

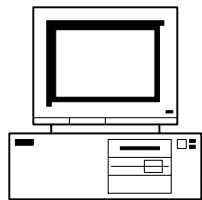
TruTime Wiring Diagrams

The following documentation represents the various time & attendance terminals that communicate with TruTime. These diagrams detail the terminal settings and wiring connections for each communication scenario. Additional diagrams show how to connect and setup peripheral equipment with the terminals. These diagrams are separated into categories by clock type and peripherals. These categories are displayed to the left of this screen. Click on the plus mark to expand the category – then click on the diagram to display.

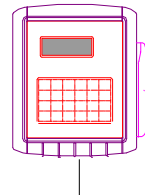
MTX Terminals

J1: ON
J2: ON
J3: ON
J4: ON

MTX-20



IBM Compatible



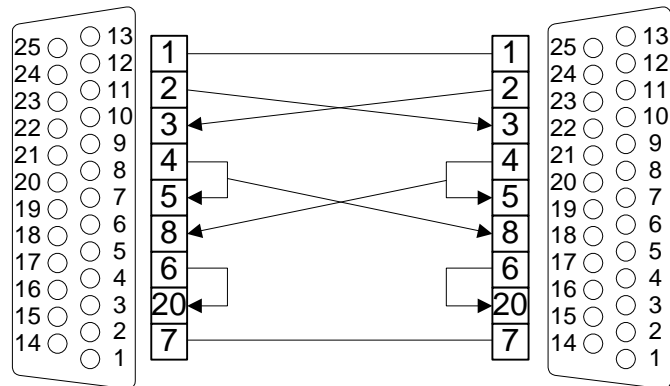
RS-232C Cross Cable
Max. 50 ft.



RS-232C (25p - 25p) Cable

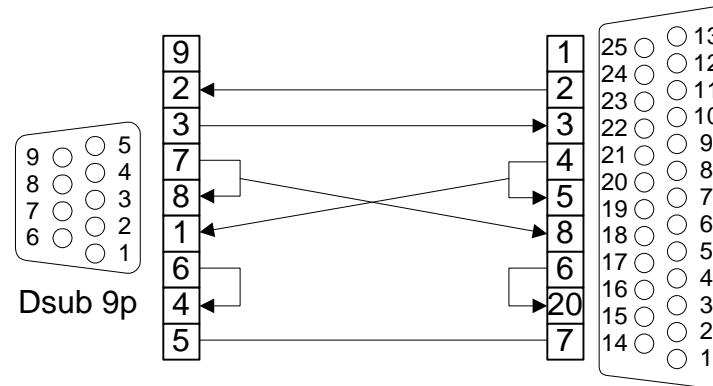


RS-232C (25p - 9p) Cable



Dsub 25p

Dsub 25p



Dsub 9p

Dsub 25p

AMANO

TITLE: MTX-20 RS-232C Direct connection

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 08/23/96

TIME: 4:36:24 PM

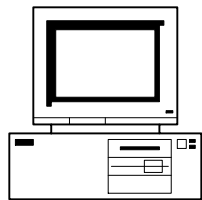
PG: 1

OF 1

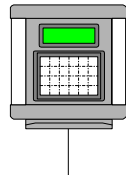
PGS

FILENAME: Rsdirect.vsd

J1: ON
J2: ON
J3: ON
J4: ON
MTX-20



IBM Compatible



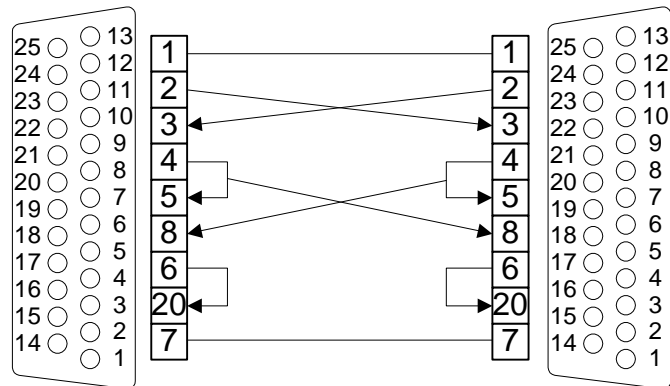
RS-232C Cross Cable
Max. 50 ft.



RS-232C (25p - 25p) Cable

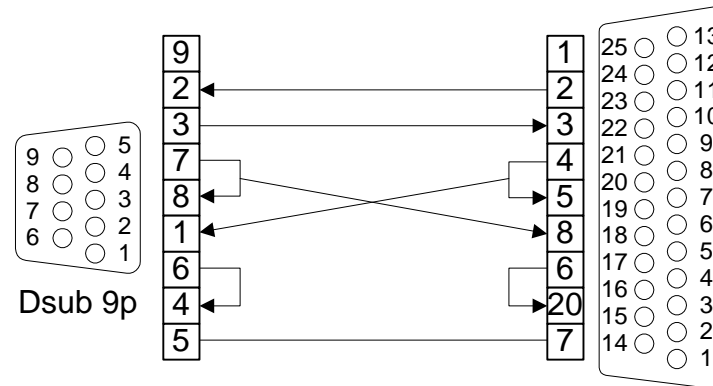


RS-232C (25p - 9p) Cable



Dsub 25p

Dsub 25p



Dsub 9p

Dsub 25p

AMANO

TITLE: MTX-20 OD RS-232C Direct connection

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 08/23/96

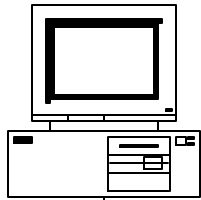
TIME: 4:36:24 PM

PG: 1

OF 1

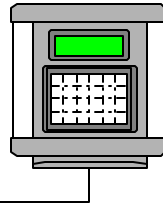
PGS

FILENAME: RsdirectTerm.vsd



IBM Compatible

J1: ON
J2: ON
J3: ON
J4: ON



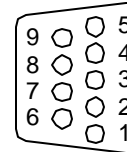
RS-232C Cross Cable
Max. 50 ft.

The diagram on the right shows the overall layout of the cabling from PC to MTX.

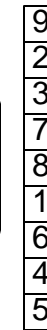
Wire the DB9F/RJ45F and DB25M/RJ45F connectors as shown in the diagram below. This is the only custom wiring that is necessary.

The DB9F/RJ45F connector will fit onto the PC and the DB25M/RJ45F connector will fit onto the inside of the MTX terminal.

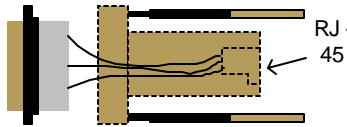
The coloring for the cables on the connectors is fairly standard. You will find this to be correct in most modular serial adaptors in stock supply.



