

Series 300 Tournament Master Buzzer System

A lockout system for use in academic competition



Novel Electronic Designs
www.BuzzerSystems.com

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Introduction

The Series 300 Tournament Master was designed for use in question-and-answer tournaments, where the function of the system is to accurately identify the first contestant who signals that they are prepared to respond to a question. The Series 300 accommodates up to four teams, where each team may have from one to seven contestants per team.

The Series 300 Tournament Master -- *our 3rd generation of lockout systems* – uses rugged electronic circuits, which, with normal use, will provide many years of trouble-free service. If service ever becomes necessary, please refer to the section entitled Maintenance for instructions regarding repair.

This manual contains the following information about the Series 300 Tournament Master:

- **Unpacking the System**
Information about the system you'll need when you receive your new system.
- **Using the System**
*Provides important instructions for using the system. Also contains complete functional descriptions of the controls and indicators on the components. This section also includes **tips** for using the system.*
- **Troubleshooting and Maintenance**
What to do if the system malfunctions. This section also includes information about routine maintenance and the one-year warranty.

About Novel Electronic Designs...

Since 1994, *Novel Electronic Designs* has been designing and manufacturing electronic products for applications ranging from residential and commercial to educational and industrial. The excellent reputation of *NED's* products is a testament to the quality designed into each of our products. *NED's* engineering and technical staff can develop and manufacture electronic equipment that meets your specifications. Call *NED* for your next custom-designed electronic system.

Unpacking the System

Upon receipt of the system, it is important that you verify that nothing is missing and that your system is completely functional.

Please refer to the packing list that is included with your system. This list will identify each of the parts and the quantity of each included with your system.

If any parts are missing, please contact *Novel Electronic Designs* (our address and phone number are listed on our website; the web address is listed at the bottom of this page).

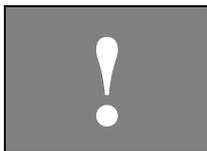
Using The System

Every effort has been made to make the Tournament Master buzzer system easy to use. This section explains the important things you need to know when using your system.

Setting up the System

Arrange the contestant modules in front of the contestants and place the system controller in front of the moderator. Connect the contestant modules to each other with the short cables; each team is connected to the controller with a long cable. For detailed information about the module and controller, please refer to the following section.

The **most important thing to do** when arranging the contestant modules is that they are grouped by the color of the plastic module enclosure, *not* the color of the lens on top of the module.

	<p>Modules must be grouped by the color of their plastic enclosure, <i>not</i> the color of the lens on the top of the module.</p>
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If modules of different colors are connected on the same team, the lights on more than one contestant module may light up when someone on that team presses their button.

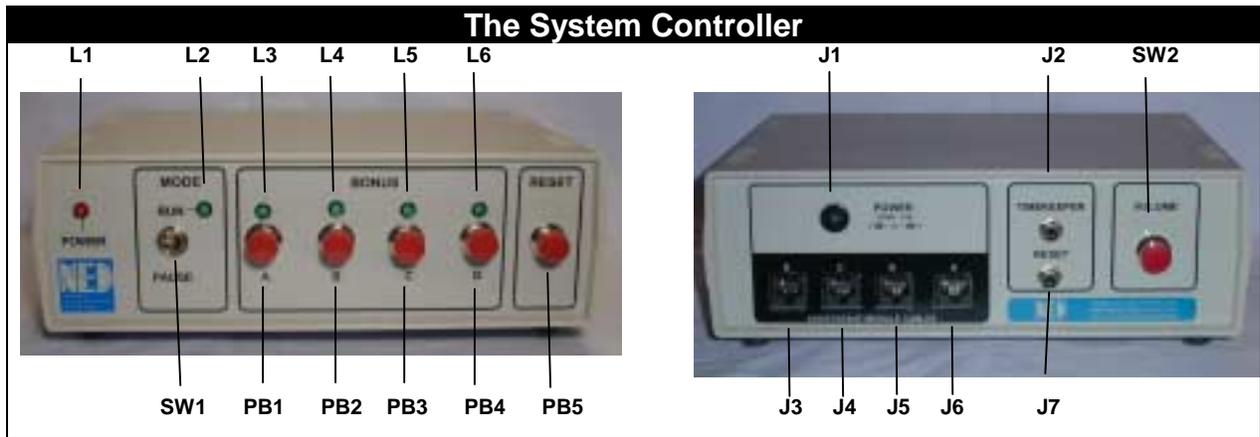
The Series 300 Tournament Master has modules with four different colors.

