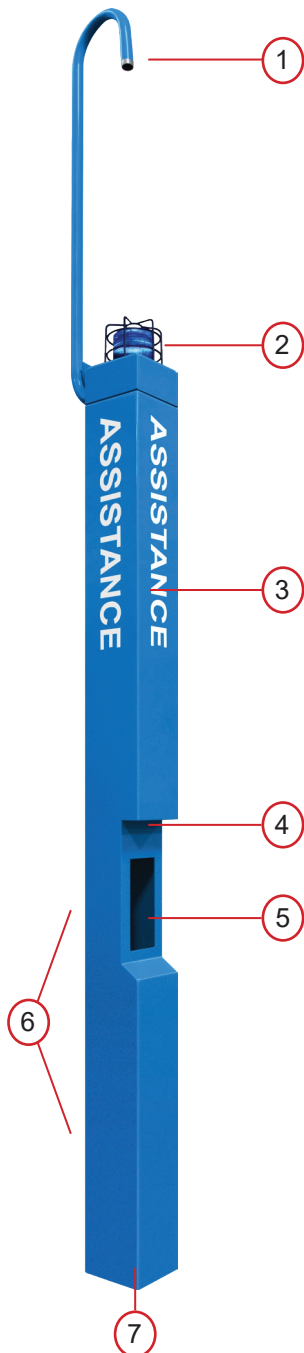# AIPHONE

TW-TA-ARM and TW-TE-ARM

Installation Instructions for Tall Aluminum Tower with Camera Arm

TW-TA-ARM and TW-TE-ARM are tall, lightweight aluminum towers with camera arms that mount third-party cameras. These towers are designed to house IX|IXG Series emergency stations. For increased visibility, the tower features either ASSISTANCE or EMERGENCY lettering, along with a strobe light and panel lighting. The tower is secured to the ground using a TW-MKL L-bracket mounting kit (sold separately). This installation manual provides instructions for tower installation, as well as wiring for lighting and the camera.

IMPORTANT: To ensure safety and prevent damage, it is recommended that any lifting of the tower be done by two people.

Names and Functions

1. Camera arm
2. Strobe light
3. EMERGENCY/ASSISTANCE lettering (4 sides)
4. Panel lighting
5. Intercom mounting receptacle
6. Access panels (back side of tower)
7. UL 514-A listed electrical box (inside base)

TW-TA/TE-ARM Package Contents

Eight 5/16-18 x 1-1/4" large button head tamper resistant screws
One T40 Torx hex bit for 5/16 screws
One T25 Torx hex bit for access panel screws
One strobe light (packaged separately)
One tower arm (packaged separately)
One container of anti-seize lubrication

TW-MKL Package Contents

Four L-bolts
Eight 3/4" hex nuts
Eight 3/4" washers
One printed template
Assembly instructions

Specifications

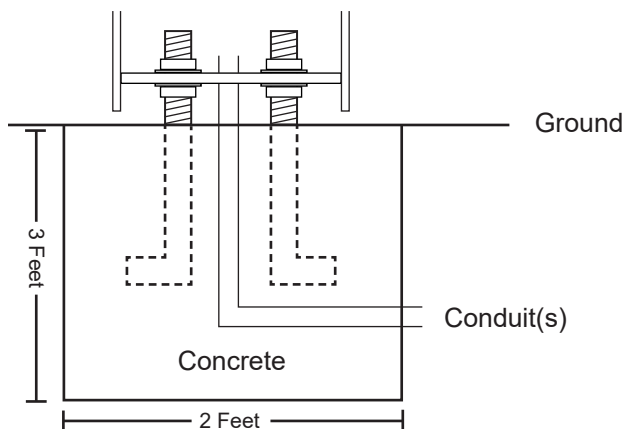|	
Material:	Aluminum 6061-T6
Dimensions:	174" H x 8" W x 8" 15-3/4" D
Weight:	80 lbs

TW-MKL Installation

Intercom and electrical wire conduits should be run through the foundation and into the center 4" diameter hole of the tower. These cables must be run separately, not in the same conduit. It is the responsibility of the installer to ensure that all applicable electrical codes are met.

Pour the foundation with a minimum square or diameter of 2' and a depth of 3'. Ensure the foundation is in accordance with local building codes and accounts for the frost line.

Install the four L-bolts below the grade with 5" projecting above the grade (see drawing below). Use the template to properly position the L-bolts within the concrete foundation.

Once the foundation has set, remove the template. Install one 3/4" hex nut and one washer on each L-bolt 2 to 2-1/2" above grade to the top of the washer. This will allow a 1/2" air gap between the foundation and tower base to allow airflow and prevent moisture problems. Verify that the nuts are level.

Ground

Conduit(s)

Concrete

3 Feet

2 Feet

i It is recommended to transfer the provided template to a piece of wood between 1/2" and 1" thick. This will make it easier to properly position the L-bolts into the poured concrete foundation.

