

DIGITAL TV SIGNAL GENERATOR

LG 3850 / BR

LEADER



SBTVD-T
option

SATVD-T
option

ISDB-T
option

ISDB-Tb
option

ATSC
option

DVB-T
option

Digital TV Signal Generator

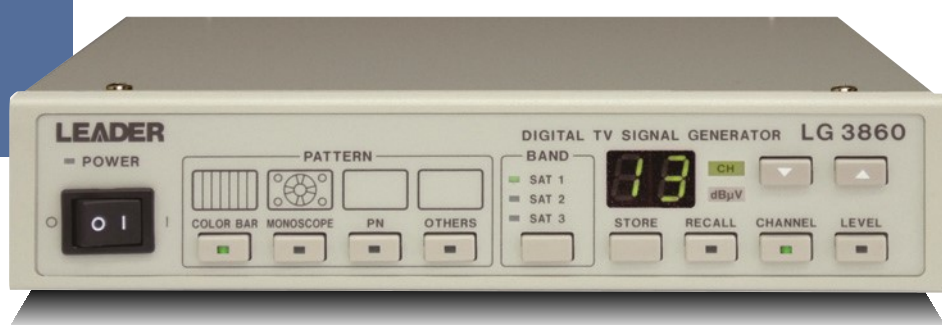
- Low-Cost, Compact Signal Generator for Digital Broadcasts
- Ability to change the encoding software from a PC connected to the LG 3850 through USB
- Seamless output of still-image and audio patterns
- Variable levels and channels
- Ability to save 99 preset configurations in the internal memory

OPTION

- Software
LG 3850SER02 ISDB-T SOFTWARE
LG 3850SER03 ATSC SOFTWARE
LG 3850SER04 DVB-T SOFTWARE
- Securable else for the Bezilien Standard ISDB-Tb

DIGITAL TV SIGNAL GENERATOR

LG 3860



ISDB-S
option

DVB-S/S2
option

Digital TV Signal Generator

- Satellite Digital Broadcasting Signal Generator
- Seamless output of still-image patterns and audio (tone) signals
- Ability to play back user-defined transport streams by connecting the LG 3860 to a PC through USB 2.0
- Variable levels and channels
- Ability to save 40 preset configurations in the internal memory
- Ability to change the encoding software by entering licenses

OPTION

- Add-in software
LG 3860SER01 ISDB-S SOFTWARE
LG 3860SER02 DVB-S/S2 SOFTWARE

LG 3850SER03

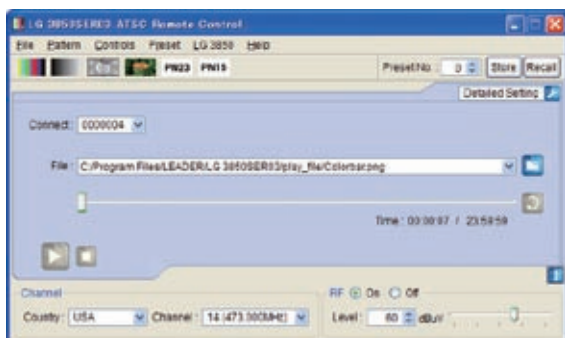
ATSC SOFTWARE

The LG 3850SER03 ATSC software makes it possible to transfer broadcast systems to the LG 3850 and operate it from a PC. After a broadcast system has been transferred to the LG 3850, the LG 3850 can be used as an ATSC signal generator.

FEATURES

■ USB 2.0

Connect the LG 3850 to a PC through USB to perform operations such as transferring broadcast systems and playing back MPEG-2 transport streams.



■ Still Images

Output four different still-image patterns seamlessly.

■ Audio Signal

Output separate audio signals with frequencies of 400 Hz or 1 kHz to the left and right channels.

