DAKTRONICS P1348 Analog Clock Instruction Manual

Contents

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ANALOG CLOCK INSTALLATION & MAINTENANCE MANUAL

201 Daktronics Drive Brookings, SD 57006-5128 **www.daktronics.com/support** 800.325.8766

Introduction

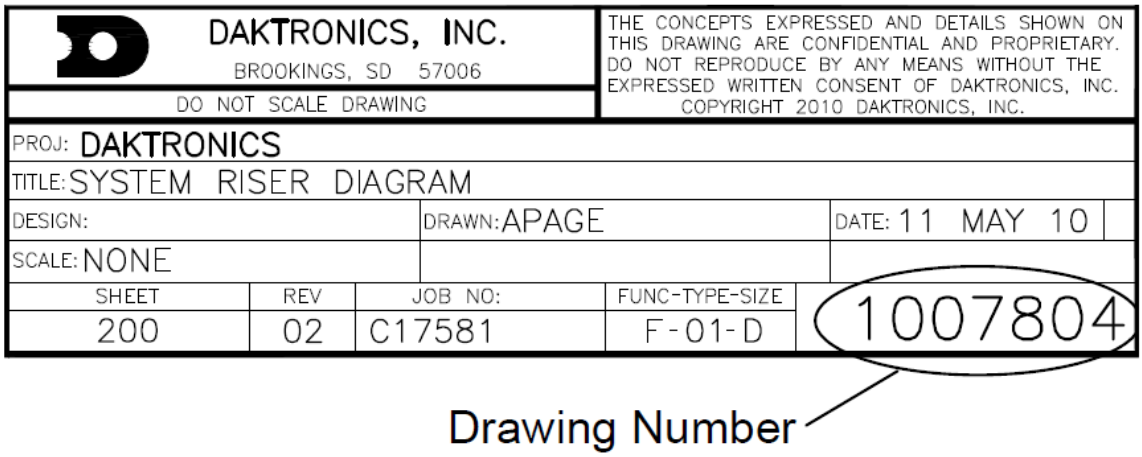
This manual explains the installation and maintenance of Daktronics Analog Clocks. This manual is not specific to a particular installation. Project-specific information takes precedence over general information found in this manual.

Important Safety Instructions

- Read and understand all instructions before beginning the installation process.
- Disconnect power when not in use or when servicing.
- Do not modify the structure or attach any panels or coverings to the clock without the express written consent of Daktronics.
- Do not disassemble control equipment or electronic controls of the clock; failure to follow this safeguard will make the warranty null and void.

Resources

Figure 1 illustrates a Daktronics drawing label. This manual refers to drawings by listing the last set of digits. In the example, the drawing would be referred to as DWG-1007804. All references to drawing numbers, appendices, figures, or other manuals are presented in bold typeface. Any drawings referenced in a section are listed at the beginning of it as shown below:



Drawing Number

Reference Drawing: System Riser Diagram

System Riser Diagram …… DWG-1007804

Daktronics identifies manuals by the DD or ED number located on the cover page. Ensure all applicable materials have been gathered before beginning the installation. Contact a Daktronics sales coordinator or project manager. Daktronics identifies manuals by the DD or ED number located on the cover page. Ensure all application materials have been gathered before beginning the installation. Contact a Daktronics sales coordinator or project manager.

Mechanical Installation

Mounting

Reference Drawings:

Attachment- DA-1100-4 to DA-1004-XX …….. DWG-272683

Each analog clock will be mounted differently depending on the diameter of the clock face and the surface to which it will be attached. DWG-272683 in Appendix A shows the typical location and hardware required when mounting an analog clock to a standard Daktronics arch truss. For all other types of mountings, refer to contract-specific shop drawings or system riser diagrams.

