ETA SYSTEMS

IMAGENATION SERIES
MODEL MC12F
FOOTSWITCH LIGHTING CONTROLLER

OWNERS MANUAL

ETA SYSTEMS
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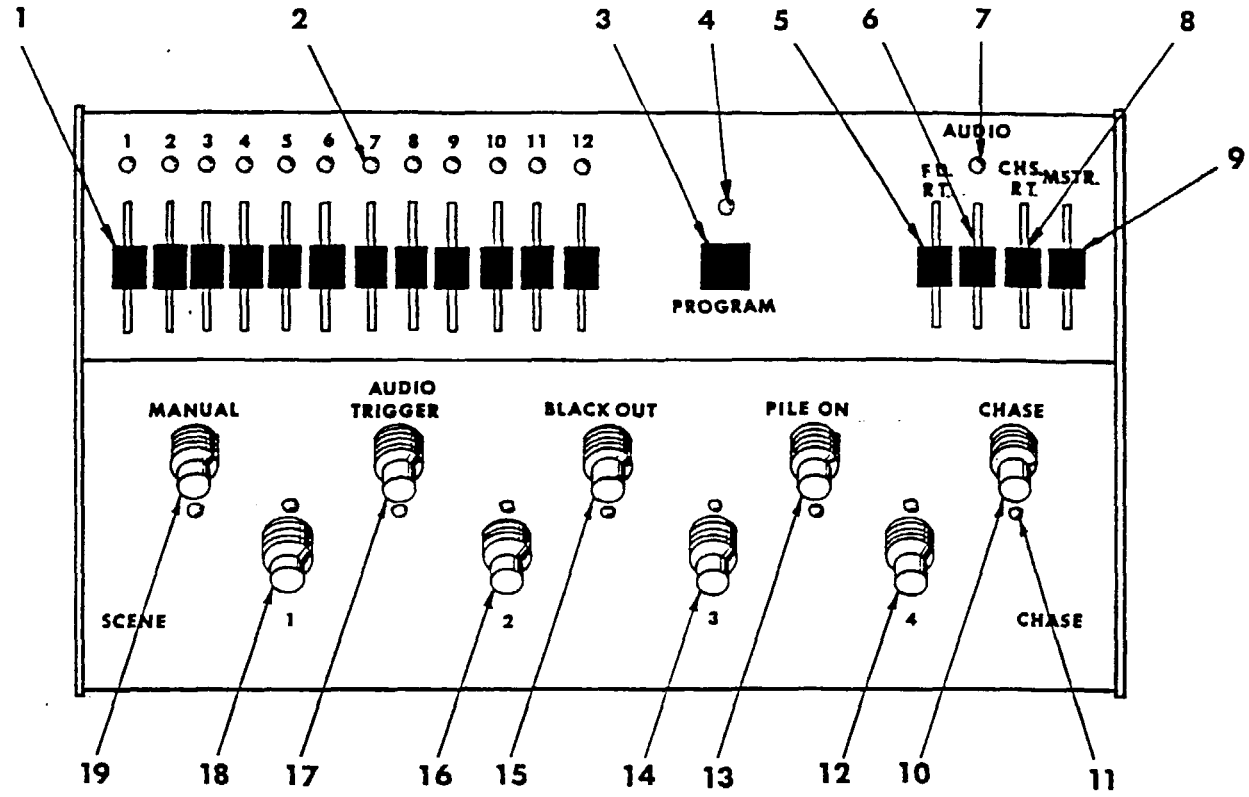
ETA MC12F MICROPROCESSOR LIGHTING CONTROLLER FOOTSWITCH



Key to Illustration

1. Channel Control Slider
2. L.E.D. Channel Output Status Indicator
3. Program Button
4. Program Status L.E.D.
5. Fade Rate Slider
6. Audio Sensitivity Slider (Chase Trigger)
7. Audio Sensitivity L.E.D. Indicator
8. Internal Chase Speed Adjust Slider
9. Master Level Control Slider
10. Chase Function Footswitch
11. L.E.D. Indicator (on all Footswitches)
12. Program #4 Footswitch Chase/Scene
13. Pile on Footswitch
14. Program #3 Footswitch Chase/Scene
15. Blackout Footswitch
16. Program #2 Footswitch Chase/Scene
17. Audio Trigger (Chase) Footswitch
18. Program #1 Footswitch Chase/Scene
19. Manual Mode Footswitch

