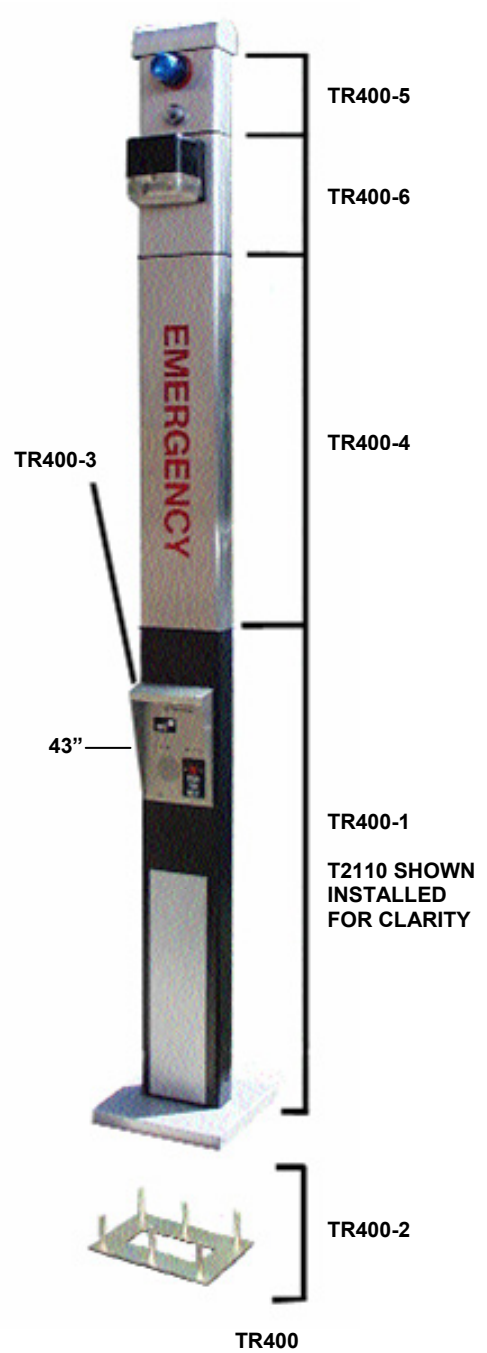
USERS GUIDE
EMS TR400 COLUMN

A HALMA GROUP COMPANY

PRODUCT DESCRIPTION

The TR400 family of products is a modular column designed for use as an emergency safety or communication device, incorporating a T21XX series phone that will activate upon the push of a pressure sensitive button. The column can be customized to include a blue light/strobe light unit and/or an area light unit.

COMPONENT ID



TR400

SPECIFICATIONS

PEDESTAL WITH CAP (TR400-1)	
Weight	85 lbs
Dimensions	Base: 16” x 16” Pedestal: 10”W x 4”D x 60”H
Pedestal Material	1/4” CRS, Black
Cap Material	1/16” St/St
Surge Suppressor Information	5 Outlet, RJ11 Protection On/Off & Reset Switches
Power	120V AC, 50/60Hz, 15A
Suppression	150V RMS AC/2470 Joules/330V UL1449
Other	Modem/Fax surge protection

BURIED BOLT KIT (TR400-2)	
Weight	10 Pounds
Concrete Pad Dimensions	2’ x 2’ x 2’ Dependent on Frost Line
Concrete Mix	1,2,4 Mixture Minimum 28 Day Comp. Strength 2,500 PSI
Wiring	Use Conduit and Ground Rod

LIGHTED PHONE HOOD (TR400-3)	
Weight	3 lbs.
Dimensions	9”W x 3”D x 14”H
LED Electrical	12 VDC
Material	1/16” St/St

EXTENSION SLEEVE (TR400-4)	
Weight	22 lbs.
Dimensions	41”
Material	1/16” St/St

STROBE/MARKER LIGHT (TR400-5)	
Weight	10 lbs.
Dimensions	10”W x 4”D x 13”H
Material	1/16” St/St
Strobe Light	60-80 Flashes/Min.
Electrical	60W Rating 75 effective candela 800,000 Peak candela
Power	120 VAC
Marker Light	Blue Lexan Housing/LED
Dimensions	4” Dia. X 3-1/2”H.
Power	12 VDC

