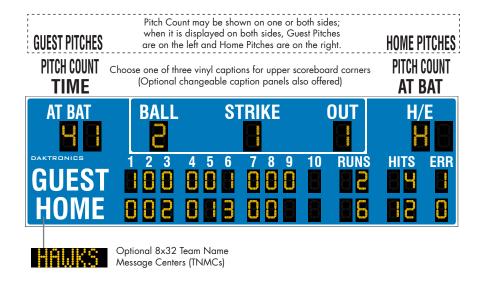
# **DAKTRONICS BA-2019 PRODUCT SPECIFICATIONS**



This outdoor LED baseball/softball scoreboard displays HOME and GUEST team scores for up to 10 innings, total RUNS and HITS to 99 and ERR (errors) to nine for each team, AT BAT to 99, BALL to three, STRIKE to two, OUT to two and H/E (hit or error) with field position number for the error. Scoreboard can show TIME or PITCH COUNT instead of AT BAT, as well as AT BAT or PITCH COUNT in place of H/E. Scoreboard shown with optional striping and amber PanaView® digits.

		VINYL CAPTIONS (STANDARD)	TNMCS & VINYL CAPTIONS		
POWER	Red/Amber Digits	320 Watts, 2.7 Amps	390 Watts, 3.3 Amps		
(120 VAC)*	White Digits	570 Watts, 4.8 Amps	730 Watts, 6.1 Amps		
UNCRATED WEIGHT		500 lb (227 kg)	580 lb (263 kg)		
DIMENSIONS		6'-0" H x 20'-0" W x 8" D (1.83 m, 6.10 m, 203 mm)			

<sup>\*</sup>Scoreboard requires a dedicated circuit. Models with 240 VAC power at half the indicated amperage are also offered (International Use Only).

#### **DIGITS**

- AT BAT, BALL, STRIKE, OUT and H/E digits are 15" (381 mm) high. All other digits are 10" (254 mm) high.
- Select red, amber, or white LED digits. Scoreboard may instead have mixed LED digit colors (see <u>DD1965467</u>).
- Scoreboard features robust weather-sealed digits (see <u>DD2495646</u>).
- Digits may be dimmed for night viewing.

#### **DISPLAY COLOR**

Choose from 150+ colors (from Martin Senour® paint book) at no additional cost.

#### **CONSTRUCTION**

Alcoa aluminum alloy 5052 for excellent corrosion resistance

#### **CAPTIONS**

- HOME and GUEST captions are 12" (305 mm) high.
   AT BAT, BALL, STRIKE, OUT and H/E captions are 8" (203 mm) high. All other captions are 6" (152 mm) high.
- Standard captions are vinyl, applied to the display face.
- Optional TNMCs are 10.6" (269 mm) high.

### PRODUCT SAFETY APPROVAL

ETL-listed to UL 48, tested to CSA standards, and CE-labeled

#### **OPERATING TEMPERATURES**

- Display: -22° to 122° Fahrenheit (-30° to 50° Celsius)
- Console: 32° to 130° Fahrenheit (0° to 54° Celsius)



# **DAKTRONICS BA-2019 PRODUCT SPECIFICATIONS**

CONTROL CONSOLE	CONTROL OPTIONS
All Sport® 5000 (see SL-03991)	<b>Wired (standard):</b> Two-pair shielded cable of 22 AWG minimum is required. A cover plate with mounted connector and standard 2" x 4" x 2" (51 mm x 102 mm x 51 mm) outlet box is provided. Connector mates with signal cable from control console.
(see <u>31-03771</u> )	<b>Wireless (optional):</b> 2.4 GHz spread spectrum radios feature 64 non-interfering channels and 8 broadcast groups (see <u>SL-04370</u> ).
<b>DAK Score &amp; MX-1</b> (see <u>DD3888368</u> )	CUSTOMER-SUPPLIED mobile device or tablet with DAK Score app installed communicates via <b>Bluetooth®</b> wireless technology to an MX-1 Interface Box that controls the scoreboard through 2.4 GHz radio or wired connection.

