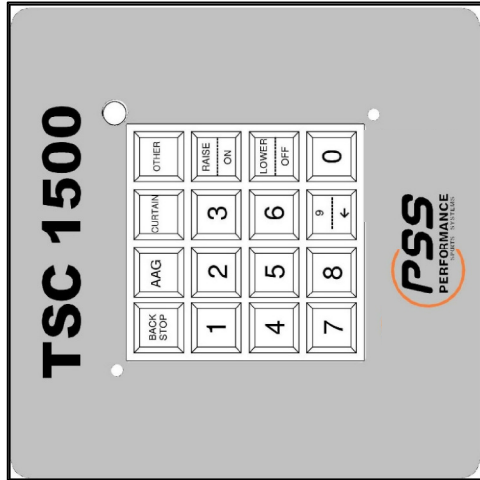


IMPORTANT: THE VOLTAGE PROVIDED MUST BE STABLE. IF UNSTABLE CAN CAUSE PROBLEMS WITH SYSTEM.



**KEYPAD**

IMPORTANT: THE SHIELD OF THE COMMUNICATION WIRE BETWEEN THE RELAY BOX AND THE INTERFACE MUST BE GROUNDED

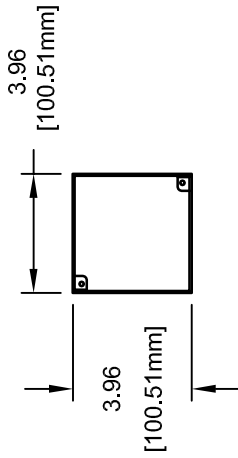
2:18AWG DUAL TWISTED PAIR 24V SHIELDED CABLE

NOTE: WIRE MOTOR ON TERMINALS PER DEVICE ASSIGNMENT SHEET

WIRING EXAMPLE OF FOUR CIRCUITS PER RELAY PANEL.  
 J6 = INCOMING LINE 1  
 J10 = INCOMING LINE 2  
 J11 = INCOMING LINE 3  
 J15 = INCOMING LINE 4

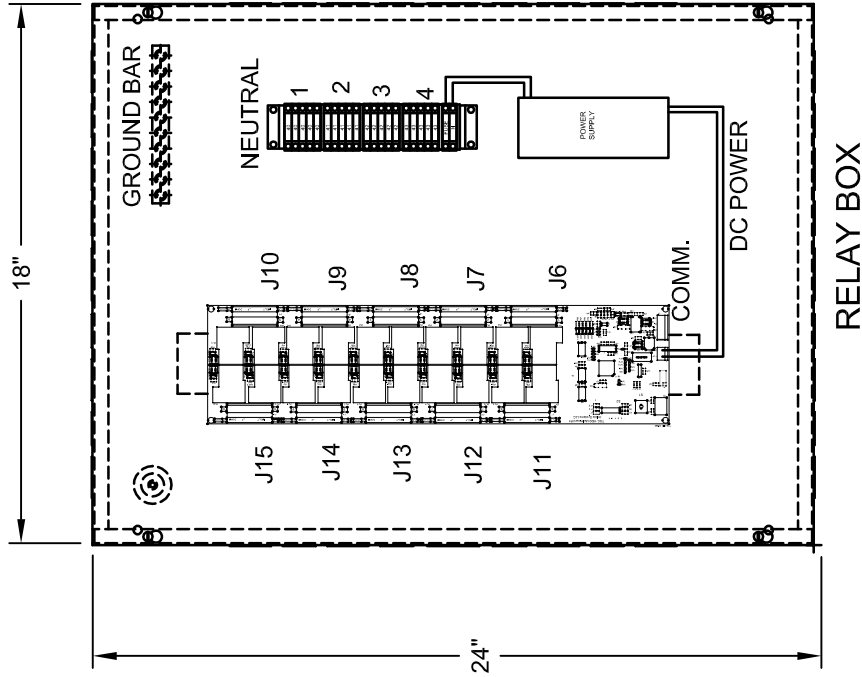
NOTE: ONE LINE WILL NEED TO THE RED WIRE GOING TO THE BLACK FUSED TERMINAL TO PROVIDE POWER TO THE TRANSFORMER!

**MOTOR ELECTRICAL REQUIREMENTS**  
 MINIMUM CIRCUIT REQUIREMENTS  
 -DEDICATED 120VAC, 1PH, 60HZ,  
 30 AMP SERVICE  
 -MAX OF FOUR POWER LINES PER BOX  
 ALL TERMINALS ACCEPT ONLY 10GA MAX



NOTE: JUNCTION MOUNTING TABS MUST BE ORIENTED AS SHOWN FOR PROPER MOUNTING OF TOUCH PAD

STANDARD 4" x 4" x 2 1/2" DEEP JUNCTION BOX. REQUIRED AT EACH KEYPAD LOCATION. (SUPPLY BY OTHERS)



NOTE: LOCATE KEYPAD ON WALL AT A CONVENIENT HEIGHT FOR AUTHORIZED USERS.

