# Constellation™ Multi-Chassis Synch Card (CMX-6)

The Multi-Chassis Synch Card (CMX-6) is a component in the Constellation™ power delivery system. When installed in a configuration employing multiple CPCX-12 power transmitters, the CMX-6 allows for synchronization of multiple transmitter chassis; the absence of which, may result in transmission errors. CMX-6 is out of the box compatible with any Constellation transmitter system.

Warning! Installation should be preformed with chassis powered down. "Hot plug" or "live" installation may cause transmitter faults.

1 SPECIFICATIONS

TYPE	PARAMETER	SPECIFICATION	NOTES
Connection	Chassis	Card edge	See Installation
	CMX-6	RJ-45	
Mechanical	Dimensions	13.35 in. 1.51 x 0.57 in. (33.09 x 3.83 x 1.45 cm)	Occupies 2 slots
	Weight	0.12 lbs. (0.05 Kg)	
Approvals	Safety	UL/IEC 62368-1	CMX-6 is a sub-assembly of CPCX-12
Max. number of synchronized chassis allowed		14	

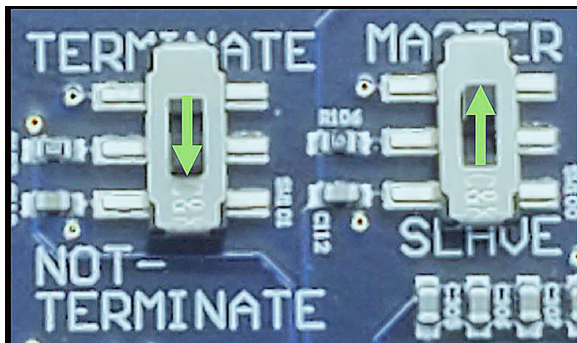## 2 DIMENSIONS
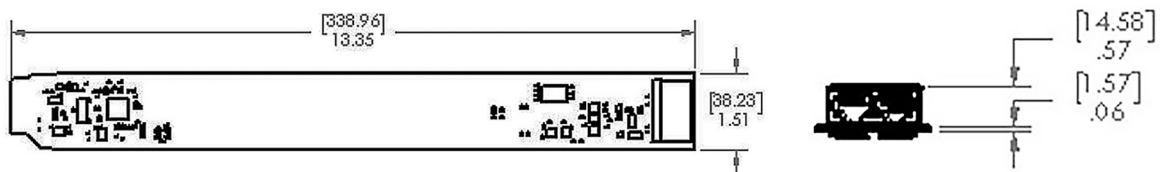
3   PLANNING AND PREPARATION

Decide the number of shelves requiring synchronization. Arrange in such a way that all the CMX-6 cards can be accessed and rearranged or modified if necessary.

Note: A maximum of 14 chassis can be synchronized.

4   PHYSICAL INSTALLATION

Multi-chassis synchronization follows a master/ slave model of communication and control. Determine which chassis shall be designated as the "Master" and set the MCS switch status to MASTER:NOT-TERMINATE,
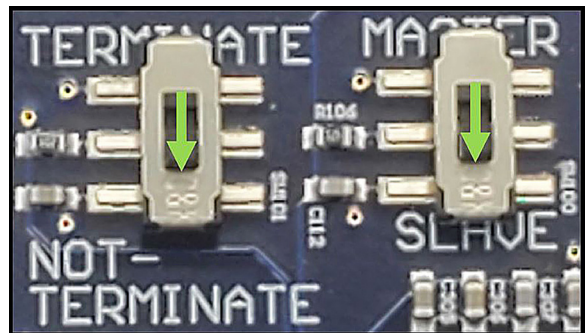

MASTER: NOT-TERMINATE

The Multi-Chassis Sync Card (CMX-6) requires a minimum of 2 card guide slots. Slots 23 and 24 are recommended. If those slots are not available, any two adjacent slots may be used. Insert the CMX-6 into the transmitter shelf, ensuring the card is able to slide easily.

