Release Notes for DrayTek Vigor2862 series (UK/Ireland)

Firmware Version	3.8.9.1_BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient Note: A previous firmware (3.8.8.2_BT) was a **critical release**. This f/w includes all changes/improvements that were in 3.8.8.2_BT.
Build Date	12th June 2018
Release Date	19th June 2018
Revision	74522
Applicable Models	Vigor2862, Vigor2862n, Vigor 2862Ln, Vigor2862ac, Vigor 2862Lac, Vigor 2862Vac
VDSL Modem Code	779517
ADSL Modem Code	773F01
Locale	UK & Ireland Only

Security Advisory

1. Check your DNS and DHCP settings on your router.
   https://www.draytek.co.uk/support/security-advisories/kb-advisory-csrf-and-dns-dhcp-web-attacks
   If you have a router supporting multiple LAN subnets, check settings for each subnet. Your DNS settings should be either blank, set to the correct DNS server addresses from your ISP or DNS server addresses of a server which you have deliberately set (e.g. Google 8.8.8.8). A known rogue DNS server is 38.134.121.95 - if you see that, your router has been changed.

New Features

1. Firewall Filter rules can now be linked to specified LAN and WAN interfaces by selecting a Direction then clicking Advanced and selecting the interfaces that the Filter rule will affect
2. ISO 3166 Country objects configured in [Objects Setting] > [Country Object] menu can be applied as Source / Destination IP ranges in Firewall Filter rules
3. LAN IP Alias added to [LAN] > [General Setup] to define which WAN is used for outbound traffic by sending to a different Gateway address for the router
4. Support DrayOS IKEv1 IPsec XAuth as a VPN protocol for Remote Dial-In User VPN tunnels
5. Support for EAP Tunnelled Transport Layer Security (EAP_TTLS) security method added to [Applications] > [Local 802.1X General Setup].
6. Configuration backup / restore is now available for Remote Dial-In User and LAN-to-LAN profiles to back up all VPN profiles configured, separately from the main router configuration file
7. Larger certificate files now supported in [Certificate Management] > [Local Certificate] making it possible to include additional certificates required to complete a certificate chain
8. Support for mOTP and 2FA (two factor authentication) via e-mail/SMS added for remote management in [System Maintenance] > [Administrator Password]
9. When upgrading firmware, selecting a firmware file and clicking the "Preview" button will display details of the firmware selected

Improvements

1. Fixed the App Enforcement profile issue in 3.8.9 firmware
2. Fixed the Web UI Issue if Bandwidth Limit and Data Flow Monitor were enabled in 3.8.9 firmware
3. Factory Default configuration now enables WAN2 port instead of operating as LAN5 port
4. Support for VigorACS 2 version 2.3.0
5. Improved device compatibility with router's 5GHz WLAN and AES encryption
6. Layout of [WAN] > [Internet Access] > [Details Page] improved to group essential settings in the left pane, with additional / advanced options grouped in the right pane
7. Subnet Mask settings in the web interface now use a drop-down box for selection
8. The number of characters allowed in a text box, such as a username or password field, is now displayed in the web interface when no text is entered in that text box
9. Layout of [VPN and Remote Access] > [Connection Management] improved with separate tabs for active LAN-to-LAN and Remote Dial-In User VPN tunnels
10. Layout of [Bandwidth Management] > [Quality of Service] improved
11. DoS Defence moved to [Firewall] > [Defence Setup]
12. Anti-Spoofing Defence settings for IP and ARP spoofing added to [Firewall] > [Defence Setup]
13. Certificate import can now be performed via CLI using "mngt cert_import" command via URL
14. Removed deprecated CLI commands "ip dmz" and "ip aux [Join to NAT pool]"
15. Added "IPv6 Address Random Allocation" option for DHCPv6 Server settings
16. IKEv2 LAN to LAN VPN tunnels can specify these new Proposal options:
    a. Diffie-Hellman (DH) Group 19 (256-bit Elliptic Curve)
    b. Diffie-Hellman (DH) Group 20 (384-bit Elliptic Curve)
    c. Diffie-Hellman (DH) Group 21 (512-bit Elliptic Curve)
17. [LTE models only] Improvements to LTE module operation
18. The Router Name set in [System Maintenance] > [Management] can be used as L2TP Client's Host name
19. Central AP Management profiles now have options to configure AP-assisted Client Roaming parameters
20. Support Channel Width selection on [Central Management] > [AP] > [WLAN Profile]
21. When upgrading firmware, selecting a firmware file and clicking the "Preview" button will display details of the firmware selected
22. Improvements to WAN Budget scheduling
23. Inter-LAN Routing table in [LAN] > [General Setup] now allows routing between LAN1 and DMZ when VLANs are not enabled
24. Improved load balancing algorithm for VoIP – STUN and SIP connections will now remain on the same WAN interface by default
25. Session timeout values for SSH and Telnet can now be adjusted with "mngt telnettimeout/sshtimeout" CLI commands
26. Improved Bandwidth Limit operation when used in conjunction with QoS
27. If TR-069 was configured with STUN, the resulting UDP connection request address would still be sent to the TR-069 server after disabling STUN for TR-069
28. Unable to pass traffic through VPN when VPN Trunk Backup connection was resumed
29. The web interface did not accept IPv6 Object IP addresses ending with "::"

