Devices	Chip Set / Amp	LED Color
MP3-TF-16P	AB24CR437T, AF24C099149 / 8002A	Blue
MP3-TF-16P V3.0	MH2024K-24SS / 8002A	Red
DFPlayer-Mini	DFROBOT LISP3 / YX8002	Blue
DFPlayer-Mini HW-247A V0.5.1	TD5580A / 8002	Red

Operational commands					
No Parameters Returned	Description	Devices			
0x01	Next	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x02	Previous	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x03	Specify tracking(NUM) 0-2999	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x04	Increase volume	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x05	Decrease volume	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x06	Specify volume 0-30	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x07	Specify EQ (0/1/2/3/4/5, Normal/Pop/Rock/Jazz/Classic/Base)	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x08	Specify playback mode single repeat, mode (0/1/2/3, Repeat/folder repeat/single repeat/ random)		DFPlayer mini		
0x08	Specify playback mode single track repeat (Enter track number to repeat, 0-2999)	MP3-TF-16P		TD5580A Clone	YX-5200
0x09	Specify playback source (1/2, USB/TF(SD)/)	MP3-TF-16P			
0x09	Specify playback source (0/1/2/3/4, USB/TF (SD)/AUX/SLEEP/FLASH)		DFPlayer mini		
0x09	Specify playback source (1/2/3/4/5, USB/TF (SD)/AUX/SLEEP/FLASH)				YX-5200
0x09	Specify playback source (1-U disk; 2-SD card; 3-AUX (not supported);4-FLASH; 5-PC; 6-SLEEP)			TD5580A Clone	
0x0A	Sleep, Enter into standby . low power loss	MP3-TF-16P	DFPlayer mini		YX-5200
0x0B	Normal working		DFPlayer mini		YX-5200
0x0C	Reset module	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x0D	Playback	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x0E	Pause	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x0F	Specify folder to playback (1~10)		DFPlayer mini		YX-5200
0x0F	Specify playback a track in a folder (MSB Folder 1-99, LSB Track 1-255 (0xFF))	MP3-TF-16P		TD5580A Clone	
0x10	Volume adjust set (MSB 1:Open volume adjust, amp on, LSB: set volume gain 0~31)	MP3-TF-16P	DFPlayer mini		YX-5200
0x11	Repeat play (1:start repeat play, 0:stop play)	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
	Specify the MP3 folder to play tracks in (1-9999, the folder name must be "MP3", 4-digit number of the files in				
0x12	the folder as in 0001)			TD5580A Clone	YX-5200
	Insert ADVERT file, Advertisements (1-9999, the folder name must be "ADVERT", The first 4 digits of the files in	1			
0x13	the folder are numbered as in 0001)			TD5580A Clone	YX-5200
	Specify folder and file number to play (The high four bits of MSB are used as the folder number (1-15), The				
0x14	lower four digits of MSB and LSB are the file number (1-2999))			TD5580A Clone	YX-5200
0x15	Stop inserting ads			TD5580A Clone	YX-5200
0x16	Stop playing			TD5580A Clone	YX-5200
0x17	Loop playback of specified folder (MSB = 0, LSB folder number 0-99)			TD5580A Clone	

0x18	All files are played randomly in physical order	TD5580A Clone
0x19	Current track loop play (0-Open single loop; 1-Close single loop)	TD5580A Clone
0x1A	Enable DAC high impedance (0- Turn off DAC high; 1- Enable DAC high impedance)	TD5580A Clone
0x1B	Power-on volume memory (0-Power-on memory; 1-30 Fixed power-on volume)	TD5580A Clone
0x1C	Set baud rate: 0-9600;1-19200;2-38400; 3-57600;4-115200; Restart to take effect	TD5580A Clone
0x1D	Restore factory settings	TD5580A Clone
0x20	Combination Report	TD5580A Clone

Query Commands					
Parameters(16 bit)	Description	Devices			
0x3A	Device Insertion (1. Insert UDISK; 2. Insert TF card; 3. Insert PC)			TD5580A Clone	
0x3B	Device unplugged (1. Pull out UDISK; 2. Pull out TF card; 3. Pull out PC)			TD5580A Clone	
0x3C	UDISK Playback Completed			TD5580A Clone	
0x3C	STAY		DFPlayer mini		YX-5200
0x3D	TF card playback completed			TD5580A Clone	
0x3D	STAY		DFPlayer mini		YX-5200
0x3E	Flash playback completed			TD5580A Clone	
0x3E	STAY		DFPlayer mini		YX-5200
	Send initialization parameters 0 - 0x0F (each bit represent one device of the low-four bits, 1.U disk; 2.TF card;				
0x3F	4.PC; 8.FLASH)	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
	Returns an error, request retransmission. (1. The file system is initializing, 2. Sleep mode only supports				
	specified devices, 3. One frame of data has not been received completely (Serial Receive Error), 4. Checksum				
	error, 5. The file designation exceeds the range, 6. The specified file was not found, 7. The current state does				
	not accept interruptions (Insertion error))				
	Other error codes that may be supported:				
	8. SD card reading failed(SD card pulled out or damaged)				
0x40	10. Entered into sleep mode	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x41	Reply	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x42	Query the current status	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x43	Query the current volume	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x44	Query the current EQ	MP3-TF-16P	DFPlayer mini	TD5580A Clone	YX-5200
0x45	Keep on	MP3-TF-16P			
0x45	Query the current playback mode		DFPlayer mini	TD5580A Clone	YX-5200
0x46	Query the current software version		DFPlayer mini		YX-5200
0x47	Query the total number of U-disk files	MP3-TF-16P		TD5580A Clone	YX-5200
0x47	Query the total number of TF card files		DFPlayer mini		
0x48	Query the total number of TF card files	MP3-TF-16P		TD5580A Clone	YX-5200
0x48	Query the total number of U-disk files		DFPlayer mini		
0x49	Query the total number of flash files		DFPlayer mini	TD5580A Clone	YX-5200

0x4A	Keep on		DFPlayer mini		YX-5200
0x4B	Queries the current track of TF card		DFPlayer mini		
0x4B	Queries the current track of U-Disk	MP3-TF-16P		TD5580A Clone	YX-5200
0x4C	Queries the current track of U-Disk		DFPlayer mini		
0x4C	Queries the current track of TF card	MP3-TF-16P		TD5580A Clone	YX-5200
0x4D	Queries the current track of Flash		DFPlayer mini	TD5580A Clone	YX-5200
0x4E	Query number of tracks in a folder	MP3-TF-16P			
0x4F	Query number of folders in the current storage device	MP3-TF-16P			