

# **THANK YOU FOR PURCHASING A PHYTOTRONICS MISTING CONTROLLER**

## **1626C MISTING CONTROLLER Instructional Manual**

**Phytotronics, Inc.  
P.O. Box 59A  
St. Louis, MO 63166**

PLEASE READ ENTIRE INSTRUCTION MANUAL (INCLUDING LIMITED WARRANTY) BEFORE INSTALLATION.

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Effective Date - June 1, 1991

## LIMITED WARRANTY

NOTICE: The new **Phytotronics** 1626C Misting Controller should never be opened in the field. If it is opened, the balance of the one year warranty will be nullified.

**Phytotronics, Inc.** extends this limited warranty to the original buyer and warrants that the 1626C Misting Controller shall be free from original defects in workmanship and materials for one year from date of shipment, provided same have been properly stored, installed, and operated. This warranty shall not apply to products which have been improperly stored by the buyer, improperly installed, or operated, subjected to misuse, negligence or accident, incorrectly used in combination with other substances, or altered or repaired in any way which, in the judgment of **Phytotronics**, may affect the product's performance or reliability.

## DISCLAIMER

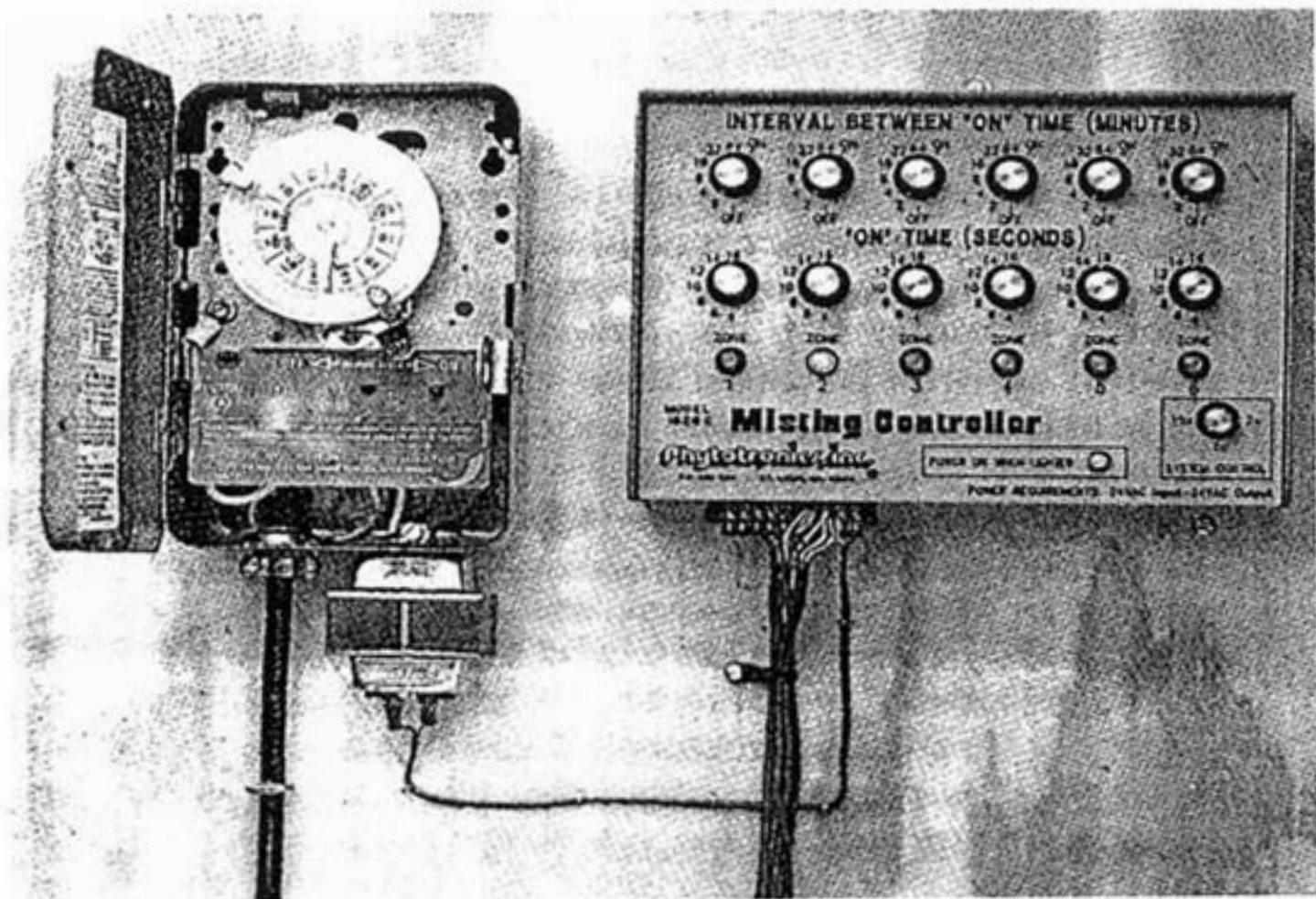
The buyer assumes all risks and liability for results of use of the products. **PHYTOTRONICS, INC. GIVES NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. PURCHASER AGREES THAT THE LIMIT OF LIABILITY OF THE COMPANY FOR ALL CLAIMS FOR LOSS OR DAMAGE DUE TO ANY CAUSE SHALL NOT EXCEED THE INVOICE PRICE OF THE GOODS. IN NO CASE SHALL THE COMPANY BE LIABLE FOR LOSS OR DAMAGE TO A CROP OR FOR ANY OTHER CONSEQUENTIAL OR INCIDENTAL DAMAGES.**

