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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 18910.21-2024

Replacing GB/T 18910.21-2007

**Liquid crystal display devices - Part 2-1: Passive matrix
monochrome LCD modules - Blank detail specification**
(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting:

This document is Part 2-1 of GB/T 18910: GB/T 18910 has been published in the following parts:

- Liquid crystal display devices Part 1-1: General specification (GB/T 18910.11);
- Liquid crystal display devices Part 1-2: Terms and symbols (GB/T 18910.12);
- Liquid crystal display devices Part 2: Liquid crystal display module specification (GB/T 18910.2);
- Liquid crystal display devices Part 2-1: Passive matrix monochrome liquid crystal display module blank detail specification (GB/T 18910.21);
- Liquid crystal display devices Part 2-2: Blank detail specification for color matrix liquid crystal display modules (GB/T 18910.22);

- Liquid crystal display devices Part 3: Liquid crystal display panel specification (GB/T 18910.3);
- Liquid crystal display devices Part 4: Basic ratings and characteristics of liquid crystal display modules and panels (GB/T 18910.4);
- Liquid crystal display devices Part 4-1: Basic ratings and characteristics of color matrix liquid crystal display modules (GB/T 18910.41);
- Liquid crystal and solid state display devices Part 5: Environmental, durability and mechanical test methods (GB/T 18910.5);
- Liquid crystal display devices Part 6-1: Test methods for photoelectric parameters of liquid crystal display devices (GB/T 18910.61);
- Liquid crystal display devices Part 6-2: Test methods for liquid crystal display modules - Reflective type (GB/T 18910.62);
- Liquid crystal display devices Part 6-3: Test methods for liquid crystal display modules Motion artifacts in active matrix liquid crystal display modules (GB/T 18910.63);
- Liquid crystal display devices Part 10-1: Environmental, durability and mechanical test methods Mechanical (GB/T 18910.101);
- Liquid crystal display devices Part 10-2: Environmental, durability and mechanical test methods Environment and durability (GB/T 18910.102);
- Liquid crystal display devices Part 20-1: Visual inspection of monochrome liquid crystal displays (GB/T 18910.201);
- Liquid crystal display devices Part 20-2: Visual inspection of monochrome matrix liquid crystal display modules (GB/T 18910.202);
- Liquid crystal display devices Part 20-3: Visual inspection of active matrix color liquid crystal display modules (GB/T 18910.203);

This document replaces GB/T 18910.21-2007 "Liquid crystal and solid state display devices Part 2-1: Passive matrix monochrome liquid crystal display modules Compared with GB/T 18910.21-2007, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- Deleted the sentence about CDS examples, because the adopted IEC standard does not give examples later (see Chapter 4 of the:2007 edition);
- Deleted all references to "IEC Q" and "QC";
- Added "or rise time" and "or fall time" (see Table 3 and Table 6);
- For the limit values of dimensions, "see Chapter 1" is changed to "see the summary page of Chapter 4 [7]" (see Tables 5 and 6, Chapter 8 of the:2007 edition):

This document is equivalent to IEC 61747-2-1:2013 "Liquid crystal display devices Part 2-1: Passive matrix monochrome liquid crystal display modules Blank Detail Specification:

This document adjusts 1:2 Normative References to Chapter 2 and adds Chapter 3 "Terms and Definitions":

Introduction

In order to meet the production, manufacturing, inspection, and import and export trade needs of liquid crystal display device products in my country, a series of standards for liquid crystal display devices are formulated:

GB/T 18910 is intended to consist of the following parts:

--- Part 1-1: General specification: The purpose is to specify the general procedures for the inspection of liquid crystal display devices and to give the electro-optical characteristics test method:

General requirements, for climatic, mechanical and durability tests:

--- Part 1-2: Terms and symbols: The purpose is to define the preferred terms, definitions and text symbols for liquid crystal display devices:

--- Part 2: Liquid crystal display module section specification: The purpose is to specify the quality assessment procedures and inspection requirements required for evaluating liquid crystal display modules:

requirements, screening sequences, sampling requirements, details of tests and test methods:

--- Part 2-1: Passive matrix monochrome liquid crystal display module blank detail specification: The purpose is to specify the format and summary page requirements:

The minimum requirements and detailed specifications:

--- Part 2-2: Blank Detailed Specification for Color Matrix Liquid Crystal Display Modules: The purpose is to specify the format and summary page and detailed the requirements for the most basic content of the specification:

--- Part 3: Liquid crystal display screen specification: The purpose is to specify the quality assessment procedures and inspection requirements required for evaluating liquid crystal display screens:

requirements, screening sequences, sampling requirements, tests and test methods:

--- Part 3-1: Liquid Crystal Display (LCD) Screen Blank Detailed Specification: The purpose is to define the quality assessment system for LCD screens:

--- Part 4: Basic ratings and characteristics of liquid crystal display modules and panels: The

purpose is to specify liquid crystal display panels and passive matrix monochrome Basic ratings and characteristic requirements of LCD display modules:

--- Part 4-1: Basic ratings and characteristics of color matrix liquid crystal display modules: The purpose is to specify the basic ratings and characteristics of color matrix liquid crystal display modules:

Basic ratings and characteristic requirements of the block:

--- Part 5: Environmental, durability and mechanical test methods: The purpose is to evaluate the environmental performance of liquid crystal display devices and to determine uniform the preferred test method and preferred value of stress level:

--- Part 6-1: Test methods for electro-optical parameters of liquid crystal display devices: The purpose is to specify the standard for electro-optical parameters of liquid crystal display devices:

Standard test conditions and test methods:

--- Part 6-2: Test method for liquid crystal display module reflective type: The purpose is to specify the detailed quality of reflective liquid crystal display modules Evaluation procedures, inspection requirements, screening procedures, sample requirements, and test and measurement procedure requirements:

--- Part 6-3: Liquid crystal display module test method Active matrix liquid crystal display module motion artifacts: The purpose is to specify the transmissive General quality assessment procedure for motion picture performance of thin film transistor liquid crystal display devices:

--- Part 6-4: Test methods for liquid crystal display modules Liquid crystal display modules with dynamic backlight: The purpose is to specify the Standard test conditions and test methods for the optical performance and power consumption of active-matrix liquid crystal display modules:

--- Part 10-1: Environmental, durability and mechanical test methods Mechanical: The purpose is to evaluate the mechanical properties of liquid crystal display devices it is possible to determine a unified optimal test method and optimal value of stress level:

--- Part 10-2: Environmental, durability and mechanical test methods Environmental and durability: The purpose is to evaluate the performance of liquid crystal display devices:

Environmental performance, determine the unified optimal test method and stress level optimal value:

--- Part 10-3: Environmental, durability and mechanical test methods for glass strength and reliability: The purpose is to specify liquid crystal display devices Test methods for strength and reliability of glass: