

Castro Village Bowl

Replace 27 Lane Panels and Swap-out Scoring Monitors

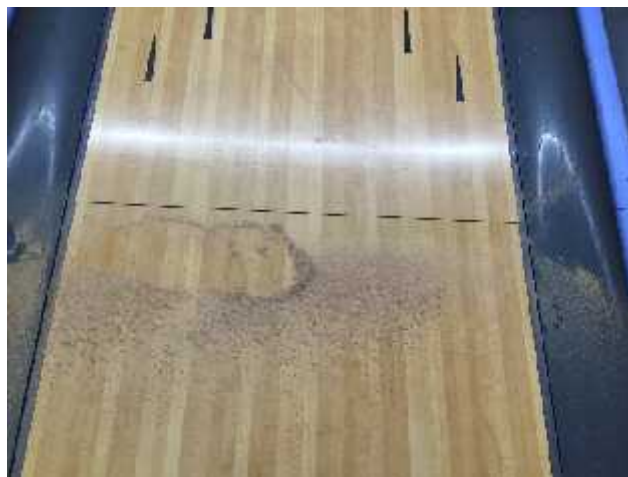
Day 1 – Monday November 30, 2015 – Can in and did trial run for swapping Monitors. We can make existing mounting plates work just fine. We bought the hardware we will need to mount new 49" LG Commercial Monitors on existing mounting plates. We swapped out a monitor and tried to connect Accuscore RGB signal, but language from Accuscore is too old. We replaced the existing monitors.

Tuesday, December 1, 2015 – Waiting for router and other critical tools.

Day 2 – Wednesday, December 2, 2015 –Day 4 – All but Betterley Router came in Air Freight. We bought a new plunge router and installed Diamond Bit that just arrived from Fletcher Diamond Tools in North Carolina. We set depth for plunging the many holes in old panels (10 per lane) to secure the freshly cut end of the old panel where mating with the new panel 4" past foul line and 12' 4" from foul line.

Day 3 – Thursday, December 3, 2015 - Thursday, December 3, 2015 - Betterley Router came in Air Freight. We came in and replaced 2 head panels, taking a lot of time to double-check the plunge router depth for screwhole dowels to fit flush, and adjusting Betterley for exactly a .015" gap between existing panel and cut-in-to-mate panel. It took all day to do these 2 panels, but we are now set to move quickly.

Day 4 – Friday, December 4, 2015 – We came in early, expecting Scoring Equipment shipment from Richmond. We installed 4 head panels as we waited for the shipment.



We used a Straight-Edge Emerson Clamp-On Fence Tool (flown-in from Emerson in MN to Castro), to clamp onto the old lane to make a dead parallel cut 4" past foul line and another just under 12' 4" from foul line (pictured above), to drop-in a new head panel, cutting the void 1/16" too narrow, then using Betterley Router (just arrived this week from Betterley) to mate the panels. We removed the old head area panels (now in two 6' pieces), and secured the old wood-lane underlayment.



We installed the new head panel and plunged new securing screw-holes with the Plunge Router just received, where the old panel meets the new panel directly across the joint from the new panel screw-hole locations as shown below (foul line side shown – same pattern on the arrow panel side). We secured the new panels with Lane Screws as well as the cut ends of the existing panels.



New Plunged Screwholes (5 on each end – 10 per lane) securing old panel.

We shimmed each side of the new panel to mate correctly with the old panels both at the foul line and 12' past foul line. We sealed both ends of these new joints with Adhesive and covered the joint with clear packing tape to cure, while allowing oil to be applied to the lanes over the tape, to let the adhesive cure for 24 hours without being contaminated by oil and cleaner from the lane machine. We doweled all screw holes and cleaned-up completely.

Saturday, December 5, 2015 – We wired the building completely for Scoring – no lane work was done.

Lanes/Monitors Day 5 - Sunday, December 6, 2015 – We did 6 more lanes as described above coming in very early, since Sunday Morning Special is pretty packed. We finished by 9:30, not causing any customers to need to wait for a lane.

Day 6 – Monday, December 7, 2015 – We did 7 more lanes including the two that involved an Arrow Panel (23 and 25). No Issues. 7 head panels left. We don't have enough Dowel Plugs to complete the final 7 lanes. I ordered more from Richmond.

Day 7 – Sunday, December 13, 2015 – We finished the final 7 lane panel replacements.

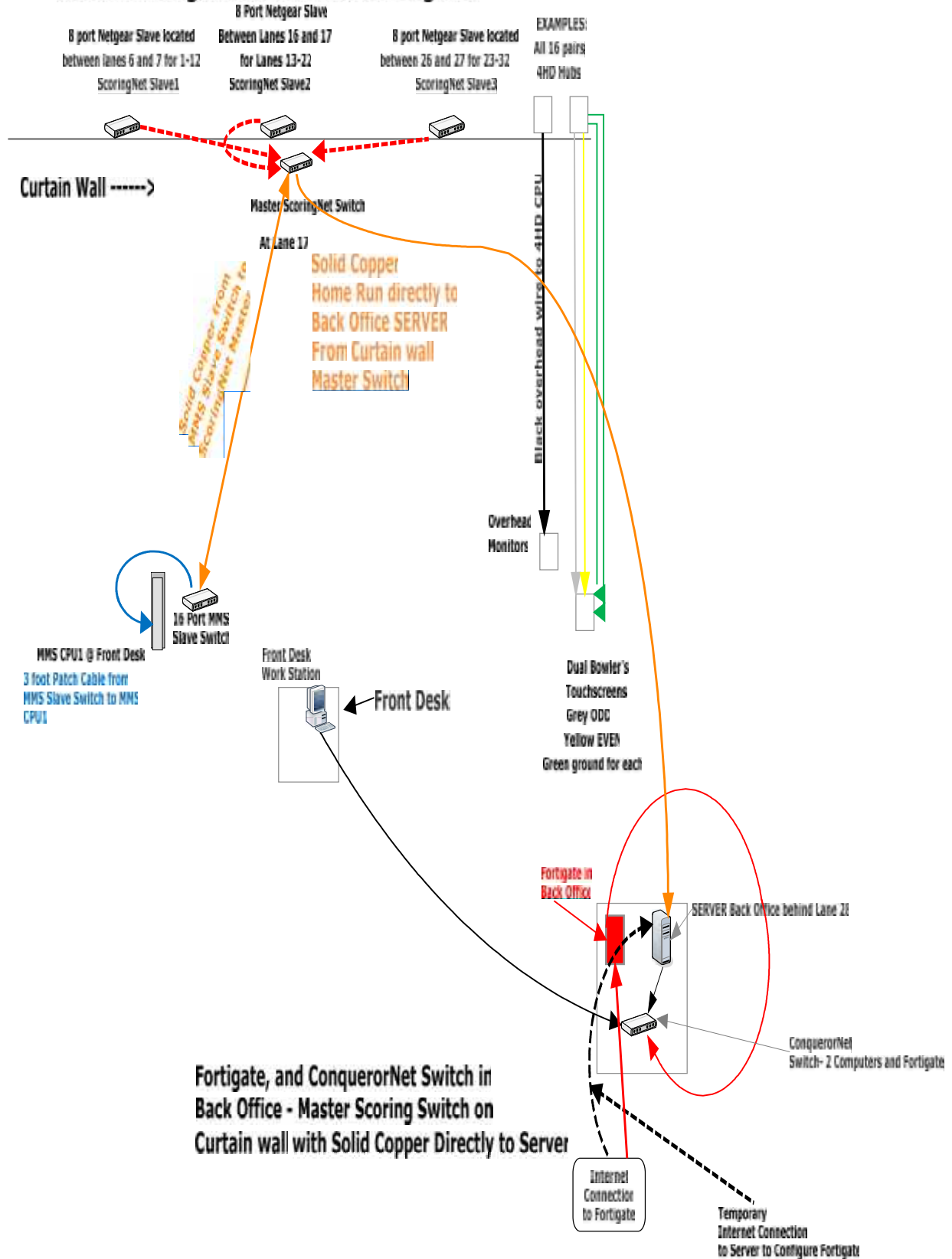
Castro Village Bowl, Castro Valley, CA

Remove AccuScore and Install BES-X with MMS

Day 1 – Friday, December 4, 2015 – Truck arrived at 1 PM and we unloaded and inventoried. We noticed that 3 things were missing on the shipment and were not on the Packing List. There were no 612-283-007 4HD CPU Mounting Kit (16 needed). There were no COMCABRJ4550GY – 150' Gray Cat5 Cable (underground cable from 4HD Hub to Odd Touch) (16 needed). And there were no COMCABRJ4550YE – 150' Yellow Cat5 Cable (underground cable from 4HD Hub to Even Touch) (16 needed). We called Richmond and ordered. No chance of getting out until Monday – receive Tuesday, so we are dead-in-the-water until Tuesday as far as bringing BES-X online completely on any lanes. We can run overhead cables, setup Front Desk and Server computers, wire curtainwall network cables, etc. to save time later, but we will be waiting for three days until we can actually begin installing Bes-X. Daily hours: 8 (me) + 16 (skilled) + 8 (labor) = 32. Job Hours: 8 + 16 + 8 = 32.

Here is proposed Network Diagram for Castro Village Bowl:

Castro Village Bowl Network Diagram



Day 2 – Saturday, December 5, 2015 – We wired the building completely for ScoringNet (Curtainwall 3 slaves and Master on Diagram above – running all Network wire to 4 HD Hub locations, and from all slaves to Master, Solid Copper to Server from Master (tested-good), Installed Server and Front Desk Computers, Internet to Server (temporary), Internet to Fortigate (permanent), ConquerorNet to Server, Front Desk, and Fortigate). All computers up and running. Two Computers only – front desk and Server:



We are Dead-In-The-Water now, waiting for missing items mentioned above. Daily Hours: $7 + 14 + 0 = 21$. Job Hours: $15 + 30 + 8 = 53$.

Day 3 – Tuesday, December 8, 2015 – The wires we were missing and the mounting Kits for CPU's, apparently came in Saturday. We were not notified that these cables had been shipped, nor that they had arrived, nor had a tracking number. We were doing lane panel swap-out anyway. The customer ordered 27 panels from us and we were installing. Trainer not coming until Wednesday, so if we started earlier than Monday, we would have too many lanes finished with system not properly configured.

We removed AccuScore and installed BES-X on 6 lanes (27-32).