## LIMITATION OF REMEDY AND DAMAGES

All claims under this warranty must be made in writing and delivered to **Phytotronics, Inc., P.O. Box 59A, St. Louis, MO 63166**, within 15 working days after discovery of the defect and prior to the expiration of the one year limited warranty. Buyer shall be barred from any remedy if buyer fails to make such claim within such period. Within 30 days after receipt of timely claim, **Phytotronics** shall have the option either to inspect while still in buyer's possession, or to request buyer to return the product to **Phytotronics** at buyer's expense for inspection by **Phytotronics**. **Phytotronics** shall replace, or at it's option repair, free of charge, any product it determines to be defective, and it shall ship the repaired or replacement product to the buyer F.O.B. point of shipment; provided, however, if circumstances are such as in **Phytotronics** judgement to prohibit repair or replacement to remedy the warranted defects, the buyer's sole and exclusive remedy shall be a refund to the buyer of any part of the invoice price, paid to **Phytotronics**, for the defective product or part.

**Phytotronics** is not responsible for the cost of removal of the defective product or part, damages due to removal, or any expenses incurred in shipping the product or part to or from **Phytotronics**, or the installation of the repaired or replaced product or part. No employee, agent, dealer, or other person is authorized to give any warranties on behalf of **Phytotronics** or to assume for **Phytotronics** any other liability in connection with any of its products except as signed in writing by an officer of **Phytotronics**.

If these terms are unacceptable, return the unused controller to your distributor for a complete refund of the invoice price.



Typical installation of Phytotronics Misting Controller wired to a 24 volt transformer, mounted with a 24 hour timer for separation of day/night operation. Do not wire more than one Phytotronics Misting Controller to a 24 volt transformer.

## CONTROLLER INSTALLATION

1. Select appropriate location. Preferably a location where the unit will be protected from moisture, extremes of climate, pesticides, and other corrosive materials. Mount Controller.
2. Flip up mounting bracket (located on back panel), and attach with provided screw.
3. Attach bottom flange by inserting provided grommets into slots and securing with screws.

## THE WIRING PROCESS

Complete wiring diagram is located on pages 6 & 7.

