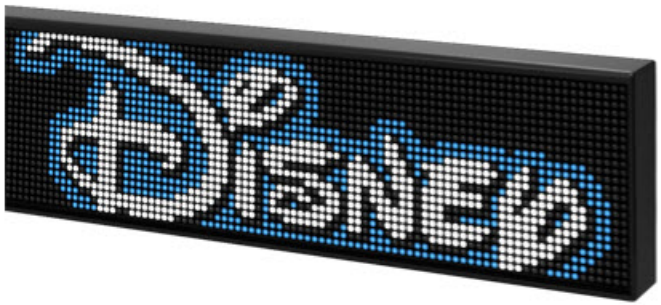
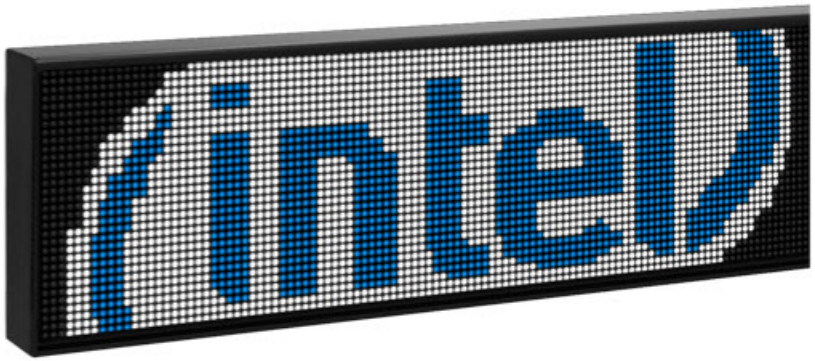
LED Ticker Installation Guide

Materials Checklist	Suggested Tools for Installation
LED Ticker • Verify overall length of ticker • Verify chassis type - Rigid or Flex • Verify style of ticker – Premium/Standard • Verify Pixel/Character Height – 24 or 32 • Verify mounting method – Wall/Ceiling • Wiring Configuration – Power Cord/Hardwired • Orientation – Vertical/Horizontal	• Laptop • Drill w/ metal, wood, and mortar bits • Tin Snips • Tape Measure • Level • Chalk Line • Ladder •*This is a minimum list – review statement of work to determine all tools needed*



24 Pixel - 7.2" Character



32 Pixel - 9.6" Character

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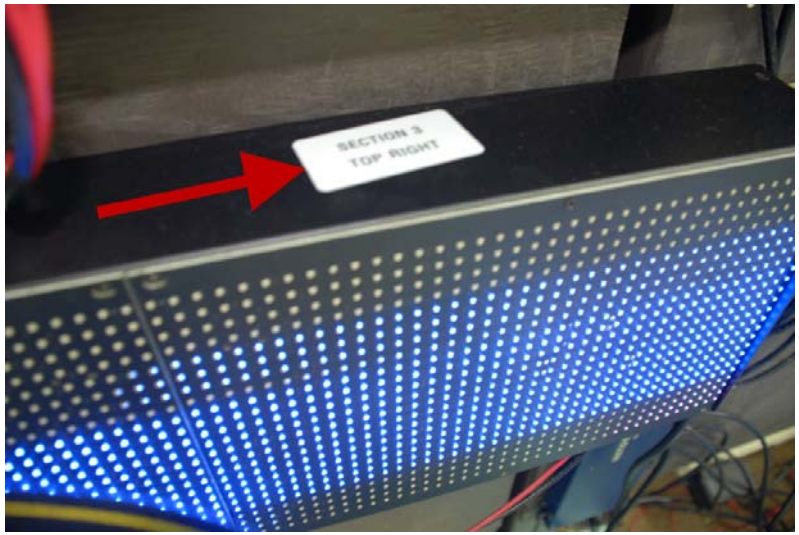
LED Ticker Installation Guide

LED Ticker Installation – Preparation

Preparation for Installation

- Verify that installation location is ready (power, network, wall surface)
- Open all packages
- Lay all ticker materials out in the correct order.
    - Start with Master section – labeled #1
    - Master section if first section on right end.
    - Section 2 is left of section 1 and so on.
- Make sure all materials are present and there is no visible damage.

