

Application Note

KPT-110SDK 2.50

Last Updated:	Sep-29, 2017
Language:	English
Document No.:	AN-17-0006
Version	1.00

Revision History

Version	Date of issue	Note
1.00	29-Sep-2017	First edition

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1 Outline

KPT-110SDK Version 2.50 supports the G.711(u-law/A-law) codec of voice.

Since the previous KPT-110SDK is compatible only with the AMBE+2™ codec, in the console application for NEXEDGE® system, it was necessary to purchase a hardware Vocoder such as USB-3000™ to encode and decode AMBE+2™, or purchase an AMBE+2™ compatible software Vocoder .

The supported G.711 codec is the ITU-T (International Telecommunication Union Telecommunication Standardization Sector) standard, and it is used in general SIP phone etc. G.711 is playable on most major OS, and it can convert to 16bit PCM audio data with simple program.

Development of console application for NEXEDGE® became easier by KPT-110SDK supporting G.711 codec.

Console application compatible with KPT-110SDK can select G.711(u-law), G.711(A-law) or AMBE+2™ for codec to be used when registration to the system.

In the IP Gateway server of the Gen2 system to which the console application connects, when transmitting voice from the radio to the console where G.711 is selected, transmit the voice data of AMBE+2™ encoded by the radio to the G.711 voice Convert it to data and send it. When receiving voice from the console, convert G.711 voice data to AMBE+2™ voice data and send it to the radio.

Note:

- ✓ The G.711 codec conversion is supported only by the Gen2 System (NEXEDGE® Generation 2 System), which is not supported by the conventional NEXEDGE® Type-C System. G.711 codec conversion is supported from Gen2 System version 1.60 or later.
- ✓ G.711 codec is supported by NXIP Console Interface version 2.30 or later which is used on KPT-110SDK.
- ✓ It can't use AES, DES and Scrambler on voice call which is used G.711 codec.

2 Support function

KPT-110SDK version 2.50 supports the following functions.

Conference Voice Call
Individual Voice Call
Broadcast Voice Call
Telephone Voice Call(Outgoing)(Trunking)
Telephone Voice Call(Incoming)(Trunking)
All Group Voice Call(Conference)
All Group Voice Call(Broadcast)
Conference Short Data Call(Trunking)
Individual Short Data Call(Trunking)
Conference Long Data Call
Individual Long Data Call
Conference Status Call
Individual Status Call
Individual Status Inquiry Call
Conference Remote Control Call
Individual Remote Control Call
Conference Simultaneous Call (Data with Voice)
Individual Simultaneous Call (Data with Voice)
Transparent Conference Short Data Call(Trunking)
Transparent Individual Short Data Call(Trunking)
Transparent Conference Long Data Call
Transparent Individual Long Data Call
Transparent 2 Conference Short Data Call(Trunking)
Transparent 2 Individual Short Data Call(Trunking)
Transparent 2 Conference Long Data Call
Transparent 2 Individual Long Data Call
Individual Status Call + Voice Call(Paging Voice Call)
Emergency Conference Call
Emergency Individual Call
Individual ACK Request Voice Call(Conventional)

GPS Data Conference Short Data Call(Trunking)
GPS Data Individual Short Data Call(Trunking)
GPS Data Conference Long Data Call
GPS Data Individual Long Data Call
GPS Data Conference Simultaneous Call
GPS Data Individual Simultaneous Call
GPS Data Auto Report Request Conference Short Data Call(Trunking)
GPS Data Auto Report Request Individual Short Data Call(Trunking)
GPS Data Auto Report Request Conference Long Data Call(Conventional)
GPS Data Auto Report Request Individual Long Data Call(Conventional)
GPS Data Single Polling Request Individual Short Data Call(Trunking)
GPS Data Single Polling Request Individual Long Data Call(Conventional)
GPS Data Multiple Polling Request Conference Short Data Call(Trunking)
GPS Data Multiple Polling Request Individual Short Data Call(Trunking)
GPS Data Multiple Polling Request Conference Long Data Call(Conventional)
GPS Data Multiple Polling Request Individual Long Data Call(Conventional)
GPS Data Query Request Individual Short Data Call(Trunking)
GPS Data Query Request Individual Long Data Call(Conventional)
GPS Data Interval Request Individual Short Data Call(Trunking)
GPS Data Interval Request Individual Long Data Call(Conventional)
GPS Data Interval Update Individual Short Data Call(Trunking)
GPS Data Interval Update Individual Long Data Call(Conventional)
GPS Data on GPS Report Channel(Gen2)
ESN Data Request Individual Short Data Call(Trunking)
AUX Status Request Individual Short Data Call(Trunking)
AUX Status Request Individual Long Data Call(Conventional)
Remote Stun Remote Control Call
Remote Revival Remote Control Call
Remote Kill Remote Control Call
Remoto Monitor Control Call + Individual Voice Call
Remote Regrouping Individual Short Data Call(Trunking)
Go To Channel Conference Long Data Call(Conventional)
Go To Channel Individual Long Data Call(Conventional)
Scramble Encryption
DES/AES Encryption
Mobility Registration
Group Registration
Talk Path(Trunking)