**IMPORTANT: NEVER OPEN YOUR 1626C MISTING CONTROLLER. OPENING VOIDS 1 YEAR WARRANTY**

**CAUTION:** The **Phytotronics 1626C Misting Controller** will operate only on **24 volt input and output. DO NOT wire directly to a 120 volt power source.** Use a UL approved 24 volt transformer to reduce voltage to controller. **Do NOT wire more than one Phytotronics Misting Controller to a 24 volt transformer.**

1. Using long enough lengths of 20 gauge bell wire, or equivalent, to reach back to your misting controller, connect the wire to your solenoids via the mode of attachment specific to your valves. (Where possible, use a continuous strand of bell wire. When this is impossible, be sure to seal each connection with electrical tape to avoid shorting the misting system.)

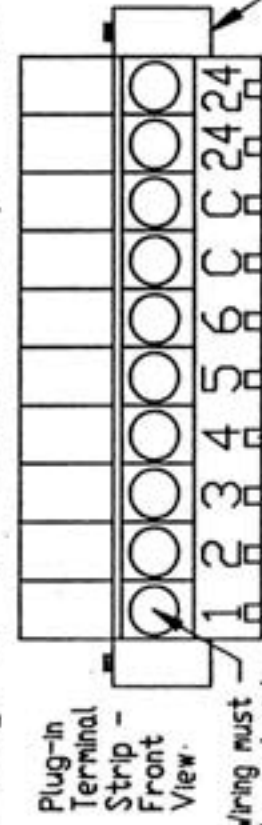
2. DO NOT remove more than 1/4 inch of insulation from wires to be connected to plug-in terminal strip. To attach leads from the solenoid valves to the controller, open each wiring port and insert one of the lead wires from the solenoid into the wiring port which coincides with the desired misting zone. (Wiring port 1 for zone 1, etc.) Then connect the remaining solenoid wire directly to one of the "C" terminals, or to a lead wire which can be inserted into the "C" wiring port. Using a lead wire will allow you to "tie" all the "C" wires from the solenoids into one or two main wires.

3. Connect transformer terminals marked "load" (or secondary) to misting controller terminals marked "24 VAC.....". \*SEE "CAUTION" page 8

Wiring Process - Continued page 8

# Wiring Diagram - Model 1626C

## Plug-in Terminal Strip - To Controller



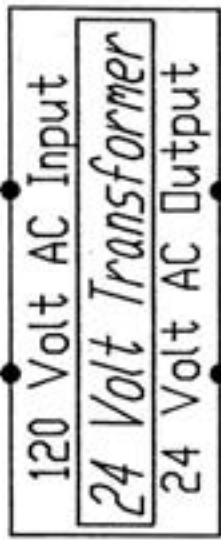
**NOTE**

Use 18 gauge bell wire or equivalent for all 24 volt wiring

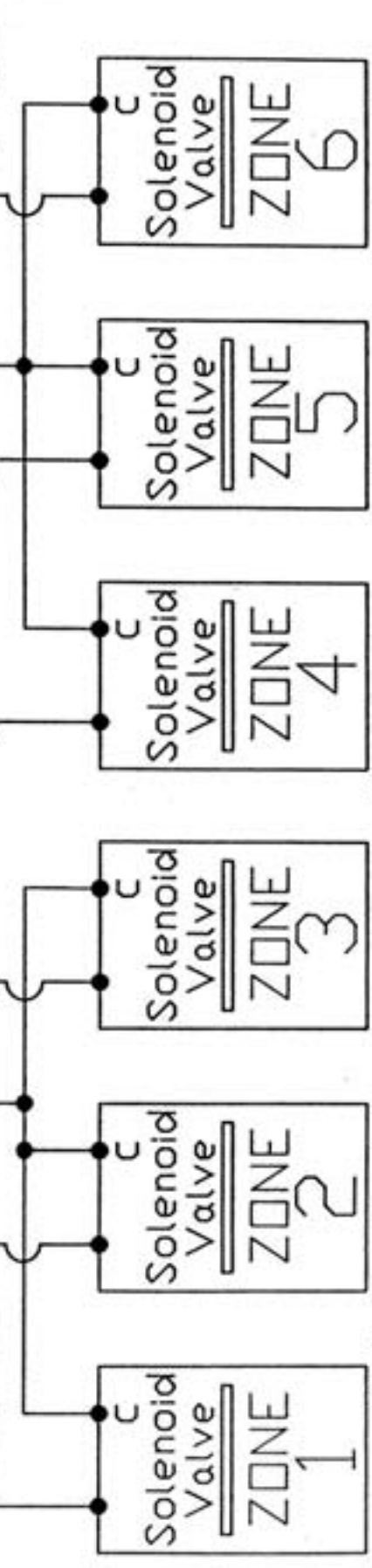
Terminal mounting screws & Terminal wiring screws are located on bottom of plug

Wiring must terminate into wiring parts and be tightened by screws on bottom of terminal plug. Do not remove more than 1/4" insulation at end of wire.

For clarity of drawing wires are not extended to wiring parts.



Controller may be grounded from the C Terminal (C = Common)



Drawing Not To Scale

Phytoelectronics, Inc. St. Louis, Mo.

4. Since most misting systems are operated only during the day, a 24 hour timer is usually installed by the grower. The purpose of this additional timer is to control the hours of the day that the misting system is actually in operation. Each 24 hour timer is somewhat different, and therefore differences in wiring procedures may be noticed, however, you will usually attach the load from the timer to the primary winding (input) of the transformer. In the event that you have a 24 volt timer, the positions of the timer and the transformer will be reversed.

5. After double checking your wiring, connect timer to power source and turn power on. (If a 24 volt timer is used, connect transformer to power source and turn power on.)

\* **CAUTION:** Take special care to avoid connecting either of the two lead wires from the transformer directly to a ground. Doing so will result in a dead short, and will either blow the transformer's fuse, or the transformer if it is an unfused model. Any damage that might occur to a **Phytotronics** controller under such conditions would be classified as misuse, and therefore not covered by our warranty.



## OPERATING INSTRUCTIONS

1. If you have followed the installation instructions properly, the misting controller is ready for operation. Do not wire more than one Phytotronic Misting Controller to a 24 volt transformer.

2. The second row of control knobs called the "on time" operates each solenoid valve in 4, 6, 8, 10, 12, 14, or 16 second intervals. All 6 zones can be individually controlled. The first row of control knobs called "interval between on time", will determine how often the mist will be turned on. These control the length of time, in minutes, that misting takes place in intervals of 2, 4, 8, 16, 32, or 64 minutes. They also permit continuous misting ("on") and turning zones "off". If less or additional time is needed in misting or between misting, the system selection switch can be used to multiply all times indicated on the control panel by either 1/2x, 1x, or 2x. Should the 1/2x be on, the 4 second on time selected will now mist for only half the time shown, or two seconds every one minute if the two minute position is selected for the "between on time".

3. In order to reduce the potential for lightning damage to the controller, it is best to detach the terminal strip from the controller during electrical storms. MOVs (surge protectors) have been added to help stop damage by electrical surges, but they are not designed to stop massive surges generated by a lightning strike.



## **PHYTOTRONICS MISTING CONTROLLER REPAIR POLICY**

**Phytotronics** misting controllers in need of repair are to be returned with a \$60.00 check to **Phytotronics, Inc. 2760 Chouteau Avenue, St. Louis, MO 63103**. The minimum repair charge for controllers not under warranty is \$25.00 which includes the return charges by UPS. In these cases, \$35.00 will be refunded. The standard repair charge for controllers not under warranty is \$60.00 and includes return charges by UPS. If repairs exceed \$60.00 or if the controller is not repairable, the customer will be contacted immediately. If a controller is not repaired, a complete refund is made.