#### **TIME CLOCK**

The two-digit clock can display hours/minutes/seconds. Clock information shifts from hours to minutes to seconds as time counts down.

#### **MOUNTING**

Scoreboard is typically mounted on two vertical beams or poles. Hardware to mount scoreboard on two beams is included; hardware for more beams is at additional cost. Standard mounting uses I-beam clamps. Optional mounting method using angle brackets is also offered; maximum beam width is 12" (305 mm) and maximum beam depth is 22" (559 mm). Refer to attached drawings for more information on mounting methods.

#### **SERVICE ACCESS**

Digit panels and electronics are serviced from the front of the scoreboard.

#### **GENERAL INFORMATION**

Scoreboard provides scoring capabilities for two teams. 100% solid state electronics are housed in an all aluminum cabinet. Scoreboard is shipped in one section. Scoreboard power is to be provided on a dedicated circuit to prevent loss of game information due to failure of another component on the circuit. Specifications and pricing are subject to change without notice.

#### **ADVERTISING/IDENTIFICATION PANELS**

#### **Backlit & Non-Backlit:**

1'-6" H x 20'-0" W (457 mm, 6.10 m) 2'-0" H x 20'-0" W (610 mm, 6.10 m)

2'-6" H x 20'-0" W (762 mm, 6.10 m)

3'-0" H x 20'-0" W (914 mm, 6.10 m)

For additional non-backlit panel sizes, see <u>SL-03761</u>.

#### FOR ADDITIONAL INFORMATION

- Installation Specifications: DWG-1157190 (attached)
- Standard I-beam Mounting: DWG-1052565 (attached)
- LVX I-Beam Mounting: DWG-3918361 (attached)
- Optional Pole Mounting: DWG-1048184 (attached)
- Component Locations: DWG-3549806 (attached)
- Architectural Specifications: See <u>SL-07439</u>

#### **OPTIONS & ACCESSORIES**

- Scoreboard border striping
- Striping around BALL, STRIKE and OUT digits
- TIME, AT BAT or PITCH COUNT captions on changeable panels
- 100+ Pitch Count an additional digit may be added to the left, right or both sides of the scoreboard
- Multiple caption and striping colors (see <u>DD2101644</u>)
- Team name caption in place of HOME \*
- Team names on changeable panels \*
- Programmable Team Name Message Centers (see DD1696958)
- Individual digit protective screens (see <u>SL-04939</u>)
- Protective netting (see <u>DD2690927</u>)
- Optional angle bracket mounting method
- Advertising/identification panels
- Decorative accents
- Electronic message centers and video displays in multiple sizes

Dual Pitch Count with Optional 100+ Digits\*





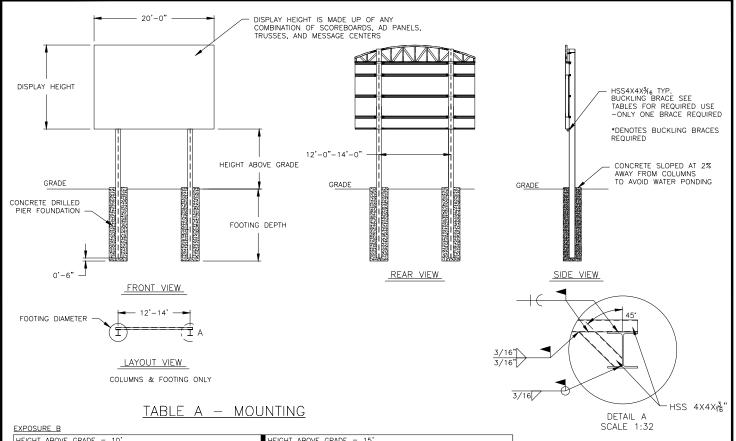
\*When pitch count is displayed on both sides at once, Guest Pitches are on the left and Home Pitches are on the right.

