



# NonVerbal INTRAOFFICE COMMUNICATION

**Five-Lite System** for the solo practice.

**Multi-Channel Five-Lite System** for the practice with two or more doctors.

## Non-Verbal Communication

Theta Non-Verbal Communications Systems allow messages to be sent discretely by using lights rather than voice. They eliminate much of the walking back and forth and in and out of the operatories which is so disturbing to the doctor, the staff and the patients. Office staff can continue working and yet be informed discretely of vital information.

## Five-Lite System (see Fig. #1)

This System is recommended for the small to medium sized solo practice with up to four operatories. It provides simple, comfortable communication for one doctor working with one hygienist. The Five-Lite System is sufficient for the solo practice if two operatories are used regularly by the doctor and one operator is used by a hygienist. A fourth operator used occasionally as a post-op, overflow or as an emergency operator would also fit within a Five-Lite System. The Five-Lite System can be expanded into a Multi-Channel Five-Lite System in the future if the practice grows.

## Multi-Channel Five-Lite System (see Fig. #2)

This System provides simple communications for a practice with two or more doctors. Each doctor and each hygienist has their own private line of five lights. As a message does not disturb a doctor or hygienist unless it is for them and multiple messages may be sent at the same time, this system would be used in large multidocor practice. (See page #5)



Fig. #1 CRL 132 Lighting Pushbutton Bar



Fig. #2 CRL 152-4T Four Channel Lighting Pushbutton Panel



## Five-Lite System

This System has five colored lights and a black reset button which are used for sending and responding to repetitive messages. Any of the lights can be turned on at any station. The lights can be responded to from any location by turning the lights out or lighting additional lights to acknowledge the message. A buzzer sounds at every station as the light is being lit and the buzzer also sounds additional times as any of the lit buttons are pressed again. Each buzzer is adjustable in volume station by station.

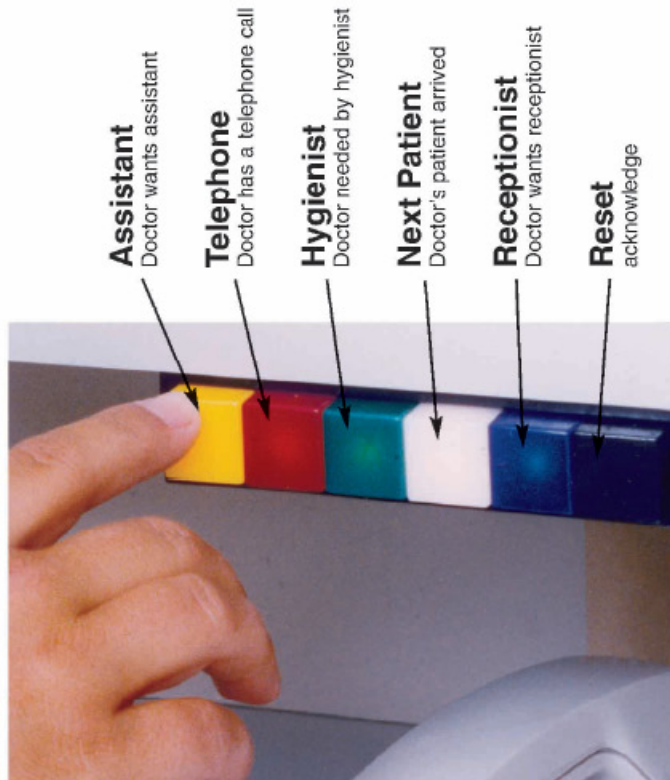


Fig. #3 Sample Message Coding

## Simple Message Coding

A simple way to code messages is to assign messages to each color of light. As the button is pressed a buzz sounds and the light lights and stays lit. An acknowledgement of "Yes" is sent by pressing the black reset button, turning out the light. A "No" or delay reply can be sent by pressing the lit button providing a buzz back to the sender. Messages for the doctor can usually be one color of light:

- |           |                               |
|-----------|-------------------------------|
| Yellow    | – Assistant needed by doctor  |
| Red       | – Phone call for the doctor   |
| Green     | – Hygienist needs the doctor  |
| White-by  |                               |
| Reception | – Next patient for the doctor |
| White-by  |                               |
| Doctor    | – Seat the next patient       |

- |           |                                 |
|-----------|---------------------------------|
| Blue-by   |                                 |
| Doctor    | – Doctor needs the receptionist |
| Blue-by   |                                 |
| Reception | – Receptionist needs the doctor |

The same coding is used for messages between staff members other than the doctor by adding the staff members color to the message. So "Next Patient" for the doctor was white. "Next Patient" for the hygienist would be green and white lit together (green is the color for the hygienist and white is the "next patient" light). Common messages sent to staff other than the doctor are:

- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| Hygiene (green light for hygienist) |                                       |
| Green-White                         | – Hygienist your next patient is here |
| Green-Red                           | – Hygienist phone call                |
| Green-Blue                          | – Hygienist needs the receptionist    |
| Green-Yellow                        | – Hygienist needs an assistant        |

- |  |                                       |
|--|---------------------------------------|
| Assistant (Yellow light for assistant) |                                       |
| Yellow-Red                             | – Assistant Phone Call                |
| Yellow-White                           | – Assistant seat next patient for Dr. |
| Yellow-Blue                            | – Assistant needed by receptionist    |

- |  |                                |
|--|--------------------------------|
| Receptionist (Blue light for receptionist) |                                |
| Blue-Yellow                                | – Receptionist needs assistant |
| Blue-Green                                 | – Receptionist needs hygienist |

It is important that all message exchanges end with the lights reset so that the System is available for the next message. The Five-Lite System should not be used to indicate status such as room busy or next patient waiting. Status indications would leave the System busy for long periods of time preventing other messages from being sent. Room Status Systems and Patient Waiting Status Systems are available from Theta Corporation.



Fig. #4 CRL 152 Lighting Pushbutton Panel



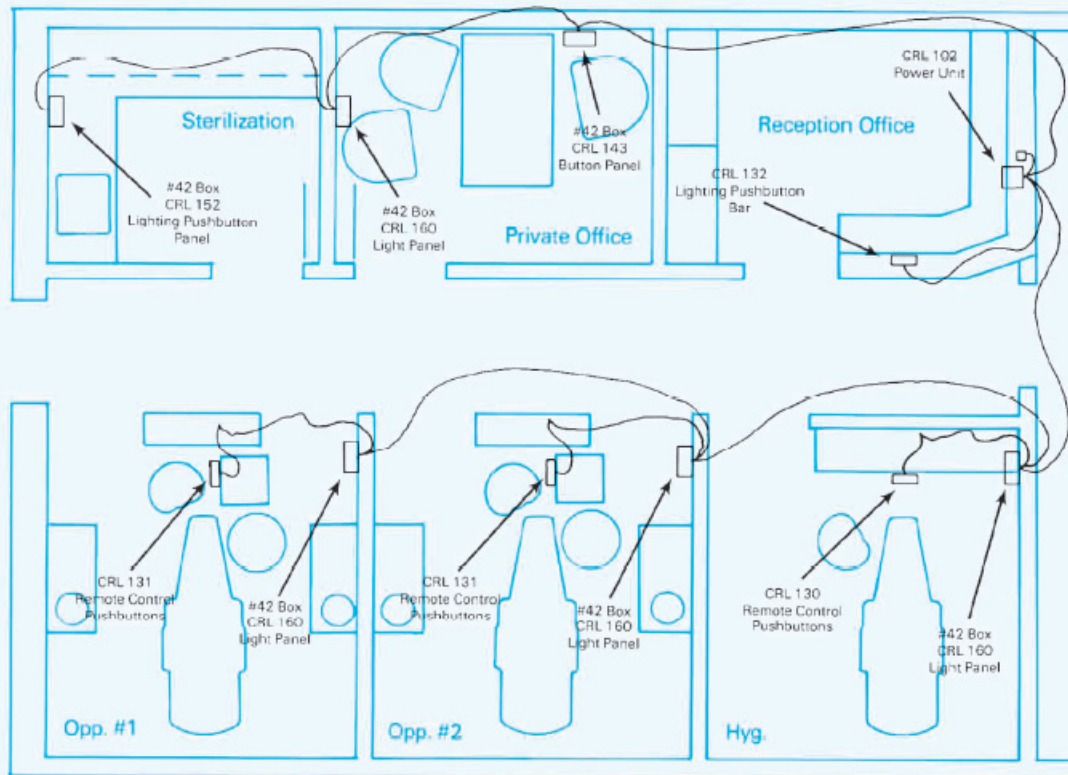


Fig. #5 Typical FiveLite System Communication Plan for Six Room Office with Three Operatories

## Selection and location of components

### Rooms other than Operatories and Private Office

In most rooms of the office a lighting pushbutton component is used. In the laboratory, sterilization, lounge, and other areas where personnel are not working in a fixed position, a CRL 152 Lighting Pushbutton Panel is usually mounted on the wall (see Fig. #4). If there is a seated work location, the panel should be within arm's reach and within sight of that position. If all personnel are standing, the panel should be in an area where it will be most visible.

In rooms which do not have a wall near the seated work position a CRL 132 Lighting Pushbutton Bar is usually mounted on the cabinetry. In reception offices that have a high check writing counter above the main reception desk, the CRL 132 Lighting Pushbutton Bar is mounted under the lead edge of the check writing counter (see Fig. #1 on Page #1). The CRL 132 Lighting Pushbutton Bar is also used in a sterilization or laboratory which is made up completely of cabinetry units and has no walls or where the walls would be difficult to install into. The CRL 132 Lighting Pushbutton Bar is mounted under the lead edge of the hung cabinets (see Fig. #6).



Fig. #6 CRL 132 Lighting Pushbutton Bar

### Operatory

In the operatories where you and your assistant are working in a fixed position for twenty to thirty minutes at a time we feel that it is very important for you to have the lights in your view where you will not have to twist to see them. The pushbuttons to control the System must be comfortable for you to reach from your working position. Display lights are usually placed at eye level across the patient on the side wall of the operatory where they can be seen without any body movement by a doctor or hygienist working either off the patients side or behind the patient. A set of remote control pushbuttons is placed low down at elbow level between the doctor and the assistant.





Fig. #7 Double entrance operatory with CRL 131 Aluminum Button Bar on mobile cart and CRL 160 Light Panel on wall

The CRL 160 Light Panel is used for the display lights where there is a wall to mount it on (see Fig. #7). The CRL 131 Aluminum Button Bar is used for the remote control pushbuttons when they can be mounted on a mobile cart (see Fig. #7). On a cart or tray table the buttons are usually mounted with the pearls facing up towards the ceiling. This makes them very easy to push and easy to reach, even if they are on the other side of the cart. If the operatory does not have a cart or tray table behind the patient but does have a counter, the CRL 130 Aluminum Button Bar is used mounted under the lead edge of the counter at the 12 o'clock position (see Fig. #8). If there is no cart, tray table, or counter at the 12 o'clock position a CRL 143 Button Panel is mounted on the wall at 12 o'clock at about elbow level. For operatories divided by cabinetry units rather than walls, the CRL 162 Light Bar is used rather than the CRL 160 Light

Panel (see Fig #9). The CRL 162 Light Bar mounts under the lead edge of the upper cabinet across the patient from the doctor or hygienist.



