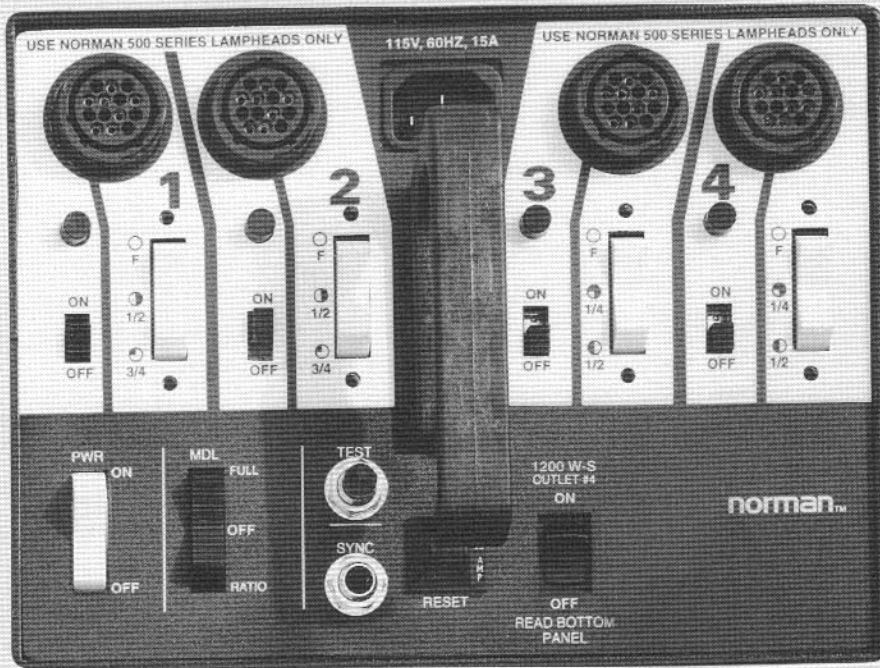




# norman

## INSTRUCTION MANUAL



# P808-1200

## PORTRAIT PAC



# P808-1200

## SERIES 500










### Welcome to the Norman family of interchangeable high-quality flash equipment.

Thank you for purchasing our Norman P808-1200 Portrait Pac. It is designed to take the pounding of high-volume studio portrait applications and will provide years of dependable service.

The **P808-1200** is the result of fulfilling your requests for additional power on the main and fill lights. It produces 1200 w-s total with numerous light output possibilities. For example, you can obtain 400 w-s main, 400 w-s fill, 200 w-s hair and 200 w-s back light. The output of each light may be controlled independently without affecting the others. In addition, all 1200 w-s is available on one light. Hence, for school photographers, the P808-1200 provides enough power to photograph class groups without bringing in additional lighting.

#### Overview of P808-1200 Features:

-  Four channels: 400 w-s, 400 w-s, 200 w-s and 200 w-s.
-  Each channel has a three-way output control switch providing 400, 300 and 200 w-s on each of the first two outlets and 200, 100 and 50 w-s on each of the second two outlets.
-  The 1200 w-s outlet #4 switch automatically disables all outlets except #4, for applications where the total power is required on one light. Requires the LH500+ (1200 w-s) lamphead.
-  A fail-to-flash alarm system provides an audible signal in the event of a lamphead misfire.
-  The P808-1200/TLC optional version provides several modes of light control to save the time and expense of custom printing due to variances in skin tone. This is especially useful in fix-lighting situations such as in school and store portrait photography.
-  Interchangeable with all Norman Series 500 equipment, with over 100 accessories and light modifiers.
-  Has a full two-year limited warranty, including parts and labor.

