



TDM-150 TIMER DISPLAY

TECHNICAL MANUAL

Covers TDM-150D, TDM-150F

Version 1.1

August 2016

TDM-150 Timer Display Technical Manual

Safety Precautions

Caution

Read Instructions: Read and understand all safety and operating instructions before using the equipment.

Retain Instructions: The safety instructions should be kept for future reference.

Follow Warnings: Follow all warnings and instructions marked on the equipment or in the user information.

Avoid Attachments: Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

Warning

Power Sources: This equipment should be operated only from the power source indicated on the product.

Servicing: Refer all servicing to qualified service personnel. There are no user-serviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.

Slots and Openings: If the equipment has slots or holes in the enclosure, these are provided to prevent overheating of sensitive components inside. These openings must never be blocked by other objects.

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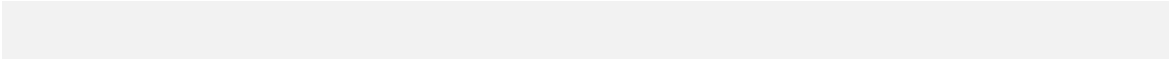
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1.0 INTRODUCTION

1.1 Overview

The TDM-150 LCD Timer Displays show the VoteLynx presentation timer count in minutes & seconds to presenters and audience in the meeting room. Large red, yellow, and green graphics indicate start, stop and wrap-up cues. Large bright green numbers give presenters a visual status of how much time they have left to speak during the meeting.

TDM-150 Timer Displays are available in two styles, both with 2.6" diagonal LCD displays. The TDM-150F is designed for podium or in-desk mounting and fits into most single gang electrical openings. The TDM-150D is a desktop version for use in tabletop applications. Both models contain a configurable audio annunciator to provide audio cues and prompts as desired. The timer displays can be powered by POE or external 5 volt supply.

The timer display modules may be used with any VoteLynx system configuration. One or more timer displays of either configuration may be connected together. For example, one timer display could be located on the podium top surface for a presenter to see while another display could be located on the rear of the podium for city council members to see. An optional plug-in module is available to drive microphone LED light rings.

1.2 Features

- Vivid 2.6" TFT active matrix color LCD with white LED backlighting
- Large bright green numbers show timer count
- Brilliant green, yellow and red graphic cue indicators
- Simple Ethernet IP interface connects timer displays to VoteLynx systems
- Desktop or single gang wall box mountable
- Configurable audio annunciator
- Three configurable general purpose I/O pins
- 16 bit color graphics
- Optional VL-VP-OPT5 plug-in circuit board module to drive microphone LED light rings

1.3 Using This Manual

Note: Important information that you should read or be familiar with in order to understand the material being presented next.

Tip: A suggestion that will show a shortcut or specific information that will help you understand or best use the Controlynx system.



Indicates that an action on your part is required in the step by step process of configuring or operating the hardware or software. This may mean setting a jumper, moving the mouse or pressing a key on the keyboard.

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1.4 Contacting *INTENT DIGITAL*

Technical Support

You may contact *INTENT DIGITAL* directly for technical support by phone, FAX or letter or e-mail. Please feel free to contact us at:

INTENT DIGITAL Inc.
3104 E. Camelback Road
Suite 445
Phoenix, AZ 85016
Voice: 602-404-0100
Fax: 602-324-4629
www.intentdigital.com
www.votelynx.com

Comments and Suggestions

We at *INTENT DIGITAL* would like to encourage you to send comments, questions and suggestions regarding our product line. Please feel free to contact us at the above address.

1.5 Warranty

For a period of one year from the date of purchase as shown on the sales invoice, *INTENT DIGITAL* warrants to the original purchaser that the VoteLynx module, (the "Product") is free from defects in material and workmanship when subjected to normal use and service. If during this one year period, such a defect due to faulty workmanship or materials should occur, the Product will be repaired or replaced (at *INTENT DIGITAL's* discretion) free of charge after the Product is returned, shipping prepaid, to *INTENT DIGITAL*. Units returned for warranty service must be shipped prepaid to *INTENT DIGITAL* for repair or replacement.

Purchaser's exclusive remedy, and *INTENT DIGITAL's* sole obligation for any and all causes of action, claims, loss, property damage, personal injury, or liability, resulting from or related to any malfunction, interruption, or loss of use of the Product or related system is limited to the repair or replacement of the Product under the limited warranty provided herein. *INTENT DIGITAL* shall not be liable for any consequential damages (even if advised of the possibility of the same) or incidental liability or loss. In no event under any legal theory of liability shall *INTENT DIGITAL's* liability for any and all claims arising under or related to this Agreement exceed the purchase price of the Product.

