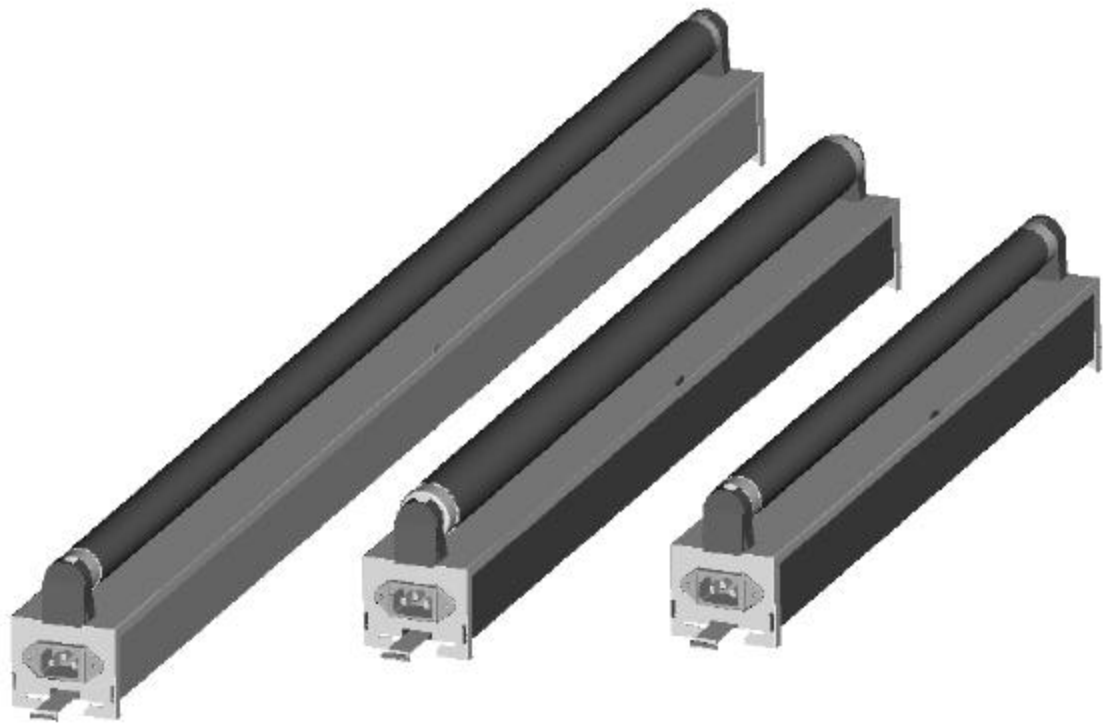


V-Mod[®] Coil Irradiator

Owner's Guide



ALTRU...V
REAL SCIENCE FOR HVAC MAINTENANCE

This page left blank intentionally

Application:

The V-Mod's flexible design allows for ease of installation in almost any system, large or small. V-Mod fixtures plug one into the other in series, in any orientation, which eliminates individual wiring to each fixture. The nominal lengths (18", 24" & 36") can accommodate almost any installation. The V-Mod functions as either a "side access" system or in a traditional "built-up bank" arrangement. This is made possible through the use of an exclusive stainless steel channel "mounting rail" and fixture design. The combination becomes an optional sliding mechanism when needed. The V-Mod may be installed to irradiate coils and drain pans where UVC degrades organic and microbial build-up to save significant energy and maintenance costs. They are also used in return and supply ducts, mixed air plenums, to irradiate filters, and in exhaust systems. Once installed, the fixture position can be permanently fixed or left to slide out of the plenum through an access panel.

Specifications

Electrical Rating

Note: Minimum 15 Amp circuit recommended for up to 15 modules.

Power Rating: 120VAC, 60Hz.

Electrical installation should be conducted by professional support personnel and in accordance with NEC regulations, and local building codes.

UVDI Fixture Part Number	Germicidal Lamp Wattage	Input Power (Amps)
17-1001 (17-1001-01)	25	.5
17-1011 (17-1011-01)	20	.5
17-1021 (17-1021-01)	30	.7

Temperature Ratings:

Ambient Temperature Range: 55° F to 135° F

Relative Humidity: Up to 95% RH, non condensing

Approvals:

Underwriters Laboratories: File no.E212213, Vol. 1, Sec. 3.

The health aspects associated with the use of this product and its ability to aid in disinfection of environmental air have not been investigated by UL.



Warning



UV-C exposure is harmful to the skin and eyes. Looking at an illuminated UV-C lamp can cause permanent blindness. UV-C skin exposure can cause cancer.

Always disconnect power receptacle before servicing. Do not operate if disconnect switch has been disabled



Hg-LAMP CONTAINS MERCURY

Manage in Accord with Disposal Laws

See: www.Altruv.com

or call: 1-877-787-3882



MERCURY NOTICE

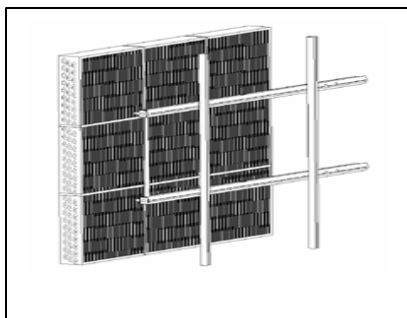
This device contains mercury in the sealed ultraviolet bulb(s). Do not place your used bulb(s) in the trash. Dispose of properly.

Product Registration

Thank you for purchasing this product from UVDI! Prior to any other installation activities, please proceed with registering you product via the web at <http://www.altruv.com> or by returning the enclosed self-addressed postcard. Product registration will insure that your warranty is handled in a proper and expeditious manner. In addition, it will allow UVDI to provide you with important updates regarding your new product including reminders of when replacement parts are needed and also make you eligible for future parts discounts.

Installation

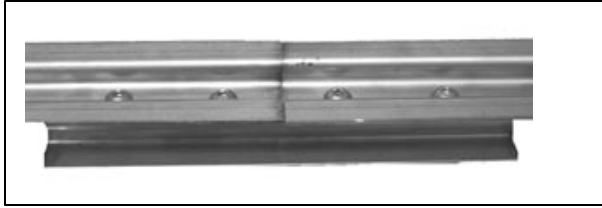
Figure 1. Typical Installation



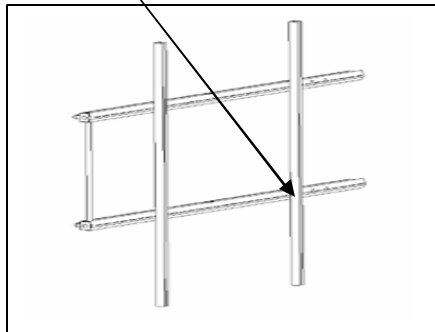
Build-Up Installation Steps:

1. Compare packing list with equipment received to confirm receipt off all equipment necessary for installation. (Consult your UVDI/Altru-V Representative or Distributor for a detailed drawing of where to properly mount rails and fixtures – See example on Page 4)
2. Measure the width of the cooling coil or target surface and the inside dimension of the plenum to insure combination of fixtures will fit in plenum.

3. Using the inside plenum dimension, measure and mark mounting rail (P/N 17-4022)
4. With appropriate saw, cut the mounting rail to length
5. If length of the combined fixtures is longer than a single mounting rail, the Mounting Rail will need to be spliced together (see example).

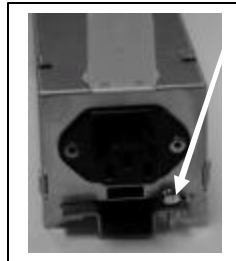


6. Vertical supports (not supplied) will be necessary to mount the rail. The rail can overhang the vertical supports by no more than 20". Mount vertical supports roughly 12"-15" from face of



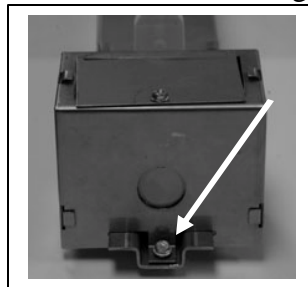
target surface.

7. Secure mounting rail to vertical support using a bolt and pre-punched holes in mounting rail.
8. On the Rail end opposite the power source, insert a sheet metal screw into the rail to act as a stop



for the fixtures.

9. Slide correct combination of fixtures onto mounting rail(s) so that the male end of the fixture plugs into the female end of the next. Repeat until all fixtures are mounted on rail.
10. At the terminal end of the fixture row, slide the Hard-Wire Module (P/N 17-4018) onto the rail, plugging its male end into the female end of the last fixture. Using the screw provided secure the



Hard-Wire Module to the mounting rail.

11. Repeat steps 7-10 until each row is complete

12. The Hard-Wire Module was designed for hardware connection to 120V/60Hz circuit and will accept standard ½” conduit fittings.
13. Electrical installation should be conducted by professional support personnel and in accordance with NEC regulations, and local building codes.
14. Remove the Hard Wire Module cover to provide access. Power to fixtures should be run through a safety switch(s) that will cause the UV fixtures to be shut-down if the space is accessed.

▲ IMPORTANT: ALWAYS RUN POWER SUPPLY THROUGH ELECTRICAL INTER-LOCK SWITCH SO POWER TO FIXTURES IS CUT-OFF WHEN SPACE IS ACCESSED.

15. Caution/Safety warning labels are provided with each lamp fixture. LABELS MUST BE AFFIXED TO ANY ACCESS PANEL OR DOOR TO WARN PERSONNEL THAT UV EQUIPMENT IS INSTALLED.

▲ WARNING: UV-C EXPOSURE IS HARMFUL TO SKIN AND EYES. LOOKING AT ILLUMINATED UV-C LAMPS CAN CAUSE BLINDNESS AND SKIN DAMAGE.

16. Insert lamps.

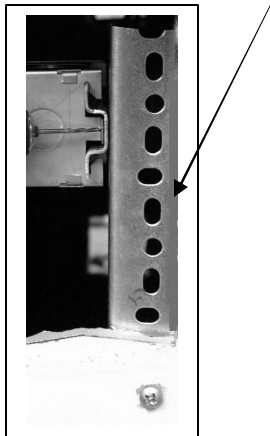
▲ IMPORTANT: UVC LAMPS SHOULD BE REPLACED EVERY 12 MONTHS (8760 HRS).

Side Mount Installation Steps:

1. Identify location Mounting Rail and fixtures will be located (roughly 12"-15" from face of target surface is the optimum location). If there is no access to area, create an access hole and use V-Mod Access /View port Accessory (P/N: 17-4023) or V-Mod Access Door (P/N: 17-4028)



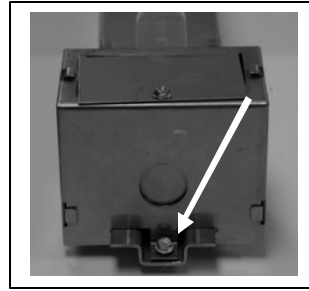
2. Measure the width of the cooling coil or target surface and the inside dimension of the plenum to insure combination of fixtures will fit in plenum.
3. Using the inside plenum dimension, measure and mark mounting rail (P/N 17-4022)
4. With appropriate saw, cut the mounting rail to length.
5. If length of the combined fixtures is longer than a single mounting rail, the Mounting Rail will need to be spliced together (see example pg. 1).
6. Vertical supports (not supplied) will be necessary to mount the rail. The rail can overhang the vertical supports by no more than 20", or it can be directly mounted the inside of the plenum.



(Note: Mount vertical supports roughly 12"-15" from face of target surface).