## SAVE THESE INSTRUCTIONS

### IMPORTANT SAFEGUARDS

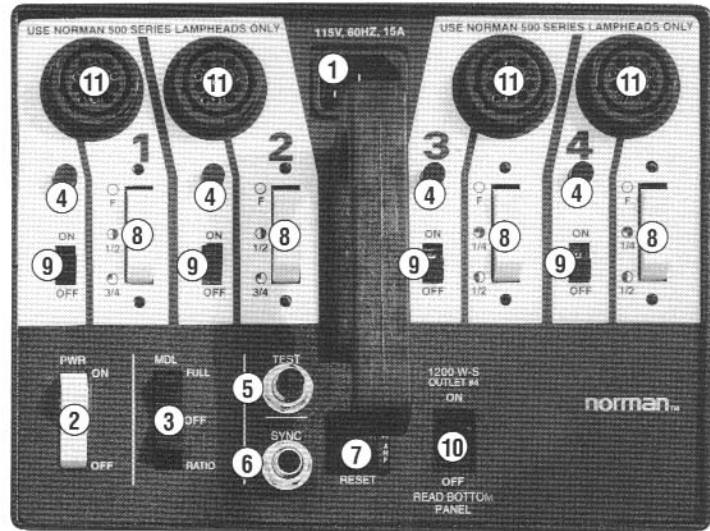
In accordance with UL 122 and UL 1012 specifications for photographic equipment and power supplies.

When using your photographic equipment, basic safety precautions should always be followed, including the following:

1. Read and understand all instructions.
2. Care must be taken as burns could occur from touching the modeling lamp.
3. Do not operate the appliance with a damaged cord or if the appliance has been dropped or damaged, until it has been examined by a qualified serviceman.
4. If an extension cord is necessary, a cord with a suitable current rating should be used. Cords rated for less amperage than the appliance may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
5. When practical, unplug the appliance from the electric outlet when not in use. Never yank the cord to pull from the outlet. Grasp the plug and pull to disconnect.
6. To avoid electric shock hazard, do not disassemble this appliance, but take it to a qualified serviceman when service or repair work is required. Incorrect reassembly could cause an electric shock hazard when the appliance is subsequently used.
7. To avoid electric shock hazard, do not bypass the ground pin on the AC power cord or use this appliance with an ungrounded electrical outlet or an ungrounded AC power cord.

## P808-1200 PRODUCT FEATURES

- 1 AC Inlet
- 2 PWR (power) Switch
- 3 MDL (model lamp) Switch
- 4 Ready/On Lights (4)
- 5 TEST Button
- 6 SYNC Outlet
- 7 RESET 15 Amp Circuit Breaker
- 8 Output Control Switches (4)
- 9 Channel OFF/ON Switches (4)
- 10 1200 W-S OUTLET #4 Switch
- 11 Lamphead Outlets (4)



### 1. AC Inlet

Connects to the AC power cable. The AC input voltage is 115 volt, 60 Hz. The unit is voltage stabilized to provide consistent light output under the most severe AC line variations (95 to 135 volts).

### 2. PWR Switch

Switches the flash circuits on/off. The modeling lights are controlled separately by the MDL switch.

### 3. MDL (model lamp) Switch

Turns the modeling lamps on/off. It operates independent of the PWR (power) switch so that the modeling lights may be operated with the power off. It has three positions:

**FULL** – The modeling lamps are at full brightness regardless of the flash power settings.

**OFF** – The modeling lamps are off.

**RATIO** – The modeling lamps automatically ratio (track) with the flash output settings. This enables you to accurately preview the lighting prior to the flash.

### 4. Ready/On Lights

There are four Ready/On Lights. Each one has three functions:

1. Illuminates to indicate that the AC power is on.
2. Illuminates to indicate that its respective lamphead outlet is switched to the ON position. The lamphead outlets are switched independently via each OFF/ON switch located just below each corresponding Ready/On Light.
3. Illuminates to indicate that the unit is ready and is at 100% voltage stabilized output.

### 5. TEST Button

The unit can be flashed by depressing the TEST Button.

### 6. SYNC Outlet

The camera connects to the SYNC Outlet via the R4155 Sync Extension Cord (included). The socket (female) end of the Sync Extension Cord connects to the camera sync cord (not included). Most 35 mm and 120 mm cameras utilize a standard "PC" sync cord, which is available through your camera store.

Proper polarity on the camera sync cord is important with cameras that utilize grounded shutter switch circuits. To check polarity, with the unit in operation, connect the camera "PC" cord to the Sync Extension Cord and touch the metal shield,

at the tip of the "PC" cord, to any exposed (non-painted and non-anodized) metal on the flash unit. If the unit flashes, the sync cord polarity is reversed.

To achieve the correct polarity reverse the camera sync cord at the point where it joins the Sync Extension Cord. This establishes a common ground between the camera body and the flash unit. If the polarity is incorrect the unit could self-flash or flash intermittently.