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<sup>\*</sup> Not available with TNMCs



HEIGHT ABOVE GRADE = 10'						HEIGHT ABO	VE GRADE	= 15'			
DISPLAY			DESIGN WIND VELOCITY		DISPLAY		DESIGN WIND VELOCITY				
HEIGHT (FT		115 MPH	130 MPH	150 MPH	170 MPH	HEIGHT (FT)		115 MPH	130 MPH	150 MPH	170 MPH
8	COLUMN FOOTING		W8x28 2.0'X9.5'	W8X31 2.0'X10.5'	W12X26* 3.0'X9.5'	8		W10X26* 2.0'X9.5'	W10X30* 2.0'X10.5'	W14x34* 3.0'X10.0'	W12X40* 3.0'X11.0'
10	COLUMN FOOTING	W8X31 2.0'X9.5'	W10X26 2.0'X10.5'	W12X26* 3.0'X10.0'	W14X34* 3.0'X11.0'	10		W12X30* 3.0'X9.0'	W14x34* 3.0'X10.0'	W12X40* 3.0'X11.0'	W16X45* 3.0'X12.0'
12		W10X26* 2.0'X10.5'	W12X26* 3.0'X10.0'	W14X34* 3.0'X11.0'	W16X40* 3.0'X12.0'	12		W14X30* 3.0'X10.0'	W12X40* 3.0'X11.0'	W14X43* 3.0'X12.0'	W21X48* 3.0'X13.5'
14		W12X26* 3.0'X9.5'	W14X34* 3.0'X10.5'	W16X40* 3.0'X12.0'	W21x44* 3.0'X13.5'	14		W14X34* 3.0'X10.5'	W16X40* 3.0'X11.5'	W21X48* 3.0'X13.5'	W21X55* 3.0'X15.5'
16		W14X30* 3.0'X10.5'	W18x35* 3.0'X11.5'	W16X40* 3.0'X13.0'	W21X48* 3.0'X15.0'	16		W16x40* 3.0'X11.5'	W21X48* 4.0'X11.0'	W18X55* 3.0'X14.5'	W21x68* 4.0'X14.5'
18		W14X34* 3.0'X11.0'	W16X40* 3.0'X12.0'	W21X48* 3.0'X14.0	W18X55* 3.0'X16.5'	18		W14X48* 3.0'X12.0'	W21x48* 4.0'X12.0'	W21X55* 4.0'X13.5'	W24X68* 4.0'X16.0'
20		W16X36* 3.0'X11.5'	W21X44* 3.0'X13.0'	W21X48* 3.0'X15.5'	W21X62* 3.0'X18.5'	20		W21X48* 3.0'X13.0'	W21X55* 4.0'X12.5'	W24X68* 4.0'X15.0'	W24X76* 4.0'X17.5'

FOOTING DIMENSIONS = DIAMETER X DEPTH

#### EXPOSURE C

HEIGHT ABO	VE GRADE	= 10'		HEIGHT ABO	VE GRADE	= 15'	
DISPLAY	12 010102		IND VELOCITY	DISPLAY	12 010.02		IND VELOCITY
HEIGHT (FT)		115 MPH	140 MPH	HEIGHT (FT)		115 MPH	140 MPH
8	COLUMN FOOTING	W12x30 3.0'x8.5'	W14X38 3.0'X10.0'	8	COLUMN FOOTING	W10x39 3.0'X9.5'	W10×49 3.0'X11.0'
10	COLUMN FOOTING	W14X38 3.0'X9.5'	W14X43 3.0'X11.0'	10	COLUMN FOOTING	W10x49 3.0'X10.5'	W12x53 3.0'X12.0'
12	COLUMN FOOTING	W14X43 3.0'X10.0'	W12X53 3.0'X12.0'	12	COLUMN FOOTING	W14x43* 3.0'X11.0'	W18x55* 3.0'X13.5'
14	COLUMN FOOTING	W10X49 3.0'X11.0'	W12X58 3.0'X13.0'	14	COLUMN FOOTING	W21x48* 4.0'X11.0'	W21X62* 4.0'X12.5'
16	COLUMN FOOTING	W16×40* 3.0'X12.0'	W21X48* 3.0'X14.5'	16	COLUMN FOOTING	W18x55* 3.0'X13.0'	W16x67* 3.0'X16.5'
18	COLUMN FOOTING	W21x44* 4.0'X11.0'	W21X55* 4.0'X14.0'	18	COLUMN FOOTING	W21X62* 3.0'X14.5'	W24X68* 4.0'X15.5'
20	COLUMN	W21X48* 4.0'X12.0'	W21X62* 4.0'X15.0'	20	COLUMN FOOTING	W16x67* 3.0'X15.5'	W24×84* 4.0'X16.5'