AUTHORIZED USER MUST HAVE FULL VIEW OF GYMNASIUM EQUIPMENT AT ALL TIMES WHEN OPERATING.

ALL OTHER ELECTRICAL, JUNCTIONS AND SYNCHRONIZER BOXES ARE TO BE INSTALLED BY A CERTIFIED ELECTRICAL CONTRACTOR. FOLLOW ALL LOCAL CODES AND MANUFACTURER'S INSTRUCTIONS.

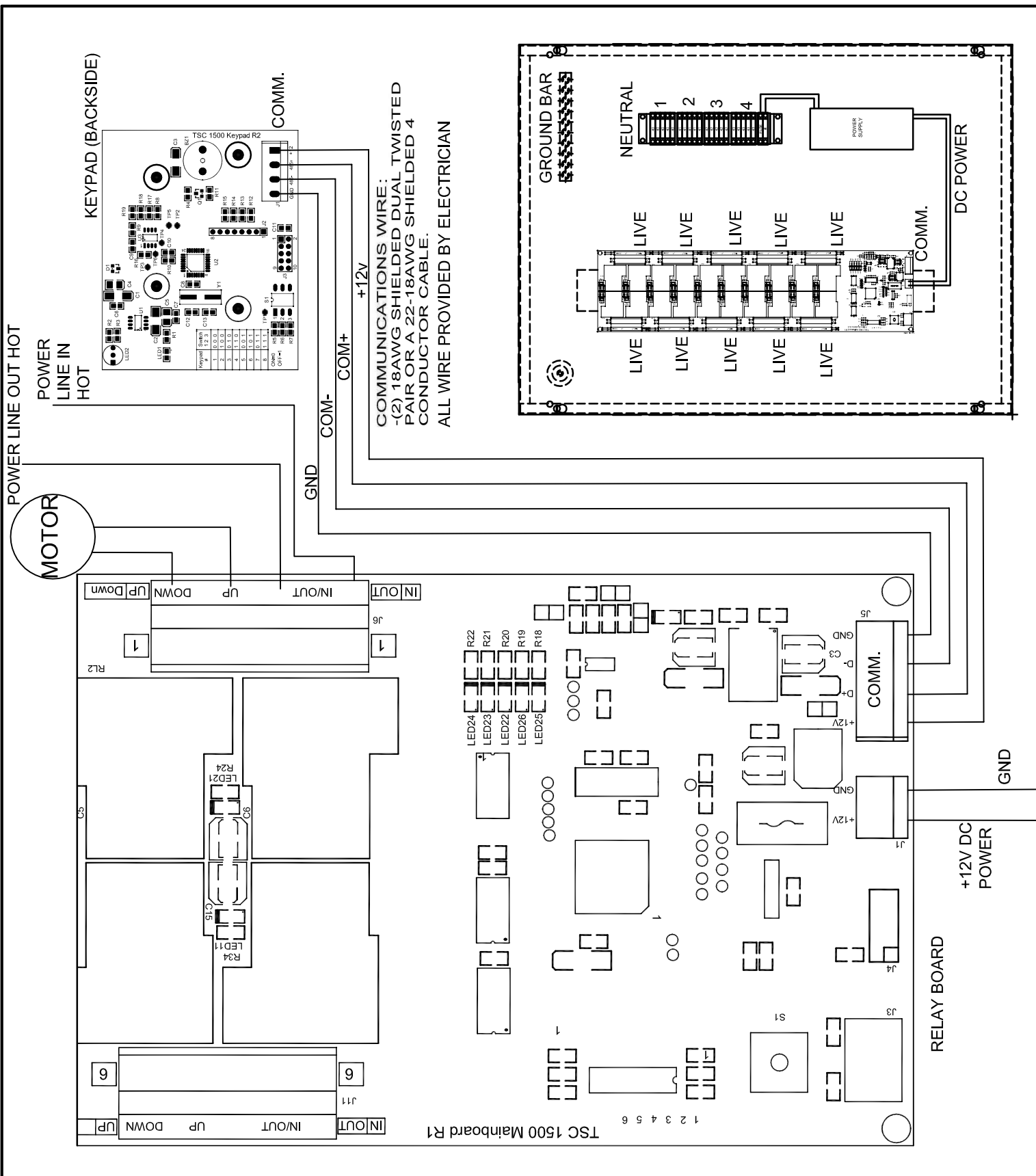
NOTE: THIS DRAWING IS FOR REFERENCE ONLY. REFER TO THE TSC INSTALLATION WIRING INSTRUCTIONS INCLUDED IN THE SUBMITTAL PACKAGE FOR SPECIFIC WIRE TERMINATION INFORMATION.