Fig. #9 Operatory with CRL 130 Aluminum Button Bar counter and CRL 162 Light Bar on side cabinetry

## Private Office

In the private office, if you are seated behind a desk with patients facing you in front of the desk (see Private Office in Fig. #5), display lights would be mounted on the wall behind the patient. Remote control pushbuttons would be placed where they would be comfortable to reach. This allows messages to be sent or received without disturbing the patient. A CRL 160 Light Panel or CRL 160W Light Panel Walnut Finish is most common for the display lights. If the desk is against the side wall the CRL 143 Button Panel or CRL 143W Button Panel Walnut Finish is placed on the wall below desk height next to the doctor. If the desk is away from the wall a CRL 130 Aluminum Button Bar is mounted under the desk.

If the desk in the Private Office faces directly into a wall the CRL 152 Lighting Pushbutton Panel or CRL 152W Lighting Pushbutton Panel Walnut Finish is placed on the wall above the desk.

## Power Supply

The Five-Lite System is operated by a CRL 102 Electronic Power Unit. This unit transforms the 120 volt power from a regular 120 volt outlet to 6 volts for the lamps within the System. The Power Unit has the electronic switching which holds the lights on until they are reset. The CRL 102 Power Unit can operate up to twenty stations.



Fig. #8 Operatory with CRL 130 Aluminum Button Bar counter and CRL 160 Light Panel on wall



## Multi-Channel Five--Lite System for the practice with two or more doctors.

For the office with many dental providers (doctors and hygienists), the simplest way to communicate is to provide each doctor and each hygienist with a private channel for communication.

Areas of the office common to all providers are provided with a large panel containing a Five-- Lite System for each Provider. Each row uses the simple message coding as shown on Page #2. Each doctor and hygienist in their own operatories will have only their own lights and buttons. In the hygiene operatories there also is a panel which allows the hygienist to call any of the doctors to check a patient (see Fig. #12).



Fig. #10 Sterilization with CRL 142-4T Four Channel Lighting Push-button Panel

### Reception Office, Sterilization and Staff Lounge

A panel with an independent column of lighting pushbuttons and reset buttons for each doctor and each hygienist would be mounted on the wall (see Fig. #3, #10, & #11). The CRL 152-2 thru CRL 152-6T would be used depending on the number of rows needed.

### Laboratory and Private Office

A panel with a row for each doctor would be mounted on the wall. As these areas are not used by the hygienists, they would not need the rows for the hygienists. The CRL 152-2 thru CRL 152- 6T would be used depending on the number of rows needed.

### Doctor Operatories

The Operatories used by doctors are equipped with one row the same as in a Five--Lite System (see Page #3 & #4).



Fig. #11 Staff Lounge with CRL 152-6T Six Channel Lighting Push-button Panel

### Hygiene Operatories

The hygiene operatories are equipped with one row the same as in the Five-Lite System and they also have a Hygiene Call Panel. The Hygiene Call Panel controls one light for each doctor channel. A CRL 180-2 Two Doctor Hygiene Call Panel would be used for a office with two doctors (see Fig. #12). This panel would permit the hygienist to call either of the two doctors by lighting a light on their channel of the system.



Fig. #12 Hygiene operatory with CRL 131 Aluminum Button Baron cart, CRL 160 Light Panel, and CRL 1802 Two Doctor Hygiene Call Panel

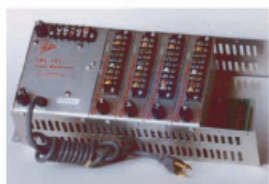
### Power Supply

The Multi Channel Five-Lite System is operated by a CRL 103 Power Unit Mainframe with a CRL 104 Power Unit Channel for each channel within the System (see Page #6).





**CRL 102 Electronic Power Unit**  
Provides low voltage and switching for solo practice Five-Lite System.



**CRL 103 Power Unit Mainframe**  
**CRL 104 Power Unit Channel**  
Provides low voltage and switching for Multi-Channel Five-Lite System. One CRL 104 required for each channel.



**CRL 120 Walnut Button Block**  
Five colored pushbuttons and a reset pushbutton in solid oiled walnut wood block.



**CRL 130 Aluminum Button Bar**  
Five colored pushbuttons and a reset pushbutton in machined solid aluminum housing. Bar is 1 in. high, 5-3/8 in. long.