■ Operating Environment

PC Specifications Required to Use This Product

OS Microsoft Windows XP SP3, Vista, Windows 7

CPU Intel® Celeron® M, 1.4 GHz or higher

Memory 512 MB or more

HDD 1 GB or more of free space

USB USB 2.0 (1 port)

The license key must be entered when the software is installed.

SPECIFICATIONS

Broadcast System

Digital Terrestrial
Television Broadcasting: ATSC (A/53B)

Transmission Parameters

Carrier Modulation: 8VSB

External TS Input Specifications

Input Packet Format: 188 bytes, 204 bytes

Supported Stream: MPEG-2 TS (ISO/IEC13818-1)

Input Data Rate: 0.2 to 40 Mbps

Standalone Operation of the LG 3850

Through the transferring of a broadcast system to the LG 3850, the LG 3850 can be used as a standalone ATSC signal generator. When the LG 3850 is used in this manner, the following settings can be configured.

RF Signal Generator(*1)

Frequency

Channel: One of the following countries, selected using the control application.
Channels 2 to 83 for USA, channels 2 to 12 and 21 to 70 for Korea

Output

Range: 10 to 89 dBμV(*2)

Resolution: 1 dB

Impedance:	75 Ω
Internal Signal(*3)	
Pseudo Random Signal:	PN23, PN15(*4)
Still-Image Pattern:	Colorbar (simple animation), ramp, monoscope, natural picture
Format:	One of the following formats, selected using the control application. 1920 × 1080i (HDTV), 1280 × 720p (16:9), 704 × 480p (16:9), 704 × 480i (16:9), 704 × 480i (4:3)
Audio (Tone):	1 kHz (LR), 400 Hz (LR), 1 kHz (L) + 400 Hz (R)
Presets	
Recall/Store:	Stores and recalls presets(*5)
Alarm Display:	Shown on the 7-segment display

Control Application Operations

Function:	Controls the LG 3850 from a PC over a USB connection
Country Setting:	Set the output channels for stand-alone mode by selecting one of the following countries. USA, Korea
System Switching:	LG 3850s that are configured to use different broadcast systems can be immediately switched to ATSC.

RF Signal Generator(*1)

Frequency

Channel: Channels 2 to 83 for USA, channels 2 to 12 and 21 to 70 for Korea

Output

Range: 10 to 89 dBμV(*2)

Resolution: 1 dB

Impedance: 75 Ω

Output Control: Output can be turned on and off

Internal Signal(*3)

Pseudo Random Signal: PN23, PN15

Still-Image Pattern: Colorbar (simple animation), ramp, monoscope, natural picture

Format: 1920 × 1080i (HDTV), 1280 × 720p (16:9),
704 × 480p (16:9), 704 × 480i (16:9),
704 × 480i (4:3)

Audio (Tone): 1 kHz (LR), 400 Hz (LR), 1 kHz (L) + 400 Hz (R)

MPEG-2 TS Operations: Select, playback, stop, etc.

Presets

Recall/Store: Stores and recalls presets

Begin/End: Sets the beginning and ending preset numbers on the LG 3850

Load/Save: Collectively saves and writes 99 presets

Alarm Display: Can't connect to USB device, etc.

Licenses

This product can only be used on one LG 3850.

It cannot be installed on multiple LG 3850s.

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*1 Image waves are generated for all waves other than the fundamental wave. Therefore, it is desirable to use the LG 3850 signals separately. If you want to mix LG 3850 RF signals with cable television RF signals, you must use a separate filter to delete the image interference waves.

*2 This is the operating range. The optimal range is 39 to 89 dBμV (75 Ω termination). If signals in the range of 10 to 38 dBμV (75 Ω termination) will be generated, we recommend that an external attenuator be connected to the LG 3850.

*3 The still picture patterns and formats may be changed.

*4 The pseudo random signal can be transmitted when the LG 3850 is connected to a PC. (It can also be transmitted when the LG 3850 is not connected to a PC if presets have been stored through the use of the control application.)

*5 If a preset recall range has been set through the use of the control application, presets from within that range are recalled.

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