Light Gray	Dark Gray	Light Blue	Dark Blue
			
<p><i>Light gray case Green lens</i></p>	<p><i>Dark gray case Red lens</i></p>	<p><i>Light blue case Red lens</i></p>	<p><i>Dark blue case Green lens</i></p>

The Controller and Contestant Module

The two primary components of the Series 300 are the **system controller** and **contestant module**. This section provides information about each of these components' displays and controls.

System Controller. The system controller determines which contestant was the first to press their pushbutton. The system controller also provides controls that enable the moderator to disable (or "pause") the system, identify a team for bonus questions, and reset the system in order to begin the next question.



System Controller Controls, Indicators, and Connectors			
L1	Power LED. Indicates system is powered.	J1	Power. Plug the cable from the power pack into this connector.
L2	Run mode indicator. This LED lights while the system is waiting for a contestant to press their pushbutton.	J2	Timekeeper. Press this pushbutton when time has expired for a question. Time-out buzzer will sound and all contestants will be locked out.
L3 – L6	These LEDs indicate which team was the first to buzz in. These LEDs make it easy to know which “bonus” button to press after a contestant has answered a question.	SW2	Buzzer Loudness control. Press this button to toggle buzzer loudness between loud and soft.
SW1	Operating Mode. Set to RUN during tournament; PAUSE disables system during breaks and intermission.	J1 – J4	Contestant Module Cables. Connect the long contestant module cables to these connectors. Any combination of connectors may be used.
PB1 – PB4	Bonus. Press pushbutton to cause all of one team's light bulbs to light (e.g., during bonus question).	J6	Remote Reset. Provides functionality of PB5 in a convenient hand-held pushbutton for the moderator.
PB5	Reset. Pressing this button resets the system so that it's ready to identify the first contestant to press their pushbutton.		

Contestant Module. The contestant module is an interface between each contestant and the system controller. The module provides a means for signaling the controller when the contestant wants to be recognized, as well as an indicator to signify he/she was the first to press their button.



Contestant Module Indicators	
Green LED	The Operating Mode LED lights when the system is ready to recognize the first contestant to press their button.
Red LED	The Pushbutton Indicator LED lights when a contestant pushes their pushbutton. This LED provides the contestant some assurance their button is functional.
Light	The light on the top of the module illuminates to signify the contestant was first to press their button.

Tips and Suggestions

- If you have a defective pushbutton, remember: **your system comes with a spare pushbutton.** Remove the defective pushbutton, tie a knot in its cable (so it is easy to identify later), and use the spare pushbutton. Refer to our website to order replacement pushbuttons. **You should always carry a spare pushbutton with your system!**
- The system controller has a toggle switch that allows the moderator to put the system in *standby* mode (that is, button presses won't trigger the system). Switch the toggle switch to PAUSE between matches to prevent accidental triggering of the system.
- The **tournament timekeeper** may lock out all contestants from responding to a question by pressing a pushbutton connected to the controller's *timekeeper* connector. This eliminates the need for the moderator to determine if a contestant buzzed in before time was called.
- **Adding Extra Contestants.** If your system has fewer than four teams or fewer than seven modules per team, you have the option of adding modules for additional teams and/or contestants. Please visit the NED website for information on upgrading your system.

