



SANTA ROSA CITY SCHOOL DISTRICT
211 RIDGWAY AVE
SANTA ROSA, CA 95401 4320

Consultant:
Laurie Pierson, x234
lpierson@stewartsigns.com
Direct Fax: (888) 586-3964
Customer ID: 1653695
Quote #: 910967 / 1
Quoted: 1/25/2018

Attn: Beth Brose
707-528-5455

DESCRIPTION

4'x 6' Double Sided TekStar 24x80 Full Color LED Display with 12" Deep, Hinged, Extruded Aluminum Cabinet and Thermoformed Makrolon SL Faces Decorated on Inside Surface with 3M Vinyl Graphics.

Face / Cabinet Details

Internal TekStar Cabinet with Complete LED Display Assembly, 20mm 24x80 Color

Header Area Decorated with Internal Photo-Real Graphics

Electrical Information

Horizontal LED Illumination Package for a 2' x 6' Cabinet
LED Communication Method: Short-range Wireless; connectivity requires line-of-sight between sign antenna and wireless device antenna mounted on building by customer. Maximum distance of 1,500 feet* between antennas.

One 20 Amp Circuit, 120 Volts; Max Draw: 8.15 Amps
SignCommand.com Cloud-Based Software Included FREE for Lifetime of Product. Please visit www.signcommand.com for more information**.

Structural Details

Mount Style: Dual Leg Mount

Cowling (Creates Pedestal Appearance)

Mount Size:

Leg Height: 3 Ft 6 In

Leg Width: 2 Ft 8 In

Overall Sign Height: 7 Ft 6 In

Minimum Wind Load Rating: 120mph, Exposure B

Miscellaneous Items

*** Review Custom Artwork for Text, Graphic and Layout Details ***

I.D. Cabinet: Plum Purple

Draft: White

Header Copy: Plum Purple

Mount: Plum Purple

Special Instructions:

4x6 TekStar LED
FULL COLOR
\$12,406.00 Double Sided
\$8,578.00 Single Sided

Monochrome RED
\$10,318.00 Double Sided
\$7,416.00 Single Sided

Freight is included in this price

* Tax (CA State tax) will be added to your final bill.

* Your quote does not include installation. We will coordinate with your facilities and/or maintenance department. Many School Districts have specific protocols regarding outdoor sign installation. So long as your Stewart School Sign is installed according to Stewart Signs Protocol, your warranty will not be voided. Therefore your sign can be installed by the School District, Volunteers, or a Sign installation professional. We have professional installers in your area.

Investment: \$15,302.00
Special Price: \$12,406.00

Unless otherwise noted in Special Instructions, these prices are valid for 60 days.

Freight, storage, other freight services and applicable sales tax will be added to your invoice.

Organizations exempt from sales tax must include exempt certificate with order.

Shipping Terms: F.O.B. Origin
Payment Terms: 50% Down, Balance due 10 days after shipment

** By purchasing the SignCommand.com product, you are agreeing with the Website Terms of Use (<https://www.signcommand.com/terms>) and Software End User License Agreement (<https://www.signcommand.com/eula>).

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Phone: (800) 237-3928 Fax: (800) 485-4280 Web: www.stewartsigns.com Tax ID: 20-5076284



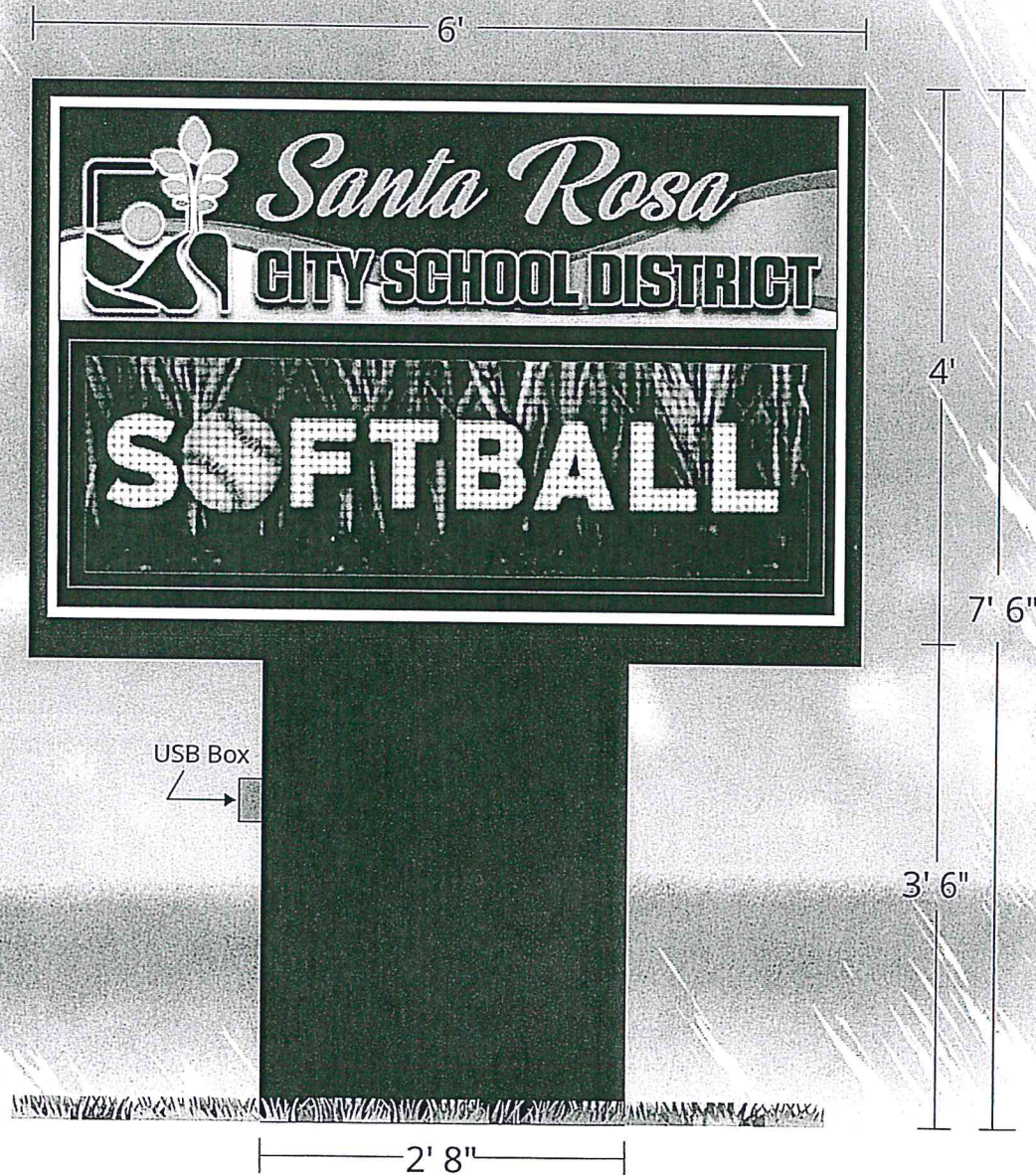
TekStar Color

20mm 24x80

CABINET SIZE: 4'x6'