REVISION		
REV.	DATE	BY



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TSC 1500					
DRAWN	PERRY	DATE	11/5/13	MATERIAL	N/A
APPROVED		DATE		FINISH	N/A
FILE LOC. Q:\Final Release\Specifications			DWG. NO.	TSC2000	
SIZE	SCALE	SHT. NO.	PART NO.	REV	
A	NOTED	1 OF 3	TSC1500	B	



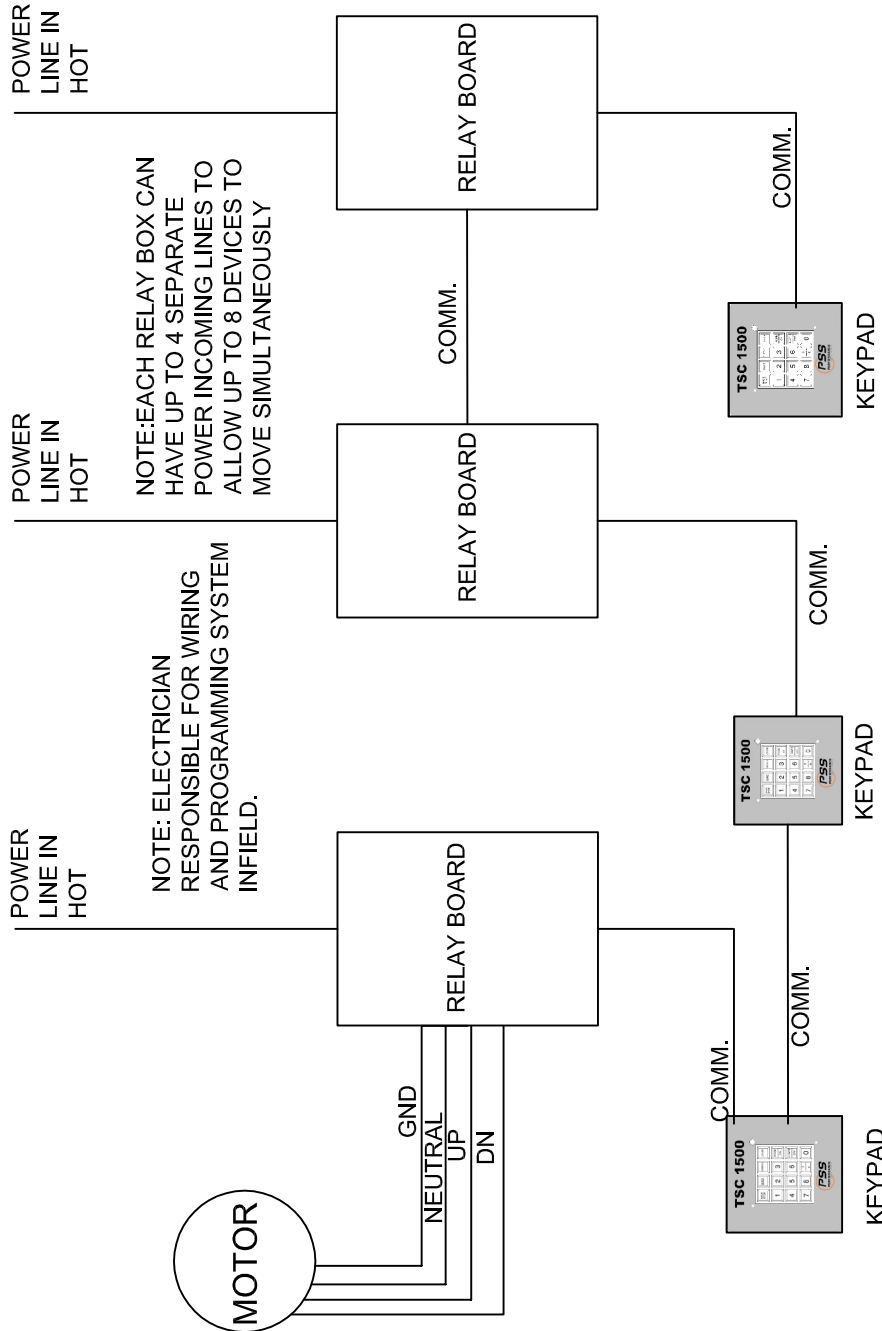
REVISION		
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TSC 1500 COMM. SCH					
DRAWN	PERRY	DATE	11/5/13	MATERIAL	N/A
APPROVED	-	DATE	-	FINISH	N/A
FILE LOC. Q:\Final Release\Specifications			DWG. NO.	TSC2000	
SIZE	SCALE	SHT. NO.	PART NO.	REV	
A	NOTED	2 OF 3	TSC1500	B	



NOTE: ELECTRICIAN RESPONSIBLE FOR WIRING AND PROGRAMMING SYSTEM INFIELD.

