

85020-3 Sync Option Module for Series II,III, AM-7, AM-8 Automations

GENERAL: The 115020-3 SYNC OPTION is an OPTIONAL Interlok system, to allow running one print in several auditoriums at the same time. It may be used with the Kelmar Deluxe Automation or the Christie AM-7,8 Automation. For SYNC operation, each Automation must have the #85020-3 Sync Option. 2 Automations may be interfaced so that the print can be run in 2 auditoriums at one time. For more than 2, a SYNC SELECTOR NODULE is available in 4 or 6 Auditorium modules which permits interlocking any 4 combinations of auditoriums as required. See instructions with SYNC SELECTOR NODULE. These instructions are for 2 Automation systems.

SYNC SELECTOR MODULE PART NUMBERS ARE AS FOLLOWS:

85028-4	4 Auditorium Sync Selector Module
85028-6	6 Auditorium Sync Selector Nodule

#85020-3 SYNC MODULE: For interlock each Automation requires a #85020-3 SYNC MODULE. The Sync Module is comprised of:

Sync Module Chassis
Sync Control Illuminated Pushbutton *
Sync Control. MAN. CUE SYNC I/L (Re-start) button **

* MOUNTED ON AUTOMATION CONTROL PANEL

** PROVIDED ON CONTROL PANEL OF ALL NEW AUTOMATIONS.

INSTALLATION: The #85020-3 Sync Option is the updated version of the #85020-1 SYNC OPTION. It may be used with the new style Kelmar Deluxe Automation, Christie AM-7,8 or with earlier Kelmar automation units. The #85020-3 may be installed in the Kelmar Deluxe Automation system at the factory if it was ordered with the Automation Systems, or it may be readily added in the field.

Installation In the field requires mounting the components and plugging them in.

Check the Automation System control. panel, right side. On the NEW style there is 1 hole in the panel for the SYNC OPTION. For an OLDER style system, the re-start button will have to be added. The re-start button is a 1 pole NORMALLY OPEN pushbutton. Install the re-start button in the control panel hole provided and connect the Brown and White/Green wires. If there is no hole or wires, mount the button wherever it is convenient and connect to the automation In accordance with Kelmar Drawing No. 1296.

FIELD INSTALLATION of the #85020-3: Mount the Sync Module Chassis to the bottom of the Kelmar cabinet, or to the chassis side bracket of the Christie AM-7,8 (mounting holes provided) with the 2 - #6/32 x 3/8" screws and nuts provided so that the nuts are on the inside of the cabinet, or inside the chassis of the AM-7,8. Remove the relays from their sockets to gain access to the nuts. The #85020-3 Chassis should be Located so that the relays face the front of the Kelmar cabinet or UP on the AM-7,8.

Mount the SYNC CONTROL ILLUMINATED PUSHBUTTON as follows:

Snap out the Black Hole plug on the Control Panel. Insert the plug of the Sync Control Button through the front of the control panel. Locate the button so that the protector hinge is at the top. Press the button firmly into the control panel.

Route the wire **from** the Sync Control Button BEHIND the Kelmar main automation chassis. Plug the Sync Control Button plug into the mating plug on the Sync Module Chassis. For the AM-7,8 route the wire to the SYNC MODULE chassis and coil up the slack.

Remove Jumper Plug P1 **from** the main chassis and plug in the Harness of the Sync Module Chassis. DO NOT DISCARD JUMPER PLUG IT MAY BE REQUIRED FOR SERVICE OR TESTING IN THE FUTURE. LEAVE JUMPER PLUG IN THE AUTOMATION CABINET.

Remove the STRAP on the Kelmar Automation Terminal Strip between terminals 14-15. For Christie AM-7,8 remove STRAP between terminals 45-46.

INTERFACE: Refer to drawing No. 1296 for Interface Information. It is suggested that Belden No. 9444, 4 conductor #20 wire be used. If a SYNC SELECTOR MODULE is to be used, refer to instructions and interface drawing furnished with the SYNC SELECTOR MODULE. These instructions are for 2 automations.

BOTH AUTOMATION SYSTEMS MUST BE ON THE SAME PHASE FOR SYNC OPERATION. If systems are out of PHASE a shutdown will occur as the failsafes are paralleled.