FOOTING DIMENSIONS = DIAMETER X DEPTH

#### NOTES:

- 1. FOOTING AND COLUMN SIZES ARE SUGGESTIONS ONLY, PROVIDED TO ASSIST WITH ESTIMATING INSTALLATION COSTS AND ARE NOT INTENDED FOR CONSTRUCTION PURPOSES. THE DESIGN MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE INSTALLATION BEFORE THEY CAN BE USED FOR FABRICATION OF ERECTION.
- 2. INTERNATIONAL BUILDING CODE 2012 USED IN DESIGN OF COLUMNS AND FOOTINGS WITH, IMPORTANCE FACTOR=1, kzt=1.0, kd=0.85, G=0.85. SEISMIC DESIGN WAS NOT CONSIDERED.
- 3. FOOTING DIMENSIONS ARE BASED ON ASSUMED SOIL CLASS 4 (ALLOWABLE LATERAL BEARING PRESSURE OF 150 psf).
- 4. STRUCTURAL STEEL IS GRADE A992 (50 ksi) STEEL. CONCRETE SHALL HAVE A MINNIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 psi.
- 5. THE AVERAGE DISPLAY WEIGHT FOR A LAYOUT CAN NOT EXCEED 8 PSF.
- 6. DAKTRONICS INC. IS NOT RESPONSIBLE FOR STRUCTURES DESIGNED AND INSTALLED BY OTHERS.
- 7. LOCAL BUILDING OFFICIALS SHOULD BE CONTACTED TO DETERMINE THE WIND SPEED AND EXPOSURE CATEGORY FOR THE PROPOSED SIGN LOCATION. THE EXPOSURE CATEGORY C IS DEFINED AS:

EXPOSURE B — URBAN AND SUBURBAN AREAS, OR OTHER TERRAIN WITH NUMEROUS SPACED OBSTRUCTIONS HAVING THE SIZE OF SINGLE—FAMILY DWELLINGS OR LARGER. THESE CONDITIONS MUST PREVAIL FOR A DISTANCE FROM THE SIGN OF AT LEAST 2,600 ft OR 20 TIMES THE SIGN HEIGHT, WHICHEVER IS GREATER

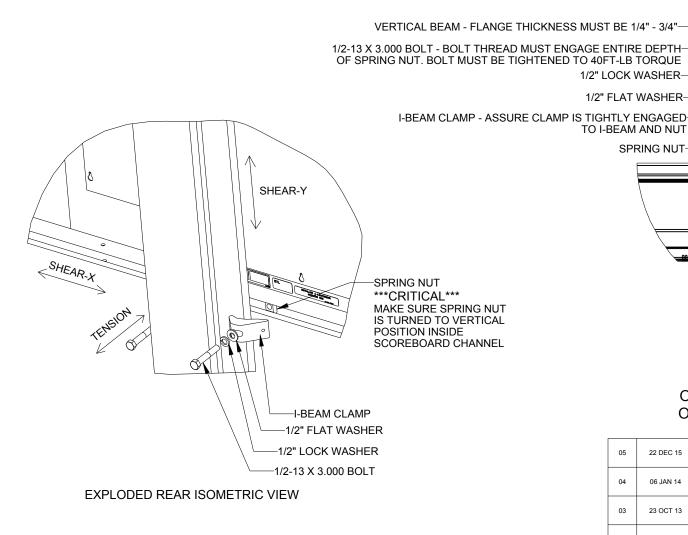
EXPOSURE C - OPEN TERRAIN WITH SCATTERED OBSTRUCTIONS HAVING HEIGHTS GENERALLY LESS THAN 30 FT. THIS CATEGORY INCLUDES FLAT OPEN COUNTRY, GRASSLANDS, AND ALL WATER SURFACES IN HURRICANE PRONE REGIONS.

