

USER MANUAL

MODEL 2015 Interface Powered RS-449/422 to V.35 Converter



PE PATTON
Electronics Co.

Part# 07M2015-C
Doc# 070020UC
Revised 12/31/96

SALES OFFICE
(301) 975-1000
TECHNICAL SUPPORT
(301) 975-1007
<http://www.patton.com>

1.0 WARRANTY INFORMATION

Patton Electronics warrants all Model 2015 components to be free from defects, and will—at our option—repair or replace the product should it fail within one year from the first date of shipment.

This warranty is limited to defects in workmanship or materials, and does not cover customer damage, abuse or unauthorized modification. If this product fails or does not perform as warranted, your sole recourse shall be repair or replacement as described above. Under no condition shall **Patton Electronics** be liable for any damages incurred by the use of this product. These damages include, but are not limited to, the following: lost profits, lost savings and incidental or consequential damages arising from the use of or inability to use this product. **Patton Electronics** specifically disclaims all other warranties, expressed or implied, and the installation or use of this product shall be deemed an acceptance of these terms by the user.

1.1 RADIO AND TV INTERFERENCE

The Model 2015 generates and uses radio frequency energy, and if not installed and used properly—that is, in strict accordance with the manufacturer's instructions—may cause interference to radio and television reception. The Model 2015 has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection from such interference in a commercial installation. However, there is no guarantee that interference will not occur in a particular installation. If the Model 2015 does cause interference to radio or television reception, which can be determined by disconnecting the Model 2015, the user is encouraged to try to correct the interference by one or more of the following measures: moving the computing equipment away from the receiver, re-orienting the receiving antenna and/or plugging the receiving equipment into a different AC outlet (such that the computing equipment and receiver are on different branches).

1.2 SERVICE

All warranty and non-warranty repairs must be returned freight prepaid and insured to Patton Electronics. All returns must have a Return Materials Authorization number on the outside of the shipping container. This number may be obtained from Patton Electronics Technical Support: **(301) 975-1007**; <http://www.patton.com>; or, support@patton.com.

Notice: Packages received without an RMA number will not be accepted. Patton Electronics' technical staff is also available to answer any questions that might arise concerning the installation or use of your Patton Model 2015. Technical Service hours: **8AM to 5PM EST, Monday through Friday.**

1.2 CE NOTICE

The CE symbol on your Patton Electronics equipment indicates that it is in compliance with the Electromagnetic Compatibility (EMC) directive and the Low Voltage Directive (LVD) of the European Union (EU). A Certificate of Compliance is available by contacting Technical Support.

2.0 GENERAL INFORMATION

Thank you for your purchase of this Patton Electronics product. This product has been thoroughly inspected and tested and is warranted for One Year parts and labor. If any questions arise during installation or use of the unit, contact Patton Electronics Technical Support: (301) 975-1007; <http://www.patton.com>; or, support@patton.com.

2.1 FEATURES

- Bidirectionally converts synchronous RS-449/422 to V.35
- Data rates to 2 Mbps, full or half duplex
- Transparent to protocol
- No AC power or batteries required
- Various DCE/DTE combinations available
- DB-37 and M/34 connectors with integral 6 foot cable
- Circuitry housed in a miniature case
- Made in the USA

2.2 DESCRIPTION

The **Model 2015 RS-449/422 to V.35 converter** lets a synchronous RS-449/422 device communicate bi-directionally with a synchronous V.35 device. The Model 2015 requires no AC power or batteries to operate and supports data rates to 2 Mbps. Operating full or half duplex, the Model 2015 passes all necessary clocking and control signals, and is transparent to protocol.

The Patton Model 2015 connects directly to the synchronous RS-449/422 interface using a male or female DB-37 connector. A male or female M/34 connector at the end of an integral 6 foot cable plugs into the V.35 device. Models with any combination of "DCE" and "DTE" wiring are available, thus eliminating the need for special crossover cables.

Housed in an ultra-miniature case measuring only 2.66" x 2.10" x 0.73", the Model 2015 fits easily into tight locations. Like all Patton products, the Model 2015 is manufactured by Patton Electronics in the USA.

3.0 INSTALLATION

The Patton Model 2015 is very simple to install. Just plug it in like a normal cable and you're ready to go: no configuration is necessary! Since the Model 2015 is available in various combinations of genders and DCE/DTE orientations, many applications are possible. Figures 1 and 2 show two possible applications for the Model 2015.

