Matick Chevrolet - Lighting Controls Project

AT A GLANCE:

- Total Cost: $181,051
- Total Rebates: $48,124
- Payback Period: 3 years
- Annual Energy Savings: 601,549 kWh
- Annual Electric Cost Savings: $60,154.92

RETROFIT LIGHTS:

- (108) 320W Horner A300s, **replaced** (94) 1160W and (64) 455W Metal Halide fixtures
- (5) 100W Horner A100s, **replaced** (30) 455W Metal Halide fixtures
- (10) 60W Horner WPC60s, **replaced** (16) 1160W Metal Halide fixtures

CUSTOMER:
Matick Chevrolet
14001 Telegraph Rd, Redford Charter Township, MI 48239

Exterior lighting, light quality, control and energy savings were identified as the key improvement areas to focus on for Matick Chevrolet during their massive interior and exterior facilities upgrade.

Matick chose to replace existing 400 and 1000 watt metal halide lights with Horner Lighing Group's red enhanced A300 area lights. Providing 90 CRI and 3500K CCT, the A300 fixtures provide 50% more light than the replaced metal halides. The Horner Lighting designers was able to provide a design that used the unique adjustability of the A300 to provide the high, even light levels required by the customer and their designers. The fixtures were optimized on networked relay blocks to allow banks of lights to be switched on and off as needed. This allowed for re-use of the customer's existing lighting contactors for savings during installation, as well as fulfilling their goal to incorporate control and energy savings.

The A300 fixtures installed provide Matick with **50% more light** than the replaced metal halides.

HORNER LIGHTING GROUP

59 S. State Ave., Indianapolis, IN 46201 | 317-916-4274 | www.hornerlighting.com

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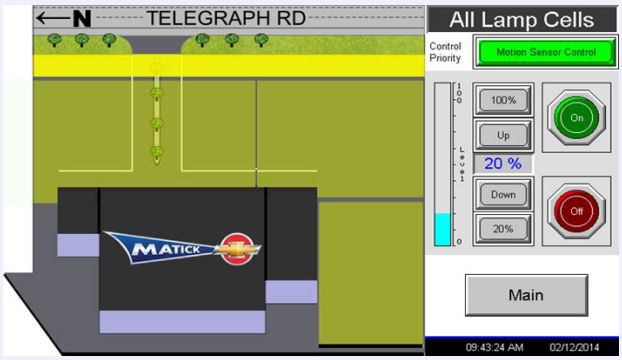
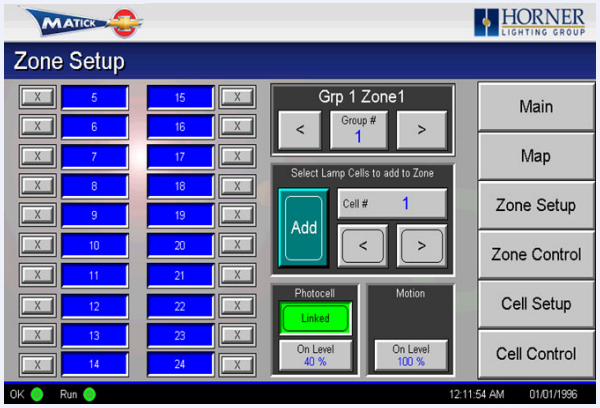
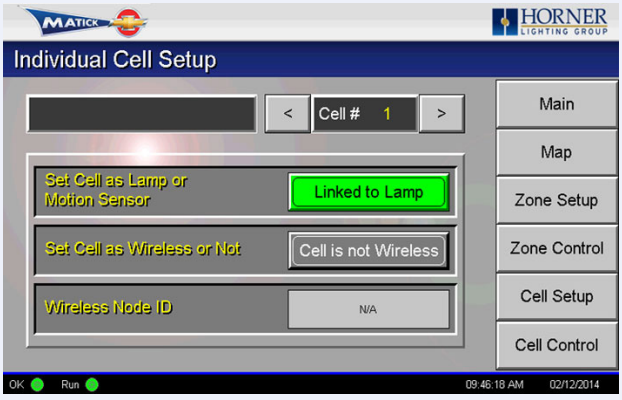
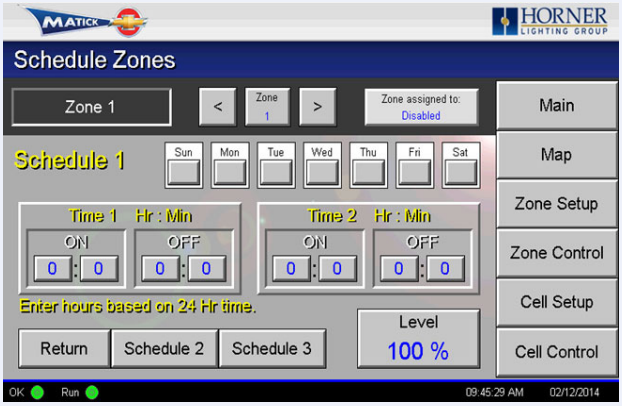
CONTROL SCREEN EXAMPLES