Dsub 9p

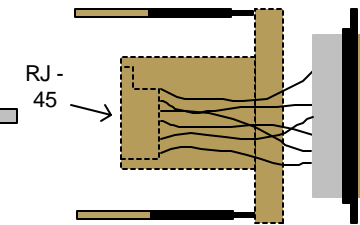


Dsub 25p

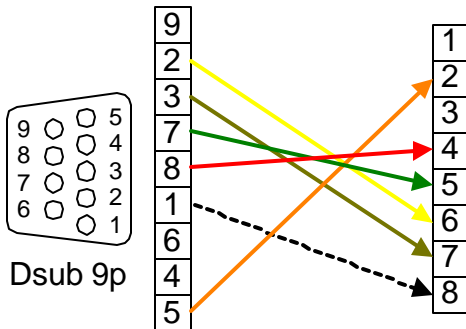


DB-9F/RJ-45F
Converter

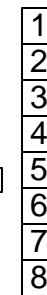
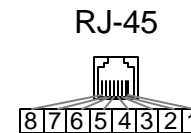
Straight Cable
Maximum of 50ft.



DB-25M/RJ-45F
Converter



RJ-45



Dsub 25p

AMANO

TITLE: MTX-20 RS-232 Faster Direct Connection

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Chad McFarlin

DATE: 05/06/2003

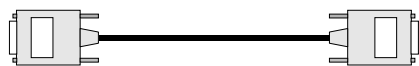
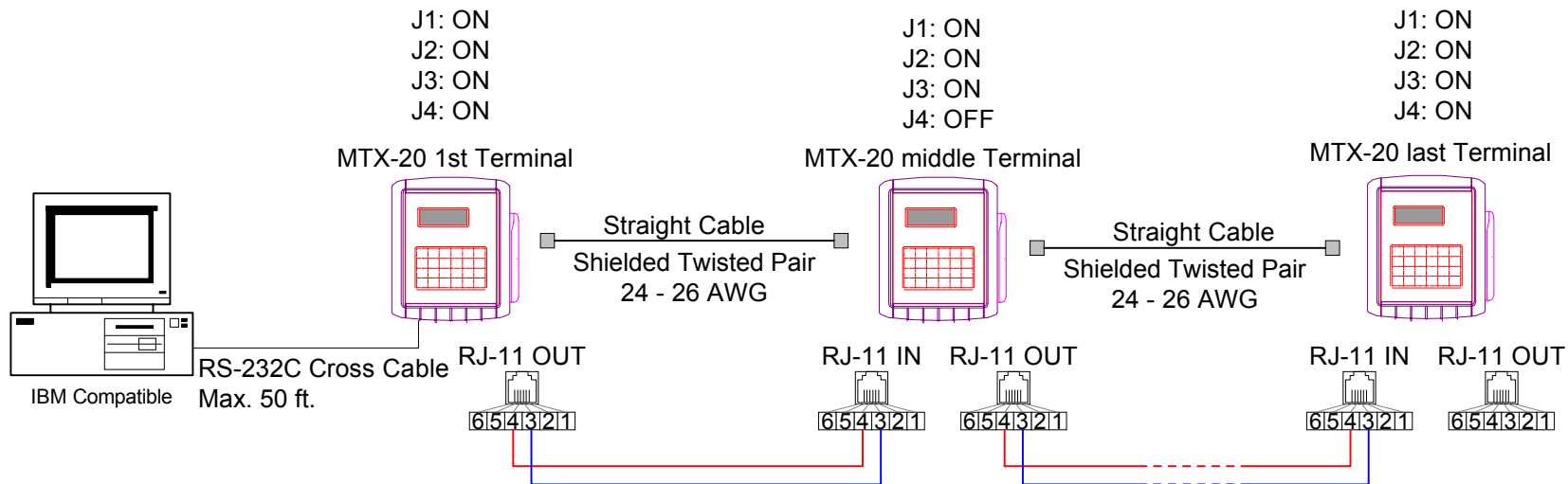
TIME: 1:40:00 PM

