



Fiber Optic Ethernet Media Converter Kit

VG4-SFPSCKT



BOSCH

en Installation Manual

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1 Important Safety Instructions

Read, follow, and retain all of the following safety instructions. Heed all warnings on the unit and in the operating instructions before operation.

1. Clean only with a dry cloth. Do not use liquid cleaners or aerosol cleaners.
2. Adjust only those controls specified in the operating instructions.
3. Operate the unit only from the type of power source indicated on the label.
4. Use only replacement parts specified by the manufacturer.
5. Install in accordance with the manufacturer's instructions in accordance with applicable local codes.

Use only attachments/accessories specified by the manufacturer. Equipment change or modification could void the user's guarantee or authorization agreement.



Danger!

High risk: This symbol indicates an imminently hazardous situation such as “Dangerous Voltage” inside the product.

If not avoided, this will result in an electrical shock, serious bodily injury, or death.



Warning!

Medium risk: Indicates a potentially hazardous situation.

If not avoided, this could result in minor or moderate bodily injury.



Caution!

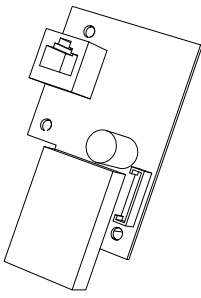
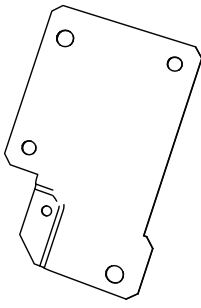
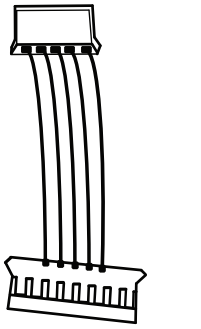
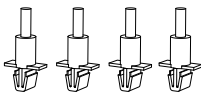
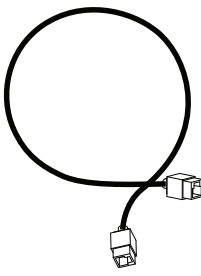

Low risk: Indicates a potentially hazardous situation.

if not avoided, this could result in property damage or risk of damage to the unit.

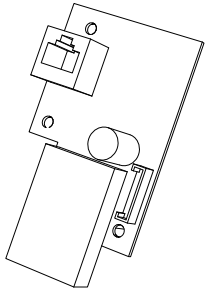
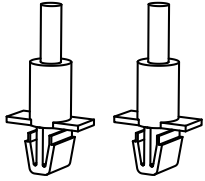
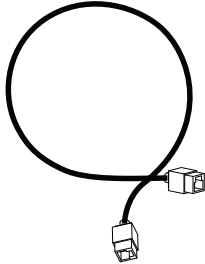
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2 Parts List

For an AUTODOME camera and for an EXTEGRA camera, the following parts are included in the kit of the fiber optic module:

Part	Description	Part Number
	Fiber Optic Media Converter Module (with SFP socket)	F.01U.139.350
	Metal adapter plate	F.01U.138.662
	Power harness (black)	F.01U.026.085
	Four (4) Plastic standoff pins	F.01U.073.233
	Ethernet patch (jumper) cable (blue) with RJ45 connectors	F.01U.032.132
	One (1) M2.5 Phillips pan screw	F.01U.009.951

For a MIC camera, the following parts are included in the kit of the fiber optic module:

Part	Description	Part Number
	Fiber Optic Media Converter Module	F.01U.139.350
	Fiber cable (gray)	F.01U.xxx.xxxx
	Two (2) Metal standoff pins	F.01U.073.233
	Ethernet patch cable (blue) with RJ45 connectors	F.01U.032.132

3 System overview

This guide provides instructions for installing the Bosch VG4-SFPSCKT Fiber Optic module into a VG4-A-PA1, VG4-A-PA2, VG4-A-PSU1 or a VG4-A-PSU2 AutoDome power supply box, or into one of the following MIC IP power supply units: MIC-IP-PS-115, MIC-IP-PS-24, MIC-IPIR-PS-115, MIC-IPIR-PS-230, MIC-IPIR-PS-24.

The VG4-SFPSCKT is a unique media converter module for use with a VG4 or VG5 series AutoDome incorporating the Ethernet (TCP/IP) Communications Module, or with a MIC IP power supply unit. This media converter module is designed to accept any of the 10/100 Mbps Small Form-factor Pluggable (SFP) modules described below.

The media converter module along with the SFP module is user installed directly into the power supply box of the AutoDome or MIC camera to provide an integrated fiber optic solution.

The Fiber Optic module accepts the following SFP modules:

Sub-module	Fiber Type	Optical Interface
SFP-2	MMF	Duplex LC
SFP-3	SMF	Duplex LC
SFP-25	MMF	Single SC
SFP-26	MMF	Single SC



Notice!

The SFP module is not included with the VG4-SFPSCKT kit; it must be purchased separately.

The SFP-25/SFP-26 modules are counterparts; if you use one in the VG4-SFPSCKT module then you must use the other in the CNFE2MC head-end unit. For example, SFP-25 is used in the VG4-SFPSCKT module installed into a VG4 power supply. You must use the SFP-26 module in the CNFE2MC head-end unit.

The following chart lists the compatibility between the SFP modules:

SFP Sub-module used in VG4-SFPSCKT	Use this SFP Sub-module in CNFE2MC
SFP-2	SFP-2
SFP-3	SFP-3
SFP-25	SFP-26
SFP-26	SFP-25

4 Install for an AUTODOME camera

Use the following instructions to install the VG4-SFP5CKT Fiber Optic module inside a VG4 Power Supply Box for an AUTODOME camera.

1. Unpack the fiber optic module kit, and remove the parts from the bag.
2. Turn off the power to the VG4 power supply box and remove the cover.
3. Remove the 6-pin connector from the P106 connector inside the power supply box, if present.



Figure 4.1: P106 connector with 100 Ohm resistor

4. Insert one plastic standoff pin into the hole on the main power supply board, located to the left of the P107 (Heater) connector.

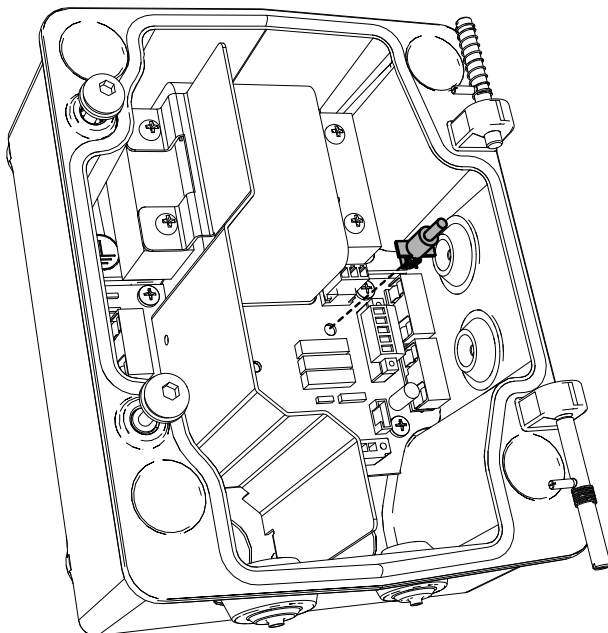


Figure 4.2: Insert standoff pin into power supply board

5. Connect the supplied power harness (black) to the J103 socket on the power supply board, located below the Heater connector.

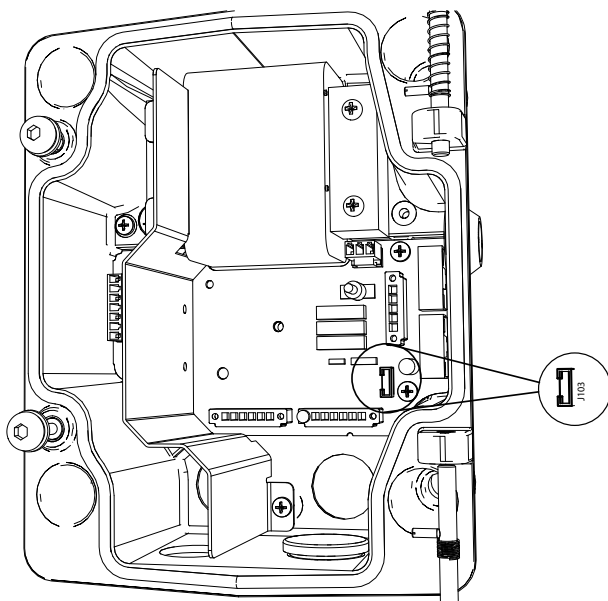


Figure 4.3: J103 socket location

6. Insert three standoff pins into the metal base plate as shown below.

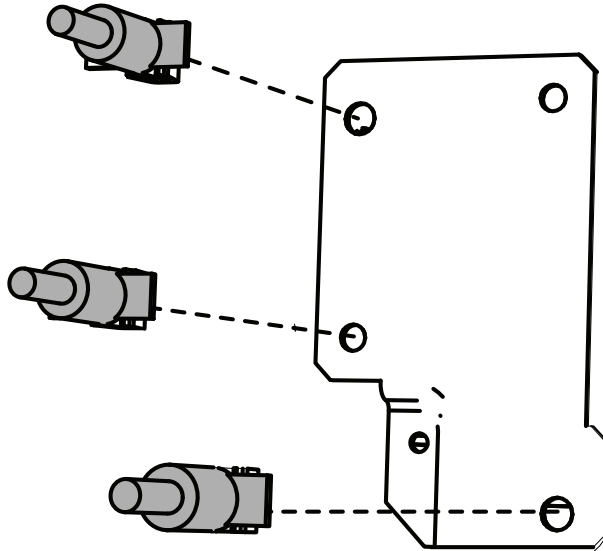


Figure 4.4: Placement of standoff pins in base plate

7. Align the upper right hole in the base plate to the standoff pin attached to the power supply box and press the base plate onto the pin. Secure the base plate with the supplied screw in the lower left hole of the P105 connector.

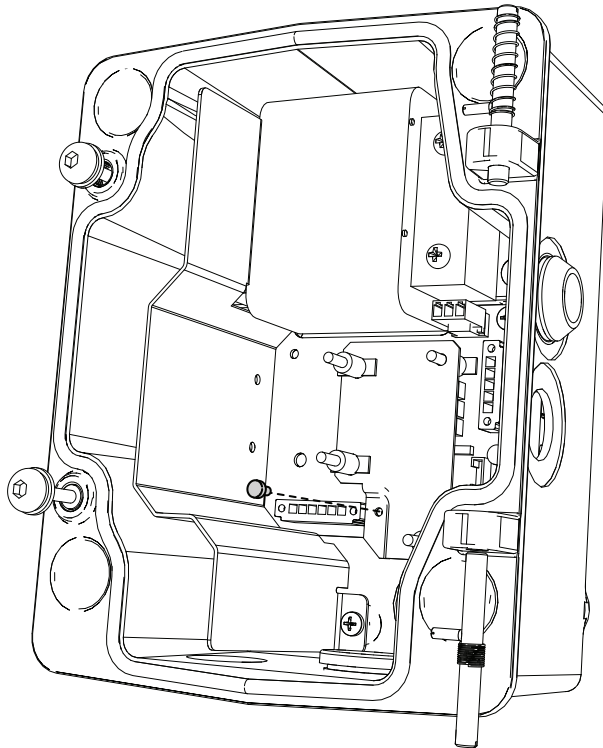


Figure 4.5: Attach base plate to power supply box

8. Insert the SFP module into the VG4-SFPSCKT module:
 - Note:** The SFP module is static sensitive. Use static handling procedures when installing or removing the module.
 - Ensure that the bale-clasp on the SFP module is up.
 - Line up the SFP module with the port on the VG4-SFPSCKT module and slide it into the port until you hear the catches engage.
9. Remove the rubber plug from the SFP module.

10. Align the anchor holes on the fiber optic module to the standoff pins on the base plate and press the module onto the standoff pins until secure.

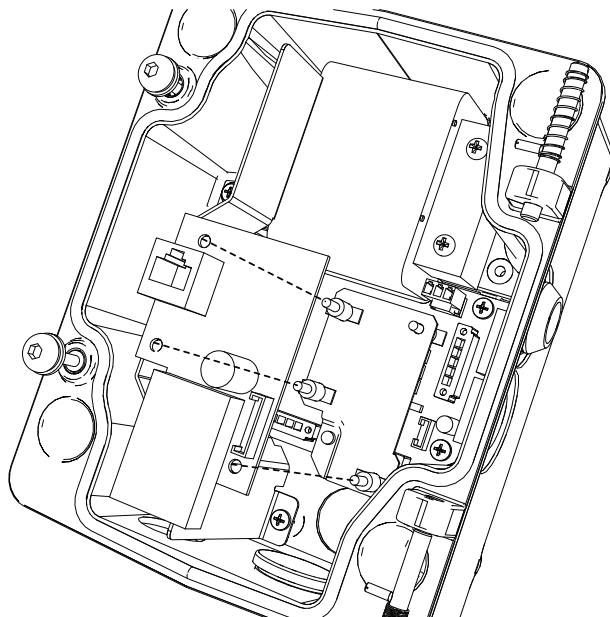


Figure 4.6: Attach Fiber Optic board to base plate

11. Attach the supplied power harness (black) to its connector on the fiber optic module.
12. Connect the RJ45 Ethernet patch cable (blue) to its socket on the fiber optic module. Then attach the other end to the female mating connector in the AUTODOME pendant arm.

Note: If installing a Pipe- or Roof-mounted AUTODOME, you will need to provide the appropriate length Ethernet cable with RJ45 connectors to reach between the AUTODOME and the power supply box.

13. Route the appropriate fiber optic cable through the conduit hole (2) on the power supply box that is in-line with the VG4-SFP SCKT module (1).

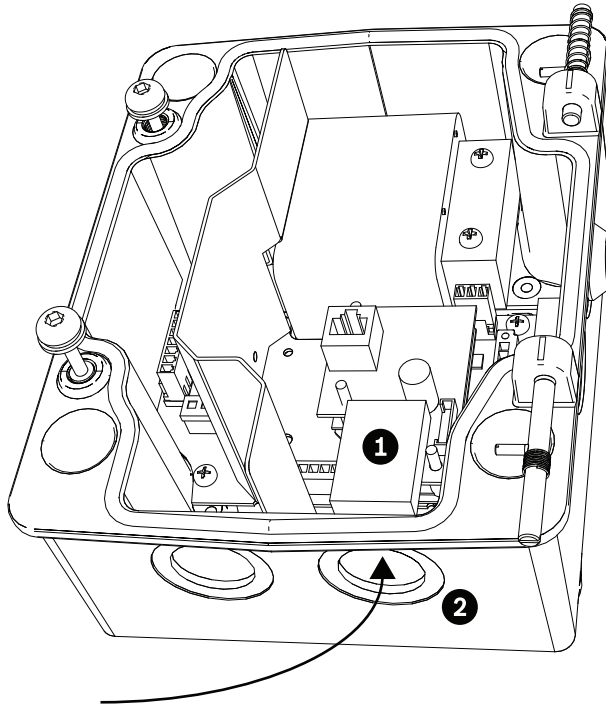


Figure 4.7: Route cable into power supply box

14. Plug the fiber optic cable (LC or SC connector) into the SFP module inside the power supply unit.
15. Close and secure the power supply box when finished.
16. Restore the power to the power supply box.

5 Install for a MIC analog camera

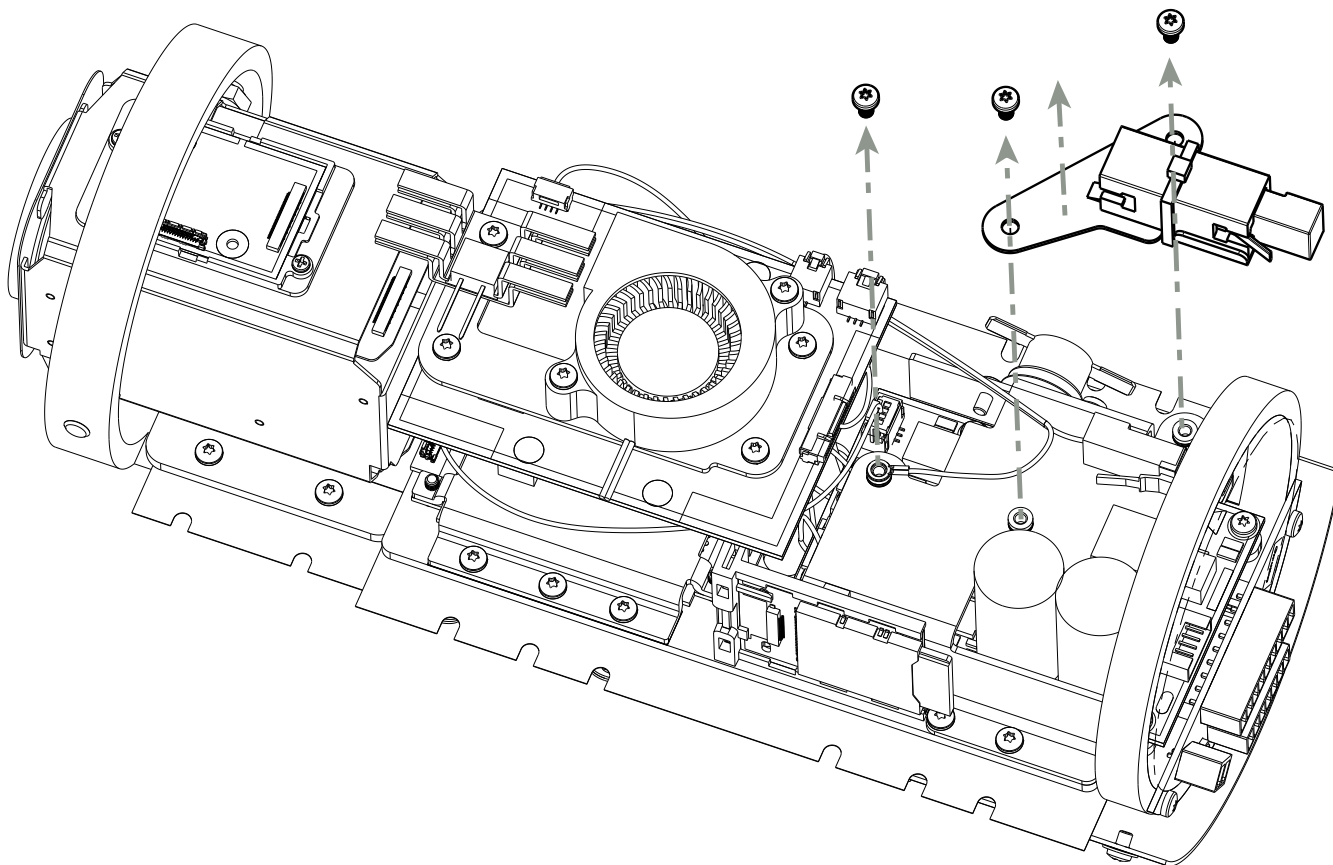
Use the following instructions to install the VG4-SFPSCKT Fiber Optic module inside a MIC IP Power Supply to provide fiber optic connections for a MIC550, MIC550IR, or MIC612 camera.

1. Unpack the fiber optic module kit, and remove the parts from the bag.
2. Reverse the fiber board module.
3. Connect the RJ45 cable to the fiber board.
4. Align the anchor holes on the fiber optic module to the standoff pins on the base plate, and then press the module onto the standoff pins until secure.
5. Fix the fiber board PCBA.
6. Connect the fiber cable.
7. Continue installation of the PSU as necessary, and then close and secure the power supply enclosure.

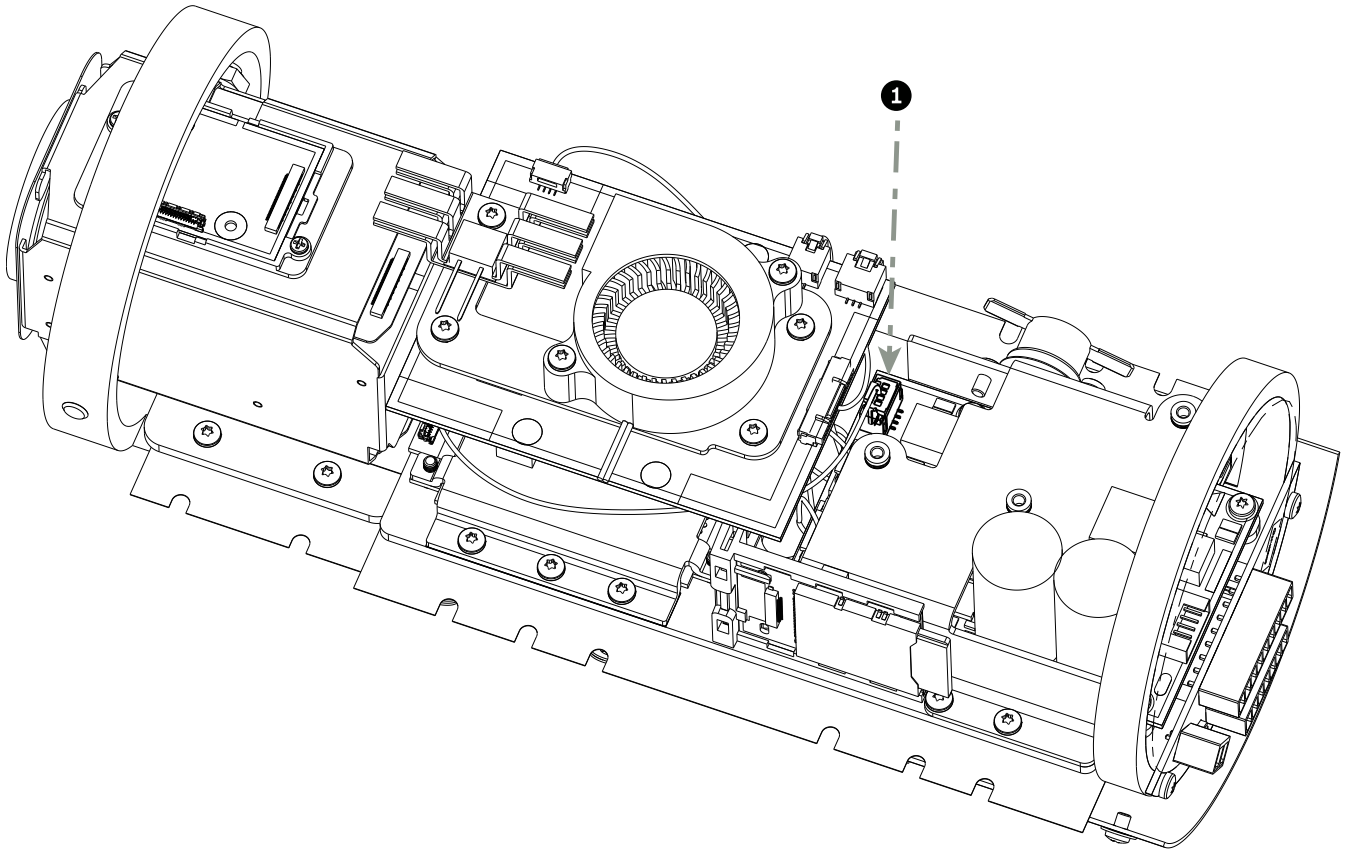
6 Install for an EXTEGRA IP 9000 FX camera

Use the following instructions to install the VG4-SFP5CKT Fiber Optic module inside an EXTEGRA IP 9000 FX camera.

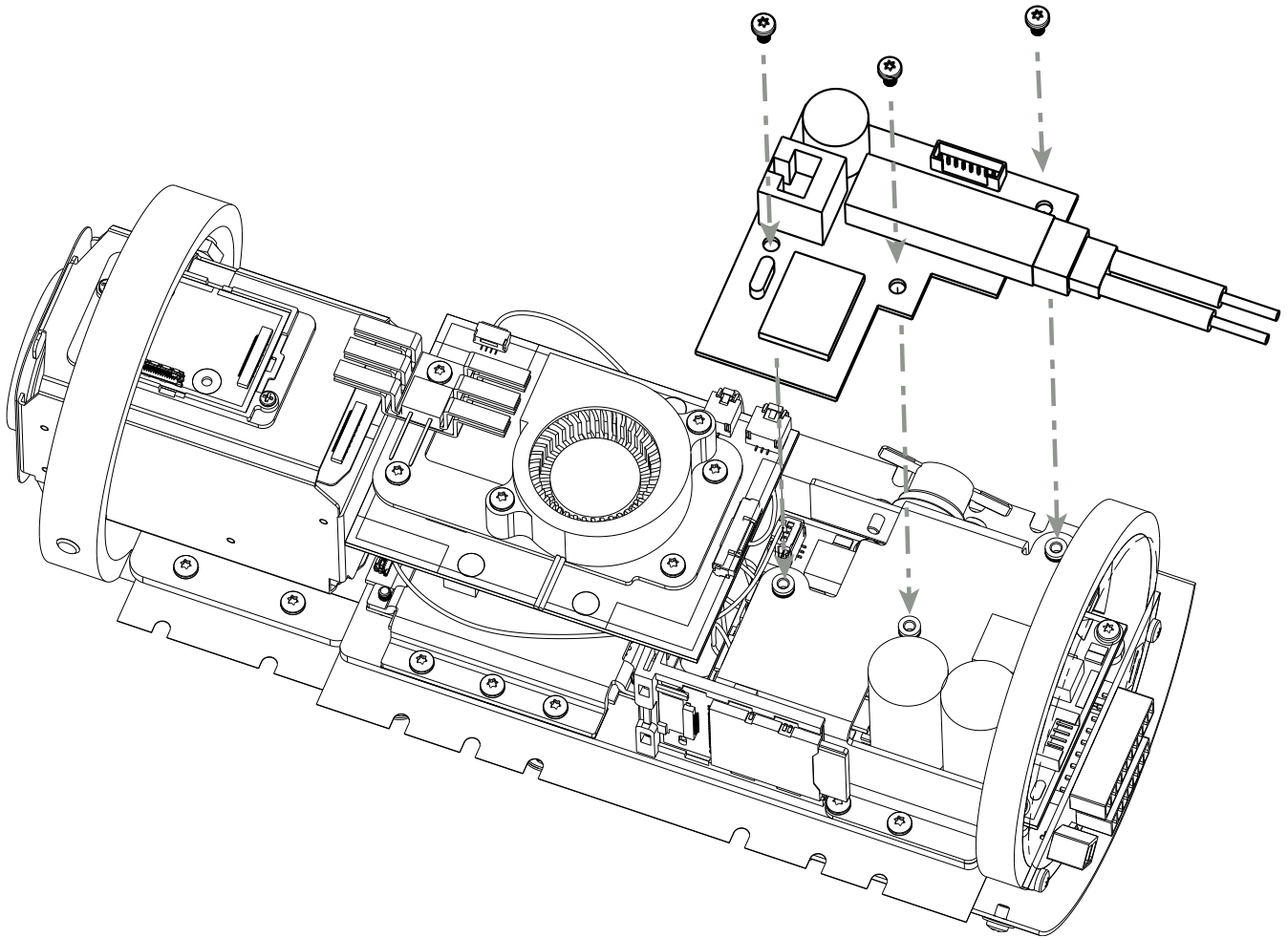
1. Unpack the fiber optic module kit, and remove the parts from the bag.
2. Remove the three (3) screws that hold the RJ45 coupler assembly in place. Remove the RJ45 coupler assembly.



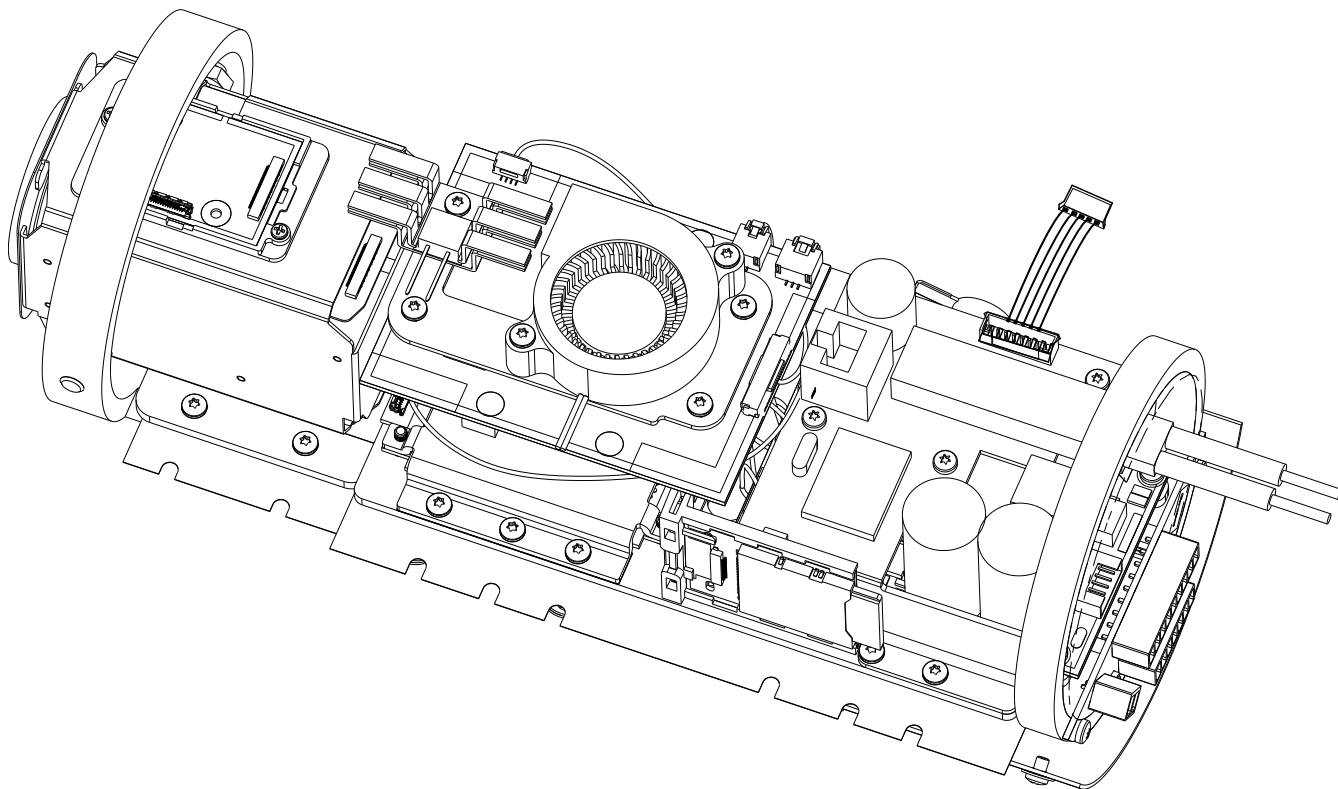
3. Push down the wires (item 1 in the following figure) to prevent the fiber optic board from crimping the wires.



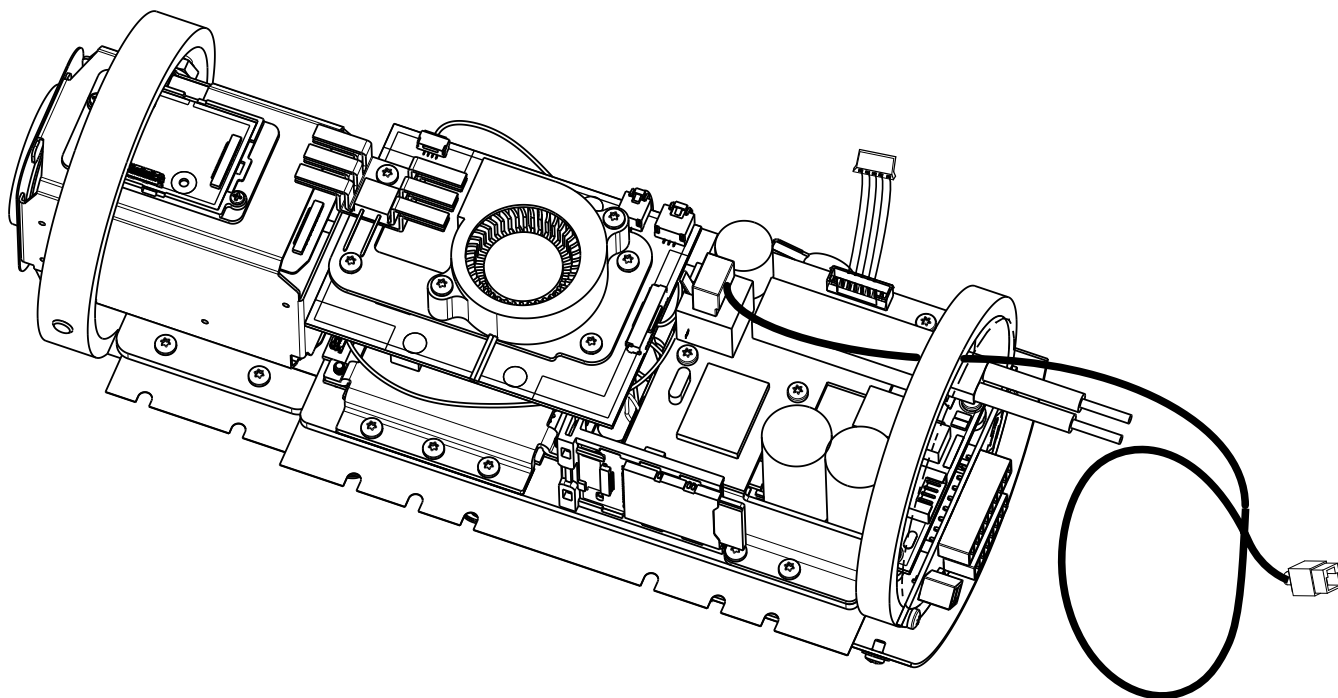
4. Align the screw holes on the fiber optic module to the screw holes from which you removed the screws for the RJ45 coupler assembly.
5. Press the module down until it is secure.
6. Replace the screws.



7. Attach the supplied power harness (black) to its connector on the fiber optic module.



8. Insert the RJ45 plug.



7 Troubleshooting

Issue	Symptom	Resolution
No data present	No Power	<p>Check power to VG4-SFPSCKT:</p> <ul style="list-style-type: none"> – If Green LED is present, then <p>Check power to CNFE2MC:</p> <ul style="list-style-type: none"> – If Power LED is Green, then check data link
	Invalid Fiber Link	<p>Check fiber connection to VG4-SFPSCKT:</p> <ul style="list-style-type: none"> – If Red LED is present, then the fiber link is missing. If the LED is Flashing Red, then <p>Check the fiber connection to the CNFE2MC:</p> <ul style="list-style-type: none"> – If the Link/Act LED is not lit, then the fiber link is missing.
No Video present	RJ-45 Connection	<p>Check the PWR/Link on the VG4-SFPSCKT:</p> <ul style="list-style-type: none"> – If the LED is slowly Flashing Red, then <p>Check all video connections from the VG4 AutoDome.</p> <ul style="list-style-type: none"> – If the LED is rapidly Flashing Red, then <p>Check the RJ-45 connector on the VG4-SFPSCKT:</p> <ul style="list-style-type: none"> – If the right LED (Green) is not lit, then no data is present at this RJ-45 connection. – If no LED lit on the RJ-45 connector, then there is a fault with this connector, the RJ-45 cable, or the cable is not connected to the CNFE2MC. <p>Check the RJ-45 connector on the CNFE2MC:</p> <ul style="list-style-type: none"> – If the right LED (Green) is not lit, then no data is present at this RJ-45 connection. – If no LED lit on the RJ-45 connector, then there is a fault with this connector, the RJ-45 cable, or the cable is not connected to the VG4-SFPSCKT.

Bosch Security Systems, Inc.

850 Greenfield Road
Lancaster, PA, 17601
USA

www.boschsecurity.com

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Bosch Sicherheitssysteme GmbH

Robert-Bosch-Ring 5
85630 Grasbrunn
Germany