Tower Mounting

It is recommended to install the camera arm and top plate with the light cage on the tower prior to mounting the tower onto the base.

Install the camera arm first. It is best practice to run the power and connection wires for the camera through the camera arm before mounting it to the tower. It mounts to the top of the tower with the provided 5/16" tamper resistant screws. **Apply the anti-seize lubrication to the 5/16" tamper resistant screws. These screws must be tight to ensure a water tight seal.**

Install the top plate with the light cage on top of the camera arm mount. Feed the wires for the light through the hole on the top of the tower, then fasten the top plate to the camera arm mount using the rest of the provided 5/16" tamper resistant screws. **Apply the anti-seize lubrication to the 5/16" tamper resistant screws.These screws must also be tight to ensure a water tight seal.** The strobe light will require a dedicated 24V DC power supply or the PS-POE. This will also be used to power the tower's LED illuminator, located above the intercom opening.

Remove the access panels from the tower. Carefully lift the tower onto the level hex nuts of the L-bolts, ensuring that the unit is oriented in the desired direction (access panels are on the back). Check that the tower is level at this point. Install the second set of nuts and washers on the L-bolts and carefully tighten them, securing the tower to the concrete foundation. Adjust as necessary.

i Due to the added height from the camera arm, extra wire may be needed to connect the strobe light to the power source inside the tower.

i Be sure to apply the provided anti-seize lubrication to the screws' threading before they are installed. Failure to use the anti-seize may cause corrosion and damage to the tower and screws.

Strobe Wiring

Locate the strobe wires and connect to the 24V DC power source.
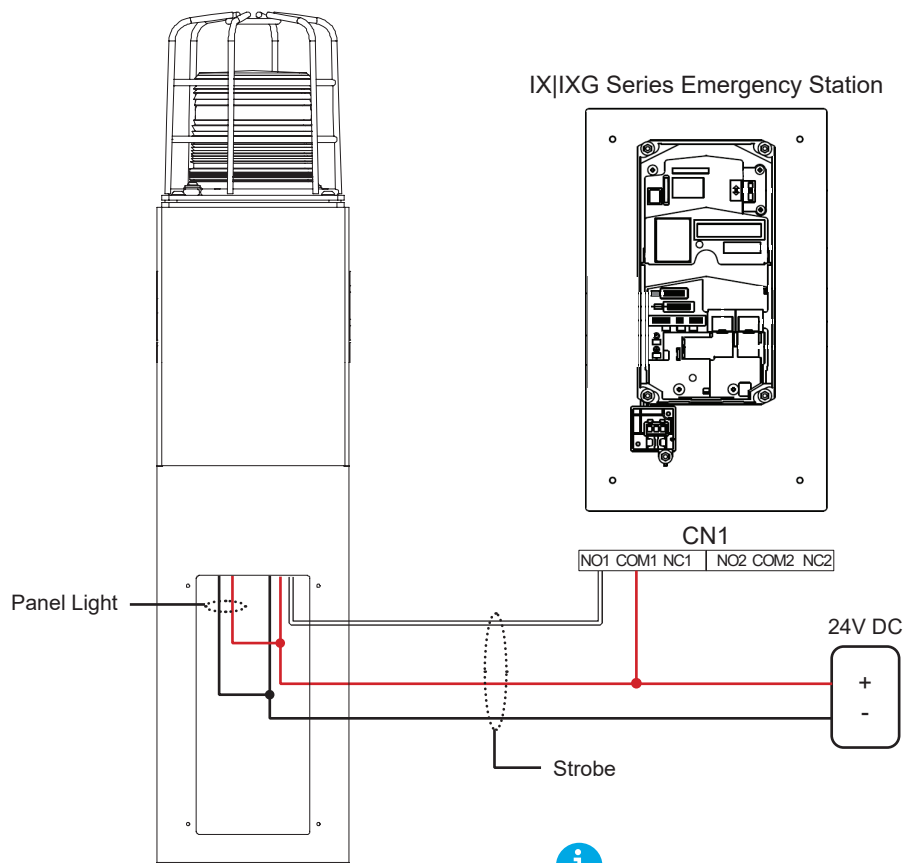Red to +24V DC (positive)
Black to -24V DC (ground)
White (trigger wire) to one side of a normally open (NO) relay on the emergency station. Connect the other side of the normally open (NO) relay to the +24V DC (positive) power source.

Locate the panel light wires and connect to the 24V DC power source.
Red to +24V DC (positive)
Black to -24V DC (ground)

IX|IXG Series Emergency Station

CN1

NO1	COM1	NC1	NO2	COM2	NC2

Panel Light

24V DC

+
-

Strobe

ℹ Once connected to 24V DC, the strobe light will be steadily lit. Manually connecting the white wire of the strobe to the 24V DC + will cause the strobe light to flash.

For more details about the features and information above, please contact Technical Support.

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