IP Camera Integration to B Series Control Panels

v2.0

BOSCH

en Application Guide

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1.0 Reference

Table 1: Supporting Literature for B Series Control Panels

Description	Part Number /Date
B5512 Datasheet	6085453963
B4512 Datasheet	7050304907
B5512/4512/3512 Installation Guide	F01U287180
B5512/4512/3512 Release Notes	F01U299696
Configuration Manager 5.0 Installation and Operation manual	02/2014

2.0 Introduction

This Guide will discuss the most common ways to integrate any Bosch IP camera with a B Series Control Panel. The integration uses RCP plus (RCP+). The RCP+ protocol allows the Bosch B4512 and B5512 control panels to establish a two-way communication path to any Bosch IP camera. Up to 4 Bosch IP cameras can be assigned to the B5512 and up to 2 Bosch IP cameras can be assigned to the B4512. Although there are multiple ways to configure Bosch IP cameras, such as the Bosch Configuration Manager utility, all configurations in this guide will be demonstrated using a standard web browser. Please consult the literature in Table 1 for more information.

2.1 Applications Included

- **2.4 -** How to set up an IP Camera using the MOTION+ feature to activate an input point on the B Series panel.
- **2.5 -** How to set up an IP camera using MOTION+ to act as a motion sensor only when the B Series panel is in the armed state.
- **2.6 -** The IP camera sends an alarm email with a snapshot once the B Series panel is disarmed.

2.2 Compatibility

- B5512 or B4512 Control Panel with firmware v2.02 or higher.
- Any Bosch IP Camera.

2.3 Required Software

Remote Programming Software (RPS) v5.18 or higher.

2.3.1 How to obtain the required software

RPS can be obtained by following the steps below.

1. Navigate to us.boschsecurity.com
2. Under Products, click **Intrusion Alarm Systems**
3. Click on **Software**.
4. Click on **Programming Software**.
5. Under Remote Programming Software, click on **Product Page**.
6. Click the **Software Downloads** tab.
7. Choose the desired file and under Language, click **>en-us** to download a copy.

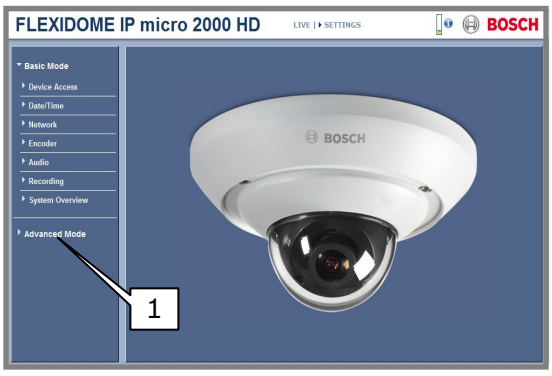
A D5370-USB hardware key is required before a connection to the control panel can be made. The hardware key can be obtained by contacting the Bosch Customer Service Department at +1 800-289-0096.

2.4 Using MOTION+ to activate an input source on the B Series panel

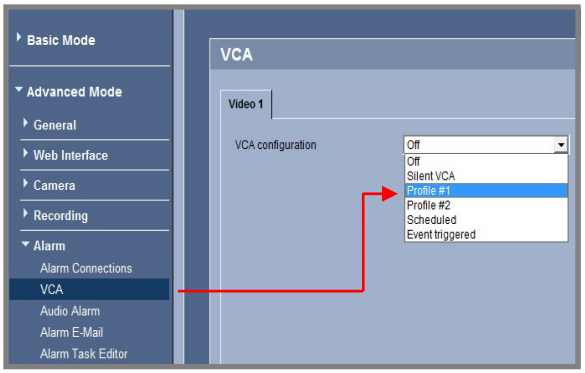
In this application you will learn how to assign a Bosch IP camera using MOTION+ to be used as an input point on the B Series control panel when the camera senses movement.

2.4.1 IP Camera Programming – Advanced Mode

1. Using a web browser, navigate to the IP address of the camera. The default address is **192.168.0.1**. If the IP address of the camera was altered, the Bosch Configuration Manager utility can be used to retrieve the cameras IP address. See Table 1 for more information.
2. If the camera was previously configured with login credentials, enter the username and password and then select **Advanced Mode**.



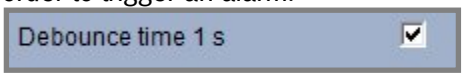
3. In the Advanced Mode section, select **Alarm** and then **VCA (Video Content Analysis).** Next to VCA Configuration, use the drop-down menu to select **Profile #1**



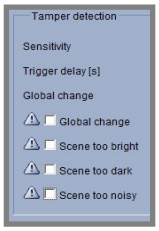
4. In profile 1 there are several options that affect the motion capabilities of the IP camera. The following steps contain a brief explanation and recommended settings:
   a) **Aggregation Time** – Slide the bar to 10 seconds. This option helps to minimize the amount of alarm events received in a consecutive rapid sequence. This will extend the event time for the amount of seconds specified. No other alarms are triggered during this time.

   b) **Analysis Type** – Set to MOTION+ if not set by default.

   c) **Debounce Time 1 s –** Check this option to prevent brief alarm events from triggering individual alarms. Alarm events must last at least 1 second in order to trigger an alarm.



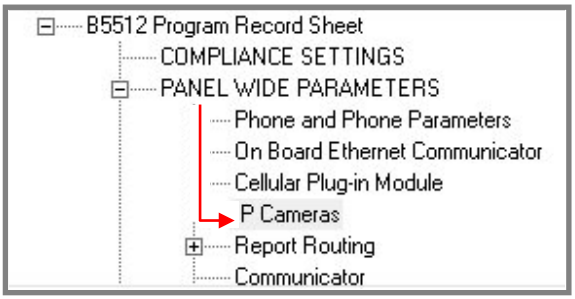
   d) **Tamper Detection** – For best results uncheck Global change, Scene too bright, Scene too dark, and Scene too noisy. For more information, select the link – **Help on this page?**



   e) The rest of the settings in the Video Content Analysis (VCA) section can be left at the default setting.
   f) Select the **Set** button to save the changes.

2.4.2 Control Panel Programming – IP Cameras

1. Using RPS and the desired panel account, navigate to **Panel Wide Parameters** and select **IP Cameras.**



2. Select **Camera 1** to enter a name for the camera. The name entered here does not correspond to camera names in the IP camera.

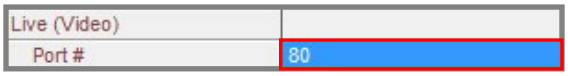
3. Enter the valid URL or IP Address of the IP camera the panel will connect to. The default IP address of Bosch IP cameras is **192.168.0.1**

4. For the RCP+ port, leave this selection at the default parameter. The RCP+ port is preset to 1756 in all Bosch IP cameras.

5. Enter a password if a password was configured in the IP camera for the user “service”. Otherwise this section can be left blank.

6. A supervision period of 10-128 seconds can be entered if looking to monitor the IP cameras connection to the control panel. This period sets the amount of time the panel will wait before reporting the IP camera as missing.

7. The live video port below can be left at the default value of 80 if assigning a single IP camera to the panel. If assigning multiple IP cameras to the panel, unique camera port numbers are required. A port range of 10,000-10,100 can be utilized.



To adjust the remote port of the camera to match the settings described in step 7, use a web browser and navigate to the IP address of the camera. Choose **Settings** – **Advanced Mode** – **Network** – **Network Access** and select **HTTP browser port**.

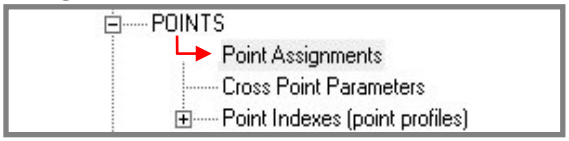
8. The **HTTPS** option is not used by this application and can be left at the default value of **No**. If secure Network communications between the camera and Remote Security Control (RSC) is desired, set this option to **Yes**.

9. Enter a password if a password was configured in the IP camera for the user "live". Otherwise this section can be left blank.

