TS Player User Guide

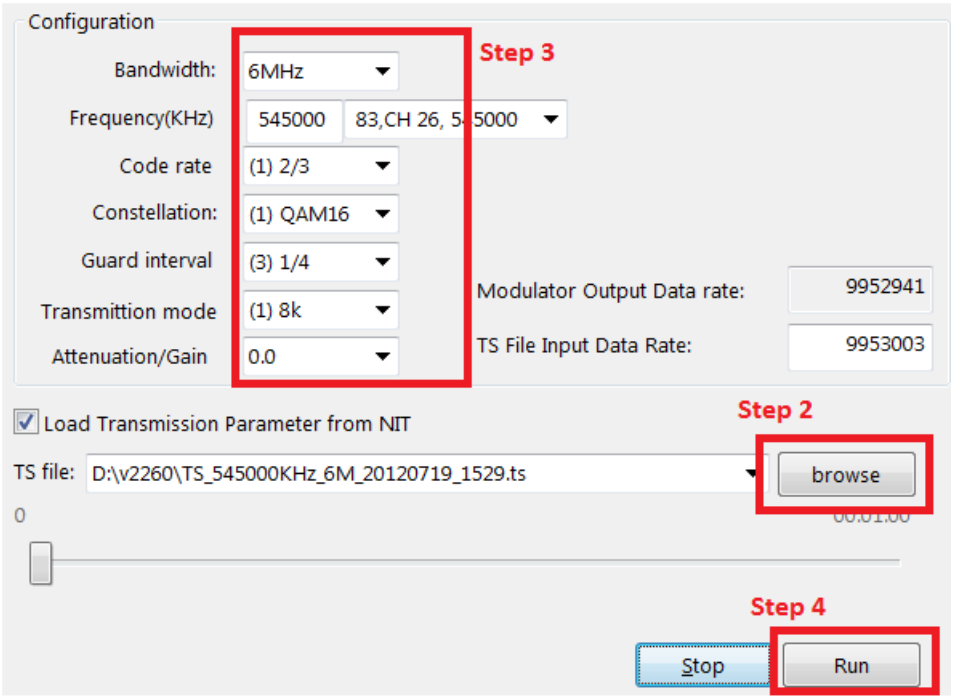
1. Introduction

HiDes TS Player is an intuitive transport stream player for Windows. It is designed to feed the TS to UT-100A/B modulator for EN 300-744 DVB-T transmission. TS player can read and play MPEG-2 compliant transport streams. You can get the TS file from live digital TV signal or from 3'rd party conversion tools.
A cost-effect commercial conversion tool, MediaExpresso from Cyberlink (www.cyberlink.com) is recommended, and a brief guide about converting TS files for TS Player from regular media files with MediaExpresso is included.
Besides, a simple trans-coding tool "Media2TS" is included in this package release. For more details, please refer to the user's guide in the package folder \Media2Ts.

Some sample TS files can be found in the package folder \TS Files.

