

# MP-20x Telephone Adapter

Version 4.4.9





---

## Table of Contents

---

<b>1</b>	<b>Introduction .....</b>	<b>7</b>
<b>2</b>	<b>Version 4.4.9 Build 146 .....</b>	<b>9</b>
2.1	New Features .....	9
2.2	Known Constraints .....	9
2.3	Resolved Constraints .....	9
<b>3</b>	<b>Version 4.4.9 Build 142 .....</b>	<b>11</b>
3.1	New Features .....	11
3.2	Known Constraints .....	11
3.3	Resolved Constraints .....	11
<b>4</b>	<b>Version 4.4.9 Build 111 .....</b>	<b>13</b>
4.1	New Features .....	13
4.2	Known Constraints .....	13
4.3	Resolved Constraints .....	14
<b>5</b>	<b>Device Gateway Specifications.....</b>	<b>15</b>

**This page is intentionally left blank.**

## Notice

Information contained in this document is believed to be accurate and reliable at the time of printing. However, due to ongoing product improvements and revisions, AudioCodes cannot guarantee accuracy of printed material after the Date Published nor can it accept responsibility for errors or omissions. Updates to this document can be downloaded from <https://www.audiocodes.com/library/technical-documents>.

This document is subject to change without notice.

Date Published: September-22-2020

## WEEE EU Directive

Pursuant to the WEEE EU Directive, electronic and electrical waste must not be disposed of with unsorted waste. Please contact your local recycling authority for disposal of this product.

## Customer Support

Customer technical support and services are provided by AudioCodes or by an authorized AudioCodes Service Partner. For more information on how to buy technical support for AudioCodes products and for contact information, please visit our website at <https://www.audiocodes.com/services-support/maintenance-and-support>.

## Stay in the Loop with AudioCodes



## Abbreviations and Terminology

Each abbreviation, unless widely used, is spelled out in full when first used.

## Related Documentation

Document Name
MP-20x Quick Installation Guides
MP-20x Telephone Adapter User's Manual

## Document Revision Record

LTRT	Description
50522	Initial document release for Version 4.4.7.
50523	New features added for Version 4.4.7.
50524	Initial document release for Version 4.4.8.
50525	Initial document release for Version 4.4.9.
50526	New features added for Version 4.4.9 Build 111
50527	Resolved constraints added for Version 4.4.9 Build 142
50528	Resolved constraints added for Version 4.4.9 Build 146

## Documentation Feedback

AudioCodes continually strives to produce high quality documentation. If you have any comments (suggestions or errors) regarding this document, please fill out the Documentation Feedback form on our website at <https://online.audiocodes.com/documentation-feedback>.

# 1 Introduction

AudioCodes MP-20x series of analog Telephone Adapters are cost-effective, feature-rich gateways, allowing the connection of ordinary POTS analog telephones or fax machines to a Voice-over-Broadband (VoBB) service provider.

The MP-20x series is designed for the rapidly growing residential and Small Office/Home Office (SOHO) voice-over-IP (VoIP) market. The MP-20x series typically connects to an existing Broadband Internet device (Cable and ADSL modem, - depending on model), and establishes a communications path with the service provider network through its IP uplink connection. Supporting a rich set of subscriber calling features such as Caller ID, Call Forwarding, and Call Waiting, the MP-20x series maintains a uniform user experience when migrating to VoIP services. In addition, the MP-20x series serves as a router with capabilities such as DHCP, NAT, Firewall, PPPoE, PPTP supporting connectivity of home PC networks.

The MP-20x VoIP Gateway is an all-in-one unit featuring (depending on model) a VoIP adapter, FXS lines, Ethernet LAN interfaces (with an internal Layer-2 switch), and Ethernet WAN interface.

Utilizing AudioCodes' VoIPerfect™ core architecture, and gaining from its accumulated experience in providing IP telephony solutions, the MP-20x series combines superior voice quality and cutting-edge features for end users, such as T.38 Fax Relay and G.168-2004 compliant Echo Cancellation. Low bit rate vocoders (voice coders) can be used simultaneously on all the telephony ports to save valuable bandwidth.

**This page is intentionally left blank.**



## 2 Version 4.4.9 Build 146

This section describes Version 4.4.9 Build 146.

