Anderson County Government

Request for Bids

100 North Main Street, Suite 214 Courthouse Clinton, Tennessee 37716 (865) 457-6218 Office (865) 457-6252 Fax

purchasing@andersoncountytn.gov

Bid #2502

Date Issued: July 25, 2024

Bids will be received until 2:30 p.m. Eastern Time on August 13, 2024

Sealed bids are subject to the <u>General Terms and Conditions</u> of this bid, and any other data attached or incorporated by reference. Bids will be received in the Anderson County Purchasing Office until the date and time specified above, and at that time publicly opened and read aloud.

ANDERSON COUNTY RESERVES THE RIGHT TO WAIVE ANY INFORMALITIES IN OR TO REJECT ANY OR ALL BIDS AND TO ACCEPT THE BID DEEMED FAVORABLE AND IN THE BEST INTEREST OF ANDERSON COUNTY.

Robert J. Holbrook, Director of Finance

BID DESCRIPTION

Bid for Installation of Scoreboard at the Clinton High School Football Field. Bidders are to provide one original and two copies.

A mandatory pre-bid meeting will take place August 1, 2024 at 9 a.m.

Bids must be in sealed envelopes with the Bid # clearly labeled.

Questions are to be emailed to <u>purchasing@andersoncountytn.gov</u> and <u>kkleehammer@andersoncountytn.gov</u>.

Bid #2502

Clinton High School Football Field Score Board

250 W Broad St, Clinton, TN 37716

Anderson County is seeking bids for the installation of a new scoreboard at the Clinton High School Football Stadium. The County will provide the scoreboard. Exhibit 1 provides product and installation specifics. Exhibit 2 provides the architectural drawings.

Job Specifications:

- 1. New scoreboard beams installed per architect specifications (Exhibit 2).
- 2. All other supplies including beams, electrical supplies, and connections, etc. will be by designated contractor.
- 3. Bid includes digging holes, providing and installing steel beams, and setting beams in concrete footers.
- 4. Crane, operator, and welder are to be included in the bid price.
- 5. Yard and property to be returned to prior condition after installation. Including soil, seed or straw needed.
- 6. All work to be done in compliance with architectural drawings provided (Exhibit 2)
- 7. Bid to include hanging of approximately 8 advertisement signage on new scoreboard as depicted in Exhibit 1.
- 8. Contractor responsible for connecting power and contacting Tennessee One Call to have utilities marked.

Prebid meeting attendance mandatory to be eligible to place bid.

Vendor Name:	_
4	
Cost:	

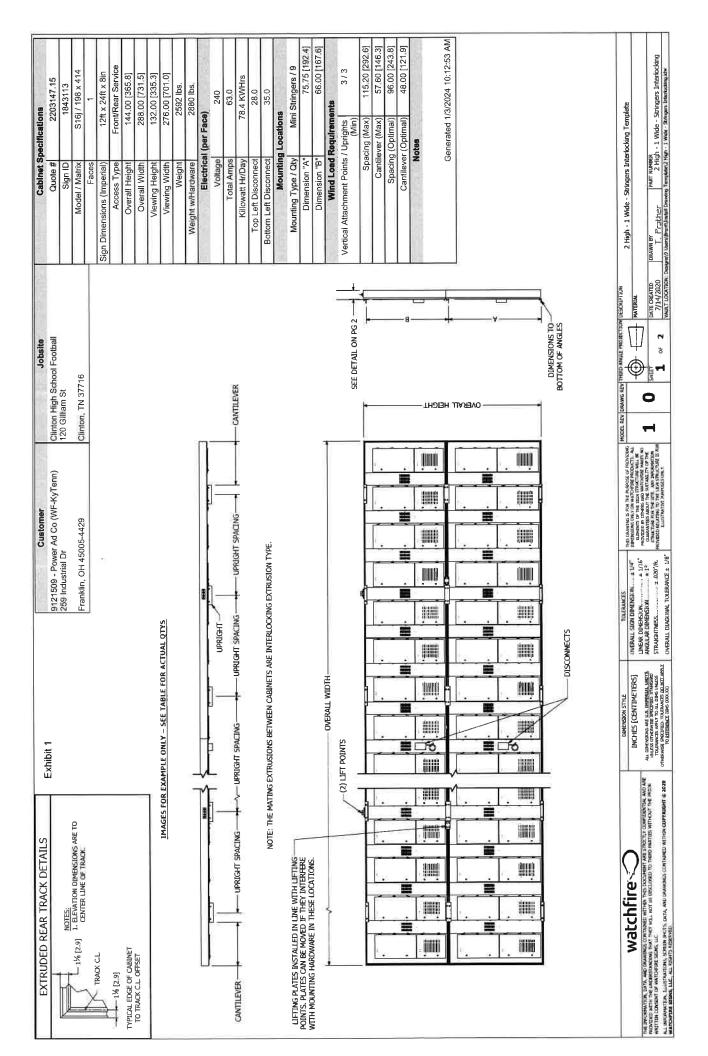


Exhibit 1 Watchfire Field Service Technician Responsibilities (if included with order)

MOUNTING

- Provide technical support related to sign assembly, mounting, and wiring during installation. Technician will explain and
 offer advice on all aspects of installation.
- Train customers on the use of sign and software.

Sign Installer Responsibilities

- Verify winds are not in excess of 15mph at the time of install.
- Lift sign off the truck utilizing lifting points.
- Assemble the sign if shipped in multiple sections. Signs over 10'1" in height and or greater than 48'4" in length are shipped in multiple sections. Signs 10'1" and under in height and also less than 48'4" in length are shipped in one section and do not require assembly.
- Ensure the sections are never left to free-stand and are always secured by the crane or framing during the installation and stacking process.
- (Optional) Attach Watchfire provided camera to the camera boom. Run the camera cable inside the boom and down the entire length of the boom. Secure the camera boom bracket to the sign corner and then attach the camera boom. Connect the webcam cable to the POW48 inside the sign cabinet.
- Mount the Sign

Electrician Responsibilities

Pre-install

- Install electrical service and meter at jobsite.
 - Install main circuit panel
- Install conduit and wiring from the distribution panel to a junction box at the top of the structure.

- Attach Watchfire provided temperature sensor to the structure. Typically, the sensor will mount easily on the bottom of the catwalk or bottom edge of the sign cabinet. Route the cable through the hole in the bottom of the sign and to the first flare.
 - Run power lines to the disconnects on the back of each sign section
 - Verify all local electrical codes are adhered to.

 - Verify the correct voltage.
- If power is not applied on the day of install, you MUST contact Watchfire support before cycling power for the first time. Turn on power

Failure to follow recommended installation procedures could result in voided warranty,



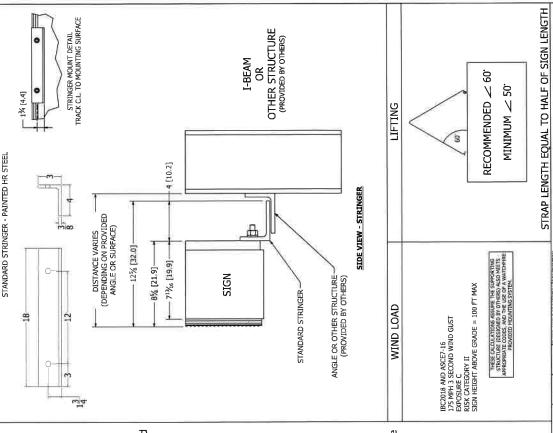
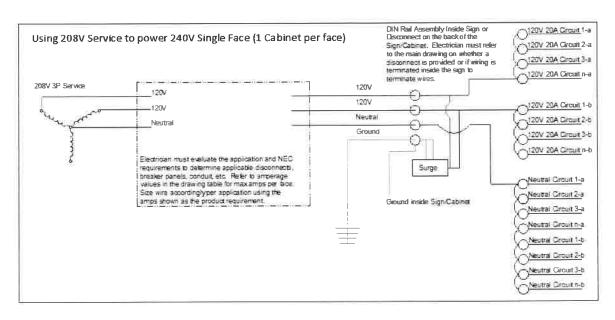
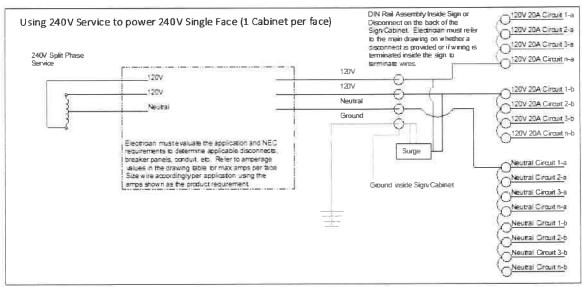
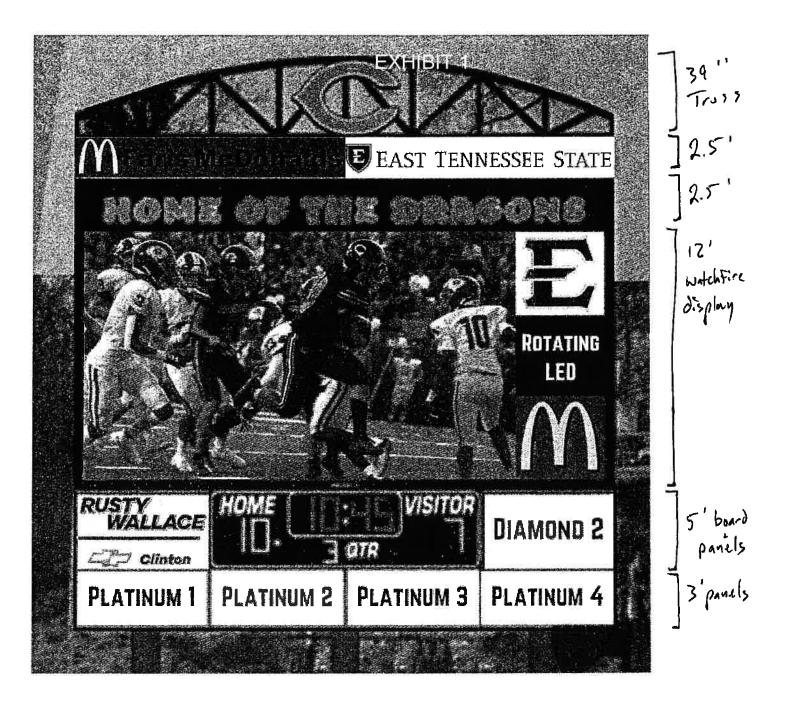


Exhibit 1







Total: 28. 11 × 12 wide

ON PREMISE SIGN INSTALLATION MANUAL

watchfire <

Exhibit 1



Sign Configuration



Introduction

Welcome to Watchfire!

Congratulations on your purchase of a new Watchfire sign. At Watchfire, our goal is to provide you with the best product in the sign industry, and that experience begins with the installation phase. This manual has been designed to help you achieve a fast, high-quality installation.

There are several ways you can use this manual depending on your experience with Watchfire. If this is your first Watchfire product, the manual will serve as an excellent how-to guide, from handling the LED modules to setting up the software required to run the sign. More experienced Watchfire customers will find several changes from previous versions of the installation manual, including updates on our newest products. We suggest that you look over the entire manual before beginning a detailed review of any one component.

On the next page, you will find the Installation Checklist. Use it to guide your install and quickly reference sections if you have a question. The Sign Configuration page at the front of the manual will also be helpful, because it lists details for this particular sign that you may need to know during installation.

If you purchased a Time and Temperature sign from Watchfire, rest assured these signs are very similar to message centers and follow the same basic installation procedures. Page 40 details the installation of the GPS antenna for Time and Temperature signs.

Finally, be sure to review the Maintenance and FAQ sections at the very end of the manual for valuable tips to keep your sign running smoothly for years to come. If you have additional questions, please visit our online knowledge database, the most up-to-date reference for owning and operating your new signs, at: http://watchfiresigns.com/kb.

Congratulations again, and enjoy your Watchfire sign.



Installation Checklist

Co	mplete this checklist while working through the manual and installing the sign.
	 Mount Sign Follow structural requirements as specified by structure manufacturer (see page 1). Follow proper handling instructions (see page 4). Ensure proper ventilation (see page 3). Proper ventilation dramatically increases the life of a sign. Install conduit where needed - water tight conduit required for connection to electrical box (see page 18).
	 Install Electrical Elements Refer to amperage & voltage requirements for the sign(s) as identified on nameplate (see page 14). Route power wires to the terminal block, load center, or disconnect of the sign(s) (see page 16). DO NOT turn on power at this time! Install a ground rod and connect to ground lug inside the sign(s) (see page 15). Ground rods help protect the sign in the event of a lightning strike.
	 Connect Data Cables and Conduits For installations with multiple sign cabinets, connect data cables from sign to sign (see page 19). Install conduit for exposed data cables. Most signs have outdoor rated cables and do not require conduit (see page 18).
	Install Temp Sensor (Optional)
	 Mount the sensor and route the cable to the twist-lock connector on the back of the sign (see page 21). Install Communication Options Radio: Install both sign and host radio for line-of-sight communications (see page 23). Fiber: Route "long" fiber from the sign to an indoor wall plate. Route "short" fiber from the wall plate to the indoor PC equipment (see page 25). Broadband Wireless: Mount the antenna with antenna pointing toward the sky or towards the ground, on a metallic surface (see page 26). Broadband DSL: Connect the DSL phone line and route 50' fiber to the sign (see page 27). GPS Time/Temp: Mount and connect GPS antenna to sign controller (see page 40).
u	 Apply Power Confirm proper electrical service and switch the appropriate breaker(s) to the on position (see page 14).
	Connect to Sign Install Ignite® on the host PC — not applicable to GPS Time/Temp units (see page 36).
	Schedule Software Training (Optional) • You can schedule software training online at www.watchfiresigns.com/ist (see page 38 for

• Call 800-637-2645 to purchase software training.

more information).



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Compliance Information

FCC Class A Compliance

All equipment in use by Watchfire has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference in which case the user will be required to correct the interference at the user's own expense.

Changes or modifications not expressly approved by Watchfire could void the user's authority to operate the equipment.

National Electric Code

Watchfire signs are intended to be installed in accordance with the requirements of the National Electrical Code, NFPA 70, and any other applicable local codes. This includes proper grounding and bonding of the sign.

UL / CUL Compliance

Underwriters Laboratories (UL) certification is for manufacturers of electric signs built in accordance with the National Electric Code, NFPA 70. UL signs require pre-testing by UL before being allowed to use the UL mark. All Watchfire LED signs and digital billboards have been UL48 tested and approved.

Price Watcher™ gas price signs have been UL879 and UL879A tested and approved.



UL Energy Efficiency Certification

By marking our signs with the UL energy verified label (also referred to as the UL green leaf label), Watchfire verifies that its LED signs and digital billboards meet the California Energy Commission (CEC) 2008 building Energy Efficiency Standards Title 24, Part 6, and Section 148 of the California Code of Regulation.

Watchfire products meet option B of the standard, the specific lighting approach. The signs use 100% LEDs for lighting. The LEDs are powered by a power supply that is at least 80% efficient. Efficiency is defined as the ratio of output wattage to input wattage at 100% load.



Structural & Mounting Requirements

- Existing Structures: Make sure the structure is engineered to accept the weight and wind load of a Watchfire sign.
- New Structures: Make sure structure meets or exceeds the state's guidelines and all required regulations.
- Cabinet drawings included with the sign will list the sign dimensions and mounting locations.
- Install the sign cabinet so that adequate ventilation is provided. Proper ventilation dramatically increases the life of the sign. Please see page 3 for ventilation guidelines.

The chart below lists suggested upright spacing for large 8" deep cabinets. This may be required to meet local building codes. Refer to local code for proper windload requirements.

Wind Speed	Upright Spacing	
88 mph	16 ft	
120 mph	12 ft	
150 mph	9.6 ft	

Cabinet Types

Watchfire Signs come in 3 different styles and each has their own mounting requirements:

- 5" Deep Slim Cabinet with Front Ventilation (S)
- 8" Deep Cabinet w/ Rear Mounting Track (FV)

Be sure to refer to any labels on the back of sign cabinets for further details.

Slim Cabinet

All 5" deep Watchfire signs use a track on the back of the cabinet to hold the head of a ½" bolt that may be used to attach to a mounting angle. Signs that are less than 10' in length must use 4 bolts evenly spaced across the top and bottom of the cabinet. Signs between 10' and 24' in length will use 5 bolts on top and bottom. These bolts are included in a mounting kit that will ship with the sign. The bolt is inserted in the track using the enlarged opening in the middle of the track (see Figure 1). The angle is then attached to the bolt using a nut and washer (see Figure 2). Tighten all bolts to 45-50 ft-lbs.



Figure 1 • Slim cabinet mounting bolt inserted in track.

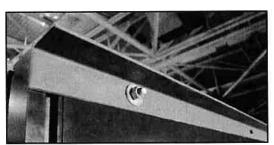


Figure 2 • Angle attached to slim cabinet mounting bolt.



Structural & Mounting Requirements (continued)

8" Deep Cabinet w/ Rear Mounting Track (FV)

Insert two of the supplied $\frac{1}{2}$ " bolts into the bolt carriers and install the carriers into the track (see Figure 1). Slide the bolt carriers to the proper mounting locations.

Set the Stringer in place, add washers and nuts. Tighten nuts to 60-70 ft-lbs using a %" impact socket (see Figure 2)

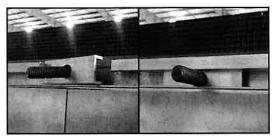


Figure 1 • Bolt in bolt carrier placed into track.

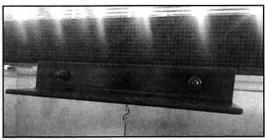


Figure 2 • Example of 18" Stringer with 1/2" bolts



Watchfire cabinets are designed to minimize heat and provide durable protection from the elements. The rear side of our cabinet features mill-finish aluminum. Contact your Watchfire representative if a painted finish is required.

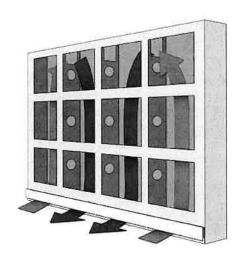
Ventilation Designs

Improperly ventilated signs risk overheating, which will affect the life and operation of the sign.

Front-vent Cabinets (Price Watcher Included)

Watchfire front-vent cabinets and Price Watcher models draw air in through vents on the lower edge of the cabinet. Patented multi-chamber cooling provides built-in fans to ensure brighter, longer lasting LEDs with no need for additional wiring or fan kits.

DO NOT BLOCK the air intake, exhaust or LED modules located on the front face with any part of the metal cabinet or coverings.



Rear-vent Cabinets

Watchfire rear-vent cabinets draw air in through a vent at the bottom of the cabinet's rear side, and use cooling fans located inside the top of the cabinet to draw cool air up.

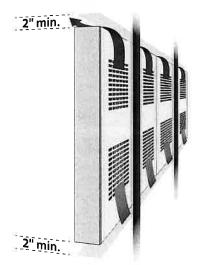
Ventilation must be completely unobstructed by mesh or louvers. To conceal a gap, calculate the open air portion of the concealment material and (for each cabinet) allow 24 (or more) square inches of total air intake and 24 (or more) square inches of total air exhaust per foot of cabinet length.

Optimal Ventilation

For signs 16' in length or longer OR signs with multiple pole installation – allow a minimum 2" gap above and below the LED cabinet. Although ends may be sealed, it is best to use a loose mesh material or leave area open to allow for maximum airflow.

Alternate Ventilation (Single Pole)

For signs up to 16' in length installed on a single pole – allow a minimum 2" gap below the LED cabinet for optimal ventilation. **DO NOT SEAL ENDS** if no gap exists above the cabinet.