CAPABILITIES 1 TO 3 ROWS

5.5" TO 18.9" CHARACTERS



Header Vinyl:	Paint Color:	Approved as shown
Text Color:	Draft:	
Cowling Text Vinyl:	SIGN DESIGN #	
<p>GRAPHICS DISCLAIMER: This custom artwork is not intended to provide an exact match between ink, vinyl, paint, or LED color. Brickwork, masonry and landscaping is not included in the proposal. Measurements shown are approximations; dimensions of final product may vary. LED images shown are simulated to replicate optimum viewing distance. Sign is designed to be illuminated at all times. Sketches are based off of this premise. Non-illumination during daylight hours may result in graphics appearing darker than expected.</p>		<p>Date _____</p> <p>Approved with listed changes</p> <p>Date _____</p>

<p>stewart signs America's Premier Sign Company</p>	3/4"=1'
	Sk: 910967-1
	Cust: 1653695
	1/4/2018
Ca/IPierson	
PROPOSAL	
ORIGINAL DESIGN DO NOT DUPLICATE	
PH. 1-800-237-3928 - FAX 1-800-485-4280	

Your Consultant: Laurie Pierson
(800) 237-3928, x234

Customer ID: 1653695

Quote Number: 910967 / 1

Date Quoted: 1/25/2018

Customer's Authorized Signature

Print Name

Date

Laurie Pierson, Regional Manager - School Division
(800) 237-3928, x234
lpierson@stewartsigns.com

1/25/2018

Date

Your Consultant: Laurie Pierson
(800) 237-3928, x234

Customer ID: 1653695

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Date Quoted: 1/25/2018

SHIPPING INFORMATION

SIGN (via Common Carrier)

SANTA ROSA CITY SCHOOL DISTRICT
211 RIDGWAY AVE
SANTA ROSA, CA 95401 4320

*** All applicable items will be sent to the CUSTOMER address ***

*** unless noted otherwise below ***

INVOICE (via USPS)

SANTA ROSA CITY SCHOOL DIST
211 RIDGWAY AVE
SANTA ROSA, CA 95401 4320

ORDERING PROCEDURES

1. Check proposal for accuracy and, if approved, sign and date where indicated.
2. Approve design and colors on the custom artwork. Be sure to check spelling. If approved, sign and date the artwork.
3. Write deposit check according to terms listed on proposal form's header, made payable to EBSCO Sign Group LLC, dba Stewart Signs.
4. Return signed custom artwork, signed proposal form and deposit check to Stewart Signs.

** Unless indicated under special instructions, permits, footers, erection, electrical service, electrical hook-up and planters or other decorative masonry are the responsibilities of the buyer. Stewart Signs furnishes engineered footer drawings when applicable.*

** Any cancellation may be subject to a cancellation charge.*

** A late fee of 1.5% per month will be charged on any overdue balances.*

** In the event of a payment default, customer will be responsible for all of Stewart Signs costs of collection, including but not limited to court costs, filing fees and attorney fees.*

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Stewart Signs
America's Premier Sign Company
Limited Product Warranty ("Limited Warranty")

Definition of Warranty Coverage:

- 1) EBSCO Sign Group, LLC, dba Stewart Signs (the "Company") expressly warrants to the original purchaser ("You" or "Buyer" or "Owner" or "Customer") that, for a period of five (5) years from the date of shipment (the "Warranty Period"), the electronic displays and the associated Company products (the "Product") will be reasonably free of material defects in materials and workmanship impacting Product fit, form and/or function. During the Warranty Period, the Company will, at its discretion, repair or replace any defective covered Product. The Owner will be responsible for removing and reinstalling any and all repaired or replacement parts. This Limited Warranty only applies to the Company's Product if installed, used, and maintained in the manner recommended by Company, and this Limited Warranty is conditioned upon compliance with all such instructions. Lifetime telephone support for the Product is provided, as needed.
- 2) In the event the Product is damaged during shipping, it is the responsibility of the Buyer to refuse delivery, causing the Product to be returned to the manufacturer for repair. Title to the Product passes to the Buyer upon the Company's delivery to the freight carrier. The Company assumes no liability for damage caused by careless handling or poor installation, except for work completed by employees of the Company. Loss or damage to the Product when in possession of the freight carrier is the responsibility of the Customer and is not covered by this Limited Warranty.
- 3) Any information or suggestion by the Company with respect to the Product concerning applications, specifications or compliance with zoning, codes and standards is provided solely for your convenience and without any representation as to accuracy or suitability. You must verify and test the suitability of any information with respect to the Product for your specific application.
- 4) Sign Structure and Sign Face: In the event the sign structure or identification/changeable copy portion of the sign malfunctions under normal use and service thereof DURING THE LIFE OF THE SIGN due to material defects in workmanship or materials, the Company will, at its option, repair or replace any defective materials.
- 5) Vandalism to Sign Faces: This Limited Warranty covers polycarbonate faces against breakage due to vandalism DURING THE LIFE OF THE SIGN. Warranty protection does not extend to these surfaces if damaged by gunshots, or when damaged coincident with damage to the sign cabinet in which the faces are installed.
- 6) Failed electronic parts or assemblies, with the exception of lamps, will be repaired or replaced, at the sole discretion of the Company. Owner bears the expense and responsibility of shipping Product to Company's Repair Center. Replacement or repaired parts are warranted to be free from material defects in material or workmanship for ninety (90) days, or for the remainder of the Warranty Period of the Product they are replacing or in which they are installed, whichever is longer.
- 7) The Company will repair failed LED pixels if greater than one half of one percent (0.5%) of the total number of pixels in the sign have failed in one (1) calendar year, provided the sign is installed with the recommended ventilation system for its location. The definition of pixel failure is when all LED's in the pixel will no longer emit light. Pixel repair is performed at the Company Repair Center. It is common knowledge within the sign industry that all LEDs degrade and produce less light as they age. Eventually the LEDs will require replacement even though the LEDs will still emit light. This Limited Warranty does not cover normal LED degradation.
- 8) **Customer Obligations:**
Failure by the Customer to properly maintain the Product, including but not limited to filters and the ventilation/air conditioning systems, will void coverage for affected components. The Customer shall notify the Company immediately of equipment failure and allow the Company full and free access to the Product when required. Waiver of liability or other restriction shall not be imposed as a site access requirement. The Customer is responsible for all costs and management oversight associated with providing the Company access to the Product, providing the necessary machines, communication facilities and other equipment, inclusive of but not limited to lifting equipment. Should on-site repair be required, Customer is required to have a responsible individual on-site to provide access to the Product as well as sign off on a completed work order.
- 9) **Exclusions and Restrictions:**
The Company reserves the right to restrict service, limit replacement parts or invalidate this Limited Warranty to Customers whose account balance is past due. This Limited Warranty specifically excludes any on-site labor required to service the covered Product including diagnosis, removal and installation of parts or products. Any on-site service required by the Customer of Company technicians or a local authorized service provider is billable to the Customer based on an agreed upon written quote.
This Limited Warranty does not apply to software. Software is covered by a separate agreement, which appears in the Company's software license agreement.
Ballasts are covered for a period of three (3) years.
ID cabinet LED illumination and power supply are covered for a period of two (2) years, when purchased as a system.
- 10) This Limited Warranty specifically does not cover the following:
 - a) Third-party communication devices such as wireless devices and modems, which are covered by a separate electronic communication warranty.
 - b) Damage to Product that has been moved from its original installation location or is mounted in a mobile structure.
 - c) Cosmetic damage to the Product (including but not limited to scratches and dents that do not otherwise affect the fit, form or functionality of the Product or materially impair its use).
 - d) Temperature sensor results: temperature sensors will register variable results, given local environmental factors such as direct sunlight, distance from concrete or asphalt, etc.; results are not guaranteed or covered under this Limited Warranty.
 - e) Recovery or transfer of any data or software stored on the Product not originally installed on the Product by the Company.
 - f) Light bulbs or lamps.
- 11) This Limited Warranty specifically does not cover conditions, defects or damage caused by or resulting from the following:
 - a) Defects caused by unreasonable or unintended use of Product, improper or unauthorized handling, accident, omission, neglect, vandalism (unless otherwise noted in this Limited Warranty), misuse, physical abuse, installation, use and/or fabrication, and maintenance of the Product by any party other than the Company.
 - b) Damage not resulting from manufacturing defects that occurs while the Product is in the Owner's control and/or possession.