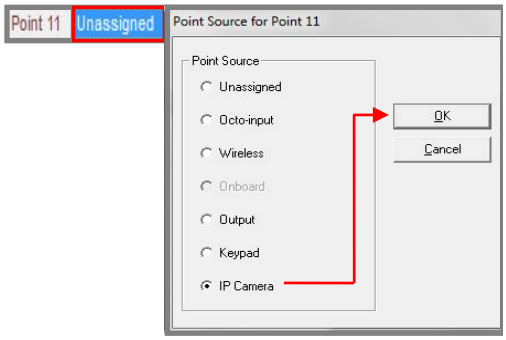
2.4.3 Control Panel Programming – Point Assignments

The next series of steps describe how to assign the IP camera to a point on the B Series panel. Please refer to **Note #1** under section 2.5.1 that explains how panel outputs are linked to camera virtual inputs. When the Bosch IP camera receives a MOTION+ alarm, virtual input 1 on the camera will fault input 11 on the panel.

1. In RPS, select **Points** and then **Point Assignments**.



2. For point 11, select **Unassigned** under **Source**. Choose **IP Camera** and then select **OK**.



3. Select the **Point Text** to enter a desired name for the camera. The name entered here does not correspond to camera names set in the IP camera.

4. Select the **Index** to configure how the point will respond once the IP camera generates a MOTION+ alarm. For more information, see the RPS help section. When the motion sensor in the IP camera senses movement, this will cause the associated point in the panel to short. The point response assigned to the point index should match a shorted condition upon activation.

5. Press the **Save** button and send the changes to the panel.

2.4.4 Conclusion - Testing

This concludes the required settings for this application. As the camera senses movement using MOTION+ and activates a camera alarm condition, the B Series panel will receive an activation on point 11 according to the armed state of the panel.

2.5 Using an input and output source to enable MOTION+ only during an armed state

In this application the configured output in the B Series panel, when the “area armed” panel wide output is activated, will trigger the camera to detect motion using MOTION+ and enable an alarm e-mail with a snapshot only when the alarm panel area is armed. The input source associated with the camera, once motion is detected, will report to the B Series panel and trigger the programmed input point.

2.5.1 IP Camera Programming – Advanced Mode

1. Follow section 2.4.1, step 1-2 and proceed to step 2 below.
2. In the Advanced Mode section, select **Alarm** and then **VCA (Video Content Analysis).** Next to VCA Configuration, use the drop-down menu to select **Event triggered.**

3. For **Trigger,** select **Virtual alarm 1**

Note #1: The chart below explains how panel outputs are associated to the cameras virtual alarm inputs.

Panel Type	Cameras Supported	Panel Outputs	Camera Virtual Inputs
B5512	4	11-14 21-24 31-34 41-44	Camera 1 (1-4) Camera 2 (1-4) Camera 3 (1-4) Camera 4 (1-4)
B4512	2	11-14 21-24	Camera 1 (1-4) Camera 2 (1-4)

4. For **Trigger active**, select **Silent VCA** (Motion+ is only active when the selected output is active).

5. For **Trigger inactive**, select **Profile #1** (When the output is inactive, the camera does not respond to motion alarms).

6. Set the **Delay [s]** to the amout of exit delay time specified for the armed area in the B Series panel.

7. Press the **Set** button to save the camera settings.

2.5.2 IP Camera Programming – Alarm E-Mail

1. To enable alarm email with this application, follow section 2.6.2, step 1-12 and proceed to section 2.5.3.

2.5.3 Control Panel Programming – IP Cameras

1. Follow section 2.4.2, steps 1-9 and proceed to section 2.5.4.

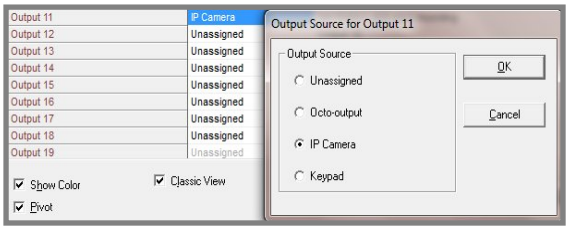
2.5.4 Output Parameters – Area Wide Outputs

1. Navigate to **Output Parameters** and select **Area Wide Outputs**.
2. For the **Area Off** output, program an (11). For an explanation of panel outputs versus camera virtual inputs, refer to **Note #1** under section 2.5.1, step 3.