DO NOT RESTRICT AIRFLOW on the cabinet's rear side. A minimum 2" gap per face behind each cabinet is necessary. For wall-mounted rear-vent cabinets, airflow must be unobstructed from top to bottom, in addition to leaving a minimum 3" gap between the sign and wall.



LED Module Handling



Touching the LEDs can bend and misalign them. Bent LEDs will adversely affect the display quality of the sign. Bent LEDs can also compromise the encapsulation around the LEDs, which can cause moisture to leak through to the circuit board. Touching the LEDs may also leave dirt and oil residue, which can further affect the display quality.

WARNING! DO NOT let the LED modules hang from the cable assemblies. Wires may be pulled loose from the connectors.

Removing and Replacing Modules (Sectional and Non-Sectional Signs)

- 1. To remove a module, locate the locks and turn them counterclockwise. Use the table below and images on page 2 to determine proper tool and lock location based on the sign model.
- 2. Firmly pull on module to remove it from cabinet. **CAUTION:** Water-tight seal on back of module may stick to cabinet and pulling too hard on plastic louvers can cause them to break.
- 3. Disconnect both power and data connectors from back of module (see Figure 3).
- 4. Reconnect power and data connectors securely to the back of the module. For 6mm, 8mm and 10mm modules, before reconnecting, be sure to secure strain relief clips to the back of the module where indicated.
- 5. Align the pins on the module with the holes on the sign face. Tighten all locks clockwise.

Required Tool	Sign Model	Number of Locks
5/32" Allen Wrench	All 19mm	2
5/32" Allen Wrench	8mm, 10mm, 16mm	4
2 mm Allen Wrench	6mm	4



Figure 1 • 4 locks









Figure 2 • 2 locks





Figure 3 • Power and data connectors

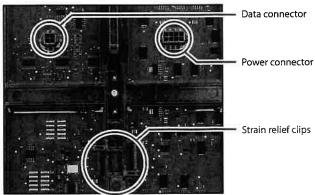


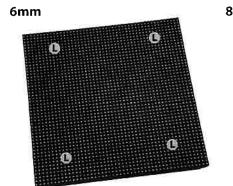
Figure 4 • Power and data connectors, strain relief clips

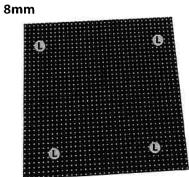


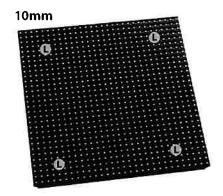
Removing and Replacing Modules (continued)

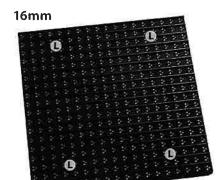


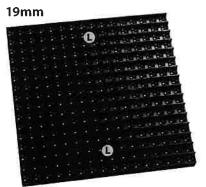
Indicates Lock Location

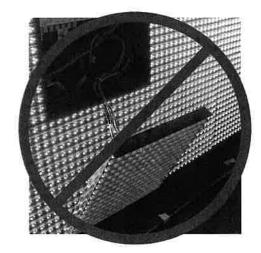














NEVER let modules hang from their wires.



LED Module Handling and Addressing (continued)

Addressing LED Modules

Watchfire LED signs are made up of multiple LED modules. For an LED module to play the appropriate data, it must store its own unique address.

All modules are factory set with correct addresses prior to shipment. The sign must be re-addressed if a new module is installed or if modules within the sign are relocated.

Setting Display Module Addresses

- Ensure all LED modules are connected to the sign. Addressing will not work properly if a module is not connected.
- 2. Turn off power to the sign cabinet that will be addressed.

 Note: If the controller is a BC550 or BC760, turn off power to the entire sign.
- 3. Put the sign in test mode:
 - a. If Automated Diagnostics is enabled, simply cycling power to the sign will address the modules.
 - b. BC550 The test/operate switch on the BC550 must be set to Test.
 - c. BC760 The test/operate switch on the BC760 must be set to **Test.**
 - d. BC760 with eFlare The test/operate switch on one eFlare must be set to **Test.***Note: If you have the special set up of BC550 with bHubs- every bHub will need to be set to test to readdress the sign.
 - e. BC-860 will have eFlares. The test/operate switch on one eFlare must be set to Test.
 - f. M203 The test/timeset/operate switch must be set to **Test**.
- 4. Turn power back on.
- 5. Monitor the sign as it goes through its addressing pattern. This will vary by sign model; some light up modules in a vertical and horizontal sequence, whereas others show address numbers. The modules will keep their addresses indefinitely, even during a power outage.

BC550:

The first module in each channel displays the channel number. Every channel displays the same color. Each module will then display its address numerically.

BC760:

The first module in each channel will count up to the total number of modules. Each module will then display its address numerically.

M203:

Each module will light up sequentially for each channel until all modules are on. All modules will briefly go blank and then back fully on.

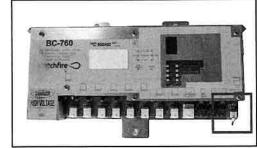


Figure 1 • BC760 Test Switch

Addressing is Complete

- 1. Wait at least one minute before setting switch back to **Operate**. You do not need to power off the sign.
- 2. A module has an incorrect address if it lights up at the wrong time. If that happens, repeat the address setup procedure.
- 3. If a module is still not addressing after the proper test procedures, contact Watchfire Technical Support.
- 4. Ensure that the controller is powered up with the toggle switch in **Test.**



General Sign Handling Instructions

Lifting straps should always be rated to exceed the load being lifted.

Do NOT attempt to lift the sign in sustained winds over 15 mph.



Tag lines should not be attached to a fixed point at ground level.

Signs must remain vertical at all times.

- Always use all available lifting points.
- Signs equipped with lifting eye hooks (see Figure 1) may utilize straps.

Signs must never be left free-standing.

- Always have some means of vertical support.
- Larger signs may have sign supports included. If so, be sure to use them.
- Signs equipped with eye hooks or no more than 2 eye bolts may utilize only straps so long as the angle of the straps does not exceed 30 degrees offset from vertical.
- Signs containing more than 2 lifting eye bolts must use a spreader bar.
- Ensure that all eye bolts are tightened into the sign completely, so that the shoulder of the eyebolt is in contact with the top surface of the sign frame. The eyebolt must be installed in an orientation parallel to the cabinet (see Figure 2).







Figure 2 • Lifting eye bolt.

Spreader Bar Lifts

- Spreader bars must be constructed out of material sufficiently strong to carry the weight of the sign without any deflection along the entire length of the bar (see Figure 3).
- The length of the spreader bar must be equal to or greater than 75% of the sign's overall length.
- Straps between the spreader bar and the sign must be as vertical as possible over the top of each eyebolt.
- All spreader bar straps must be of equal length.
 It is best if these straps are as short as possible.

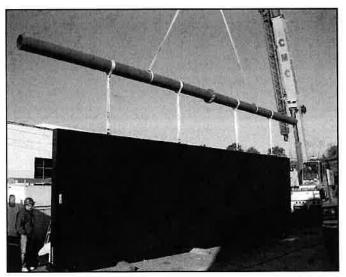


Figure 3 • Properly attached spreader bar.



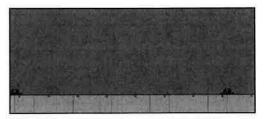
General Sign Handling Instructions (continued)

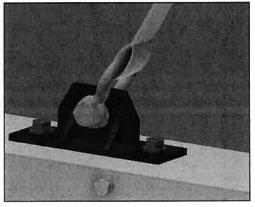
If the sign meets all of the following requirements, it will use lifting eyes that do not require a spreader bar.

- The sign is manufactured one or two sections tall.
- Total sign height does not exceed 15 feet.
- Total sign length is between 19 and 49 feet.

Lifting System with No Spreader Bar

- Damage to sign frame can occur if proper lifting techniques are not used.
- Spreader bar is not required.
- · Recommend use of d-ring shackles.
- · One strap per lifting eye.
- · Straps must be rated for load.
- Leave lifting eye on sign or place in spares box after use.
- When reattaching lifting eyes, torque bolts to 65 ft. lbs.







Recommended strap angle is 60°, minimum of 50°.

Strap length is equal to half of the sign length.

Cabinet must remain upright at all times. Use Brackets to support multi-section signs during assembly.

WARNING! Do not attempt to lift the sign in winds sustained over 15 mph. Consult the nearest National Weather Service weather station or an anemometer for wind speed and direction at your location prior to lifting. Tag lines should not be attached to a fixed point at the ground level.

WARNING! For Interlocking Extrusion Signs: Place the lifting plate or sign mounting hardware directly in line with the lifting load path. Failure to do so could result in damage to sign frame.



For Interlocking extrusion signs. During installation, only reposition one middle mounting component at a time. Moving more than one at a time could cause severe damage to the sign cabinet and cause physical injury.

Palletized Signs

Signs that are 3 modules or less in height will be secured together with shipping caps (See Figure 1). Signs that are greater than or equal to 4 modules in height will be crated with a wooden A-frame.

- 1. Attach lifting straps to the cabinet that does not have plastic banding over its hangers or lifting eye-bolts.
- 2. Remove the A-Frame assembly or shipping caps along with any banding material securing the first cabinet to the pallet. Do NOT remove the banding from the second cabinet until after the first cabinet is secured.
- 3. Lift the first cabinet from the pallet and ensure it is secured so it will not tip over before going on to step 4.
- 4. When ready attach the lifting straps to the other cabinet and remove the plastic banding from hangers or lifting eye-bolts and lift. Repeat this step on the third face if applicable.

Non-Palletized Signs

Metal tele-strut feet are bolted to the track on the rear of the sign. This allows the sign a larger footprint and less of a tip hazard. If the sign is shipped on a wooden deck trailer the feet may be nailed into the deck. Do NOT remove the feet from the sign until it is ready to be secured to its permanent structure.

- 1. Attach properly rated lifting straps to the sign's lifting eyes or eye-bolts.
- 2. Remove any nails that might have been used to secure the feet to the deck of the truck.

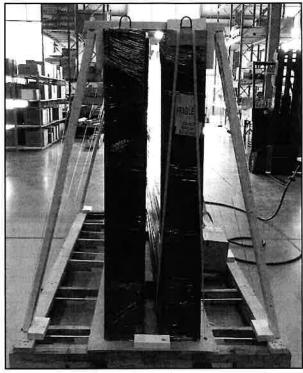


Figure 1 • Palletized sign with green tie-down straps.



Figure 2 • Metal feet shown with sign supports.



Sectional Sign Handling & Assembly

Signs must remain vertical at all times.

- Always use all available lifting points.
- Signs equipped with lifting eye hooks may utilize straps.

Signs must never be left free-standing.

- Always have some means of vertical support.
- Larger signs may have sign supports included. If so, be sure to use them.

Sign Supports

- 1. Evenly place all included sign supports along the back length of the bottom cabinet.
- 2. If the wooden feet are mounted perpendicular to the sign, they may be left on. If the wood is comprised of long planks, mounted in line with the length of the sign (most common on signs shipped in containers), the wood will need to be removed, though the metal end caps should be kept in place.
- 3. Lower the bottom section of the sign until it is approximately 3-5 inches above the ground. Place the T-section of the sign support under the sign until the short vertical upright is against the back of the sign. Ensure that the supports are near one of the bolts that are installed on the back of the sign.
- 4. Remove one of the ½" bolts from the top of the section and bolt the other part of the sign support to the sign using the ½" bolt. Complete this process with all of the sign supports. On rear service signs, make sure the supports are not directly behind any doors. If so, move the supports to an area of the sign not covered by doors.
- Lower the sign until it is resting on the sign supports. Make sure that the short vertical piece on the base of the support is up against the sign.
- 6. Tighten the swivel bolt on the top of the section.
- 7. Have the crane reduce its load until the load straps just barely relax. Check the sign to ensure that it is very close to vertical. Tighten all bolts/nuts to 60-70 ft-lbs on the sign supports.
- 8. Make sure the sign section is stable prior to releasing the crane.

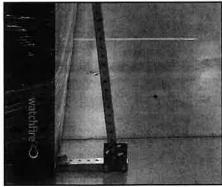


Figure 1 • Metal feet shown with sign supports.



Figure 2 • Sign support.



DO NOT allow a stacked sign to freely stand at any time, even if sign supports are still attached.

Assembling Stacked Sectional Signs with 3 or More Sections

- Once the lower section of a sign is properly setup and able to stand on its own, additional sections can be stacked on top.
- Front Service: Remove the LED modules necessary to uncover the bolt holes in the top section.
 Rear Service: Bolt access is available through rear doors.
- 3. If desired, this would be a good time to mount the steel stringers to the top section, while it is easily accessible.
- 4. Place threaded guide pins in the middle hole on each end of the bottom section.
- 5. Place beads of silicone, approximately 1" apart, around the outer edge on the top of the bottom section in a complete circle.
- 6. Raise the upper section and set on top of the lower section, ensuring that the guide pin enters the middle hole on each end. At this point, DO NOT place much weight on the sign. The upper section should be kept light in order to facilitate the bolting process.
- 7. For each set of holes, two bolts and one washer will be required. Place the bolt with the washer in the hole at the rear of the sign. It may be necessary to use a tool such as a spud wrench in order to properly align the holes. Hand start all bolts in the sign. Drive all the bolts down until they are finger tight.
- 8. Once all of the bolts are in place, the crane can place most of the weight onto the lower section. Starting with the front row of bolts, torque them down to 75 ft. lbs. Then perform the same action on the back row.



Figure 1 • Top section being placed onto lower section.

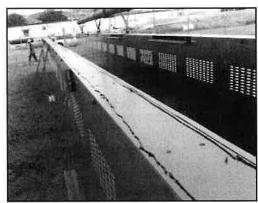
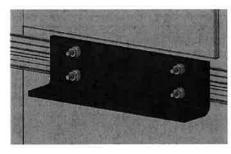


Figure 2 · Beads of silicone.

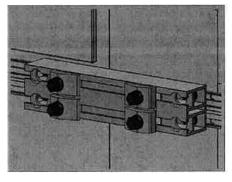


One Piece Ship Interlocking Extrusion Sectional Sign Handling & Assembly

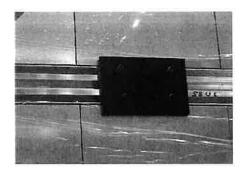
- 1. The sign will ship with stringers or I-beam clamp hardware.
- 2. I-Beam clamp hardware will be pre-installed on the top, middle, and bottom here at the factory.
- 3. Stringer hardware will ship loose for the top and bottom locations and pre-installed for the middle location.
- 4. Two lifting plates are also pre-installed in the middle. These will be located directly in line with the lifting load path. Removing these could result in damage to sign frame.
- 5. It is important to use the provided Watchfire mounting hardware. Using Non-Watchfire provided mounting hardware is not permitted.
- 6. The middle row of mounting hardware is what holds the two sign sections together. If the middle hardware needs repositioned during installation, only reposition one at a time. Moving more than one at a time could cause severe damage to the sign cabinet and cause physical injury.
- 7. If the mounting hardware needs to be repositioned to where a lifting plate is located, it is acceptable to loosen and slide the lifting plate out of the way of the mounting hardware.
- 8. Tighten any repositioned mounting hardware or lifting plates to 65ft-lb.



Middle Stringer



Middle I-Beam Clamp



Lifting Plate



Sectional Sign Handling & Assembly (continued)

- Verify that there is no gap between the sections. The gap between the two rows of modules should not be greater than gap between other rows in the sign.
- 2. Remove the sign supports and attach the lower stringers.
- Place a waterproof passthrough in the hole between the sections, run the data cables through it, and connect them.
- 4. Replace all the modules.

Note: If modules are not put in the exact same place they came from, then the sign will need to be readdressed when it is powered on. See page 6.

- 1. To unload from the truck, remove all nails from the shipping feet, attached to the bottom of the lower sign section, prior to lifting.
- 2. Attach sign support brackets to the lower sign section and set it on the ground.
- 3. Remove lifting eyes from the top of the lower sign section and install guide pins on each end of the sign, middle of sign (when applicable), and the two inner most lifting eye holes (no pins needed in the outer two most lifting eye holes). Also install the left and right end alignment brackets on the top of the lower section.
- 4. Remove all nails from the shipping feet, attached to the bottom of the upper sign section, prior to lifting.
- 5. Lift the upper sign section off of the trailer and remove the shipping feet by removing the ½" bolts from the rear track. This will require a ½" socket.
- Remove the necessary doors along the bottom of the upper sign section. Identify the holes where the shipping feet were installed and remove the panels above them. **Note:** Only on signs with three or more sections.
- 7. Insert the supplied ½" bolts into the bolt carriers and install the carriers into all tracks. See Figure 2. Two bolts required per top and bottom stringer, four bolts required per middle stringer. Four bolts required per lifting plate. One lifting plate or middle stringer is to be placed in line with each lifting eye.
- 8. Apply a thin bead of caulk on the top of the lower sign section, approx. 1" in around the entire perimeter of the sign. **Note:** Not required for Interlocking Extrusion Signs.
- 9. Set the upper sign section onto the guide pins until the upper and lower sign sections touch. Use the cinch tool to pull the top section back flush with the bottom section.
 - 9a: Install the middle row of mini-stringers and lifting plates using the provided ½" hardware and tighten with a ¾" socket. Start in the middle and work to the outside in each direction.

 Watchfire's stringers must be used.

 Using non-watchfire stringers is not permitted.
- 10. Lift and attach sign to uprights using the clamps. Ensure the clamp is slid completely against the upright. Tighten the clamp bolts using the 1 1/16" socket. Repeat for each set of clamps.
- 11. Lift and attach the sign to the uprights using the Mini Stringers. Ensure the Mini Stringers are slid completely against the uprights. Weld the Mini Stringers to the uprights.

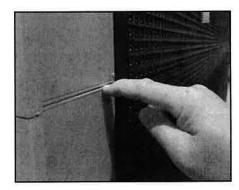


Figure 1 • Gap between cabinets.

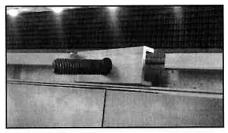
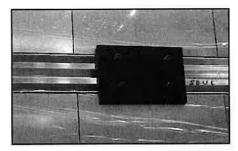
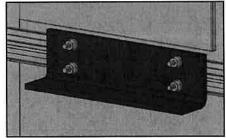
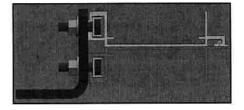


Figure 2: Bolt in bolt carrier placed into track.









- 12. Interlocking extrusion signs. The middle row of mounting hardware is what holds the two sign sections together. If the middle hardware needs repositioned during installation, only reposition one at a time. Moving more than one at a time could cause severe damage to the sign cabinet and cause physical injury.
- 13. Using the provided hardware, secure two beam clamps on the back of the spare part box. Choose either the right or left side of the box. Install the spare box on one of the uprights and above the lower catwalk by tightening the bolts on the beam clamp.

Electrical Installation Requirements



If an electrical disconnect is not furnished by Watchfire, an electrical disconnect must be furnished by the electrician.

Electrical Requirements

Refer to the nameplate on the sign or the Watchfire sales order sheet for the electrical service required for the sign. The current rating found on the nameplate applies to that cabinet or sectional cabinet only.

Some LED message centers require 120-volt single-phase electrical service, with 2 wires (1 hot leg and 1 neutral) plus a ground. Some very large signs require 240-volt single-phase electrical service, with 3 wires (2 hot legs and 1 neutral) plus a ground.

Electrical Code Requirements

This sign is intended to be installed in accordance with the requirements of Article 250 and 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.

Determining Electrical Service and Wire Gauge

Refer to the signed quote or the nameplate on each face of the sign for the required electrical service. Service frequently must run several hundred feet; a good rule of thumb is to increase wire size one gauge for every 200 feet.