PG: 1

OF 1

PGS

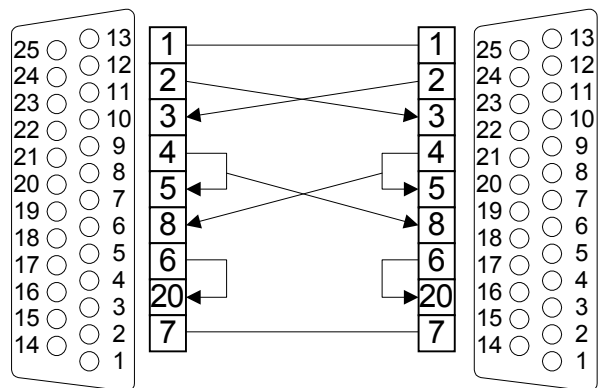
FILENAME: RsDirect-Fast.vsd



RS-232C (25p - 25p) Cable

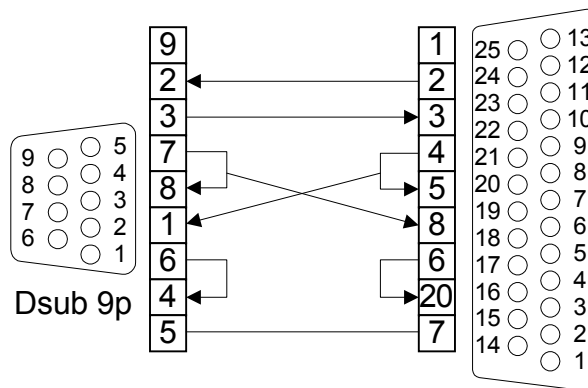


RS-232C (9p - 25p) Cable



Dsub 25p

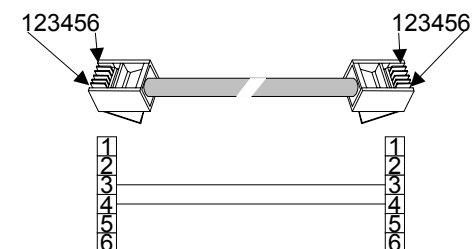
Dsub 25p



Dsub 9p

Dsub 25p

2 wires RJ11 straight connection



AMANO

TITLE: MTX-20 Direct connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

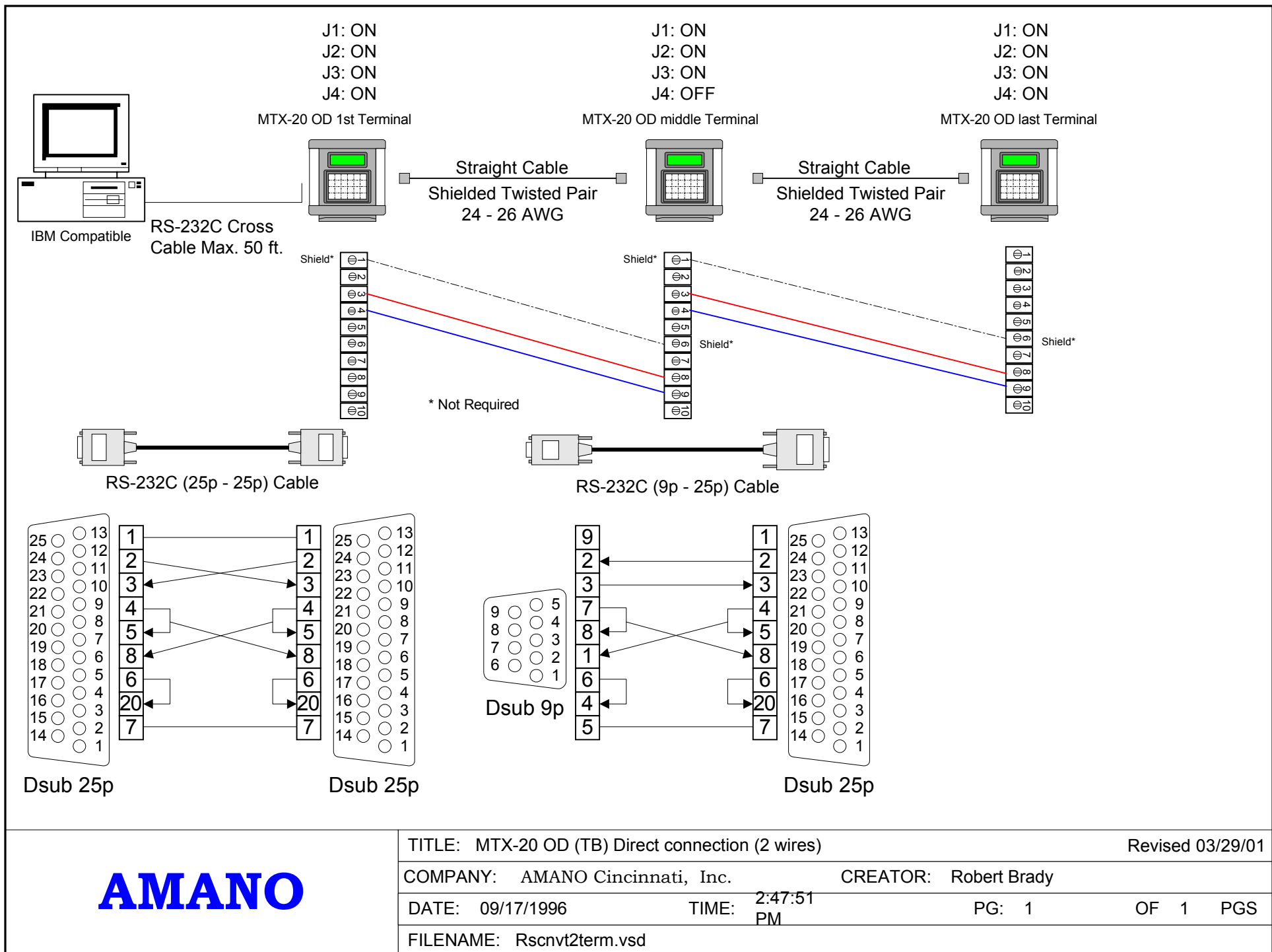
DATE: 09/17/1996

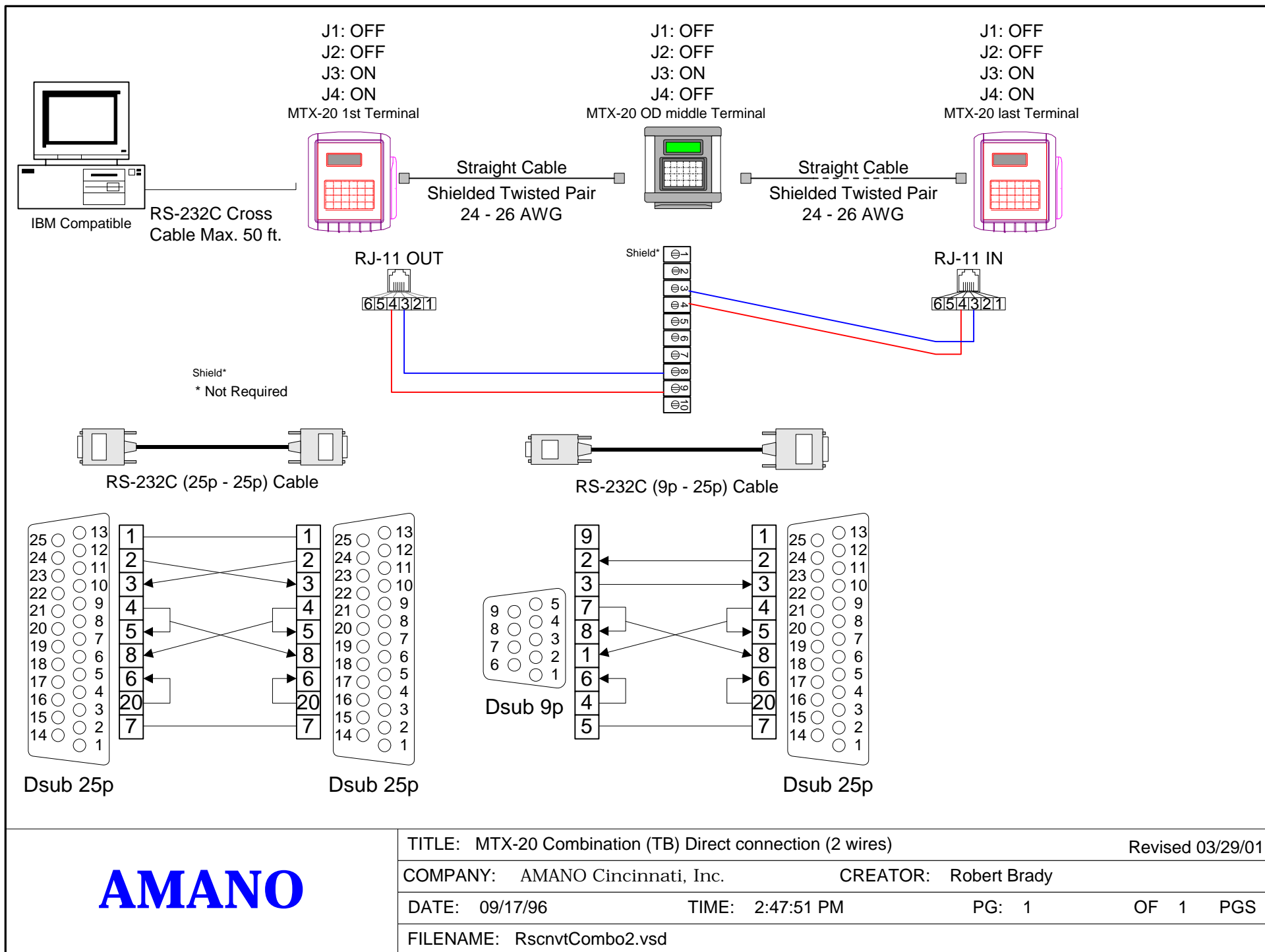
TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Rscnvt2.vsd





AMANO

TITLE: MTX-20 Combination (TB) Direct connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