Seat the card by pressing on the available end with the 2-port RJ45 connector attached until the card edge fingers seat firmly into the card edge connector.
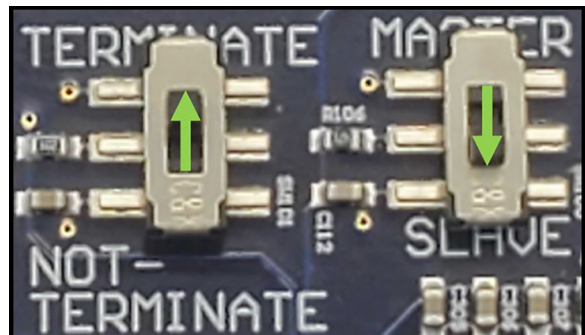
When the chassis is powered, the blue LED will flash for approximately 5 seconds during startup. Once complete, a green LED will turn on indicating the "master" CMX-6. If no green LED is present, the CMX-6 is designated the "slave" status. The blue LED will blink periodically, signaling normal operation.

The remaining MCS cards + chassis combinations up until but not including the last MCS card + chassis combination shall be designated as SLAVE: NOT-TERMINATE status.

Synch Card and LEDs
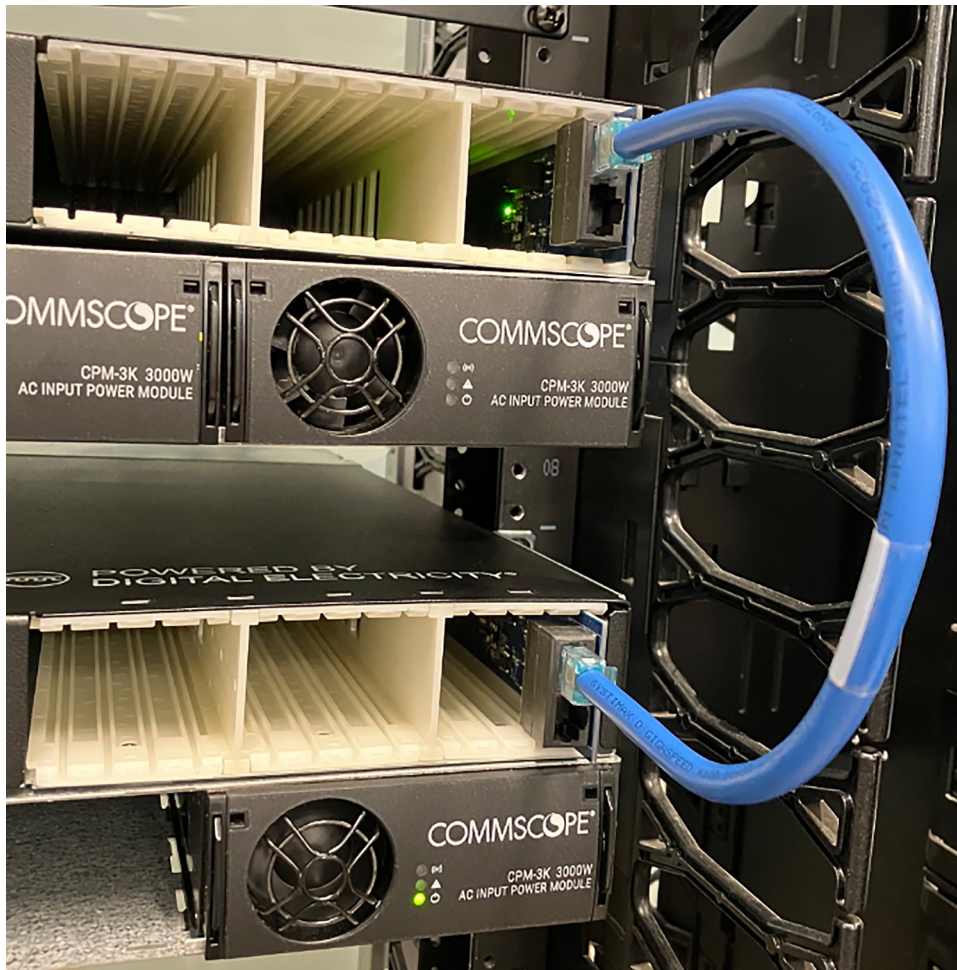

SLAVE: NOT-TERMINATE

SLAVE: TERMINATE

5 WIRING

The transmitters synchronized via the CMX-6 are connected with Ethernet cables through the 2-port RJ45 connector. The 2-port RJ45 connector allows multiple CMX-6 cards to be "daisy-chained" together.

Choose the port that makes the most sense It is best practice to install the "Master" sync card in the upper-most or bottom-most chassis to allow syn-synchronization to go in "one direction". Installing in the middle of the chain may result in errors

Note: The CMX-6 does not require a ground.

Daisy-Chained Cards