

# Economy Discover System

Please read through **ALL** instructions prior to set-up.

Congratulations on the purchase of your Economy Discover System! This unit has been built utilizing state-of-the-art surface mount microprocessor circuitry and will provide years of trouble-free service. If, for any reason, a problem should develop, we suggest that you contact us immediately. If the problem cannot be solved in the field, instructions will be provided for returning the unit to ZeeCraft for proper servicing. When setting up, make sure there is an electrical outlet nearby.

The operation of this equipment is quite simple. We offer the following comments to assure optimal use. First, connect all buzzers to the connections located on the back of the master unit. To continue, the plugs are easily inserted by depressing the tab on the plug and inserting. For removal, simply depress the tab and pull out. It should also be noted that extreme care should be exercised so that **no foreign objects are inserted** in the connections, which could result in damage to the unit. The cords provided are 14' to allow for proper seating and spacing. If you have purchased a unit with more than 10 or more buzzers, extension cords are supplied.

After connecting all buzzer boxes, insert the power pack adaptor into the unit and then plug the power cord into any standard wall socket or surge protector. At this point, the equipment will automatically proceed through a programmed test format. At the completion of the test, a tone will sound, indicating that you are now ready to use the equipment.

First, press the reset switch on top (R button on the left side). The system is now ready for the moderator to ask questions. When a contestant responds, all lights and switches, except the one responding, are electronically cancelled until they are reset by the moderator. It is suggested to ask the question, let a player / players respond in, reset the unit immediately and then let the answer be given each time.

A few practice rounds will help you master the features described herein. If you have a model that can accommodate more buzzer boxes than there are contestants, simply disconnect the extra buzzers and proceed as usual.

**EXPLANATION OF THE CONTROL SWITCHES:** To be set prior to play.

Switch 1: Volume control. Switch 1 **DOWN** position, volume is low; switch 1 in the **UP** position, volume is high.

Switch 2: Switch 2 in the **DOWN** position, allows the clock to run continuously until the set time has expired. During this period, the moderator can clear the system (by pressing "R") and continuing to present questions without interfering with the operation of the clock. The countdown can be discontinued at any time by pressing "0". Further, if the clock should run out before a contestant

responds, it will automatically lock out all buzzer boxes, thus preventing Switch 2 (Cont'd): anyone from responding after the allotted time has expired. Simply reset for the next round as previously described. Switch 2 in the **UP** position allows for the time to be frozen during play. In this mode, when a player buzzing in the clock will stop. By pressing reset, the time will continue.

Switch 3: Number of teams playing. Switch 3 in the **DOWN** position will allow up to 4 teams to play at once, provided you own a 16 player master control system. Switch 3 in the **UP** position will allow for 2 teams to play. The number of teams playing will be distinguished by different sound tones, unique to each team.

Switch 4: Identify 1<sup>st</sup> and 2<sup>nd</sup> place players. This switch is not applicable on the Discover systems.

Switch 5: Setting and resetting the 3 timing buttons. Switch 5 **MUST** be in the **DOWN** position for the system to operate as a lock-out system. To set the time, unplug the system, move switch 5 in the **UP** position and then plug the system back into an electrical outlet. The switch must be set **BEFORE** power is applied.

Switch 6: Used in a Multi-unit setup, this switch is used to select whether this unit is a Host or Remote unit. Switch 6 in the **UP** position will allow for the unit to be used as a Stand Alone unit or as a Host to control the action in a multi-unit setup. Switch 6 in the **DOWN** position will allow the unit to be used as a Remote unit in a multi-unit setup.

Switch 7: Used in a Multi-unit setup, this switch is used to identify the Remote system. If only one Remote is being used, this switch can be in either position. If two Remotes are being used, one Remote should have Switch 7 in the **UP** position and the other Remote must have Switch 7 in the **DOWN** position. If two Remotes are connected with both of their Switch 7 switches in the same position, the system will not operate properly.

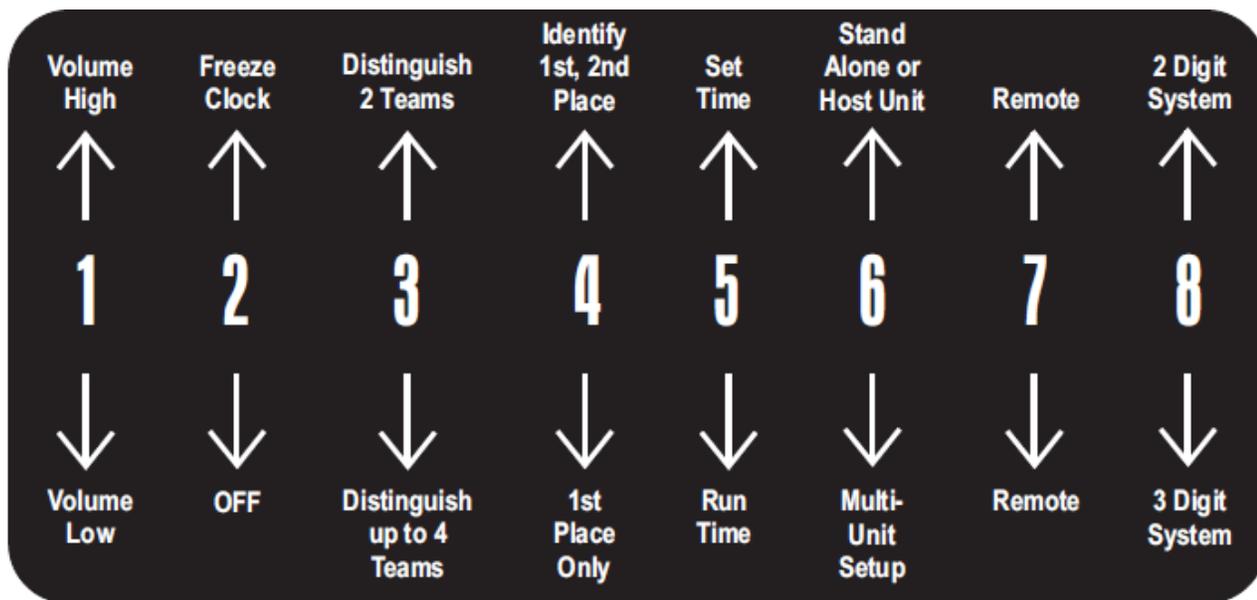
When a multi-unit setup is being used, up to 48 players can participate at once. Systems set as Remote systems will be controlled by the Host system to which they are connected. None of the buttons on the top of the Remote systems will operate. The only switches on the Remote systems that must be set are Switch 1, 6, and 7.