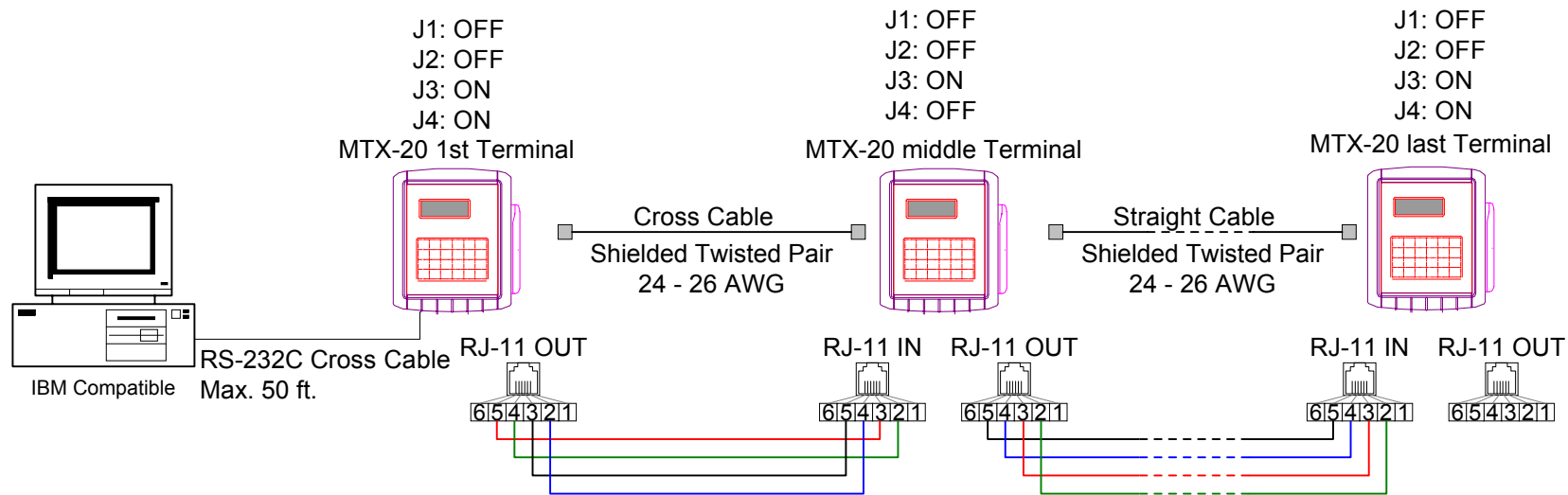
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

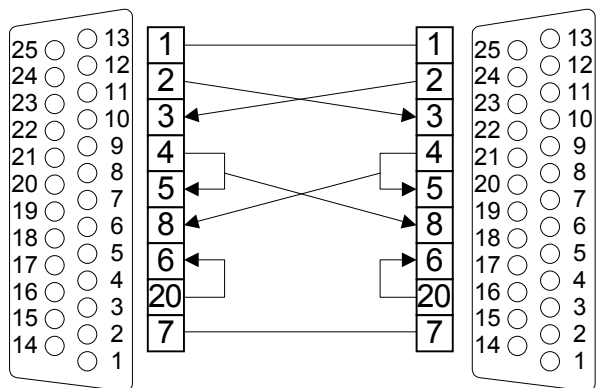
FILENAME: RscvntCombo2.vsd



RS-232C (25p - 25p) Cable

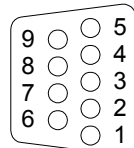


RS-232C (9p - 25p) Cable

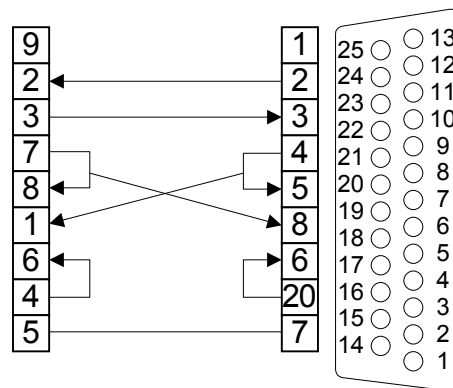


Dsub 25p

Dsub 25p

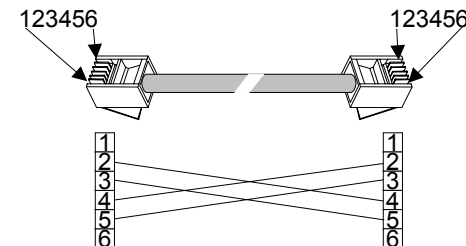


Dsub 9p

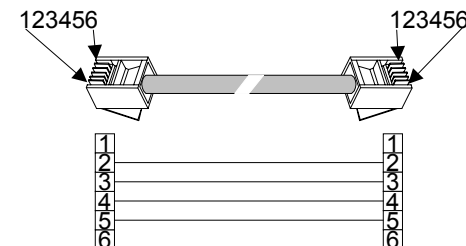


Dsub 25p

4 wires RJ11 cross connection



4 wires RJ11 straight connection



AMANO

TITLE: MTX-2 Direct connection (4 wires)