All came up fine and uploaded fine. We installed Q-Vision on low-profile mounts because of deep gutters here. We set parameters and bowled on all lanes. At first – all lanes (all 6!) scoring nothing but FOUL (pinspotters NOT doing a foul cycle) even though all wired correctly. If disconnect one of the F-Box Foul wires from the MP Chassis APS plug, all works perfectly. Tried many changes – no help. MP Chassis (very old) are sending a Foul signal through APS Plug even though no foul has been sent to terminals 7 and 8 in A & MC Box. Very strange – and ALL 6 Lanes are doing this. We checked voltage, and 12V AC is leaking into the MP Chassis APS port for some reason (probably old age). We spent hours chasing this issue. I called Martin Vera and he said that this is common on old MP Chassis. We will disconnect the Foul signal from the MP Chassis cable (288-401-002) that connects to APS, and run a separate cable to terminals 7 and 8 (foul from foul unit) in the A & MC Box. This will ensure that 12V AC will only be provided to the F-Box when an actual foul signal has been sent to the A & MC Box. All other functions worked fine.

Here is our procedure:

Remove old Accuscore Gold Chassis from curtainwall, move terminator to new "last pair", so that old system will continue to work, and disconnect old Electronic Triggering system, saving all components for Center. Remove all old Accuscore wiring from curtainwall. Attach new F-Box, and 4HD Hub, to curtainwall. Remove old monitors/wiring and install new 49" LG Commercial monitors. Mount new BES-X CPU to Monitor frame and wire to HDMI2 on monitors. Run new overhead Cat 5 from curtainwall to Monitor Frame and wire to New CPU from 4 HD Hub. Connect ScoringNet cable to 4 HD Hubs, that was run on Day 2. Power-up ScoringNet Master and appropriate Slave Switches. Remove old Bowler's Terminal. Remove old AccuScore camera. Use disconnected underground AccuScore wire to pull 4 wires underground – Blue and Yellow Cat5 cables (Richmond sent Blue instead of normal Beige for Odd LCD), and 2 grounds. Run these 4 wires up Pinspotter leg along with APS-to-Camera wire and LCOM for camera (6 wires total up Pinspotter Leg). Wire F-Box to 4HD Hub, Q-Vision Camera, Pinspotter APS and A&MC box, and connect grounds to 4HD Hub Mounting Frame. Locate Bowler's Terminal 60-degree plate centered, proper consistent distance from Ball Return, and Install the new Touchscreen Bowler Terminal Pedestals on the plate, running the correct cable plus a ground up the appropriate pedestal.

