



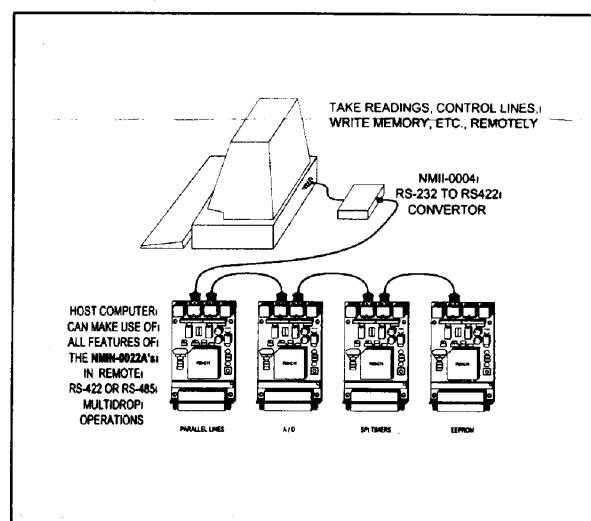
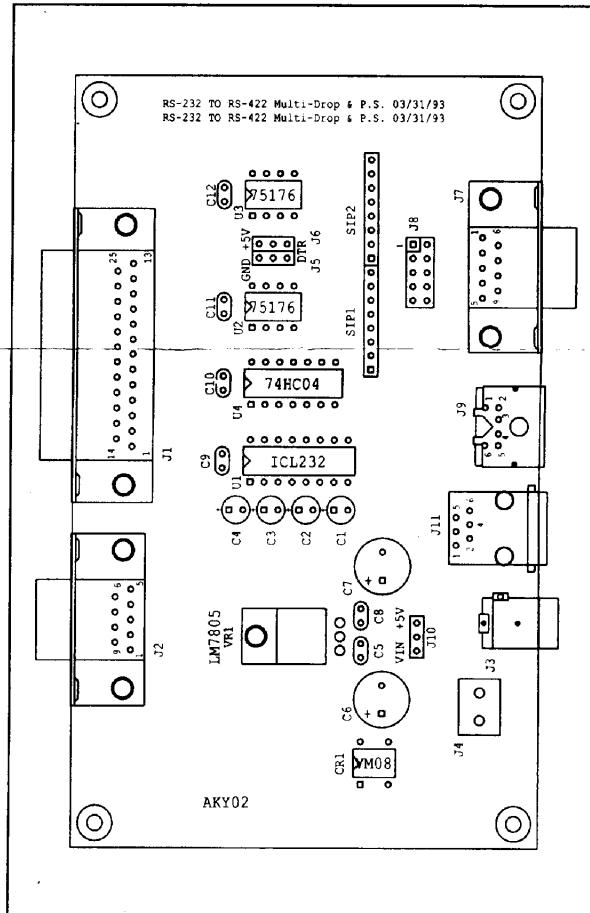
NMII-0004 RS-232 TO RS-422/485

The NMII-0004 provides RS-232 to RS-422, or RS-485, conversion, and has a built-in power supply. It can also supply power to a network of RS-422 multidrop boards.

FEATURES

- RS-232 to RS-422 or RS-485 serial conversion
- RS-232 connectors:
 - DB25F Standard
 - DB9F Standard
- RS-232 connectors configurable as DTE or DSE
- RS-422/485 connectors:
 - Mini-DIN 6-pin
 - DB9M
 - RJ-11
 - Dual Row .1" header
- RS-422/485 cable lengths up to 4000 feet
- Power Connector:
 - Barrel jack 3.5mm
 - Screw terminals
- Built in power supply
 - 7805 5VDC Voltage Regulator
 - VM08 Bridge Rectifier
- Can accept external 7-20 VAC or 7 to 28 VDC
- Can source 5VDC @ 950mA, or pass through unrectified, unregulated A.C.
- DC/DC conversion for +/-9VDC RS-232 levels

The NMII-0004 is a converter board, allowing an RS-232 system to interface to a RS-422, or RS-485, system, or network of systems. The converter can accomodate RS-422, and RS-422 modified for multidrop, and RS-485 multidrop. An RS-232 based terminal, or personal computer can access RS-422/485 networks using the NMII-0004. On the RS-232 side, both DB25 and DB9 connections are provided. One, or the other, may be used at one time. A level shifter converts the RS-232 serial in and serial out to TTL levels. These signals are then converted to RS-422/485 levels for connections to systems operating at that level. On the RS-422/485 side, Mini-DIN-6 and RJ11's are provided for Easy-A interface, and also DB-9 and 3M10 connectors.