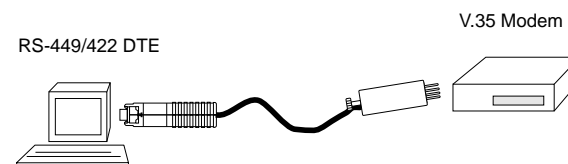


Figure 1. A common RS-449/422 DTE to V.35 DCE installation

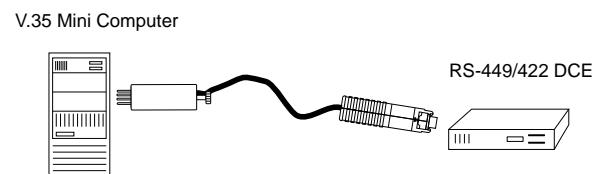
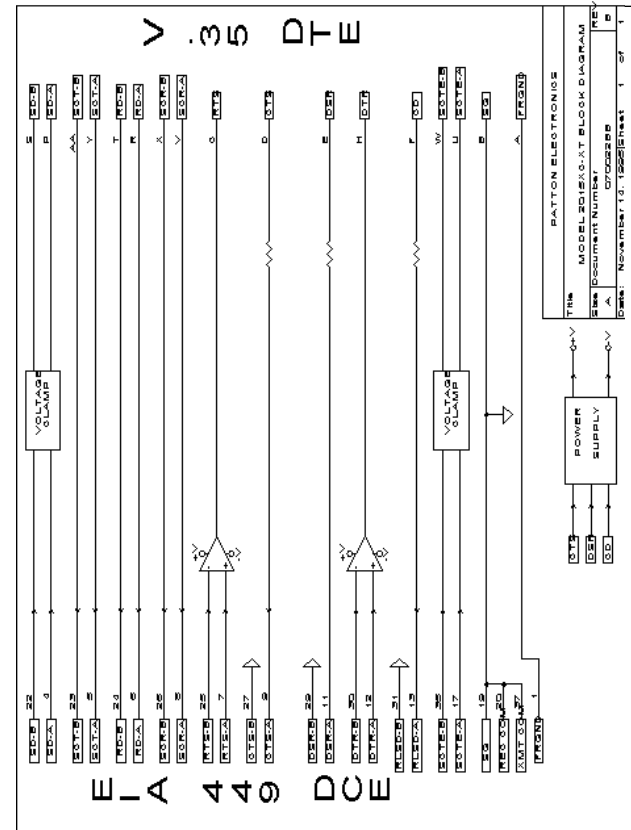


Figure 2. A common V.35 DTE to RS-449/422 DCE installation.

APPENDIX A
PATTON MODEL 2015 SPECIFICATIONS

- Interfaces:** EIA RS-449/422/CCITT V.24 to CCITT V.35
- Data Rates:** 0 - 2 Mbps
- Transmission Mode:** Full or half duplex
- Protocol:** Transparent to protocol
- Clocking:** Set by connected devices
- Connectors:** DB-37 male or female on RS-449/422 side,
M/34 male or female on V.35 side
- Power Supply:** No external power required; uses power
from NIC data and control signals
- Temperature Range:** 0-60°C (32-140°F)
- Altitude:** 0-15,000 feet
- Humidity:** 5 to 95% non-condensing
- Dimensions:** 2.66"L x 2.10"H x 0.73"W
- Weight:** 14 oz, including cable and connectors

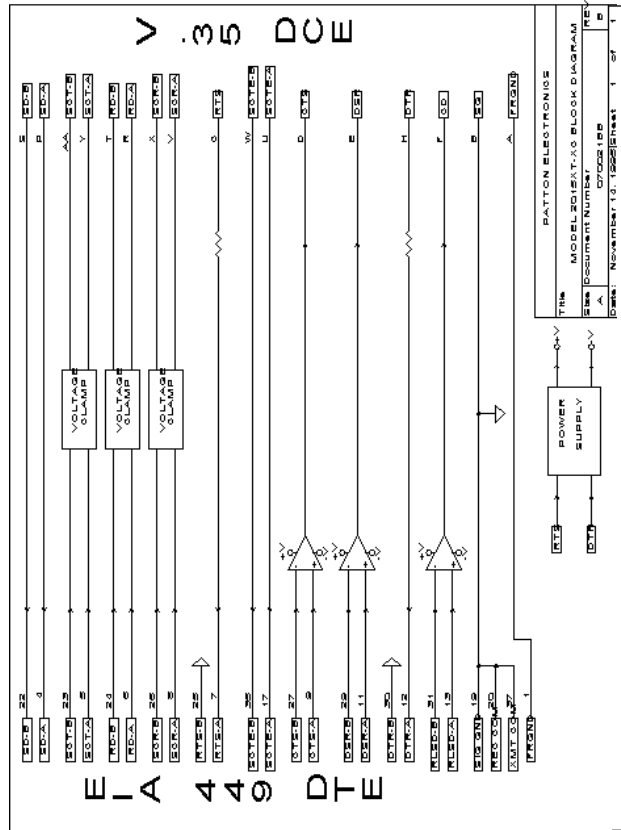
APPENDIX B
PATTON MODEL 2015 DTE/DCE BLOCK DIAGRAM



Applies to Models

- 2015MC-FT 2015FC-MT
- 2015MC-MT 2015FC-FT

APPENDIX C
PATTON MODEL 2015 DCE/DTE BLOCK DIAGRAM



Applies to Models
 2015MT-FC 2015FT-MC
 2015MT-MT 2015FT-FC

APPENDIX D
PATTON MODEL 2015 INTERFACE PIN ASSIGNMENTS

DB-37 Connector (RS-449 DCE or DTE)

Pin #	Signal
1	Shield
4	TD
5	TC
6	RD
7	RTS
8	RC
9	CTS
11	DM (DSR)
12	TR (DTR)
13	RR (CD)
17	TT (XTC)
19	Signal Ground
20	Signal Ground
22	TD/
23	TC/
24	RD/
25	RTS/
26	RC/
27	CTS/
29	DM/ (DSR/)
30	TR/ (DTR/)
31	RR/ (CD/)
35	TT/ (XTC/)
37	Signal Ground

APPENDIX D (Continued)
PATTON MODEL 2015 M34 PIN ASSIGNMENTS

M/34 Connector (V.35 DCE or DTE)

<u>Pin #</u>	<u>Signal</u>
A	Shield
B	SGND (Signal Ground)
C	RTS
D	CTS
E	DSR
F	CD
H	DTR
P	TD
R	RD
S	TD/
T	RD/
U	XTC
V	RC
W	XTC/
Y	TC
AA	TC/