



Configuring CyberData Devices for the iPECS-LIK



Ericsson-LG. It's not all we know; it is all we sell

Version 1.0 / September, 2012 © Presence Management LLC. All rights reserved



800.873.5528 | WWW.TARGETD.COM | TGSALES@TARGETDIST.COM

This document covers the integration of CyberData IP endpoints with the iPECS-LIK versions 5.5He and 6.0Bo.

All support and supporting documentation for CyberData should be obtained from CyberData itself. This document assumes the reader is at least an iPECS Certified Technician, and is familiar with creating station user's for phontage, SIP phones, and UCS Users in general.

This document also assumes the reader is familiar with setting up CyberData Paging equipment and/or has access to the Manuals for the CyberData equipment, as several sections are left out of this manual such as setting up the network configuration of the CyberData Equipment and pin outs for relay, and audio out usage.For more information on the integration process see integration section.

COPYRIGHT NOTICE:

© 2013, CyberData Corporation, ALL RIGHTS RESERVED.

This manual and related materials are the copyrighted property of CyberData Corporation. No part of this manual or related materials may be reproduced or transmitted, in any form or by any means (except for internal use by licensed customers), without prior express written permission of CyberData Corporation. This manual, and the products, software, firmware, and/or hardware described in this manual are the property of CyberData Corporation, provided under the terms of an agreement between CyberData Corporation and recipient of this manual, and their use is subject to that agreement and its terms.

DISCLAIMER: Except as expressly and specifically stated in a written agreement executed by CyberData Corporation, CyberData Corporation makes no representation or warranty, express or implied, including any warranty or merchantability or fitness for any purpose, with respect to this manual or the products, software, firmware, and/or hardware described herein, and CyberData Corporation assumes no liability for damages or claims resulting from any use of this manual or such products, software, firmware, and/or hardware. CyberData Corporation reserves the right to make changes, without notice, to this manual and to any such product, software, firmware, and/or hardware.

OPEN SOURCE STATEMENT: Certain software components included in CyberData products are subject to the GNU General Public License (GPL) and Lesser GNU General Public License (LGPL) "open source" or "free software" licenses. Some of this Open Source Software may be owned by third parties. Open Source Software is not subject to the terms and conditions of the CyberData COPYRIGHT NOTICE or software licenses. Your right to copy, modify, and distribute any Open Source Software is determined by the terms of the GPL, LGPL, or third party, according to who licenses that software.Software or firmware developed by CyberData that is unrelated to Open Source Software is copyrighted by CyberData, subject to the terms of CyberData licenses, and may not be copied, modified, reverse-engineered, or otherwise altered without explicit written permission from CyberData Corporation.

TRADEMARK NOTICE: CyberData Corporation and the CyberData Corporation logos are trademarks of CyberData Corporation. Other product names, trademarks, and service marks may be the trademarks or registered trademarks of their respective owners



1.0 Configuring a CyberData unit as a SIP extension

1.1 Configuring SIP settings on the iPECS-LIK

The first step in setting up the CyberData Paging units is to login to the iPECS-LIK web administration using your maintenance User ID (if required) an password.

Once logged in click on "System ID & Numbering Plan" on the left hand side of the Administration tab. Select "Flexible Station Number (105)" from the drop down menu. On the right hand side you will see all of the extension numbers programed on your system with the associated order number, MAC address, and IP Address. Scroll down or select the next order range from the links at the top of the page till you see an extension that does not have any associated MAC address, or IP address and record that extension number.