- *IMPORTANT: If the installation location is not ready or any materials are missing or damaged, call the Rise Display Project Manager for instructions.*



This is section 3 of a multi section ticker

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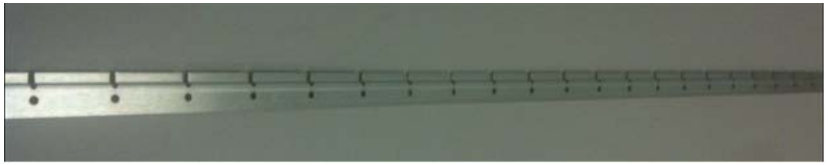
LED Ticker Installation – Install Zee Bracket

Wall Mount, Cleat and Rail Mounting

- Determine where the top or bottom of the ticker will be when installed.
- Use the chart on the next page to determine where the bottom of the zee bracket will be located.
- Snap a chalk line to align the bottom of the zee bracket on.
- Attach all zee brackets to wall.
- Ensure zee bracket is level or if not level – lined up with ceiling.



Zee Bracket

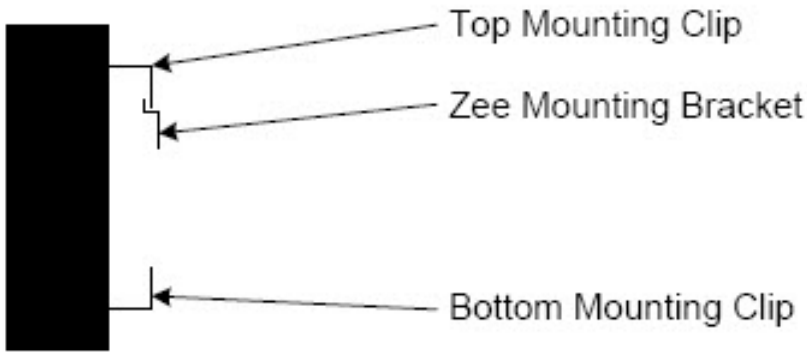


Image 2.1

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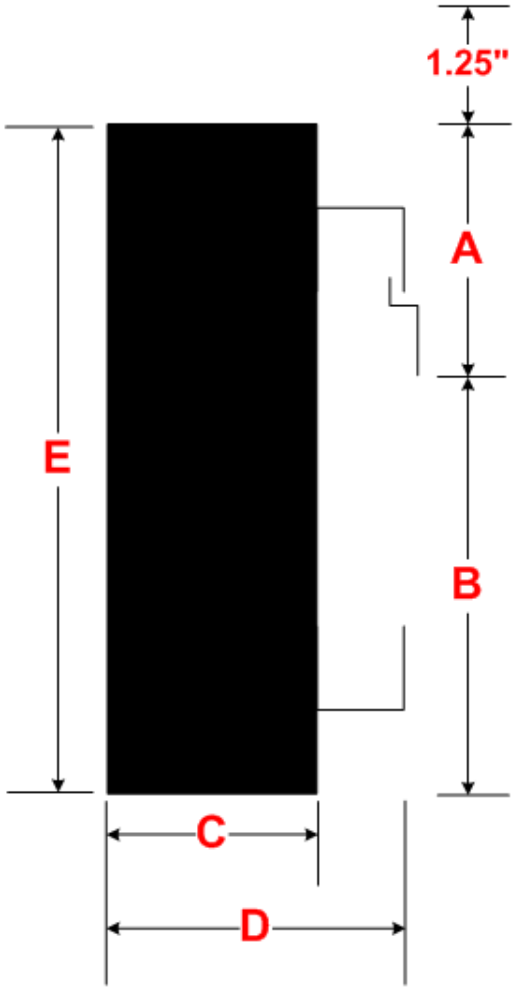
LED Ticker Installation Guide