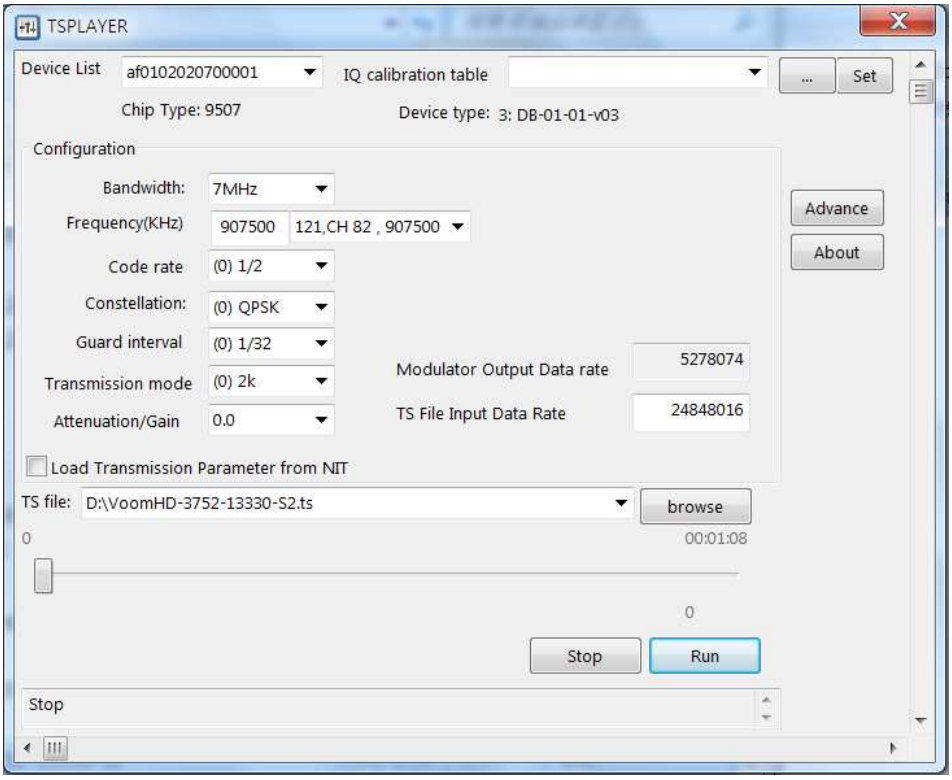
2. Quick Start Guide

Step 1: Following UT-100 QIG to install device and driver.
Step 2: Run TsPlayer.exe and click on "browse" button to select a TS file.
Step 3: Setting transmission parameters in "Configuration". You can set Frequency, Bandwidth, Code rate, Guard interval, etc. Please be noted the transport stream may not be decoded properly by your receiver if you change the configuration.
Step 4: Click on "Run" button to start streaming the transport stream file.


Configuration
Bandwidth:
6MHz
Frequency(KHz)
545000
83,CH 26, 5
5000
Code rate
(1) 2/3
Constellation:
(1) QAM16
Guard interval
(3) 1/4
Transmittion mode
(1) 8k
Attenuation/Gain
0.0
Step 3
Modulator Output Data rate:
9952941
TS File Input Data Rate:
9953003
Load Transmission Parameter from NIT
Step 2
TS file:
D:\v2260\TS_545000KHz_6M_20120719_1529.ts
browse
0
Step 4
Stop
Run

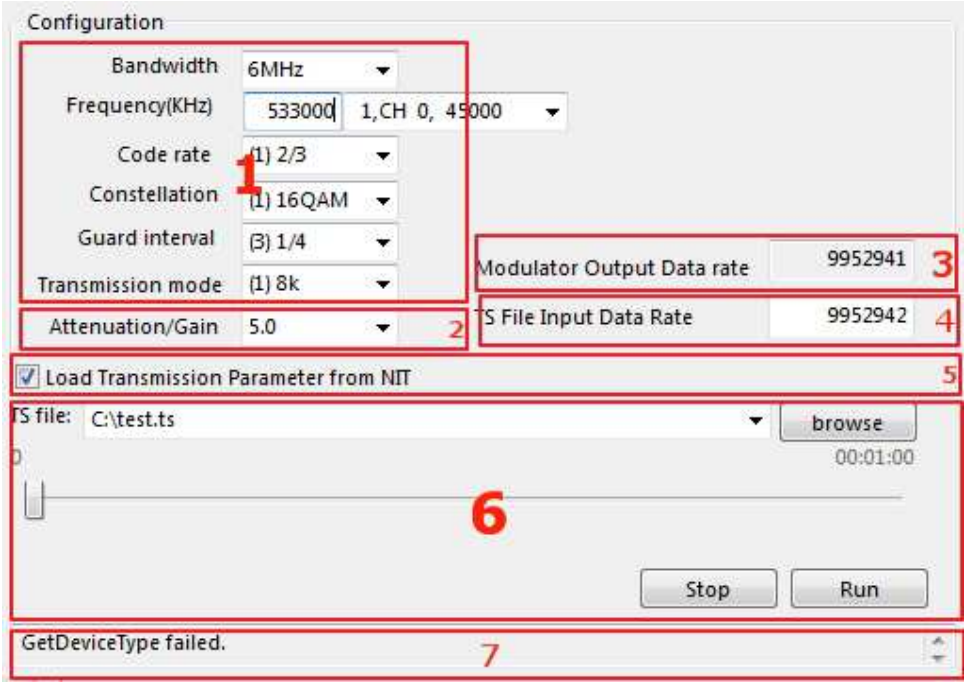
3. Operation Guide

You can click on the “Browse” button to import a TS file. After analyzing a transport stream file, you will see the following window. You can see the device list, and configuration menu