In a multi-unit setup, communication is accomplished over a two-wire serial link between the Host and the Remote systems. Two audio jacks are located on the back of each unit. The system can be wired up in a daisy-chain fashion with the Host connected to Remote 1 and then Remote 1 connected to Remote 2. The system can also be wired up with the Host as a hub, with one cable connecting the Host to Remote 1 and another cable connecting the Host to Remote 2. This will allow the Remotes to be placed in a convenient location relative to the Players. Also during normal operation, when a Player responds, the unit they are attached too will sound its buzzer. Therefore the Remote units should be placed near the Players they are attached too. This will allow an audio indication of which team responded.

\*In order to allow proper communication between the units, the serial cables should be connected between all the units first. Then the remotes units should be given power. When the Remote system is

plugged in, the buzzer will beep for 1 second to indicate the unit itself is operating correctly. After the Remote systems are given power the Host unit can be plugged in. Switch 7 (Cont'd.) When the Host is plugged in it will sound its buzzer for 1 second. It will then look for attached Remotes systems. If Remote systems are found the Host will sound the buzzer once to indicate Remote 1 is attached or twice to indicate Remote 2 is attached. If two Remote systems are attached, there will be one beep and then two. If the Host doesn't beep to indicate a Remote is attached, then communication has not been established and the system will not operate properly. Check all connections and disconnect power from the Host and then reconnect it to Reset the system.

Switch 8: Identify whether the timer is being used in minutes or seconds mode. Switch 8 in the **UP** position, the timer will count down in seconds from a maximum of 99 seconds. Switch 8 in the **DOWN** position, the timer will display and count down minutes and seconds from a maximum of 9 minutes 59 seconds.



**All switches need to be either in the UP or DOWN position for the system to work properly.**

## TIPS FOR HANDLING AND PREVENTING SIMPLE PROBLEMS

1. Under normal circumstances your Team Responder will operate by just plugging into any standard wall outlet. Because this equipment utilizes state-of-the-art microprocessor circuits, it is recommended, if possible, to use a **surge protector** between the plug and the wall outlet. By doing so you will minimize the possibility of a circuit failure that can result from **voltage spikes**, which sometime occur in the power supply.
2. When storing your equipment, **never wrap the cord of the responder box around the box itself**. This practice will eventually cause the wire to break where it enters the box, thus causing it to malfunction. We recommend coiling the wire and securing it with a restrainer such as a “tie-um”.
3. The bulbs used in this unit are referred to as a #1866 bayonet type bulb, which is normally rated for over 3000 hours of use. If you do have a failure and you no longer have spares or replacement bulbs on hand, they can be secured locally at an electronic store such as Radio Shack. If they are unobtainable locally, they can be ordered directly from ZEECRAFT.

In addition to the #1866 bulb, it is also acceptable to use either a #47, #1847, #1891, or #1815 which are also bayonet type bulbs. The latter two bulbs will not provide quite the same illumination, but it's possible that they will operate longer.

4. If a buzzer or light or both fail to operate on a buzzer, chances are good that the problem is with the connector on the end of the cord. They sometimes need to be re-crimped and this can be done locally by securing an inexpensive crimping tool from a store such as Radio Shack. If a crimper tool is unobtainable locally, one can be ordered directly from ZEECRAFT.

If you prefer, you can notify ZEECRAFT telling us the type of buzzer and the lens cover on the light so that we can send you a replacement while you arrange to return the defective unit to us.

5. Care should be taken to insure that the wire pins in the connectors located on the master control unit are not bent nor should they be touching each other. It is a good practice to visually check the connectors each time before setting the unit up for operation. They can be easily adjusted to correct the above situation by carefully straightening with a small tool while the unit is NOT powered up.
6. The #5 switch **MUST** be in the **DOWN** position for the system to operate properly.
7. If using SuperBrite buzzers, test all buzzers before match. This will charge the strobes
8. **IF YOU CONTINUE TO EXPERIENCE PROBLEMS, DO NOT HESITATE TO CALL: 1-800-662-7475.**