Revised 10/1/96

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

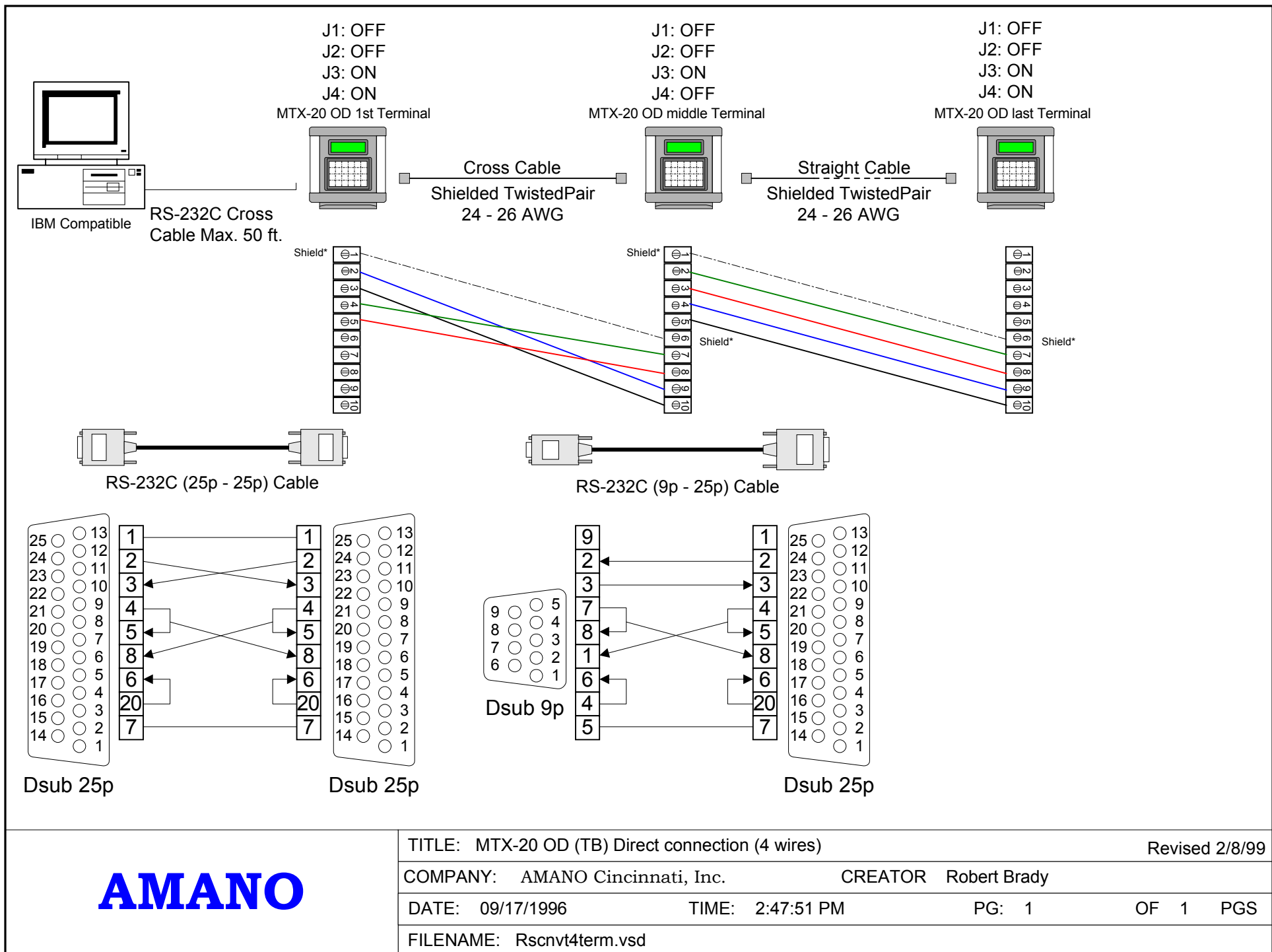
DATE: 09/17/1996

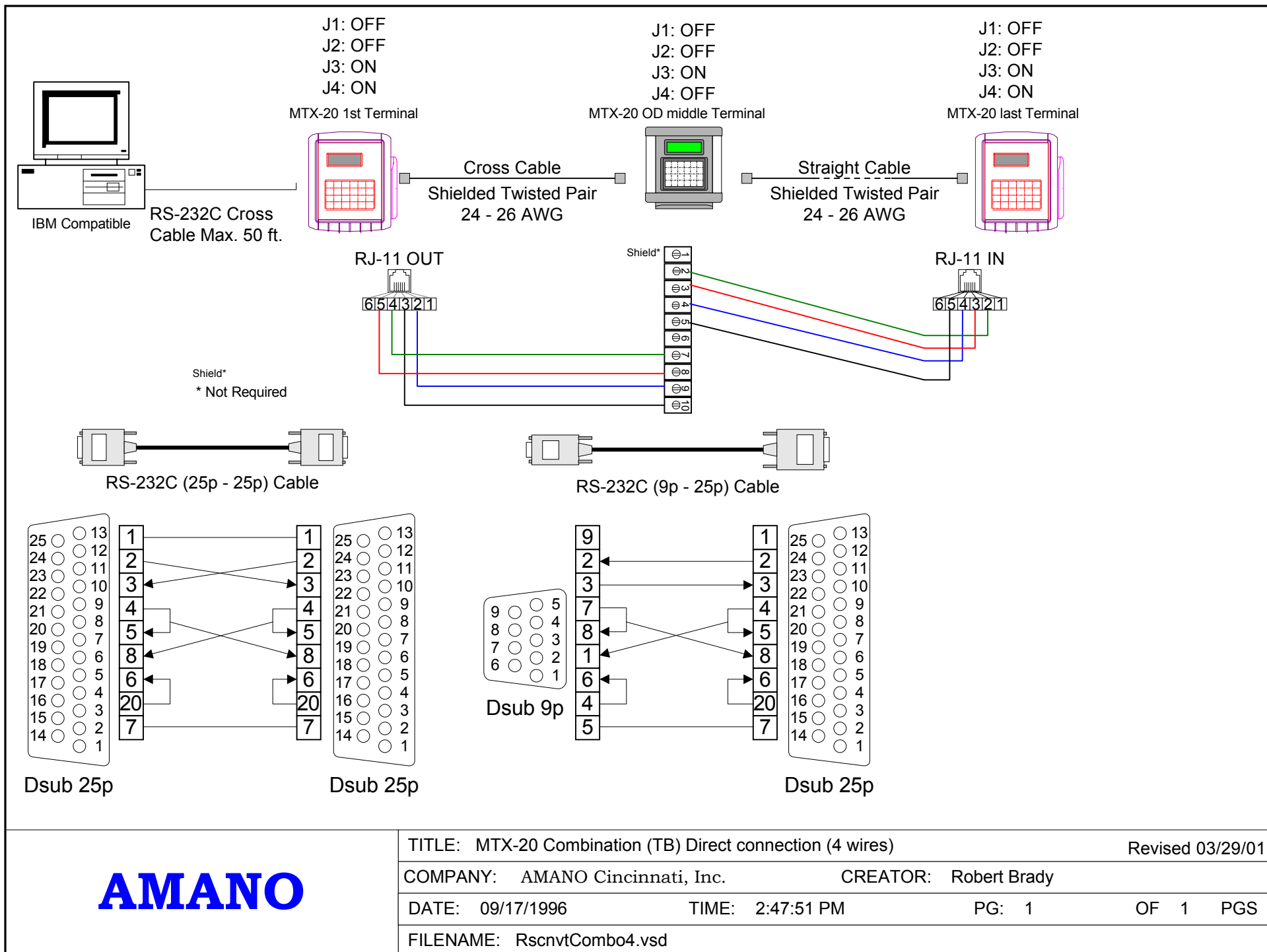
TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Rscnvt4.vsd