30. Improved warning notifications given when disabling LAN ports, USB ports, LEDs and buttons in [System Maintenance] > [Panel Control]
31. LTE status on [Dashboard] changed signal display of RSSI/RSRP to RSSI after auto refreshing
32. Syslog incorrectly displayed the password setting for WAN DHCP Client Identifier
33. The router could sent incorrect DNS queries if Syslog / Mail Alert was enabled
34. Improved VLAN Tag Insertion layout for [WAN] > [General Setup] > [WAN1]
35. Schedule entries are now selected from a drop-down box which displays each schedule entry number and configured Comment fields
36. Schedule entries configured to operate overnight did not work correctly
37. Improved handling of Firewall filter rules configured to operate on a schedule
38. Enabling Session Limit could block Internet connectivity for Remote Dial-In User VPN tunnel connections from VPN clients sending Internet traffic through the VPN tunnel
39. NAT Port Redirection entries configured through the CLI did not take effect unless disabled and re-enabled
40. NAT Port Redirection entries configured with TCP protocol could not be enabled
41. Improved USB storage handling, to better handle USB storage being unplugged while reading data from the USB for a user connected to the router's FTP server
42. Improved interoperability of the DHCP Relay function with Windows Server's DHCP server
43. DHCP Relay did not work with Remote Dial-In User VPN tunnels
44. Enabling "Allow management from the Internet" option for IPv4 could also enable this option for IPv6 Internet connections
45. Entering a Pre-Shared Key(PSK) containing " in [Wireless LAN] > [Security] would cause that settings page to display incorrectly
46. [Central AP Management] > [WLAN Profile] could not set TX Power for 5GHz WLAN
47. USB Disk could not be detected upon reconnection after disconnecting via WUI
48. Improved compatibility with "freedns.afraid.org" and "UBDDNS" Dynamic DNS providers
49. Log information could not be displayed for DtDNS Dynamic DNS hostname updates
50. The Domain Name "ddns.net" could not be selected when using No-IP.com Dynamic DNS
51. Added support for EntryDDNS Dynamic DNS provider
52. Unable to get DrayDDNS domain name after registering and activating the DrayDDNS license
53. TR-069 Packet Counters for LAN ports could still increment when the port was not in use
54. The "Don't Fragment" flag of an IP header was not processed correctly in all scenarios
55. Could not register Avaya phone [H.323] to IPPBX server through router's NAT
56. Multiple objects can now be selected configuring an object group
57. Added "Next" and "Previous" links on each object profile editing page
58. DHCP Broadcast packets from LAN clients could incorrectly be sent out through the WAN2 interface in some circumstances, affecting WAN2 connections using DHCP for IP allocation
59. DHCP server state of LAN Subnets could be displayed incorrectly on the [Dashboard]
60. Auto VoIP QoS is now applied to routed LAN subnets
61. Wireless clients could not communicate with wired clients in the same VLAN with a VLAN tag
62. Incoming RDP sessions cannot authenticate with Firewall configured for User-based mode
63. QoS LED could be incorrectly lit if QoS was enabled then disabled
64. Restart is no longer required for changes to [Applications] > [RADIUS/TACACS+] > [Internal Server] when enabling/disabling Internal Radius Server or modifying the Authentication List