Troubleshooting and Maintenance

Troubleshooting Guide

<i>Symptom</i>	<i>Cause</i>	<i>What to do...</i>
Power indicator on system controller won't illuminate.	Power Pack not connected to system controller.	Verify power pack's cable is firmly plugged into the system controller's power connector.
	Power not available at the outlet.	Change to a different outlet.
Light bulb on contestant module won't illuminate.	Contestant module isn't connected to the contestant module cable.	Attach the contestant module cable to the faulty module.
	A contestant module cable is not fully inserted into a module.	Press each connector into each module to ensure each connection is secure.
	Light bulb is defective.	Replace bulb. <i>See instructions located in this section regarding bulb replacement.</i>
Multiple modules light up when a contestant presses their pushbutton.	Different colored modules are mixed together on the same team.	Arrange the modules so that all similarly-colored modules are on the same team (that is, all light-gray modules on one side, all dark-gray modules on the other). <i>Do not arrange modules based on the lens color.</i>
Pressing BONUS A, B, C, or D doesn't cause any of the desired team's bulbs to light.	MODE switch is set to "pause".	Bonus only works in "run" mode. Set MODE to "run".
	Contestant module cables not connected to system controller	Connect cables to system controller.
Pressing contestant module's activation button doesn't trigger the system.	Pushbutton connector is not firmly seated in module connector.	Ensure the plug is fully inserted into the module's receptacle.
	Defective push button.	Disconnect the push button from the contestant module by gently pulling the push button cable from the module's connector. Connect the replacement push button included in the <i>Series 300</i> accessory pack.
<p>If system is malfunctioning in a way not listed above, please call NED at the phone number listed at our website. When you call, <i>please</i> have your system set up so that the NED service technician can assist you in determining the cause of the problem.</p>		

Replacing the Light Bulbs

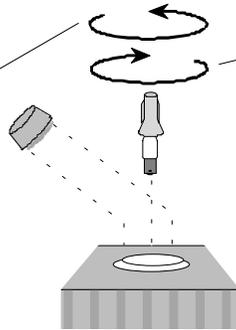
Follow this procedure when replacing a light bulb in a contestant module.

	<p>Do NOT remove or replace a module's light bulb while the system is powered. <u>Always</u> disconnect power before changing a bulb. Failure to disconnect power may damage the module.</p>
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1. Unscrew and remove the lens.

2. Remove lamp by fitting the lamp-changing tool over the bulb and gently pressing down until lamp can't be pressed further; turn lamp to disengage it from socket.

NOTE! Lamp does not unscrew from the socket.



3. Install new lamp by gently pressing down until lamp can't be pressed further, then turn until it latches into socket.

4. Replace lens.
Do not over tighten.

CAUTION! Excessive pressure on lamp will cause bulb to break which may cause injury. Use caution when removing and installing lamp.



CAUTION! Replace lamp with part specified in the parts list. Use of wrong lamp may damage the lamp, system, or both.

Cleaning

Cleaning of the *System Controller*, *Contestant Modules*, and *Pushbuttons* should be limited to lightly scrubbing with a damp cloth. Be careful not to get moisture underneath the *Pushbutton's* protective cover. Following cleaning, the handles should be dried with a clean cloth. **Never immerse any component of the *Tournament Master* in water.**

Repair

With the exception of the light bulbs in the *Contestant Modules*, there are no user serviceable parts in this system. Do **NOT** open the *System Controller* or the *Contestant Module* enclosures for any reason. If a problem arises, call *Novel Electronic Designs* at the phone number listed at our website (the website address is listed at bottom of this page). When you call, you will be given an address for our repair facility and an estimate of cost (if the unit is out of warranty), and an estimate of the time required to make the repairs.

All shipments should be securely packaged and insured. Please enclose a letter with the defective merchandise that includes a brief description of the problem, the name and phone number of the person requesting service, and the address where the repaired unit should be sent.

Warranty

The *Tournament Master* is warranted from defects caused by workmanship for three full years following the date of purchase. A complete description of your warranty is listed at our website. This warranty does **not** include the following:

- mishandling or abuse by user
- using the wrong type of light bulbs
- cosmetic damage
- operating the system with a power pack with a voltage exceeding the operating voltage specified on controller's rear panel
- damage to components caused by using cables not supplied by *NED*
- damage to contestant modules caused by connecting them to anything other than the *NED* system controller
- damage to system controller caused by connecting it to anything other than model *NED* contestant modules or team modules
- equipment serviced by anyone not authorized by *NED*

Determination of warranty violations are at the sole discretion of the repair department at *NED*. ***All warranty work must be performed by Novel Electronic Designs.***

Replacement Parts

Please visit the *NED* website for price and ordering information.