## 7. RESET 15 Amp Circuit Breaker

Automatically protects the flash circuit against excessive overloads. When activated, it will pop out about 1/4" and the flash portion of the unit will become inoperative. To reset, wait at least 30 seconds and depress the RESET Button. If the circuit breaker continues to activate, consult the factory or your authorized Norman service center.

## 8. Output Control Switches (4)

Each channel (outlet) has an Output Control Switch. This permits the output of each light to be adjusted independently in a manner where the output of the other lights are unaffected.

In portrait applications, lamphead outlets #1 and #2 are generally utilized for "Main" and "Fill" lights respectively, and #3 and #4 are generally utilized for auxiliary lights such as a "Background" and "Hair" light. The P808-1200 produces additional light on outlets #1 and #2 which is where you need it, as follows:

- Outlet #1 400 w-s, 300 w-s and 200 w-s (full, three-quarter and half)
- Outlet #2 400 w-s, 300 w-s and 200 w-s (full, three-quarter and half)
- Outlet #3 200 w-s, 100 w-s and 50 w-s (full, half and quarter)
- Outlet #4 200 w-s, 100 w-s and 50 w-s (full, half and quarter)

Note – for convenience's sake, outlets #3 and #4 are termed "full, half and quarter," but relative to outlets #1 and #2 they are actually half, quarter and eighth.

## 9. Channel ON/OFF Slide Switches

Used to switch each respective channel ON or OFF. When the switch is off, its corresponding READY/ON Light is off, which indicates that its lamphead is inoperative; the flash circuit, modeling lamp and audible alarm circuits are all disabled.

## 10. 1200 W-S OUTLET #4 Switch

When activated, all 1200 w-s is available to one light on Outlet #4. Requires the use of a Norman LH500+ lamphead type to obtain full 1200 w-s. If a Norman LH500 lamphead type is utilized, 600 w-s will be obtained on Outlet #4, thereby automatically protecting the lower-power FT-6 flash-tube from damage. When the 1200 W-S OUTLET #4 Switch is activated, the four Output Control Switches and the OFF/ON Slide Switches for Outlets 1-3 are automatically disabled so that their settings are irrelevant, and the Ready/On Lights for Outlets 1-3 go "off" to confirm that all the power is routed to Outlet #4. (The Outlet #4 OFF/ON Switch must be "on" for Outlet #4 to operate.)

## 11. Lamphead Outlets (4)

The Lamphead Outlets accept all Norman Series 500 lampheads.

**Important – Use Norman Series 500 lampheads only. Do not connect lampheads made by other manufacturers, as damage could result.**

## Audible Lamphead Misfire Alarm

The P808-1200 Portrait Pac is equipped with an audible alarm system that warns the photographer in the event that one or more lampheads fail to flash. Should this occur, an audible "beep" will sound for about one second after the unit is triggered. (See page 6 for troubleshooting tips.)

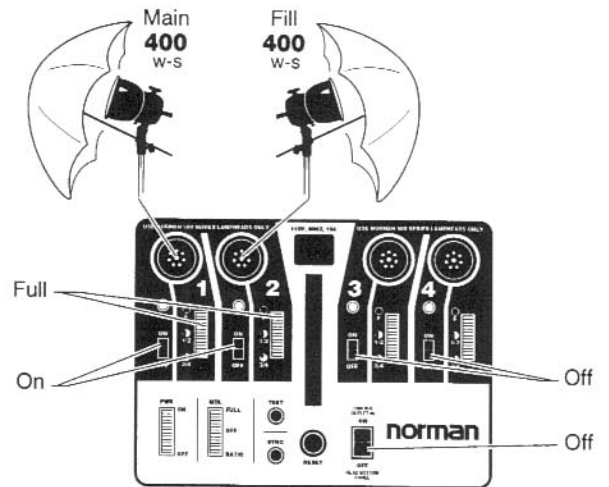
# P808-1200 Portrait Pac

HERE ARE TYPICAL MODES OF OPERATION  
FOR THE P808-1200

One-Light at full power

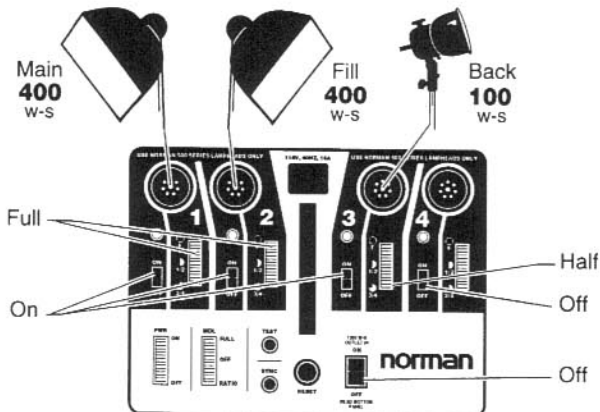


Two-light  
(Proms or small groups)