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- c) Extreme physical or electrical stress or interference; environmental conditions beyond the Company's control, such as man-made or naturally occurring electrochemical oxidation or corrosion and/or metallic pollutants; normal wear and tear; inadequate, improper, or surges of electrical power; lightning, floods, fire, acts of God, war, terrorism, or other external causes, including Force Majeure.
 - d) Unauthorized modification including installation of third-party software on the Product.
 - e) Product modification or service by anyone other than: (a) the Company, (b) a Company-authorized service provider, or (c) Customer's own installation of Company approved parts with instruction from the Company. Service to a damaged or malfunctioning sign which has not been ordered or authorized by the Company's Customer Satisfaction Department is not covered under this Limited Warranty and will automatically invalidate this Limited Warranty.
 - f) Computer viruses, Trojan horses, worms, self-replicating code or like destructive code which was not included in the Product by the Company.
 - g) Products installed with known or visible manufacturing defects at the time of installation.
- 12) All items returned to the Company must have a Return Materials Authorization ("RMA") number, available by using the contact information below. Items received without an RMA number will not be processed and will be returned to the Customer at their expense. The Customer is responsible for sending any defective part to the Company, after which the Company will send a repaired or replacement part to the Customer.
- 13) The Company will provide and be responsible for the cost of shipping parts from the Company to the Customer, with the exception of sign faces replaced due to vandalism. Standard shipping via the United States Postal Service or other commercial parcel delivery company is the default method of delivery. Expedited delivery is available to the Customer at his or her expense. The Customer will provide and be responsible for the cost of shipping parts to the Company.
- 14) Warranty claims must be registered with the Company within thirty (30) days of damage or malfunction. To register a claim, the Customer must contact the Company at the location specified below and provide (a) his or her name and any other required contact information, (b) Product and purchase descriptions, and (c) the nature of the defect. The Company reserves the right (at its sole discretion) to require proof of original purchase (e.g. paid invoice, receipt) and to visit the site of the installation or to require documentation of the claim before assuming any responsibility under the provisions of this Limited Warranty.
- 15) THE LIMITED WARRANTIES SET FORTH HEREIN ARE THE ONLY WARRANTIES MADE BY THE COMPANY IN CONNECTION WITH THE PRODUCT. THE COMPANY CANNOT AND DOES NOT MAKE ANY IMPLIED OR EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, AND DISCLAIMS ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE COMPANY'S SOLE OBLIGATION UNDER THIS LIMITED WARRANTY SHALL BE TO REPAIR OR REPLACE MALFUNCTIONING OR DEFECTIVE PARTS OF THE PRODUCT. BUYER ASSUMES ALL RISK WHATSOEVER AS TO THE RESULT OF THE USE OF THE PRODUCT PURCHASED, WHETHER USED SINGULARLY OR IN COMBINATION WITH ANY OTHER PRODUCTS OR SUBSTANCES.
- 16) NO CLAIM BY BUYER OF ANY KIND, INCLUDING CLAIMS FOR INDEMNIFICATION, SHALL BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL COMPANY BE LIABLE TO BUYER IN TORT, CONTRACT OR OTHERWISE, FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, RELIANCE, PUNITIVE OR EXEMPLARY DAMAGES, OR FOR LOSS OF PROFIT, REVENUE OR USE, IN CONNECTION WITH, ARISING OUT OF, OR AS A RESULT OF, THE SALE, DELIVERY, SERVICING, USE OR LOSS OF USE OF THE PRODUCT SOLD HEREUNDER, OR FOR ANY LIABILITY THAT BUYER HAS TO ANY THIRD PARTY WITH RESPECT THERETO.

Contact Information:

Stewart Signs Customer Satisfaction
2201 Cantu Court, Suite 215
Sarasota, FL 34232
Phone: 855-841-4624
Web: www.stewartsigns.com/support/

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Create and send amazing sign messages from anywhere
with the easiest LED sign software in the Cloud

 **SignCommand**® by  **stewartsigns**

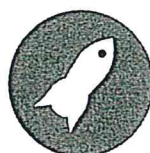


Learn more at stewartsigns.com/software



Access From Anywhere

No software to install or update,
and never lose your messages to
computer crashes.



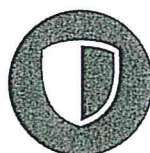
Eye-Catching Special Effects

Many built-in effects will increase
interest and attention in your
sign message.



The Media You Need

Search, preview and add from
our expanding graphics library
optimized for use on signs, right
inside the application.



Delivering Peace-of-Mind

Offering features like two-factor
authentication, it's built from
the ground-up with a focus on
the security of your sign and its
message.



Your Message, On Your Time

Advanced scheduling options
allow for highly customized
messages based on date and time.



A Network of Support

Remote diagnostics &
monitoring allow us to fix
existing problems and prevent
future ones.

Why Choose **SignCommand**?

