Notices

Use these instructions when operating the D5070 Analog Device Programmer in an analog circuit controlled by the D8024, D9024, or D10024 Analog Fire Alarm Control Panels (FACPs).

Operate, test, and maintain the D5070 according to these instructions, NFPA 72, local codes, and the authority having jurisdiction (AHJ).

Follow the procedures in these instructions to avoid personal injury and damage to the equipment. Failure to follow these instructions can result in the D5070 not operating properly. Bosch is not responsible for improperly installed, tested, or maintained D5070 Programmers.

NFPA 72 requires a complete system-wide functional test be performed after modifying, repairing, upgrading, or adjusting system components, hardware, wiring, programming, software, and firmware.

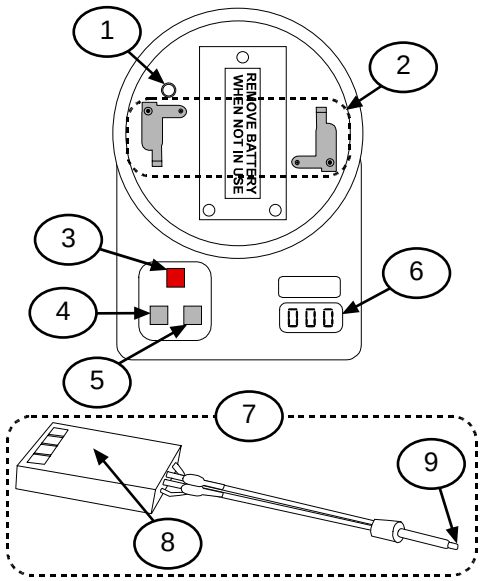
1.0 Description

The D5070 (*Figure 1*) is a hand-held device used to program address settings on electrically erasable programmable read-only memory (EEPROM) programmable analog devices. Use the D5070 base to program the detector head, use the module-programming adapter to program the relay module and point contact module. With the exception of the D339A Point Contact Module, all relay modules and point contact modules are programmed this way.

The D5070 requires terminal block wiring to set the addresses. Refer to *Section 2.2 Accessory Module Address Setting* on page 2 for address setting instructions.

The detector head twist mounts on the base contacts. The module-programming adapter's non-polarized plug attaches to the address programming pins on the relay modules and point contact modules. The programming jack end of the adapter plugs into the D5070.

Figure 1: D5070 Analog Device Programmer



1 - Module programming jack receptacle
2 - Twist on the detector head here.
3 - Red programming button
4 - Power On programming button
5 - Power Off programming button
6 - Display
7 - Module programming adapter
8 - Non-polarized plug
9 - To remote programming jack

Table 1: D5070 Compatible Devices

Model	Description
D322A	Analog heat detector
D323A	Analog photoelectric smoke detector
D323A-DH	Replacement photoelectric smoke detector head for analog duct detectors
D324A	Analog ionization smoke detector
D325A	Analog manual fire alarm station
D326A	Analog point contact module
D327A	Analog notification appliance circuit (NAC) output module
D328A	Analog relay module
D331A	Analog duct detector
D332A	Analog duct detector with Form C relays
D333A	Analog circuit fault isolator
D339A	Analog point contact module

2.0 Setting an Address

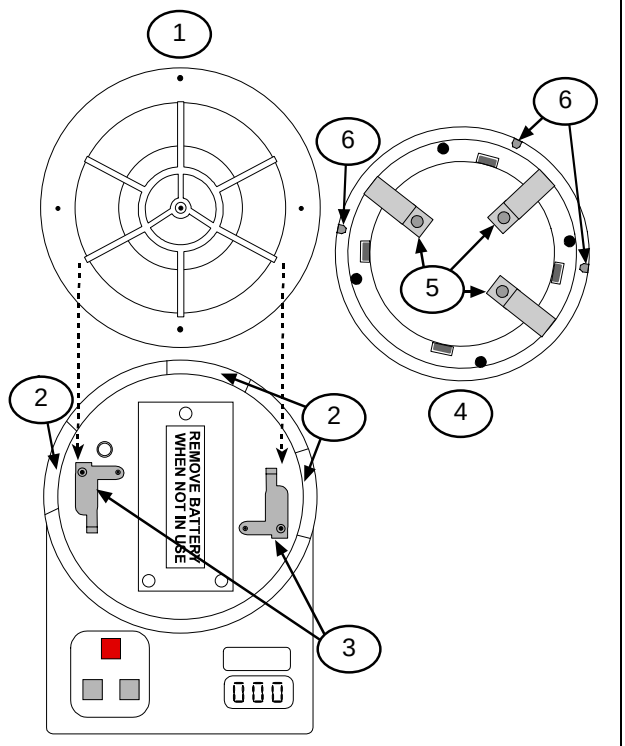
Ensure the battery inside the D5070 is connected before setting an address.

2.1 Detector Head Address Setting

To set the detector head address for the D322A, D323A, and D324A:

1. Place the detector head on the programmer, aligning the head tabs with the tab grooves (*Figure 2*).
2. Turn the detector head clockwise, attaching the detector head.

Figure 2: D5070 Detector Head



1 - Detector head (top view)	*4 - Detector head (bottom view)*
2 - Tab grooves (3)	*5 - Head contacts (3)*
3 - Programmer contacts (2)	*6 - Head tabs (3)*

3. Press the Power On button to activate the D5070.

   A battery check message appears followed by the device address.