AREA LIGHT (TR400-6)	
Weight	15 lbs.
Dimensions	10”W x 4”D x 13”H
Material	1/16” St/St
Area Light	High Pressure Sodium Shielded Wallpack
Material	Cast Aluminum Housing Clear Polycarbonate Lens
Wattage	50 W
Power	120/177 VAC
Ballast	AL-HPF
Intermatic Photosensor	K4000 Series K4021C
CSA Listed	C22.2-55 LR38068
UL Listed	773A E42722
Activation	1-5 FC “ON”; 3-15 FC “OFF” (w/o Shield)

SAFETY PRECAUTIONS

Shut off all power going to the pad before attempting any installation.

- Maintain a clean & safe environment when working in public areas.
- Constantly be aware of pedestrian traffic around the working environment.
- Ensure compliance with all applicable safety standards upon completion of installation.

PRE-INSTALLATION GUIDELINES

Prior to installing the TR400 the following guidelines must be observed:

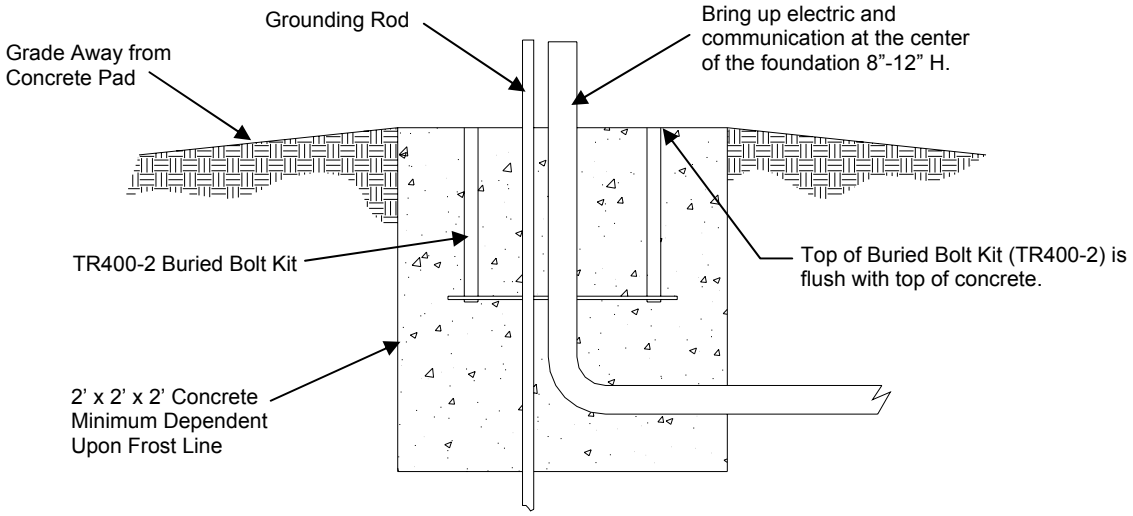
- The device must only be operated at a protected low voltage with safe electrical isolation.
- Electrical connections and materials must be in compliance with all national and local codes.
- A clean, soft cloth can be used for cleaning.
- EMS factory personnel only must make repairs to the individual modules.
- NOTE: It is the responsibility of the installer to ensure that the completed installation complies with all National and Local codes and regulations.

Tools Required for Installation

- Ratchet, preferably with short handle
- 9/16" Socket Wrench
- Phillips Head Screwdriver
- 14" Long Wobble Extension
- 1/8" Allen Wrench
- Two 12' Ladders (Column with Modules only)

BURIED BOLT KIT (TR400-2) INSTALLATION

1. Prepare a form by excavating soil required for concrete pad (2' x 2' x 2', minimum dependent upon frost line).
2. If underground wiring is being used, provide conduit and ground rod before pouring concrete.
3. Pour concrete and install Buried Bolt Kit (TR400-2) so top is flush with top of concrete. Ensure base is level.



Note: Concrete Foundation Requirements – Concrete mix (1, 2, 4 Mixture) minimum 28 day compressive strength 2,500 PSI.