7. Secure mounting rail to vertical support through pre-punched holes using a bolt. (Note: "notched" edge of rail should be bottom edge when mounted to vertical support to insure proper sliding of fixtures)

8. On the opposite end of the rail from the access door, slide the Hard-Wire Module (P/N 17-4018)



onto the rail and secure using the screw provided.

9. Slide correct combination of fixtures onto mounting rail(s) so that the female end goes on the rail first. As fixtures “stack-up” slide down rail unit fixture end “plugs” into Hard Wire Module at the opposite end of the unit.
10. Repeat steps 7-10 until each row is complete.
11. The Hard-Wire Module was designed for hardware connection to 120V/60Hz circuit and will accept standard 1/2” conduit fittings.
12. Electrical installation should be conducted by professional support personnel and in accordance with NEC regulations, and local building codes.
13. Remove the Hard Wire Module cover to provide access. Power to fixtures should be run through a safety switch (s) that will cause the UV fixtures to be shut-down if the space is accessed.
14. Caution/Safety warning labels are provided with each lamp fixture. LABELS MUST BE AFFIXED TO ANY ACCESS PANEL OR DOOR TO WARN PERSONNEL THAT UV EQUIPMENT IS INSTALLED.

▲ IMPORTANT: ALWAYS RUN POWER SUPPLY THROUGH ELECTRICAL INTER-LOCK SWITCH (P/N 18-6001) SO POWER TO FIXTURES IS CUT-OFF WHEN SPACE IS ACCESSED.

15. Insert lamps.

Replacement Lamps

UVDI Fixture Part Number	Replacement Lamp Part Number
17-1001 (17-1001-01)	17-2926-80-01
17-1011 (17-1011-01)	17-1334-05-01
17-1021 (17-1021-01)	17-3601-64-01

Click to Return

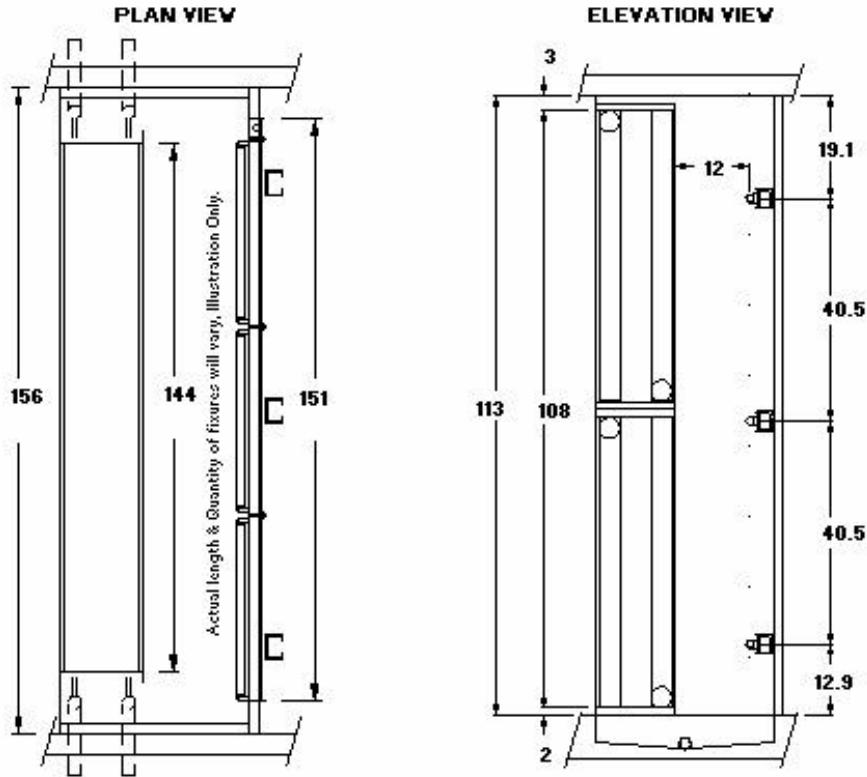
ALTRU...V

SD-1/85, Rev. 9

REAL SCIENCE FOR HVAC MAINTENANCE V-Mod™ Smart-Draw, 3 Row Drawing & Parts List

Project Name:
 Location:
 Contact:
 AHU Tag:

Date & Time: Wednesday, April 20, 2005 4:32 PM
 Engineer:
 Contractor:
 UYDI Rep:



APD @ CFM = 0.03

TOTAL WATTS / AMPS = 780/6.51

PARTS PER UNIT

Model #	Part #	Description	Qty	Weight
VM-18-120	17-1001	V-Mod™ 18 - 120 - S/S Modular Coil Irradiator with Lamp Installed	0	0
VM-24-120	17-1011	V-Mod™ 24 - 120 - S/S Modular Coil Irradiator with Lamp Installed	0	0
VM-36-120	17-1021	V-Mod™ 36 - 120 - S/S Modular Coil Irradiator with Lamp Installed	12	72
HWR-120V	17-4018	V-Mod™ S.S. Hard-wire Modular 120v (1 for each Row)	3	3
N/A	N/A	None	0	0
N/A	N/A	None	0	0
N/A	N/A	None	0	0
MR-96	17-4022	V-Mod™ S/S Mounting Rails (8' Lengths - 2 per Box)	3	30
UYDI-FR	18-6004	UYDI - Fixed Radiometer (1 Per Bank of Lamps)	0	0
UYDI-SS	18-6001	Safety Switch For Accesses - 120Vac	1	5
GVP	17-4013	Glass View Port Assembly	0	0
VM-AD	17-4028	V-Mod™ Access Door (8" x 8")	0	0
VM-AVD	17-4023	V-Mod™ Access/View port Door (8" x 8")	0	0
				110 Lbs.

Example: V-Smart Draw™ with bill of materials.

NOTES

Equipment Warranty

UltraViolet Devices, Inc. (UVDI), warrants to original Buyer for one year from the date of original installation, or eighteen (18) months from date of shipment, whichever comes first, that its goods are free from defect in material and workmanship under normal use and service. *UVDI's* obligation under this warranty shall be limited to the repair or replacement of those goods which prove defective, provided that such products are installed, maintained, and operated for the purpose and in the manner intended and for which *UVDI* instructs or recommends. Neither *UVDI* nor its dealers shall be liable for any special or consequential damages directly or indirectly arising from the design, construction, installation, servicing, or operation of the goods. THIS IS *UVDI'S* SOLE WARRANTY. NEITHER *UVDI* NOR ITS DEALERS MAKE ANY OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED *UVDI'S* AFFORESTATED OBLIGATIONS ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS WARRANTY.

UVDI AND ITS DEALERS' LIABILITY UNDER THIS WARRANTY SHALL IN NO EVENT EXCEED THE COST OF THE GOODS SOLD UNDER THIS CONTRACT OF SALE. *UVDI* neither assumes, nor authorizes any person to assume for it, any obligation in connection with the goods. This warranty shall not apply to any goods (a) which have been subjected to misuse, tampering, negligence, or accidents; or (b) the serial numbers of which have been altered, defaced, or removed; or (c) which have been used in a manner contrary to *UVDI's* instructions or recommendations. Buyer shall not return to *UVDI* any allegedly defective goods without *UVDI's* prior written authorization. This warranty may not be assigned or transferred.

Product Registration

It is highly recommended that you register your product via the web at <http://www.altruv.com/> or return the enclosed self-addressed postcard to *UVDI*. Product registration will insure that your warranty is handled in a proper and expeditious manner. In addition, it will allow *UVDI* to provide you with important updates regarding your new product including reminders of when replacement parts are needed and also make you eligible for future parts discounts.



Manufactured by:



26145 Technology Drive
Valencia, CA 91355
(877) PUREUVC
(661) 257-4698 fax

www.uvdi.com & www.altruv.com

*Specifications subject to change without notice.
©Altru-V and V-Mod are brands owned by UVDI.
Copyright © 2003 by UltraViolet Devices, Inc. All rights reserved.*

This page left blank intentionally