1.25" = Minimum distance needed from structure above to top of ticker

A = Distance from top of cabinet to bottom of zee bracket

B = Distance from bottom of cabinet to bottom of zee bracket

C = Depth of ticker cabinet

D = Depth of ticker cabinet plus mounting bracket

E = Height of ticker

Standard Rigid	A	B	C	D	E	Plexi-glass Cover
24 Pixel	1.38"	7.38"	2.38"	3"	8.8"	Yes
32 Pixel	1.38"	9.81"	2.38"	3"	11.2"	Yes

Premium Rigid	A	B	C	D	E	Plexi-glass Cover
24 Pixel	3.75"	4.43"	2"	2.5"	8.2"	No
32 Pixel	3.75"	6.88"	2"	2.5"	10.6"	No

Flexible	A	B	C	D	E	Plexi-glass Cover
24 Pixel	2.46"	5.66"	3"	4.25"	8.2"	No
32 Pixel	3.66"	6.86"	3"	4.25"	10.6"	No

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LED Ticker Installation Guide

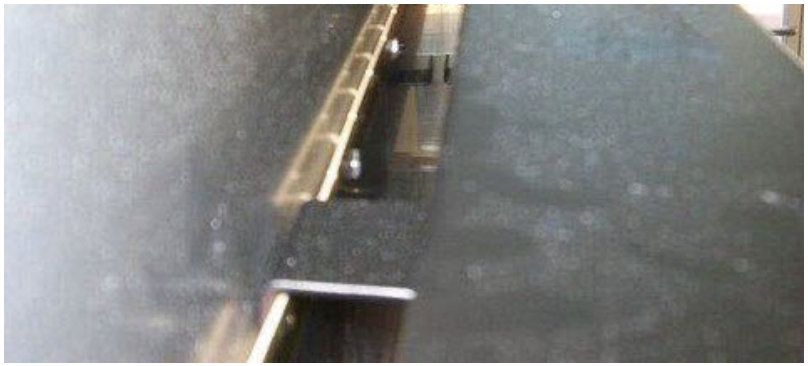
LED Ticker Installation – Hanging Ticker Sections

Wall Mount, Cleat and Rail Mounting

Step 2 – Install Ticker on Zee Brackets

•Turn off power to master section.
• Connect power cord to master section and AC outlet.
• Connect the data cable to the data jack.
• Hang the master section on the zee bracket.
• Slide the ticker section left or right to get it into the proper position. Make sure all cleats are correctly hanging on the zee bracket.
• Install section 2 onto zee bracket to the left of section 1.
• Continue adding sections in order until all sections are in place.
• Once all sections are in place, make the connections between sections (See next step)

Power switch located on right end – bottom of master section



Cleats properly hung on zee bracket

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LED Ticker Installation Guide

LED Ticker Installation – Connecting Ticker Sections

Connecting Ticker Cabinet Sections

Splice Plates:

- Where two ticker sections meet, you will need to secure the two sections together using the included splice plates internal to the sign.
- Remove first and last module of each section.
- Remove back splice plate.
- Remove screws from top and bottom splice plates.
- Slide sections together.
- Reattach back splice plate to both sections
- Screw top and bottom splice plates to next section.