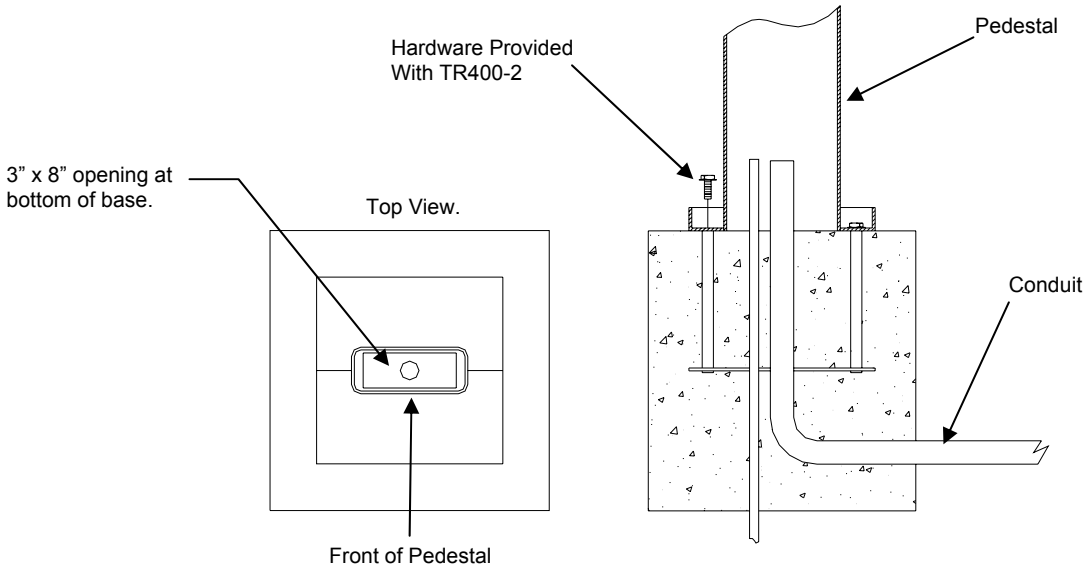
MECHANICAL INSTALLATION

PEDESTAL (TR400-1) ONLY

1. Place the pedestal as close as possible to the pad/site where the column is to be located. Slide the upper box off of the pedestal. Remove the box wrapped around the base of the pedestal. Remove both covers from the base using that #10 spanner bit. Set the covers & screws aside since they will be re-installed shortly.

2. Using the #10 bit spanner provided, remove the two screws holding the access panel on the bottom of the pedestal. Once the screws are out, grab the panel from the left side. Push it toward the right and pull it out. Set the panel and screws in a safe place nearby since you will need them to put the panel back when you are done.

3. Line the pedestal base up with the buried base holes. Using the hardware that was provided with the buried bases, secure the pedestal to the site per the diagram.



4. Take the cap and place it over the top of the pedestal. Slide one screw with lock and flat washers on it, up into the cap thru the phone compartment in the pedestal and hand-tighten it into one of the holes in the four corners on the top.

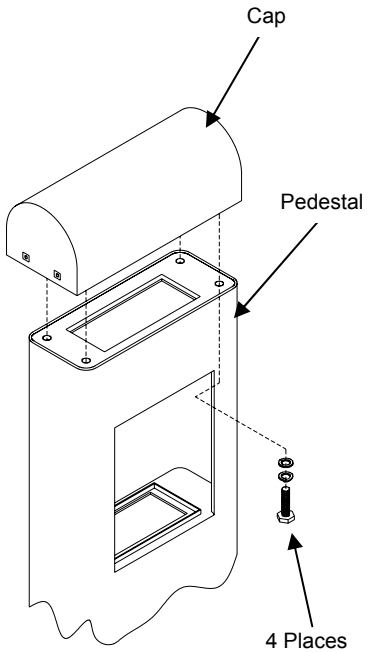
5. Install screws and washers in the remaining holes and hand tighten. Evenly align the cap and use the ratchet to tighten the screws completely.