For 2 Automation systems, connect as called for on drawing No. 1296. Please note that the red wire is connected at ONE system ONLY. PHASE TEST AT OPPOSITE AUTOMATION.

EMERGENCY STOP BUTTON: A 1 pole NORMALLY CLOSED Emergency Stop button **may** be added. This button is provided on the SYNC SELECTOR MODULES. Remove the jumper on the SYNC MODULE chassis between terminals 4-5 and connect 1 side of the button to 4, the other side to 5.

PHASE TEST: (FOR 2 SYSTEMS) Requires the use of an A.C. Voltmeter, 30 Volt Scale, both Automations turned ON. Take readings between the RED wire and Kelmar Terminal 13, or the RED wire and AM-7,8 terminal 44. The reading should be 0. If it is 24 Volts, one of the units is out of phase. Relocate the A.C. supply to the automation unit until proper phasing is achieved. Re-Test with the RED wire until reading is 0.

TESTING: After both units are installed and wired and Phase test has been completed, Test the system as follows:

1. Tie up both FAILSAFE **arms** for testing.
2. Lift Button Protector and TURN ON BOTH Sync Units by pressing button IN. WHEN THE BUTTON IS "IN" THE SYNC SYSTEM IS "ON" and the YELLOW light in the button is lit.
3. Press any Automation START Button, both C.O. Dowsers should close and both machines should start.
4. Simulate an OUTBOARD CUE at each Automation. As the CUE is detected, the Automation should go through Show Start Cycle. The BLUE light in the SYNC CONTROL button should come ON, indicating that Sync Module relay K3 is energized and the Failsafe is connected to the parallel bus.
5. After BOTH SYNC lights are ON, press a STOP Button, Both machines should shut down, and go Into an INTERMISSION Cycle.
6. After Both Automation timers have stopped cycling, Re-start by pressing any Automation START Button as In 3. Go around and press each MAN. CUE SYNC I/L (Re-Start) button, the Automation Timer should cycle as the Re-Start button is pressed.
7. After BOTH SYNC lights are ON and Automation Timers have stopped cycling, go around and simulate an OUTBOARD cue at each Automation. The Automation will go through Intermission Cycle, as the C.O. closes, the SYNC light in the SYNC CONTROL will go OFF indicating the Failsafe is no longer Paralleled.
8. Drop the Failsafe, that machine will STOP, the other will continue to run. Repeat at the other automation.
9. Turn OFF Sync Selector buttons by pressing IN and allowing them to come back OUT, OFF position, YELLOW light OFF.

THIS COMPLETES THE SYSTEM TEST

OPERATION: For SYNC INTERLOCK Operation, a Foil CUE must be placed on the LEADER of the Show, OUTBOARD SIDE so that It is detected 7 Seconds (approximately 10.5 feet) AHEAD of the first frame of the Show.

DO NOT USE MYLAR LEADER FOR SYNC OPERATION; DAMAGE TO EQUIPMENT CAN RESULT.

IF IT IS NECESSARY TO STOP THE SYNC I/L SYSTEM AS SOON AS IT HAS STARTED (prior to cue being detected) Use the Emergency Stop Button or TURN OFF THE SYNC I/L SELECTOR SWITCHES. It is suggested that the SYNC I/L system be started from the second machine.