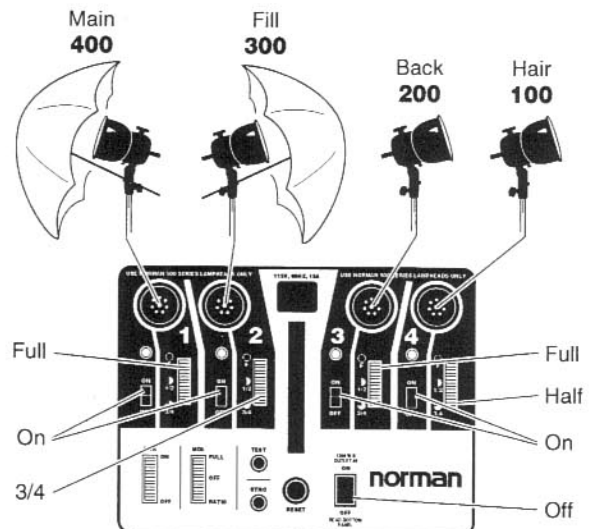


HERE ARE TYPICAL MODES OF OPERATION  
FOR THE P808-1200

Typical three-light portrait set-up



Typical four-light portrait set-up



## Troubleshooting Tips

A basic understanding of how the built-in alarm system operates can, in some cases, enable the operator to make on-the-spot repairs in the event of a malfunction. It is important to know that the alarm system is set into operation when either the TEST Button is depressed or the camera is triggered. Either of these operations causes the alarm to look at each lamphead to determine if one or more of them failed to flash. If so, it will "beep" for two seconds to warn the operator.

If all lampheads flash, the alarm will not sound. Therefore, if the lights fail to flash and the alarm did not "beep," this would indicate that the alarm did not receive a signal from either the TEST Button or the camera. In this event, the most likely failure is the camera sync cord or possibly reversed sync cord polarity. (Refer to item 6 for sync cord polarity information.) Other possible causes of all lampheads misfiring include a defective camera or Sync Extension Cord. To verify this, remove the Sync Extension Cord at the power supply and depress the TEST Button. If the unit flashes manually, the problem is one of the items listed above.

In the event that only one lamphead misfires, it can be detected visually by triggering the unit and observing which light is malfunctioning. Service by substitution is often the fastest and easiest method of getting back into operation. Here are a couple steps that can be helpful in this regard.

Swap an operating lamphead into the Lamphead Outlet that is not operating. If the outlet then functions the problem is in the lamphead. Swap flashtubes from the operating lamphead and reconnect the malfunctioning lamphead. If it then operates, the problem was the flashtube. Often times these simple steps can prevent costly downtime.