For further details Refer to Electrical Service and Circuit Wiring Document 659305.



Figure 1 • Electrical nameplate.

Want to know more?

For instructions on handling LED modules, see *page 4*. For conduit instructions, see *page 18*. For instructions on connecting tagged cables, see *page 19*.

Connecting Earth Ground & Power



Always follow the National Electric Code. Article 250 of the National Electrical Code describes general requirements for grounding of electrical installations. Be sure to follow any local codes as well.

Proper grounding protects equipment from electrical disturbances such as lightning, line surges, and unintentional contact with higher-voltage lines.

- 1. Install an 8' long, copper-clad ground rod within 25' of the base of the sign. Certain environments may require more than one ground rod due to soil type.
- 2. Attach the ground rod to a ground terminal inside the sign cabinet.
- 3. **DO NOT** depend on the steel sign poles for grounding. Steel poles may corrode over time and not provide a good earth ground. Copper-clad ground rods resist corrosion and retain their grounding properties.
- 4. Install the ground rod so its entire length is in contact with the soil.
- 5. Make an electrical connection from the ground rod to each sign cabinet. Watchfire recommends using a minimum of 8 AWG wire to make the connection. Install a separate ground rod for each cabinet if the cabinets are more than 50' apart.
- 6. Securely attach the wire connecting the ground rod to the sign. Be sure to protect the wire and its connection points from corrosion. For example, route exposed wire inside conduit.

Note: GND lug terminal is located about 1' to the right of the incoming power DIN rail in 5" slim cabinets (See Figure 2).

Electrical Code Requirements: This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes and ordinances, including proper grounding and bonding.

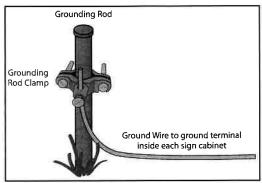


Figure 1 • Grounding rod connection.

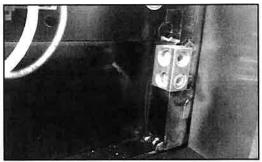


Figure 2 • Ground lug inside sign cabinet.

*Torque the lug with 2" x 1/32" Wide Tip-Slotted Bit @ 25 lbf.in



120V Terminal Block Signs

Connect incoming power to the bottom of the terminal block assembly, to the left of the breaker.

- 1. Connect line wire to the open terminal marked "L".
- 2. Connect the neutral wire to the open terminal marked "N".
- 3. Connect the service ground to the internal cabinet ground lug.

Verify the current rating of the breakers and the conductors that are supplying power to the sign. The current rating of the sign is located on the nameplate on the outside of the sign.

*Torque Circuit Screws with a Slotted Bit @ 12.5 lbf.in



Figure 1 - 120V terminal block.

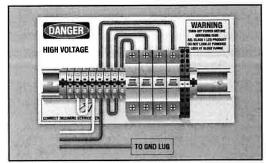


Figure 2 · Alternate 120V terminal block.

240V Bus Bar Signs

Connect incoming power to the top of the Bus Bar assembly,

- 1. Connect neutral to the neutral block.
- 2. Connect line 1 to the left terminal on the bus bar.
- 3. Connect line 2 to the right terminal on the bus bar.
- 4. Connect service ground to the internal cabinet ground lug.



Figure 3 • 240V terminal block.

^{*}Torque Circuit Screws with a Slotted Bit @ 12.5 lbf.in



Connecting Earth Ground & Power (continued) **Power & Data Surge Protection**

240V Disconnect

The picture to the right shows the power connections inside a standard 240V single phase disconnect. Sectional signs typically have one disconnect per cabinet. Verify the current rating for each cabinet; they may not be identical. Refer to the nameplate for the correct current rating. Connect the incoming power in the following manner:

- Connect both of the line voltage conductors to each disconnect terminal block (⁵/₃₂" Allen wrench).
- Connect neutral to the neutral bar. This is a current carrying neutral and must be properly connected.
- · Connect the ground to the ground lug.
- Verify the correct voltage is stable before turning on sign disconnects.

*Torque 2 Line Circuit Screws and 1 neutral circuit screws with 5/32" Hex Key/Socket @ 50 lbf.in

*Torque Ground Circuit Screws with a Slotted Bit @ 50 lbf.in

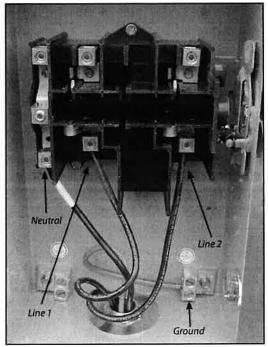


Figure 1 • Standard 240V single phase disconnect.

Power Surge Protection

Due to the dangers of lightning and power surges, Watchfire recommends using an adequate power surge suppressor with all network-connected computers. A consumer grade power surge suppressor would be adequate.

Watchfire extends no warranty to any surge protection products. Connecting a suppressor improperly can adversely affect the performance of the device it is connected to. Consult a qualified electrician for assistance with properly connecting these devices.

Data Surge Protection

Using a data suppressor in addition to a power suppressor is recommended with outdoor-mounted radio antennas or if the radio cable runs a long distance in an attic or drop ceiling. The data suppressor ground must route to the same point as the host system ground via the shortest possible path. Install the suppressor in between the radio and the POE or the computer as close to the POE or computer as possible. If grounding points are not available, contact a qualified electrician.

Our RWF radios come standard with a shielded cable between the radio and the power supply.



Additional Connections & Conduit Requirements

Conduit Installation

- Conduit may be installed in advance to hasten installation when the sign arrives.
- Signs with a twist-lock data connection will have their connectors on the back of each cabinet. Temperature sensors and radio connections are also located on the back of the cabinet (see Figure 1).
- There are at least two holes in the back and/or bottom of each sign cabinet
 that are plugged with caps where conduits may be attached. One is located
 on the left end of the cabinet near the power terminal block. The other is
 located on the right end of the cabinet. If practical, install conduit at these
 locations. DO NOT route power and data cables together. If needed, similar
 locations are marked on the false back where the back wall can be drilled
 through for additional access.
- Only use conduit fittings suitable for outdoor use. Route all electrical wires and cables that will be exposed to the outdoors inside properly sized conduit.



Figure 1 • Twist-lock connections.

Drilling Precautions

- Always disconnect power to sign before drilling.
- Whenever possible, use the provided conduit openings in the sign, or drill where the conduit markings are positioned in the false back inside the sign.
- Take care to avoid electrical components and wiring when drilling.
- Keep metal shavings away from live electrical parts, and remove the shavings when finished.
- · Always seal any welds, screws, bolts and holes with an outdoor silicone sealant.

Radio and Temp Sensor

Watchfire radios do not require conduit unless specified by local code. The temp sensor cable is weatherproof and does not require conduit unless specified. If required for either, conduit must be at least 1".

Fiber-Optic

Use 1½" conduit. Fiber-optic cable may run in the same conduit as the power cable. Fiber-optic **must not** be exposed to sunlight or weather. Make sure no water is in the conduit. When the water freezes it can break the fiber.

Data Crossover

- Twist-lock data cables are weatherproof and do not require conduit unless specified by local code.
- If the faces are separated by more than 300 feet a fiber-optic cable will be used for data crossover. The fiber-optic cable may be routed along with power wiring inside the same conduit.



Data Crossover Cables (2 options)

The sign ships with several cables labeled with color-coded tags to assist installation. Match each colored tag to its partner.

Data Crossover Cables

On multiple face installations where two or more sign cabinets are used, data crossover cables link the secondary cabinet to the primary cabinet.

- Signs with a twist-lock data connection will have their connectors on the back of each cabinet (see Figure 1). The data cable will be marked with orange tape. Pull out the cable from the secondary cabinet. The primary data cable is 5' long, and the secondary data cable is 35' long. Align the white dots on each connector and twist to complete the connection.
- Large signs may have more than one data crossover cable.
 Signs with several crossovers use colored tags to mark the locations of the cables and their attachment points. These tags extend past the modules on each face.

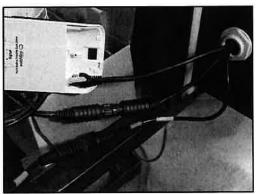


Figure 1 • Secondary cabinet (left) connected to the primary cabinet (right).



Data Crossover Cables (2 options) (continued)

Data Crossover with Surge Suppressors

If the purchased sign included Watchfire's data crossover with surge suppressor option, then follow the instructions below to complete installation.

- 1. 300' of copper cable is included with the sign and should be used to complete the data connection between sign faces.
- 2. Determine what length of cable is needed between the two faces. Cut the cable to length if needed (ex. If the distance between the two cabinets requires 100' of cable, cut the cable to 100' and eliminate 200' of excess cable).
- 3. If the 300' cable was cut to length, cut the insulation back and strip all six small wires so that $\frac{3}{16}$ " of copper wire is exposed on each wire.
- 4. Locate the data line surge suppressor in the primary sign cabinet. It is a 5" x 2" grey box labeled PolyPhaser (see Figure 1).
- 5. Remove the lid from the surge suppressor box.
- 6. Remove the wire grommet and wire tie from inside the surge suppressor box. Set the wire tie aside; it will be needed later.
- 7. Insert the data interconnect cable through the grommet. Start inserting the wire on the side of the grommet with the hook. (If needed, use the assembly on the right side of the surge suppressor as a reference.)
- 8. Connect the six wires to the terminal block on the left.
- 9. The terminals are numbered 1 through 6 going from the top down. Each wire has a different insulation color. Connect the wires as follows:
 - Terminal 1: Brown
 - · Terminal 2: Brown/White
 - Terminal 3: Orange
 - Terminal 4: Orange/White
 - · Terminal 5: Green
 - Terminal 6: Green/White

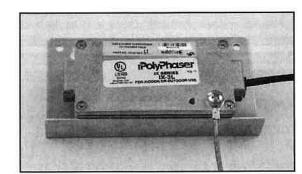


Figure 1 • PolyPhaser

- 10. Seat the grommet securely in the channel on the left side of the metal box.
- 11. Make sure the cable's outer jacket sticks out through the grommet by 3/16".
- 12. Attach the wire tie on the cable on the inside of the box next to the grommet. The wire tie will act as a strain relief for the cable.
- 13. Re-attach the lid to the box.

Repeat steps 4 through 13 for the secondary sign cabinet.

Temperature Sensor

A temperature sensor is optional. If the sign does not have one, skip this instruction. Without a temperature sensor, the customer can use the RSS temperature feed wizard in Ignite to display the temperature on the sign.

- Mount the temperature sensor in a shaded area if possible, such as the side of a building or underneath the sign. If possible, temperature sensors should be mounted on the north side of a building or the sign. Refer to the documentation included in the temp sensor box for assembly instructions.
- 2. Mount the temp sensor away from heat sources such as vents, walls, lamps or large objects that are in direct sunshine. If possible, avoid mounting the sensor on the top of the sign or on a roof.
- 3. If a hardware photocell is included, it will be on the bottom of the temp sensor. It must be mounted where it is not obstructed or in direct light.
- 4. Use the supplied bracket and hardware when mounting the sensor. Supplied hardware includes a ¼" bolt, washer and nut. The bracket provides the minimum spacing needed to reduce heat build-up.
- 5. Install the bracket vertically underneath the sign, an overhang, or building soffit. If mounting to the sign, drill a ¼" hole in the bottom of the cabinet. **DO NOT** drill holes in the side of the sign cabinet.
- 6. Mount the sensor so air is free to circulate around the sensor housing. This will prevent heated air from being trapped around the sensor and causing a false reading.
- 7. Always mount the sensor so the open ends of the plastic shields point downward.
- 8. **DO NOT** mount the sensor sideways.
- 9. The black temp sensor cables and connectors have a weatherproof outer jacket. They do not need to be routed in conduit unless specified by local code.
- DO NOT cut or splice the cable. DO NOT use wire nuts to make electrical connections to wires within the cable. Contact Watchfire for a replacement cable if the cable is damaged.

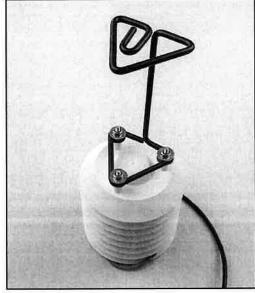


Figure 1 • Temperature sensor with vertical mounting bracket.

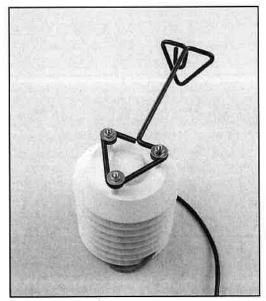


Figure 2 • Temperature sensor with horizontal mounting bracket.

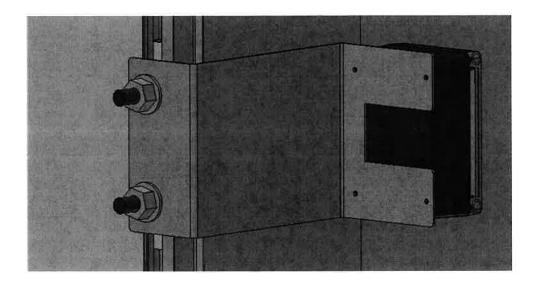


Directional Photocell Installation Instructions



Installation Tips:

- Before attaching the camera boom, slide the photocell assembly into the tracks via the openings at the bottom of the sign
- Slide the photocell assembly up the side of the sign until it is two feet from the bottom of the sign
- Tighten both bolts down so the photocell won't slide down





RWF Radio

 Two radios are included with your sign: One for the PC and one for the sign. Both radios are labeled accordingly. The radios cannot be switched. Doing so will result in communication failure.

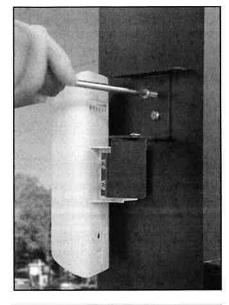


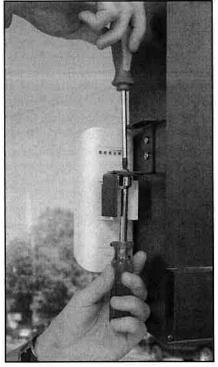
DO NOT cut, splice, or modify the radio cables in any way. This will void the warranty on all radio parts.

- **DO NOT** place anything in front of the radios that could obstruct their RF signals.
- DO NOT mount the sign radio inside the sign or any other metal structure.
- Make sure both radios are positioned so their faces are pointed towards each other.
- Elevate the radios above any obstructions.

Sign Radio Installation

- Mount the sign radio so that it will be line-of-sight with the PC radio. Mount the radio vertically so that the cable will be pointing toward the ground. Place it above or away from any obstructions. Both the radio and its cable are rated for outdoor use.
- 2. Remove the LAN cover from the bottom of the radio by pressing in on the tab on the back of the radio and sliding the cover down.
- 3. Pull the radio cable out of the back of the sign cabinet and make the connection to the sign radio.
- 4. Replace the LAN cover by centering the cable into the opening and sliding the cover upwards until it "clicks" into place.







RWF Radios (continued)

RWF Host Radio Installation

- 1. Verify that the radio is labeled "PC Radio." The radios are not interchangeable.
- 2. Mount the host radio:
 - Vertically and within clear line-of-sight of the sign radio.
 - Place it above or away from any obstructions. The best signal quality is achieved through outdoor, lineof-sight placement.



- **DO NOT** mount the host radio near wifi access points or wireless routers. It causes interference issues. These are directional radios. They must have the faces pointed towards each other to receive good signal.
- The POE adapter is not rated for outdoor use. If possible, mount the radio near a window. Both the radio and its cable are rated for outdoor use.
- 3. Route the radio cable from the host radio to the host PC. Unless required by local codes, the radio cable does not need to be placed in conduit. Route the 100' radio cable. Do not extend the cable if the cable is not long enough to maintain good signal strength; you could put the radio on your network. See instructions in the RWF manual. Routing the cable through plenum spaces is **not** recommended, because the cable is not plenum rated.
- 4. Connect the radio cable to the POE port on the POE adapter (see Figure 1). The POE adapter is not rated for outdoor use; it must be placed indoors. This is how the radio gets power. Do not plug anything except the radio cable into the POE port.
- 5. Connect the AC cable, included with the POE adapter, to an AC outlet. Plug the other end of the AC cable into the POE adapter.
- Connect the included 3' Ethernet cable to the LAN port on the POE adapter. Connect the other end to the USB to ethernet external NIC adapter. Instructions on setting up the USB to ethernet NIC adapter can be found on page 35.

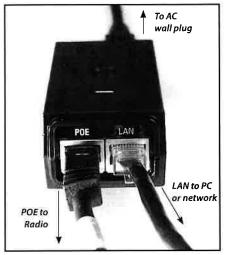


Figure 1 • POE adapter.

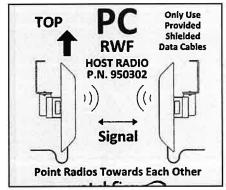


Figure 2

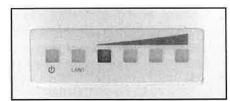


Figure 3 • LED's on the back of the radio indicate signal strength.



High Speed Fiber

High Speed Fiber

*Refer to the High Speed Fiber manual for complete setup instructions.

- 1. Connect the long fiber to the BMC in the sign.
- 2. At the sign, the blue connector attaches to RX and the orange or red connector attaches to TX.
- 3. Connect the other end of the long fiber to an indoor wall plate.
- 4. Connect the short fiber, included with the sign, to the wall plate. It is very important to use the provided short fiber and wall plate. Using the short fiber decreases the chances of damaging the long fiber in the future. It is also important for TX and RX to be straight through on the wall plate. For example, the blue long fiber will connect on one side of the wall plate, and the blue short fiber will connect directly on the other side of the wall plate.
- Connect the other end of the short fiber to the included Media Converter. Connect the blue fiber-optic cable to the XMT plug and the red/orange fiber-optic cable to the RCV plug on the Media Converter.
- Connect the Media Converter AC cable to the Media Converter. Plug the other end of the AC cable into an AC outlet.
- 7. Connect one of the included 3' Ethernet cables into the network port on the Media Converter. Connect the other end of the cable to the Media Converter port on the Fiber Router.
- 8. Connect the Fiber Router AC cable to the Fiber Router. Plug the other end of the AC cable into an AC outlet.
- 9. Connect the second 3' Ethernet cable to the PC/LAN port on the Fiber Router. Connect the other end of the cable to the USB to ethernet external NIC adapter.*

*If connecting to a LAN, first program the Fiber Router from a PC, and then connect the Fiber Router to the LAN. See the Network Configuration section of the High Speed Fiber manual for details on configuring the Fiber Router for network use. See page 35 for instructions on setting up the USB to ethernet external NIC adapter.

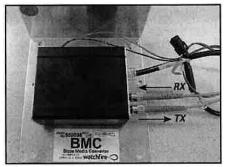


Figure 1 • BMC

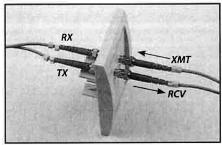


Figure 2 • Fiber wall plate

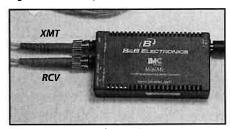


Figure 3 • Ethernet-to-fiber media converter



Figure 4 • High Speed Fiber Router

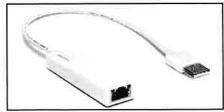


Figure 5 • USB-to-Ethernet NIC adapter



Broadband Wireless

Broadband Wireless

The BBW is a high-speed internal cellular communication unit for the sign. It receives a cellular internet signal through its antenna and converts it to Ethernet. This enables the sign to have an always-on internet connection. Depending on the size and model of the sign there may be a BBW or a BC760/BBW

Watchfire requires a yearly fee and data plan agreement. If the data plan expires and has not been renewed, connectivity to the sign will be impaired. To reactivate service please contact Watchfire Technical Support at 1-866-637-2645.