Note: For installation procedures of the truss itself, refer to the Outdoor Decorative Accent Installation Manual (ED-16076), available online at **www.daktronics.com/manuals.**

Removal & Replacement

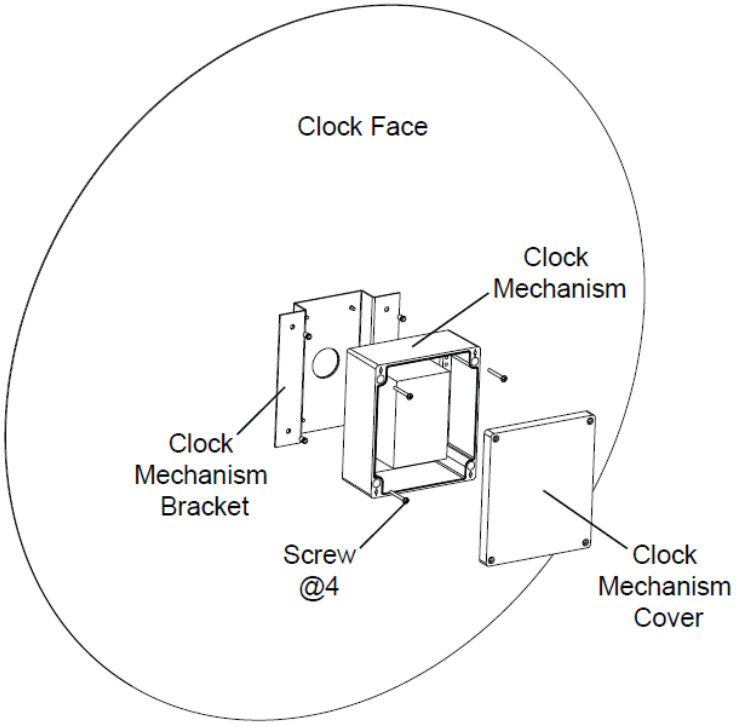
Instructions for removal and replacement of the analog clock will depend on the specific installation and should be outlined in the project-specific information.

Small Clocks

Refer to Figure 2 and the instructions below for removal of clocks that are 4′ (1.2 m) and smaller in diameter:

1. Disconnect power to the clock.
2. Remove both clock hands from the front of the clock.

3. Remove rear cover from the back of the clock.
4. Remove the four screws from within the clock mechanism to free the clock from the bracket.



Large Clocks

Refer to Figure 3 and the instructions below for removal of clocks that are 5’ (1.5 m) and larger in diameter:

1. Disconnect power to the clock.
2. Remove both clock hands from the front of the clock.
3. Remove the four screws securing the Clock Mechanism (with Attached Mounting Plate) to the Clock Mechanism Bracket.
4. Unbolt the Mounting Plate from the Clock Mechanism, and keep it for the replacement clock.

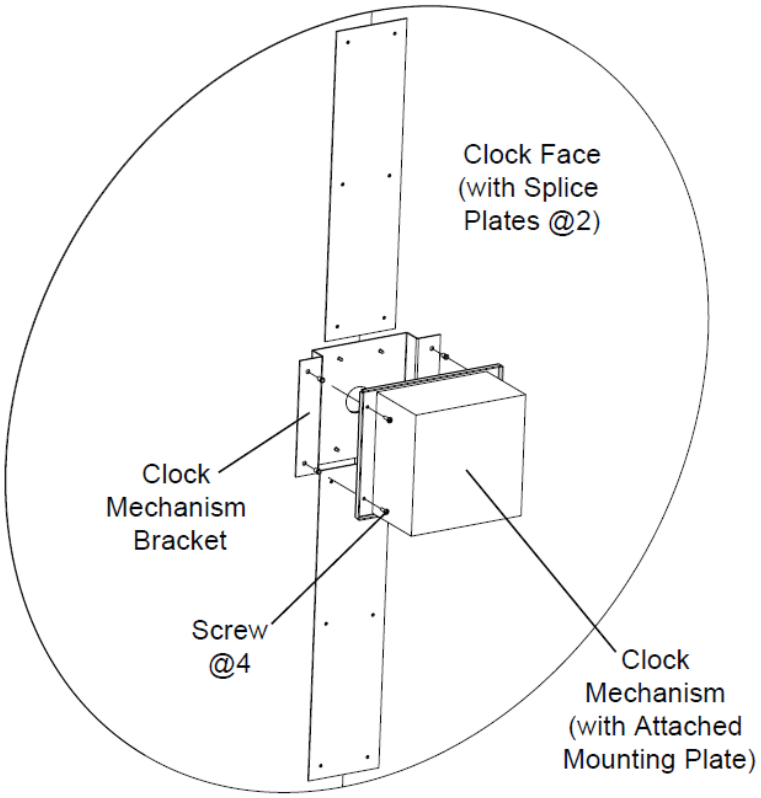


Figure 3: *Rear View, Large Analog Clock*

Note: Do not use straps provided by Electric Time; reuse the Daktronics mounting plate when replacing the clock mechanism.

Electrical Installation

CAUTION: Only qualified individuals should perform power routing and termination.

Warnings and Disclaimers

Before beginning electrical installation, ensure all power to the area is turned off and the area is safe to work in. Failure to follow proper safety procedures can result in injury or death. Daktronics is not responsible for any damages or injuries resulting from improper installation or use of their products.

- Ensure that all electrical work meets or exceeds all local or national electrical codes.
- Provide the required power to the display as listed on the product labels, specifications, or site-specific riser drawings. The conductor size may vary based on the length of the power run.
- Consider implementing a separate circuit for the display using an isolation transformer or dedicated transformer.
- Daktronics assumes no liability for any issues caused by line voltage fluctuations or other improper power conditions.

Clock Control Installation

Reference Drawings:

Instructions for clock control installation will depend on the specific installation and should be outlined in the project-specific information.

System Riser: Clock Assy DWG-263976

The clock control system consists of two parts: a controller and a motor mechanism. The controller is used to set the current time and send power to the motor mechanism, which in turn rotates the clock hands. DWG-263976 in Appendix A illustrates a typical wiring diagram for 115 and 230 VAC installations. For additional clock installation and setup information, refer to the 99B-MI User's Manual, located online at **www.electrictime.com/services/support**.

1. After the motor mechanism is mounted to the rear of the clock face, install the clock hands to the front of the clock face with both hands pointing up at the 12:00 position.
2. Determine the controller location and mount per manufacturer's instructions.
   Note: The controller and motor may be located no more than 100′ (30.5 m) away from each other.
3. Connect power in conduit to the controller.
4. Connect power in conduit from the controller to the motor mechanism.
5. Set the clock to the correct time per manufacturer's instructions.

Replacement Parts

Refer to the following table for standard and optional replacement parts.

Description	Part Number	Clock Model #
Clock Movement, 36" (B28G7-MI)	A-2034	DA-1101-3
Clock Movement, 48" (B28G7-MI)	A-2035	DA-1100-4, DA-1102-4
Clock Movement, 60" (B28G7-MI)	A-2036	DA-1100-5, DA-1101-5
Clock Movement, 72" (B28G7-MI)	A-2037	DA-1100-6, DA-1102-6
Electric Time Analog Clock Controller (99B-MI)	A-2038	All

Replacement Fuses

If a fuse needs to be replaced, refer to the project-specific information for the correct replacement fuse and instructions for replacement.

Primary fuse:

- Daktronics: P/N FUSE-99BMI-2.5-250-F
- Digikey: P/N WK4713-ND FUSE 2.5/250V SLO 5X20 UL/CSA
- WICKMAN: 1971250000

Secondary fuse:

- Daktronics: P/N FUSE-99BMI-1.0-250-F
- Digikey: P/N WK4709-ND FUSE 1.00 250V FAST 5X20 UL
- WICKMAN: 1911100000

Routine/Preventative Maintenance

Perform routine maintenance as outlined in the project-specific information to ensure proper functioning of the analog clock.

Perform an annual visual inspection of each clock and check the following:

- Check and tighten fasteners or replace them as required.
- Check the electrical components for proper connection and any signs of corrosion.

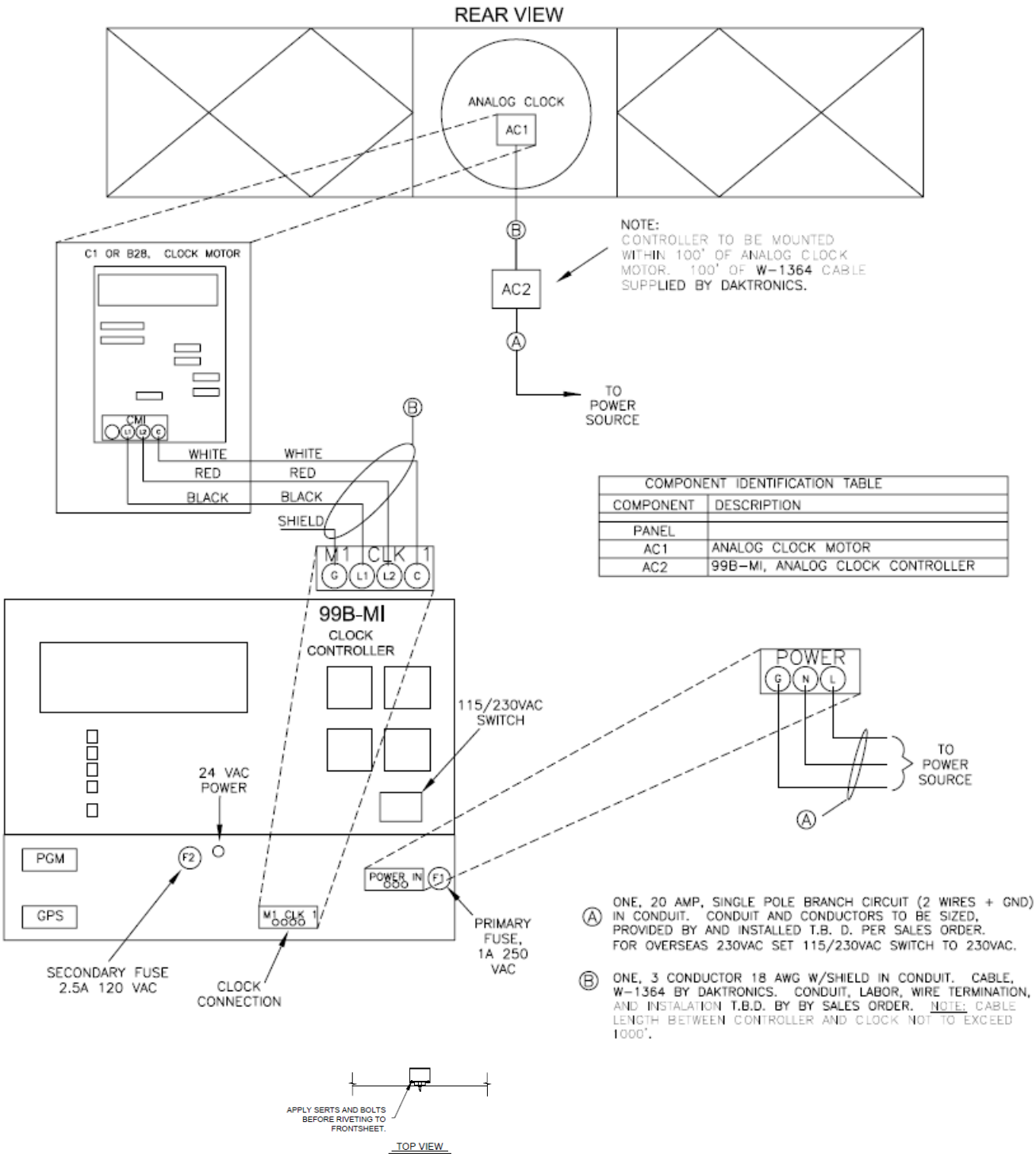
A Reference Drawings

Refer to the reference drawings listed throughout this manual for detailed installation and maintenance information. Refer to Resources (p.1) for information regarding how to read the drawing number. Any contract-specific drawings take precedence over the general drawings.