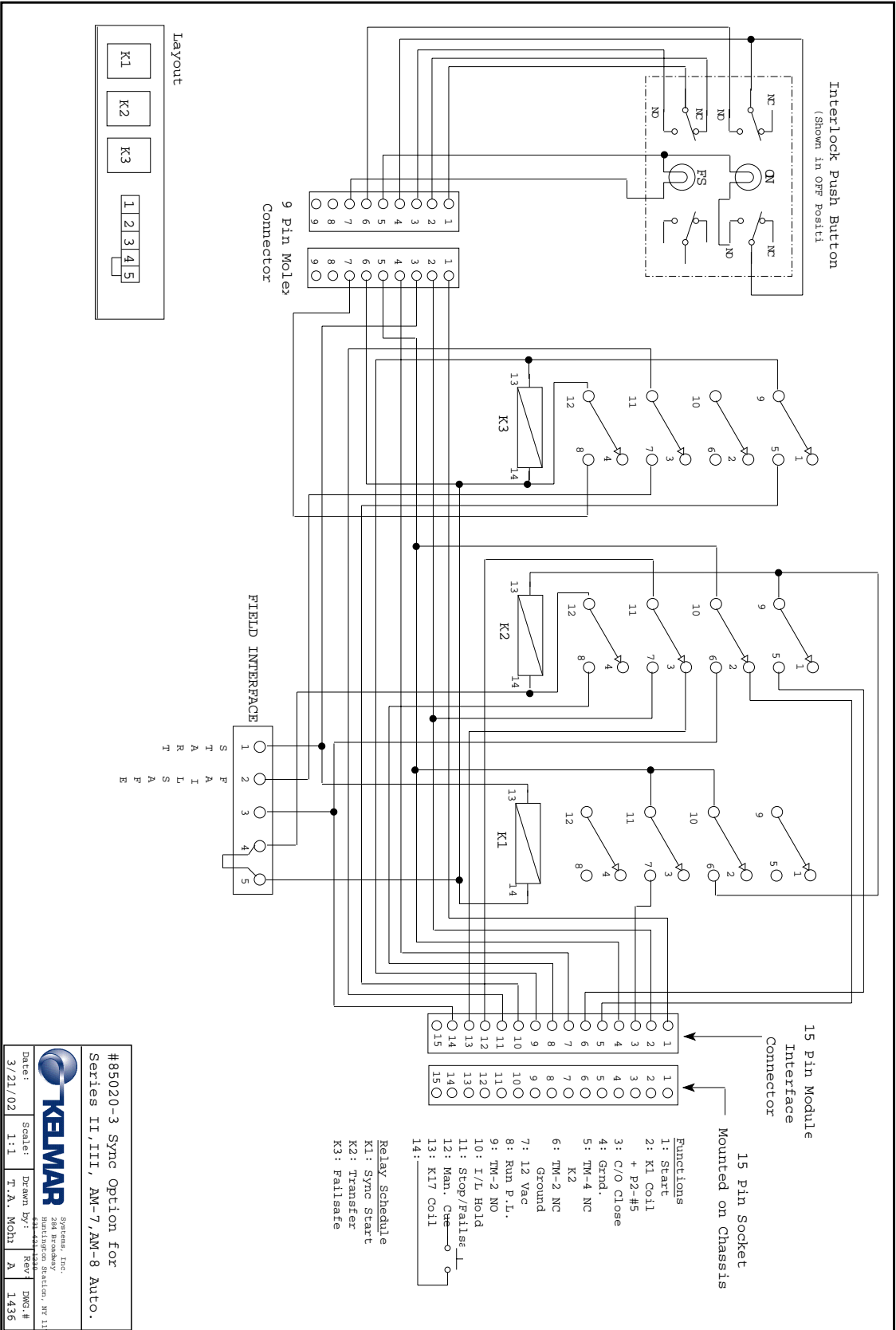
Thread the film through the system. Turn on the SYNC CONTROL pressing buttons IN, "ON" EYELLOW light ONJ. Place the "Show End Mode" switches in the "Normal" position. Press any START button. As the OUTBOARD CUE is detected, that automation will cycle a Show Start, putting the Show on the screen. At the END of the Show the normal OUTBOARD CUE will cycle the Automations into an Intermission cycle. As the C.O. Closes, the SYNC light in the Sync Control Button will go out. As the tail runs through, that machine will shut down while the other keeps running.

FILM BREAK: If there is a film break while running Interlok, the Automations will cycle into an Intermission Mode. Repair the film break and Re-Thread the film through the System. Press ANY START button, after the machines are up to speed, go around and press the MAN. CUE SYNC I/L (Re-start) buttons on each Automation to put the show back on the screen.

To return to normal operation after running Interlock, turn OFF each Sync Module by pressing the SYNC CONTROL Button. Button will come back out, "OFF". (YELLOW light OFFJ.

IN CASE OF DIFFICULTY: Remove Sync plug from Automation Chassis and Install jumper plug. If problem persists, the problem is with the Automation, If the problem goes away, it may be in the Sync Module.

The MAN. CUE SYNC I/L Button is only active with the SYNC ON and after the START Button is pressed, prior to the cue being detected. Once the BLUE light comes ON the MAN. CUE SYNC I/L button is no longer in the circuit.



#85020-3 Sync Option for
 Series II, III, AM-7, AM-8 Auto.

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