

GY

**INDUSTRY STANDARD OF THE
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**Digital audio broadcasting in FM band - Part 1: Framing
structure, channel coding and modulation for digital
broadcasting channel
(English Translation)**

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Foreword

GY/T 268 "Digital audio broadcasting in FM band" is planned to publish the following parts.

- Part 1.Framing structure, channel coding and modulation for digital broadcasting channel;
- Part 2.Multiplexing;

This Part is the Part 1 of GY/T 268.

This Part was drafted according to the provisions specified in the GB/T 1.1-2009.

This Part shall be under the jurisdiction of the National Technical Committee for Standardization of Radio, Film and Television (SAC/TC 239).

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1 Scope

This Part specifies the signal framing structure and technology of channel coding and modulation for the broadcasting channel of the digital audio broadcasting system, within the frequency range of 87MHz to 108MHz.

2 Normative references

The following documents are essential to the application of this Part. For dated references, only the versions with the dates indicated are applicable to this Part. For undated references, only the latest versions (including all the amendments) are applicable to this Part.

GB/T 4311-2000 Technical specifications for FM sound broadcasting at VHF

3 Terms, definitions, symbols, protocol and abbreviations

The super frames are composed of 4 continuous physical-layer frames.

The pilots refer to partial sub-carriers used for transmitting the signals for auxiliary terminal demodulation in a specific position among OFDM symbols, which is divided into continual pilot and scattered pilot.

4 System description

SEE Figure 2 for the functional block diagram for the physical coding and modulation of digital audio broadcasting channel in FM band.

Each 640ms of physical frame is considered as one frame, which is used for carrying the data obtained from multiplexing frames.

5 Subsystem description

The system information is transmitted in unit of a logic sub-frame.

SEE Figure 20 for the beacon structure, including the cyclic prefix with the length of TBcp and the same two synchronization signals $S_b(t)$. $S_b(t)$ represents the pseudo-random signals with limited frequency band.

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