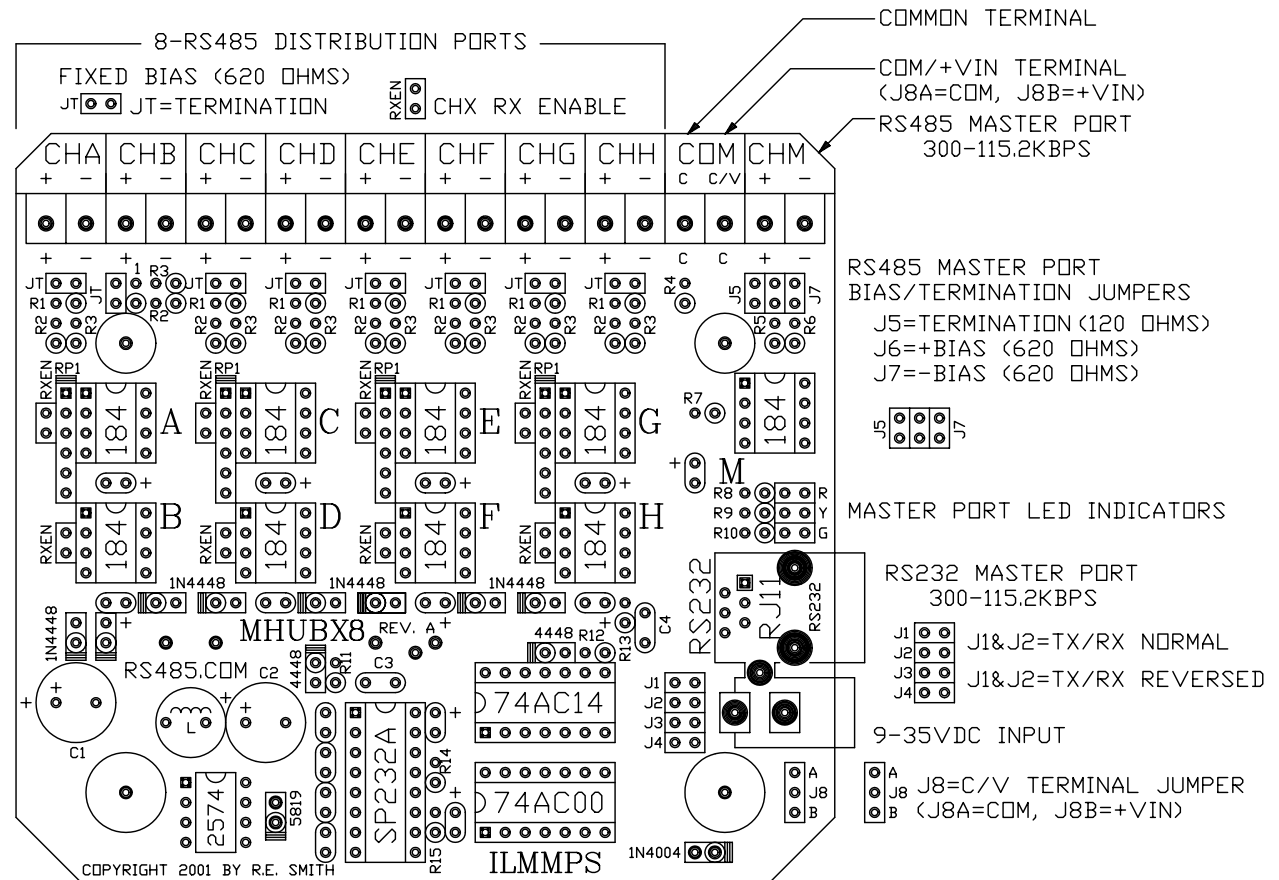


# MODEL MHUBX8 NON-ISOLATED REPEATER HUB

## RS232/RS485 MASTER PORTS & 8 RS485 DISTRIBUTION PORTS

### GENERAL INFORMATION:

THE MHUBX8 IS AN 8-PORT RS485 REPEATER HUB WITH A MASTER RS232/RS485 PORT. DATA RECEIVED BY THE MASTER PORT IS TRANSMITTED TO THE EIGHT DISTRIBUTION PORTS (CHA THRU CHH). DATA RECEIVED AT ONE OF THESE PORTS (CHX) IS TRANSMITTED OUT OF THE MASTER PORT. DATA IS NOT TRANSFERRED FROM ONE DISTRIBUTION PORT TO ANOTHER. "CHX" RS485 PORTS HAVE A TERMINATION JUMPER AND AN RXEN JUMPER. BIAS IS FIXED WITH 620 OHMS OF PULL-UP AND PULL-DOWN RESISTANCE. UNITS CAN BE CASCADED IN VARIOUS WAYS TO FORM LARGE NETWORKS. THE HUB WILL SUPPORT UP TO 32 FULL-LOAD RS485 DEVICES ON EACH PORT. ADDITIONAL NODES CAN BE ADDED, USING 1/2 AND 1/4 LOAD DEVICES. THE 75LBC184 TRANCEIVER IC HAS BUILT-IN TRANSIENT PROTECTION AND IS SLEW RATE LIMITED. THE HUB CAN BE CONNECTED TO 8 "HOME RUN" DEVICES WITH PROPER TERMINATION AND BIAS FOR DISTANCES UP TO 4000 FT. TWO "HOME RUN" DEVICES CAN BE CONNECTED TO ONE PORT BY REMOVING THE TERMINATION JUMPER ON THAT PORT. AS LONG AS THE "END TO END" DISTANCE OF THE TWO "HOME RUN" DEVICES IS LESS THAN 4000FT., THE RS485 DISTANCE SPECIFICATION IS NOT VIOLATED. PROPER TERMINATION CAN BE APPLIED TO EACH END OF THE DUAL "HOME-RUN" NETWORK. BIAS IS PROVIDED "NEAR THE MIDDLE" OF THE NETWORK BY THE MHUBX8 REPEATER. THIS WILL ALLOW UP TO 16 "HOME RUN" UNITS TO BE CONNECTED TO THE HUB, WITHOUT ANY RS485 VIOLATIONS. THE UNIT WILL OPERATE FROM 9-35VDC. IF JUMPER J8A IS INSTALLED TERMINAL C/V IS CONNECTED TO COMMON. IF J8B IS INSTALLED THE INPUT VOLTAGE IS APPLIED TO C/V.



[www.rs485.com](http://www.rs485.com)

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SHEET 1 OF 1		DATE 12-01-01	FOR PHYSICAL DRAWING
MHUBX8SS		SCALE NONE	RES R. E. SMITH 4311 TYLERSVILLE RD. HAMILTON, OHIO 45011
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