- We focus on what you care about most: getting a powerful message out to the world.
- Powerful in-browser editing options. Crop, size, and add text on top of images and video clips without the need for photo-editing software.
- With a wide variety of fonts, colors, styles and outline options, adding custom text is a breeze!



- Quick message feature available for when you're on the go.
- Powerful scheduling options: schedule custom messages down to the minute and years in advance.

You can run **SignCommand** from virtually any internet-connected device using any operating system.



What sets us apart?



<https://>

The sign **ONLY** talks with the **SignCommand[®]** servers, making it **virtually invisible to hackers**. 100% encrypted communication means that no one can eavesdrop on the conversation!



= ∞

Control multiple signs with ease! Across the street or across the country, your signs can be any distance apart. And adding a new sign to your network is as easy as turning it on!



Windows or Mac, Android or iOS... we support them all!

READY TO LEARN MORE?

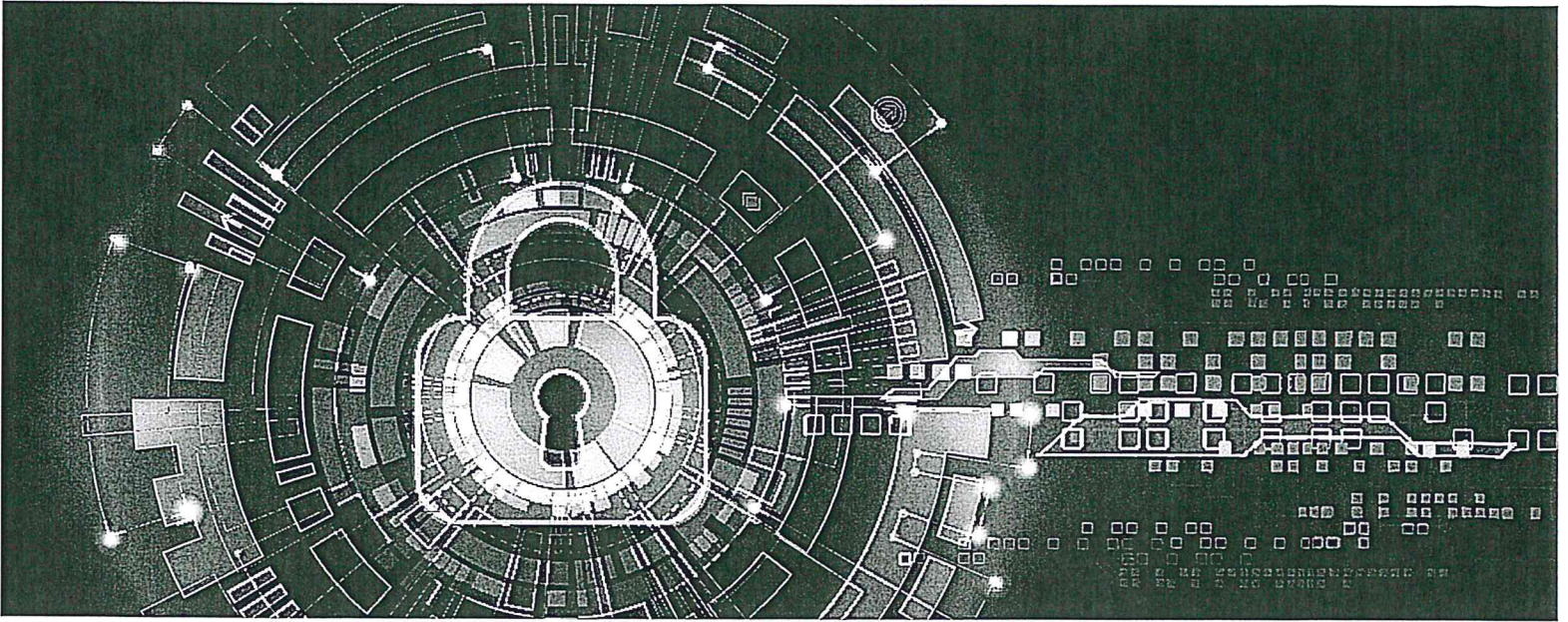
Visit stewartsigns.com/software for more information



stewartsigns

America's Premier Sign Company

1.800.237.3928



Communication Option Information



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1.800.237.3928
stewartsigns.com

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Communications Options Summary

Choosing a communications method for uploading content your LED sign is critical. Stewart Signs offers communications options and methods that are customized based on the customers’ needs. Here is an overview of the different configurations available along with information about the benefits for each application to help you, our customers find a method that is suited to your needs.