| <b>P808-1200 Specifications</b>  |   |                         |                         |                          |                          |
|--|---|-------------------------|-------------------------|--------------------------|--------------------------|
| Maximum Energy Storage: 1200 watt-seconds  |   |                         |                         |                          |                          |
| Output Level (watt-seconds): on one light 50, 100, 200, 300, 400, 600 (with LH500) or 1200 w-s (with LH500+) |   |                         |                         |                          |                          |
| Light Output @ 10 feet with ISO 100: f-stop  |   |                         |                         |                          |                          |
|  | <b>1200</b>   | <b>600</b>              | <b>400</b>              | <b>300</b>               | <b>200</b>               |
| Bare Bulb  | <i>f/11<sup>5</sup></i>   | <i>f/8<sup>5</sup></i>  | <i>f/8</i>              | <i>f/5.6<sup>5</sup></i> | <i>f/5.6</i>             |
| 5DL Reflector  | <i>f/16</i>   | <i>f/11</i>             | <i>f/8<sup>5</sup></i>  | <i>f/8</i>               | <i>f/5.6<sup>5</sup></i> |
| 5E Reflector   | <i>f/22<sup>8</sup></i>   | <i>f/16<sup>8</sup></i> | <i>f/16<sup>3</sup></i> | <i>f/11<sup>8</sup></i>  | <i>f/11<sup>3</sup></i>  |
| 5WW-RP Reflector   | <i>f/11<sup>9</sup></i>   | <i>f/8<sup>9</sup></i>  | <i>f/8<sup>4</sup></i>  | <i>f/5.6<sup>9</sup></i> | <i>f/5.6<sup>4</sup></i> |
| WB45 Umbrella  | <i>f/11<sup>8</sup></i>   | <i>f/8<sup>8</sup></i>  | <i>f/8<sup>3</sup></i>  | <i>f/5.6<sup>8</sup></i> | <i>f/5.6<sup>3</sup></i> |
| S45 Umbrella   | <i>f/16<sup>2</sup></i>   | <i>f/11<sup>2</sup></i> | <i>f/8<sup>7</sup></i>  | <i>f/8<sup>2</sup></i>   | <i>f/5.6<sup>7</sup></i> |
| Recycle Time:  | 5 sec. to full power @ 1200 w-s   |                         |                         |                          |                          |
| AC Input Voltage:  | 95-135 volts, 50-60 Hz  |                         |                         |                          |                          |
| DC Output Voltage:   | 500 volts   |                         |                         |                          |                          |
| Size:  | 9 <sup>7</sup> / <sub>8</sub> " tall, 8.5" wide, 6.5" deep (O/A including handle)<br>8.5" tall to tops of connectors) |                         |                         |                          |                          |
| Weight:  | 12 <sup>1</sup> / <sub>4</sub> lbs.   |                         |                         |                          |                          |

# PHOTO CONTROL CORPORATION



A division of Photo Control Corporation

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# NORMAN P808-1200/TLC

## INSTRUCTION SUPPLEMENT

### PREFACE

The human eye has a greater tonal range than is reproduced from photographic materials, and reproducing photographs on a printing press condenses the tonal range further. This situation is even more pronounced when printing dark tones because the high density of dots tend to expand (dot gain) and can plug-up on the press, eliminating subject detail. Hence, custom lab work is often required to compensate for dark skin tones when printing school yearbooks.

School portrait photographers have long recognized the need for additional lighting controls at the camera to prevent this costly rework. The purpose of the TLC (Tone Light Control) feature on the **P808-1200 Portrait Pac** is to provide the means for controlling light to compensate for these varying skin tones.

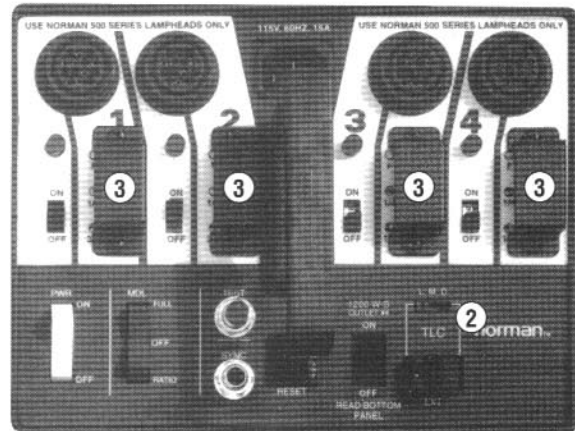
Several modes of compensation are available. Hence, each studio is encouraged to determine which mode best serves their needs, and the factory offers variations of the TLC feature in accordance with the wishes of each customer. A label, located on the bottom of each **Pac**, describes the particular mode variation being utilized. If no mode is specified, the unit will be preset and labeled as "Mode 1".

