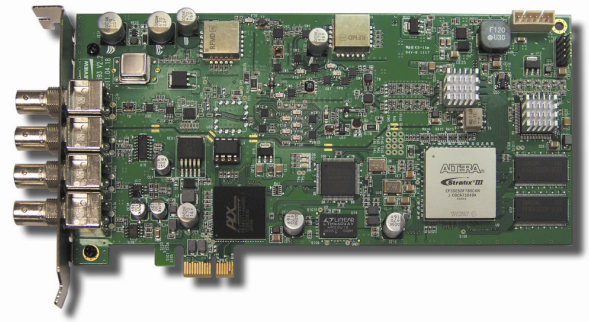


# TVB593 DTMB

**MultiMode VHF/UHF/L Band DTMB (China) Transport Stream Modulator with DVB-ASI Input and Sophisticated User Interface with Scheduling. Frequency Agile, Field Upgradeable with Other Modes. Transport Stream Input via PCIe Bus or from BNC Connector on the Bracket. RF Output. For Digital Signage, STB Testing, and Laboratory Applications. This Device Feeds Either an Antenna or Coax Cable.**

RF Output  
TS Input  
DVB-ASI Output  
SMPTE 310  
Output



PCIe Version

## Features

- Transmits real time video or stored video from the server hard drive and sends it to multiple HD monitors simultaneously
- Input: IP, DVB-ASI or SMPTE 310M transport streams via PCIe bus or BNC bracket connector
- Output: DTMB
- Includes ASI port for simultaneous ASI and RF output if TS is pulled from hard drive
- Frequency agile
- RF Output Frequency: 55-860 MHz
- On board channel selectable RF output up-converter
- Programmable RF output level (0.1 dB step)
- Can superposition white noise over modulated signal and control the output C/N ratio
- Feeds either an antenna or coax cable
- Field upgradeable – can be reprogrammed to add other profiles
- Supplied with Windows® based Transport Stream Player application with Scheduler
- Playout Scheduler – schedule tasks (5 maximum) to run daily, weekly or monthly at a certain time
- Includes transport stream analyzer
- Freq Config GUI supported via Windows® 2000, Windows XP, Windows 7, Vista 32 bit, and Linux®
- Customer oriented API is also available
- Sample transport streams available
- 0dBm amplifier included

## Applications

- Engineering labs
- In Store Demos of DTMB receivers
- Digital Signage
- Test Equipment for RF demodulators
- Hotel and Lodging video systems

## Overview

RF modulators convert a video signal to RF (radio frequency) so the video can be transmitted to a television via its RF input.

DTMB (Digital Terrestrial Multimedia Broadcast) is the digital broadcasting standard used in China for regular terrestrial digital TV and for mobile TV.

Our **TVB593 DTMB** modulator PCIe card transmits real time video or stored video from the server hard drive and sends it to multiple HD monitors simultaneously, using RF as a carrier. The TVB593 DTMB can connect via an antenna or coaxial cable, and features RF output.

It is suitable for set top box testing, DTMB receiver testing, laboratory applications, digital signage, and video feeds in public areas such as hotels and trade shows.

This card is *field upgradeable* – you can purchase licenses for a wide variety of additional modulator profiles and upgrade the card immediately. Modulator profiles typically used in North America include QAM, ATSC M/H, and 8VSB. Modulator profiles typically used in Europe are DVB-T, DVB-T2, DVB-H, DVB-C2, DVB-S, and DVB-S2. Modulator profiles typically used in Asia are ISDB-T, ISDB-S, DTMB, CMMB, and T-DMB.

