Application Notes

1.24 Programmable Outputs *(PC1616/1832/1864 V4.2)*

Panels:

POWER SERIES (PC1616/1832/1864 V4.2)

Overview:

All PowerSeries control panels can active a negative trigger programmable output called a "PGM". These PGM's can trigger garage door openers; activate partition-able sirens, or status lights.

Programming PGMs is a three-step process:

- Wire the PGM
- Program the PGM's definition
- Program the PGM's attribute (*Optional*)
- Partition the PGM (*Optional*)

Program Sections:

        Section [009] – [011]   PGM's Definition
        Section [501] – [514]   PGM's Attributes (*Optional*)
        Section [551] – [564]   PGM Partition Options (*Optional*)

Step 1 – Wiring the PGM

Connect the positive wire (+) of the LED, Relay, etc. to Aux+ and the negative wire (-) to the PGM. PGM1, and PGM3-10 supports up to 50mA of current draw. PGM2 supports up to 300mA of current draw. PGM11-14 supports up to 1000mA of current draw.

Step 2 – Program the PGM 1 – 14 definition

The PGMs will not function until they are programmed. To program the two on-board PGM's (*PGM1 or PGM2*), program section [009]. To program the PGMs on a PC5208 (*PGM3 thru PGM10*), program section [010]. To program the PGMs on the PC5204 (*PGM11 thru PGM14*), program section [011].

        Section [009]   PGM 1 – PGM 2
        Section [010]   PGM 3 – PGM 10 (*PGMs on a PC5208 Expander*)
        Section [011]   PGM 11 – PGM 14 (*PGMs on a PC5204 Expander*)

Step 3 (*Optional*) – Program the PGM Attributes

These Sections are used to customize the operation of the PGM outputs (*Section [501] for PGM 1, Section [502] for PGM 2 etc.*). The available options depend on which PGM output type is programmed. When the PGM Output Options (*Section [009] to [011]*) are programmed, the system will change the PGM Attributes to the default settings. The PGM Attributes will default if a new PGM output option is programmed.

        PGM1 Attributes is Section [501]
        PGM2 Attributes is Section [502]
        PGM3 Attributes is Section [503]
        PGM4 Attributes is Section [504]
        PGM5 Attributes is Section [505]
        PGM6 Attributes is Section [506]
        PGM7 Attributes is Section [507]
        PGM8 Attributes is Section [508]
        PGM9 Attributes is Section [509]

PGM10 Attributes is Section [510]
PGM11 Attributes is Section [511]
PGM12 Attributes is Section [512]
PGM13 Attributes is Section [513]
PGM14 Attributes is Section [514]

- PGM Output Option [01], [03] to [08], [11] to [22], [25],[26], [28], [30], [33], [34]

Option [3]   ON: the PGM output will operate normally (*switch to ground when activated*).
              OFF: the PGM output will be normally ground and switch to open collector (*open circuit*)
              when activated.

- PGM Output Option [19] to [22]

Option [3]   ON: the PGM output will operate normally (*switch to ground when activated*).
              OFF: the PGM output will be normally ground and switch to open collector (*open circuit*)
              when activated.
Option [4]   ON: the PGM output will activate for the duration of the PGM Output Timer when the
              [*][7][x] command is performed.
              OFF: the PGM output will latch until the [*][7][x] command is performed again.
Option [5]   ON: a valid user code must be entered after the [*][7][x] command.
              OFF: user code is not required.

- PGM Output Option [09]

Option [1]   ON: PGM output activates if a Service Required trouble condition is present.
Option [2]   ON: PGM output activates if an AC trouble condition is present.
Option [3]   ON: PGM output activates if a Telephone Line trouble condition is present.
Option [4]   ON: PGM output activates if a Failure to Communicate trouble condition is present.
Option [5]   ON: PGM output activates if a Zone Fault condition is present.
Option [6]   ON: PGM output activates if a Zone Tamper condition is present.
Option [7]   ON: PGM output will activates if a Wireless Low Battery trouble condition is present.
Option [8]   ON: PGM output will activates if a Loss of Clock trouble condition is present.

- PGM Output Option [10]

Option [1]   ON: PGM output activates if a Burglary Alarm occurs.
Option [2]   ON: PGM output activates if a Fire Alarm occurs.
Option [3]   ON: PGM output activates if a Panic Alarm occurs.
Option [4]   ON: PGM output activates if a Medical Alarm occurs.
Option [5]   ON: PGM output activates if a Supervisory Alarm occurs.
Option [6]   ON: PGM output activates if a Priority Alarm occurs.
Option [7]   ON: PGM output will activates if a 24-Hour Hold-Up Alarm occurs.
Option [8]   ON: the PGM output activates for the time programmed for the PGM Output Timer.
              OFF: the PGM output will latch until a valid user code is entered.

NOTE: **If System Event PGM is programmed to follow the command output timer then all
              attributes must be enabled.**

Step 4 (*Optional*) – Partition the PGM

PGMs will activate on Partition 1 at default. To have the PGM activate on another partition you will need to
disable Partition 1 (option 1) and enable another partition (option 2-8). Enter Section [551] – [564] and toggle
options 1-8 to partition the PGM to that partition.

PGM1 Partition Assignment is Section [551]
PGM2 Partition Assignment is Section [552]
PGM3 Partition Assignment is Section [553]
PGM4 Partition Assignment is Section [554]
PGM5 Partition Assignment is Section [555]
PGM6 Partition Assignment is Section [556]
PGM7 Partition Assignment is Section [557]

PGM8 Partition Assignment is Section [558]
PGM9 Partition Assignment is Section [559]
PGM10 Partition Assignment is Section [560]
PGM11 Partition Assignment is Section [561]
PGM12 Partition Assignment is Section [562]
PGM13 Partition Assignment is Section [563]
PGM14 Partition Assignment is Section [564]

Technical Tips:

1. Ensure all the partitions have been enabled in programming section [201].