's customer support.

2.7 Restrictions on using remote.it 3.0.33

2.7.1 Restrictions on termination of service

If your environments don't have any connections to the network and you will terminate the remote.it service, it may take approximately one minute or more for the service to end.

2.7.2 Restrictions on removing a device



































If you will take over the configuration file (/etc/remotedit/config.json) created in remote.it 1.8.8 and use it in remote.it 3.0.33, delete the registered device on remote.it (sudo remotedit unregister) and then register the device (sudo remotedit register) cannot be successful.


■ Workaround

If you will take over the settings and use them, follow the steps below to remove the device..

```
$ sudo remotedit uninstall
$ cd /usr/bin          ←Because in 3.0.33 you need to run it in the installation path
$ sudo remotedit tools install --yes ←
$ sudo remotedit agent install ←
```

Revision History

Version	Date of issue	Revision details	Target device
1 st	December 1, 2020	Due to the release of the firmware V1.1.2.	
2 nd	March 31, 2021	Due to the release of Indoor-Type IoT Router and the release of the firmware V 1 .2.0.	
3 rd	April 28, 2021	Due to the release of the firmware V 1 .2.1.	
4 th	May 18, 2021	Due to the release of the firmware V 1 .2.2.	
5 th	July 5, 2021	Due to the release of the firmware V 1 .2.3.	
6 th	September 10, 2021	Due to the release of the firmware V 1 .3.0 and V1.3.1.	
7 th	October 4, 2021	Due to the release of the firmware V 1 .3.2.	
8 th	October 22, 2021	Due to the release of the firmware V 1 .4.0.	
9 th	October 27, 2021	Due to the release of the firmware V 1 .4.1.	
10 th	December 6, 2021	Due to the release of the firmware V 1 .4.2.	
11 th	December 24, 2021	Due to the release of the firmware V 1 .4.3.	
12 th	January 18, 2022	Due to the release of Outdoor-Type Edge Gateway and the release of the firmware V 1 .4.4.	
13 th	February 21, 2022	Due to the release of Outdoor-Type IoT Router and the release of the firmware V 1 .4.5.	
14 th	May 19, 2022	Due to the release of the firmware V 1 .5.0.	
15 th	June 15, 2022	Due to the release of the firmware V 1 .5.1.	
16 th	July 15, 2022	Due to the release of the firmware V 1 .5.2.	
17 th	July 28, 2022	Due to the release of the firmware V 1 .5.3.	
18 th	October 18, 2022	Due to the release of the firmware V 1 .6.0.	
19 th	November 15, 2022	Due to the release of the firmware V 1 .6.1.	
20 th	January 13, 2023	Due to the release of the firmware V 1 .8.2.	
21 st	January 24, 2023	Added No.77 to the known problems.	
22 nd	February 10, 2023	Due to the release of the firmware V 1 .8.3.	
23 rd	April 5, 2023	Due to the release of the firmware V1.8.4.	
24 th	May 11, 2023	Due to the release of the firmware V1.9.2.	
25 th	June 1, 2023	Due to the release of the firmware V1.9.4.	
26 th	July 24, 2023	Due to the release of the firmware V1.9.5.	
27 th	August 8, 2023	Due to the release of the firmware V1.9.6.	
28 th	September 29, 2023	Due to the release of the firmware V1.9.7.	
29 th	October 24, 2023	Due to the release of the firmware V1.9.8.	
30 th	November 30, 2023	Due to the release of the firmware V2.1.0.	
31 st	November 13, 2023	Added specification changes for V2.1.0 release.	
32 nd	November 27, 2023	Due to the release of the firmware V2.1.0 for amnimo R series Indoor Type.	
33 rd	December 14, 2023	Due to the release of the firmware V1.9.9	
34 th	March 15, 2024	Due to the release of the firmware V2.4.1 for amnimo X series Indoor Type.	

Version	Date of issue	Revision details	Target device
35 th	April 1, 2024	Due to the release of the firmware V2.4.2	



amnimo X/G/R Series Release Notes
 March 15, 2024 35th Edition

IM AMD03A91-01EN

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