- The BBW is a high-speed internal cellular communication unit for the sign. It receives a cellular internet signal through its antenna and converts it to Ethernet. This enables the sign to have an always-on internet connection. (Figure 2)
- 2. The antenna (Figure 2) has a magnetic base. The antenna must be mounted perpendicular to the horizon. The easiest way to mount the antenna is by magnetically attaching it to the stringer on the bottom of the sign. If that is not an option, the antenna may be placed on top of the sign, or a metal bracket may be used.
- 3. Route the antenna cables inside the sign cabinet and attach the 2 antenna cables to the "cellular" port and the other in to the "diversity" port.
- 4. Power on the sign and check the lights on the BBW modem (see Figure 3).

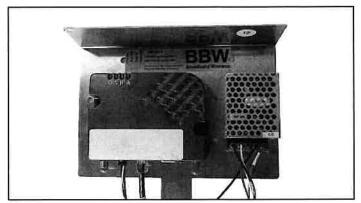


Figure 4 • BBW

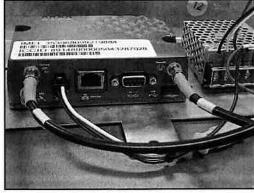


Figure 1 • BBW

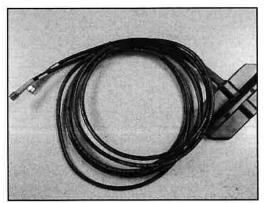


Figure 2 • BBW Antenna



Figure 3 • Status Indicators



Broadband DSL

Broadband DSL

The DSL modem resides in a weatherproof, NEMA-rated enclosure. In most scenarios and prior to sign shipment, Watchfire will work with the customer in order to obtain internet service with a local provider of their preference which allows the modem to be programmed prior to installation.

DSL Setup

Pictured to the right is the assembly — referred to as an OA700-DB — which provides all necessary connections for DSL service and ships housed within the NEMA enclosure. Please reference the image for assistance with making connections.

- Turn power OFF on the breaker (1) located on the DIN rail assembly. Three wires bring power into the terminal block: line (L) - black, neutral (N) - white, and ground - green, which attaches to the green/yellow terminal. Connect power.
- 2. Connect the DSL phone line running from the telephone company's NID (Network Interface Device) to the top of the RJ-11 surge suppressor (2). Route the cable via conduit (¾"+) through the bottom of the NEMA enclosure.
- 3. Verify the three DSL modem (3) connections. The phone line connects to the bottom of the RJ-11 surge suppressor (2) from the "line" port on the DSL modem. The Ethernet cable connects to any port on the Ethernet switch (4) from the "ETH" port on the DSL modem. The DC power cable from the DSL modem connects to the 12 VDC power supply (5).
- 4. Connect the provided 50' dual-strand fiber cable from the Ethernet switch (6) to the BEF inside the sign cabinetry.
- 5. Turn the power breaker (1) on.

Note: The GFCI electrical outlet (6) is included for troubleshooting purposes only, and should have no devices connected.

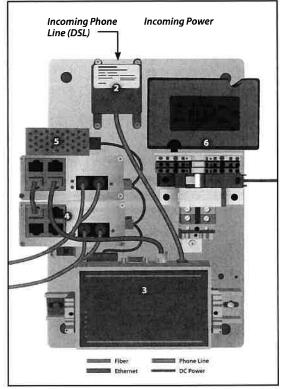


Figure 1 • OA700-DB



RWF Walk-Up Radio

*Please refer to the RWF Walk-Up Installation Guide for more detailed information regarding this option.

RWF Walk-Up Radio

The RWF Walk-Up Radio is a close range wireless option that uses 802.11 WiFi standards. One RWF radio is mounted at the sign. An internal or external WiFi card can then be used with a laptop to update the sign.

General Mounting Guidelines

- Do not place anything in front of the radio that could obstruct its RF signal.
- Do not mount the radio inside the sign or inside a metal structure.
- Elevate the radio above any obstructions.
- Mount the radio so that it will be line-of-sight with the wireless computer.

To Install

- 1. Mount the sign radio so that it will be line-of-sight with the location you will be updating the sign from. Mount the radio vertically so that the cable will be pointing toward the ground. Place it above or away from any obstructions. Both the radio and its cable are rated for outdoor use.
- 2. Remove the LAN cover from the bottom of the radio by pressing in on the tab on the back of the radio and sliding the cover down. Pull the radio cable out of the back of the sign cabinet and make the connection to the sign radio.Pull the radio cable out of the extrusion on the back of the sign cabinet and connect it to the radio.
- 3. Replace the LAN cover by centering the cable into the opening and sliding the cover upwards until it "clicks" into place.

Note: Both the radio and its cable are rated for outdoor use.

Computer Setup

- 1. Make sure the sign is powered on.
- 2. If using a built-in Wi-Fi card, click the wireless networks list icon on the taskbar.
- 3. If using the included external USB Wi-Fi card, insert the driver CD and follow the onscreen instructions. Plug the USB Wi-Fi card into the computer.
- 4. Find the network labeled WF012345 (WF followed by the sales order number of the sign) and click Connect.
- 5. Enter the security key. The key can be found inside the front cover of this manual or inside the RWF Walk-up manual.
- 6. Verify that it connects to the sign. If an exclamation point is located next to the wireless networks list icon, that's OK; this indicates there's no connection to the Internet.



RWF Walk-Up Radio (continued)

Ignite Setup

- 1. Insert the Ignite CD into a laptop and follow the on-screen instructions to install Ignite.
- 2. On the Ignite Auto Configuration page, click Network Connect Page.
- 3. Enter 172.24.128.1
- 4. Click Next.

Ignite is configured to communicate to the sign.

Radio Security

The RWF sign radio operates in the 2.4 GHz spectrum using WPA2-AES encryption for communication. The SSID is exclusive to each sign and is broadcasted so it can be seen from a wireless laptop. Each radio uses a WPA2-AES encryption key that is generated by Watchfire Signs and is unique to each sign. Watchfire Signs keeps all encryption keys confidential. Sign communications can only occur with a licensed copy of Ignite software. For more information concerning RWF radio security, contact Watchfire Technical Support.

Want to know more?

For the wireless network adapter's WPA2 key, see the **Sign Configuration** page at the beginning of this manual. For conduit instructions, see *page 18*For instructions on how to set up software, see *page 36*.



Fiber XVS with Live Video

Fiber XVS with Live Video

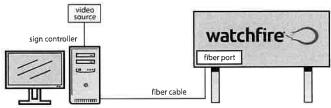
Watchfire offers two separate Live Video configurations, Live Video Only and Live Video On-Demand, which enables a sign to feature live video or Ignite message scheduling functionality. Because the computer connects to and also runs the sign, it must remain powered on at all times.

The Live Video feature allows messages to be displayed in real time on the sign. Data is sent directly from the camera or video device to the sign without the need for editing, saving or managing. Live Video is not limited to live action. It is also capable of playing content from a TV, DVD player or other device on the sign. Be mindful of any copyright on material from these sources.

Live Video Only is attached to a 24/7 video source which fundamentally converts the sign into a video playback device. Scheduled messages are not capable of playback. It is used only for setup and trouble-shooting purposes.

Included with Fiber XVS with Live Video:

- High-end Dell with video capture hardware computer configured at Watchfire factory (rack-mount PC available at additional cost)
- · Fiber-optic Cable



Standard Live Video hardware setup.

Setting Up Ignite for Live Video

Ignite needs to be set up to properly work with Live Video.

- Click Tools > Configuration > Sign Configuration. The Sign Controller Type must be set for Direct Connect
 Flare-Ethernet, Direct Connect Flare550-Ethernet or Direct Connect eFlare, depending on the hardware
 in the sign.
- Click **Tools** > **Sign For Windows.** Click Live Video from the toolbar and select the appropriate video input of the capture cable.

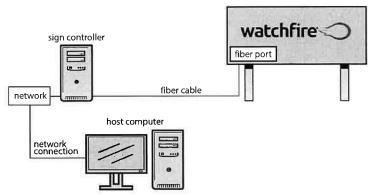


Fiber XVS with Indoor Sign Controller

Fiber XVS with Indoor Sign Controller

The Indoor Sign Controller option is best utilized for uploading large amounts of content to be displayed on the sign. Unlike most controllers installed inside the sign cabinetry, an Indoor Sign Controller takes full advantage of available Ethernet speeds of the customer's network while converting and transferring data to the sign via fiber-optic cable. Though this setup is not suitable for Live Video, the very high update speed is perfect for working with large messages containing custom images and video files. Setting up the Fiber XVS with Indoor Sign Controller option is simple and easy to do.

- Because the Indoor Sign Controller connects to and also runs the sign, it must remain powered on at all times.
- A separate host PC will be setup to communicate directly to the Indoor Sign Controller via Ethernet using the Ignite software.
- Included with Fiber XVS with Indoor Sign Controller
 - High-end Dell Computer (Rack-mount PC Available at additional cost)
 - Fiber-optic Cable



Standard Indoor Sign Controller hardware setup.

Setting up Ignite to connect to the Indoor Sign Controller

- The NIC in the PC is programmed to use an IP of 192.168.13.100. This can be edited to work on the
 customer's network, the IP needs to be a static IP. The Fiber NIC is used to connect to the sign.
 DO NOT change any network settings on the Indoor Sign Controller Fiber NIC. The internal NIC is preprogrammed to communicate to the sign.
- 2. Install the Ignite software on the host PC that will be used to update the sign. Follow the Ignite Quick Setup instructions (page 36) to configure Ignite. Choose the **Network Connect Page** option and enter the static IP assigned to the Indoor Sign Controller.



Webcams

The wide-angle, fixed view camera comes standard with Watchfire Digital Outdoor signs. The webcam is mounted on an articulating boom. Its wide-angle lens provides a full view of the sign. Advertisers can view the sign at any time through the easy-to-use web interface.

The webcam allows for image capturing as well as monitoring. Frame rate and image quality are factory optimized for viewing the LED sign.

Mounting the Camera Boom

- 1. Mount the webcam assembly to the boom arm using the two provided bolts. To avoid damaging the camera, do not over-tighten the screws.
- Determine if the camera will be mounted on the left side or right side of the sign. Assemble the camera boom bracket in the proper orientation for bottom left or bottom right side mounting. Use the L-shaped bolt alignment plate before attaching the boom bracket to the back of the sign.
- 3. Using the hinge bolt provided, attach the boom to the bracket. Tighten hardware to 60-70 ft-lbs and insert the pin to hold the boom in the proper orientation. Remove the pin to swing the boom in toward the face of the sign for servicing.
- 4. The camera cable and ground wire are outdoor rated and do not need to be routed through conduit unless specified by local codes. No tie-downs are included, as typically, the cable is routed inside the boom. At the camera end of the boom, ensure a drip loop is made in the cable and secured to the boom as close to the camera as possible.
- 5. When the camera is on the left side of the display: The camera cable may be installed through a preinstalled grommet in the back of the sign. The 8-pin push lock connector will connect directly to the POW-48 inside the sign cabinet after disconnecting the extension cable currently connected to the POW-48.
- 6. When the camera is on the right side of the display: An extension cable should be coiled up in the right side of the sign. A grommet is provided to seal this to the pre-drilled hole in the back side of the sign cabinet. While the cable is weatherproof, the connectors are not and should always reside inside the sign cabinet.

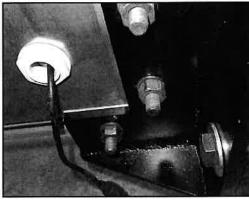


Figure 1 • Mounting plate shown attached to rear track.



Figure 2 - Boom mounted in interface bracket and retracted to servicing position.



Figure 3 • View of a Watchfire sign, as seen through the webcam.



HS900 & NEMA Box Enclosures & Spare Parts Box

Mount the NEMA Housing on the Sign Pole

The air-conditioned NEMA box ships with a set of external mounting brackets used to mount the main housing on the sign pole. Watchfire recommends using Unistrut framing bars (see Figure 2) in conjunction with these mounting brackets to secure the main housing to the sign pole. Apply silicone sealant to all bolt connections.

Cabling

Each communications housing is custom built per the communication option.

- Route the fiber cable from the fiber input to the sign.
- If using a cellular modem, route the modem's antenna cable through the 1" conduit opening and connect it to the cellular modem.
- If using RWF, route the RWF antenna cable through the 1" conduit opening and connect it to the POE.
- If using a DSL modem, route the phone line to the surge suppressor and then the DSL modem.

Connecting Power

The NEMA housing is powered by a 120V terminal block on the bottom shelf.

- Route the electrical wires from the main circuit panel through the predrilled conduit opening in the NEMA housing.
- Connect the green grounding wire to the grounding lug, the white neutral wire to the neutral bus and the line wire to the line bus.
- Plug the air conditioner's power cord into the outlet provided, and then switch on the circuit breaker.

Spare Parts Box

- 1. Plan for a suitable location to mount the spare parts box. Considerations:
 - a. Box accessibility from the catwalk (see Figure 4).
 - b. Weight of the box.
 - c. Box door being able to fully open.
- 2. Install the included beam clamps to the box: two clamps on the top and one on the bottom (see Figure 5).
- 3. Mount the box to the sign structure (see Figures 6 and 7).

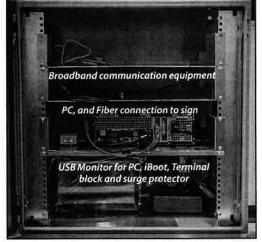


Figure 1 • The communications housing contains three internal shelves and the attached air conditioner.



Figure 2 • Unistrut framing bar and mounting brackets on the back of the AC NEMA box.



Figure 3 • Closeup of the spring nut and bolt used with the Unistrut framing bar.





Figure 5



Figure 6

Figure 4



Figure 7



PC Requirements

A personal computer (PC) is needed to run Ignite, the application used to create and send messages to the sign. A new sign owner has two choices for a PC to operate their new Watchfire sign:

1. Order New PC From Watchfire®1

All needed hardware & software pre-installed. Sign & PC tested together prior to shipment.

2. Using An Existing Computer

Below are the minimum required specifications to ensure Ignite operates properly. Our helpdesk can only resolve compatibility issues with computers provided by Watchfire, but most PCs will work.

Minimum requirements (all models, regardless of PC supplier):

Microsoft Windows 10, 8 or 7 (32 or 64-bit), or Mac OS 10.10 or newer running Parallels Desktop 10.10 or newer (with one of the previously listed OS's)

1GB of RAM (2GB+ recommended)

5GB of available hard-disk space

Video card capable of displaying 64,000 colors (1024x768)

Internet Explorer 8.0 or higher

NOTE: Some sign communication methods add to Minimum System Requirements. Refer to Communication System Requirements below.

Communication System Requirements

The following communication system requirements are necessary in order to communicate with your Watchfire Sign:

Network Interface Card

· Required for High Speed Fiber, RWF Radio and Broadband communications

Video Capture Card

· Required for XVS Live Video

Want to know more?

To set up software, see page 36.

¹ Laptop available; part #33989. Not compatible with Live Video or Video Capture.



Setting up the USB to Ethernet External NIC Adapter

The USB to ethernet external NIC adapter can be programmed to a static IP address that is able to communicate with the RWF radio, high speed fiber router, or live video computer.

- 1. Connect the external USB/Ethernet NIC to an available USB port on the computer.
- Go to the Network and Sharing center of the computer.*
 Start Menu > Control Panel > Network and Sharing Center > Change Adapter Settings
- Right-click the adapter labeled Local Area Connection 2 or ASIX. Select Properties.
- 4. Highlight Internet Protocol Version 4. Select Properties.
- 5. Select **Use the following IP**. Set the IP address to **192.168.20.5**. Set the Subnet mask to **255.255.255.0**. Click **OK**.

Note: For an Indoor Sign Controller set up, the static IP address will be used during the configuration process on the host PC.

*If you cannot find the Network and Sharing center try this: Select the **Start Menu** and type "ncpa.cpl" in the Quick Search field. Press **Enter**.

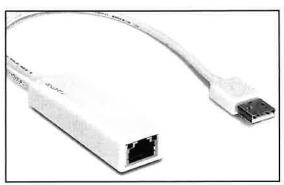
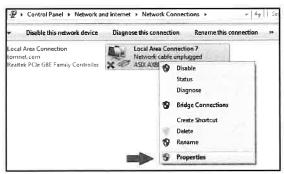
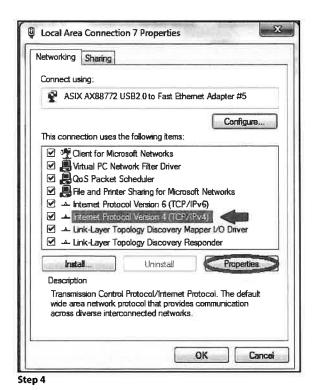
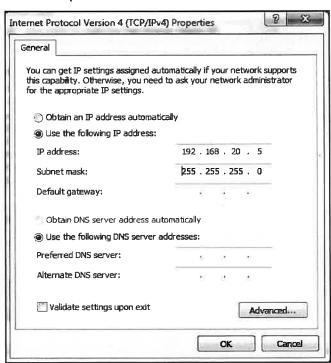


Figure 1 • *USB-to-Ethernet NIC Adapter.*



Steps 2 & 3





Step 5



Quick Setup for Auto Configuration

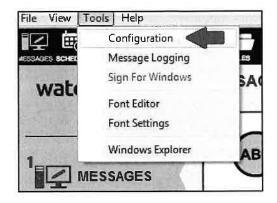
The Auto Configuration Wizard attempts to connect to the sign in order to download the configuration details from the sign controller. Follow these simple steps to configure Ignite and connect to the sign. To get to the Auto Configuration Wizard in Ignite, click on Tools > Configuration > Add Sign.

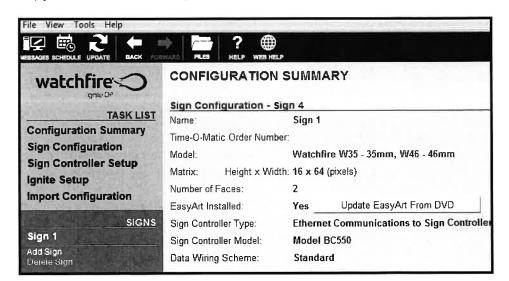
- 1. Be sure the sign is turned on. It should be playing a default message.
- Install Ignite on the host PC. If the sign does not have power, choose Manual Configuration Page, and refer to the inside cover for Sign Configuration.

Note: Auto Configuration is preferable. If possible, wait for the sign to be powered on.

3. Watchfire offers many communication options. Choose the appropriate sign communication method from the three options below and follow those instructions.

Note: For RWF Walk-up radio, please see page 26 of the installation manual or the RWF Radio Walk-Up guide (Answer 1544 on watchfiresigns.com/kb).





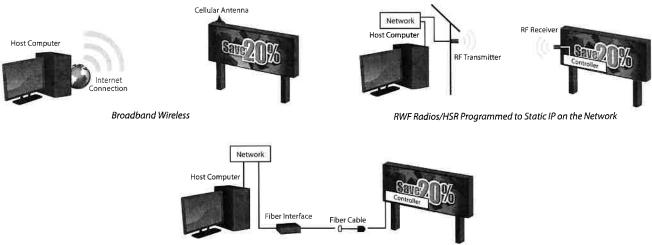


Quick Setup for Auto Configuration (continued)

a. **RWF Radio, High Speed Fiber or HSR:** If the sign has High Speed Fiber, RWF Radios or HSR, connect the equipment to the host PC at this time. The drivers will install automatically. Click the **Click Here** link on the Auto Configuration Wizard. The Wizard will attempt to connect to the sign and download the sign configuration. If communications are established, the Auto Configuration Successful screen will appear. Click **Finish**.



b. **Broadband Wireless, HSR, High Speed Fiber set to a static IP on the network, or RWF Radios that have been programmed to a static IP on the network:** If the sign has Broadband Wireless, HSR, High Speed Fiber or
RWF Radios that have been programmed to a static IP on the network, click **Network Connect Page** and enter
the static IP. Click **Next**. The Wizard will attempt to connect to the sign and download the sign configuration. If
communications are established, the Auto Configuration Successful screen will appear. Click **Finish**.