65. Remote Dial-In User VPN connections could not access the Internet through the VPN tunnel if Hardware Acceleration was enabled on the router
66. Some IPv6 packets were incorrectly blocked by the IP Filter with rules configured to pass these IPv6 packets
67. Resolved display issue with Bind IP to MAC enable/disable setting in VigorACS 2
68. When the Interface - LAN section is expanded on the [Dashboard], click on Host ID/Comment text to switch between ARP Table's Host ID and Bind IP to MAC's Comment
69. Added switching between viewing All Users and Online Users view in [User Management] > [User Online Status] by clicking on the text in the upper right
70. Bind IP to MAC was incorrectly limited to 300 entries instead of 1024
71. Increased Hotspot Web Portal profile Terms and Conditions Content field length to 1360 characters
72. Idle timeout value was not applied to Remote Dial-In User tunnels using SSL VPN
73. ARP Table displayed Comments incorrectly for some IP addresses i.e. x.x.x.10 would display the same comment as x.x.x.101
74. "CN" and "cn" values (Common Name Identifier) for LDAP now operate in the same way
75. PPPoE status messages were not displayed in [Physical Connection] > [Online Status]

Known Issues

1. Currently detected WAN1 (ADSL or VDSL) throughput for Quality of Service is not displayed, instead displaying the default 100Mbps Up & 100Mbps Down. This is a display issue and does not affect the functionality of QoS
2. **Important Note – WAN2 Factory Default configuration:**
   The WAN2/LAN5 port is set to operate as the WAN2 port by default.
   3.8.8BT and 3.8.8.2BT had the port operate as LAN5 by default. This only affects the factory default configuration, which is loaded upon pressing the router's Factory Reset button, or reflashing with .rst firmware. Existing WAN2/LAN5 port configuration will not be altered during the upgrade process.
   To use this port as LAN5, it must be configured in [WAN] > [General Setup] > [WAN2] by changing the Enable setting of WAN2 to "Set as LAN".

Firmware File Types

The ZIP file contains the firmware with two different file extensions, .ALL and .RST. The firmware is identical but the RST file contains factory default settings. If you install the ALL file, your router will retain all existing settings. If you use the RST file, all settings will be wiped from your router.

Modem Codes

There are six firmware variants available for download.

Download Filename	Firmware Filename	Modem Code	
		VDSL	ADSL
v2862_3891_BT.zip	v2862_3891BT_779517.all	779517	773F01
v2862_3891_MDM2.zip	v2862_3891_77B506.all	77B506	775401
v2862_3891_STD.zip	v2862_3891_776D07.all	776D07	772801

We recommend using firmware "v2862_3891BT_779F17.all" unless you have specific line issues.

Upgrade Instructions

It is recommended that you take a configuration backup prior to upgrading the firmware. This can be done from the router's system maintenance menu.

To upgrade firmware, select *'firmware upgrade'* from the router's system maintenance menu and select the correct file. Ensure that you select the ALL file unless you want to wipe out your router's settings back to factory default.

Manual Upgrade

 If you cannot access the router's menu, you can put the router into 'TFTP' mode by holding the RESET whilst turning the unit on and then use the Firmware Utility. That will enable TFTP mode. TFTP mode is indicated by all LEDs flashing. This mode will also be automatically enabled by the router if there is a firmware/settings abnormality. Upgrading from the web interface is easier and recommended – this manual mode is only needed if the web interface is inaccessible.

Firmware Version	3.8.9_BT (Not Released)
Release Type	**Regular** – Upgrade recommended when convenient Note: A previous firmware (3.8.8.2_BT) was a **critical release**. This f/w includes all changes/improvements that were in 3.8.8.2_BT.
Build Date	22nd May 2018
Release Date	-
Revision	74033
Applicable Models	Vigor2862, Vigor2862n, Vigor 2862Ln, Vigor2862ac, Vigor 2862Lac, Vigor 2862Vac
VDSL Modem Code	779517
ADSL Modem Code	773F01
Locale	UK & Ireland Only

Security Advisory

1. Check your DNS and DHCP settings on your router.
   https://www.draytek.co.uk/support/security-advisories/kb-advisory-csrf-and-dns-dhcp-web-attacks
   If you have a router supporting multiple LAN subnets, check settings for each subnet. Your DNS settings should be either blank, set to the correct DNS server addresses from your ISP or DNS server addresses of a server which you have deliberately set (e.g. Google 8.8.8.8). A known rogue DNS server is 38.134.121.95 - if you see that, your router has been changed.