ETA LIGHTING SYSTEMS

MICROPROCESSOR LIGHTING CONTROLLER
MODEL MC12 F

Welcome to the ever growing family of professionals who have discovered that ETA Professional Lighting Products are engineered specifically to meet the high standards expected of quality equipment.

We care about your performance; and when you look your best, so do we. With proper care and operation of your system, you and your audiences will enjoy years of spectacular, professional lighting effects.

CAUTION

Please read and follow these instructions carefully to assure the safe use of your new ETA MC Series Lighting Controller. Our engineers have created a durable and safe system. However, as with all sophisticated electronic systems, this equipment is also powerful and, when misused, potentially very dangerous.

Around electricity, a little knowledge is a very dangerous thing. The more electrical experts know about electrical power, the more they respect it. Therefore, if you install or use this ETA system, you must bear the responsibility of taking proper safety precautions. We have made every effort to provide you with complete and accurate instructions for the safe operation of your ETA system, but we cannot accept any responsibility for injury due to negligence or faulty interpretation of our instructions.

If you are uncertain about any electrical connections or usage, please seek qualified technical assistance from a local licensed electrician who is familiar with local codes, or contact your ETA Dealer.

ONE YEAR LIMITED WARRANTY

ETA warrants each new product to be free from defects in material or workmanship for a period of one year from the date of purchase, except triacs, which shall be warranted for the first sixty days after purchase. ETA will, within the warranty period, repair or replace, at its discretion, any ETA product, which in the judgement of ETA has proven to be defective.

This warranty is voided if any portion of an ETA system or product has been altered, tampered with, or has been repaired by anyone other than ETA or one of its authorized service representatives. This warranty does not cover any incidental or accessory items used in conjunction with any ETA products.

This warranty does not apply to any ETA product or system damaged by improper installation, improper operating practices, improper line voltage, misuse, abuse, accident, fire, lightning, flood or acts of God.

ETA shall not be liable for any damage or loss of equipment due to shipping.

It is the responsibility of the owner to retain the original sales receipt or sales invoice showing the date of purchase, dealer's name, purchaser's name, serial number, and model number in order to verify warranty status.

All transportation is the responsibility of the owner.

This warranty is non-transferable and applies to the original purchaser only.

This warranty is in lieu of any and all other warranties expressed or implied, including any implied warranty of merchantability. No person is authorized to assume for ETA any other liability in connection with the sale of the product.

CAUTION

RISK OF ELECTRIC SHOCK

DO NOT OPEN UNIT

Never Attempt To Disassemble the Controller.

Disassembly of the chassis and/or tampering with the inside of the Controller can be dangerous to you and may cause serious damage to the unit. There are NO USER SERVICEABLE PARTS INSIDE.

Protect the Controller. Do not set drinks, ashtrays or any spillable items on the console. Keeping the Controller clean and free from debris will assure trouble free operation. Protect the controller from violent shocks or sudden impacts. Use of a protective road case is recommended when the unit is not in use.

INTRODUCTION

The IMAGENATION MC12F is a 12 Channel Microprocessor Footswitch Lighting Controller with a computerized memory which assures easy programming and use. The MC12F features four programmable scenes or four 20-step chase sequences which can be triggered by a speed adjustable internal timer, or external audio source.

MC12F POWER OPTIONS

The MC12F Microprocessor Footswitch is usually powered by 12VDC which it receives from the dimmer pack power source; or an optional 12VDC wallmount power supply, if the controller is required to be self-powered. ETA's Ultraplex series (MD410 or MD824U) are the compatible dimmers which feature a digitally encoded control signal that will address the 12 channels of control through an industry-standard 3 pin microphone cable. Additional dimmers can be added to the system to increase power or total wattage capacity; but the controller remains limited to the 12 channels of control.