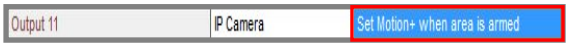
AREA WIDE OUTPUTS	Area 1
Alarm Bell	1
Fire Bell	1
Reset Sensors	3
Fail To Close / Part On Armed	0
Force Armed	0
Watch Mode	0
Area Armed	0
Area Off	11

2.5.5 Output Parameters – Output Configuration

1. Navigate to **Output Parameters** and select **Output Configuration**.
2. For **Output 11** and under **Output Source**, select IP camera.



3. Select **Output Text** and enter a desired name.



2.5.6 Control Panel Programming – Area Wide Parameters

1. Set **All On – No Exit** to **No** for area 1. Having this parameter set to Yes changes how the **Area Off** relay functions for this application.

2.5.7 Control Panel Programming – Point Assignments

1. Follow section 2.4.3, steps 1-5.

2.5.8 Conclusion - Testing

This concludes the required settings for this application. Once the area is master armed, the associated camera will activate the MOTION+ feature. While the system is armed and if the camera senses movement, a point on the B Series control panel will activate and the IP camera will send an alarm e-mail with a snapshot.

2.6 Disarming the B Series panel sends an alarm e-mail

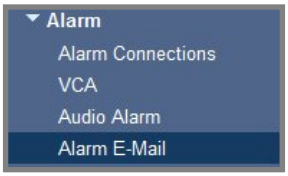
In this application the IP camera will send an alarm email with a snapshot once the area is disarmed.

2.6.1 IP Camera Programming – Advanced Mode

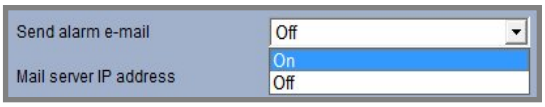
1. Follow section 2.4.1, step 1-2 and proceed to section 2.6.2.

2.6.2 IP Camera Programming – Alarm E-Mail

1. Navigate to **Alarm** and then select **Alarm E-Mail**.



2. Set **Send alarm e-mail** to **On**.



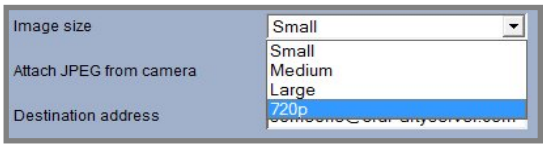
3. Next to **Mail server IP address**, input the mail servers SMTP URL address.

4. Next to **SMTP user name**, input the account holders user name for the desired email account.

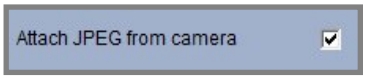
5. Next to **SMTP password**, input the account holders password for the desired email account.

6. Next to Format, leave the default entry.

7. Select the size of the snapshot image you would like to email to the user.



8. Place a check next to **Attach JPEG from camera**.



9. Enter the destination email address next to **Destination address**.

10. Enter the sender's email address next to **Sender address**.

11. Press the **Set** button to save the settings

12. To send a test email and verify the settings entered are correct, press the **Send Now** button and verify that the account programmed above received the test email.

2.6.3 Output Parameters – Area Wide Outputs

1. Follow section 2.5.4, steps 1 and 2. Proceed to section 2.6.4.

2.6.4 Output Parameters – Output Configuration

1. Follow section 2.5.5, steps 1-3. Proceed to section 2.6.5.

2.6.5 Control Panel Programming – Area Wide Parameters

1. Follow section 2.5.6, step 1.
2. Press the **Save** button and send the changes to the panel.

2.6.6 Conclusion - Testing

This concludes the required settings for this application. When the alarm system is disarmed, the configured IP camera will send an alarm email.

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