2.0 INSTALLATION & OPERATION

2.1 Getting Started

SUPPLIED HARDWARE AND CABLES

Check to make sure that you have received the following equipment and accessories with each Timer Display module.

Desktop version

- TDM-100D Desktop Timer Display
- Attached power and Ethernet cable

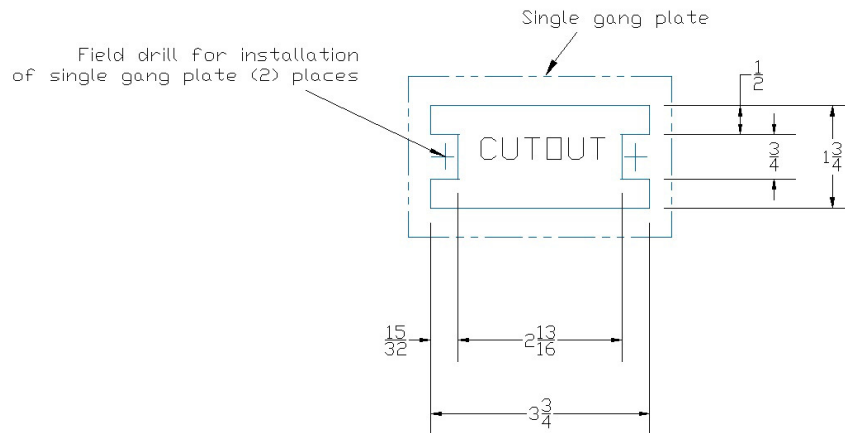
Flush mount version:

- TDM-100F Flush Mount Timer Display
- (1) Removable two conductor power cable
- (2) Black Philips Flat Head Mounting Screws

If any of these items is missing please contact **INTENT DIGITAL** immediately for replacement.

MOUNTING TIMER DISPLAY

The flush mount VoteLynx Timer Display is designed to mount in a many single gang electrical box or a cutout on a flat tabletop surface using two mounting screws. The panel cutout pattern for the TDM-150F flush mount timer is shown below.



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TDM-150F Flush Mount



TDM-150D Desktop

2.2 Switches & Indicators

FRONT PANEL LCD SCREEN

- Numerical Digits:** Displays either the timer remaining or the elapsed time as determined by the VoteLynx software. Time is displayed as minutes:seconds.
- Red Indicator:** The red indicator lights when the timer count has expired.
- Yellow Indicator:** The yellow indicator lights when the warning or wrap-up time is reached. The green indicator will turn off and the yellow LED will remain lit until the red stop indicator lights.
- Green indicator:** The Green indicator lights when the timer count starts and remains lit until the yellow warning or wrap-up indicator lights.

REAR CHASSIS SWITCHES AND INDICATORS

These switches and indicators are located on the rear of the timer display.

- Reset Switch:** Press this switch to reset the timer display during maintenance procedures.

2.3 Cabling and Connectors

EQUIPMENT CONNECTIONS:

The TDM-150D desktop timer display ships with both Ethernet and power cables attached. The power cable connector is a 2.1 mm plug with the center pin being the positive conductor.

The TDM-150F flush mount unit has a removable Phoenix style plug for power connection. The table below shows the connections to the two pin terminal connector.

Terminal Pin	Connection
1	+5 Volts
2	0 Volts

3.0 SPECIFICATIONS

3.1 TDM-150 Timer Display Specifications

Display:	2.6" Diagonal TFT LCD
Screen Resolution:	400 x 240 pixels
Brightness:	180 nits, LED backlight
LCD Colors:	65,536 colors (16 bit)
Network:	TDM-150F: 10/100 Base-T Ethernet on RJ-45 connector TDM-150D: Attached 10 foot 10/100 Base-T Ethernet cable
Audio:	Variable frequency piezoelectric annunciator
Mounting:	TDM-150F: Single gang wall plate TDM-150D: Desktop
Dimensions (mm):	TDM-150F: 114.5 W x 70 H x 35 D (4.50" W x 2.75" H x 1.38" D) TDM-150D: 102 W x 71 H x 106 D (4.00" W x 2.80" H x 4.17" D)
Weight:	TDM-150F: 0.12 Kg TDM-150D: 0.23 Kg
Operating Temperature:	0°C to 50° C
Storage Temperature:	-10° C to 60° C
Supply Voltage:	IEEE-802.3af POE or external 5 Volts DC
Supply Current:	Version 1.0: 370mA Version 1.3: 300mA w/external supply
Power Connection:	TDM-150F: 2-pin removable Phoenix style 3.81 mm terminal plug for 5 volt operation TDM-150D: Attached 10 foot cable with 2.1 mm DC coaxial power jack for 5 volt operation

Specifications subject to change without notice