Application

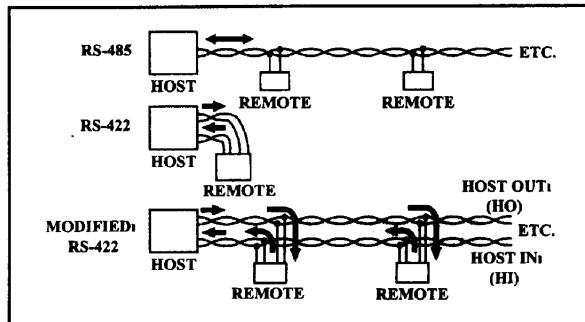
NMII-0004 RS-232 TO RS-422/485 CONVERTER

NMII-0004 RS-232 TO RS-422/485 CONVERTER

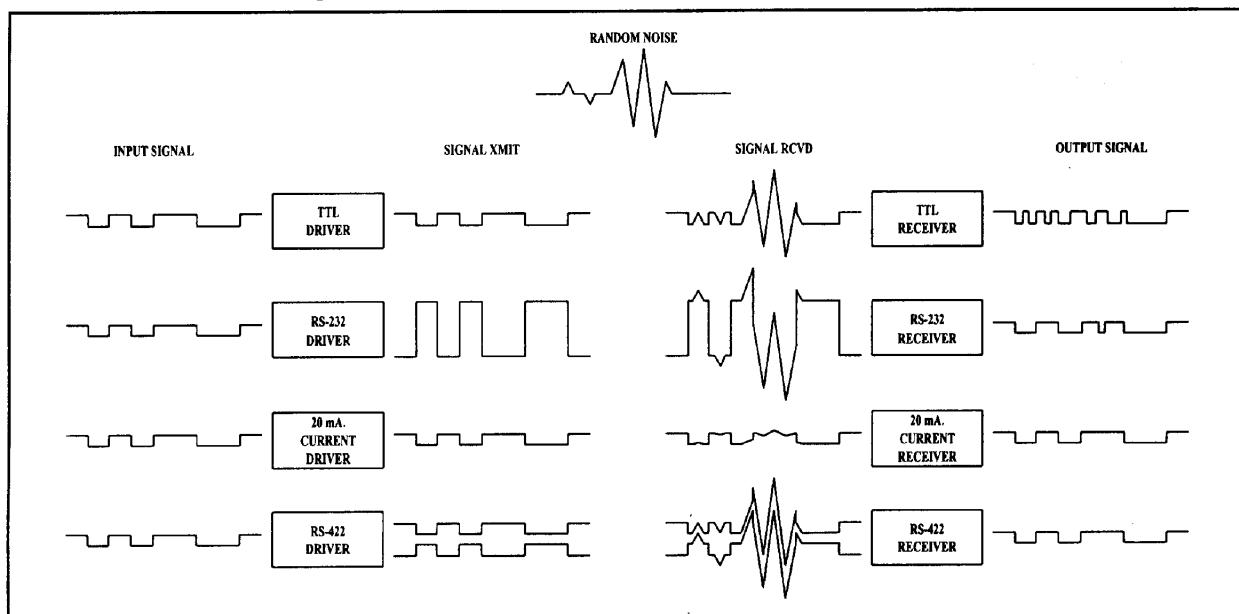
RS-232 is a single ended transmission standard (single wire and ground reference) based on voltage levels, generally between -15V and +15V. RS-422/485 standard is a differential interface (two wires and ground reference). RS-422/485 voltage levels are between 0V and 5V, but since they are differential, or relative to each other rather than the ground reference, The RS-422/485 interface is more immune to noise. RS-232 cable lengths should be limited to 25 feet. RS-422/485 can run with cable lengths of 4000 feet, and further using repeaters.

RS-422 systems use two twisted pairs, one pair for serial in and one pair for serial out, plus a signal return reference (shield or ground). RS-485 interfaces use only one twisted pair and a signal return reference. Both serial in and serial out on the RS-485 pass on the same line, so it

is necessary to have a half-duplex control signal to turn the RS-485 drivers around when listening or talking. This talk/listen function is controlled by the DTR line from the RS-232 side.



RS-485, RS-422 and Modified RS-422



Single-ended and Differential Drives

WORLD HEADQUARTERS

WORLDWIDE REPRESENTATIVES

AMERICA (N, C & S)	CENTRAL EUROPE	SOUTHERN EUROPE	SCANDINAVIA	ASIA
NEW MICROS, INC. Sales Department 1601 Chalk Hill Road Dallas, TX 75212, USA Phone: (214) 339-2204 Fax: (214) 339-1585 G3, G2, FMG1 User Bulletin Board: (214) 339-2321 24/12, N, 8, 1	MS Microscan Electronic GmbH 31 Ueberseering P O Box 601705 D 2000 Hamburg 60 WEST GERMANY Phone: 0 40/63 20 03-0 Fax: 0 40/63 20 03-49 Telex: 2 13 288	DEMEL G. Demel Handelsges, m.b.H. Hoffmeistergasse 8-10/1/4, A-1120 Vienna, AUSTRIA Phone: (0043) 0222 813 2507-0 Fax: (0043) 0222 85 95 93 Telex: 75311851	FIELD OY ELECTRONIINKARYHMA P O Box 131 SF 00601 Helsinki, FINLAND Phone: 358 0 757 1011 Fax: 358 0 79 8853 Telex: 12-2022 FIELD SF	CIBI TRADING INT'L 20 Matimian Street Teacher's Village, Diliman Quezon City, PHILIPPINES Phone: (632) 922-2988 Fax: (632) 921-8027

NEW MICROS, INC.
1601 Chalk Hill Road
Dallas, Texas 75212
Tel: (214)-339-2204