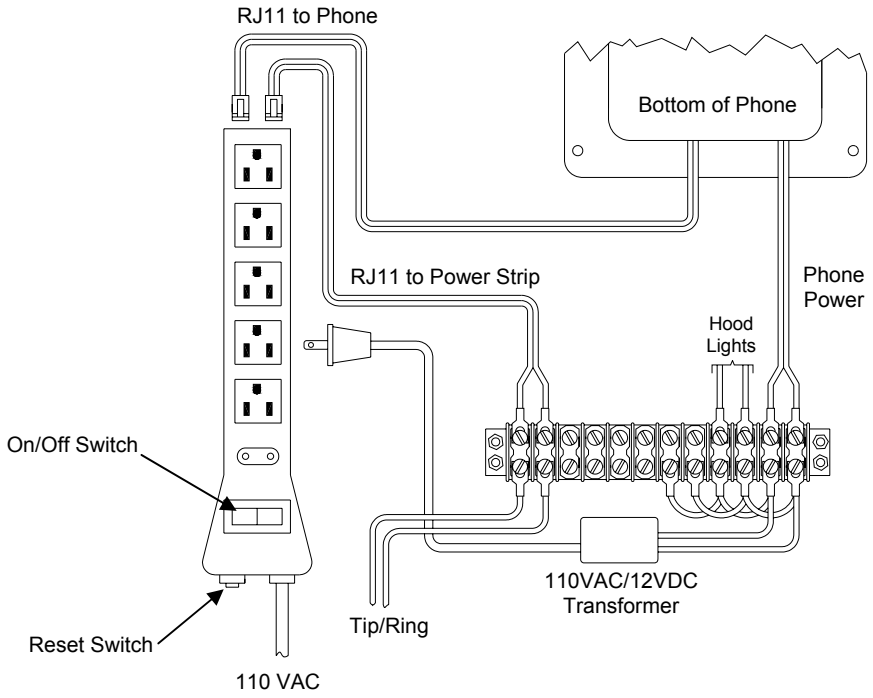
6. There should be a set of wires in the conduit for the telephone line (tip & ring) and for 120VAC power. The tip & ring lines go to the terminal strip where indicated on the label.

7. Unpack the hood and move back to the telephone opening. Lay the hood around the opening for the phone with the holes aligned.

8. Run both sets of wires for the hood lights down thru the opening at the bottom of the phone compartment. Pull the wires down from the access opening in the bottom. Using a Phillips or flat head screwdriver loosen the terminals on the strip for the hood lights. Slide each of the spade lugs into the hood lights. Polarity counts.

9. Unpack telephone (T21xx). Be sure not to throw out screws and other accessories provided with phone. Hold phone in one arm, upside down. Take the RJ-11 modular cord taped to the back of the telephone opening and plug it into the bottom of the phone. Then take the power pigtail and plug that into the power (J2) as indicated in the instruction provided with the phone.





10. Lay the phone in the hood and align it with the hood holes.

11. Take the six vandal-resistant screws provided with the phone and secure the phone and hood to the pedestal. Use the supplied #10 spanner head bit to tighten the vandal-resistant screws. The gasket behind the hood should be evenly compressed completely around.

12. Be sure the power strip switch is turned on before putting the access panel back. Put the access panel back into place, again pushing it from the left side toward the right. The panel should snap into place. Install the two screws for the panel back into place.

