Modular Electrical System

Overview

The modular electrical system is designed to interface with the modular casework, this electrical system puts the finishing touches on a truly modular concept. The combined modularity of the casework and electrical system allows for easy reconfiguration of equipment as required in the future.

Placement of the Electrical

The electrical connections should be located below the countertop, and here is why:

-In today's pharmacy, most electrical connections are required for computers, peripherals or fax machines. In most of the designs that we see today, cpu's, printers, battery back ups and on occasion fax machines are located below the counter on pull out shelving or racks. Electrical receptacles below the counter make sense to support this equipment.

-By feeding the cord of any countertop equipment through a grommet in the countertop and plugging into the receptacle below counter, cords are now better managed and out of the way for active work surfaces.

Attachment and Installation Responsibility

Installers attach and connect the system together within the modular casework at predetermined locations, leaving the final connection to the building and verification of circuits for the site electrician.

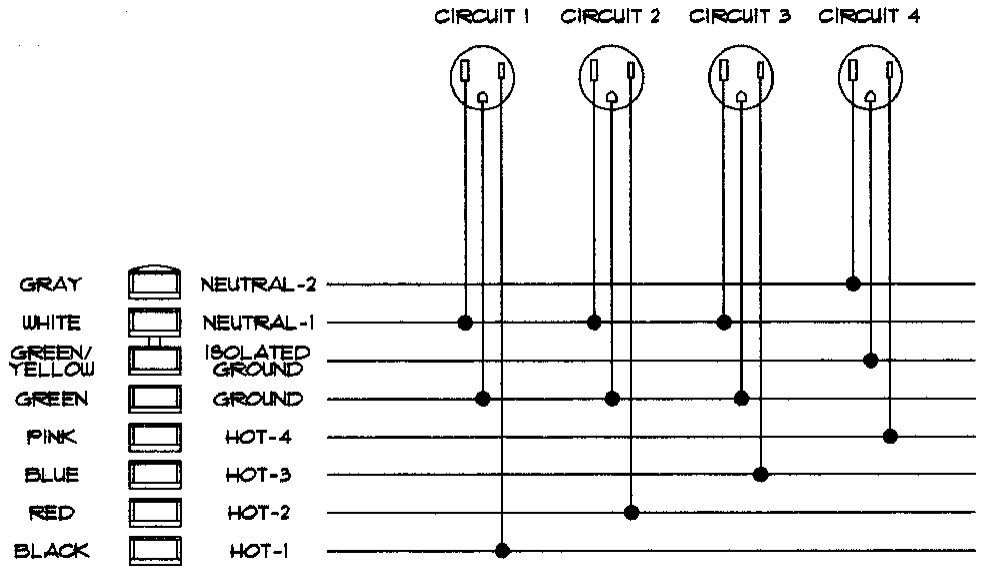
This electrical system saves significant time and money in the field by greatly reducing the amount of work required of the site electrician.

Universally Recognized

The modular electrical system is recognized under UL Standard 1286, and is listed as a manufactured system under UL Standard 183. It is CSA recognized and is in full compliance with electrical specifications found in the National Electric Code.

Circuitry

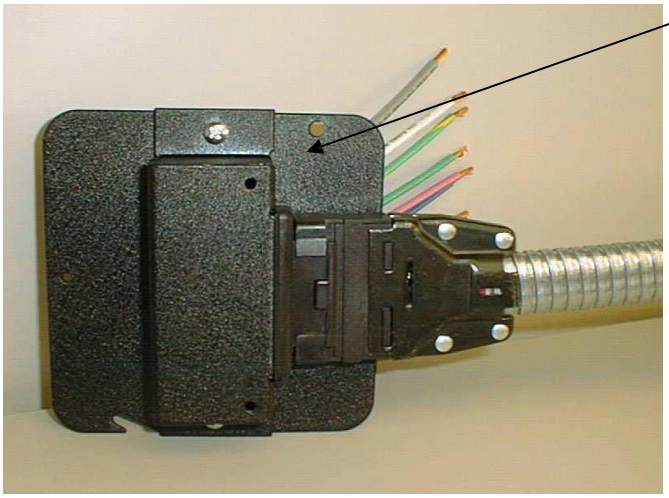
The modular electrical system is a 20 amp system allowing for the use of 4 circuits with 4 line conductors, 2 neutrals and 2 grounds. Three of the line conductors are 12 AWG, and share a 12 AWG ground and a 10 AWG neutral. The fourth circuit is isolated and dedicated, serviced by its own line conductor, neutral and isolated ground.



8 Wire Circuit Identification

Feed Options

The modular electrical system may be fed from either the ceiling (thru a chase) or the wall (thru an access panel in the back of the modular casework). In either case, the modular electrical system may be fed from the left or right end. One feed may contain up to four circuits of 20 amps each.



Wall feed plate with modular wiring harness connected. Wiring harness will connect to a modular junction block on the other end with appropriate receptacle inserted. Plate is reversible and may feed a left or right run as required**. 2-gang box required for hookup.**

Wires running out the back of the plate connect to the building through a dual gang wall junction box provided by others. Hookup is by site electrician.

Receptacles

A variety of receptacle types are available and all lock into the standard modular junction block. Each receptacle is stamped with the circuit number for ease of identification. The following options are available for receptacle type and circuitry:

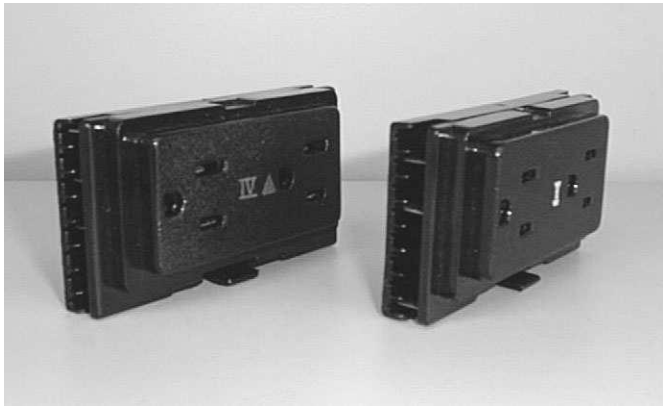
Receptacle Options

20 amp/125V (Available in circuits 1,2 or 3)
-Gray Color

20 amp/125V Isolated Ground (Avail. in circuit 4)
-Gray Color

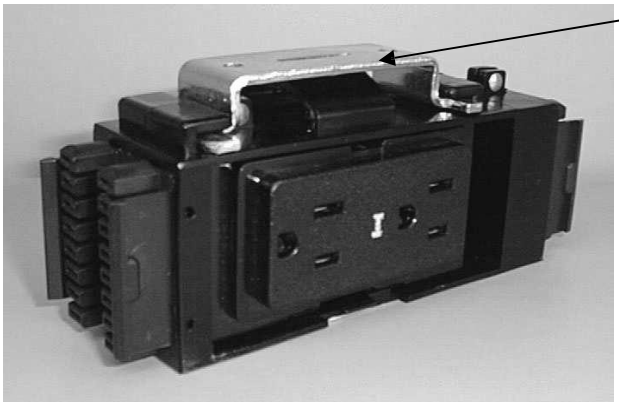
20 amp/125V Hospital Grade (Avail. in circuits 1 or 2)
-Gray with Green Dot

20 amp/125V Hospital Grade, Isolated Ground
-Red Color (Avail. In circuit 4)



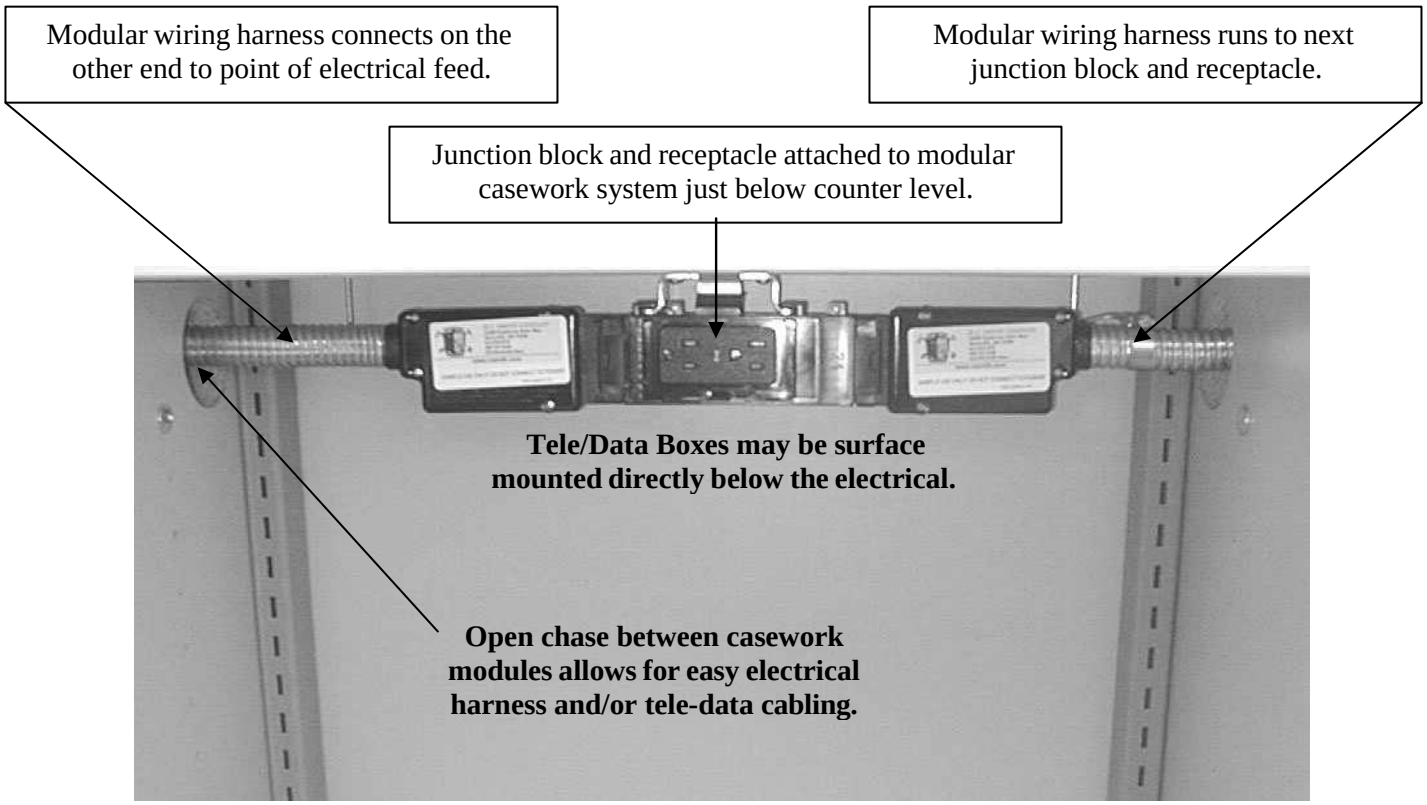
Junction Blocks

The junction block receives the modular duplex receptacle and connects it to the 8 wire electrical harness through a secure male to female locking connection that insures proper alignment of all connection points. A doubling of the junction blocks allows for a four-plex requirement. A change in desired circuits may be obtained by simply switching the modular receptacle device.



Mounting bracket attaches the modular junction block and selected receptacle to the R.C. Smith Casework.

Note the stamp of "I" on the receptacle, designating circuit #1 to this receptacle.



System Connected and Operational