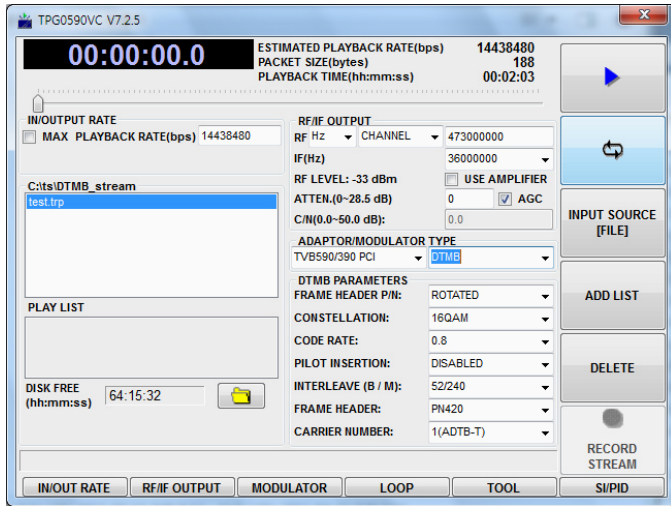


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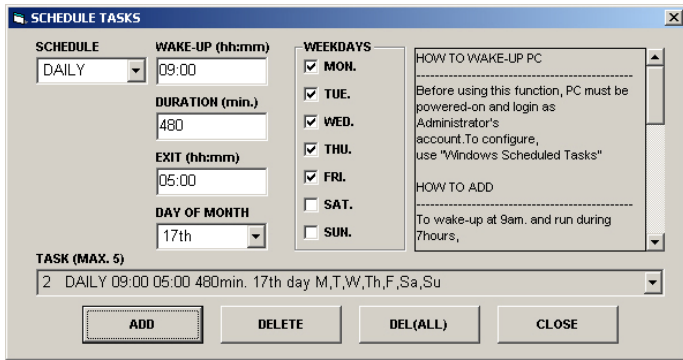
11409 West Bernardo Court  
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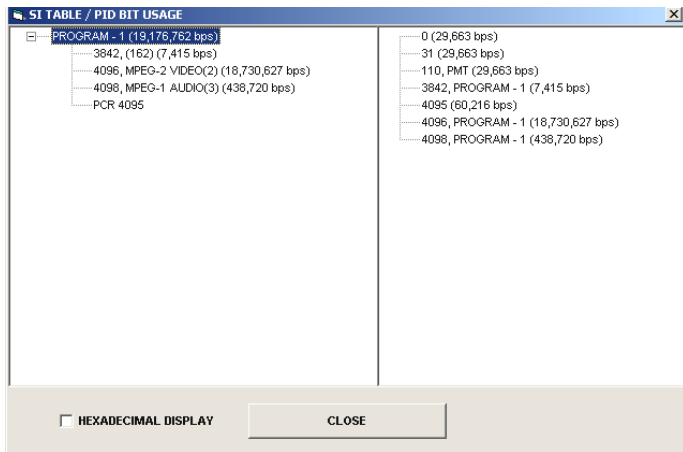
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**Main GUI**



**Playout Scheduler**



**SI Table**

## Ordering Info

### TVB593 DTMB

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## Board Specifications

Transport Stream Input	From Hard Disk through PCIe, or via BNC DVB-ASI connector
Bit Rate	Up to 90 Mbps
ASI/SMPTE 310M Input/Output	Connector: 75 ohm BNC
RF output	Connector: 75 ohm BNC Freq: VHF/UHF 55~867 MHz L-BAND 956~2036 MHz Level: VHF/UHF -31.5 to 0 dBm L-BAND -25dBm max Freq accuracy: +/-5 KHz max Attenuation step: 0.1dB Phase noise <-90dBc/Hz @ 10 KHz RF step size: 50 KHz step (except for TDMB: 8 KHz step)
PCIe Bus	PCI express x1 compliant
Dimensions	HxWxL: 25mm x 107mm x 210mm
Drivers	Windows® 7 (32/64 bit), XP (32/64 bit), 2000, Vista (32/64 bit), WDM, and Linux®
Conformities	FCC, UL, RoHS, CE Mark

## DTMB Specifications

Standard	GB20600-2006 compliant
Number of Carriers	1 or 3780 sub-carriers selectable
Frame Length	4200, 4335, 4725 symbols
Constellations	4QAM-NR, 4QAM, 16QAM, 32QAM, 64QAM
Code Rates	0.4, 0.6, 0.8
Time Interleaving	240, 720 symbols
Bandwidth	8 MHz



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