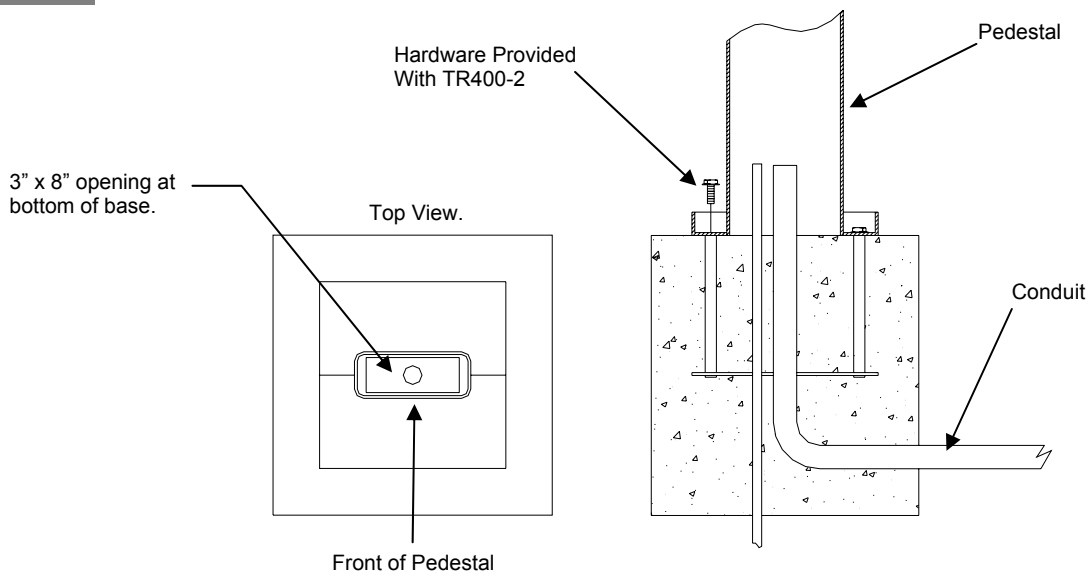
13. Once secure, place the covers over the base and secure it using the eight vandal-resistant screws provided. Installation is complete.

MECHANICAL INSTALLATION

COMPLETE COLUMN

1. Place pedestal as close as possible to the pad/site where the column is to be located. Slide the upper box off of the pedestal. Remove the box wrapped around the base of the pedestal. Remove both covers from the base using the #10 spanner head bit provided. Set the covers & screws aside since they will be re-installed shortly.

2. Using the #10 spanner head bit provided, remove the two screws holding the access panel on the bottom of the pedestal. Once the screws are out, grab the panel from the left side. Push it toward the right and pull it out. Set the panel and screws in a safe place nearby since you will need them to put the panel back when you are done.



3. Line the pedestal base up with the buried base holes. Using the hardware that was provided with the buried bases, secure the pedestal to the site per the diagram.

4. Open the boxes containing the extension sleeve, area light and strobe/marker light and remove items.

5. Stand the extension up. Be sure that the “EMERGENCY” lettering reads from the top down. Take the tools (ratchet, 9/16” bit, and 14” long extension) and four of each of the mounting hardware (3/8” bolt, 3/8” split lock, 3/8” flat washer), supplied with each module, and place them at an accessible area. The mounting hardware is the same for all the units. It is easier to slide the lock washer and flat washer on to the screws now rather than later when you are holding the area light or strobe.

6. Lay one reveal plate on top of the extension with the holes of the plate and extension lined up.

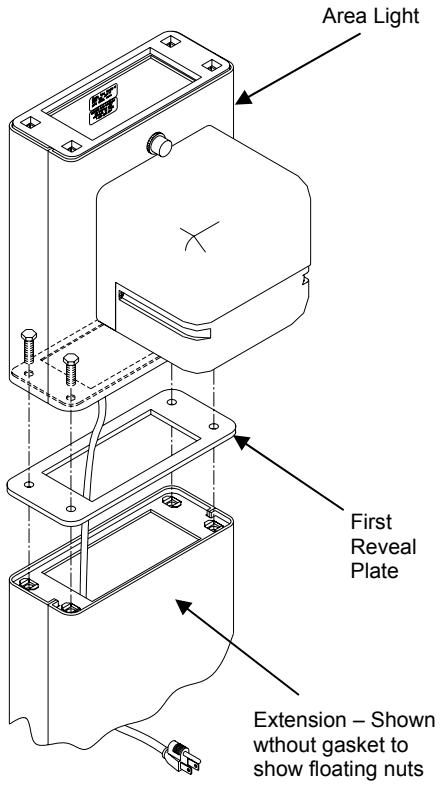
7. Take the area light and hold it in one hand while feeding the wires into the opening thru the reveal plate and extension with the other hand. The wires should drop right to the bottom of the extension.

