

**High Quality DVD Player and New Level Home Theater Receiver Offer Great Sound with All the Latest Features such as 1080p-Compatible HDMI, XM/SIRIUS Satellite Radio Ready, and iPod / Bluetooth Compatibility.**

Total **625W**  
5.1ch System



## 1 Advanced Features

- 4 SCENE buttons offering greater operating ease (with 17 preset SCENE templates)
- XM ready with XM HD Surround powered by Neural Surround
- SIRIUS Satellite Radio ready
- YPAO for automatic speaker setup
- iPod compatibility via Yamaha Universal Dock
- Bluetooth (A2DP) compatibility with Yamaha Bluetooth Wireless Audio Receiver
- Front panel mini jack input for connecting portable audio player
- On-screen display with iPod song title display
- USB port for direct playback of MP3/WMA/DivX®/JPEG from USB devices
- High-Definition JPEG picture playback DVD player

## 2 High Sound Quality

- 5.1-channel 625W powerful surround sound (105W x 5 + 100W subwoofer)
- Direct mode for high quality sound reproduction
- Burr-Brown 192kHz/24-bit DACs used in all channels
- 100W 8" Advanced YST subwoofer for powerful bass response

## 3 High Picture Quality

- 1080p-compatible HDMI (2 in/1 out) including 1080p/24Hz repeat
- HDTV compatible component video terminals (3 in/1 out)

## 4 Surround Realism

- CINEMA DSP with 8 DSP programs
- Compressed Music Enhancer to improve compressed music sources
- Night Listening Enhancer and SILENT CINEMA

### YHT-690BL Main Specifications

#### Receiver (HTR-6140BL)

Minimum RMS Output Power (8 ohms, 1 kHz, 0.9% THD)	
Front L/R Channels	105 W/ch
Center Channel	105 W
Surround L/R Channels	105 W/ch
Dynamic Power (Front L/R)	110/130/160/180 W (8/6/4/2 ohms)
Signal-to-Noise Ratio (CD)	100 dB (250 mV)
Frequency Response (CD)	10 Hz-100 kHz +0, -3 dB
Total Harmonic Distortion (CD, Front Sp Out) (1 kHz, 50 W/8 ohms)	0.06%
Monitor Out Frequency Response	5 Hz-60 MHz -3 dB (component video signal)
Dimensions (W x H x D); Weight	17-1/8" x 5-15/16" x 13-7/8"; 18.7 lbs.

#### DVD Player (DV-S6160BL)

Video D/A Converter	108 MHz/12-bit
Audio D/A Converter	192 kHz/24-bit
Signal-to-Noise Ratio	105 dB
Dynamic Range	97 dB
Dimensions (W x H x D); Weight	17-1/8" x 2" x 12-3/16"; 5.7 lbs.

#### Speakers

System Frequency Response	28Hz - 35kHz
Magnetic Shielding	All speakers except for surround speakers
Impedance	6 ohms (except subwoofer)
Removable Grille	Front and center speakers

#### 4 Satellites and Center Speaker (NS-AP2800)

<b>Front Speakers</b>	2-way bass reflex
Drivers	4" woofer and 1/2" balanced dome tweeter
Input Power (Max/Nominal)	100 W/30 W
Dimensions (W x H x D); Weight	5-23/32" x 9-7/16" x 6-1/2"; 4 lbs./unit

<b>Center Speaker</b>	2-way bass reflex
Drivers	Dual 3" woofers and 1/2" balanced dome tweeter
Input Power (Max/Nominal)	100 W/30 W
Dimensions (W x H x D); Weight	13" x 4-1/8" x 4-11/32"; 3.9 lbs.