Reference Drawings:

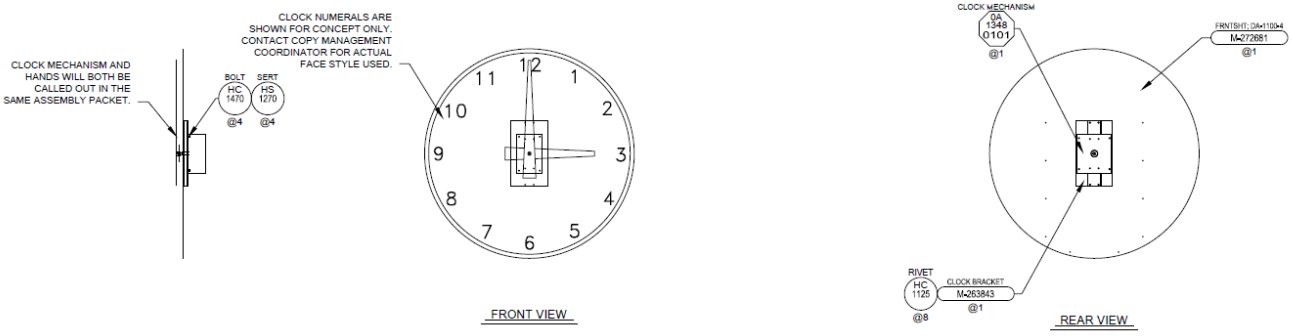
- System Riser; Clock Assy DWG-263976
- Assy: DA-1100-4 ..... DWG-272682
- Attachment- DA-1100-4 to DA-1004-XX DWG-272683

ANALOG CLOCK FRONT VIEW



COMPONENT IDENTIFICATION TABLE	
COMPONENT	DESCRIPTION
PANEL	
AC1	ANALOG CLOCK MOTOR
AC2	99B-MI, ANALOG CLOCK CONTROLLER

TOP VIEW



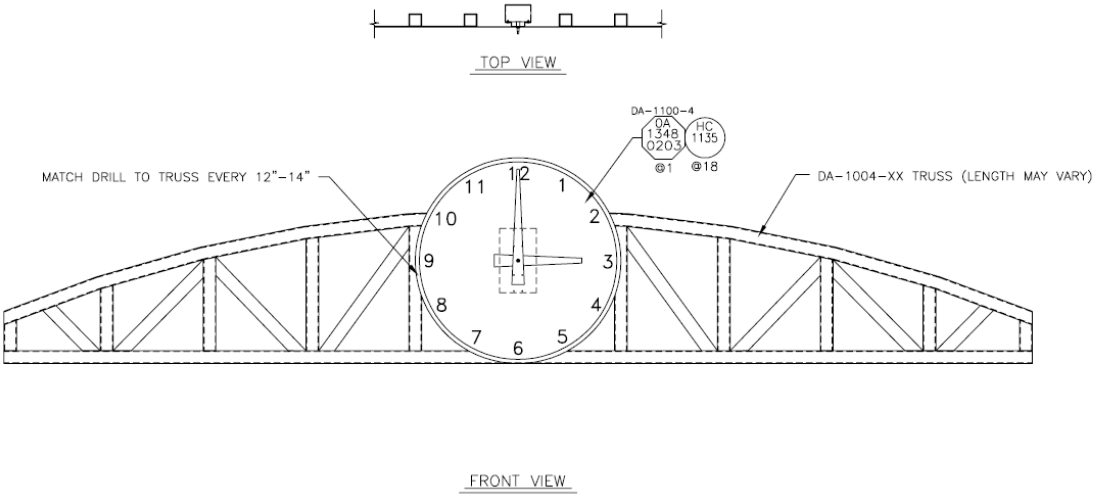
FRONT VIEW

REAR VIEW

ASSEMBLY PACKETS

0A-1348-0203…… F. ASSY, DA-1102-4

- DA-1100-4 WILL BE MOUNTED TO THE FRONT FACE OF A TRUSS.
- REFER TO 0W PACKET FOR MOUNTING PROCEDURE AND LOCATION.



NOTES:
TRUSS SHOWN IN MAY THIS HAVE DRAWING. ADDITIONAL ITEMS (MESH, LETTERING, ETC.) ATTACHED NOT

Documents / Resources

	DAKTRONICS P1348 Analog Clock [pdf] Instruction Manual P1348 Analog Clock, P1348, Analog Clock, Clock

References

- Daktronics :: Scoreboards, LED Video Displays, Message Signs, Billboards
- Manuals and Quick Guides
- Street Clocks, Tower Clocks, Custom Made Clocks | Electric Time ®
- Support | Electric Time Company ®