New Features

(See Firmware 3.8.9.1)

Improvements

(See Firmware 3.8.9.1)

Known Issues

1. **Important Note – WAN2 Factory Default configuration:**
   The WAN2/LAN5 port is set to operate as the WAN2 port by default.
   3.8.8BT and 3.8.8.2BT had the port operate as LAN5 by default. This only affects the factory default configuration, which is loaded upon pressing the router's Factory Reset button, or reflashing with .rst firmware. Existing WAN2/LAN5 port configuration will not be altered during the upgrade process.

   To use this port as LAN5, it must be configured in [WAN] > [General Setup] > [WAN2].
   Set the Enable setting of WAN2 to "Set as LAN" and click OK. The WAN2/LAN5 port will operate as LAN5 once it has restarted.

2. The router cannot be managed from the Web UI if Bandwidth Limit is enabled on the router. This will be corrected in the next firmware release.

Firmware Version	3.8.8.2_BT (Formal Release)
Release Type	**Critical** – Upgrade recommended immediately
Build Date	18th May 2018
Release Date	18th May 2018
Revision	73942
Applicable Models	Vigor2862, Vigor2862n, Vigor 2862Ln, Vigor2862ac, Vigor 2862Lac, Vigor 2862Vac
VDSL Modem Code	779517
ADSL Modem Code	773F01
Locale	UK & Ireland Only

Security Advisory

1. Check your DNS and DHCP settings on your router.
   https://www.draytek.co.uk/support/security-advisories/kb-advisory-csrf-and-dns-dhcp-web-attacks
   If you have a router supporting multiple LAN subnets, check settings for each subnet. Your DNS settings should be either blank, set to the correct DNS server addresses from your ISP or DNS server addresses of a server which you have deliberately set (e.g. Google 8.8.8.8). A known rogue DNS server is 38.134.121.95 - if you see that, your router has been changed.

New Features

None

Improvements

1. This firmware includes improvements to harden the web interface against attacks. We have become aware of specific attacks against router, including DrayTek models where hackers have altered specific settings relating to your DNS servers and DHCP settings. You should urgently check those settings on your router. If they appear to have been tampered with, correct them and change your admin password and for any other config anomalies. Restore a config backup if you have one (from prior to the attack). We continue to investigate this issue but the first priority was to issue updated firmware.

Known Issues

1. **Important Note – WAN2 Factory Default configuration:**
   The WAN2/LAN5 port is set to operate as a LAN port by default.
   To use the port as WAN2 it must be enabled in [WAN] > [General Setup] > [WAN2]

Firmware Version	3.8.8_BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	14th February 2018
Release Date	8th March 2018
Revision	72016
Applicable Models	Vigor2862, Vigor2862n, Vigor 2862Ln, Vigor2862ac, Vigor 2862Lac
VDSL Modem Code	779517
ADSL Modem Code	773F01
Locale	UK & Ireland Only

New Features

1. WAN2 (Ethernet) port can now operate as a LAN port when disabled in [WAN] > [General Setup] > [WAN2], for a total of 5 LAN ports, by selecting "No-Set as LAN" as the Enable option

   Important Note – WAN2 Factory Default configuration:
   The WAN2/LAN5 port is set to operate as a LAN port by default. To use the port as WAN2 it must be enabled in [WAN] > [General Setup] > [WAN2]

2. LAN ports, Wireless LAN button and Factory Reset button can now be enabled or disabled from [System Maintenance] > [Panel Control]
3. Router's status LEDs & port LEDs can be turned off or put into "LED Sleep Mode" when inactive, configured in [System Maintenance] > [Panel Control]
4. Wireless Pre-Shared Key can now be viewed when logged into the router's admin account. Click on the "****" text to reveal the password currently in use
5. EAPOL Key Retry Enable/Disable setting added to [Wireless LAN (2.4GHz/5GHz)] > [Security] Disabling this setting can prevent WPA2 Key Reinstallation Attack (KRACK) attack vectors, for more details please read this security advisory:
   https://www.draytek.co.uk/information/our-technology/wpa2-krack-vulnerability
   (EAPOL Key Retry is set to Enabled by default and in previous firmware)
6. Full Bridge mode added to WAN1 (DSL) in Static or Dynamic IP section, to support forwarding packets with VLAN tags through the router's modem