AMANO

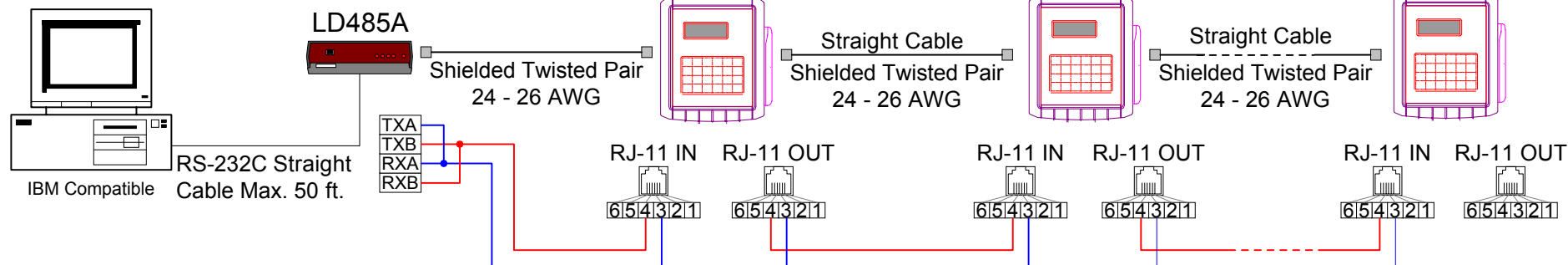
TITLE: MTX-20 Combination (TB) Direct connection (4 wires)					Revised 03/29/01	
COMPANY: AMANO Cincinnati, Inc.			CREATOR: Robert Brady			
DATE: 09/17/1996		TIME: 2:47:51 PM		PG: 1	OF 1 PGS	
FILENAME: RscnvtCombo4.vsd						

S2: OFF at 19200 bps W8: Half W9: ON
 S2: ON at 9600 bps - 1200 bps
 W15: B-C W16: A-B W18: B-C
 W17: A 1ms at 19.2k or 9600 bps
 B 100ms at 4800 - 1200 bps
 DCE: Put the DIP shunt jumper in socket
 XW1A with all Dip switches ON.

J1: ON
 J2: ON
 J3: ON
 J4: OFF

J1: ON
 J2: ON
 J3: ON
 J4: OFF

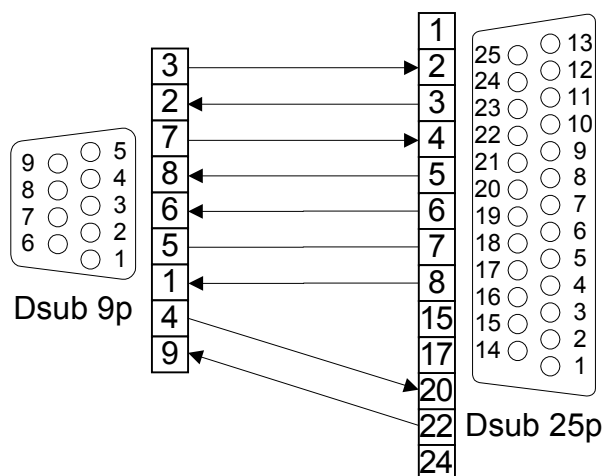
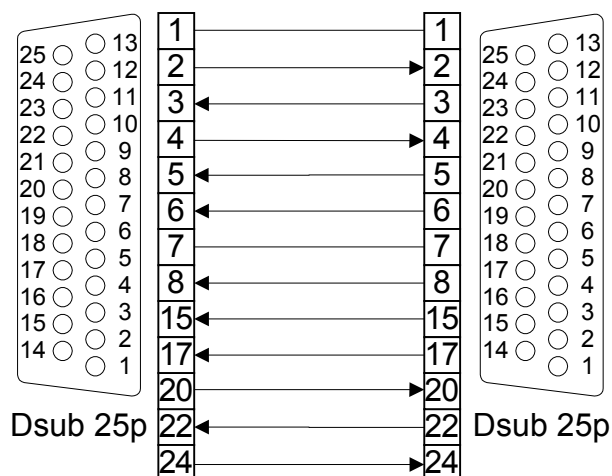
J1: ON
 J2: ON
 J3: ON
 J4: ON



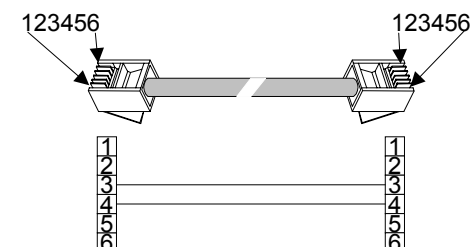
RS-232C (25p - 25p) Cable



RS-232C (9p - 25p) Cable



2 wires RJ11 straight connection



AMANO

TITLE: MTX-20 Line Driver (LD-485A-MP) connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Line2.vsd

S2: OFF at 19200 bps W8: Half W9: ON
 S2: ON at 9600 bps - 1200 bps
 W15: B-C W16: A-B W18: B-C
 W17: A 1ms at 19.2k or 9600 bps
 B 100ms at 4800 - 1200 bps
 DCE: Put the DIP shunt jumper in socket
 XW1A with all Dip switches ON.

J1: ON
 J2: ON
 J3: ON
 J4: OFF

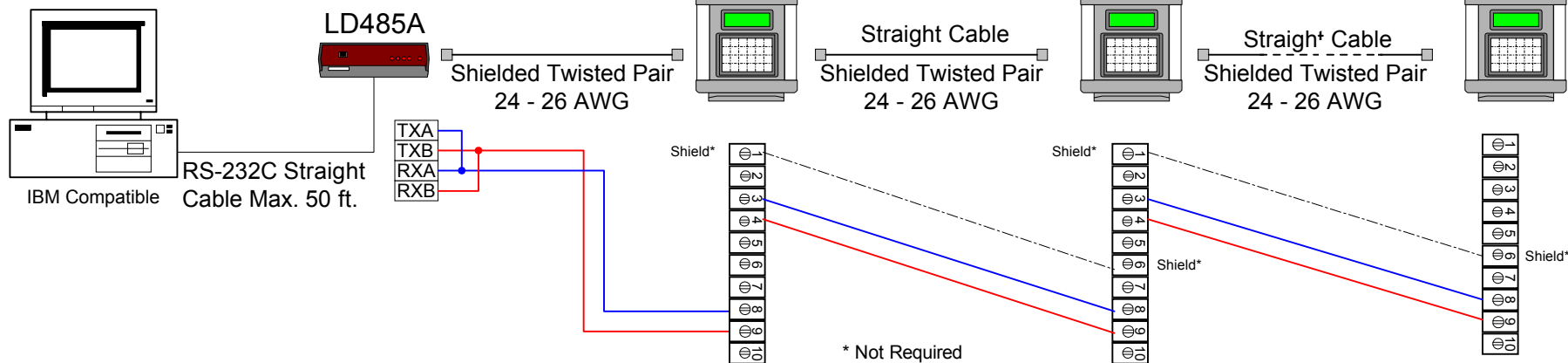
J1: ON
 J2: ON
 J3: ON
 J4: OFF

J1: ON
 J2: ON
 J3: ON
 J4: ON

MTX-20 OD 1st Terminal

MTX-20 OD middle Terminal

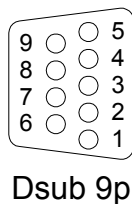
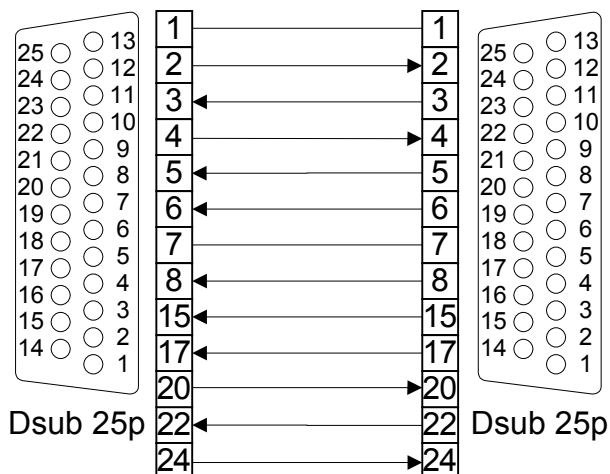
MTX-20 OD last Terminal