High Speed Fiber Programmed to Static IP on the Network

4. Once Ignite has been configured for the sign, install the EasyArt Graphics by inserting the included EasyArt disc. The correct size of EasyArt will be installed. If the EasyArt was installed before the configuration was set in ignite, it will need to be reinstalled. The default location for where the EasyArt is installed, can be found here: C: > Program files > Ignite12 > MsxArt

If the Ignite Auto Configuration Wizard fails to connect to the sign, the Auto Configuration Failed message will appear. Check connections and power to the communication equipment and be sure the sign is playing a message before clicking **Retry**. If the problem persists, click **View Log** and review the error messages for possible solutions. View the "Troubleshooting Auto Configuration" help answer on watchfiresigns.com/kb for further steps.

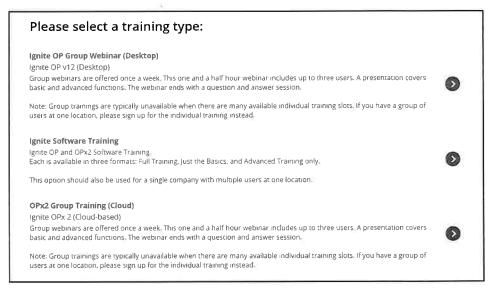


Ignite® Software Training

Watchfire has developed the most user-friendly software package in the industry. Ignite is set up for quick, easy learning yet contains enough horsepower to cater to the most demanding content developer. If you ever reach a stumbling block or would like to go beyond the Ignite manual, you can choose to participate in a web-based training option to take your content creation to the next level.

Web-based training is an excellent option for users who have access to the internet at their location. The software trainer will allow you access to view their computer screen with Ignite configured to match your sign, and they will guide you through the steps of creating content for your Watchfire sign. We also use this method for general Ignite overview sessions. Attendees from multiple locations can connect to the same session, which makes this an excellent option for users with employees in remote offices. Audio is handled via a standard conference call. Watchfire will provide a common phone number for all attendees to dial into. Web-based sessions are typically 1 to 1 ½ hours in duration. Check the front cover of this manual to see if training was included with your sign purchase.

Schedule convenient, online training at watchfiresigns.com/ist. If you would like to purchase Ignite software training please call Watchfire Technical Support at 1-866-637-2645. Training is good for the life of the sign, and you can schedule training as often as needed.



Minimum internet connection: Cable modem, DSL or better Internet connection
Web browser: Internet Explorer 8 or newer, Mozilla® Firefox® 24 or newer, or Google™ Chrome™ 23 or newer

Check out our new online tutorials at www.watchfiresigns.com/kb. Click on OP VIDEOS or OPX VIDEOS, whichever is relevant to your configuration.





Automated Sign Diagnostics

Automated sign diagnostics help technicians and customers identify and solve problems faster and more effectively than ever before. The sign diagnostics report can be accessed on the left side of the home screen in Ignite.

- Note the Sales Order number displayed at the top of the window. This number allows Watchfire technicians to quickly locate any prior service information relevant to the sign.
- Sign diagnostics displays the report in both text and graph format. The graph representation of the sign highlights malfunctioning LED modules (see Figure 1).
 - Modules highlighted in red have critical malfunctions, which can likely be seen on the sign. Modules highlighted in yellow have non-critical malfunctions, which may not be visible on the sign.
- Click a highlighted module to see details of the malfunction. The location and type of error will assist the technician during troubleshooting.
 - The red modules display a window of error details.
 First Detected is the first time the diagnostic program detected the malfunction. Last Detected is the last time the software detected the error. Elapsed Time is the difference between the two.
 - The yellow modules display a graph of the module divided into individual pixels. Malfunctioning pixels are highlighted. Hover the cursor over malfunctioning pixels to display the details of the malfunction.
- Below the diagnostics report graph are text tables which display similar information (see Figure 2). View the details of these reports by clicking the + next to the error type.
- Below the diagnostics table is the uptime log. Whenever the controller turns on or off, the log creates an entry.
 If the controller ever loses power, or is restarted for any reason, it will register in the log.

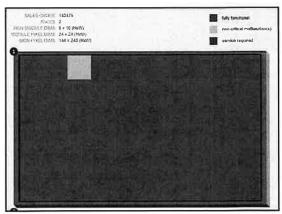


Figure 1 • Graphic diagnostic display.

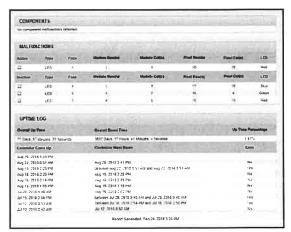


Figure 2 • Text table diagnostic display.



Time & Temperature Signs

GPS Antenna

The GPS antenna receives time signals from one or more GPS satellites. It amplifies those signals, then relays them through the cable to the GPS receiver inside the control unit chassis. For best operation, please follow the guidelines and installation instructions listed below.

Guidelines

- For maximum sensitivity to the satellite signals, mount the antenna in full view of the sky. The antenna works best when there is a direct line of sight from the antenna to the satellite.
- Mount the antenna so the flat portion is level with the horizon.
- If the antenna is mounted on top of the sign cabinet, use silicone to seal the area around the mounting hole. It is very important to prevent water from entering the sign cabinet.
- The GPS antenna cable is 16' long. Select an antenna location within reach of the cable.

Installation

- 1. An L-shaped steel mounting bracket is supplied with the GPS antenna. The GPS antenna is magnetic. Mount the antenna on a flat metallic surface outside the sign cabinet (see Figure 1).
- 2. Route the antenna cable through the small hole on the mounting bracket. The bracket may be fastened to either side of the sign with the screws provided with the bracket. Two threaded holes are located on either side near the top of the sign. These holes are used to hold the lifting eye hooks; the lifting eye hooks may be removed after the sign is mounted.
- 3. If it is not practical to use the threaded holes, mount the bracket securely on a flat surface. If using the bracket is not practical, the antenna may be mounted directly on a flat surface. The bottom of the antenna has an adhesive strip. Peel off the protective backing before permanently mounting the antenna.
- 4. Route the antenna cable inside the sign to the M203 controller. Use a cable grip to seal the opening in the sign cabinet. If a hole must be drilled in the sign to get the cable inside, use the cable grip to hold the cable in place and to help seal the hole. The cable grip requires a $\frac{7}{8}$ diameter hole. Route the GPS antenna cable through the cable grip and then tighten it securely to the sign cabinet. Be sure to use outdoor silicone sealant to seal the hole.
- 5. Connect the cable to the small connector on the bottom of the M203 GPS receiver (see Figure 2).
- 6. The connector snaps into place.

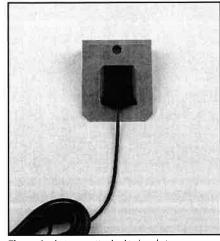


Figure 1 • Antenna attached to bracket.

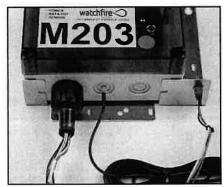


Figure 2 • M203 controller.

Want to know more?

For drilling precautions, see *page 18*. For electrical wiring instructions, see *page 14*.

For conduit instructions, see *page 18*. For ventilation requirements, see *page 3*.



Sign Maintenance

Watchfire signs have been designed and manufactured to provide years of trouble-free operation. This section describes some preventive maintenance steps that may be needed from time to time.

Ventilation and Fans



Ensuring proper ventilation is the single most important factor in increasing the life of a LED message center. It is good practice to check the fans and ventilation any time the sign is being serviced.

In order to help extend the life of the sign, it is important to keep the internal cabinet temperature as cool as possible. Watchfire signs have temperature sensors in the sign controllers that monitor internal cabinet temperature. If the internal temperature reaches 67°C (152°F) the display is turned off, which stops the heat generation by the electronics. This over-temperature condition may occur if the sign installation has compromised the ventilation or if an excessive number of fans have failed. Ventilation can also be compromised by rodents, insects and birds.

Checking for Leaks

It is very important to keep water from entering the sign cabinet. Check the cabinet for signs of leakage, paying special attention to any holes, like those for mounting poles, where water may leak in. Reapply a silicone sealant periodically as needed.

Surge Protection

Check all internal surge suppressors when a sign is being serviced. Surge suppressors are installed on all power DIN rails throughout a sign. A faulty surge suppressor will have a red or orange indicator. A good surge suppressor will have a clear window as seen in the picture to the right. If a faulty surge suppressor is found, obtain a replacement by contacting Watchfire Technical Support.





Cleaning Louvers and LED Modules

Special care must be taken when cleaning your sign. please see kb for proper technique. *More information at www.watchfiresigns.com/kb article 167.*

Powering Down



DO NOT turn the sign off or put it on a timer.

CAUTION!

The sign is designed to have power supplied to it at all times, except during maintenance or service. Do not shut the sign down overnight, on weekends, or during other times of disuse. The sign uses very little electricity when not playing data, and allowing it to continue to run — although blank — keeps the fans running and avoids moisture build-up, protecting the electronics inside the sign.

To make the sign go blank, update the sign with an empty schedule.

To schedule the sign to go blank on a regular basis, use the On Times feature in Ignite. On the schedule page, select the schedule dropdown and click On Times. For more information regarding the cleaning and maintenance of the sign, contact Watchfire at 866-637-2645.



FAQs & Additional Troubleshooting

The following are several steps that are useful when troubleshooting your Watchfire sign. Check out our KnowledgeBase at http://watchfiresigns.com/kb to find more FAQs, How-to's, and contact information. Dealers can request access to specially tailored dealer content by clicking "Request Dealer Access."



IGNITE ERROR CODE 12029

12029 is an error code meaning the computer did not communicate with the controller.

- A. Check the settings of the USB to Ethernet NIC adapter. If the setting is "obtain IP address automatically," it will cause this error. See page 35 for instructions.
- B. Check the communication at the computer. Open a web browser (i.e. Internet Explorer, Google Chrome, or Firefox.) In the URL bar enter the IP of the communications. Typically this is 192.168.20.1.



This should bring up a login page. If it does not, power cycle the communications and make sure everything is connected properly (e.g. RWF POE adapter, High Speed Fiber Router, and media converter.) If you are still unable to get a login page in the web browser, contact Watchfire Technical Support for assistance.

C. Make sure the sign is powered on. Try power cycling the sign and attempt communication in Ignite again. If you are still getting 12029 please contact Watchfire Technical Support for further troubleshooting.

1. DISPLAY ISSUES - Nothing playing on the sign, cannot communicate:

The controller stores data without constant communication from the PC. If nothing is playing and the sign cannot communicate, the controller is not operating properly.

- A. Much like a desktop PC, the controller's reboot takes 1-2 minutes. Allow plenty of time before assuming there is a problem after a power outage or after performing any updates that require a reboot. Wait at least 2 minutes for the controller to reboot, and then try again.
- B. Confirm there is power to the sign. The fans should be running and the display should be lit on the controller. The sign should briefly light when power cycled.
- C. Remove enough modules to be able to see the small display on/in the controller.
- D. Confirm that the switches on the controller and flares, if any, are set to **Operate**.
- E. Turn the power off, wait at least 1 minute, and turn the power back on.
- F. Watch the display on the controller. i.e. BC550, BC760, BC816 etc. The display should be counting down or displaying a series of codes.
 - 1. If the countdown freezes for more than 2 minutes, or if the display is frozen on .8; the controller did not complete the boot-up procedure. Turn off the power, wait 1 minute, then reapply power. Allow at least 2 minutes for the system to complete the reboot. If it still freezes, contact Watchfire Technical Support.
 - 2. Once the countdown has completed, the controller should display H for ethernet (RWF, HRS, high speed fiber, broadband wireless). If the messages begin playing, go on to **Section III**.
 - 3. If the controller is displaying the right code but the sign is still blank, try to communicate and send it a schedule. If the sign cannot communicate, contact Watchfire Technical Support.

II. DISPLAY ISSUES - Software communicated successfully, but:

- A. Sign is still blank.
 - 1. Search watchfiresigns.com/kb for "blank sign troubleshooting" for more information.



- 2. For the software to communicate successfully, the controller must have power, the controller toggle switch and flare switches must be set to Operate, and the controller should be sending data to the sign.
 - a. In Ignite, double-check the schedule to confirm it actually should be playing a message. On the schedule page in Ignite, make sure the virtual sign at the bottom of the page is displaying a message.
 - b. Re-send the schedule.
- 3. Try deleting the entire schedule, and then create a fresh new message e.g. just the time and schedule it to play all day-every day. Send the schedule to the sign by using the **Update Sign** button.
- 4. Click **Tools** > **Configuration** > **Get Sign Controller Status**. Verify that the date and time are correct, and check Schedule Entry to confirm that a message is scheduled to play.
- 5. Confirm the data cables are all plugged into the controller properly.
- 6. Call Watchfire Technical Support for additional assistance.
- B. Only the primary face is playing the message.
 - 1. Confirm the secondary face has power. Check the wiring and ensure the fans are running and the breakers are switched on. Cycle power to the secondary face and watch the modules.
 - a. If the modules don't show anything when the power is cycled, then the modules are not getting any power at all.
 - Check that power is coming to the secondary face from the primary face or from the main service.
 - ii. Confirm the breaker is on inside the secondary face.
 - iii. Contact support if there still is no power to the modules.
 - b. If the modules play codes but then go blank, the face has power but isn't receiving data.
 - 2. Confirm the data crossover cables are plugged into the controller according to the instructions, and not accidentally plugged into the wrong port.
 - 3. Confirm the data crossovers are plugged in at the secondary face correctly.
 - 4. Contact Watchfire Technical Support for further assistance.
- C. Entire face displays scrambled data.
 - 1. Re-address the sign. See **Addressing LED Modules** (page 6) for details. Be sure to return the switch to **Operate** and allow the sign time to reboot.
 - 2. The problem may be a damaged fiber. Contact support and ask to borrow the fiber-optic test kit to check for data loss in the cable.
 - 3. If the cable is fine and the problem persists, call Watchfire Technical Support.
- D. Sign keeps lighting whole modules one at a time or shows a number and counts up, but will not play any messages.
 - 1. The sign is probably in test mode, addressing. Move the controller's switch, along with every flare into the Operate position.
 - 2. Confirm it is now displaying the desired data.
 - 3. Make sure the sign isn't being readdressed from the software
 - 4. If the problem still exists, call Watchfire Technical Support.
- E. One or more lines, one or more columns, or most of a line, not displaying data or scrambled data.



- 1. Confirm that each module's data and power cables are properly attached.
- 2. In Ignite, confirm that the message being sent is the proper size. (The sign's size is listed on the **Sign Configuration Page** on the inside front cover of this manual.)
- 3. In Ignite, click **Tools** > **Configuration** > **Sign Controller Status**, and make sure the configuration is correct for this sign.
- 4. Re-address the sign as covered in Addressing LED Modules (page 6).
- 5. Check data cables are plugged into the proper ports on the controller and/or flares.
- 6. If any of the ports on the controller or eFlare were accidentally unplugged, the cable may have been plugged into the incorrect output. Contact Watchfire Technical Support to confirm which plug needs to be moved.
- 7. If the last line of the sign is not working and the data seems to be "pushed up" the sign one row, the data crossover cables are off by one. Unplug the first data cable and move it over one, and so on.
- 8. If the bottom line or lines are not working, the sign's configuration may be wrong. Check in **Sign Controller Status** for the proper sign size.
- 9. Sometimes one module will have problems with its data input or output port, affecting the rest of that line.
 - a. To test the data input, switch the first module that is not working with the far right module in that row. If the rest of the row now plays except that last module, contact Watchfire Technical Support about exchanging the module.
 - b. If the problem remains in the same location and still includes only a portion of the row, switch the last module that is working with the far right module in a different row.
 - i. If this solves the problem, attach a note to the back of the moved module indicating "To be used in the far right column only." Then readdress and close up the sign.

 [See Addressing LED Modules (page 6).] The module will operate in this position.
 - ii. If the problem moves with the module, contact Watchfire Technical Support to exchange.
- F. One or more individual module(s) not displaying or scrambling data.
 - 1. Confirm that all cables are properly attached to the module and the modules on each side of it.
 - 2. Readdress the sign. [See Addressing LED Modules (page 6).]
 - 3. If the module is completely blank, disconnect and reconnect the power cable from the back of it. Watch to see whether the module's LEDs light when you reapply power.
 - a. If it lights any LED's during boot up, the module itself has power but may not be receiving valid data. Repeat the tests in **Section II**, **Part E**, above.
 - b. If it does not light any LED's during power up, then the module, the power supply or the power cabling is bad.
 - i. Exchange this module with the nearest module.
 - ii. If the problem goes with the module, contact Watchfire Technical Support about exchanging it.
 - iii. If the problem remains, contact Watchfire Technical Support about the power supply or cable.



III. DISPLAY ISSUES – The original (shipping) message is playing, but the software cannot communicate with the sign:

- A. Confirm the communication method is properly installed and operational per its individual instructions.
 - 1. RWF: See page 23
 - 2. High Speed Fiber: See page 25
 - 3. Broadband Wireless: See page 26
- B. If an Invalid Password or Access Denied error is received and the sign has no password, be sure the password field is empty when attempting to communicate. Contact Watchfire Technical Support for a password reset.

IV. Temperature Issues:

- A. No temperature displayed:
 - 1. Confirm the sign controller is receiving temperature data from the sensor:
 - a. Click Tools > Configuration > Get Sign Controller Status.
 - b. Check for an actual temperature listed under Temp.
 - c. If a temperature is displayed, then data is being received; if not, see below at Section IV, part A, item 2. Go to **Scheduling** and confirm the message is set to play the temperature.
 - i. View the preview at the bottom of the screen, and confirm it shows 68° (the placeholder for temperature).
 - ii. Check the scheduling to ensure the message is actually scheduled to play at this time of day. If the problem persists, contact Watchfire Technical Support.
 - 2. If the temperature sensor is not being recognized, then the field will contain only a question mark (?). Make sure the temperature sensor cable is plugged into the controller. Unplug and re-plug the temperature sensor. Allow 2 minutes, and then get sign controller status again...
 - 3. Check that the connector joining the sensor to the cable is properly protected. Check for water or corrosion and that the twist catch is secure. This connector must be indoors or inside a conduit.
 - 4. If the problem persists, contact Watchfire Technical Support.
- B. Temp always displays 68°:
 - 1. If Ignite always displays 68°, but the sign displays the proper temperature, there is no problem. Ignite doesn't know what the real outdoor temperature is, and so 68° is utilized as a placeholder to show where the temperature will be displayed. To confirm the actual outdoor temperature, follow **Section IV**, **part A**, **item 1**, above, to connect to the sign controller and read the actual temperature.
- C. Temp always displays –50: Contact Watchfire Technical Support.
- D. Temperature is consistently wrong by the same amount: Before adjusting the temp, use a quality thermometer to check the temperature several different times of day to confirm the problem is consistent. If the sign is always off a few degrees, adjust the temp offset from the configuration summary page within Ignite. See Section IV, part A, item 1 above.
- E. Temperature is wrong by varying amounts: If the inaccuracy varies throughout the day, it is most likely a problem with the location of the temperature sensor installation. This could cause false readings, such as picking up heat off the street or from a nearby air conditioning vent.