### 2.1 New Features

Not applicable

### 2.2 Known Constraints

Not applicable

### 2.3 Resolved Constraints

This section lists constraints from previous releases that have now been resolved:

**Table 2-1: Resolved Constraints for Version 4.4.9 Build 146**

Incident	Description
MP-390	MP-202 does not respond to incoming calls after a specific period of idle time.
MP-391	CWMP: Adding X.parameter for 'voip/signalling/sip/update_support_enabled'.
MP-351	MP-202 does not send ACK message on '500 Server Internal Error'.

**This page is intentionally left blank.**

## 3 Version 4.4.9 Build 142

This section describes Version 4.4.9 Build 142.

### 3.1 New Features

Not applicable

### 3.2 Known Constraints

Not applicable

### 3.3 Resolved Constraints

This section lists constraints from previous releases that have now been resolved:

**Table 3-1: Resolved Constraints for Version 4.4.9 Build 142**

Incident	Description
MP-211	Failed EMS response when upgrading same file twice
MP-215	Drop from the conference with an internal call failed
MP-232	MP-202: Phone1 LED turns red after hang-up internal call
MP-253	MP-202 incorrect CID on analog device in specific scenarios
MP-259	[HGC]: Cancel all registered ABBD not work as expected
MP-278	Update default client certificate
MP-280	Syslog format improvement
MP-285	Support SIP Update method
MP-307	WEB: missing GW entry in static route rule
MP-317	Supporting provisioning based on random Time-Of-Day
MP-318	[HGC]: Cannot block/unblock Caller ID per call
MP-339	MP-202 response 491 then receiving INVITE inside re-INVITE
MP-341	WEB: Pressing on 'check now' button (configuration) cause reboot

**This page is intentionally left blank.**

## 4 Version 4.4.9 Build 111

This section describes Version 4.4.9 Build 111.

### 4.1 New Features

This section describes the new features introduced in this version:

- **Changing Default Cipher Suites for SIP over TLS**

You can now change the default cipher suites to be used (or removed) for SIP over TLS.

- **Changing Default Cipher Suits for Provisioning**

You can now change the default cipher suites to be used (or removed) for Provisioning.

- **Setting Provisioning Time of Day (TOD)**

You can now configure the device to perform provisioning at random or fixed times using a specified configuration. You can also configure default behavior when if no random TOD or Fixed TOD has been configured,

### 4.2 Known Constraints

This section lists known constraints:

**Table 4-1: Known Constraints for Version 4.4.9 Build 111**

Incident	Description
106501	Connected Line Presentation ('P-Asserted-Identity') is not updated after 'Forward on no answer'.
109783	Speed Dial: Destination SIP port cannot be changed from '5060'.
109789	Internal service: Call Forward 'Busy' mode does not work.
109790	Internal service: Call Forward 'No Reply' mode does not work.
109791	Internal service: DND prevents incoming calls to all SIP lines instead of the relevant SIP line.

## 4.3 Resolved Constraints

This section lists constraints from previous releases that have now been resolved:

**Table 4-2: Resolved Constraints for Version 4.4.9 Build 111**

Incident	Description
MP-75	FaxBack: Signaling was routed to the network instead of the pFax application.
MP-93	Incoming DTMF (SIP INFO method) for "*" and "# " are played like the "0".
MP-6	Incorrect Caller ID is displayed for forwarded incoming calls.
MP-14	Unnecessary DNS NAPTR query is sent before an INVITE is sent.
MP-15	An old configuration path for Remote Conference URI was removed.
MP-45	Internal calls do not work in specific scenarios.
MP-54	Payment terminal transaction failed when Transparent mode was used.
MP-70	The device does not answer incoming SIP keep-alive OPTIONS.
MP-98	Internal calls do not work when ATA is configured for TLS/SRTP.
MP-101	VoIP failure was encountered when receiving specific RTCP packets.
MP-106	Support for Huawei's softswitch format for MWI Notify event.
MP-116	URL value with <i>.cfg</i> extensions provided by DHCP Option 66 is being ignored by CPE.
MP-138	Call forward busy embedded service doesn't work on Line 2.
MP-139	Caller ID + prefix was not converted into '00' in the Call Log history of the phone.
MP-167	Bad handling of REFER call flow for specific scenarios.
MP-168	Voice is not established when INVITE is missing the SDP header.
MP-1	ARP requests received on WAN, answered with LAN IP instead of a WAN IP.
MP-25	Software Fastpath doesn't work on bridge configuration.
MP-62	SIP destination port remains unchanged for calls executed by speed dial.