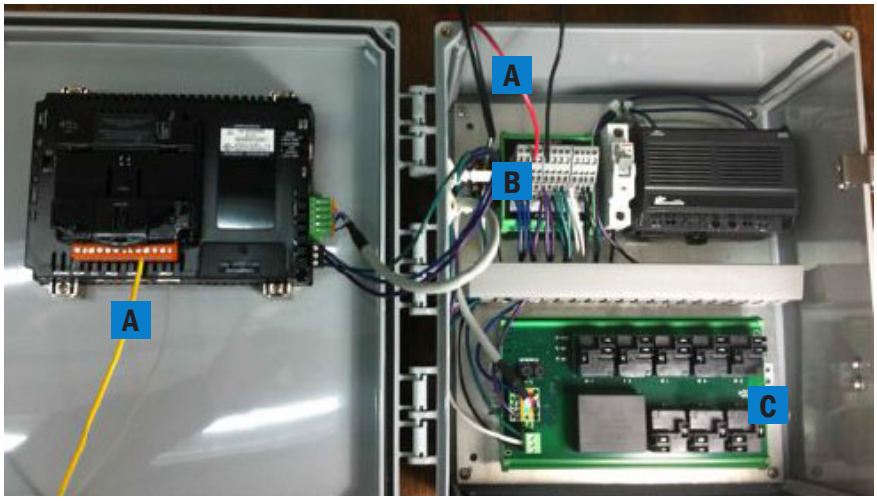




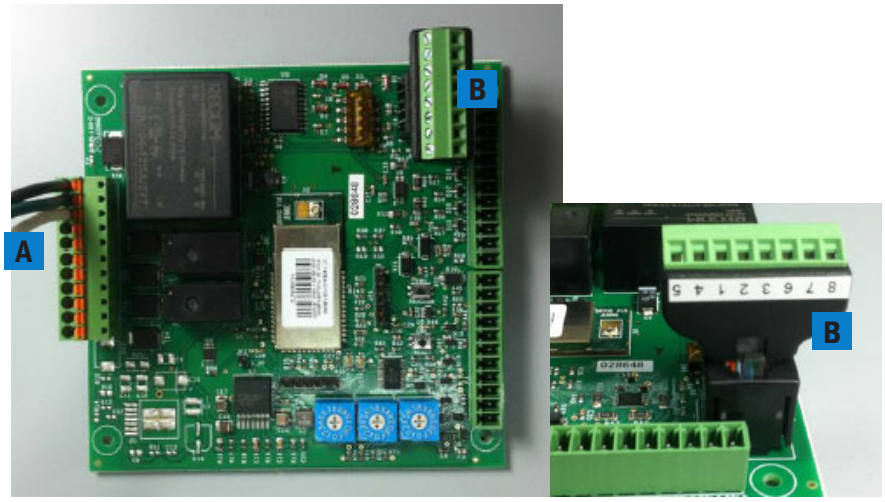
The control system installed at Matick Chevrolet allows great flexibility and energy savings. The field of 100 lights uses Horner's CsAir wireless lighting control. This integrated mesh network allows the fixtures to be turned on, off, or dimmed. Wireless motion sensors placed around the parking areas allow for targeted dimming. During night time operation the lights can be dimmed to 30 percent power, providing ample light while reducing energy cost. When visitors are detected by the wireless motion sensors, light levels are raised to 100 percent power.

The motion sensing information is then data logged, which can later be used to determine when and where the heaviest visitor traffic occurred on the lot after hours. An ambient light sensor tied into the controller provides dusk to dawn control, but can adjust the lighting levels as needed. For example on cloudy days the lights can be brought up to 50%, creating a more pleasant shopping experience.

WIRELESS COORDINATOR PANEL WIRING



A) Light Sensor; **B**) 120-240 VAC Power; **C**) Relay wiring



A) 90-305 VAC Power; **B**) Data Connection

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