Install and wire the Touchscreens on the pedestals, connecting the Speaker wire, Ground wire, and Cat5 cable. Remove the remaining underground AccuScore wires and neatly fold the excess BES-X underground wire out of harm's way at downsweep. Transfer Q-Vision Camera onto a Low Profile Base (since the gutters here are deep), and secure the Pinspotter side of the Camera 156" from 7-10 line (which is 92.5" from nose of kickback to Pinspotter-side of Qvision camera FRAME) and wire Lcom and plug-in APS wire to Qvision Board. Install reflectors 91.5" from nose on kickback. In Conqueror Lane Setup- select proper parameters (Tenpin, English Touch, CPU serial number, Pinspotter type (8270MP, Qvision/Fbox), Monitor type (LG COM), monitor configuration (2 Up 2 Down), Checkmark the Intercom Box, and send. Reinitialize when shown on monitor to do so. During Upload, adjust Camera Ball Detects, remove old Pinspotter Sweep-arm AccuScore Start Switch and wire rear Pinspotter Control Box mechanic's reset (disconnecting cushion Start Switch), remove old AccuScore wire in wireway, and old Cushion Start Switch wire, Install Camera guard, and do final wire-tie of curtainwall. Clean lanes of all debris and clean approach/settee areas completely. After reinitialize is complete, set Pinspotter default parameters and send. Turn on lanes after reboot, and adjust Camera Parameters, centering camera view and Auto-Placing individual pin locations and sending to Camera. Bowl on the lanes testing Pinspotter Power-On, Cycle, Foul, Second Ball (no score input if Pinspotter is in 2nd ball and BES-X is waiting for a 1st ball), Smart Cycles, Pin Count, Ball Speed, Gutter Ball (to see that a gutterball will cycle Pinspotter in both gutters), all reset buttons, and Tenth Frame reset (strike-cycle) of fill-ball function.

Daily Hours: $12 + 18 + 6 = 36$. Job Hours: $27 + 48 + 14 = 89$.

Day 4 – Wednesday, December 9, 2015 – We removed AccuScore and installed BES-X on six more lanes (21-26) as described above. We had one bad Hub that rebooted over and over. All connections were good and no debris on any Cat5 cables. Changed Hub and worked perfectly. Bad Hub number 8316. Other than that all came up fine and all functions were checked and all work fine. Trainer Greg Dow arrived! He will help with full house of league tonight.



Daily Hours: $10 + 14 + 6 = 30$. Job Hours: $37 + 62 + 20 = 119$.

Day 5 – Thursday, December 10, 2015 – We removed Accuscore and installed BES-X on six more lanes (Lanes 15-20). All came up fine and checked fine. Daily Hours: $10 + 14 + 4 = 28$. Job Hours: $47 + 76 + 24 = 147$.

Day 6 – Friday, December 11, 2015 – We removed Accuscore and installed BES-X on 6 more lanes (Lanes 9-14). All came up fine and tested fine as described in procedure above. Daily Hours: $10 + 14 + 6 = 30$. Job Hours: $57 + 90 + 30 = 177$.

Day 7 – Saturday, December 12, 2015 – Removed AccuScore and Installed BES-X on all remaining lanes (1-8). All came up fine and tested fine according to procedure described above.







We installed, uploaded programs, and tested MMS and removed old front desk computer. Daily hours: $10 + 14 + 7 = 31$. Job Hours: $67 + 104 + 37 = 208$. 6.5 Man-hours per lane for scoring replacement.