Introduction

This application note describes how to connect the Grade Crossing Pro (GCP or GCP-IR, hereafter just referred to as simply GCP) to Innovative Train Technology’s (ITT) bell module. ITT has had multiple module designs over the years and this application note covers those we are aware of. Please make sure you match the wiring diagram and module “vintage!”

This application note does not provide details on wiring your crossing signals – these details are provided in the GCP instructions!

GCP triggering an ITT bell module

In all of the figures below the GCP’s Trigger Output (TO) is used to either control the power to the bell module or activate one of the bell module’s mode inputs.

Figure 1 – HQ Series (no year indication or 2015 version)

Figure 2 – HQ 2009 Series
Figure 3 – HQ300 Series (2010)

Figure 4 – GL Series (introduced in 2017)
As shown in Figures 4 and 5 the GL bell module will play its sound file as long as the TO output is active. If the crossing is active for a long time (more than a minute) you may hear a brief gap in the sound when it reaches the end of its recorded loop and starts over again.

**Technical Support**

If you need further assistance with this application please do not hesitate to contact us by phone, mail and email; our contact information can be found on the top of Page 1.