Improvements

1. Unicode text codes can now be used in Hotspot Web Portal bulletin text
2. "None" option for Syslog in CSM (UCF/WCF/DNSF) profile is no longer used
3. Default WAN Connection Detection mode for PPPoE/PPPoA connections is now named "PPP Detect" instead of "ARP Detect"
4. Automatic monthly reset of User Profile time/data quotas (with monthly schedule entry)
5. Central AP Management could not query AP status correctly with management VLAN tag configured
6. Syslog & SMTP Server fields in [System Maintenance] > [Syslog/Mail Alert Setup] now allow up to 63 characters for longer hostnames
7. Web Syslog in [Diagnostics] > [Syslog Explorer] can now be used when "Syslog Server" is not enabled or configured in [System Maintenance] > [Syslog / Mail Alert]

8. RIP entries in the routing table received across the LAN and associated with a WAN interface were cleared from the routing table after 3 minutes when the WAN interface was disconnected
9. Internet Explorer browser could not successfully upload logo images for Hotspot Web Portal
10. Setting changes to the telnet command "adsl automode" to control the "Multimode" setting for ADSL modulation, were not kept when restarting the router
11. The router's DSL modem could still sync using ADSL2+ Annex M after removing "AnnexM" from the "Multimode" ADSL modulation using "adsl automode"
12. The "IP Routed Subnet" option could not be enabled in [Bandwidth Management] > [Bandwidth Limit]
13. Bandwidth Limit's effect on LAN to LAN VPN tunnels is toggled on/off with the "IP Routed Subnet" option
14. Bandwidth Limit was not applied correctly when using IP Groups
15. Bandwidth Limit was not applied to VPN traffic correctly in some configurations
16. Corrected a display issue that could occur when configuring a LAN subnet with a Subnet Mask of 255.255.0.0
17. DHCPv6 could incorrectly assign multiple IPv6 addresses from other LAN subnets
18. MyVigor DrayDDNS service status could incorrectly be displayed in red after updating information
19. [NAT] > [Open Port] settings could not be saved if a UDP port was specified that conflicted with a TCP management port
20. LAN to LAN VPN tunnels configured using the "Ipsec VPN with the Same Subnets" option enabled could not be saved in some configurations
21. [LTE models only] An LTE WAN with an active VPN connection could drop the LTE WAN interface after 5 hours due to inactivity
22. Enabling Session Limit could stop NAT port forwarding (Open Ports / Port Redirection / DMZ) from operating correctly
23. Quick Start Wizard could incorrectly allow configuration of a blank administrator password
24. Remote dial-in user name (with RADIUS authentication) was not correctly displayed on VigorACS 2 server (on Dashboard >> VPN Overview).
25. Resolved connectivity issue with 1483 Routed LLC Mode ADSL connections
26. Improved DNS caching behaviour with Web Content Filtering and DNS Filtering enabled

Known Issues

(None)

Firmware Version	3.8.7_BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	20th October 2017
Release Date	3rd November 2017
Revision	69378
Applicable Models	Vigor2862, Vigor2862n, Vigor 2862Ln, Vigor2862ac
VDSL Modem Code	779517
ADSL Modem Code	773F01
Locale	UK & Ireland Only

New Features

(None)

Improvements

1. Improvements to Wireless WAN (WAN2) mode WPA2 security to protect against WPA2 Key Reinstallation Attack (KRACK), for more details please read this security advisory: https://www.draytek.co.uk/information/our-technology/wpa2-krack-vulnerability
2. BGP Router ID can now be set to a specified LAN / WAN IP address manually
3. Switch Management now supports management of the VigorSwitch P1280
4. Improved handling of WAN Alias IPs by sending an ARP request to the WAN Gateway upon first configuration
5. ISO 3166 Country objects added to [Objects Setting] menu for use with Route Policy to determine outbound connection used for IPs within a country's IP range
6. Improved session handling when using VPN Trunk in Weighted Round Robin mode
7. Improved DNS Security – Domain Diagnosis function to utilise the router's DNS Cache
8. Corrected handling of DNS query responses with DNS Security enabled on the router
9. Improved Firewall's Session limit handling of Fragmented UDP packets on a Routed LAN
10. Restarting the router (via WUI, CLI), would drop and restart PPP connection before the router rebooted
11. [Product Registration] link did not work when connected to EE's 4G network