8. Place the area light on top of the reveal plate.

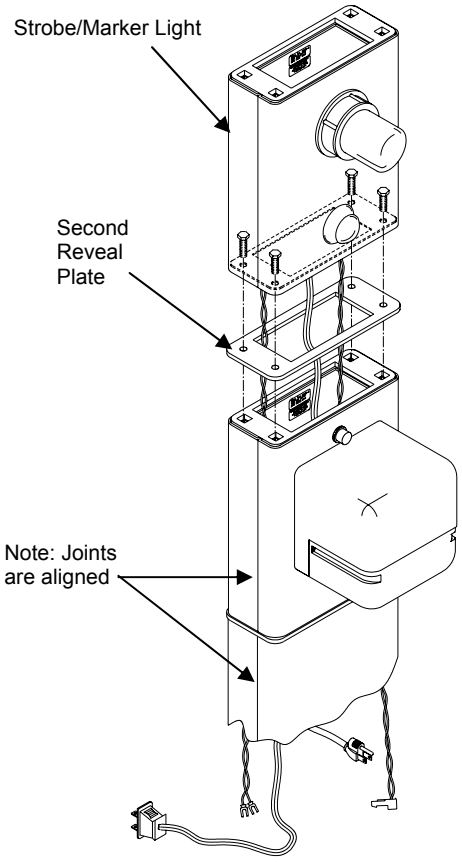
BE SURE THE JOINTS ON THE SIDES OF THE EXTENSION AND AREA LIGHT ARE ALIGNED!

9. While holding the area light in place, grab one screw with lock & flat washers already on it. Slide the screw down into the area light thru the opening in the top and hand-tighten it into one of the holes in the four corners on the bottom. Use the ratchet to tighten enough to hold the area light in place.

10. Install screws in the remaining holes. Evenly align the reveal plate, the area light and the extension sleeve and tighten the screws completely.



11. The area light should be on tight. Move the area light and confirm that it is securely in place.



12. Lift the strobe/marker light with the blue marker light up and take the wires out of the bottom of the unit. Wrap the wires around one of the screws.

13. With the extension standing, place another reveal plate on top of the area light. Line up the holes on the reveal plate with the holes on the area light.

14. Lift the strobe/marker and hold it in one arm. Put the wiring thru the reveal plate and area light and let the weight of the bolt pull the strobe/marker light wires down to the bottom of the extension.

15. Place the strobe/marker light on top of the reveal strip. This may be too high too reach with the hardware. If this is the case, angle the extension and area light toward you. Hold the strobe/marker light at the base so that it stays on top of the reveal strip. Place the area light on top of the reveal strip.

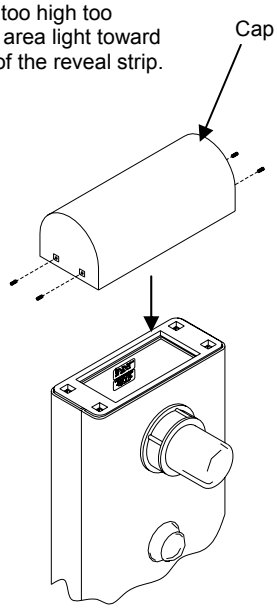
BE SURE THE JOINTS ON THE SIDES OF THE EXTENSION, AREA LIGHT, AND STROBE/MARKER LIGHT ARE ALIGNED!

16. Again, be sure the ratchet and hardware are within reach. Insert screws into each corner of the box. Once all the screws are loosely installed, tighten the screws completely.

17. The Strobe/Marker light should be on tight. Move the strobe/marker unit and confirm that it is securely in place.

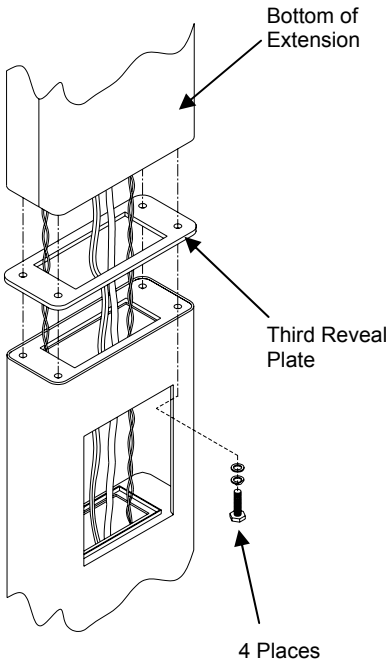
18. Install the cap on top of the assembly by tightening up the set screws in the side of the cap using the 1/8” Allen Wrench.