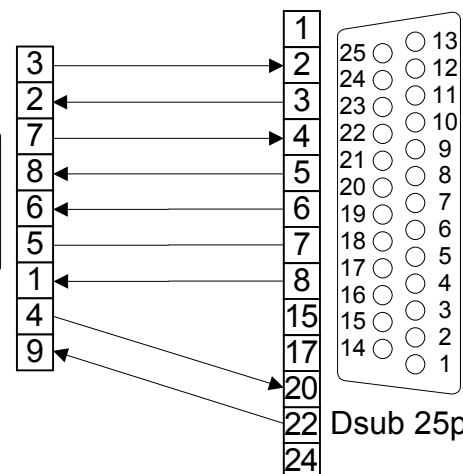
RS-232C (25p - 25p) Cable



RS-232C (9p - 25p) Cable



Dsub 9p



Dsub 25p

AMANO

TITLE: MTX-20 OD (TB) Line Driver (LD-485A-MP) connection (2 wires)

Revised 03/27/02

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Chad McFarlin

DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

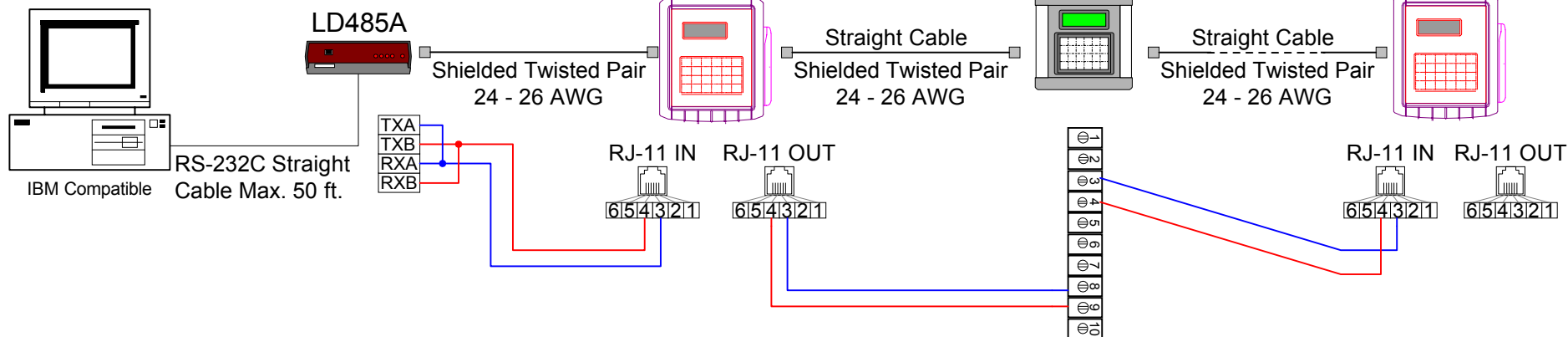
FILENAME: Line2term.vsd

S2: OFF at 19200 bps W8: Half W9: ON
 S2: ON at 9600 bps - 1200 bps
 W15: B-C W16: A-B W18: B-C
 W17: A 1ms at 19.2k or 9600 bps
 B 100ms at 4800 - 1200 bps
 DCE: Put the DIP shunt jumper in socket
 XW1A with all Dip switches ON.

J1: ON
 J2: ON
 J3: ON
 J4: OFF
 MTX-20 1st Terminal

J1: ON
 J2: ON
 J3: ON
 J4: OFF
 MTX-20 middle Terminal

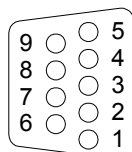
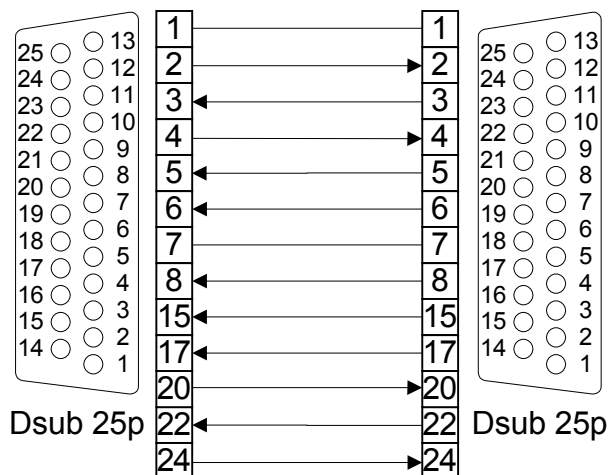
J1: ON
 J2: ON
 J3: ON
 J4: ON
 MTX-20 last Terminal



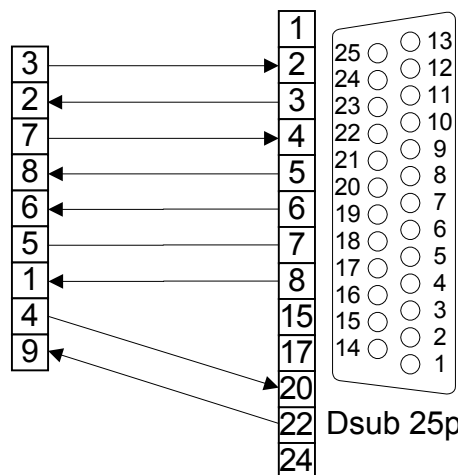
RS-232C (25p - 25p) Cable



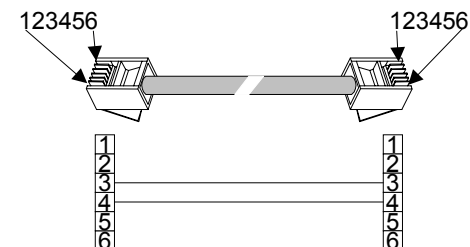
RS-232C (9p - 25p) Cable



Dsub 9p



2 wires RJ11 straight connection



AMANO

TITLE: MTX-20 Combo-Line Driver (LD-485A-MP) connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