TS PLAYER User’s Interface

3.1. Streaming control panel

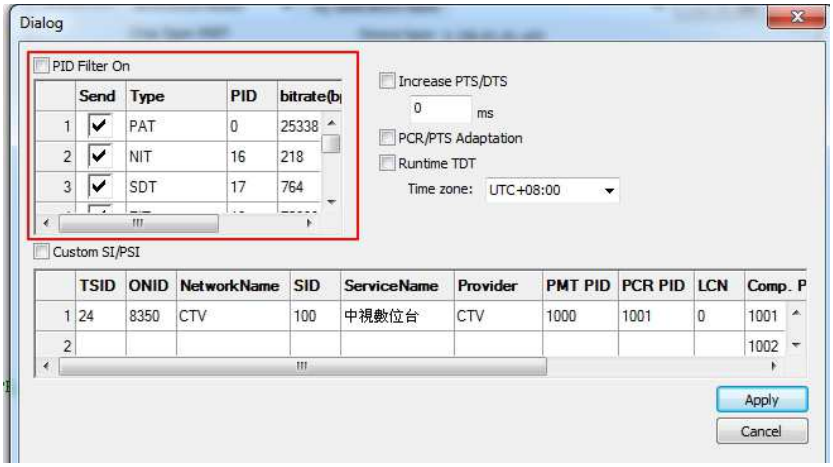


Group Number	Function	Description
1	Modulator Transmission Settings	You can change the modulator settings by selecting different bandwidth, frequency, code rate, constellation mode, guard interval, and the transmittion mode. Different modulator settings will change the Modulator Output Data rate. Basically, the Modulator Output Data rate should be equal to or larger than the TS file input data rate (group 4). **Note: for 2 MHz bandwidth, it's recommended to set Transmission mode as 2k for quicker channel lock time.**
2	Attenuation/Gain for output power control	The RF output power is configurable, from -25dB~+12dB, step size 1 dB. In most practical configurations, the maximum gain may only be up to +6 dB.
3	Modulator output data rate	The data rate of modulator settings in group 1.
4	TS file input data rate	The data rate of the TS file. When a TS file is read, TS Player will calculate its default data rate by checking PCR's in the file automatically. In case of wrong calculation, the input data rate can be entered manually.
5	Load Transmission Parameters from NIT	Normally, an Mpeg2 compliant TS files should have transmission parameters in NIT table. When this option is checked, the information in the NIT will be displayed in group 1.
6	Stop/ Run for playback control	This group provides controls for the playback, including run, stop, and scrolling.
7	Message	Messages for system status

3.2. Advance functions

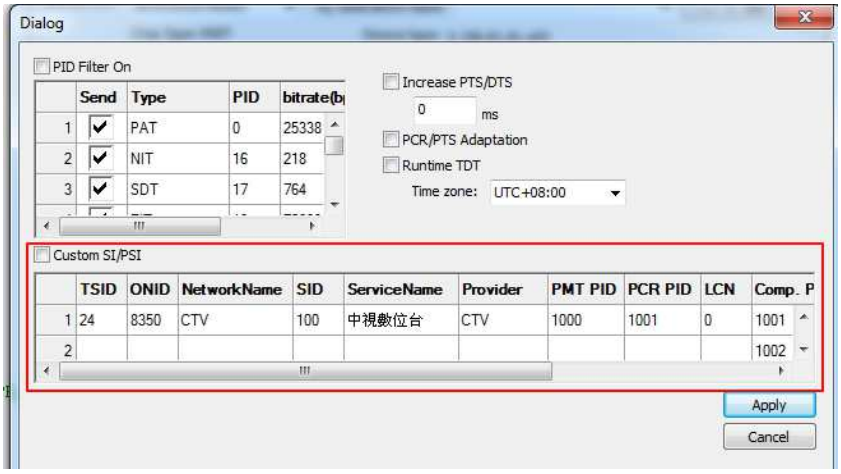
After clicking on “Advance” button, you can see the window for advanced functions such as PID filter, custom SI/PSI, PCR/PTS adaptation, etc.

3.2.1 PID Table



TS PLAYER can parse the TS file and list all PID’s inside, including types, PID values, and the bit rate. If necessary, user can filter (block) PID’s by checking “PID Filter On” and then unchecking PID’s “Send” box to filter them out during transmission.

3.2.2 SI/ PSI information



TS PLAYER will read and parse the PSI/ SI data from within the TS file and display following information if it’s available in the stream:

-Transport Stream ID.

-Original Network ID.

-Network Name.

-Each program detected in the stream.

-Service ID, Service Name, Provider Name, PMT PID, PCR PID, and LCN for each program.

-Under each program: PID#, Stream_type, Stream_ID and bitrate of each PID.

If "Custom SI/PSI" is checked, user can edit the SI/PSI table, and TS PLAYER will replace SI/PSI tables with updated information.

3.2.3 Miscellaneous options

Increase PTS/DTS: Increase the time gap between PCR and PTS/DTS.

PCR/PTS Adaptation: This feature is still under verification and should be unchecked.

Runtime TDT: Replace the TDT table with the PC system time.