19. The extension and light assembly is now ready to be attached to the pedestal. Before doing so, decide whether you want the area light to function with a light sensor (so the area light turns off during the day) or whether you want the light constantly on. If you want the area light to function with the light sensor, remove the rubber cap from the sensor, located above the area light.



20. Take the third reveal strip and place it on the pedestal. Lift the extension & light assembly and line it up over the pedestal, making sure the wires fall through the opening. This assembly is top heavy so use caution when lifting it. Lower it and hold it in place.

BE SURE THAT NO WIRES ARE BEING PINCHED.



21. Thru the telephone opening in the pedestal reach up and insert a screw with lock and flat washers into one of the corners and hand tighten the bolt to secure the extension and light assembly. Do this with the other three screws. Use the ratchet to fully tighten the screws.

22. Feed the wires through opening in the bottom of the phone compartment.

23. At the access opening in the bottom of the pedestal take the wires for the marker light (they have the spade lugs on the end) and attach them to the terminal strip where the label indicates “Marker Lights” – see the wiring diagram following Step 27. Use a small Phillips head or flat head screwdriver to secure the spade lugs to the terminal strip. Be sure polarity is correct, with red attached to positive and black attached to negative.

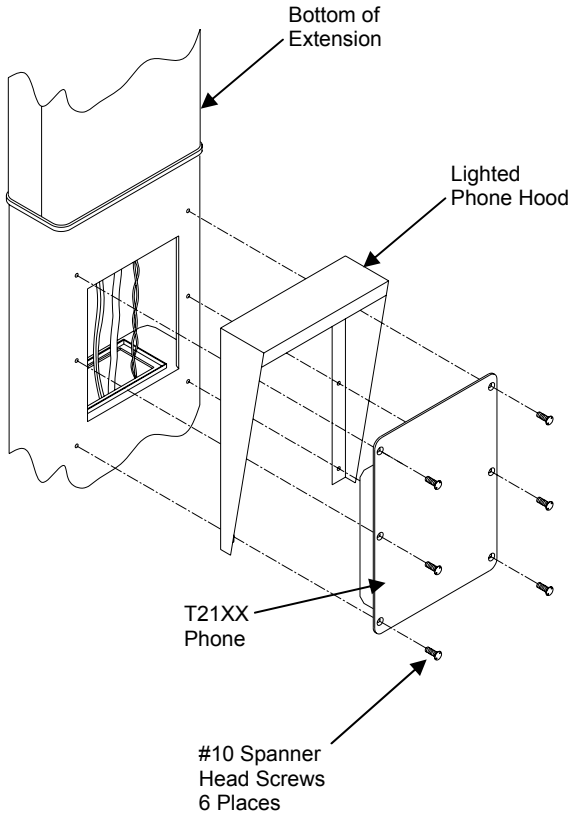
24. Plug the area light wall plug (three prong) into the power strip in the first available plug down from the top – see wiring diagram following step 27.

25. Plug the strobe light wall plug (two prong) into the power strip in the first available plug underneath the area light plug.

26. Unpack the hood and move back to the telephone opening. Lay the hood around the opening for the phone with the holes aligned.

27. Run both sets of wires for the hood lights down thru the opening at the bottom of the phone compartment. Pull the wires down from the access opening in the bottom. Using a Phillips or flat head screwdriver loosen the terminals on the strip for the hood lights. Slide each of the spade lugs into the hood lights. Polarity counts.

28. Unpack telephone (T21xx). Be sure not to throw out screws and other accessories provided with phone. Hold phone in one arm, upside down. Take the RJ-11 modular cord taped to the back of the telephone opening and plug it into the bottom of the phone. Then take the power pigtail and plug that into the power (J2) as indicated in the instruction provided with the phone. Connect the strobe trigger to the Aux 1 contacts as shown in the phone instructions.



