



# Surface Mounting Installation Guide

# HALO Installation Procedure

## Before You Start

Tools required include: #2 Phillips screwdriver, T10 Torx wrench (included), and some others that depend on the mounting arrangement selected.

This sheet assumes the inclusion of the standard HALO Installation Guide.

## Location

HALO Surface Mount should be located on the ceiling away from draft inducing features such as windows, A/C vents, or fans.

HALO Surface Mount may be attached directly to a ceiling, mounted to a standard electrical box, or secured to a  $\frac{1}{2}$ " NPT down pole. Wall mounting is not supported.

Direct surface mounts can be wired using WireMold B1/V500 or BWH1/V700 surface conduits, or with standard  $\frac{1}{2}$ " electrical conduit using an available adapter.

Follow the standard HALO Installation Guide location section in all other respects.

## Installation With Through-Surface Wiring

Figure-1 shows the general arrangement of the Surface Mount, wiring, and screw anchors.

Referring to Figure-2, push out the center punch-out to allow wiring to pass through (large red circle).

Using the Surface Mounting unit as a template, mark the large and small holes (4) on the surface desired.

Obtain four (4) screw anchors in #6 or #8 size.

Using suitable tools, make the marked holes in the surface for the (4) anchors and the center wire way.

Bring the connectorized shielded network connection through the hole and allow it to dangle.

If relay connections are involved, route the wiring along with the network wire.

Install the (4) screw anchors in the surface, run the network wire through the center hole, and use (4) screws to mount the Surface Mount to the surface.

Connect the network cable and carefully insert the HALO unit into the Surface Mount housing, taking care not to damage the cable. Rotate the HALO unit counterclockwise until it is felt to hit the rotation stops in the Surface Mount housing. Complete the installation and test in accordance with the standard HALO Installation Guide.

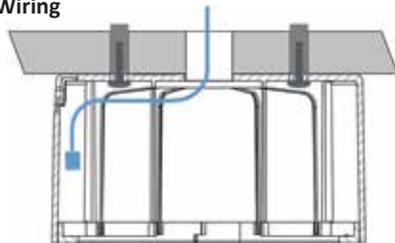


Figure-1

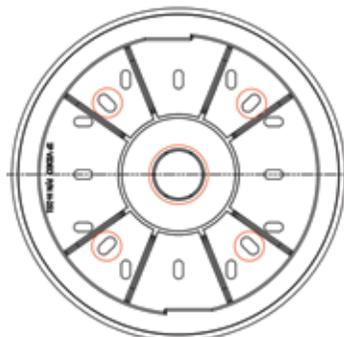


Figure-2

# HALO Installation Procedure

## Install With WireMold V500 Surface Conduit

Remove the side punch-out (3-1) from the Surface Mount.

Install the Surface Mount on the ceiling using four screw anchors (3-2) as in Page 2.

Insert V500 conduit (3-3) into the provided slot (punched-out) in the Surface Mount.

Install and connecterize shielded Ethernet cable (3-4) for data and power.

Connect the network cable and carefully insert the HALO unit into the Surface Mount housing, taking care not to damage the cable. Rotate the HALO unit counterclockwise until it is felt to hit the rotation stops in the Surface Mount housing. Complete the installation and test in accordance with the standard HALO Installation Guide.

Larger **WireMold V700** conduit may be used by manually enlarging the side punch-out (3-1) to the outer marking with a file or Dremel cutter.

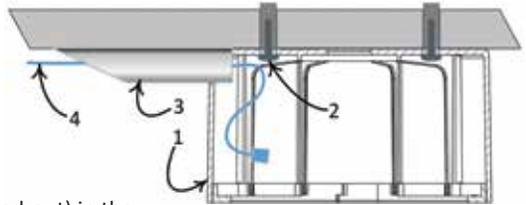


Figure-3

## Install on Ceiling Drop Pole

Remove the round center punch-out from the Surface Mount.

Install the ½" NPT (galvanized or black pipe) ceiling drop pole (4-1) as required for nominal 8 to 10 foot height from floor.

Route the shielded Ethernet cable (4-5) down through the pole and install a shielded RJ-45 plug. Leave sufficient service loop to attach the HALO later.

Install Surface Mount onto the ½" NPT pole using two ½" by ¾" washers (4-3) and two ½" NPT locking ring nuts (4-4).

Connect the network cable and carefully insert the HALO unit into the Surface Mount housing, taking care not to damage the cable. Rotate the HALO unit counterclockwise until it is felt to hit the rotation stops in the Surface Mount housing. Complete the installation and test in accordance with the standard HALO Installation Guide.

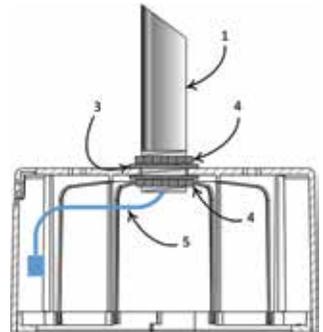


Figure-4

# HALO Installation Procedure

## Install on Ceiling Electrical Box

This mounting method is based on a standard electrical box (5-2) being installed in the ceiling (5-1), with the connectorized network cable (5-5) in place as shown. The Surface Mount hole pattern is designed to fit a variety of standard electrical utility boxes without modification.

Remove the center punch-out from the Surface Mount (5-3), run the network cable through the resulting hole, and secure the Surface Mount (5-3) to the box using either 2 or 4 properly sized machine screws (5-4) as shown.

Connect the network cable and carefully insert the HALO unit into the Surface Mount housing, taking care not to damage the cable. Rotate the HALO unit counterclockwise until it is felt to hit the rotation stops in the Surface Mount housing. Complete the installation and test in accordance with the standard HALO Installation Guide.

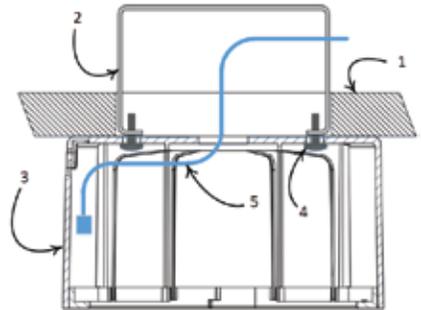


Figure-5

## Wrapping Up

The final steps are to use the HALO finder software (on a Windows computer) on the same network as the HALO unit to locate the unit on the network and change the unit's network configuration in accordance with the facility network plan.

Move on to the HALO Quick Start Guide or the HALO User Guide for more information on this topic.