Communication Type


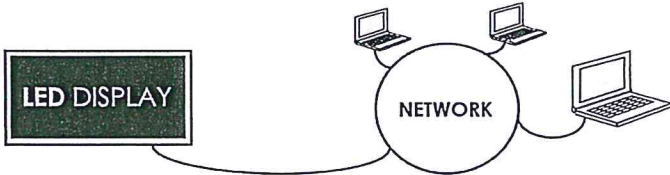

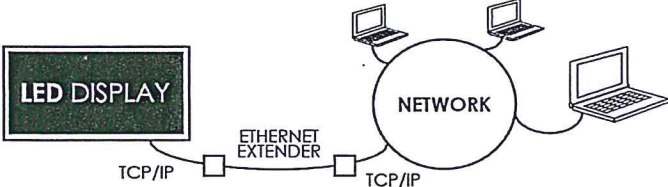






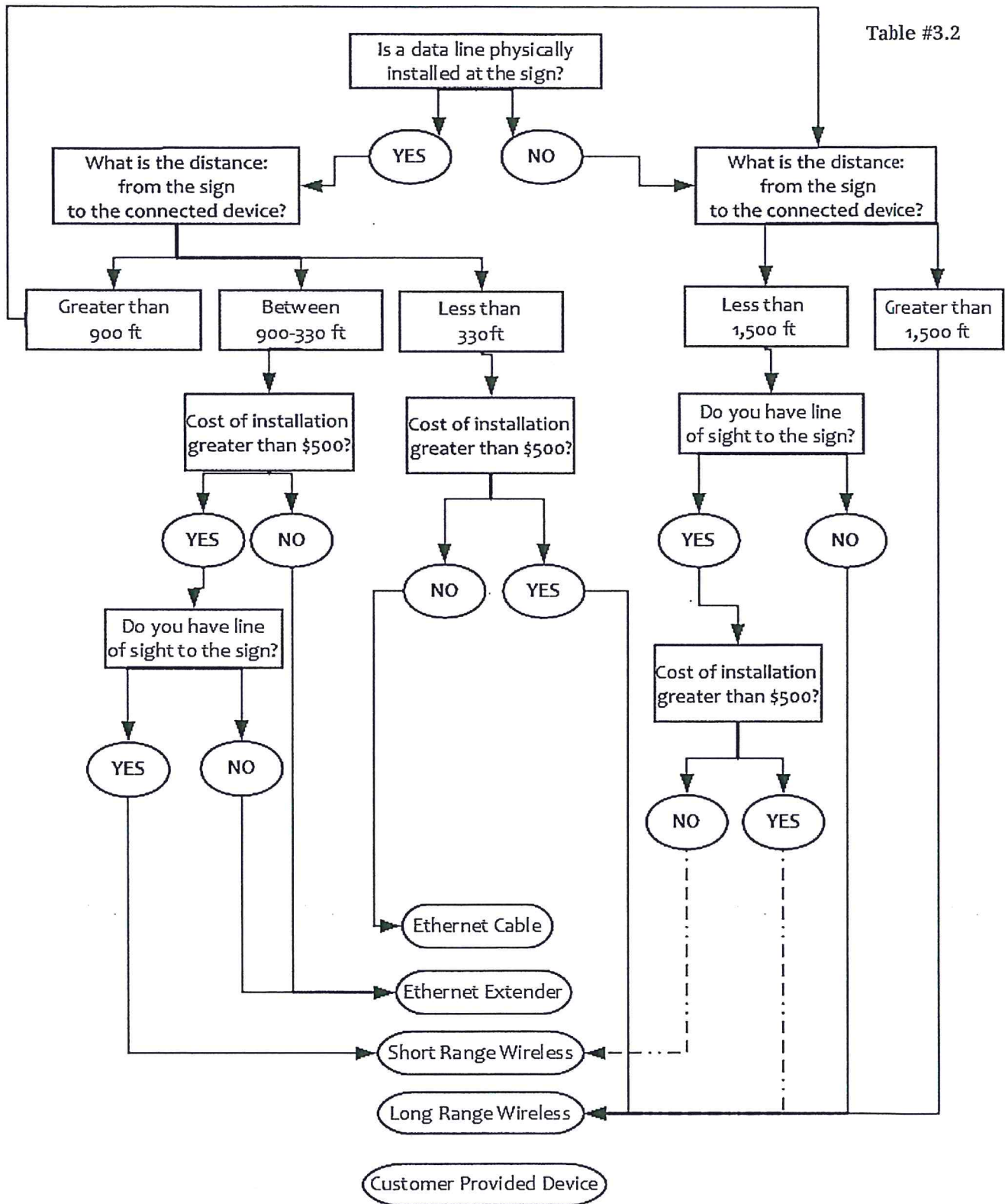
Wired Communication Options		Range	Speed
	Ethernet 	330 ft	1,000 MB/s 
	Ethernet Extender 	900 ft	500 MB/s 
Wireless Communication Options		Range	Speed
	Short Range Wireless Wireless Radios Paired Over a Network 	1,500 ft	100 MB/s 
	Long Range Wireless Single Wireless Radio at the Sign 	No Limit	500 MB/s 

Table #3.1

Flow chart to determine best communication method to use.

Table #3.2



Wired Communication Options

Ethernet

Features:

An Ethernet connection provides a fast and reliable communication to upload content to a Stewart sign.

Cat 5e cable or better is installed in a dedicated 1 ½ inch conduit.

Ethernet is a wired communication method allowing an Ethernet communication card (installed on your computer or your network) to communicate with the LED display over a Local Area Network (LAN). When properly deployed, Ethernet can communicate up to 330ft with data transfer speeds up to 1GB/s (1,000MB/Sec).

Benefits:

Cost Effective	No Additional Cost
Reliability	Fewer components are needed to connect the sign to a network. Thus there are fewer potential points of failure.
Simplicity	Installation of Ethernet is easier, typically, and less expensive than other communication options.
Efficient	Ethernet consumes less power than other communication options, for those who have a laptop or like to conserve energy.
Performance	Ethernet offers a fast data connection to the sign.

Distance:

Maximum cable length of 330 feet.

Disadvantages:

Distance - Maximum cable length is 330 feet; refer to the Ethernet extender solution when cable length exceeds 330 feet.

Considerations:

Distance from the LED sign to the Computer or Network switch is less than 330 feet for a Cat 5e cable or better. An Ethernet cable can NOT be run in the same conduit as power lines.

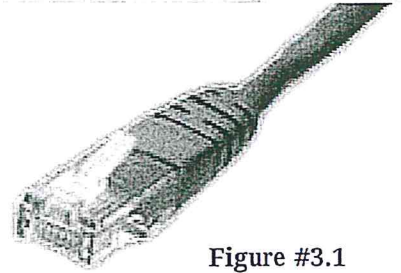


Figure #3.1

Requires:

Outdoor Cat 5e Cable or better: Such as Belden 7919A or Belden 1594A.

Separation of electrical and Ethernet cables by a minimum distance of 12 inches (National Electric Code, NEC, 300.5(A))

Ethernet Extender

Features:

An Ethernet extender forwards information between connected devices over distances that exceed the limitations of a standard

Ethernet connection to upload content to the sign.

One device, an Ethernet extender receiver, with the patch, cable is factory installed in the sign. Another Ethernet extender, with a patch cable, will be installed onto the network. In ideal conditions, an Ethernet extender can communicate up to 900ft with data transfer speeds up to 500MB/Sec.

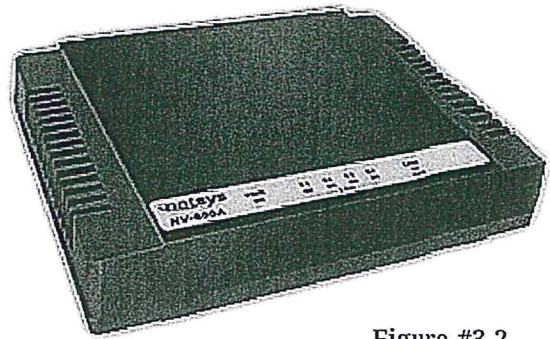


Figure #3.2

Benefits:

Extended range beyond Ethernets inherent distance limitations of 330 ft. out to 900ft.

Distance:

Maximum cable length of 900 feet.

Disadvantages:

Additional devices are required.

Considerations:

One device, a media converter, with the patch cable is factory installed in the sign. The installer will connect another media converter inside the building onto the network. An extended Ethernet cable can NOT be run in the same conduit as power lines.

Requires:

- Outdoor Grade Cat 5e Cable or better: Such as Belden 7919A or Belden 1594A.
- Separation of electrical and Ethernet cables by a minimum distance of 12 inches (National Electric Code, NEC, 300.5(A)).

Used for the following Communication Methods:

- Ethernet
 - Direct Data Cable
 - Network Data Cable
- Ethernet Extender
 - Direct Data Cable
 - Network Data Cable

Both of the above communication methods utilize Cat 5e cables or better.

The approved process for joining two Cat 5e or better data cables for a sign is to splice them together using moisture resistant gel-filled connectors.