Controllers not repaired are returned by UPS to the customer at no charge at the customer's request. **Phytotronics**, limited warranty is offered for 1 year from date of purchase. Controllers under warranty in need of repair are to be returned with a copy of sales receipt or invoice and an explanation of malfunction or defect. Controllers determined by **Phytotronics** to be covered by limited warranty are repaired and returned by UPS at no charge. Limited warranty does not cover controllers stored, installed or operated improperly, controllers repaired without **Phytotronics** express authorization, or controllers subjected to misuse, negligence, or accident.

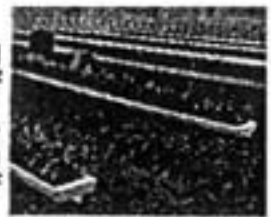
## **PHYTOTRONICS MISTING CONTROLLER LOANER POLICY**

Customers in need of a loaner controller may contact **Phytotronics, Inc.** at (314) 771-3444. Loaners are available for up to 60 days to those who need the use of a controller while one of their controllers is being repaired. The handling charge for loaners is \$35.00 and includes UPS freight charges for delivery of a loaner to customers in the continental United States. If a loaner is not returned within 60 days, the customer will be invoiced for \$395.00, the selling price of a new controller. Loaners are shipped regular UPS unless the customer requests and agrees to pay for second day air or next day air UPS service. **Phytotronics, Inc.** reserves the right to require a \$35.00 prepayment and a \$300.00 deposit prior to sending a loaner to customers who have been delinquent in the past, are currently past due, or do not have a previously established charge account.

**Phytotronics welcomes your comments and suggestions about any Phytotronics product or literature. We always have an open ear when it comes to new product ideas for the greenhouse or nursery industry. Please write or give us a call at (314) 771-3444.**

# OTHER FINE PRODUCTS FROM PHYTOTRONICS, INC.

- **Aqua-Trough** — The Aqua-Trough growing and irrigation system provides growers with a means of expanding the growing area of their greenhouses 1 sq. ft. for each linear foot. Aqua-Trough operates as a subirrigation system providing uniform application of water and accepts most 4,5, and 6 inch standard pots.



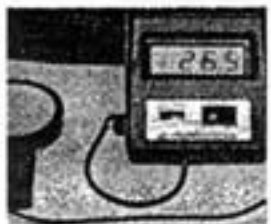
- **Phyto-Lite** — Decreases growing time and increases plant quality. When using the Phyto-Lite the grower can be assured of uniform and healthy seedlings. The Phyto-Lite is a real space saver with an effective photoperiod control allowing seedling development in 15 -16 hours at 300-350 footcandles.



- **Pestick** — A ready-to use sticky compound for preparing insect traps. It is a clear formulation allowing attractant colors to be highly visible under the coating. One gallon of Pestick will cover up to 500 sq. ft. of surface with a medium coating.



- **Digital Light Meter** — Model FCM-10M Digital Footcandle Light Meter is very accurate, it is portable, has a range of 0 to 10,000 footcandles and is economically priced. The Digital Light Meter has a cord length up to 3.5 feet, comes with a deluxe carrying case and has a full 1 year warranty.



- **DGT Mist Nozzle** — The DGT misting and watering nozzles are one of the finest low pressure nozzles available to the horticultural industry. They are made with PVC and the top is chromium-plated, they are self-cleaning and any water soluble fertilizer can be applied through the DGT nozzle.



- **CapMat** — A capillary mat made of non-woven fabric which easily fits a greenhouse bench allowing many plant pots to be placed on it for economical, efficient watering. CapMat is lightweight and easy to handle, resistant to shrinking, rot, mildew, chemicals and is highly absorbent allowing water to wick rapidly to the roots of the plant for capillary action.



Please call or write for the nearest stocking distributor.

**PHYTOTRONICS, INC.**

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