- 1. Try adjusting the installation to move the sensor away from blacktop, roofs or other heat sources.
- 2. If the installation location does not fix the issue, contact Watchfire Technical Support.
- F. If the temperature sensor cable is cut or the temperature sensor has physical damage or water damage, contact Watchfire Technical Support regarding replacing the cable. These cables cannot be spliced.

V. Time Issues:

- A. Daylight savings time issues: Watchfire signs default to having the time change automatically with daylight savings time. Signs shipping to areas known not to follow daylight savings ship with this option off. If for any reason the daylight savings option needs to be turned either on or off, contact Watchfire Technical Support for assistance in correcting the daylight saving setting.
- B. Time is off by a set amount: The controller has an internal clock and does not retrieve time data from the host PC. In the unlikely event the controller loses or gains time:
 - 1. Click Tools > Configuration > Get Sign Controller Status.
 - 2. Click Change Date & Time. Adjust time as needed.
 - 3. The sign will have to reboot for the time correction to take effect.
- C. Time zone change: If the sign is relocated to a new time zone, the Ignite software will need to tell the sign controller the new location. Contact Watchfire Technical Support to assist in changing the time zone settings within Ignite. To protect the sign from accidental changes, a service password is required to access this data.

VI. Time & Temp Issues, Time/Temp L203 Signs:

- A. Setting the time manually: If the GPS has been turned off for any reason, the time can be set manually:
 - 1. With the power **On**, move the operate/ time set/ test switch to **Time**.
 - 2. When the desired time displays, move the switch back to operate.
- B. Setting the temp offset: The temperature offset allows the user to adjust the temp displayed on the sign up or down the same number of degrees at all times. If temp is wrong by varying amounts, see IV. Temperature Issues, part E.
 - 1. With the power Off, move the switch to **Time**.
 - 2. Turn the power On.
 - 3. The sign will continually display the temperature. It will slowly cycle from its lowest possible adjustment to the maximum.
 - 4. When at the desired temperature, put the switch to operate.
- C. M203 display: This display shows some key data, as follows:
 - 1. One dash, then programming settings.
 - 2. Two dashes, then number of GPS receivers recognized (0-9, E for Error if no antenna found, or F for Fault if antenna is not sending data).
 - 3. Three dashes, then temperature offset (-5 to 5), then current dimming (0 = night, 1 = twilight, 2 = day).



Warranty

WATCHFIRE SIGNS, LLC - TERMS OF SALE

NOTE: The following Terms of Sale are subject to change. All transactions for all products sold by Watchfire are subject to the latest published Terms and Conditions and to any special Terms of Sale which may be contained in applicable Watchfire quotations and acknowledgements.

QUOTATIONS: Quotations shall be valid for no more than ninety (90) days from their date, unless otherwise stated in the quotation. All quotations are subject to change by Watchfire at any time upon notice to Buyer. It is Buyer's obligation to review the quotation carefully and to immediately advise Watchfire of any discrepancies Buyer has so any necessary changes may be made. Changes to the System after acceptance of the quote are valid only when accepted in writing and signed by both Watchfire and the Buyer.

Terms of Payment - Upon Buyer's acceptance of a System quote, the Buyer shall make a non-refundable minimum deposit of one-half of the System Price. When applicable, taxes, crating, transportation, delivery charges, and any other related expenses shall be included in the System quote. The remaining balance must be paid by the Buyer three (3) days prior to Watchfire's shipment of the System. The System Price does not include costs of any construction or installation of the System and is solely the responsibility of the Buyer. Systems delayed in shipment at the request of Buyer are subject to annual interest charges of 18% on the remaining balance, which must be paid by Buyer prior to shipment.

Shipment - Watchfire will retain title and all risk of loss or damage in transit until the System is received by the Buyer at the shipping designation. Any damage during the unloading of the System is at the Buyer's sole risk and shall not be considered shipping damage. Buyer shall have the responsibility of inspecting the equipment for apparent shipping loss or damage immediately upon its arrival. In the event of shipping loss or damage, Buyer shall note each exception on Buyer's delivery receipt provided by the carrier at the time of delivery at the shipping destination and shall provide a copy to Watchfire within 14 calendar days of delivery. All loss or damage claims must be accompanied by clear photographs depicting the loss or damage while in the presence of the carrier driver. In the event of concealed damage which occurred during transit and is discovered by Buyer after delivery, Buyer shall report such damage immediately, but in no event later than 21 calendar days after delivery. If such notification is not made, Watchfire shall not be liable for loss or damage in transit. Buyer shall give Watchfire, and its agents, a reasonable opportunity to inspect, test and repair or replace the System or portions thereof. Buyer's exclusive remedy against Watchfire for physical damages during shipping, and Watchfire's only liability for shipping damages, shall be replacement or repair of such System or parts damaged as determined by Watchfire. Watchfire shall be entitled to immediate exclusive possession and control of such portions of the System repaired or replaced. Buyer must return such goods to Watchfire and accept delivery of the replacement goods.

Driver Detention - Fees for up to two (2) hours of detention time, per load, are included in the System Price. In the unlikely event that the driver is delayed or detained beyond two (2) hours following arrival at the shipping destination, detention fees will be accrued by the hour. If these delays are a direct result of issues with preparedness of the installation team and/or jobsite readiness, these fees will be invoiced to the Buyer in a timely manner and will not exceed \$75.00/hour.

Force Majeure - Watchfire shall not be liable for any damages as a result of any delays due to any causes beyond Watchfire's control, including, without limitation, telecommunications failures, technology attacks, epidemic, embargos, quarantines, viruses, strikes, labor problems of any type, accidents, fires, war, acts of terrorism, material unavailability, natural disaster, transportation failures, instability and unavailability of the Internet, and acts of God, etc. In the event of such any such delay, the date of delivery shall be extended for a period of time reasonably necessary to over the effect of such delay.

System Warranty - When used properly under normal use and normal environmental conditions, and subject to the exclusions set forth herein, Watchfire warrants its manufactured goods, and the System against material defects in material and workmanship for five (5) years from the date of shipment from Watchfire's dock. Watchfire warrants the Price Watcher product series against material defects in workmanship for two (2) years from the date of shipment from Watchfire's docks. During the warranty period, Watchfire's only obligation and liability is to repair or replace (at its option) those part(s) of the System which prove to be defective and not merely worn out (e.g., aged LEDs). Repaired or replaced parts provided within the original warranty period shall have the same warranty for the balance of the original warranty period. Part(s) replaced or repaired outside of any warranty period shall have a warranty of replacement only for material defects in material or workmanship for one year from date of shipment. Any parts not manufactured by Watchfire, but which are added to the System manufactured by Watchfire, are covered only by their original manufacturer's warranty, if any. Watchfire is not responsible for telecommunications or Internet services being unavailable, or for limitations caused by environmental conditions or incompatibilities with other systems.

Limitations - Buyer's exclusive remedy for Watchfire's breach of this Agreement as to any term hereof, and Watchfire's only liability for any such breach, shall be replacement or repair of the System and its parts actually delivered to Buyer in Watchfire's sole discretion. IN NO EVENT WILL WATCHFIRE BE LIABLE TO BUYER FOR LOSS, DAMAGE, OR INJURY OF ANY KIND OR NATURE ARISING OUT OF THIS TRANSACTION IN EXCESS OF THE SYSTEM PRICE. The Buyer agrees that these limitations on liability and remedies are independent of the agreed remedies under this Agreement. Significant surge protection is included in the signs. However, very high electrical surges can damage electronic LED sign systems and are not covered by warranty. Proper installation to allow for adequate ventilation as detailed in the Installation Manual S-1504 is required to keep the warranty in force. Power must be applied at all times except for during service incidents. Power outages for more than three (3) days require notice to Watchfire Service to keep the warranty in force.



Warranty (continued)

Intellectual Property - As to the equipment proposed and furnished by Watchfire, Watchfire shall defend any suit or proceeding brought against Buyer so far as it is based on a claim that such equipment constitutes an infringement of any copyright, trademark or patent of the United States. Watchfire retains ownership of intellectual property in any materials, goods, software and production process which may be developed under this Agreement.

Use of System Image - Buyer agrees that Watchfire, without compensation to Buyer, may use Buyer's name along with photographs and images of the System in Watchfire's advertising and promotional materials in any media worldwide without the prior written consent of Buyer. Watchfire agrees that such use shall not imply any endorsement of Watchfire by Buyer.

License for Software Use and Warranty - "Software" as used herein includes software distributed on a media (like a CD, DVD or flash drive), software hosted on a server and accessed through a web browser, and software running on the System controllers. Media does not apply to Ignite OA. This license covers end-user applications such as Ignite OP, Ignite OPx and Ignite OA. The Ignite OP software is a single station license. Additional station access is available at additional cost. Excluding Third Party software, Watchfire warrants that: (1) the media (if any) on which Software is provided shall be free from material defects for sixty (60) days after shipment by Watchfire; and (2) Software substantially conforms to the documentation that accompanies it. Watchfire hereby grants the Original End User a limited, non-exclusive personal, non-transferable and non-assignable license to use the Software. This license terminates upon violation of any provision of this License, and Watchfire reserves the right to electronically disable the Software upon such violation. The software is copyrighted by Time-O-Matic and buyer shall not permit the software to be copied (except for backup purposes), transferred, distributed, disassembled, reverse engineered, decompiled or tampered with. Watchfire does not warrant that the media and Software is completely error-free, will operate without interruption or is compatible with all equipment or software configurations. Watchfire may charge additional fees for any upgrades or modifications to the Software.

Third Party Software - Operation of the sign is supported only with Watchfire software and Watchfire qualified versions of approved third party software. Installing un-supported software on sign controllers could lead to non-operational signs. Service charges for troubleshooting and returning to operation will apply.

BUYER AND ORIGINAL END USER HOLD WATCHFIRE HARMLESS AND INDEMNIFIED FOR ANY CLAIMS BY THIRD PARTIES. INCLUDING WATCHFIRE'S ATTORNEY'S FEES. THAT THE USE OF THE SOFTWARE OR SYSTEM INFRINGES ANY INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY DUE TO AN IMAGE DISPLAYED ON THE SYSTEM BY THE BUYER.

Warranty Service - Defective media or Software may be replaced during the warranty period unless damaged by accident or misuse. WATCHFIRE'S ENTIRE LIABILITY SHALL BE THE REPAIR OR REPLACEMENT OF THE DEFECTIVE MEDIA OR SOFTWARE WHEN TIMELY RETURNED TO WATCHFIRE. Any replacement media or Software has the same sixty (60) day warranty. Warranty service for the System and the Software are expressly conditioned on Watchfire's prior receipt of all payments due under the License, including System Price. Buyer shall contact the Watchfire Technical Support for warranty service. Items determined defective by Watchfire will be replaced at its option with new or like-new part(s). No credit is given for such items. Watchfire will pay for outbound shipping and return ground freight for items repaired/replaced for its manufactured goods. Buyers must pay all duties and taxes for items shipped to destinations outside of the continental United States. Buyer shall pay for the installation of repaired/replaced item and updates to the software. In the event of any delay in Watchfire's performance beyond Watchfire's reasonable control, Watchfire shall have additional reasonable time for performance. Buyer shall pay for all maintenance services.

Exclusions - The above warranties do not apply if the System or Software are damaged due to improper or unreasonable use, modification, repair, service, installation, or environmental conditions or if they are reversed engineered, de-compiled or used to create derivative works.

WATCHFIRE'S LIABILITY TO BUYER UNDER THESE WARRANTIES FOR THE SYSTEM AND SOFTWARE IS LIMITED AS SET FORTH HEREIN, WHETHER IN CONTRACT, TORT, OR ANY OTHER THEORY OF LIABILITY, INCLUDING BUT NOT LIMITED TO FRAUD, MISREPRESENTATION, BREACH OF CONTRACT, PERSONAL INJURY, PRODUCTS LIABILITY OR ANY OTHER THEORY, AND WATCHFIRE SHALL NOT BE LIABLE FOR ANY SPECIAL, DIRECT, COMMERCIAL, EXEMPLARY, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR PUNITIVE DAMAGES, OR DAMAGES FOR LOSS OF USE, LOSS OF ANTICIPATED PROFITS, INCOME, OR ECONOMIC LOSSES OF ANY KIND. WATCHFIRE'S LIABILITY UNDER ANY WARRANTY HEREUNDER, WHETHER EXPRESS OR IMPLIED, SHALL NOT EXCEED THE COST OF REPAIR OR REPLACEMENT OF DEFECTIVE PARTS OF THE SYSTEM AND SOFTWARE. BUYER MAY NOT BRING ANY ACTION UNDER THESE WARRANTIES MORE THAN ONE YEAR AFTER THE CAUSE OF ACTION HAS ACCRUED.

Miscellaneous - Should any part of this Terms of Sale be found invalid, the other parts shall remain unaffected and shall be enforceable. This Terms of Sale shall be governed by the laws of the State of Illinois. Any litigation shall be exclusively in Vermilion County, in the State of Illinois or the U.S. District Court for the Central District of Illinois.

Privacy Policy - See http://www.watchfiresigns.com/privacy-policy for details.



Notes
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Notes



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1015 Maple St Danville, IL 61832 watchfiresigns.com

Sales & Administration

217-442-0611 toll free: 800-637-2645 sales@watchfiresigns.com

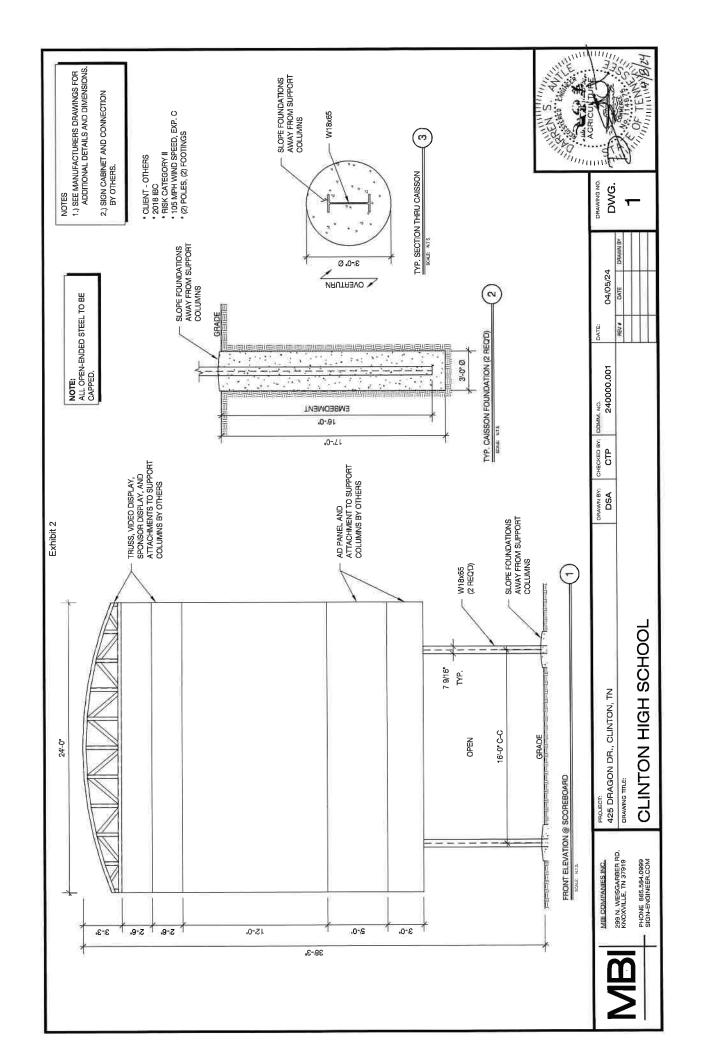
Technical Support

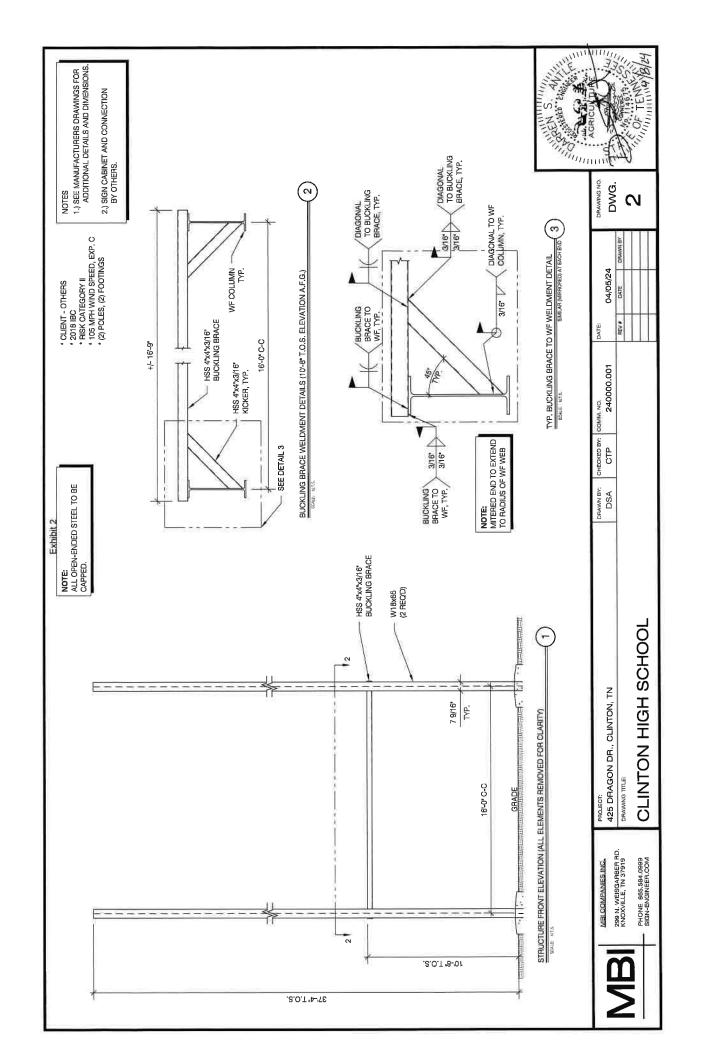
watchfiresigns.com/kb watchfiresigns.com/chat service@watchfiresigns.com 866-637-2645

Outdoor Advertising Support

oasupport@watchfiresigns.com 800-406-6091

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ADDITIONAL DETAILS AND DIMENSIONS. 1.) SEE MANUFACTURERS DRAWINGS FOR

NOTE: ALL OPEN-ENDED STEEL TO BE CAPPED.

2.) SIGN CABINET AND CONNECTION BY OTHERS.

* RISK CATEGORY II * 106 MPH WIND SPEED, EXP. C * (2) POLES, (2) FOOTINGS

CLIENT - OTHERS

2018 IBC

GROUND SIGN DESIGN SPECIFICATIONS:
1. REFER TO SIGN COMPANYS DRAWINGS FOR MORE DETAILS, ALL DESIGNS,
DETAILING FABRICATION AND CONSTRUCTION SHALL CONFORM TO:

2018 IBC

AISC

AMERICAN WELDING SOCIETY LOCAL BUILDING CODES & ORDINANCES

CONCRETE: 2500 PSI @ 28 DAYS

THREADED RODS: ASTM A193 GRADE B7

STD. STEEL PIPE SECTION: ASTM A83 GRADE B (Fy=35 KSI), U.N.O. STEEL PIPE SECTION: ASTM A252 GRADE 3 (Fy=42 KSI MIN.) U.N.O. HSS ROUND SECTION: ASTM A500 GRADE C (Fy=46 KS) U.N.O. HSS SQUARERECTANGULAR SECTION: ASTM A500 GRADE C (Fy=50 KSI) W SHAPES: ASTM A992 (Fy = 50 KSI) ANCHOR BOLTS: ASTM F1554 GRADE 36 U.N.O. (ALTERNATES GRADE 55 & 105) CONNECTION BOLTS: ASTM A325 (GALVANIZED)

STEEL ANGLES, CHANNELS, STRUCTURAL SHAPES & PLATES ASTM A36 REINFORCING: GRADE 60 ASTM A615 PROVIDE A MINIMUM OF THREE INCHES OF CONCRETE COVER OVER

EMBEDDED STEEL. 4.