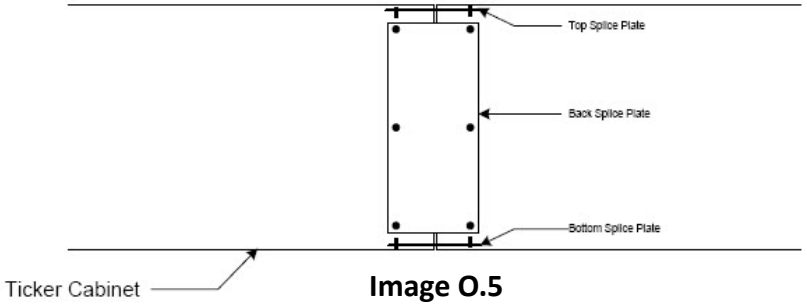

Image O.5

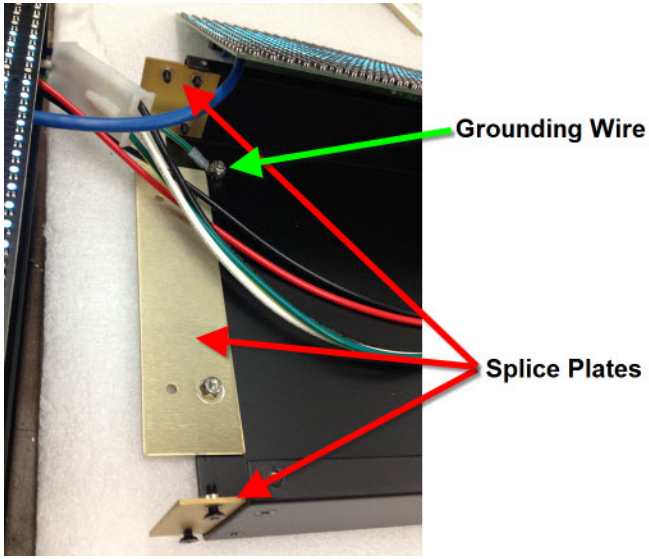

Image O.6

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LED Ticker Installation Guide

LED Ticker Installation – Connecting Ticker Sections

Connecting Ticker Sections Power and Data

Ground

• At each joint, you will see a Green/Yellow Ground wire used to connect each section together. Connect sections as shown in image at right.

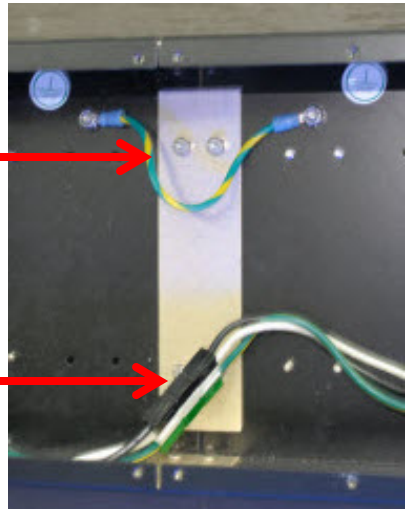
AC Power

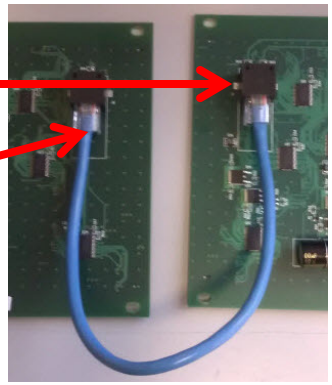
• At the end of most sections, you will see a Green/White/Black connector used to get AC power from a section with a power cord, to those sections that don't have a power cord.

• A section that has a power cord, DOES NOT connect power internally to the previous section

Data (or Content)

• On the back of each LED Module, there are 2 RJ45 ports, Data IN, and Data OUT. Plug the blue CAT5 cable from the last module into the input on the first LED module of the next section. See image at right.





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LED Ticker Installation Guide

LED Ticker Installation – Completion check list

Complete Ticker Installation

DO NOT leave the site until the following is done:

❑ Power on the ticker and confirm that data scrolls across all LED Modules. Keep an eye out for defects – any LED's that may be out, discolored, stuck on, etc.
❑ Zip tie any power cords or the network cable so that it is hidden behind the display.
❑Clean up the site disposing of any shipping material or mess created during the installation.
❑ Client has confirmed the ticker has been installed and running as they expected.
❑ You have received the check out code from your Project Manager at Rise Display
❑You have taken quality pictures with no ladders etc. in the scene.

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LED Ticker Installation Guide

LED Ticker Overview – General Information

Ticker Identification – Standard vs Premium

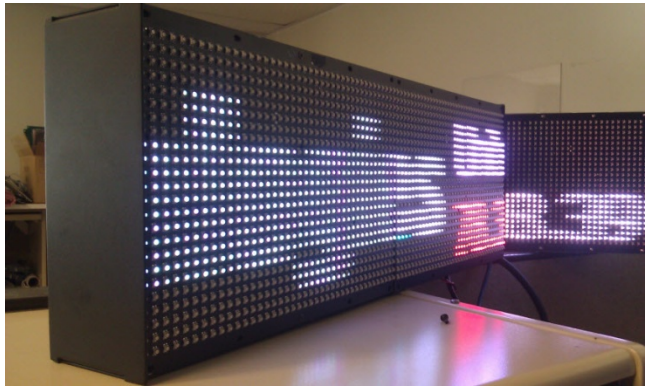
Standard Tickers:

- Identified by the smoked acrylic (plexi-glass) cover over LED modules.
- 24 Pixel tall tickers have 12 pixels per column and require *additional AC power every 48 feet*
- 32 Pixel tall tickers have 16 pixels per column and require *additional AC power every 32 feet*

Premium Tickers:

- Do not have smoked acrylic cover
- 24 Pixel tall tickers have 24 pixels per column and require *additional AC power every 24 feet*
- 32 Pixel tall tickers have 32 pixels per column and require *additional AC power every 16 feet*

Standard Ticker



Premium Ticker

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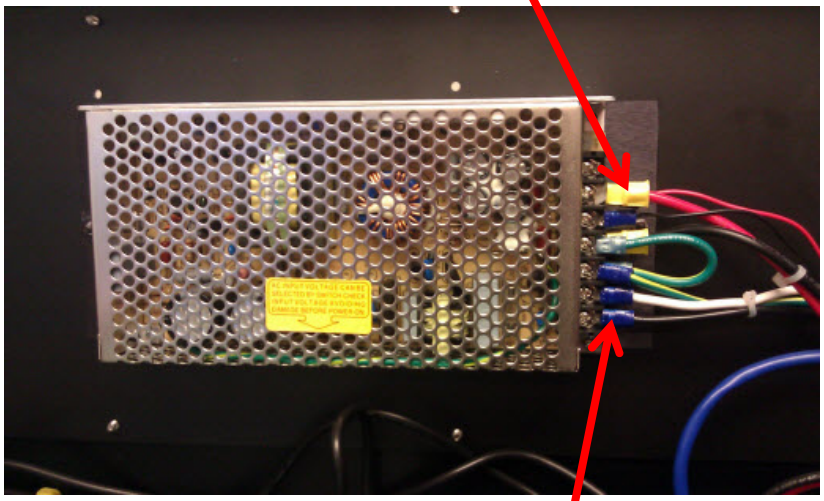
LED Ticker Installation Guide

LED Ticker Overview – General Information

LED Ticker Power Supplies

- Premium tickers use double the number of power supplies that a Standard ticker uses.
- Power supplies convert AC power to DC to drive the modules.
- AC is fed to the power supplies via the Black/White/Green wire harness
- DC is fed to the modules via the Red/Black wire harness.

DC power out – Black/Red



AC power in – Black/White/Green

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LED Ticker Installation Guide

LED Ticker Overview – General Information

LED Ticker Cabinet Types

Standard Rigid Tickers:

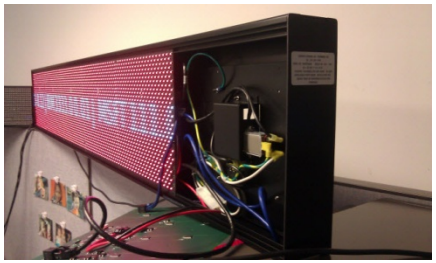
- Solid cabinet - includes smoked acrylic cover
- Have grooves that modules rest in – no screws to hold modules in place

Premium Rigid Tickers:

- Do not include smoked acrylic cover
- Have 6 screws per module securing them in place

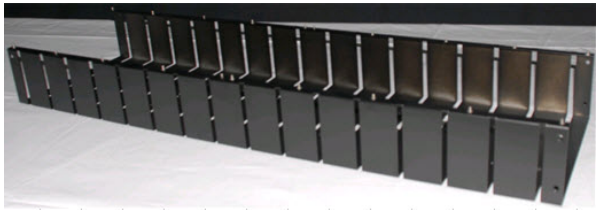
Flexible Tickers:

- Easily identified by the 'rib cage' type chassis.
- Have 6 screws per module securing them in place



Standard Rigid Ticker Chassis

Premium Rigid Ticker Chassis



Flexible Ticker Chassis

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LED Ticker Installation Guide