Instructions:

1. Open access panel and locate the Cat 5e or better cable in the leg of the sign. See Figure #3.3. Note: Typically one leg contains the electrical lines and the other leg contains the data.
2. Pull the Cat 5e or better cable down from the sign and out through the access point on the sign.
3. Cut the RJ45 connector from the end of both Cat 5e or better cables. Always splice, do not use RJ45 connectors to make this connection.
4. Pull the Cat 5e or better cable coming from the building up and out through the access point on the sign. Connect
5. Make the connections see Figure #3.4 and 3.5, using moisture resistant Gel-filled connectors from manufactures such as 3M (Scotchlok™ connectors) or REGAL (JD-UR connectors). These connectors can be purchased at most home improvement centers. See Figure #3.6.
6. Push the completed connected cable back into the sign leg and replace the access cover.

Figure #3.3

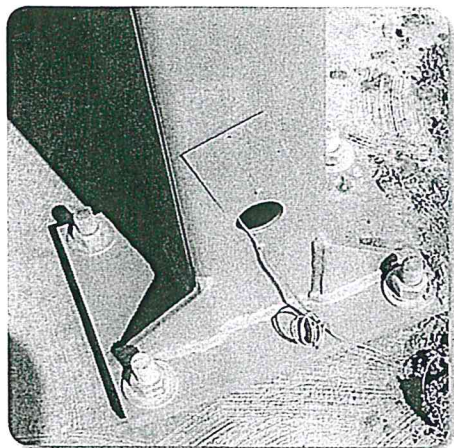


Figure #3.4

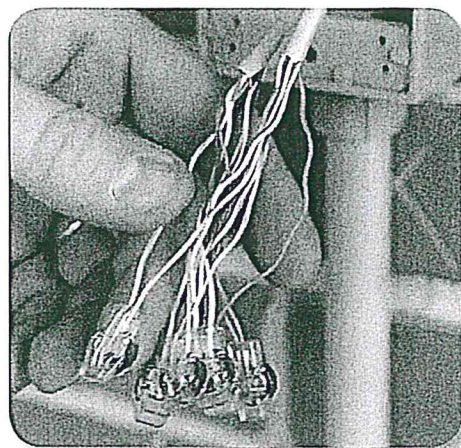


Figure #3.5

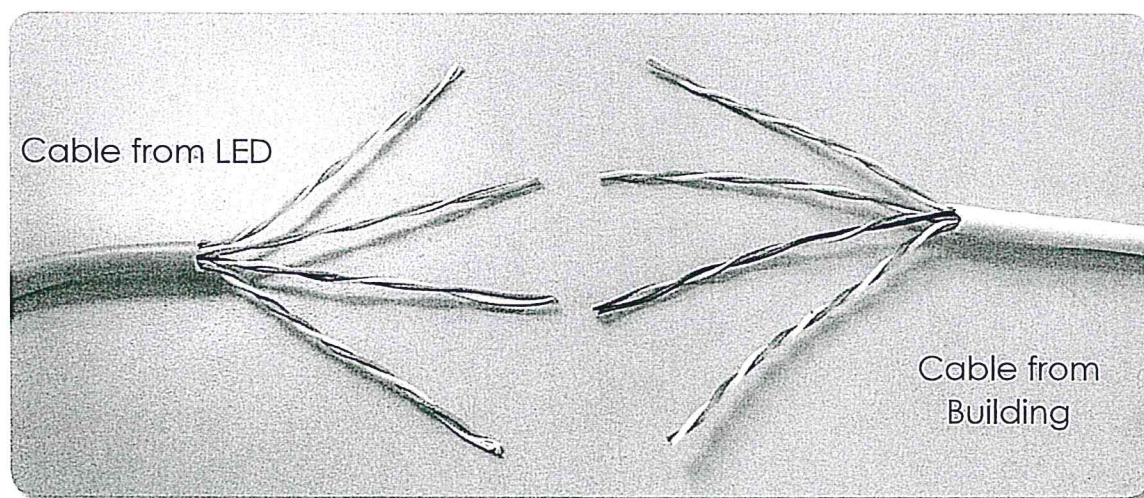
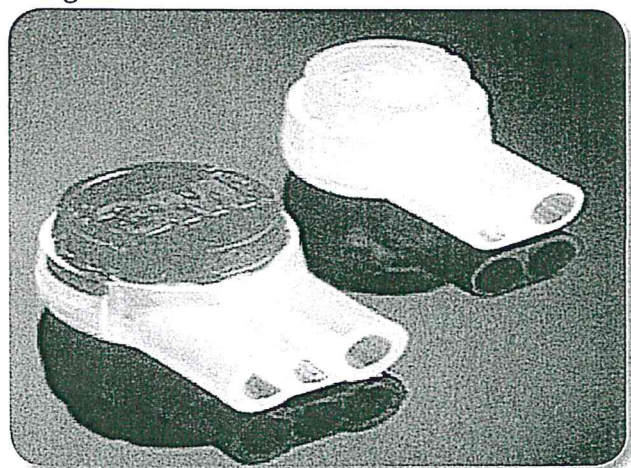


Figure #3.6



Wireless Communication Options

Short Range Wireless (High-Security Local Wireless)

Figure #3.7



Features:

Short range wireless consists of two radio transceivers. Both radios transmit and receive messages between the sign and the computer(s) through radio frequencies (IEEE 802.11, N). Even when a local area network does not exist, the result of wirelessly connecting the sign to a single computer creates a network of two devices; between the sign and the computer. When connecting to an existing local area network, the short range wireless connects to the customer's network hub which allows access to the sign by other computers on the network.

One device, the sign radio, with the patch cable is factory installed in the sign. The speed of the network is very good and is suitable to send video and picture files to the sign. In ideal conditions, high-security local wireless can communicate with data transfer speeds up to 100MB/s.

Benefits:

Installation Cost Savings – When direct wire cable methods cannot be used due to high installation costs.

Distance:

Up to 1,500 feet, under line-of-sight conditions.

Disadvantages:

Limit to distance. - Direct line-of-sight between antennas provides a higher potential for stable connectivity. This industrial quality short range wireless has proven to work without direct line-of-sight at ranges of 200 – 400 feet. Connectivity may ultimately require direct line-of-sight between antennas in some instances. RF may use unlicensed public channels which have numerous causes of interference.

Relocating antennas or installing more powerful, higher gain antennas may be needed when interference occurs. Antennas are not guaranteed to solve interference problems and the customer is responsible for the cost and installing or relocating devices.

Considerations:

The distance for the device is limited to 1,500 feet or less and the building radio must be located outside the building to be effective. Wi-Fi is very susceptible to interference, and even in “ideal” conditions, dozens or even thousands of transmission and receive errors occur every hour. This rate will increase exponentially as you add more devices and when other access points are added nearby. Wi-Fi can be interrupted by microwave ovens, cordless phones, and other devices that operate near the 2.4 GHz (or 5 GHz) range. The signs external antenna is shipped with the sign, to be installed on the outside of the sign at the time of installation.