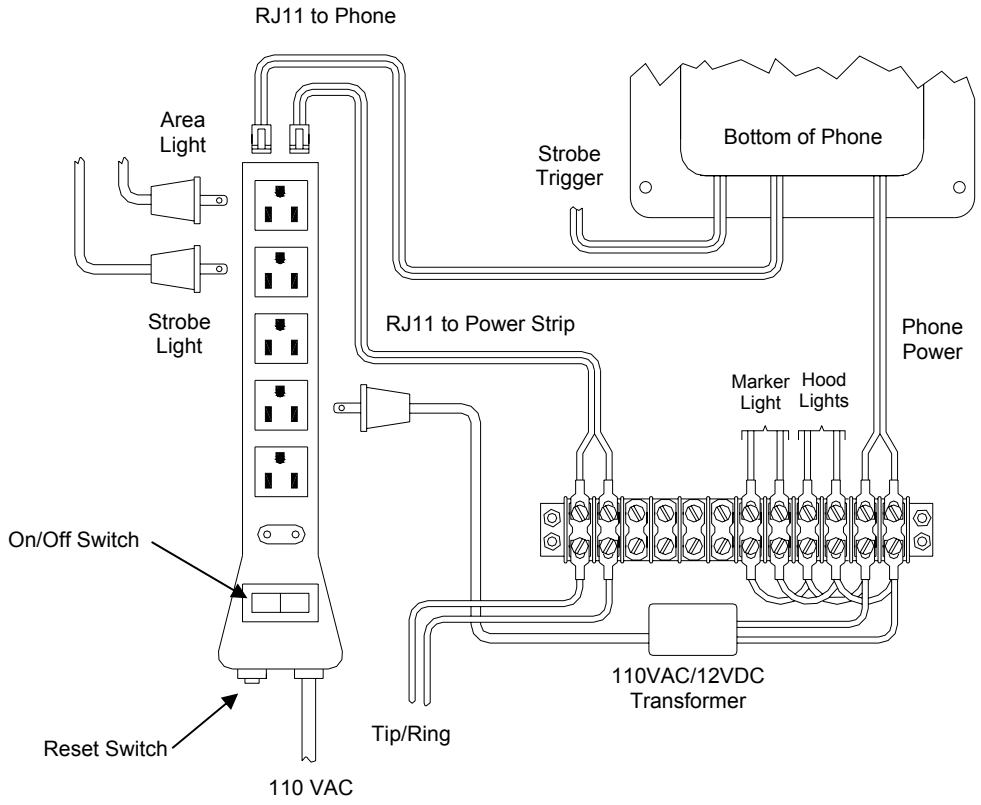
29. Lay the phone in the hood and align it with the hood holes.

30. Take the six vandal-resistant screws provided with the phone and secure the phone and hood to the pedestal. Use the supplied #10 spanner head bit to tighten the vandal-resistant screws. The gasket behind the hood should be evenly compressed completely around.

31. There should be a set of wires in the conduit for the telephone line (tip & ring) and for 120VAC power. The tip & ring lines go to the terminal strip where indicated on the label.

32. Be sure the power strip switch is turned on before putting the access panel back. Put the access panel back into place, again pushing it from the left side toward the right. The panel should snap into place. Install the two screws for the panel back into place.

33. Once the access panel is secure, place the covers over the base and secure it using the eight vandal-resistant screws provided.



Installation of the TR400 column is complete.

COMPANY CONTACT

Warranty Policy

Electronic Micro Systems Inc. (EMS) warrants its products to be free from defect in materials and workmanship under normal use and service for 12 months from date of purchase. Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor any product which proves defective in materials or workmanship under normal use and service. **EMS** shall not be responsible for any damage to the unit incurred during installation. Seller shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than EMS factory service. For warranty service, contact EMS at 631-864-4742 or 800-333-3671.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO CASE SHALL SELLER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER, EVEN IF THE LOSS IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

Return Policy

All **Electronic Micro Systems Inc. (EMS)** products are warranted to be free from defects in workmanship and material for a period of one year from the product date. Please read the warranty that accompanies every **EMS** product.

During installation, if a product does not appear to function properly the installer must call **EMS** Technical Support Unit at (800) 333-3671, Monday through Friday. If the technician determines that the product is not functioning, an **RA** (Return Authorization) number will be issued, allowing the installer to return the product directly to **EMS** for immediate replacement or credit.

Returns with no fault found, will result in a bench charge plus shipping costs. Returning the product without an **RA** number will result in a restocking charge of 15% or more plus shipping costs.