THE CONTRACTOR (INSTALLER) IS RESPONSIBLE FOR THE MEANS & METHODS OF CONSTRUCTION IN REGARDS TO JOBSITE SAFETY.

NO FIELD HEATING FOR BENDING OR CUTTING OF STEEL SHALL BE ALLOWED WITHOUT THE ENGINEERS APPROVAL.

WELDING ELECTRODES: E70XX

15,

ALLOWABLE SOIL BEARING PRESSURE ASSUMED: 2000 PSF

ASSUMED HORIZONTAL (PASSIVE PRESSURE) ASSUMED AT 150 PSF/FT OF 16. 18.

DEPTH, ISOLATED LATERAL BEARING FOUNDATIONS FOR SIGNS NOT ADVERSELY AFFECTED A 1/2" MOTION AT THE GROUND SURFACE DUE TO SHORT TERM LATERAL LOADS SHALL BE PERMITTED TO BE DESIGNED USING TWO TIMES THE TABULATED CODE VALUES.

ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED RESIDUAL SOIL AND/OR ENGINEERED EARTH.

19

EXCAVATION SHALL BE FREE OF LOOSE SOIL BEFORE POURING CONCRETE.

WELDERS SHALL BE CERTIFIED FOR THE TYPE OF WELDING. ADEQUATELY BRACE POLE(S) UNTIL CONCRETE HAS SET UP FOR 7 DAYS. THIS ENGINEER DOES NOT WARRANT THE ACCURACY OF DIMENSIONS

FURNISHED BY OTHERS. 22. 23. 23.

ALL EXPOSED STEEL SHALL BE PAINTED WITH AN ENAMEL PAINT TO INHIBIT 24.

THIS DESIGN IS FOR THE INDICATED ADDRESS ONLY, AND SHOULD NOT BE USED AT OTHER LOCATIONS WITHOUT WRITTEN PERMISSION OF THE 22

DESIGN OF DETAILS AND STRUCTURAL MEMBERS NOT SHOWN, BY OTHERS. 26.

EN4/8/24 A STATE OF THE STA

> DRAWING NO. DWG. ന 04/05/24 BEV # DATE 240000.001 COMM. NO. снескер ву: CTP DRAWN BY: DSA

> > 299 N. WEISGARBER RD. KNOXVILLE, TN 37919 MEII COMPANIES INC.

DRAWING TITLE: PHONE 865,584,0999 SIGN-ENGINEER,COM

425 DRAGON DR., CLINTON, TN

OLINTON HIGH SCHOOL

Attachment 1 BID NUMBER: 2502 – Scoreboard Installation

SECTION 1 - BID INFORMATION	SECTION 2 - VENDOR INFORMATION
Acknowledgment of Addenda (if any): (Write "Yes" if received)	Vendor Name
Addenda 1 Addenda 2 Addenda 3 Addenda 4	Vendor Address
	City
	State
	Telephone Number
	Lead Contact Person (Please Print)
	E-Mail Address
F:	Taxpayer Identification Number, Social Security or Employer Identification Number:
	State of Tennessee Business License Number: License #
	I agree to abide by all Terms and Conditions of this Invitation to Bid and certify that I am authorized to sign this bid for the vendor. Failure to include any information mentioned in the bid or to comply with these bid instructions may result in rejection of your entire bid. Signing this form affirms that the original Invitation for Bid document has not been altered in any way. Authorizing Signature:
	(Please sign original in blue ink)

Attachment 2

Non-Collusion Affidavit

- This Non-Collusion Affidavit is material to any contract awarded pursuant to this bid.
- This Non-Collusion Affidavit must be executed by the member, officer, or employee of the bidder who makes the final decision on prices and the amount quoted in the bid.
- Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection
 with the submission of bids are unlawful and may be subject to criminal prosecution. The person who signs
 the affidavit should examine it carefully before signing and assure himself or herself that such statement is
 true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with
 the bidder with responsibilities for the preparation, approval, or submission of the bid.
- In the case of a bid submitted by a joint venture, each party to the venture must be identified in the bid documents, and an affidavit must be submitted separately on behalf of each party.
- The term "complementary bid" as used in the affidavit has the meaning commonly associated with that term in the bidding process and includes the knowing submission of bids higher than the bid of another firm, an intentionally high or noncompetitive bid, and any other form of bid submitted for the purpose of giving a false appearance of competition.
- Failure to file an affidavit in compliance with these instructions may result in disqualification of the bid.

Non-Collusion Affidavit
STATE OF
COUNTY OF
I state that I am (Title) of (Name of My Firm) and that I am authorized to make this affidavit on behalf of my firm and its owners, directors, and officers. I am the person responsible in my firm to the price(s) and the amount of this bid.
 The price(s) and amount of this bid have been arrived at independently and without consultation, communication, or agreement with any other contractor, bidder, or potential bidder. Neither the price(s) nor the amount of this bid and neither the approximate price(s) nor approximate amount of this bid, have been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed before bid opening. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a bid higher than this bid, or to submit any intentionally high or noncompetitive bid or other form of complementary bid. The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid. (Name of My Firm)
I state that (Name of My Firm) understands and acknowledges that the above representation are material and important and will be relied on by <u>Anderson County</u> in awarding the contract(s) for which this bid is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from <u>Anderson County</u> of the true facts relating to submission of bids for this contract.
Representative's Signature Title
Sworn to and subscribed before me this day of
My commission expires:
Notary Public



DIVERSITY BUSINESS INFORMATION

Definitions for Determining Minority, Women And Small-Owned Firms

The guidelines for determining minority, women and small-owned firms are defined as follows:

"MINORITY" means a person who is a citizen or lawful permanent resident of the United States and who is:

- o Black (a person having origins in any of the black racial groups of Africa);
- Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- Asian American (a person having origins in any of the original peoples of the Far East,
 Southeast
- o Asia, the Indian subcontinent, or the Pacific Islands); or
- o American Indian and Alaskan Native (a person having origins in any of the original peoples of North America).

"MINORITY BUSINESS ENTERPRISE" shall mean a minority business:

A continuing, independent, for profit business which performs a commercially useful function, and is at least 51 percent owned and controlled by one or more minority individuals; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned and controlled by one or more minorities. Whose management and daily business operations are controlled by one or more of minority individuals. "Control" as used in the above clause, means exercising the power to make policy decision. "Operate," as used in the above clause, means being actively involved in the day-to-day management of the business.

"WOMEN BUSINESS ENTERPRISE" shall mean women business:

A continuing, independent, for profit business which performs a commercially useful function, and which is at least 51 percent owned and controlled by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned and controlled by one or more women. Whose management and daily business operations are controlled by one or more of such individuals. "Control" as used in the above clause, means exercising the power to make policy decision. "Operate," as used in the above clause, means being actively involved in the day-to-day management of the business.

Attachment 3

DIVERSITY BUSINESS INFORMATION ANDERSON COUNTY GOVERNMENT

NOTE: This form is to be submitted only by those who qualify. Bidders do not have to be a minority business to be considered.

IMPORTANT! NOTARY AND COPY OF CERTIFICATION REQUIRED

SECTION 6 – DIVERSITY INFORMATION
ENDOR/CONTRACTOR NAME:
pe of Company: (Check One)
your company 51% Owned or Operated by a Minority Group? Yes No
yes, check the ethnic category and indicate % of ownership:
 American Indian/Alaskan Native% African American% Hispanic% Asian/Pacific Islander% Other%(please indicate)
ease name the entity of certification:
ease provide copy of certification letter or certificate
HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.
HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF MIT KNOWLEDGE.
gnature:OFFICER OF THE COMPANY
gnature:OFFICER OF THE COMPANY
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Attachment 4 Insurance Requirement Acknowledgment

The bidder awarded this bid or contract will maintain, at their expense adequate insurance coverage to protect them from claims arising under the Worker's Compensation Act, any and all claims for bodily injury and property damage to the Bidder and to Anderson County Government while delivery and service are being done. A certificate of insurance <u>must</u> be on file in the Purchasing Department before work may begin and must be maintained until work is completed.

Only the items marked with an "X" are applicable to this bid and or contract.

1.	\boxtimes	Workers Compensation Employers Liability	Statutory limits 100,000/100,000/500,000
2,	\boxtimes	Commercial General Liability	\$500,000 per occurrence \$1,000,000 aggregate
		 ○ Occurrence Form Only ○ Include Premises Liability ○ Include Contractual ○ Include XCU ○ Include Products and Completed Operation ○ Include Personal Injury ○ Include Independent Contractors ○ Include Vendors Liability ○ Include Professional or E&O Liability 	
3.		Business Auto Include Garage Liability Include Garage Keepers Liability Copy of Valid Driver's License Copy of Current Motor Vehicle Record Copy of Current Auto Liability Declaration	ons Page
4.		Crime Coverages ☐ Employee Dishonesty ☐ Employee Dishonesty Bond	
5.		Property Coverages Builders Risk Inland Marine Transportation	
		Performance Bond Required – A <u>One Hundred</u> of Anderson County Government at a federally in <u>ST</u> be submitted before purchase order issued. R	d Percent (100%) performance or an irrevocable letter of sured financial institution in accordance with T.C.A. 12-4-EQUIRED IF BID IS OVER \$100,000.
Anders auto. certificathe ab	on Cou Insurana ate shou	nty Government shall be named as an additional ce carrier ratings shall have a Best's rating of Auld strike out "endeavor to" and include a 30-day no	linton, Tennessee, and shall show the bid number and title. insured on all policies except worker's compensation and A-VII or better, or its equivalent. Cancellation clause on otice of cancellation where applicable. Any deviations from County Purchasing Agent. Any liability deductibles or if applicable.
days if	rstand tl awarde contrac	ed this bid and or contract. I agree to furnish the	nd Certification s and will comply in full within 21 (twenty-one) calendar county with proof of insurance for the entire term of the bid
	-	Vendor Name	Authorized Signature
	Bid Re	epresentative Name (Please Print)	Date

Attachment 5 ANDERSON COUNTY GOVERNMENT PURCHASING DEPARTMENT

CONFLICT OF INTEREST AFFIDAVIT/STATEMENT

NOTE: PLEASE SIGN AND RETURN PAGE TWO IN YOUR BID PACKET.

T. C. A. 5-14-114. Conflicts of interest -- Illegal payments.

- (a) Neither the county purchasing agent, nor members of the county purchasing commission, nor members of the county legislative body, nor other officials of the county, shall be financially interested, or have any personal beneficial interest, either directly or indirectly, in any contract or purchase order for any supplies, materials, equipment or contractual services used by or furnished to any department or agency of the county government.
- **(b)** Nor shall any such persons accept or receive, directly or indirectly, from any person, firm or corporation to which any contract or purchase order may be awarded, by rebate, gift or otherwise, any money or anything of value whatsoever, or any promise, obligation or contract for future reward or compensation.
- (c) A violation of this section is a Class D felony.

T. C. A.12-4-101 Personal interest of officers prohibited.

- (a) (1) It is unlawful for any officer, committee member, director, or other person whose duty it is to vote for, let out, overlook, or in any manner to superintend any work or any contract in which any municipal corporation, county, state, development district, utility district, human resource agency, or other political subdivision created by statute shall or may be interested, to be directly interested in any such contract. "Directly interested" means any contract with the official personally or with any business in which the official is the sole proprietor, a partner, or the person having the controlling interest. "Controlling interest" includes the individual with the ownership or control of the largest number of outstanding shares owned by any single individual or corporation. This subdivision (a)(1) shall not be construed to prohibit any officer, committeeperson, director, or any person, other than a member of a local governing body of a county or municipality, from voting on the budget, appropriation resolution, or tax rate resolution, or amendments thereto, unless the vote is on a specific amendment to the budget or a specific appropriation or resolution in which such person is directly interested.
- (2) (A) Subdivision (a)(1) shall also apply to a member of the board of directors of any not-for-profit corporation authorized by the laws of Tennessee to act for the benefit or on behalf of any one (1) or more counties, cities, towns and local governments pursuant to title 7, chapter 54 or 58.
- **(B)** Subdivision (a)(2)(A) does not apply to any county with a metropolitan form of government and having a population of four hundred thousand (400,000) or more, according to the 1980 federal census or any subsequent federal census.
- (b) It is unlawful for any officer, committee member, director, or other person whose duty it is to vote for, let out, overlook, or in any manner to superintend any work or any contract in which any municipal corporation, county, state, development district, utility district, human resource agency, or other political subdivision created by statute shall or may be interested, to be indirectly interested in any such contract unless the officer publicly acknowledges such officer's interest. "Indirectly interested" means any contract in which the officer is interested but not directly so, but includes contracts where the officer is directly interested but is the sole supplier of goods or services in a municipality or county.

Attachment 5 ANDERSON COUNTY GOVERNMENT PURCHASING DEPARTMENT

CONFLICT OF INTEREST AFFIDAVIT/STATEMENT

- (c) (1) Any member of a local governing body of a county or a municipality who is also an employee of such county or municipality and whose employment predates the member's initial election or appointment to the governing body of the county or municipality may vote on matters in which the member has a conflict of interest if the member informs the governing body immediately prior to the vote as follows: "Because I am an employee of (name of governmental unit), I have a conflict of interest in the proposal about to be voted. However, I declare that my argument and my vote answer only to my conscience and to my obligation to my constituents and the citizens this body represents." The vote of any such member having a conflict of interest who does not so inform the governing body of such conflict shall be void if challenged in a timely manner. As used in this subdivision (c)(1), "timely manner" means during the same meeting at which the vote was cast and prior to the transaction of any further business by the body.
- (2) Any member of a local governing body of a county or a municipality who is also an employee of such county or municipality and whose employment began on or after the date on which the member was initially elected or appointed to serve on the governing body of the county or municipality shall not vote on matters in which the member has a conflict of interest.
- (3) (A) In the event a member of a local governing body of a county or a municipality has a conflict of interest in a matter to be voted upon by the body, such member may abstain for cause by announcing such to the presiding officer.
- **(B) (i)** Any member of a local governing body of a municipality who abstains from voting for cause on any issue coming to a vote before the body shall not be counted for the purpose of determining a majority vote.
- (ii) This subdivision (c)(3)(B) shall in no way be construed to apply to any county having a metropolitan form of government and having a population in excess of five hundred thousand (500,000), according to the 1990 federal census or any subsequent federal census.
- (d) This section shall apply to a member of the board of directors or officer of any nonprofit corporation required under $\S 8-44-102(b)(1)(E)$ to conduct all meetings of its governing body as open meetings.

I have read and understand **both** T.C. A. 5-14-114 and T. C. A. 12-4-101, and will comply.

NOTE: PLEASE SIGN AND RETURN PAGE TWO IN YOUR BID PACKET.

Contractor or Company Owner (signature)	Date	====
Contractor or Company Name (print)		77

BACKGROUND CHECK COMPLIANCE FORM

ANDERSON COUNTY GOVERNMENT

PURCHASING DEPARTMENT 100 N. MAIN STREET, ROOM 214 or 218 CLINTON, TN 37716 (865) 457-6251

(865) 457-6252 (Fax)			
BID NUMBER	CONTRACT NUMBER		
BACKGROUND CHECKS Contractors shall comply with Public Chapter 587 of 2007, as codified in Tennessee Code Annotated Section 49-5-413, which requires all contractors to facilitate a criminal history records check conducted by the Tennessee Bureau of Investigation and the Federal Bureau of Investigation for each employee prior to permitting the employee to have contact with students or enter school grounds when students are present.			
Any person, corporation or other entity who enters or any em or renews a contract with a local board of education or child of (1) Provide a fingerprint sample (2) Submit to a criminal history records check to be con Federal Bureau of Investigations.	ployee of any person, corporation or entity who enters into care program on or after September 1, 2007, must: ducted by the Tennessee Bureau of Investigations and the		
Contact the Anderson County School's Human Resources Deinstructions.	epartment at (865) 463-2800 ext. 2811 for fingerprint		
Company or Individuals (Name)	Address		
City, State, Zip Code	Telephone Number		
Contractor License Number (If Applicable)			
I agree to abide by Public Chapter 587 of 2007, as codified in that I am authorized to sign. The undersigned further agrees is Background Check Information on himself and all of his emp County Government. I hereby agree to release all criminal his Government, the Tennessee Bureau of Investigation and the I Tennessee law and I further certify that all information supple to release and hold harmless the above-mentioned government purposes mandated under Tennessee law. I further certify that all current employees and will obtain said information on further defined in this bid or contract, pursuant to Tennessee Code A mine is prohibited from direct contact with school children for Section §§ 49-5-401 et seq.	f this bid or contract is accepted, to furnish any and all of the ployees as required by law, at the request of Anderson istory and other required information to Anderson County Federal Bureau of Investigation in accordance with ited by me regarding this inquiry is true and accurate. I agree that entities for the use of this information related to the it. I have obtained acceptable criminal history information on the employees associated with the performance of the work innotated 49-5-413 and that neither I nor any employee of		
Signature	Title		
Printed Name:(Please Print Clearly)	Date (Month, Day, Year)		
INTERNAL OFFICE USE ONLY	(wonth, Day, 10m)		



Attachment 7 – Sample Contract for Services

This Agreement, between Anderson County, Tennessee, a governmental entity ar	nd political
subdivision of the State of Tennessee (hereinafter, "County") and (hereinafter, "C	ontractor")
and for good and valuable consideration, the sufficiency of which is hereby acknowledged, the pa	rties agree
as follows:	

Contractor Services. Contractor agrees to provide _____ per Bid #XXXX, Exhibit 1

Standard of Performance. Contractor agrees to perform the services in a manner consistent with the standard in the industry and to the satisfaction of the County.

Purchase Order. A Purchase Order must in place before services are rendered.

Contractor Compensation. Contractor shall be paid by County for the Contractor's services within thirty (30) days of invoicing and completion of the contracted services. The compensation to Contractor shall be calculated by: **Bid #XXXX**. Contractor **shall not** receive additional compensation for expenses including travel, hotel, food, etc.

Term. The term of this agreement shall be one year with four one-year renewal options. The contract shall start on the date of final signature.

Release. Contractor hereby agrees to release, indemnify, and hold County harmless from and against any and all claims, lawsuits, or the like associated with County's performance of this agreement, or as it relates to the past, present, or future financial condition of the County or the performance of Contractor's services under this Agreement.

Default. In the event of default by the Contractor hereto, the County may bring suit against the Contractor to enforce the terms of this Agreement. In such event, the prevailing party shall be entitled to recover any remedies available at law and/or equity including reasonable attorney's fees and costs associated with the default.

No Oral Modification. No modification, amendment, supplement to or waiver of this Agreement or any of its provisions shall be binding upon the parties hereto unless made in writing and duly signed by all the parties.

Waiver. A failure of any party to exercise any right provided for herein, shall not be deemed to be a waiver of any right hereunder.

Entire Agreement. This Agreement sets forth the entire understanding of the parties as to the subject matter and may not be modified except in a writing executed by all parties.

Severability. In the event any one or more of the provisions of this Agreement is invalid or otherwise unenforceable, the enforceability of the remaining provisions shall be unimpaired.

Cancellation. In the event any party materially breeches, defaults or fails to perform hereunder, this Agreement may be cancelled by the other party with cause on thirty (30) days written notice to the other, if the event constituting the breach, default, or failure is not cured during that time.

