Color Assessment Cabinet

Operation Instruction



Thank you for your purchase of this Color Assessment Cabinet.

Please read this manual before operating this equipment. After you finish reading this manual, store it in a safe place for future reference.

1.0 Descriptions

Color Assessment Cabinets, are suitable for all industries and applications where there is a need to maintain color consistency and quality.

Since different light source has different radiant energy, when they arrive on the surface of an article, different colors display. With regard to color management in industrial production, when a checker has compared the color consistence between products and examples, but there may exist difference between light source used here and light source applied by the client. In such condition, color under different light source differs. It always brings following issues: Client makes complaint for color difference even requires for rejection of goods, seriously damaging company credit.

To resolve the above problem, the most effective way is to check good color under same light source. For example, international practice applies Artificial Daylight D65 as standard light source for checking goods color. Thus it's very important to use standard light source to check color difference in night duty.

Besides D65 light source, TL84, CWF, UV, and F/A light sources are available in this Lamp Cabinet for metamerism effect. Please check the detailed information about some common light sources as below table:

Light source	Description	Power	Color temperature
D65	International-standard Artificial Daylight	20W	6500K
TL84	Applicable to stores in Europe, Japan	18W	4000K
	and China	1000	
CWF	Cool White Fluorescent	20W	4150K
F/A	Comparison referential light source,	40W	2700K
	Applicable to family/hotel	4077	
UV	Ultraviolet light source	20W	Wavelength 365nm
U30	Warm White Fluorescent	18W	3000K

Table 1: Common light sources

2.0 Product Features

2.1 Hepachromic artificial daylight acknowledged by CIE, 6500K color temperature.

2.2 Lighting scope: 750-3200 Luxes.

2.3 Background color of light source is Neutral Grey of absorbance. In using lamp cabinet, prevent outer light from projecting on article to be checked. Don't place any unconcerned articles in the cabinet.

2.4 Making metamerism test. Through microcomputer, the cabinet can switch between different light sources in very short time to check color difference of goods under different light source. When lighting up, prevent lamp from flashing as home fluorescent lamp is lighted.

2.5 Correctly record use time of each lamp group. Especially D65 standard lamp shall be replaced after being used for over 2,000 hrs, avoiding error resulted from aged lamp.

2.6 UV light source for checking articles containing fluorescent or whitening dye, or be used to add UV to D65 light source.

2.7 Shop light source. Oversea clients often require other light source for color check. For example, USA

clients like CWF and European and Japan clients for TL84. It's because that goods is sold indoor and is under shop light source but not outer sun light. It's become more and more popular to use shop light source for checking color.

3.0 Electrical Parameters

Power supply: AC 220V, 50Hz **Power:** less than 300W

4.0 Operation

4.1 Plug one end of power line into socket at the backside of the lamp cabinet and the other end into electric supply source (electric supply must comply with nominal electricity of the cabinet.) At this time, the display will give information indicating that power is on.

4.2 Press "**ON/OFF**" key for one time and the Timing will display the total service time of this lamp cabinet.

4.3 Press D65 key again and D65 lamp would light up. The Timing will display the total service time of D65 lamp. In case of pressing F, TL84, or UV key, the corresponding lamp group lit up. And the Timing will display the total service time of this lamp group. In case of using two or more light sources, it's just to press two key or more keys.

4.4 Put articles to be checked at the center of the bottom of the lamp cabinet. When comparing the color of two or more articles, don't observe them by overlapping, but to put them in the cabinet parallel.

4.5 It's appropriate to observe target in reference to Figure I. When light is projecting on article in right angle, checker shall observe the article in 45 angle.

4.6 After working, press ON/OFF key to power-off. Power-off lamp cabinet in case of long-time not use.

5.0 Common Questions

5.1 How can I elongate the use life of lamp?

The use life of lamp is decided by actual use time and use time. For example, in case user need to use lamp for long time and power on and off lamp and switch functions in a day for many times, the use life of lamp is reduced. When you want power on and off lamp cabinet for several times in an hour, don't power off the lamp cabinet. Generally, powering on lamp is equal to using lamp for one hour. Please power off lamp cabinet in case of not using lamp for long time. In case of unnecessary condition, don't try to switch from different light sources, elongating effective use life of lamp.

5.2 How can I install CWF light source or other light sources?

Color Assessment Cabinets are equipped with different standard light sources, of which some are installed on the fixed position in lamp cabinet. Also, the cabinet has 2 CWF lamp that client can install them when they are needed. At that moment, press TL84 key to light up CWF light source. If use CWF light source for long time, write CWF word to pester and past it to the TL84 key. Install other lamps according to the above procedures.

5.3 When do I need to replace lamps and how to do it?

Replace it in case lamp works over normal time or its ends are blackened. We can provide various standard fittings all the time (note: Fitting shall comply with relevant standard).

Install new lamp in reference to **Picture 1** as below or instructions noted on the bottom of lamp.

Don't make mistake in positioning lamp. After replacing, zero the use time of new lamp (calculate time from zero) as follows: light up new lamp, extend small screw driver to the central hole of CLR and press the key (the timing of lamps not lit up are not zeroed).



Note: Don't press CLR key in case of not replacing lamp, avoiding error zeroing.

Picture 1: Different light sources distribution picture in BGD 274 Cabinet

5.4 How can I buy a new lamp for replacing or needing other special light sources?

Lamp tube and bulb used in standard light source cabinet is certified special light source for laboratory, different from common civil light source. Buy new fittings in certified dealer for replacing. We can provide various original fitting and other special light sources, including D65, TL84, CWF, UV, F light sources, and imported fittings for D75, D50, D35, TL83, U30, INCA, HORIZON international standard light sources.

5.4 How to clean dirtied wall of lamp cabinet?

If the internal wall of lamp cabinet is dirtied with dust or hang print, use clean, white, soft and wet cloth to wipe the dirty off. Forbidden to use hard article to or chemicals in cleaning, avoiding to damage absorbent lay of the inside wall of lamp cabinet.

6.0 After service

We offers free one-year warranty (calculated from the date of delivery) paid and provide lifelong maintenance and calibration.

6.1 This cabinet is warranted in respect of materials and workmanship for 12 months from the date of purchase. Any defective parts within the machine arising during the warranty period, shall be replaced free of charge subject to our inspection.

6.2 Any defective parts within the machine arising out of the warranty period: shall be replaced at client's expense.

6.3 Lamps is not covered by this warranty

6.4 Under the following conditions, we will not be responsible for the replacement during the warranty period:

- Without invoice or receipt.
- Damaged by wrong assembling or disassembling.
- Damaged by wrong or careless operation.
- Damaged by wrong operating under improper condition.
- Damaged by broken packing during transportation.

7.0 Packing List

Parts	BGD 274	BGD 275	BGD 276
D65 lamp	2 PCS	2 PCS	2 PCS
TL84 lamp	2 PCS	2 PCS	2 PCS
CWF lamp		2 PCS	2 PCS
F/A lamp	4 PCS	4 PCS	4 PCS
UV lamp	1 PC	1 PC	1 PC
U30 lamp			2 PCS
Operation Manual	1 PC	1 PC	1 PC

8.0 Optional Accessories

BGD 277---45° normative stand (has accurate angles and has the same color as the your cabinet which makes a non-interference viewing effect).

9.0 Others

For more information regarding this product, spares, accessories etc. or if you would like a catalogue listing our full range of products, please contact your local agent or us.