Known Issues

(None)

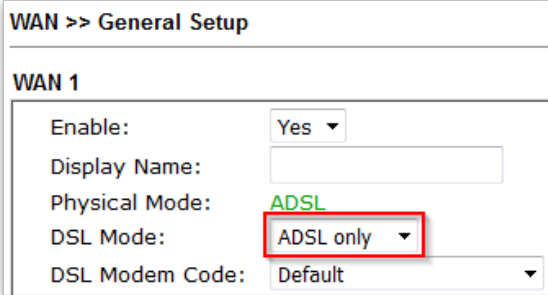| Firmware Version	3.8.6_BT (Formal Release)
Release Type	**Regular** – Upgrade recommended when convenient
Build Date	21st August 2017
Release Date	27th October 2017
Revision	68071
Applicable Models	Vigor2862, Vigor2862n, Vigor2862ac
VDSL Modem Code	779517
ADSL Modem Code	773F01
Locale	UK & Ireland Only

New Features

1. Support for extra TR-069 parameters
2. Support for Ethernet Bridge Mode on Ethernet WAN2
3. Added Users Information section to Hotspot Web Portal (requires USB storage to operate) to store details of users that have connected through the Hotspot Web Portal
4. Switch Management now supports Alert & Log, which stores and notifies of events such as port disconnections for connected VigorSwitches (requires USB storage to operate)

Improvements

1. Improved 5GHz wireless support
2. Improved support for integrated LTE models of the Vigor 2862 (i.e. Vigor 2862Ln)
3. Improved router's NTP update of current time on restart
4. Added "Enforce HTTPS Access" to router's HTTP management setting, which redirects management access over unencrypted HTTP to encrypted HTTPS
5. IPsec traffic was not passed correctly to a VPN server connected to a Routed LAN Subnet
6. Could not assign an IPv6 Static IP as an IPv6 WAN address using a prefix of /128
7. Firewall blocked large ICMPv6 packets incorrectly
8. A VLAN tag of 3 could not be specified on the WAN2 interface
9. Changing High Availability configuration to Hot Standby could cause unexpected behaviour from the WAN Config Sync settings
10. NAT loopback did not operate correctly when using [NAT] > [DMZ Host]
11. The router could respond to a port scan on TCP port 443 with the services that use TCP port 443 disabled (i.e. SSL VPN, HTTPS Management, DNS Filter)
12. Improved wording of Web Content Filter categories in web UI
13. When enabled DoS Defense could affect information displayed in [Online Status]
14. Improved Web Content Filtering algorithm to block Gmail when using the Chrome web browser with the Web Content Filter set to block "Web-based Mail" category
15. Improved App Enforcement algorithm for "Google Services" to block only Gmail and Google Drive
16. Route Policy Diagnostics would indicate an incorrect rule for Route Policies with a domain name specified as the destination
17. Improvements to handling of multiple subnets across a VPN tunnel, to avoid scenario where a VPN tunnel linking two DrayTek routers using LAN2 on each could result in traffic sometimes being forwarded to LAN1 subnet
18. WAN IP Alias addresses did not work correctly with ports opened in [NAT] > [Open Ports]

Known Issues

1. If experiencing an issue establishing an Internet connection on ADSL or ADSL2+ connections, set the WAN1 DSL Mode to "ADSL Only"

2. Restoring a configuration from a Vigor 2860 is not possible with this firmware version. Upgrade to the 3.8.7 firmware to restore a configuration file from a Vigor 2860 router

Firmware Version	3.8.5_BT (Formal Release)
Release Type	**Initial Release**
Build Date	12th May 2017
Release Date	12th October 2017
Revision	65164
Applicable Models	Vigor2862, Vigor2862n, Vigor2862ac
VDSL Modem Code	779517
ADSL Modem Code	773F01
Locale	UK & Ireland Only

First Firmware Release for this model

New Features

(None)

Improvements

(None)

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