An audio input jack (¼" mono) is provided as a means of syncing your programmed chase sequences to the beat of the music. The audio signal can be either low level monitor output or line level speaker output.

PROGRAMMING INSTRUCTIONS FOR MC12F

When you have completed your lighting designs, which by definition, are beyond the scope of this manual, you are ready to program the controller. Programming is easy. A chart is provided in the back of this manual to plan and record your programs.

SCENE PROGRAMMING

To program each scene, power up controller, remove from blackout and push Program Button (3). Program L.E.D. (4) will flash indicating that the controller is ready to program. The Master Controller Slider (9) is not recorded in the program, but must be raised above zero (or bottom position) if you want to preview your scenes. Set the Channel Sliders for "Scene One" according to your chart. Push Scene One Footswitch (18). Scene one L.E.D. will light indicating that scene one is recorded, and the Program L.E.D. will go off. To program remaining scenes, repeat the above procedure using programming chart until all scenes are programmed. Scenes may be modified by pushing Program Button (3) and repeating recording sequence.

NOTE: The position of the Channel Slider is relative to the output of the dimmer. This may vary with dimmer used, and type of fixture used. However, in most cases, the light output (not voltage) will be linear. At the Slider's bottom position, there is a zero light output; at the top position, light output is 100%; and at the center position, light output will approximate 50%. Use these percentage settings on your charts.

CHASE PROGRAMMING

Chase programming is similar to scene programming. Each of the four chase sequences will accept up to 20 steps. Each step in the chase is recorded the same way a scene is recorded. In other

words, each sequence is a scene chase with a maximum of 20 scenes. To avoid confusion and mistakes, use the Scene or Chase Programming Chart provided at the back of this manual to design and record your chases. Record each channel as a percentage.

When your charts are complete, you are ready to program each chase sequence. Push Program Button (3); L.E.D. (4) will flash. Push Chase Footswitch (10) and the corresponding L.E.D. will flash. Now you are ready to program each step in your chase sequence by using the following steps:

One, set Channel Slider/s (1) to the particular step (Step one in this case) according to your chart.

Two, depress Sequence (scene) One Footswitch (18) and corresponding L.E.D. will stay on momentarily indicating that the step is recorded in memory. Then it will flash indicating that it is ready for the next step in the chase sequence.

Third, repeat the above procedure (one and two) for each step until the particular chase sequence being recorded is completed.

Four, move on to the next chase sequence using Sequence (scene) Two Footswitch and so on, until you have completed all four 20-step chase sequences.

IMPORTANT NOTE: When you use all 20 steps in each chase sequence, the controller will not accept any more commands. However, it is not necessary to use all 20 steps in any chase sequence. Simply, when you are finished with a given chase sequence, just move on to the next procedure, (four) noted above.

When you have completed chase programming, push Program Button (3) and L.E.D. will go off.

NOTE: Exercise care in programming chase sequence because it is not possible to edit the chase program. If a mistake is made, the entire chase sequence must be reprogrammed.

MASTER LEVEL CONTROL SLIDER (9)

The Master Control overrides all other level controls on the controller. It is a common mistake to have this control set at zero and try to run the controller. There are not outputs with the Master Slider set at zero.

BLACKOUT FOOTSWITCH (15)

When pushed, the Blackout Footswitch will take any function (scene, chase, or manual mode) to blackout instantaneously. Push the Blackout Switch again, and the board will return to the function that was in progress before the black out.

When in blackout, the pushing of any other function switch will cause the controller to fade to that function at a rate determined by the Fade Rate Slider (5).

NOTE: The controller will always to to "Blackout" when powered up.

OPERATING INSTRUCTIONS FOR ETA MODEL MC12F CONTROLLER

Now that you have programmed the four scenes and the four chase sequences, you are ready to discover the real power of your Model MC12F controller.