## 5 Device Gateway Specifications

The specifications for the router and VoIP functionality are listed in the table below:

**Table 5-1: MP-20x Telephone Adapter Software Specifications**

Feature	Details
<b>VoIP Signaling Protocols</b>	<ul style="list-style-type: none"> <li>▪ SIP - RFC 3261, RFC 2327 (SDP)</li> </ul>
<b>Data Protocols</b>	<ul style="list-style-type: none"> <li>▪ IPv4, TCP, UDP, ICMP, ARP, LLDP, TLS</li> <li>▪ PPPoE (RFC 2516)</li> <li>▪ PPTP (RFC 2637)</li> <li>▪ DNS, Dynamic DNS</li> <li>▪ WAN-to-LAN Layer-3 routing with:               <ul style="list-style-type: none"> <li>✓ DHCP Client/Server (RFC 2132)</li> <li>✓ NAT: RFC 3022, Application Layer Gateway (ALG)</li> <li>✓ Stateful Packet Inspection Firewall</li> <li>✓ QoS - Priority queues, VLAN 802.1p, Q tagging, traffic shaping</li> </ul> </li> <li>▪ STUN (RFC 3489)</li> </ul>
<b>Media Processing</b>	<ul style="list-style-type: none"> <li>▪ Voice Coders: G.711, G.729A/B, G.726, G.722</li> <li>▪ Echo Cancellation: G.168-2004 compliant, 64-msec tail length</li> <li>▪ Silence Compression</li> <li>▪ Adaptive Jitter Buffer 300 msec</li> <li>▪ Fax bypass, Voice-Band Data and T.38 fax relay</li> <li>▪ Automatic Gain Control</li> </ul>
<b>Telephony Features</b>	<ul style="list-style-type: none"> <li>▪ Call Hold and Transfer</li> <li>▪ Call Waiting Type 1 and 2</li> <li>▪ Message Waiting Indication</li> <li>▪ 3-Way Conferencing</li> <li>▪ Speed Dial</li> <li>▪ Polarity Reversal</li> </ul>
<b>Configuration/Management</b>	<ul style="list-style-type: none"> <li>▪ Embedded Web Server for configuration and management</li> <li>▪ TR-069 and TR-104 for remote configuration and management</li> <li>▪ Remote firmware upgrade and configuration by HTTP, TFTP, FTP and HTTPS</li> <li>▪ Configuration file encryption (3DES)</li> <li>▪ SIP-triggered remote firmware and configuration upgrade</li> <li>▪ Command-Line Interface (CLI) over Telnet</li> <li>▪ Dual image management</li> <li>▪ SNMP</li> <li>▪ Local Support and Troubleshooting with Web interception and voice notification</li> <li>▪ BroadSoft BroadCloud certification</li> <li>▪ BroadCloud PacketSmart integration (applicable only to MP-20xR)</li> <li>▪ Optional 3G/4G dongle (not applicable to MP-202)</li> <li>▪ Link Layer Discovery Protocol (LLDP) support</li> <li>▪ Faxback integration (Fax over HTTPS) – Optional</li> <li>▪ File server</li> <li>▪ Printer server</li> <li>▪ DLNA Media server</li> </ul>

