

Output Profiles

Overview

The B and G Series control panel firmware v3.10 and RPS v6.10 enhance output configuration with the introduction of Output Profiles. Output Profiles deliver custom programming and provide a way for outputs to operate based on unique application requirements. You can reuse and assign Output Profiles to multiple outputs to enable quick and consistent output programming.

The number of configurable Output Profiles available per control panel are:

- 20 - B Series panels
- 31 - B8512G panel
- 63 - B9512G panel

Configuration

Output Profiles provide flexibility by allowing you to create custom output configurations for non-standard applications. For example, you can activate outputs based on an Output Profile for a variety of events:

- Burglary (Burg) and Fire alarm
- Door chime
- Physical state of a point or points
- State of another output
- Ethernet line fault
- Execution of a SKED (schedule) or custom function

RPS 6.10 includes 13 pre-defined Output Profiles (1-13) for use. These Output Profiles may be used exactly as configured or can be modified to suit various application requirements.

Output Profile numbers 14 and higher are also provided for your own custom output configuration. The Output Profiles are located in the Outputs > Output Profiles section of RPS.

The table shows the pre-defined Output Profile numbers, profile names, and triggering events, which are available in RPS 6.10:

Output Profile Number	Output Profile Name (default)	Trigger
1	Burg, Fire, Gas Alarm	Output active
2	Reset Sensors	Output active
3	Burg Alarm	Burglary alarm
4	Fire Alarm	Fire alarm
5	Fail To Close	Fail to close
6	Part On Armed	Part on armed
7	Watch Active	Watch active
8	All On Armed	All on armed
9	Area Disarmed	Area disarmed
10	Area Fault	Area fault
11	Gas Alarm	Gas alarm
12	Burg Supervisory (Monitor Delay)	Burglary supervisory
13	Entry / Exit Delay	Entry / Exit delay
14 and higher	Profile 14 to Profile 63	Disabled (configurable)

Use Output Profiles to create an Output Behavior

Output Profiles contain triggers that produce an output behavior. When all configured output triggers within an Output Profile are active, the Output Profile activates. Outputs that are assigned to this Output Profile will then activate.

Trigger

A trigger consists of an event or condition that occurs in the system. You can configure 1 or 2 triggers within an Output Profile.

When 2 triggers are configured then:

- both triggers must be active to cause the Output Profile to activate.
- each trigger must be active to fulfill the Output Profile conditions.

Note: Do not combine SKED or Custom Function triggers with any other trigger.

Once the conditions are met, any Output Profile assigned to the outputs will activate and operate as per the configured Output Profile behavior.

Scope and Scope Filter

The scope defines the area where a general or a specific component of the system exists. Scope includes Panel Wide, Area Wide, Point, Output, SKED number or Custom Function number. For example, a point output activates when there is an alarm on point 1 (Point scope), an area output activates when there is an alarm in area 3 (Area Wide scope) or a system output activates when there is an alarm in the system (Panel Wide scope).

The scope filter further defines and constrains the scope. For example, a burglary alarm within a specific area or an input point within an area.

Duration

The duration is the length of time an output is active. You can configure outputs to deactivate automatically when:

- area alarm bells are silenced (Until Off option).
- triggering events are cleared from the keypad display (Until Cleared option).
- configured amount of time is set (Timed option). You cannot manually silence or clear Timed durations. **Note:** Do not use a Timed duration for the primary output for Fire/Gas Alarms in UL regulatory installations.
- trigger(s) deactivate (Follows Trigger option). Follows Trigger durations are active as long as the followed event trigger is active and this duration type cannot be manually silenced or cleared.

Pattern

When an output condition becomes active, you can configure the pattern that occurs:

- On Steady
- Half Second Pulses
- One Second Pulse
- Two Second Pulse
- Temporal Code 3
- Temporal Code 4
- California March

Note: These settings are repeating patterns: Half Second Pulses (60 beats per minute - half second on/half second off), One Second Pulse (30 beats per minute, one second on/one second off) and Two Second Pulse (15 beats per minute, 2 seconds on/2 seconds off).

Delay

The delay of an Output Profile activation prevents the output pattern from occurring for a configured period of time (seconds to hours). The associated output is off during the delay. If you cancel an output trigger before the delay expires, the output does not activate.

Output Assignment

Once Output Profiles are configured, you assign them to 1 or multiple outputs. When an Output Profile is assigned to an output, the output exclusively follows the behavior defined by the assigned Output Profile.