NOTE: EACH RELAY BOX CAN HAVE UP TO 4 SEPARATE POWER INCOMING LINES TO ALLOW UP TO 8 DEVICES TO MOVE SIMULTANEOUSLY

COMMUNICATIONS WIRE:  
 -(2) 18AWG SHIELDED DUAL TWISTED PAIR OR A 22-18AWG SHIELDED 4 CONDUCTOR CABLE.  
 ALL WIRE PROVIDED BY ELECTRICIAN  
 IMPORTANT: THE VOLTAGE PROVIDED MUST BE STABLE. IF UNSTABLE CAN CAUSE PROBLEMS WITH SYSTEM.

NOTE: COMMUNICATION WIRE CAN ALL BE DAISY CHAINED ON SYSTEM TO PROVIDE A REDUCTION IN REQUIRED WIRE. HOWEVER A SLAVE RELAY CANNOT HAVE THE +12V CONNECTED TO THE CIRCUIT. ALL POWER FOR THE KEYPADS MUST COME FROM THE MASTER RELAY BOARD TO AVOID BACKFEEDING +12V POWER.

**MOTOR ELECTRICAL REQUIREMENTS**  
 MINIMUM CIRCUIT REQUIREMENTS  
 -DEDICATED 120VAC, 1PH, 60HZ,  
 30 AMP SERVICE  
 MINIMUM FOUR CIRCUITS PER BOX OR EACH DEVICE ON ITS OWN DEDICATED CIRCUIT.  
 ALL TERMINALS ACCEPT ONLY 10GA MAX

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TSC 1500 SYSTEM SCH					
DRAWN	PERRY	DATE	11/5/13	MATERIAL	N/A
APPROVED	-	DATE	-	FINISH	N/A
FILE LOC.	Q:\Final Release\Specifications			DWG. NO.	TSC2000
SIZE	SCALE	SHT. NO.	PART NO.	TSC1500	
A	NOTED	3 OF 3		REV	B



## **TSC 1500 GYM CONTROL SYSTEM**

### **Total System Control 1500**

Wall mounted touchpad control system shall be designed as an alternate to conventional key switch type controls, to operate backstops, divider curtains, electric height adjusters, overhead volleyball systems, batting cages and power control for auxiliary gymnasium electrical equipment such as lighting, scoreboards, etc. The TSC1500 shall be capable of operating a maximum amount of 160 devices and a maximum of 50 auxiliary devices. Anything else less is not considered equal. Key pad requires constant pressure on the pad to control gym equipment. Control of auxiliary equipment only requires a single press of the pad.

The TSC 1500 shall provide a time saving control feature for multiple operations of basketball backstops, height adjusters and curtains including auxiliary devices. These devices may be operated individually or in a group up to 8 devices at a time. There will be one group type for auxiliary devices and one for standard moving devices. A moving device can be placed into a group up to the size of 8. There are a total of 75 possible moving groups the system can control and a total 24 auxiliary groups it can control. This allows having up to 8 backstops in a group or 8 curtains in a group for example or turning on 8 sets of lights. Any other system capable of less is not considered equal.

The security log in will be a four digit password. This password can be changed at any time. It can also be manually reset to factory default from the relay board. If no button has been pressed within the time window of thirty seconds the system will lock and log itself off. The TSC1500 can use a maximum of up to 8 keypads within a system. Key pad shall be flush mounted into a standard square electrical box (4" X 4" X 2 1/2") with a 12volt circuit to relay panels.

The Total System Control 1500 will include a single relay box capable of operating 10 devices. It will also be capable of running 8 devices at once if enough power has been run to the location. The system is expandable up to 16 relay boxes until 160 devices are reached. Relay circuits are capable of up to 250v with a 30 amp load. There are 20 relays per relay box. Size of each relay box is 18" wide X 24" tall X 6" deep.

The Total System Control 1500 will feature a tri color LED and a buzzer to provide feedback to the user during operation. The system shall also include an LED at the relay board to show activation of relay. The keypad is fuse protected at the master relay board for circuit protection. Control systems not utilizing an LED and buzzer will not be accepted as equal.

Wiring of all electrical components shall be in accordance with local codes, and in accordance with manufacturer's instructions. All conduit, wiring, junction boxes, and components not specified shall be furnished and installed by electrical contractor. In addition, relay panel dip switch settings and relay set programming per the facilities requirements shall be the responsibility of the electrical contractor.

One relay box can individually or simultaneously control 8 devices, regardless of type of device, if the correct amount of power is wired to the relay box.

Subject to design change and current manufacturing practices.  
Revised April 10, 2014 ©2008 Gared Holdings, LLC