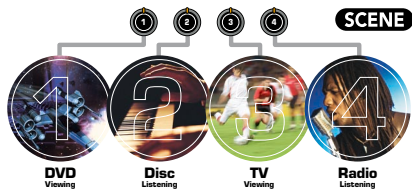
<b>Surround Speakers</b>	Full-Range acoustic suspension
Driver	3" full range
Input Power (Max/Nominal)	100 W/30 W
Dimensions (W x H x D); Weight	4-1/8" x 8-1/16" x 4-11/32"; 2.1 lbs./unit

<b>Subwoofer (YST-SW012)</b>	
Dynamic Power	100 W
Driver	8" multi-range
Dimensions (W x H x D); Weight	11-13/32" x 11-13/32" x 12-29/32"; 18.7 lbs.

## Advanced Features

### SCENE — Greater Operating Ease

Four SCENE buttons make operating the receiver easier than ever. Pressing a SCENE button automatically turns the power on and launches a number of operations that initiate play of the source controlled by that button. Many SCENE settings are available, such as Dock Listening, DVD Viewing, Radio Listening and Game Playing. Browsing and selecting the settings is quickly accomplished by rotating the Input knob and watching the on-screen display. The SCENE names can be changed also.



### XM Satellite Radio Ready with XM HD Surround Powered by Neural Surround

This HTiB is XM Satellite Radio Ready, allowing you to hear over 170 digital channels of music, news, sports, talk and entertainment. To get XM Satellite Radio the XM Mini-Tuner and Home Dock including home antenna are required.

The YHT-690BL is also capable of receiving XM Satellite Radio with XM HD Surround powered by Neural Surround.

### SIRIUS Satellite Radio Ready

The YHT-690BL is also ready to receive SIRIUS satellite radio. SIRIUS brings your favorite entertainment straight into your home, including 100% commercial-free music, plus superior sports coverage, uncensored talk and comedy, exclusive entertainment, world-class news and more.



### YPAO for Automatic Speaker Setup

This system uses Yamaha's YPAO system that quickly and automatically analyzes the acoustics of the room and adjusts various speaker parameters to provide the optimum sound at the listening position. It's like having a professional audio engineer set up and tweak your system.

### Initial Volume and Maximum Volume

Two volume setting functions are included on this receiver for additional convenience. Initial Volume Setting allows you to set the volume level that will be heard each time the power is turned on. Maximum Volume Setting prevents unexpected loud sounds, for example if a young child turns the volume knob.

### Direct Playback of MP3/WMA/DivX® (Ultra) and JPEG Files from USB Devices

A USB interface on the front panel lets you plug in USB MP3 and WMA players as well as USB

memory devices (like flash drives and portable HDDs) for convenient access to your favorite stored music and images.

### HD JPEG Picture Playback

This HTiB DVD player also provides High-Definition JPEG picture playback, allowing the enjoyment of unsurpassed JPEG pictures at its native resolution via HDMI 1080i or 720p video signals with maximum quality and detail.

## High Sound Quality

### Direct Stereo

You can enjoy pure HiFi sound from 2-channel PCM and analog sources by the Direct mode which allows signals to bypass the decoders and DSP processors.

### High Dynamic Power Capability

This HTiB is capable of delivering large amounts of reserve power for accurate reproduction of the high energy peaks that are especially prevalent in digital audio sources. This prevents clipping and emphasizes the music's dynamic qualities.

### Advanced YST II and QD-Bass Subwoofer for Deep, Powerful Bass

In Advanced YST II, an Advanced Negative Impedance Converter enables the speaker cone to be driven with even tighter control. The result is more stable and accurate low range response, as well as higher sound pressure levels, for more natural and energetic bass reproduction.

QD-Bass (Quatre Dispersion Bass) technology uses down-firing drivers with square, pyramid-shaped reflective plates to radiate the sound efficiently in four horizontal directions. The reflective plates negate any effects caused by the floor surface and reduce resonance between sound waves reflected from the floor and the unit.



## High Picture Quality

### 1080p-Compatible HDMI (2 In/1 Out)

This HTiB features dual HDMI inputs and one output that support 1080p resolution so you can connect two HDMI sources, such as a DVD player and a high definition set-top box, and enjoy the highest possible quality with a 1080p display. It is also capable of repeating the 1080p/24Hz signal for enjoying the highest quality picture from Blu-ray disc.