When Output Profiles are:

- set to 0-Unassigned, the Output Profile is inactive.
- assigned to any output number(s), the Output Profiles are active and have exclusive control.
- not assigned to an output number, the output operates using the legacy Area Wide, Panel Wide or Point Assignment output functions.

Output assignments are available in RPS in the Outputs > Output Assignments section.

The graphic shows sample Output Assignments in RPS 6.10:

Output Assignments	Output Source	Output Text	Output Text (Second Language)	Output Profile	Hide From User
Output A(1)	On-board A	Output A (1)		Unassigned	No
Output B(2)	On-board B	Output B (2)		Unassigned	No
Output C(3)	On-board C	Output C (3)		Unassigned	No
Output 4	ZONEX	Employee entrance door		13 - Entry / Exit Delay	No
Output 5	ZONEX	LED strobe		10 - Area Fault	Yes
Output 6	ZONEX	Stock room		8 - All On Armed	No
Output 7	ZONEX	Basement window		6 - Part On Armed	No
Output 8	ZONEX	AC fail alarm		Unassigned	No
Output 9	ZONEX	Panic area 12		Unassigned	No
Output 10	ZONEX	Burglary alarm garage		3 - Burg Alarm	No
Output 11	Keypad	Foyer		Unassigned	No
Output 12	IP Camera	Back entrance door		17 - Comm Fail	No
Output 13	Octo-output	Silent alarm		Unassigned	No
Output 14	IP Camera	parking lot		Unassigned	No

Manual Control of Outputs

You can manually turn outputs on or off using the keypad menu, RPS or Mode 2/Mode 1 command. Note: You can only use the Change Output (MENU 32) [CHG OUTPUT?] keypad menu function to control outputs that are in use or configured.

- Manually turning an output on, keeps the output on until it is manually turned off.
- Manually turning an output off, returns the output to automatic operation.

Interaction with Legacy Output Settings

When a legacy output setting uses the same output as an Output Profile, the Output Profile always has precedence. The best practice is not to assign Output Profiles or legacy alarm outputs to the same output.

Some events have more importance or *priority* over other events. For example, a Fire alarm is the highest priority event in the control panel and has precedence over all other types of events. A lower priority event is a routine event, such as buzz or LED on fault.

If you assign a Fire, Gas, or Burg alarm (high priority) for an area to the same legacy output as an Output Profile assignment, these behaviors are expected:

- Activation of a higher priority alarm, cancels any lower priority alarm.
- Output effects triggered by a lower priority alarm remain active until the higher priority alarm is silenced, cleared or expired depending on the duration type.
- When a lower priority alarm becomes active while a higher priority alarm is active, the lower priority alarm does not trigger its associated trigger behavior.

Important: If you are using Output Profiles for priority events, make sure to assign legacy Area Wide outputs for Alarm, Fire and Gas bells to different output numbers than the Output Profiles.

Use Cases

These use cases show how you can use Output Profiles for specific scenarios:

1. A bank has warning LEDs in the break room, vault and manager's office. Activation of a panic button silently alerts employees to prevent them from walking into a potentially dangerous situation.

Output Profiles allow multiple relays to follow the same output profile.

2. The bank lobby is normally disarmed during the day and armed at night. If the cleaning crew disarms and then forgets to re-arm, the system should automatically re-arm.

Output Profiles allow multiple conditions to trigger events, such as schedule and area arm status.

3. A video camera is required to view the teller (cash) drawer. The video camera activates without an alarm for surveillance of the teller drawer when employees access it.

Output Profiles allow any output to follow status from any point, regardless of arm state.

4. Turn on the lights to guide people outside of the building within a configured number of minutes after arming the system.

Output Profiles allow programming of an output for its own duration, independent of a trigger event.

Glossary of Output Profile Terms

Output Profile - output configuration that allows for custom creation and programming of special and/or complex output requirements for security applications. Output Profiles detect changes to conditions that control outputs to drive and control how control panels react.

Output Behavior – programmed output effects that activate with an Output Profile. Includes the duration, delay and pattern for the output when the Output Profile is active and assigned to an output.

Trigger – programmed system event in an Output Profile that activates an output. One or two triggers can be configured in an Output Profile to create an output behavior.

Scope – trigger activating condition for either a general or a specific component of the system.

Scope Filter – constrains and defines the scope further to a specific subset of a system component.

Legacy output – outputs configured by source and function with the outputs selectable by area, panel and point. Create and manually assign one output at a time.

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