**CRL 132 Lighting Pushbutton Bar**  
Five colored square pushbuttons that light and a square black reset pushbutton in black plastic housing. Bar is 1 in. high, 4-3/4 in. long and 2-1/8 in. deep. It does not contain a buzzer.



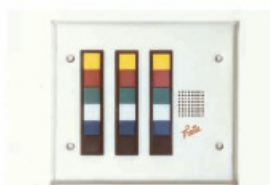
**CRL 140 Buttons and wiring Harness**  
Five colored pushbuttons and a black reset pushbutton with harness for installing in counter or cabinetry. Pushbuttons may be mounted on 7/8 inch centers in 5/8 inch holes. Requires about 1 inch depth.



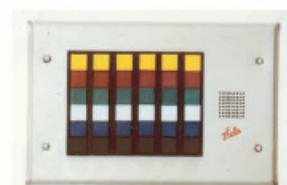
**CRL 150 Light & Button Panel**  
Five colored lights, five colored pushbuttons, black reset pushbutton, and an adjustable buzzer.



**CRL 152-2 Two Channel Lighting Pushbutton Panel**  
Five colored pushbuttons that light, a reset pushbutton and a buzzer for each of two men on stainless steel panel for wall mounting.



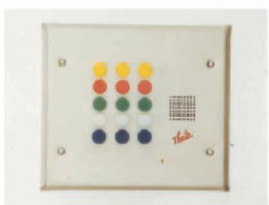
**CRL 152-3T Three Channel Lighting Pushbutton Panel with Tone**  
Five colored pushbuttons that light and a reset pushbutton for each of three men and tone in stainless steel panel for wall mounting.



**CRL 152-6T Six Channel Lighting Pushbutton Panel with Tone**  
Five colored pushbuttons that light and a reset pushbutton for each of six men and tone in stainless steel panel for wall mounting.



**CRL 160-2 Two Channel Light Panel**  
Five colored lights and buzzer for each of two men in stainless steel panel for wall mounting.



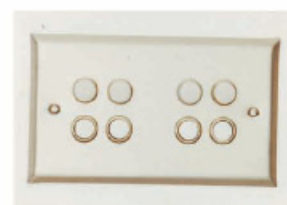
**CRL 160-3T Three Channel Light Panel with Tone**  
Five colored lights for each of three men and tone in stainless steel panel for wall mounting.



**CRL 162 Light Bar**  
Five Display Lights in a black plastic housing. Bar is 1 in. high, 4 1/4 in. long, and 2 1/8 in. deep.



**CRL 170 Light Box**  
Five colored lights and an adjustable buzzer in white plastic housing for surface mounting.



**CRL 180-4 4 Channel Hygienist Call Panel**  
One button and one light for each of four doctors in Multi-Channel System.

**Button Panel**  
Five colored pushbuttons and black reset pushbutton.

Stainless steel panel with beveled edges for wall mounting.



CRL-143

Walnut vinyl finish panel with beveled edges for wall mounting.



CRL-143W

Stainless steel panel with smaller flat face for cabinet mounting.



CRL-144

Walnut vinyl finish panel with smaller flat face for cabinet mounting.

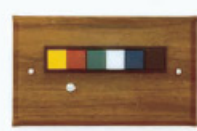


CRL-144W

**Lighting Pushbutton Panel**  
Five colored pushbuttons that light, black reset pushbutton and adjustable buzzer.



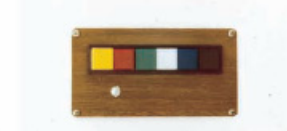
CRL-152



CRL-152W



CRL 153



CRL-153W

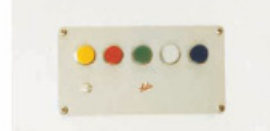
**Light Panel**  
Five colored lights and adjustable buzzer.



CRL-160



CRL-160W



CRL 161



CRL-161W