8. FOR SPECIFIC PRODUCT DETAILS ON WEIGHT, MOUNTING, ETC. REFER TO THE INDIVIDUAL PRODUCT SPECIFICATION SHEETS.

THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON

NOTE: -REFER TO NOTE 7 FOR EXPOSURE CATEGORY DEFINITIONS.					DAKTRONICS, INC.  BROOKINGS, SD 57006  DO NOT SCALE DRAWING  DO NOT SCALE DRAWING				
				PROJ:OUTDOOR SCOREBOARD INSTALLATION					
					TITLE:20' WIDTH	SCOR	EBOARD INSTA	LLATION SPEC	CS
REV	DATE:	UPDATED WIDE FLANGE SIZES	BY:		DESIGN: RSCHWAR		DRAWN: RSCH	WAR	DATE: 27 NOV 13
02	20 OCT 15	UPDATED FOUNDATION SIZES NOTED WHICH DISPLAYS NEEDED BRACE	AMP		SCALE: 1/16"=1'				
REV	DATE:	UPDATED CLAMPS IN REAR AND SIDE VIEWS AND	BY:		SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	1157190
01	23 JUL 14	ADDED 170 MPH WIND SPEC COLUMN	TJT			02	P1647	E-10-A	113/190

DALKTRONHOG



## STANDARD MOUNTING METHOD

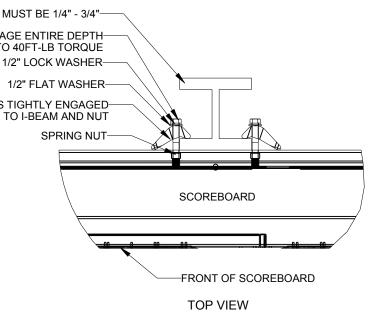
#### MOUNTING INSTRUCTIONS:

- 1. PLACE SPRING NUTS INTO SCOREBOARD CHANNEL IN APPROXIMATE LOCATION OF VERTICAL BEAMS
- 2. LIFT SCOREBOARD INTO POSITION
- 3. MAKE SURE THE 1/2-13 BOLTS ARE AS CLOSE TO THE I-BEAM FLANGES AS POSSIBLE
- 4. WHEN SCOREBOARD IS ADJUSTED TO FINAL DESIRED POSITION, TIGHTEN BOLTS FIRMLY
- 5. IF FLANGE THICKNESS IS MORE THAN 3/4" THICK LONGER BOLTS WILL BE REQUIRED AT THE CUSTOMER'S EXPENSE.