SCENE OPERATION

To activate a programmed scene, slide Master Control (9) to up position and set Fade Rate Slider (5) to desired position. Check to be sure that all other switches are off. Then, simply tap the desired scene Memory Switch (12, 14, 16, or 18), and the scene will fade to on, at the rate determined by the Fade Rate Slider (5). Push another scene, and the controller will automatically crossfade to the new scene; again, at the fade rate determined by Slider (5). To crossfade a manual scene, set Channel Sliders (1) to the desired settings. Then, push Manual Footswitch (19). The controller will crossfade to the manual scene at the fade rate determined by Slider (5). To return, push the desired programmed scene and the controller will automatically crossfade back at the fade rate determined by Slider (5).

SCENE PILE ON OPERATION

The pile on function allows you to create additional scenes by combining one scene with another. To pile on two programmed scenes, move Master Control Slider (9) to up position. Push desired programmed scene and it will fade to on. Push Pile On Footswitch (13), and the corresponding L.E.D. will light up. Then push the programmed scene you with to add, and it will fade to on in addition to the scene originally pushed. All four scenes--or any combination--may be added to each other in this way.

To return to single scene operation, push Pile On Switch (13) to off, and the controller will automatically fade to the last scene added.

CHASE OPERATION

To select a programmed chase sequence, push Chase Button (10); then, push the desired sequence (14). The controller will fade to the chase sequence selected at a rate determined by the Fade Rate Slider (5). Be sure that the Master Control Slider (9) is in up position. The Chase Rate Slider (8) position controls the chase speed.

The chase will also trigger to the beat of the music. To do this, connect the audio input jack; then push Audio Footswitch (17), the Chase Button (10), and the desired Chase Sequence. Adjust the Audio Sensitivity Slider (7) until the Sensitivity L.E.D. (6) triggers to the beat of the music. To stop chase, push Chase Footswitch (10) and the L.E.D. will go off.

NOTE: Chase will continue to run until another scene or the Black out Button (15) is pushed. For example, since the controller is in memory mode, when you push programmed Scene 3, the controller will then crossfade to Scene 3 from the chase at a rate determined by the Fade Rate Slider (5).

MANUAL MODE OPERATION

To operate the MC12F as a manual controller, push Manual Mode Switch (16) to on. Push Master Control Slider (9) to up position; and check to be sure that all other functions are off. The controller is now "live." Moving any channel slider will cause a light to respond on stage.

MC12F

TROUBLE SHOOTING

If your MC12F Footcontroller will not operate, please check the following:

1. Is the controller receiving power from the dimmer or wallmount power supply? Do the L.E.D.'s light?

2. Are your dimmers live? (see dimmer operators manual)

3. Is the Blackout switch in operation?

4. Is the Master control slider raised above zero?

5. Is the scene or chase sequence programmed?

6. Is the Fade rate slider set properly?

7. Are the microphone cables in good condition and connected properly?

8. Is the controller in program lock? (In this case the program button will not flash.)

   To remove controller from program lock, push Program button, then Blackout button within seconds of each other, and finally push the Program button again. The program L.E.D. should now flash ready for programming. Use the same sequence to put the controller back in program lock to preserve your programmed chases and scenes.

9. TO CLEAR ALL PROGRAMMED INFORMATION FROM MEMORY, power up the unit while the program button is depressed. The channel L.E.D.'s will all light up, then fade out. Unpower the unit, then repower, and the microprocessor will be cleared of all memory.

ETA Lighting Systems
A Creative Light And Sound Company

SCENE OR CHASE PROGRAMMING CHART

SCENE or STEP No.	CHANNEL											
	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
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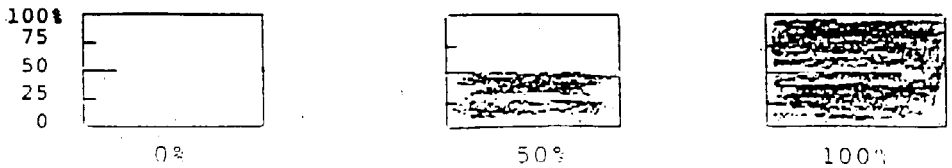
EXAMPLE: Shade the above Scene or Step blocks for each channel according to the percentage of light intensity desired from 0% to 100%