Security:

The following wireless settings are the key options enabled to comply with security standards set forth by The SANS Institute.

Proprietary Channel Shifting	Off the shelf wireless stations will not be able to access the signs access point (AP). The use of channel shifting also reduces possible interference caused by a nearby AP.
Hidden SSID	This option will stop some inexperienced users from gaining access to your signs wireless AP.
WPA2-AES (Wi-Fi Protected Access II, Advanced Encryption Standard) Pre-shared Key (PSK)	A 24-36 bit encryption standard developed specifically for Wi-Fi networks; it's a serious worldwide encryption standard that has even been adopted by the US government.
WDS (Wireless Distribution System)	The notable advantage of WDS over other solutions is it preserves the MAC addresses of sign controller across links, between access points.

Communication Devices - A display purchased with short-range wireless is equipped with an industry leading Ubiquiti© PicoStation© receiver for wireless communications. Your sign will also ship with a separate black receiver antenna. If not already installed on the sign, you should remove it from its box and attach it by screwing it into the receiver port (typically located on the side of the sign). Point the antenna straight up for the best reception. Direct line-of-sight is required. The wireless radio labeled “Base” will be installed on the building end. The recommended setup is to mount the antenna outside with the antenna pointing straight up in direct line-of-sight with the sign. The radio is weather resistant, so as long as the antenna is pointing straight up, it will be fine. Plug the Ethernet cable from the Base radio into the POE port on the power adapter supplied, and plug an Ethernet cable from the LAN side of the power adapter to your network/computer.

The default IP address of the sign controller is 192.168.111.100 unless specifically requested differently when ordered. You may need to change your IP address range to match this IP range to see the sign.

At this point, the wireless radio should have some lights on it. You are specifically looking for at least an amber signal strength light. If you do not, please verify that the sign is on, the radio is in direct line of sight, and the radios are within the recommended distance from each other (1500 feet).

If they are within recommended distance and you are still not getting any signal strength, verify there are no obstructions for the radios (both physical and electrical).

If there is still no signal, please contact our technician support.

Long Range Wireless

Broadband Wireless
4G LTE Cellular Data Only

Features:

Long Range Wireless provides a fast, secure Internet connection through a 4G LTE cellular modem to upload content to the LED sign. Sign uploads are quick and easy with standard data plans with speeds up to 100 MB/s.

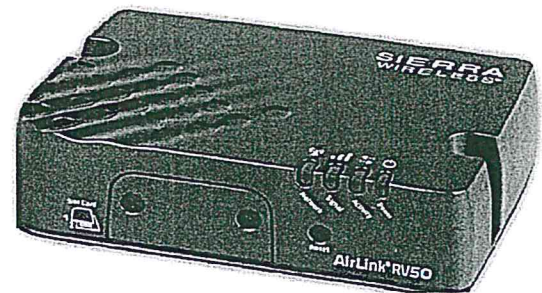


Figure #3.8

Benefits:

Simplified Sign Management	Easy to network and control several signs from a single computer.
Installation	Cost savings when direct wire cable methods cannot be used due to high installation costs.
Remote Programing	The ability to add content to the LED sign from many different Windows computers over the Internet.

Distance:

Unlimited.

Considerations:

The customer will need to activate a new Wireless Data Plan. Displays outside of the Verizon Wireless 4G LTE coverage area or with more than 80,000 pixels are required to arrange for Wireless Data Plan with your provider. See the Coverage Map to verify coverage in your area. <https://vzwmap.verizonwireless.com/dotcom/coveragelocator>.

Stewart Signs Cell Data Plan

Stewart Signs has an all-inclusive cost management solution with a 5-year data plan service option.

The Cell Connect option from Stewart Signs means reliable communication through Verizon Wireless' extensive 4G LTE coverage area. With no antennas to align, no IP addresses to network, and no software to download, a cellular connection is a distinct advantage for a smooth experience.

An internet connection also means that our signs can remotely diagnose and help resolve many issues that may arise. Our software is cloud-based and we manage the network communications process, meaning once power is connected to the sign, you're DONE!

The process is simple:

1. Verify that there is cell coverage at the location of sign install. You can check coverage here: <https://vzwmap.verizonwireless.com/dotcom/coveragelocator/>.
2. Configure the sign with LEDCOM-WDME-KIT: Stewart Signs supplied service, "Wireless Data Modem (Stewart Signs svc)".
3. Complete the required paperwork.
4. A signed quote form must be submitted with the order(s).
5. By signing the quote form, you, the customer, affirm and agree to the terms and conditions listed at: <https://www.signcommand.com/data-plan/>.
6. The Data Plan will be listed on the quote form.

Wireless Data Plan

with your Third Party provider

To activate a Wireless Data Plan with a third party carrier (Verizon, AT&T, or Sprint). The carrier will then provide the customer with an MTN (Mobile Telephone Number) and a Static IP address which the customer will have to send in for full testing before shipping (see Stewart Signs Cell Modem Form on next page).

Procedures for Processing Orders with a Wireless Data Modem:

1. Stewart Signs purchasing will submit an ESN request with part:
 - a. Order Part Number: LEDCOM-LRW-KIT.
2. The manufacturing will return an Electronic Serial Number, ESN, to Stewart Signs.
3. The ESN is provided to the customer:
 - a. The customer gives this number to their wireless provider (Verizon, AT&T or Sprint) when setting up their service.
4. The customer requests their wireless provider to activate a new data line using the provided ESN:
 - a. Our suggestion is to start with a 1Gb monthly data plan.
 - b. Monitor and adjust as needed but it is less expensive to have more than needed until history is developed.

For DayStar Media Users ONLY:

5. The customer needs to request a Static IP Address for the Wireless Data Modem from the wireless provider. Wireless providers typically charge \$500 for a static IP address
6. The wireless provider will then give the customer the following information:
 - a. The MTN (Mobile Telephone Number).
 - b. Static IP Address.
7. The customer is required to return the MTN and Static IP Address to Stewart Signs.
8. This allows Stewart Signs to activate the modem for complete testing before shipping the LED display.

Notes:



WHY A STEWART TEKSTAR FULL COLOR LED DISPLAY?