Termination: Anderson County reserves the right to terminate this contract in whole or in part with thirty (30) days written notification to the contractor. In the event of termination, the County shall not be liable for any costs other than the cost of services performed and materials delivered and accepted prior to termination date.

Exhibits. Any Exhibits attached hereto or incorporated herein are made a part of this Agreement for all purposes. The expression "this Agreement" means the body of this Agreement and the Exhibits.



Multiple Counterparts: Effectiveness. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original for all purposes and all of which shall be deemed, collectively, one Agreement. This Agreement shall become effective when executed and delivered by all the parties.

Jurisdiction. Each party hereby irrevocably consents to the jurisdiction of all state courts sitting in Tennessee or all federal courts sitting in Knoxville, Tennessee and agrees that venue for any legal action brought in connection with this Agreement shall lie exclusively in such courts.

Binding Effect. This Agreement shall be binding upon and inure to the benefit of the parties and upon their respective successors, heirs, or assigns.

Choice of Law. This Agreement shall be governed and construed in accordance with the laws of the State of Tennessee. The Contractor certifies that in performing this contract they will comply with all applicable provisions of the federal, state, and local laws, regulations, rules, and orders.

Appropriated Funds. The County's obligation to pay under this Contract is contingent upon funds appropriated in the current fiscal year's budget as approved by the County Board of Commissioners. Any contract requiring appropriated funds beyond the current fiscal year may be cancelled without notice in the event that funding to support the contract are unavailable in the subsequent fiscal year.

Payment Terms. The County's payment terms are net 30. All invoices shall be addressed to Anderson County Director of Finance, Room 210, 100 North Main Street, Clinton, TN 37716, and must include Contractor's name, address and phone number, and clearly list quantities, item description and units of measure.

Warranty. The Contractor warrants to the County that all goods and services furnished hereunder shall be free of defects in materials, workmanship, and from defect in design. In addition, Contractor warrants the goods and services are suitable for and will perform in accordance with the purposes for which they were intended.

Insurance Requirement: Vendors awarded bids or contracts are required to maintain, at their expense adequate insurance coverage to protect them from claims arising under the Worker's Compensation Act, any and all claims for bodily injury and property damage to the Vendor and to Anderson County Government while completing delivery and services. A certificate of insurance may be required before work begins and be maintained until work is completed. Certificate Holder Shall Be: Anderson County Government, Clinton, Tennessee. Anderson County Government shall be named as an additional insured on all policies except worker's compensation and auto. Insurance carrier ratings shall have a Best's rating of A-VII or better, or its equivalent. Cancellation clause on certificate should strike out "endeavor to" and include a 30-day notice of cancellation where applicable. Any deviations from the above requirements must be disclosed to the Anderson County Purchasing Agent. Any liability deductibles or exclusions must also be disclosed.

Non-discrimination. The Contractor shall comply with all Federal nondiscrimination laws, regulations, instructions, policies, and guidelines and the Tennessee Human Rights Act, T. C. A. §4-21-101 et. seq., as amended and any rules and regulations promulgated in accordance therewith.

Equal Employment Opportunity. It shall also be an unlawful employment practice for the Contractor (1) to fail or refuse to hire or to discharge any individual or otherwise to discriminate against any individual with respect to their compensation, or the terms, conditions, or privileges of their employment, because of such individual's race, color, religion, sex, age, handicap or national origin; or (2) to limit, segregate, or classify their employees or applicants for employment in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect their status as an employee, because of such individual's race, color, religion, sex, age, handicap or national origin. Contractor shall comply with The Civil Rights Act of 1964, 42 U.S.C. sec. 2000 et seq. (2000), as amended.



Anti-Boycott of Israel: By signing this contract the Contractor certifies that it is not currently engaged in and agrees for the duration of this Contract not to engage in, the boycott of Israel.

Notice. Any notice required or provided pursuant to this Agreement shall be in writing and sent or delivered to the parties.

Titles and Subtitles. Titles of paragraphs and subparagraphs are for convenient reference only and shall not have the effect of modifying, amending, or changing the express terms of this Agreement.

Assignment. This Agreement shall be assignable only upon the written consent of the non-assigning party. Consent to an assignment shall not be unreasonably withheld. In the event of assignment or succession, the terms and conditions of this Agreement shall be binding upon the parties and their successors, assigns, heirs, executors, and/or administrators.

Further Documentation. The parties agree for themselves and their successors and assigns to execute any and all instruments in writing which are or may become necessary or proper to carry out the purpose and intent of this Agreement.

Contractor:		Anderson County Government Administrative Approval:	
Signature	Date	Robert J. Holbrook, Finance Directo	r Date
Printed Name		Anderson County Departn Approval:	nent Head
Title		-	Date
Name of Company			24.0
		Approved as to Form	
Address			
		Law Director	Date
City, State Zip			

General Terms and Conditions

BID ENVELOPE SUBMISSION INSTRUCTIONS:

Bids are to be received in a sealed envelope/package with the bid number, company name and opening date clearly marked. Failure to comply may result in rejection of the entire bid. Anderson County will not be responsible for any lost or misdirected mail. Late bids, e-mailed bids and faxed bids will not be considered nor returned. It is the sole responsibility of the bidder to ensure their bid is delivered to the Purchasing Department.

Please note that Anderson County Government does not receive a guaranteed delivery time for express mail and/or packages. PLEASE MAIL ACCORDINGLY.

ANDERSON COUNTY FINANCE DEPARTMENT 100 NORTH MAIN STREET, SUITES 214 AND 218 CLINTON, TN 37716

Email: <u>purchasing@andersoncountytn.gov</u> Website: <u>http://andersontn.org/purchasing</u>

(865) 457-6218 Phone (865) 457-6252 Fax

Bid documents must be completed in ink or typed, signed in ink, and free from alterations, erasures or mark-throughs.

SECTION 1 - GENERAL TERMS AND CONDITIONS

- **1.1** <u>ALTERATIONS OR AMENDMENTS:</u> Alterations, amendments, changes, modifications or additions to this solicitation shall not be binding on Anderson County without prior written approval.
- **1.2 NO CONTACT POLICY:** After vendor receives a copy of this bid, any contact initiated by any vendor with any Anderson County representative, other than the Purchasing Department, concerning this invitation for bid is prohibited and agreements made thereto will not be considered binding on Anderson County. Any such unauthorized contact may cause the disqualification of the bidder from this procurement transaction.
- **1.3 QUESTIONS:** Pursuant to TCA §12-4-113, questions regarding the specifications or bid procedures must be received by the Purchasing Agent and/or designer no less than ninety-six (96) hours before the bid opening date. No addenda within less than forty-eight (48) hours of the bid opening date shall be permitted. Any questions concerning the bid document must be submitted to purchasing@andersontn.org no less than ninety-six (96) hours before bid opening date.
- 1.4 BID CLOCK: The bid/time clock in the Anderson County Purchasing office will be the time of record.
- **1.5 TAXES:** Anderson County is not liable for Federal excise or State sales tax. Tax exemption certificates will be provided upon request.

- **1.6** <u>CONFLICT OF INTEREST:</u> If requested by the Purchasing Agent, vendors must complete and submit a "Conflict of Interest Affidavit Statement" prior to contract award, see T.C.A. 5-14-114 and T. C. A. 12-4-101.
- **1.7 NON-COLLUSION:** Vendors, by submitting a signed bid, certify that the accompanying bid is not the result of, or affected by, any unlawful act of collusion with any other person or company engaged in the same line of business or commerce, or any other fraudulent act punishable under Tennessee or United States law.
- **1.8 NON-DISCRIMINATION:** Contracted vendors will not discriminate against any employee or applicant for employment because of race, religion, sex, national origin or disability except where religion, sex, national origin or disability is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor.
- 1.9 SAME AS OR EQUIVALENT TO: Vendors are to bid as specified herein or propose an approved equal. Determination of equality is solely Anderson County's responsibility. Any designated brands are for reference purpose only, not a statement of preference. When an alternate manufacturer, brand, model or make is bid, Anderson County will determine if the item bid meets or exceeds the items as specified. If the bidder does not indicate that an alternate manufacturer, brand, model or make is being bid, it is understood that the item(s) bid are the same manufacturer, brand, model or make as requested in the Invitation to Bid. Comparable products of other manufacturers will be considered if proof of comparability is contained in the bid submission. It shall be the responsibility of the vendors, including vendors whose product is referenced to furnish upon request catalog pages, brochures or other data to provide an adequate basis for determining the quality and functional capabilities of the product offered. Failure to provide this data may be considered valid justification for rejection of bid.
- 1.10 MULTIPLE BIDS/AWARDS: Anderson County may consider multiple bid awards.
- 1.11 STATE OF TENNESSEE CONTRACTORS' LICENSE LAW (T.C.A. 62-6-119) b): Bids for which the total cost of the project is twenty-five thousand dollars (\$25,000) or more, the outside of the sealed bid envelope/package containing the bid provides the following information: the Company Name, the Contractor's license number, license classification, the date of the license expiration and that part of each license classification applying to the bid. In addition, each heating ventilation or air conditioning, plumbing and electrical subcontractor's license number, date of the license expiration and that part of each classification applying to the bid if the value of the work is \$25,000 or greater, must be notated. If the value of either the contractor or the subcontractor's work is less than \$25,000, the bid envelope/package containing the bid is to be notated with the phrase "Contractor or Subcontractor's Bid is Less than \$25,000" after each appropriate heading. In the case of joint ventures, each party submitting the bid must provide this information. If no subcontractors are being used, the outside of the envelope/package containing the bid must state, "No Subcontractors are being used on this project."
- **1.12 ACCEPTANCE:** Vendors shall hold their price firm and subject to acceptance by Anderson County for a minimum period of sixty (60) working days from the date of the bid opening, unless otherwise indicated in their bid. Any or all bids may be rejected for good cause.
- **1.13 BID AWARDS:** Bids will be awarded to the lowest and best bidder, taking into consideration the qualities of the articles to be supplied, their conformity with specifications and their suitability to the requirements of Anderson County and the delivery terms. Anderson County also reserves the right to not award this bid.
- **1.14** <u>BIDDER'S MINIMUM QUALIFICATIONS</u>: Bidders must have the resources and capability to provide the materials and services as described in the solicitation. Anderson County reserves the right to request additional information and/or material not specified as a bid requirement from any bidder to confirm qualifications.
- **1.15 DEBARMENT**: By submitting a response to this solicitation, bidders are certifying that bidder is not currently debarred from doing business with any local or state Government or the Federal Government. Bidders shall provide documentation relating to any and all debarments that occurred within the last ten

years. The County will search the "System for Award Management" for federally excluded vendors before awarding a bid.

1.16 PROTEST: Any vendor wishing to protest the bid award shall notify in writing the Anderson County Purchasing Agent and the County Law Director, 101 S. Main Street, Suite 310, Clinton, TN 37716. No protest will be accepted, except those protests made in writing and received within (10) ten calendar days of the bid award. Protests must be in writing and envelopes/package containing protest must be clearly marked with bid number and words "BID PROTEST". The Purchasing Agent, in conjunction with the Purchasing Committee, and with the advice and counsel of the County Law Director, shall review and make a final decision as to any bid protest. Appeals shall be filed in the Circuit or Chancery Courts of Anderson County within sixty (60) days of the final decision.

VENDORS PLEASE NOTE: ANDERSON COUNTY WILL NOT STOP THE PURCHASE PROCESS. THE PURCHASE MAY BE COMPLETED OR THE PROJECT MAY BE RE-BID WHILE THE PROTEST PROCEDURE IS STILL IN OPERATION. IF A RE-BID IS MADE, THE PROTESTING VENDOR SHOULD SUBMIT A NEW BID. OTHERWISE, THEY WILL BE WITHOUT A BID ON THE RE-BID. FURTHER, THE RE-BIDDING WILL NOT END THE APPEALS PROCESS. IT WILL CONTINUE UNTIL A FINAL DECISION IS REACHED OR THE COMPLAINANT WITHDRAWS THE APPEAL.

- **1.17 DELIVERY:** Bid pricing is to include complete supply and delivery to Anderson County, Tennessee. Vendors are to state the delivery time in the bid. Anderson County requires that vendors deliver all products "free on board" to final destination unless indicated otherwise in the bid requirements.
- **1.18 PROOF OF FINANCIAL AND BUSINESS CAPABILITY:** Bidders must, upon the request of Anderson County, provide satisfactory evidence of their ability to furnish products or services in accordance with the terms and conditions of these specifications. Anderson County will make the final determination as to the bidder's ability.
- **1.19 VENDOR'S DEFAULT:** Anderson County reserves the right, in case of vendor default, to procure the articles or services from other sources and hold the defaulting vendor responsible for any excess costs occasioned thereby.
- **1.20** <u>DUPLICATE COPIES:</u> Vendors are to submit one original and at least one exact copy of their bids, including brochures; unless additional copies are requested in bid specifications.
- **1.21 DRUG-FREE WORKPLACE:** Under the provisions of Tennessee Code Annotated §50-9-113 enacted by the General Assembly effective 2001, all employers with five (5) or more employees who contract with either the state or a local government to provide construction services are required to submit an affidavit stating that they have a drug free workplace program that complies with Title 50, Chapter 9, in effect at the time of submission of a bid at least to the extent required of governmental entities. The statute imposes other requirements on the contractor and contractors should consult private legal counsel if legal questions arise under this section or any other provision of this document. All contractors with five (5) or more employees that will be providing construction services are to return the provided written affidavit signed by the principal officer of a covered employer acknowledging that the contracting entity is in compliance with the Drug Free Workplace laws of State of Tennessee.
- **1.22** <u>COMPETITION INTENDED:</u> It is the responsibility of the bidder to review the entire Invitation to Bid document and to notify the Purchasing Department if the Invitation to Bid is formulated in a manner that would unnecessarily restrict competition or if it is ambiguous in what is being requested. The Purchasing Agent must receive questions regarding the specifications or bid procedures no less than ninety-six (96) hours prior to the time set for the bid opening.
- **1.23 SCHOOL CAFETERIA BIDS:** If this bid is for Anderson County School's Cafeteria Food Service Department, bidders must be in compliance with Section 104(d) of the William F. Goodling Child Nutrition Reauthorization Act of 1998 which requires school and institutions participating in the National School Lunch Program (NSLP) and School Breakfast Program (SBP) to "Buy American" to the maximum extent practicable.

- **1.24 TERMINATION:** Anderson County reserves the right to terminate contracts in whole or in part with thirty (30) days written notification to the contractor. In the event of termination, the County shall not be liable for any costs other than the cost of services performed and materials delivered and accepted prior to termination date.
- **1.25** OSHA SAFETY: The Vendor is responsible for training their employees in Safety and Health Regulations for the job, assuring compliance with Tennessee Occupational Safety and Health regulations and any other Regulatory Agency.
- **1.26 PERFORMANCE BOND:** A standard surety or performance bond or an irrevocable letter of credit in favor of Anderson County Government at a federally insured financial institution will be required to be submitted with bid, if indicated in section four, item six insurance requirement checklist.
- **1.27 BACKGROUND CHECKS:** Contractors shall comply with Public Chapter 587 of 2007, as codified in Tennessee Code Annotated Section 49-5-413, which requires all contractors to facilitate a criminal history records check conducted by the Tennessee Bureau of Investigation and the Federal Bureau of Investigation for each employee prior to permitting the employee to have contact with students or enter school grounds when students are present.
- **1.28 AWARD RESULTS:** As soon as practicable after proposal or bid evaluations, Anderson County shall post the award decision to Vendor Registry at www.vendorregistry.com. Individual notices are normally not mailed or e-mailed except to the successful vendor.
- **1.29 INDEMNIFICATION/HOLD HARMLESS:** Vendor shall indemnify, defend, save and hold harmless Anderson County and, its officers, agents and employees from all suits, claims, actions or damages of any nature brought because of, arising out of, or due to breach of the agreement by Vendor, its subcontractors, suppliers, agents, or employees or due to any negligent act or occurrence or any omission or commission of Vendor, its subcontractors, suppliers, agents or employees.
- **1.30 DECLARATIVE STATEMENT:** Any statement or words (i.e.: must, shall, will, etc.) are declarative statements and the proposer must comply with the condition. Failure to comply with any such condition may result in their bid being non-responsive and disqualified.
- **1.31 WAIVING OF INFORMALITIES:** Anderson County reserves the right to waive minor informalities or technicalities when it is in the best interest of Anderson County.
- **1.32 APPROPRIATION:** Funding for multi-year contracts are subject to budget appropriations. In the event no funds are appropriated by Anderson County for the goods or services in any fiscal year or insufficient funds exist to purchase the goods or services of a contract, then that contract shall expire upon the expenditure of previously appropriated funds or the end of the current fiscal year, whichever occurs first, with no further obligations owed to or by either party.
- **1.33 ASSIGNMENT:** Vendor shall not assign or sub-contract any agreement, its obligations or rights hereunder to any party, company, partnership, incorporation or person without the prior written specific consent of Anderson County.
- **1.34 QUANTITIES:** Anderson County does not guarantee quantities to be purchased off this bid.
- **1.35 UNIT PRICE:** In case of discrepancy between any unit price and an extended price, the unit price will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.
- **1.36 MODIFICATION OR WITHDRAWAL OF BIDS:** When it is certain that a mistake has been made in the preparation of the bid, a request will be made to the bidder to confirm the bid. Provisions must be made so that mistakes can be taken care of and the ambiguity resolved satisfactorily. Bids may be modified or withdrawn by written notice received in the Purchasing Department prior to the time and date set for the bid

- opening. The changes or withdrawal of the bids shall be in writing and signed by an official of the company. The envelope containing the modification should clearly state "modification to bid." Either the entire bid or a particular item may be withdrawn or modified in this manner.
- **1.37 PRE-BID CONFERENCES:** Attendance at Pre-bid Conferences is strongly encouraged. When deemed necessary a Mandatory Pre-bid Conference will be held. A company representative MUST be in attendance and sign the Pre-bid sign-in sheet in order to be considered for bid award.
- **1.38 ADDENDUM:** § T.C.A. 12-14-113 Anderson County Government reserves the right to amend this solicitation by addendum. Addenda will be posted to the vendor registry up to 48 hours in advance of the bid/proposals due date and time. It is the bidder's responsibility to check the website for addendum. If in the County's opinion revisions are of such a magnitude, the deadline for this solicitation may be extended in an addendum. Addenda may change specifications, reply sheets, and times and dates for pre-bid meetings as well as due dates/deadlines for questions and bids/proposals.
- **1.39 OWNERSHIP:** All bids, once received, become property of Anderson County Government and will not be returned.
- **1.40 WEATHER AND COURTHOUSE CLOSINGS:** In the event of a situation severe enough to necessitate the closing of Anderson County Government offices during a planned bid opening, vendors will receive notification of the new date and time upon re-opening of county government offices. No bids will be opened until the rescheduled date for bid opening and all bidders/proposers whose submissions meet the extended deadline will be given equal consideration at that time. Anderson County shall not be liable for any commercial carrier's decision regarding deliveries during inclement weather.
- **1.41** IRAN DIVESTMENT ACT OF 2014: Pursuant to the Iran Divestment Act of 2014, Tenn. Code Ann. § 12-12-106 requires the State of Tennessee Chief Procurement Officer to publish, using creditable information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105. Inclusion on this list makes a person ineligible to contract with Anderson County; if a person ceases its engagement in investment activities in Iran, it may be removed from the list. The State of Tennessee list is available here: http://tennessee.gov/generalservices/article/ Public-Information-library.
- **1.42** ANTI-BOYCOTT OF ISRAEL: By responding to this bid the Bidder certifies that it is not currently engaged in and agrees for the duration of this Agreement not to engage in, the boycott of Israel.