

CONTROLMASTER

OWNER'S MANUAL

DOVE SYSTEMS
3563 Sueldo Street, Suite E
San Luis Obispo, California, 93401
CMMANUAL Ver. 3.1 7-21-92

RECEIVING YOUR EQUIPMENT

As soon as you have received your equipment, open the boxes and examine the contents. If any damage is noted, contact the carrier immediately to file a claim for damages. You can be sure that when the equipment left the factory it was in good condition and properly packed.

If you find the equipment to be in accordance with your order and the packing slip, and also in good physical condition you may read on to the section covering SET-UP AND CONNECTION. If for some reason the equipment in the carton does not agree with your order or the packing slip, contact the factory immediately and we will be happy to help you.

SET-UP AND CONNECTION

Remove all packing material from the carton and set the controller on a smooth flat surface. Proper connection of electronic lighting control equipment is very important. The Controlmaster has been designed to make it as simple as possible. The Controlmaster controllers must be connected to the dimmer pack through a control cable. The cable uses standard DB15 connectors and can be any length.

CM-SS

This is a one-scene, six-channel controller with a master. Each channel has a calibrated linear slide control. The master fader controls all the channels and must be up to allow any channel to go to full. The bump buttons located between the faders will flash each channel to full output regardless of the setting of the crossfader or the master. The red blackout switch will black out all channels when activated (down) and will override all other controls.

The CM-SS is factory set for 0-10 volts output and requires power from the dimmer. The control connector is wired so that the pin number is the channel number. Pin 15 is common, pin 13 requires +12 to +30 volts for power, and pins 7 through 12 are not used.

The CM-SS is not diode protected so that it cannot be used in parallel with another controller. Diode protection and an AC power supply can be added as options. Consult the factory for these modifications.

CM-TS

This controller has a pair of calibrated linear slide controls for each channel. These slide controls make up the two scenes X and Y. When the X-Y crossfader is moved up to the X position, the X scene is active and the scene X controls affect the lights. When the X-Y crossfader is down, or in the Y position, the Y scene controls affect the lights.

The Master control affects all channels in either scene. It is a true proportional grand master and must be up to allow any channel full output. The bump buttons located

between the faders will flash each channel to full output regardless of the setting of the crossfader or the master. The red blackout switch will black out all channels when activated (down) and will override all other controls.

The CM-TS has a timer to allow a linear timed crossfade up to 2 minutes 40 seconds. When the timer is set to zero (counter-clockwise) the crossfade follows the X-Y crossfader. When a delayed crossfade is set, the crossfade progress will lag behind the X-Y crossfader. If the timer is set fully clock-wise and the X-Y crossfader is pushed quickly from scene X to scene Y, then a straight, smooth linear crossfade will be completed in 2 minutes and 40 seconds. The crossfade can be stopped or reversed at any time by moving the X-Y crossfader. The timed crossfade can be speeded up or slowed down at any time by readjusting the timer control. The master is not affected by the timer in the Y scene but is affected by the timer in the X scene. Therefore, a timed master fade-up or down is possible in the X scene. The green LED light is the power indicator. The LED indicators next to the X-Y crossfader track the crossfade. When the top LED is bright and the bottom LED is off, the X scene is active. During a crossfade, one LED will become dim while the other becomes bright. The master control will fade both LED's just as it does the channels.

The CM-TS has a footswitch option which plugs into the accessory jack in the back and allows remote crossfades and remote blackouts. The crossfader must be in Scene X (up) in order for the footswitch to work. The left switch is the crossfade and the right is the blackout. The crossfade timer is fully functional with this accessory.

The CM-TS controllers can be slaved together in a daisy-chain to control 12 or more channels. Two or more controllers are connected together at the accessory jacks. The first controller becomes the master with its master and X-Y crossfader controlling all the slaves in the chain. The slave units' masters and X-Y crossfaders are inactive but the timers are all independently functional. Call the factory for more information on master/slave arrangement.

The control connector is wired so that the pin number is the channel number. Pin 15 is common, pin 13 is +15 and pin 14 is -15 volts. The controller requires + and - 15 volts from the dimmer or an optional AC power supply. The output voltage is adjustable from 5 to 12 volts. The low end is not adjustable. Output voltage is factory set to 0 to +10 volts.

ELECTRICAL SAFETY

1. KNOW YOUR EQUIPMENT

Read the owners manual carefully. Learn its applications and limitations as well as the specific potential hazards associated with the product.

2. PROPER GROUNDING

The equipment is equipped with grounding means to help insure safety in the event of an insulation failure in the product or with other equipment in the chain. DO NOT ignore this connection or attempt to defeat it.

3. KEEP COVERS IN PLACE

Do not operate electrical equipment with the protective covers removed. De-energize feed lines before removing any covers or otherwise exposing high voltage.

4. KEEP OPERATING AREA CLEAN

Don't let objects or materials accumulate near the vents on dimmers. Also, dust build-up on cooling components can reduce the performance of the unit.

5. AVOID DANGEROUS ENVIRONMENT

Do not use electrical equipment in damp or wet locations, or expose it to rain.

6. DO NOT FORCE THE EQUIPMENT

Use it within the specified ratings. Don't overload channels or use frayed, worn cables or damaged instruments.

7. MAINTAIN EQUIPMENT

Preventive maintenance will help your dimmers operate longer and more safely. Follow instructions for cleaning and checking for failures.

8. DISCONNECT EQUIPMENT

Do not work on the dimmers while energized. Make connections to de-energize channels (no hot patching). Don't leave the dimmers energized overnight or during other unattended times.

