

Manufacture standard player

**PULSTEC**

Create New Value

# MASTER Series

## Stamper Evaluation System for Blu-ray

Introducing the 2 new "Blu-ray Stamper Evaluation Systems" now added to the successful MASTER electrical signal tester series. This new test equipment is designed specifically for Stamper evaluation, featuring reliable performance, compact size, and the same software designed for the BD MASTER. Standardizing key optical components in our entire MASTER series means testers give excellent correlation between systems. The option to swap between stamper and replica testing is quick and easy.

### SBP-03 (BD-ROM/R/RE)

For stampers requiring a temporary, easy to remove, cover layer, Pulstec provides 2 options either spin coating or film coating methods. This system provides the option to test stampers and replicas.

Target media BD-ROM stamper  
BD-R stamper  
BD-RE stamper  
BD disc

※ This is for Master, Mother, Son stamper.



### SBP-03-CN (BD-R/RE)

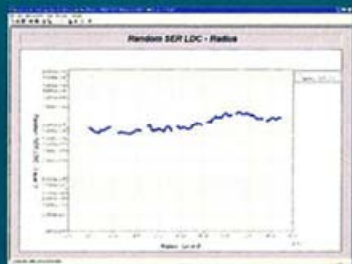
This systems unique feature is that stampers do not require a cover layer as Pulstec has designed a special PUH with surface focusing lens feature. (This is not suitable for BD-ROM stampers and BD discs in our experience)

Target media BD-R stamper  
BD-RE stamper

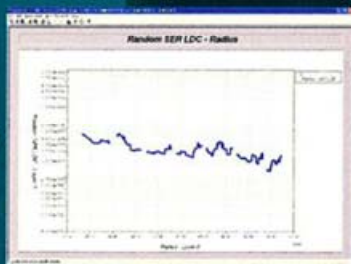
※ This is for Master, Mother, Son Stamper.  
※ O.L has surface focusing function in the PUH. (important: not suitable to test BD-ROM stamper and BD discs in our experience. (in March 2009)

### A feature of the spin coating method

Application of a single resin coating



Application of two or more resin coatings



Experiments have shown repeatedly, the application of additional coating layers improves the R-SER results when compared to single layer coating. This over coating process cleans up the stamper's surface, a key advantage of the coating process.

### Option



Spin coating equipment with UV irradiation source (model -RC)



Film coating equipment (model -FL)

### Main Screen

#### 2 Different Screen Modes(Manager Mode / Operator Mode)

The MASTER provides 2 types of the screen mode that are the Manager Mode and the Operator Mode. In the Operator Mode, only the menus and icons used for executing a measurement or confirming data are provided and all other functions have been removed in order to prevent an incorrect operation. (Passwords can be set up for changing the mode to the Manager Mode.) In the Manager Mode, a maximum of 3 users can be authorized and all of the functions are available.



### Display the Meas. Data

#### Summary/Result Page

The measurement data can be displayed in the summary page or the result page. In the summary page, the measurement data is summarized and a simple graph of each measurement item is displayed in ONE page so that the variation in data of the full surface disc can be easily checked. In the result page, the detail of the measurement data and the data required for analyzing defects occurred during mapping can be checked and the waveform recreation function is provided.



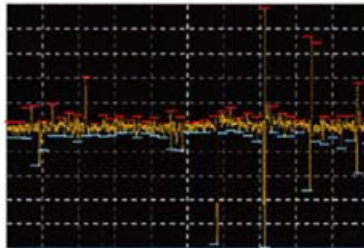
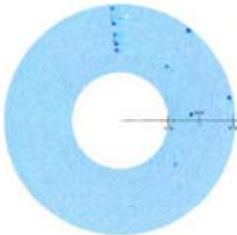
(Summary Page)

### Analyze the Defect Distribution by the Surface/Defect Inspection

#### Surface Measurement, Defect Measurement

##### ●Surface Measurement

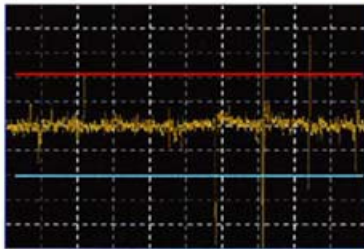
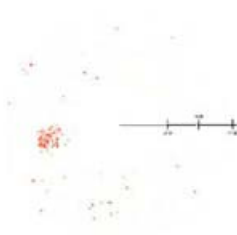
The fluctuation of each level for the FE, TE, and HF signal is mapped in the Surface Measurement.



##### ●Defect Measurement

Fluctuation of High Level(Red)/Low Level(Blue)

The FE, TE, and HF signals (non-recorded) convert the time surpassed over the assigned level to the distance and then is mapped in the Defect Measurement.

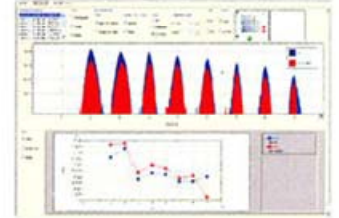
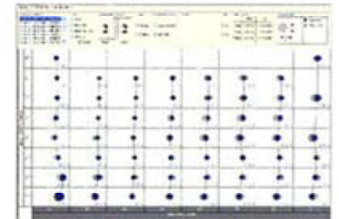


Bright Defect Level(Red)/Dark Defect Level(Blue)

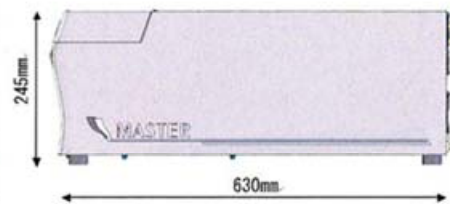
### Use the ISI (Inter Symbol Interference)

#### Check the Pit Status

The influence level (Inter Symbol Interference) by each T and Ts before and after the T of the HF signal can be measured in the ISI measurement. The ISI can be useful for adjusting the recording strategy of recordable discs and the Mastering condition of ROM discs. This ISI function and also the waveform re-creation function are highly reliable for the analysis.



**Size** (W)224mm×(H)245mm×(D)630mm WEIGHT:25kg



#### Safety Precautions

- The Class 2M Laser is used in this system (based on JIS C6802:2005/IEC60825-1:2001). Looking at the laser beam with optical instruments such as a loupe, magnificent microscope, and microscope etc could cause a severe injury such as a degradation or loss of eyesight.
- Please read the "User's Manual" carefully prior to using the system. ●Avoid installing the system in areas with water, moisture, dust, or soot. It may result in fire, electric shock, or equipment breakdown.



PULSTEC INDUSTRIAL CO.,LTD.

<http://www.pulstec.co.jp/>



■ Head Office  
7000-35, Nakagawa, Hosoe-cho, Kita-ku, Hamamatsu, Shizuoka Pref.,431-1304,Japan  
TEL +81-53-522-3611 FAX +81-53-522-3666

■ Europe Office  
Office 18,12 Devon Place, Newport, South Wales, NP120 4NN, UK  
TEL +44-7867-972860

■ Pulstec USA, Inc.  
21535 Hawthorne Blvd., Suite 375, Torrance, CA 90503 USA  
TEL +1-310-316-8185 FAX +1-310-316-9055

MEMO