Feature	Details
	<ul style="list-style-type: none"> <li>▪ FXS Voice Menu</li> </ul>
<b>Packetization</b>	<ul style="list-style-type: none"> <li>▪ RTP/RTCP Packetization (RFC 3550, RFC 3551)</li> <li>▪ DTMF Relay (RFC 2833)</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>▪ HTTPS for Web-based configuration</li> <li>▪ Password protected Web pages (MD5)</li> </ul>
<b>Telephony Signaling</b>	<ul style="list-style-type: none"> <li>▪ In-band:                             <ul style="list-style-type: none"> <li>✓ DTMF: Detection and Generation, TIA464B</li> <li>✓ Caller ID: Telcordia, ETSI, NTT - Type I, Telcordia Type II</li> <li>✓ Call Progress Tones</li> </ul> </li> <li>▪ Out-of-band:                             <ul style="list-style-type: none"> <li>✓ FXS Loop-start Signaling</li> <li>✓ On/Off Hook, Flash Hook</li> </ul> </li> </ul>
<b>Hardware</b>	
<b>Power</b>	<ul style="list-style-type: none"> <li>▪ MP-202: Power Supply 12VDC/1A</li> <li>▪ MP-202R/MP-204R/MP204: Power Supply 12VDC/2A</li> </ul>
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>▪ WAN 10/100Base-T (RJ-45)</li> <li>▪ LAN 10/100Base-T (RJ-45)</li> <li>▪ RJ-11 FXS ports for telephones (POTS)</li> <li>▪ Network Interface WAN/LAN 10/100 Base-T(RJ-45)</li> <li>▪ Ethernet ports are 10/100/1000Base-T (applicable to MP-20xR)</li> <li>▪ USB 2.0 (not applicable to MP-202)</li> </ul>
<b>LED Indications</b>	<ul style="list-style-type: none"> <li>▪ FXS Phone lines (1 to 4, depending on MP-20x model) - Registered, In Use, Alert</li> <li>▪ LAN activity on Ethernet Port</li> <li>▪ WAN</li> <li>▪ USB (applicable for MP20xR only)</li> <li>▪ Status</li> <li>▪ Power on</li> </ul>
<b>3G Backup (Optional)</b>	<ul style="list-style-type: none"> <li>▪ Support for 3G USB dongles for primary WAN backup including:                             <ul style="list-style-type: none"> <li>✓ Alcatel 4G LTE (1bbb:f000-&gt;1bbb:0195)</li> <li>✓ Alcatel AL720</li> <li>✓ Huawei E1550</li> <li>✓ Huawei E156</li> <li>✓ Huawei E156G</li> <li>✓ Huawei E160</li> <li>✓ Huawei E169</li> <li>✓ Huawei E1750</li> <li>✓ Huawei E1756</li> <li>✓ Huawei E1756 Movistar</li> <li>✓ Huawei E303</li> <li>✓ Huawei E3131</li> <li>✓ Huawei E3272</li> <li>✓ Huawei E3276</li> <li>✓ Huawei E3372</li> <li>✓ Huawei E367</li> <li>✓ Huawei E392</li> <li>✓ Huawei E398</li> <li>✓ Huawei K3765</li> <li>✓ Huawei K3772</li> <li>✓ Sierra AC326U</li> <li>✓ Vertex</li> </ul> </li> </ul>



Feature	Details
	<ul style="list-style-type: none"> <li>✓ ZTE K3805-Z</li> <li>✓ ZTE MF110</li> <li>✓ ZTE MF190</li> <li>✓ ZTE MF626</li> <li>✓ ZTE MF823</li> </ul>
<b>SLIC Characteristics</b>	<ul style="list-style-type: none"> <li>▪ Maximum Ringer Load (REN) = 5</li> <li>▪ Short Haul</li> <li>▪ Ringer Voltage - up to 65Vrms</li> <li>▪ Configurable Terminating Impedance</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>▪ <b>Operating Temperature:</b> 0 to 40°C</li> <li>▪ <b>Storage Temperature:</b> -25 to 70°C</li> <li>▪ <b>Operating Humidity:</b> 10 to 90% non-condensing</li> <li>▪ <b>Storage Humidity:</b> 10 to 90% non-condensing</li> </ul>
<b>Weight and Dimensions</b>	<ul style="list-style-type: none"> <li>▪ MP-202B: 230 grams; 167 x 133 x 33 mm</li> <li>▪ MP-202R: 280 grams; 167 x 133 x 33 mm</li> <li>▪ MP-204B: 280 grams; 167 x 133 x 33 mm</li> <li>▪ MP-204R: 280 grams; 167 x 133 x 33 mm</li> </ul>

**International Headquarters**

1 Hayarden Street,  
Airport City  
Lod 7019900, Israel  
Tel: +972-3-976-4000  
Fax: +972-3-976-4040

**AudioCodes Inc.**

200 Cottontail Lane  
Suite A101E  
Somerset NJ 08873  
Tel: +1-732-469-0880  
Fax: +1-732-469-2298

**Contact us:** <https://www.audiocodes.com/corporate/offices-worldwide>

**Website:** <https://www.audiocodes.com/>

©2020 AudioCodes Ltd. All rights reserved. AudioCodes, AC, HD VoIP, HD VoIP Sounds Better, IPmedia, Mediant, MediaPack, What's Inside Matters, OSN, SmartTAP, User Management Pack, VMAS, VolPerfect, VolPerfectHD, Your Gateway To VoIP, 3GX, VocaNom, AudioCodes One Voice, AudioCodes Meeting Insights, AudioCodes Room Experience and CloudBond are trademarks or registered trademarks of AudioCodes Limited. All other products or trademarks are property of their respective owners. Product specifications are subject to change without notice.

Document #: LTRT-50528