4. Set the required address by pressing the Power On and Power Off buttons until the desired address appears.

   The Power On button automatically reads the detector or module address and advances the address by ten. The Power Off button advances the detector or device address by one.

   When the address being programmed is different from the device's current address, the display shows three red flashing dots.

5. When the desired address appears, press the red programming button to store that address.

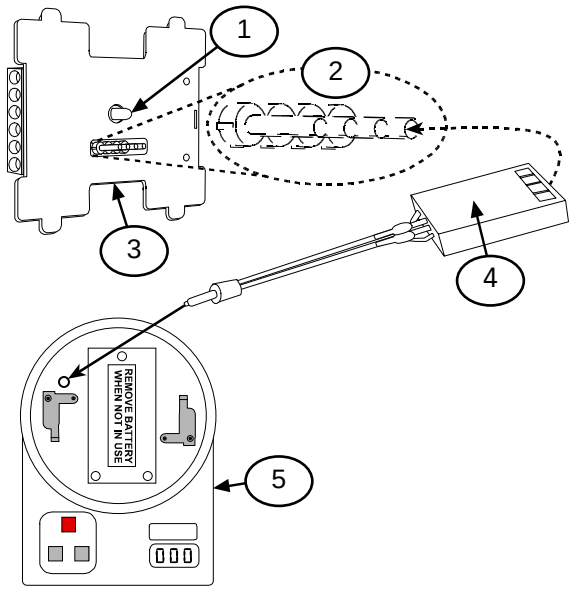
   The three red dots on the display disappear.

2.2 Accessory Module Address Setting

To set the address for the D326A, D327A, D328A, D334A, and D339A:

1. Insert the non-polarized plug on the programming adapter into the module EEPROM microchip port.
2. Plug the remote programming adapter's programming jack into the remote programming jack receptacle on the D5070 Analog Device Programmer. Refer to *Figure 3*.

Figure 3: Accessory Module and D5070 Connection



1 - Status LED	*3 - D326A, D334A*
2 - Address programming pins	*4 - Non-polarized plug*
	5 - D5070 Module

3. Press the Power On button to activate the D5070.

   A battery check message appears followed by the device address.

4. Set the required address by pressing the Power On and Power Off buttons until the desired address appears.

   The Power On button automatically reads the detector or module address and advances the address by ten. The Power Off button advances the detector or device address by one.

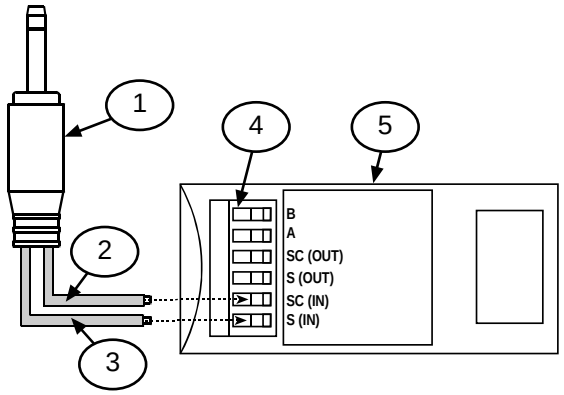
   When the address being programmed is different from the device's current address, three red flashing dots appear on the display.
5. When the desired address appears, press the red programming button to store that address.

   The three red dots on the display disappear.

2.3 D339A Analog Point Contact Module Address Setting

1. Program the D339A address by attaching the black and red wires extending from the module-programming adapter to the D339A terminal block (*Figure 4*).

Figure 4: D339A Programming Connections



1 - To module programming jack receptacle
2 - Black wire
3 - Red wire
4 - Terminal block
5 - D339A Module

2. Plug the module programming adapter jack into the D5070 module programming adapter receptacle. Then follow *Step 2* through *Step 5* in *Section 2.2 Accessory Module Address Setting* on page 3.

3.0 Reading Analog Value

The D324A Detector Heads require a 30 sec stabilization period. Do not read the ionization detector analog value during this period.

To read a detector head or an accessory module analog value:

1. Connect the detector head or accessory module to the D5070 as described in *Section 2.1 Detector Head Address Setting* or *Section 2.2 Accessory Module Address Setting* on page 2.
2. Press the red programming button.

   An **A** appears followed by the analog value. This value is continuously updated for 3 min or until the D5070 is turned off.

4.0 Display Messages

Table 2: Display Messages

Message	Description
bat	Battery check. Appears at power up and when the battery is low. A low battery is useful for up to 3000 address setting operations.
E0	The control panel does not recognize addresses above 127.
E1	Attempting to program an address with no device connected.
E2	Cannot find the device after power up or replace the device.
E3	Replace detector.
E4	Cannot locate the device to program.
E5	Device read error.
E6	Failure during analog value reading.

Table 3: Analog Device Information Table

Device	Standard Pre-Alarm Threshold*	Standard Fire Threshold*	Just Calibrated*	Range*	Normal Reading	Fault Input	Fire
D322A Heat Detector	+113°F (+45°C)	+142°F (+61°C)		+136°F to +149°F (+58°C to +65°C)			
D323A Photoelectric Detector	2.5%	3%	0.1%	0.5% to 4%			
D323A-DH Analog Duct Detector Replacement Head	2.5%	3%	0.1%	0.5% to 4%			
D324A Ionization Detector	1%	1%	1%				
D325A Manual Pull Station					16		64
D326A Point Contact Module					16	44	64
D327A NAC Output Module					16	44	
D334A Point Contact Module					16	44	64

* Percent (%) values can only be read from the FACP.