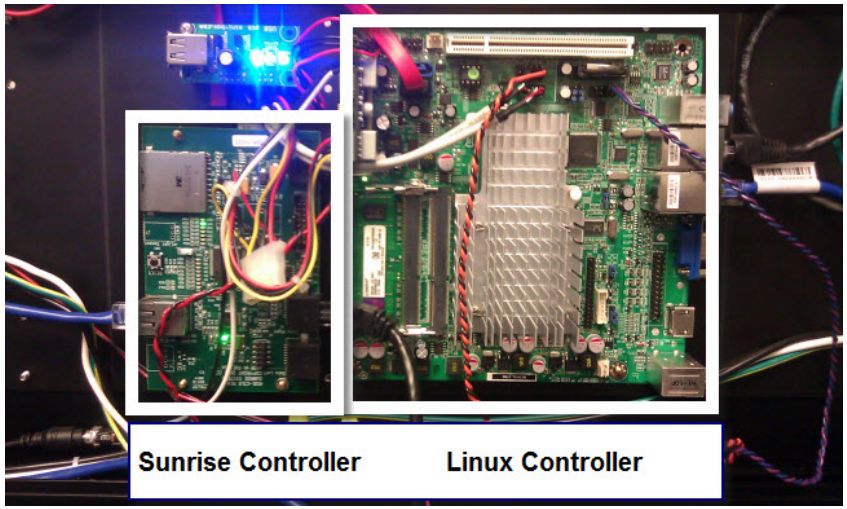
LED Ticker Overview – General Information

LED Ticker Controllers

- Two controllers per ticker
- Controllers are the devices inside the ticker that collect data via the internet from the Rise Display servers and push that data to the LED modules.

- **Rise Display Controller**
  - Data connections to both client network and to the Sunrise controller

- **Sunrise Controller**
  - Connected between Rise Display Controller and first module of ticker



Rise Display Linux Controller mounted in cabinet to the right of the Sunrise controller

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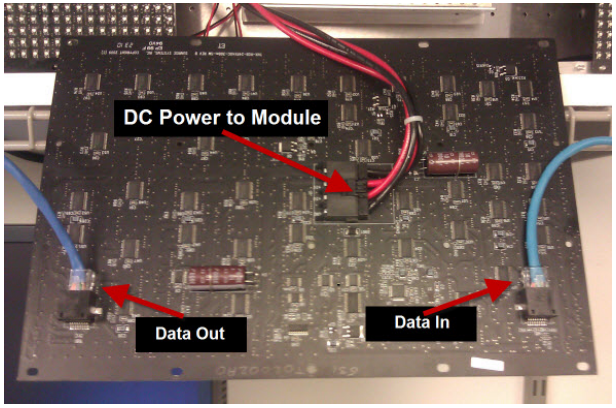
LED Ticker Installation Guide

LED Ticker Overview – General Information

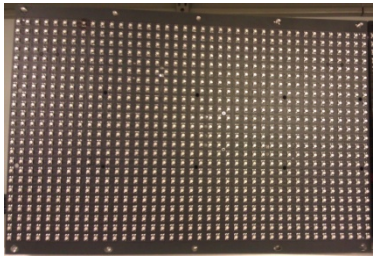
LED Ticker Modules - Description

- LED Ticker Modules are the boards that form the face of the tickers and scroll data. They are daisy chained together using CAT5 jumper cables

- There are two types of modules
    - Put chart here



Back of LED Ticker Module showing DC power connection and Data in and Data out connections



