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

GB/T 43860.1220-2024

**Touch and interactive displays - Part 12-20: Measurement
methods of touch displays - Multi-touch performance**

触摸和交互显示 第12-20 部分：触摸显示测试方法 多点触摸性能

(English Translation)

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Table of Contents

Preface	
Introduction	
1 Scope	
2 Normative references	
3 Terms and Definitions	
4 Standard test conditions	
4.1 Standard atmospheric conditions	
4.2 Test Equipment	
4.3 Test rod	
4.4 Test rod position	
5 Touch performance test method	
5.1 Multi-touch support	
5.1.1 Purpose	
5.1.2 Test Step	
5.1.3 Report	
5.2 Adjacent touch distance	
5.2.1 Purpose	
5.2.2 Test Step	
5.2.3 Report	
5.3 Adjacent Touch Accuracy	
5.3.1 Purpose	
5.3.2 Test Step	
5.3.3 Report	
5.4 Rotation	
5.4.1 Purpose	
5.4.2 Test Step	
5.4.3 Report	
5.5 Pinch Motion Drift	
5.5.1 Purpose	
5.5.2 Test Step	
5.5.3 Report	
5.6 Multi-touch sliding	

5.6.1 Purpose

5.6.2 Test Step

5.6.3 Report

5.7 Multi-touch crosstalk

5.7.1 Purpose

5.7.2 Test Step

5.7.3 Report

5.8 Quick tap

5.8.1 Purpose

5.8.2 Test Step

5.8.3 Report

Figure 1 Test equipment composition

Figure 2 Test rod example

Figure 3 Location of edge area and central area

Figure 4: Example of adjacent touch distance

Figure 5 Example of adjacent test bars on the X axis

Figure 6 Example of rotating circle trajectory

Figure 7 Rotation center position

Figure 8 Definition of R_{ref} , R_{min} and R_{max}

Figure 9 Starting point of the test rod

Figure 10 Example of horizontal drift in pinch motion

Figure 11 Example of multi-touch sliding of three test sticks in the vertical direction

Figure 12 Example of multi-touch crosstalk in the horizontal direction

Figure 13: Quick tapping example

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 12-20 of GB/T 43860 Touch and interactive displays: GB/T 43860 has published the following parts:

--- Part 1-2: Terms and text symbols;

--- Part 12-10: Touch display test methods touch and electrical performance;

--- Part 12-20: Touch display test method multi-touch performance:

This document is equivalent to IEC 62908-12-20:2019 "Touch and interactive displays Part 12-20: Test methods for touch displays" Touch Performance:

Introduction

In order to meet the production, manufacturing, inspection and import and export needs of touch and interactive display products in my country, we have developed a series of touch and interactive display products:

GB/T 43860 "Touch and interactive display" is intended to consist of the following parts:

--- Part 1-1: General specification: The purpose is to establish a common procedure for testing touch and interactive displays:

--- Part 1-2: Terminology and text symbols: The purpose is to establish commonly used terms, definitions and text symbols for touch and interactive displays:

--- Part 12-10: Touch display test methods touch and electrical performance: The purpose is to establish the touch and Standard test conditions and test methods for hovering performance:

--- Part 12-20: Touch display test method multi-touch performance: The purpose is to establish the multi-touch performance of the touch sensor module:

Standard test conditions and test methods for touch performance:

--- Part 13-10: Environmental test method for touch display reliability test: The purpose is to establish environmental test methods for touch display method:

--- Part 13-20: Mechanical test methods for touch display reliability test: The purpose is to establish mechanical test methods for touch display method:

--- Part 22-10: Test method for interactive display - Interactive performance: The purpose is to establish a test method for the interactive performance of interactive displays:

--- Part 23-10: Environmental test method for interactive display reliability test: The purpose is to establish the environmental test method for interactive display method:

--- Part 23-20: Mechanical test method for interactive display reliability test: The purpose is to establish the mechanical test method for interactive display method:

Touch and interactive display Part 12-20: Test methods for touch displays Multi-touch performance

1 Scope

This document specifies the standard test conditions and test methods for the multi-touch performance of touch sensor modules:

This document applies to touch sensor modules, touch sensors, touch controllers, touch sensor modules, display panels, touch display panels the structural relationship between the panel and the touch display module is defined in IEC 62908-1-2:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document:

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document:

guidance)

Note: GB/T 2421-2020 Overview and Guidelines for Environmental Testing (IEC 60068-1:2013, IDT) IEC 62908-1-2 Touch and interactive displays Part 1-2: General terms and text symbols Note: GB/T 43860.12-2024 Touch and interactive display Part 1-2: Terminology and text symbols (IEC 62908-1-2:2017, IDT) IEC 62908-12-10 Touch and interactive displays Part 12-10: Test methods for touch displays Touch and electrical performance) Note: GB/T 43860.1210-2024 Touch and interactive display Part 12-10: Touch display test method Touch and electrical performance (IEC 62908-12-10:2023, IDT)

3 Terms and definitions

The terms and definitions defined in IEC 62908-1-2 and IEC 60068-1 apply to this document:

The URLs for terminology databases used for standardization maintained by ISO and IEC are as follows:

---ISO online browsing platform: <http://www.iso.org/obp>:

4 Standard test conditions

4.1

Standard atmospheric conditions the test shall be carried out under the following standard atmospheric conditions:

---Temperature: $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$;

---Relative humidity: 25%~85%;