ipecs	(Admi	nistration		/W Upgrade	1 -	Bystem Ma
MFIM/VD96M-F,0Cs OCT/13	^	[Flexil	ble Station I	Number] Full	Overview		
Boot Version-2, 1Aa NOV/12 Kernel Version-6, 0Ap							
H/W issue-0		۲	Not Use F	ange Input			
Find PGM			Enter Ord	ering Range :	-		
Hide Menu		0	Start Stati	on Number :			
• System ID & Numbering Plans			Enter Stat	ion Range :	-		
System ID(100) [N]		0	Start Stati	on Number :			
Device Port Num Change(101) [N]		0	Station Nu	umber :	Sea	Irch	
System&Device IP(102~103) [N]							
CO GW Sequence Number(104) [N]		Stati	on Order :		[101- 150][151- 20	0][201- 250][2	51-
Flexible Station Number(105) [N]					00]	New Statio	n
Flexible Numbering Plan(106) [N]		Order	STA Num	IP Address	MAC Address	Number	
8 Digit Table(238) [N]		1	2100	10.10.10.58	001a7eaf44f8	2100	
© Station Data		2	2501	10.10.10.101	001a7ea67fc6	2501	
© Board Based Data	(3	1393			1393	
© CO Line Data		4	1392			1392	
© System Data		5	1391			1391	
o system Data		6	1397			1397	



Now that we have our extension (1393 in this example), Scroll down the menu on the left hand side under and select "**Device Login**" Administration Tab. Select "**Station User Login (443)**" from the drop down menu. On the right hand side of the screen you will be presented with a table that you can enter in the following values:

- ID = SIP Extension User ID
- Password = SIP Extension Password
- Desired Number = Next available unassigned Extension Number
 - This is the extension you recorded in the previous step (1393)
- Remark = Description of device or other remark.

In the example below I have entered in the ID of 1393, selected a password of 1393S1P!, and entered the desired extension number of 1393.

© ISDN Line Data											
© SIP Data		Index : [1- 50][51- 100][101- 150][151- 200][201- 250][251- 300]									
© Tables Data	Index	Registered Number	Linked	Version	ID	Password	Zone	Desired Number	Nation	Language	Remark
© Networking Data	1				1393	1393S1P!	1	1393	U.S.A 🗸	English 🔽	
	2						1		U.S.A 🗸	English 🗸	
© RSGM Data	3						1		U.S.A 🗸	English 🗸	
O Tnet Data	4						1		U.S.A 🗸	English 🗸	
© Zone Data	5						1		U.S.A 🗸	English 🗸	
Device Login	6						1		U.S.A 🔽	English 🗸	
Remote device Register(442) [N]	7						1		U.S.A 🗸	English 🗸	
Station User Login(443) [N]	8						1		U.S.A 🗸	English 🗸	
O DECT Data	9						1		U.S.A 🗸	English 🗸	

Now that the user has been created on the iPECS-LIK, power up the CyberData unit and browse to the web interface. Each CyberData unit has a quick start guide that you can use to gain access to the web based administration. At any point you do not know what you are doing call CyberData support and they can assist you with accessing the web interface.



Once you are logged into the unit with the default username of "admin" and password of "admin" Select "SIP Config" from the menu on the left hand side. Enter in the following values as it relates to your IP scheme and "Station User Login" settings.

SIP Setting	Value
SIP Server	MFIM IP Address
SIP User ID	ID value from the "Station User Logon" Table
Authentication ID	ID value from the "Station User Logon" Table
Authentication	Password value from the "Station User Logon"
Password	Table.
Re-registration	3600
Interval	

In the example below the MFIM IP address is 10.10.10.2, the SIP user ID is "1393", the Authentication ID is "1393", and the Authentication password is "1393S1P!"

Home	SIP Configuration							
	-							
Device Config	Enable SIP operation: SIP Settings							
Networking	SIP Server:	10.10.10.2						
	Backup SIP Server 1:	10.10.2						
(SIP Config	Backup SIP Server 1: Backup SIP Server 2:							
Nightringer	Remote SIP Port:	5060						
Nightringer	Local SIP Port:	5060						
Multicast Config	Outbound Proxy:							
	Outbound Proxy Port:	0						
Audio Config	SIP User ID:	1393						
Clock Config	Authenticate ID:	1393						
Clock Coning	Authenticate Password:	1393S1P!						
Event Config								
	Register with a SIP Server:							
Autoprovisioning	Re-registration Interval (in seconds):	3600						
Update Firmware		·						
opuateriniware	Unregister on Reboot:							
	Buffer SIP Calls:							
	Beep on page:							
	Call disconnection							
	Terminate call after delay (in seconds):	0						
	Note: A value of 0 will disable this function							
RTP Settings								
RTP Port (even): 10500								
* You need to reboot for changes to take effect								
Save Reboot								
Jave neuou								



Once the settings have been entered select "SAVE" from the bottom of the window and then select "REBOOT".

Log back into the iPECS-LIK and click on "System ID & Numbering Plan" on the left hand side of the Administration tab. Select "System and Device IP (102-103)" from the drop down menu. All of the devices registered on the iPECS-LIK will appear on the left hand side. The CyberData "SIP User ID" that you programmed in should show in the table under the "STA" heading as shown below. Once it is this table the unit has registered successfully.

Note: A 3rd party SIP license is required to connect any SIP extension to the iPECS-LIK. SIP extensions do not have any system features or functions associated to them and are essentially SLT phones.

It is an inherent issue with SIP paging speakers, paging units, or door box's that they are dependent on an answer acknowledgment from all devices before audio is passed to the device. Once a page is initiated to the SIP device the person making the page must wait until all speakers that are to receive the page have acknowledged before making the page. Audio can be clipped off if the user starts talking immediately.



2.0 Configuring a CyberData unit as a multicast unit

2.1 Configuring Multicast Settings on the CyberData unit

To setup the CyberData units in Multicast configuration a 3rd party SIP license is not required. All configuration is done on the CyberData unit itself.

The iPECS-LIK uses the IP of 239.20.19.1 for broadcasting multicast pages across the network. For a listing of Multicast ports based on paging types please refer to section "**System Data-> Multicast RTP/RTCP (165)**" of the iPECS-LIK web administration.

To configure Multicast paging on the CyberData unit (if available); Select "**Multicast Config**" from the menu on the left hand side of the CyberData web administration page. Check the box to "**Enable Multicast Operations**" and set the IP address under the "ADDRESS" column to 239.20.19.1 for all priorities 0-9. Next select the multicast ports from the "**Multicast RTP/RTCP (165)**" of the iPECS-LIK web administration that refer to the paging type you would like to hear broadcast across the CyberData unit. Assign a name to the Multicast group, and if desired check the box to buffer the audio before playing through the CyberData unit. Click the "**Save**" button at the bottom of the page to save your configuration and then click the "**Reboot**" button to reboot the unit. Please refer to the example on the next page for a sample configuration.



CyberData Ceiling Speaker							
Home	Multicast Configurat	tion					
Device Config Enable Multicast operation:							
Networking	priority Address	por	t Multicast Group N	ame Buffered			
SIP Config	9 239.20.19.1 8 239.20.19.1	8176 8184	Emergency Page 589/543 All Call Page 549				
Nightringer	7 239.20.19.1 6 239.20.19.1	8182 8178	External All Call 548 External Page 1				
Multicast Config	5 239.20.19.1	8180	External Page 2				
Audio Config	SIP calls are considered 4 239.20.19.1	priority 4.5 8106	Internal Page 1				
Clock Config	3 239.20.19.1 2 239.20.19.1	8108 8186	Internal Page 2 PTT 1				
Event Config	1 239.20.19.1	8100	BGM				
Autoprovisioning 0 239.20.19.1 8102 BGM External 1 Port range can be from 2000-65535							
Update Firmware Ports must be odd numbers Priority 9 is the highest and 0 is the lowest							
A higher priority audio stream will always supercede a lower one							
Priority 9 streams will play at maximum volume							
* You need to reboot for changes to take effect							
Save Reboot							

NOTE: The iPECS-LIK and all CyberData equipment must be located in the same broadcast domain for the multicast configuration to work correctly.



iPECS is an Ericsson-LG Brand



For assistance contact technical support at support@presencemanagement.com [614] 652.6500 option 3



Presence Management

800.873.5528 | WWW.TARGETD.COM |

TGSALES@TARGETDIST.COM