Premium Ticker Module

Standard Ticker Module

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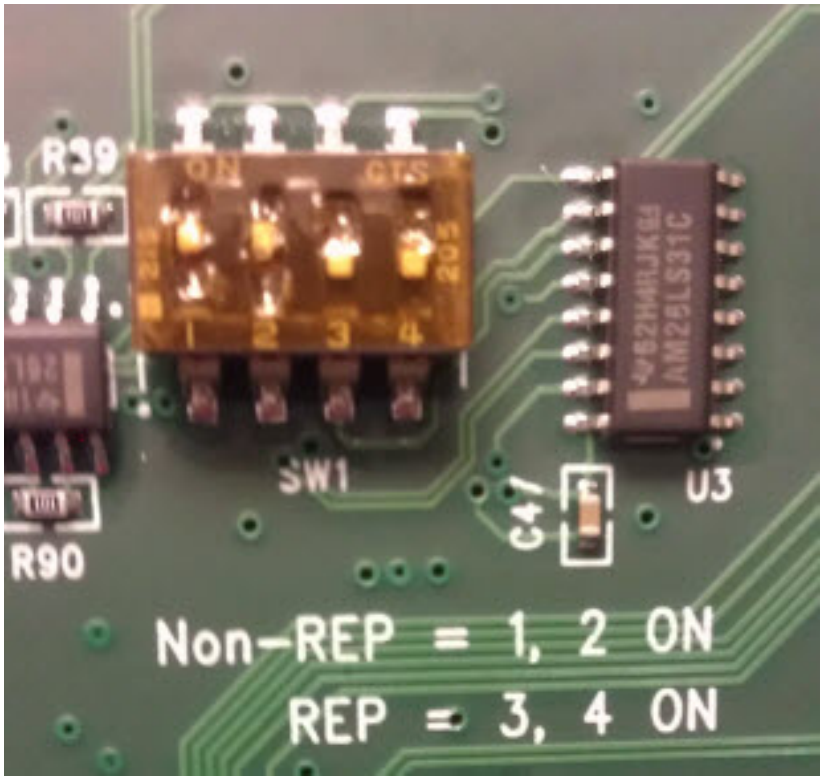
LED Ticker Installation Guide

LED Ticker Overview – General Information

LED Ticker Modules – Repeater Modules

- The chassis will be marked indicating the location of the repeater modules
- You can identify a repeater module by looking at the dip switch bank of 4 switches on the back of the module.
- If switches 1 and 2 are on, it is a non-repeater card
- If switches 3 and 4 are on, it is a repeater card
- Instructions are etched on the back of the module



Example of Non-Repeater Module

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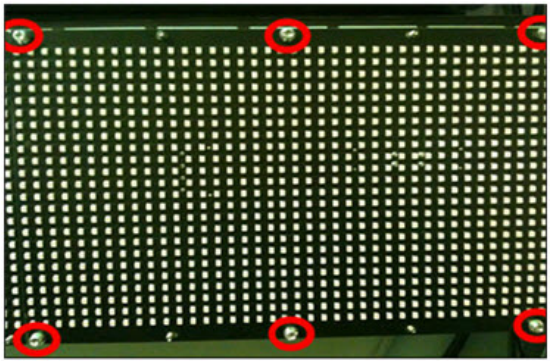
LED Ticker Installation Guide

LED Ticker Overview – General Information

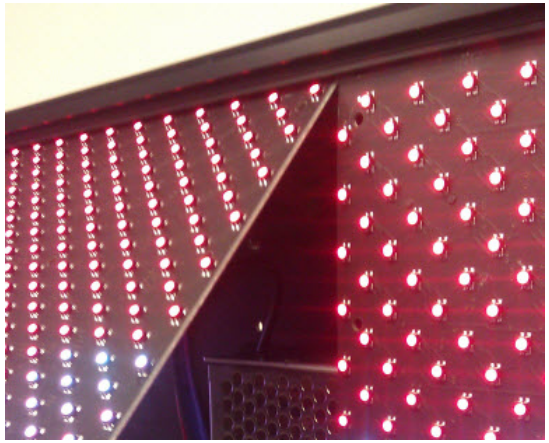
LED Ticker Modules – Removal

- **Premium Tickers**
  - Remove the six phillips screws holding each module in place (see image at right)
  - Gently pull back LED module and disconnect the two CAT5 cables and power cable

- **Standard Tickers**
  - Remove plexiglass cover. It sits in a groove in the top and bottom. Lift plexiglass cover up so bottom is exposed, then pull bottom toward you and lower plexiglass out of top slot. *Caution – once plexiglass is removed, ticker modules can fall out fairly easily.*
  - The LED Module is not held in by screws. It sits in a groove in the top and bottom. Lift module up so bottom is exposed, then pull bottom toward you and lower card out of top slot. (see image at right)



Premium module removal



Standard module removal

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