9. USE RECOMMENDED ACCESSORIES

Consult the owner's manual and the manufacturer's literature for recommended accessories. Follow the instructions that accompany them. The use of improper or home-built accessories may cause hazards.

10. CHECK DAMAGED PARTS

Before further use of the dimmer, parts that are damaged or that have malfunctioned

should be carefully checked or replaced to insure that it will operate properly and perform its intended function.

TROUBLESHOOTING

The Controlmaster is designed to resist the hard treatment of touring use. It can even withstand overvoltages and short circuits. Often what appears to be a problem with the dimmer is something else. A review of the following may save you a long distance phone call, or the cost of shipping and/or repair. Even if something is still wrong, this process will help you explain the malfunction to a service technician.

There are some basic checks that you can do to help isolate a problem. The two forms of malfunction common to solid state dimmers are: FAILED OFF, in which the lights do not come on, and FAILED ON, in which the lights cannot be turned off. If your system has FAILED OFF, check that a lamp load is connected and that the lamp is not burned out. Verify that the primary power is live and that the dimmer is on (all LED's are glowing). If either green LED is off, check fuses on the main circuit board.

If the dimmer is operating, check the channel fuses. Make sure the loads are plugged in and that all extension cords are continuous, and that they go to the loads you think they do.

Check load circuits by plugging them into regular wall outlets. If the dimmer is getting power and the loads check out, you may not be getting proper control operation. Check that the control cable is intact, and plugged in at both ends. The POWER ON light in the control console should light up.

FAILED ON dimmers will stay on regardless of the control setting. Unplug the control console from the Controlmaster. If the failure goes away, the cable or console is at fault. If the channel remains on, the Triac circuit has failed and must be repaired. Contact your dealer or the factory for this repair.

IN CASE OF TROUBLE

In the event of malfunction, recheck all connections and make sure that the unit is getting power, and that the cables are continuous and connected properly. Check to see that the black-out switch is off (up) and that the master is up.

If you still cannot get proper operation, you may take your unit back to your dealer. You may elect to send your unit to the factory, freight prepaid, with a note describing the specific complaint. **VERY IMPORTANT: PLEASE ENCLOSE A NOTE DESCRIBING THE PROBLEM--EVEN IF YOU HAVE CONTACTED THE FACTORY BY PHONE.**

Send to:
Service Dept
Dove Systems
3563 Sueldo Street, Suite E
San Luis Obispo, California, 93401

Those who wish to do their own repairs may buy a service manual and repair parts. Unauthorized repair on our products shall void the warranty and the buyer may be charged for subsequent factory repair, even if the product is defective. Call the factory Service Department for any information about our service policy, ordering parts, or for help repairing a unit. Phone: (805) 541-8292.

LIMITED WARRANTY

The manufacturer agrees that its products shall be free from defects in material or workmanship over a period of one year from date of shipment from the factory. Said warranty will not apply if equipment is used under conditions of service for which it is not specifically intended. The manufacturer is not responsible for damage to its apparatus through improper installation, physical damage, or poor operating practice.

If any device is found unsatisfactory under the warranty, the buyer should notify the manufacturer, and after receipt of shipping advice, buyer may return it directly to Dove Systems, San Luis Obispo, CA, shipping prepaid. Such equipment will be replaced or put in proper operating condition, free of all charges except transportation. The correction of any defects by repair or replacement by the manufacturer shall constitute fulfillment of all obligations to the purchaser. Manufacturer does not assume responsibility for unauthorized repairs to its apparatus, even though defective.

Manufacturer shall not be liable for any consequential damage in case of any failure to meet the conditions of any warranty of shipping schedule, nor will claims for labor, loss of profits, repairs, or other expenses incidental to replacement be allowed.

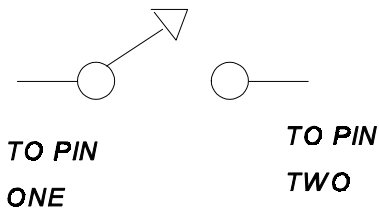
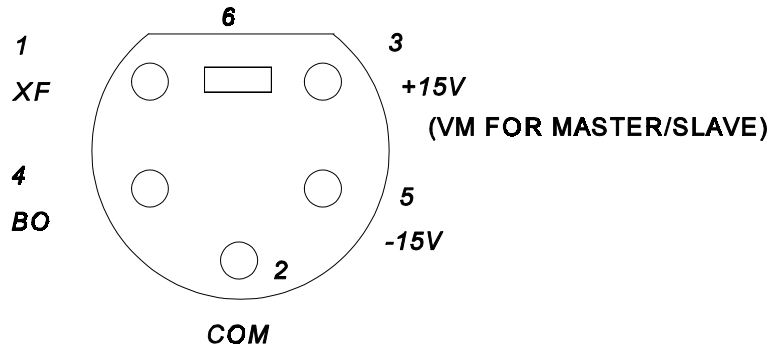
No other representation, guarantees or warranties, expressed or implied, are made by the manufacturer in connections with the manufacture and sale of its equipment. This warranty is non-transferable and applies to the original buyer only.

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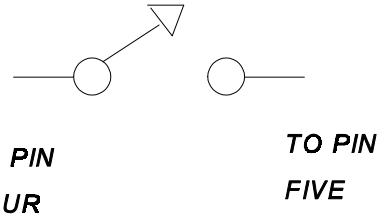
SCENEMASTER AND CONTROLMASTER

DIN CONNECTOR

END VIEW



CAUSES CROSSFADE



CAUSES BLACKOUT

DOVE SYSTEMS

**SCENEMASTER & CONTROLMASTER
REAR PANEL DIN CONNECTOR
REVISED 13 SEP 1994**