# STRUCTURAL NOTES

ALLOWABLE CAPACITY PER EACH CLAMP: SHEAR = 160 LBS TENSION = 2300 LBS

SHEAR AND TENSION LOAD DIRECTION ARE AS INDICATED ON REAR ISOMETRIC VIEW



# \*\*\*CRITICAL\*\*\* DO NOT USE ANY LUBRICANT ON ANY MOUNTING HARDWARE OR WARRANTY WILL BE VOIDED

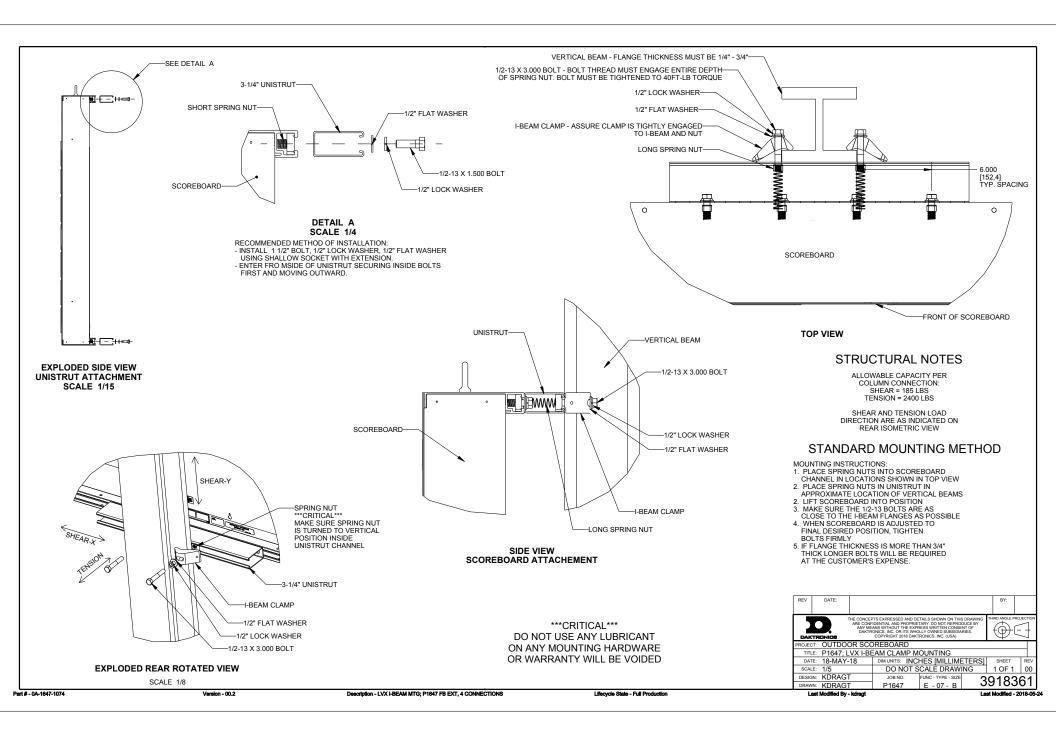
05	22 DEC 15	PER EC-22871; ADDED LUBRICANT NOTE	PJS 18704	
04	06 JAN 14	ADDED ALLOWABLE TENSION AND SHEAR CAPACITY DETAILS	JAVA	
03	23 OCT 13	PER EC-12382; CHANGED BOLT TORQUE FROM 30 FT-LB TO 40 FT-LB	NJM	
02	07 MAR 12	ADDED STANDARD MOUNTING METHODS NOTES	KDD	
01	21 FEB 12	CHANGED ROCKER TO I-BEAM	KDD	
REV	DATE:		BY:	

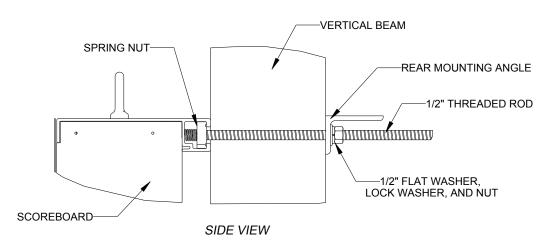


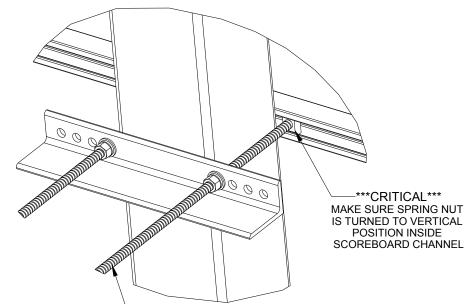
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G THIRD ANGLE PROJECTION

DAKIR	:014108	}	7					
PROJECT:	OUTDOOR SCOREBOARD							
TITLE:	P1647; I-BEAM	CLAMP MOUNTING						
DATE:	22-DEC-15	DIM UNITS: INC	HES [MILLIME	TERS]	SHEET	REV		
SCALE:	1/8	DO NOT	1 OF 1	05				
DESIGN:	MCARSRU	JOB NO.	FUNC - TYPE - SIZE	1	05250	25		
DDV/WN-	MCADSDII	D16/17	E ∩7 ∧		ひひとひに	וכט		