### HDTV Compatible Component Video Terminals (3 In/1 Out)

Component Video inputs offer higher picture quality, for use with units such as DVD players that have Component Video output. You can enjoy three different sources without having to change connections. The frequency response of the component video signal is 5Hz – 60MHz, making it compatible with HDTV (1080i/720p).

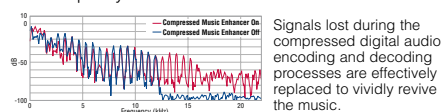
## Surround Realism

### CINEMA DSP with 8 DSP Programs

You have a choice of eight unique Yamaha CINEMA DSP surround programs to bring out the full audio potential of your entertainment sources.

### Compressed Music Enhancer

When music is encoded in a digital compressed format such as MP3, frequency response suffers in the high and low ranges. Yamaha employs sophisticated digital signal processing with exclusive algorithms, enabling faithful reproduction of the original music, for excellent sound quality.



Signals lost during the compressed digital audio encoding and decoding processes are effectively replaced to vividly revive the music.

### Other Notable Features

- 40-station preset tuning / Auto preset tuning
- HD Audio LPCM 5.1-channel reception (up to 96kHz)
- 192kHz/24-bit DACs for all channels
- iPod song titles displayed in English and Western European languages ISO 8859-1 (Latin 1) on the front panel and on-screen display
- Night Listening Enhancer, SILENT CINEMA and Virtual CINEMA DSP
- Audio Delay for adjusting lip-sync (0–160ms)
- 9 selectable subwoofer crossover frequencies
- Subwoofer phase select
- Dolby Digital, DTS and Dolby Pro Logic II decoding
- Front panel Video Aux input with mini jack for connecting portable audio player
- Subwoofer out
- 6-channel external input
- Speaker A or B selection
- Preset remote unit

### Yamaha Bluetooth® Wireless Audio Receiver

The YBA-10 Bluetooth Wireless Audio Receiver docks to the receiver and supports A2DP audio streaming, so you can enjoy music wirelessly from Bluetooth-enabled mobile phones, Windows PCs and Macs.



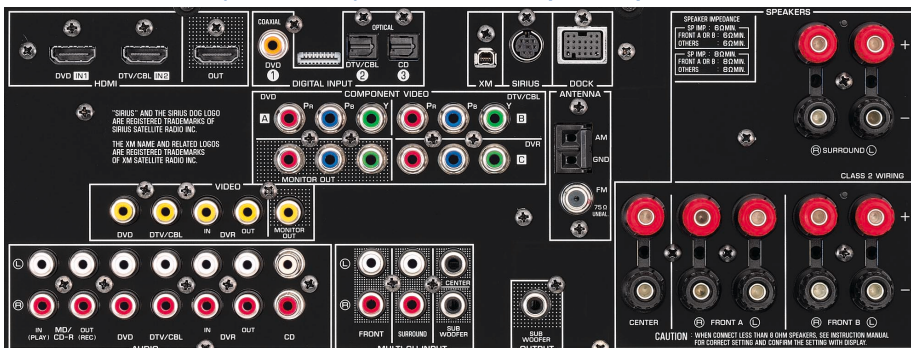
### Yamaha Universal Dock for iPod

The optional Yamaha Universal Dock lets you connect your iPod to the receiver.



iPod not included

## YHT-690BL Receiver (HTR-6140BL) Rear Panel and Inputs/Outputs



Inputs	Outputs
HDMI	2
XM / SIRIUS Satellite Radio Terminal	1 / 1
Dock Terminal (for iPod / Bluetooth)	1
Optical Digital (Fixed and Assignable)	2
Coaxial Digital (Fixed and Assignable)	1
Analog A/V / Audio*	4 / 2
Component Video	3
Multi-Channel External Input	6 ch
HDMI	1
Analog A/V / Audio	1 / 1
Component Video Monitor	1
Composite Monitor	1
Speaker (without subwoofer)	5 ch / 7 ter.
Subwoofer	1

\* Including front panel Video Aux terminals.

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