

LG 38SER02

ISDB-T MODULATOR

This add-in software adds ISDB-T modulation functionality to the LG 3810.

FEATURES

- This software enables the LG 3810 to modulate signals as outlined in the ISDB-T/Tsb standard.

SPECIFICATIONS

Transmission Encoder

Broadcast System

Digital Terrestrial Television Broadcasting:
ISDB-T (ARIB-STD-B31)

Digital Terrestrial Audio Broadcasting:
ISDB-Tsb (ARIB-STD-B29)

Transmission Parameters

Layers

ISDB-T 13seg: A, B, C

ISDB-Tsb 3seg, 8-3seg:
A, B

ISDB-Tsb 1seg, 8-1seg:
A only

Mode: MODE1, MODE2, MODE3

Guard Interval: 1/4, 1/8, 1/16, 1/32

Carrier Modulation: DQPSK, QPSK, 16QAM, 64QAM

Convolutional Code Rate:
1/2, 2/3, 3/4, 5/6, 7/8

Time Interleaving Length:
0 to 32 (differs based on the broadcast system and the mode)

Number of Segments

ISDB-T 13seg: The number of segments can be specified for each layer, but the total number of segments cannot exceed 13.

ISDB-Tsb 3seg, 8-3seg:
The number of segments can be specified for each layer, but the total number of segments cannot exceed 3.

ISDB-Tsb 1seg, 8-1seg:
1 segment

Sequential Transmission:

8-segment, pseudo-random sequential transmission (*1)

Partial Reception: Can be specified (*2)

*1: The segment configuration is specified by the range of the subchannels that are occupied and the subchannels.

*2: If the PCR packets in the TS are not independent, you cannot update the partial receiver's PCR.

External TS Input Specifications

Input Connectors: DVB-ASI, DVB-SPI

Input Packet Format: 188 or 204 bytes

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

Input Data Rate (*1)

ISDB-T 13seg: 23.234700 Mbps

ISDB-Tsb 3seg, 8-3seg:
5.36185 Mbps

ISDB-Tsb 1seg, 8-1seg:

1.787285 Mbps

Number of PCRs That Can Be Updated:

Up to 8

Seamless Playback: Only possible when an internal TS is being used (*2)

Update Parameter: PCR

*1 Example when the guard interval is 1/32, carrier modulation is 64QAM, and the code rate is 7/8.

The maximum input data rate varies depending on the modulation parameter.

*2 Only when using the standard-equipped internal TS (still images and videos) or TS data that is saved to the HDD.

RF Signal Generator

Output Channel

VHF, UHF: Japan (channels 1 to 62), Brazil (channels 7 to 69) (*1)

CATV: Japan (channels C13 to C63) (*1)

Subchannels

ISDB-Tsb 1seg, 8-1seg:
Channels 3 to 40

ISDB-Tsb 3seg, 8-3seg:
Channels 6 to 37

*1 You can configure a custom channel table in the user settings.

Output Range

ISDB-T 13seg, ISDB-Tsb 8-3, 8-1seg:
-110.0 to +13.0 dBm (50 Ω termination)
-63.0 to +60.0 dBmV (50 Ω termination)
-3.0 to +120.0 dBμV (50 Ω termination)

ISDB-Tsb 3seg:
-115.0 to +8.0 dBm (50 Ω termination)
-68.0 to +55.0 dBmV (50 Ω termination)
-8.0 to +115.0 dBμV (50 Ω termination)

ISDB-Tsb 1seg:
-120.0 to +3.0 dBm (50 Ω termination)
-73.0 to +50.0 dBmV (50 Ω termination)
-13.0 to +110.0 dBμV (50 Ω termination)

I/O and Signal Source

IF Output

Output Level: -22 dBm (ISDB-T 13seg, ISDB-Tsb 8-3, 8-1seg)
-27 dBm (ISDB-Tsb 3seg)
-32 dBm (ISDB-Tsb 1seg)

Environmental Conditions

Same as the LG 3810

Contents

License key 1
USB memory device (sample TS).... 1
Instruction manual 1

Licenses

You can only use this add-in software on one LG 3810. You cannot install it on multiple LG 3810s.

Sample TS

This product comes with a USB memory device that contains an original sample TS for checking the LG 3810's operations. The sample TS that is included is listed below.

ISDB-T sample TS