LED (Light Emitting Diode) Display

- ✓ NIT rating: adjustable to 8,000 nits
- ✓ 3 LEDs per pixel, (1 red, 1 green, 1 blue) capable of displaying 16.7 million colors for text/graphics.
- ✓ (60 high matrix text) 7 rows 4.4" max, 5 rows 5.7", 3 rows 7.5" (plus 1 row of 5.7"), or one row of 34.6"
- ✓ (48 high matrix text) 6 rows 5.5" max, 4 rows 7.1", 3 rows 9.4", or one row of 34.6"
- ✓ (40 high matrix text) 5 rows 4.4" max, 3 rows 5.7", 2 rows 7.5" (plus 1 row of 4.4"), or one row of 22.8"
- ✓ (32 high matrix text) 4 rows 5.5" max, 2 rows 7.1" (plus 1 row of 5.5"), 2 rows of 9.4" or one row of 22.4"
- ✓ (24 high matrix text) 3 rows 5.5" max, 2 rows of 7.1", 1 row of 9.4" (plus 1 row of 5.5"), 1 row of 16.5"
- ✓ (16 high matrix text) 2 rows 5.5" max, 1 row of 7.1", 1 row of 9.4", 1 row of 10.2"
- ✓ LEDs are mounted inside the Makrolon SL® sign faces and are covered by this material to prevent UV/graffiti/vandalism damage.
- ✓ Your choice of Short Range Wireless, Long Range Wireless or Data Cable for communication. USB port available dependent on sign configuration.
- ✓ Time, date, temperature, multiple levels of brightness, automatic brightness changes, variety of text display methods, graphics, animations and pre-recorded video clips.
- ✓ LED boards are warranted for a period of five (5) years, ballasts for three (3) years, communication devices for two (2) years.

Cabinet and Support Structure

- ✓ Lifetime warranty against defects in workmanship, materials.
- ✓ Extruded aluminum cabinets have reinforced, mitered, wire welded corners for added strength and stability.
- ✓ All exposed metal components are finished with powder coat, for a graffiti-resistant finish.
- ✓ All of the metal parts are powder coated separately to ensure that once assembled, there is no metal exposed to the elements.
- ✓ 120mph Exposure B wind load rating on support structure.

Electrical & Lighting Specifications

- ✓ Stewart Signs are UL listed, with all electrical wiring housed in galvanized steel raceways. These components are warranted for LIFE against defects in materials and workmanship.
- ✓ Ballasts are mounted inside the cabinet at the top for added protection from moisture on horizontally lamped models.
- ✓ Ballasts are warranted for three (3) years.
- ✓ Horizontal lamps on most models.
- ✓ Lamps are High-Output 800ma rapid start, T-12 fluorescents.

Identification Area Specifications

- ✓ Lifetime warranty against defects in workmanship, materials and breakage of the sign faces due to vandalism, excluding gunshots.
- ✓ All sign faces are pan-formed from a solar-grade polycarbonate – Bayer MAKROLON SL®, which has been tested to withstand 30 times the impact of acrylic and resists yellowing.
- ✓ All name/logo graphics are applied on the inside of the sign faces (2nd surface) using 3M Translucent Vinyl to prevent UV/graffiti/vandalism, as well as peeling.



stewart**signs**

1-800-237-3928

www.stewartsigns.com

TOP 5 REASONS TO BUY A *TekStar LED* FROM STEWART SIGNS

1. PROFESSIONAL INTEGRITY

- We have been conducting our business according to ethical principles since 1968.
- Stewart Signs is a subsidiary of EBSCO Industries, which is ranked in the top 200 of the nation's largest privately held corporations according to Forbes magazine.
- EBSCO Industries holds the Dun & Bradstreet Financial Strength rating of 5A1, the highest awarded.
- EBSCOhost databases are the most-used premium online information resource for tens of thousands of educational institutions worldwide.



**EBSCO
Industries,
Inc.**



Stewart Signs LEDs



Commercial LEDs

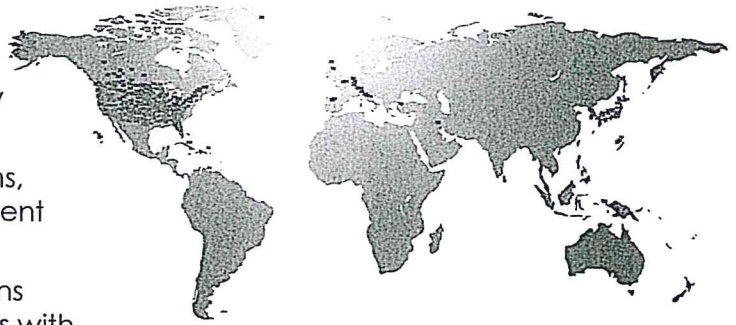


2. SUPERIOR PRODUCT QUALITY

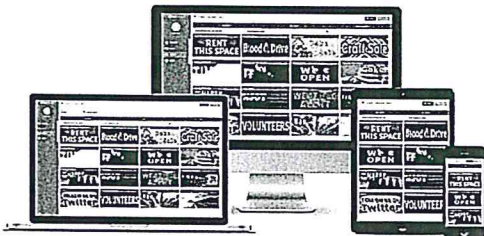
- All Stewart Signs displays are assembled in the USA.
- They are designed to endure extreme weather and are tested in temperatures ranging from -31°F to 140°F.
- Our LED cabinets are thermostatically controlled to extend the life of the electrical components within.
- We use the brightest LEDs in the industry to ensure maximum readability, even in direct sunlight.
- Each sign carries a UL listing, ensuring its safety.
- Backed by the best warranty in the industry.
- 90-day on-site labor guarantee ensures your new sign experience is worry-free with no unexpected, additional costs.

3. OUR CUSTOMERS

- Over 45 years of experience providing quality signage.
- 40,000 customers including religious institutions, schools, municipalities, businesses & government agencies.
- We have endorsements from 17 denominations and publishing houses, and we hold contracts with many state and federal cooperatives like GSA and AFNAFPO.



 **SignCommand®**



4. OUR SOFTWARE

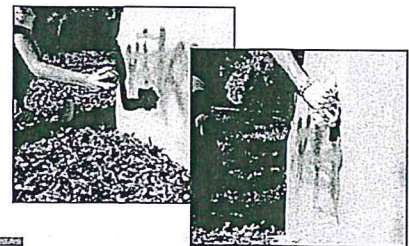
- Create and send amazing sign messages from anywhere with our cloud-based software, **SignCommand™**.
- Crop, size, and add text over images and video clips through in-browser editing without separate software.
- Integrated graphics library.
- Remote diagnostics and monitoring.
- Visit www.SignCommand.com to learn more!

5. FINISH & APPEARANCE

- The seamless face covering the graphics and LED display is made with co-extruded solar grade Makrolon® SL by Sheffield Plastics, which means that it is virtually unbreakable and will not chip, fade, turn yellow, or become cloudy over time.
- High-performance 3M™ vinyl is applied to the inside surface of the sign face, preventing shadowing.
- Our signs are protected with an industrial powder-coat finish, allowing for easy removal of graffiti if needed.
- Matte finish on sign faces and vandal covers improves and optimizes the readability of your sign by diffusing reflected light.



3M



 **stewart signs**
America's Premier Sign Company



CONTACT US TODAY: **1.800.237.3928** stewartsigns.com