



Z-Audio2 Protocol

Version: 3.6

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1. Read Total QTY of Big Packages for Z-Audio Album

Total QTY of Album: 48

Max. Length of Album name: 50 bytes

Supported Device: Z-Audio 2

Operation Code: 0x02E0		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: 1 byte		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value
0	Music Source No SD Card =1 FTP =2	1byte

Response

Operation Code: 0x 02E1		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: 2 bytes		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value
0	Music Source No SD Card =1 FTP =2	1byte

1	Total QTY of big Packages for Z-Audio Album	1byte
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2. Read Album

Supported Device: Z-Audio 2

Operation Code: 0x02E2		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: 2 bytes		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value
0	Music Source No SD Card =1 FTP =2	1byte
1	Current Big Package No Start from 1	1byte

Response

Max QTY of Album in each package: 24

MAX. Length of Album name: 50bytes

The Real length of Album name depends on **Length of Album name** below.

Operation Code: 0x 02E3		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: Please see the blow (Index 0 & 1)		
Is UDP Big Package: YES		
Index of Additional Content	Remark	Value
0	Length of Additional data (high byte is ahead of low byte), including itself	2bytes
1		
2	Music Source No SD Card =1 FTP =2	1byte
3	Current Big Package No Start from 1	1byte
4	QTY of Album	1byte

5	1 st Album No	1byte
6	Length of 1 st Album name	1byte
7	1 st Album Name (start) positive-sequence for Album name, Max. length of Album name is 50 bytes (positive-sequence)	50bytes
...	...	
7+length of Album name-1	1 st Album Name (End)	
..
All Other Album name are the same as above, Max QTY of Album in each package is 24		

3. Read Total QTY of Big Packages for Songs

Max. QTY of songs which are under each Album: 999

Max. Length of Song name: 50 bytes

Supported Device: Z-Audio 2

Operation Code: 0x02E4		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: 2 bytes		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value
0	Music Source No SD Card =1 FTP =2	1byte
1	Current Album No	1byte

Response

Operation Code: 0x02E5		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: 3 bytes		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value

0	Music Source No SD Card =1 FTP =2	1byte
1	Current Album No	1byte
2	Total QTY of big UDP Packages for Songs of current Album	1byte

4. Read Songs

Supported Device: Z-Audio 2

Operation Code: 0x02E6		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: 3 bytes		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value
0	Music Source No SD Card =1 FTP =2	1byte
1	Current Album No	1byte
2	Current Big Package No for song	1byte

Response

MAX. Length of Song name: 50bytes

The Real length of song name depends on the protocol below.

Operation Code: 0x02E7		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: Please see the blow (Index 0 & 1)		
Is UDP Big Package: YES		
Index of Additional Content	Remark	Value
0	Length of Additional data, including itself, (High byte is ahead of low byte)	2bytes
1		
2	Current Music Source No SD Card =1 FTP =2	1byte
3	Current Album No	1byte

4	Current Big Package No	1byte
5	Total QTY of songs for current package	1byte
6	1 st song No (High byte is ahead of low byte)	2bytes
7		
8	Length of Song Name	1byte
9	1 st Song Name (start) positive-sequence for song name, Max. length of song name is 50 bytes (positive-sequence)	50bytes
...	...	
9+ Length of Song Name-1	1 st Song Name (End) 50 bytes for each song name,	
..
All Other Song name are the some as above, Max QTY of Song in each package is 24		

5. Audio Control Commands

Supported Device: Z-Audio 2

Operation Code: 0x0218		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content: 4 bytes		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value
0	Type of Control Music Source =1 Play Mode Changing =2 Album Control/ Radio =3 Play Control =4 Volume Control=5 Control Specify Song =6	1byte
1	Parameter 1	1byte
2	Parameter 2	1byte
3	Parameter 3	1byte

Definition for Parameters above				
Type of Control (1byte)	Parameter 1 (1byte)	Parameter 2 (1byte)	Parameter 3(1byte)	Remark
Music Source (1)	Music Source No 1byte SD card =1 Audio In =2 FTP Server =3 FM Radio =4	N/A Any Value	N/A Any Value	
Play Mode Changing (2)	Repeat Options 1byte Not Repeated=1 Repeat One Song=2 Repeat One Album= 3 Repeat All Album=4	N/A Any Value	N/A Any Value	
Album Control/ Radio (3)	Album Control 1byte Previous Album =1 Next Album =2 Specify Album No=3 PREV Radio Channel=4 Next Radio Channel =5 Specify Radio No=6	Album No / Radio No 1byte this parameter 2 is only available when Parameter 1 is equal 3 or 6.	N/A	
Play Control (4)	Previous Song=1 Next Song=2 Play=3 Stop=4	N/A	N/A	
Volume Control(5)	VOL Control =1 Treble =2 Bass=3	Decrease =1 Increase=2 VOL value =3 (Choose VOL Value is only available when Parameter 1 is equal 1 not 2,3)	VOL value 0-79 MAX. VOL: 0 MIN. VOL:79	
Control Specify Song (6)	Album No (1byte,0-255, Album No 0 is for alarm voice)	Song No takes 2 bytes space, 1 – 999, Higher byte of Song No	Lower byte of Song No	

Response

Operation Code: 0x0219		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content:: 4 bytes		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value
0	Type of Control	1byte
1	Parameter 1	1byte
2	Parameter 2	1byte
3	Parameter 3	1byte

6. Getting Zone Status

Supported Device: Z-Audio 2

Operation Code: 0x192E		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
LEN of additional content:: 11 bytes		
Is UDP Big Package: No		
Index of Additional Content	Remark	Value
0	ASCII code of *	1byte ASCII(*)=0x2A
1	ASCII Code of Z	1byte ASCII(Z)=0x5A
2	ASCII Code of Zone # 1 here zone # always equal 1	1byte ASCII(1)=0x31
3	ASCII Code of S	1byte ASCII(S)=0x53
4	ASCII Code of T	1byte ASCII(T)=0x54
5	ASCII Code of A	1byte ASCII(A)=0x41
6	ASCII Code of T	1byte ASCII(A)=0x54
7	ASCII Code of U	1byte ASCII(A)=0x55
8	ASCII Code of S	1byte

		ASCII(A)=0x53
9	ASCII Code of ?	ASCII(A)=0x3F
10	ASCII Code of CR	ASCII(CR)=0x0D

Response

Operation Code: 0x192F		
Target Subnet ID:	Specify subnet ID of target device	1byte, scope 1-254
Target Device ID:	Specify device ID of target device	1byte, scope 1-254
Additional Content		
Please see the response as following.		

5.2 Zone Status Information Message

RSP	#Z1,ON, SRC4, VOL6o, DND0, LOCK0 – POWER ON or #Z1,OFF – POWER OFF
Response Packet Breakdown	
Zx	x=The zone the message is from: 1 to 20
ON or OFF	ON=Power is ON, OFF=Power is OFF
SRCx	x=The zones current audio source: 1 to 6
VOLx	x=The zones current volume level: 0=Max to 79=Min or MUTE
DNDx	0=Do Not Disturb is OFF, 1=Do Not Disturb is ON
LOCKx	0=Zone is not locked, 1=Zone is locked