### TLC PRODUCT FEATURES

- 1 TL Controller
- 2 TLC Homebase (LMD) Switch
- 3 Switch Guards



TLC-10 Controller



P808-1200/TLC Portrait Pac

### MODES OF TLC OPERATION — Preset at the factory

|                             |   |  |
|-----------------------------|---|--|
| <b>MODE 1</b><br>(standard) | <b>3-Levels of "Fill" (Outlet #2)</b><br>TLC-10 Controller settings<br>"L" (light skin tones)<br>"M" (medium skin tones)<br>"D" (dark skin tones)                     | 200 w-s (#2)<br>300 w-s (#2)<br>400 w-s (#2)   |
| <b>MODE 2</b>               | <b>2-Levels of "Fill" (Outlet #2)</b><br>TLC-10 Controller settings<br>"L" (light and medium skin tones)<br>"D" (dark skin tones)                                     | 200 w-s (#2)<br>400 w-s (#2)   |
| <b>MODE 3</b>               | <b>3-Levels of "Main" (Outlet #1) and "Fill" (Outlet #2)</b><br>"L" (light skin tones)<br>"M" (medium skin tones)<br>"D" (dark skin tones)                            | 200 w-s (#1 and #2)<br>300 w-s (#1 and #2)<br>400 w-s (#1 and #2)                      |
| <b>MODE 4</b>               | <b>2-Levels of "Main" (Outlet #1) and "Fill" (Outlet #2)</b><br>"L" (light and medium skin tones)<br>"D" (dark skin tones)  | 200 w-s (#1 and #2)<br>400 w-s (#1 and #2)   |
| <b>MODE 5</b>               | <b>For Pet Photography</b><br><b>3-Levels of "Main" (Outlet #1) and "Fill" (Outlet #2)</b><br>"L" (white to light fur)<br>"M" (medium fur)<br>"D" (dark to black fur) | 100 w-s (#1 and #2)<br>200 w-s (#1 and #2)<br>400 w-s (#1 and #2)                      |
| <b>MODE 6</b>               | <b>Combination Boost</b><br>"L" (light skin tones)<br>"M" (medium skin tones)<br>"D" (dark skin tones)  | 300 w-s (#1), 200 w-s (#2)<br>400 w-s (#1), 300 w-s (#2)<br>400 w-s (#1), 400 w-s (#2) |

## EXPLANATION OF INDICATORS, CONTROLS AND OUTLETS

### TLC CONTROLLER

#### A. Advance Switch

Depress to advance the light output for skin tone being photographed. The corresponding LED illuminates to indicate the setting. After the flash the TLC automatically returns to the pre-selected "Homebase" (see B. below) position.

#### B. TLC Indicator Lights

The TLC indicators illuminate to indicate which skin tone adjustment is in operation. After the flash, the circuit defaults to the pre-selected "Homebase" position which is verified by the corresponding TLC Indicator Light.

- "L" Exposure for light skin tones
- "M" Exposure for medium skin tones
- "D" Exposure for dark skin tones

#### C. SYNC Outlet

The R1200 (household female) or R1202 (Camerz ZII) sync cord connects to the SYNC Outlet on the TLC-10 Controller and to the camera.

#### D. Phone Cord

The R1300 (phone cord) connects to the Remote Cable Outlet on the TLC-10 Controller and to the EXT Outlet on the power supply.

### TLC CONTROLLER



### P808-1200/TLC

#### E. TLC Homebase Switch ("LMD")

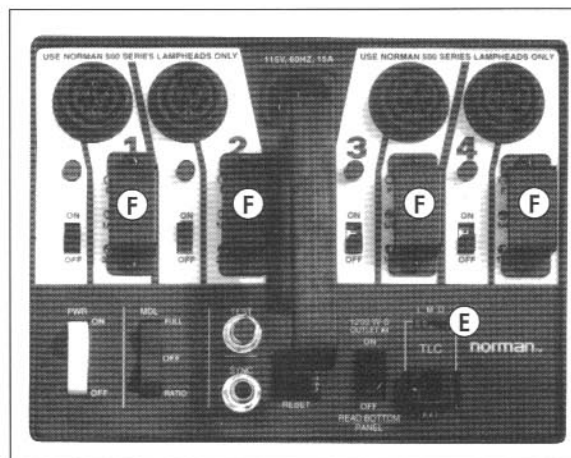
This slide switch is set by the photographer to match the average skin tone of the majority of the subjects. "L" (light skin tones), "M" (medium skin tones) and "D" (dark skin tones).

#### F. Light Output Switches

Protective guards are located on the four Output Control Switches to prevent accidental switching of these controls.

When the TLC Controller is in use, the "Main" (Outlet #1) and the "Fill" (Outlet #2) switches are automatically disabled so that the light outputs are locked onto the desired levels in accordance with the TLC system. When the TLC Controller is disconnected from the power supply, these Output Control Switches are operational once again.

### P808-1200/TLC PORTRAIT PAC



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