REAR ISOMETRIC VIEW

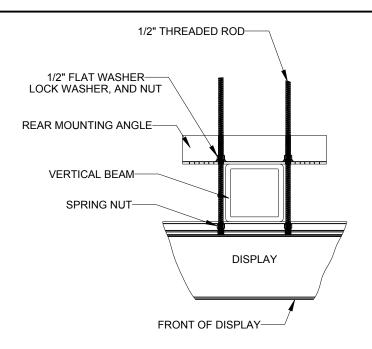
EXTRA THREADED ROD
CAN BE CUT OFF

## STRUCTURAL NOTES:

- BOLT TORQUE: 30 FT-LB

#### NOTES:

- THREADED RODS RUN ALONG BOTH SIDES OF BEAM
- RODS DO NOT PASS THROUGH THE FLANGES OF THE BEAM
- NO DRILLING NECESSARY
- MAKE SURE SPRING NUT IS PERPENDICULAR TO CHANNEL OPENING ON SCOREBOARD



TOP VIEW SCALE 1/10

# \*\*\*CRITICAL\*\*\* DO NOT USE ANY LUBRICANT ON ANY MOUNTING HARDWARE OR WARRANTY WILL BE VOIDED

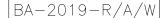
04	22 DEC 15	PER EC-22871; ADDED LUBRICANT WARNING	PJS 18704	
03	03 JULY 13	ADDED STRUCTURAL NOTE	TTF	
02	20 SEP 12	PER EC-7114; REMOVED CHAMFER FROM 0M-133259	LMG	
01	06 OCT 11	REPLACED VERTICAL I-BEAM WITH 6" X 6" SQUARE TUBE	JAVA	
REV	DATE:		BY:	

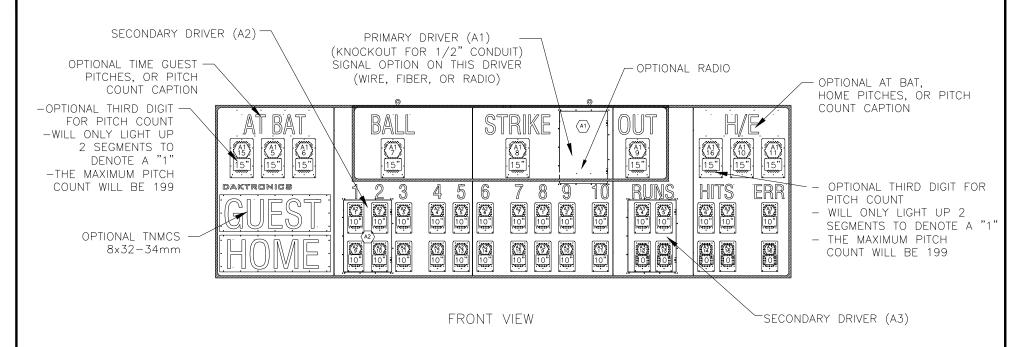


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THIRD ANGLE PROJECTION

DAKIR	CUNICS .	001 11110111 2010 27111	11011100; 1110: (00/1)		)	7
PROJECT:	OUTDOOR SCO	DREBOARDS				
TITLE:	P1647; POLE M	OUNTING OPT	ΓIONS			
DATE:	22-DEC-15	DIM UNITS: INC	HES [MILLIME	ETERS]	SHEET	REV
SCALE:	1/5	DO NOT S	CALE DRAW	ING	1 OF 1	04
DESIGN:	DOPPELT	JOB NO.	FUNC - TYPE - SIZE	1	0481	0 1
DRAWN:	DOPPELT	P1647	E - 10 - A	I	0401	<b>0</b> 4





### <u>NOTES:</u>



= LED DRIVER NUMBER & LED DRIVER CONNECTOR WIRED TO THAT DIGIT.

Version - 01.2



= DIGIT SIZE



= DRIVER NUMBER