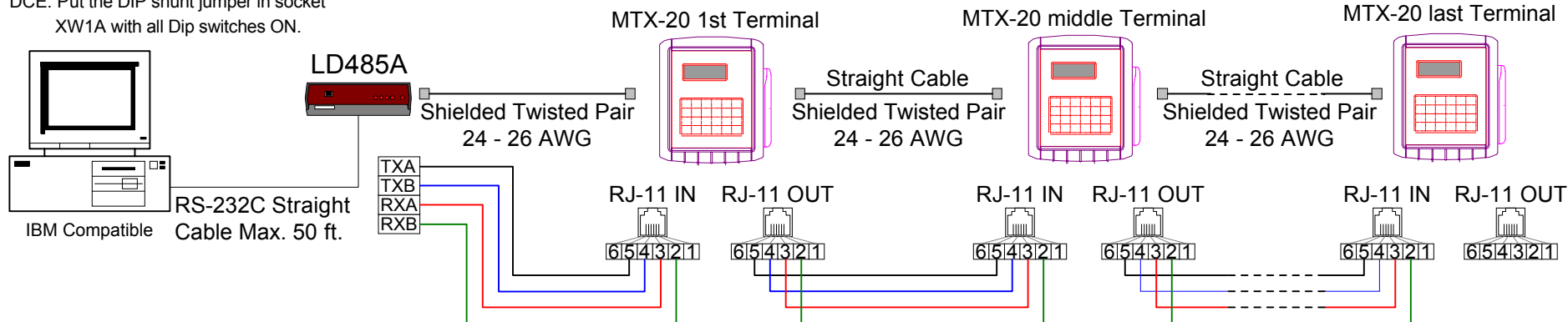
FILENAME: LineCombo2.vsd

S2: OFF at 19200 bps W8: Full W9: ON
 S2: ON at 9600 bps - 1200 bps
 W15: B-C W16: A-B W18: B-C
 W17: A 1ms at 19.2k or 9600 bps
 B 100ms at 4800 - 1200 bps
 DCE: Put the DIP shunt jumper in socket
 XW1A with all Dip switches ON.

J1: OFF
 J2: OFF
 J3: ON
 J4: OFF

J1: OFF
 J2: OFF
 J3: ON
 J4: OFF

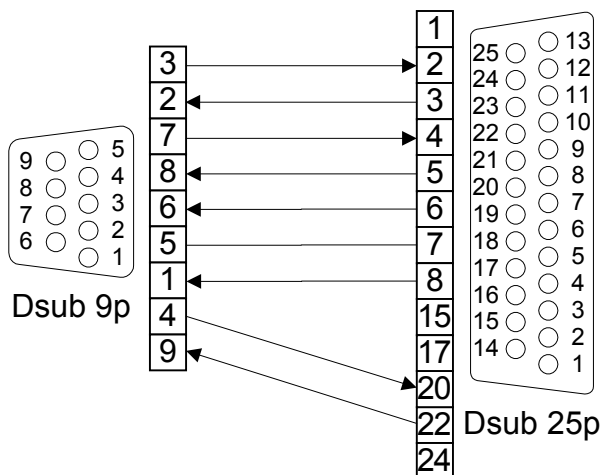
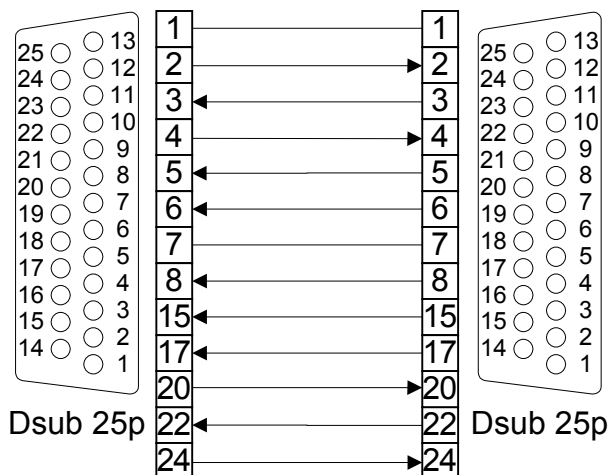
J1: OFF
 J2: OFF
 J3: ON
 J4: ON



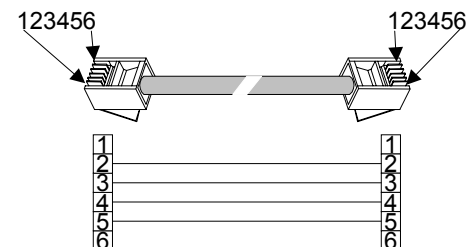
RS-232C (25p - 25p) Cable



RS-232C (9p - 25p) Cable



4 wires RJ11 straight connection



AMANO

TITLE: MTX-20 Line Driver (LD485A-MP) connection (4 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Line4.vsd

S2: OFF at 19200 bps W8: Full W9: ON
 S2: ON at 9600 bps - 1200 bps
 W15: B-C W16: A-B W18: B-C
 W17: A 1ms at 19.2k or 9600 bps
 B 100ms at 4800 - 1200 bps
 DCE: Put the DIP shunt jumper in socket
 XW1A with all Dip switches ON.

J1: OFF
 J2: OFF
 J3: ON
 J4: OFF

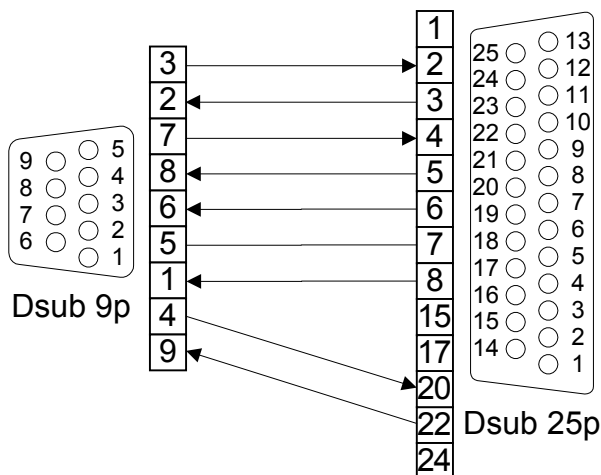
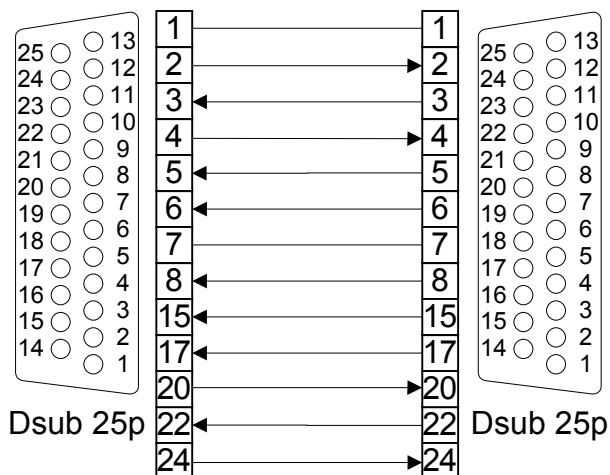
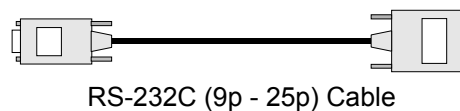
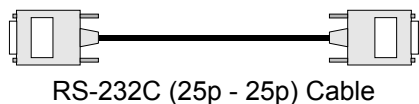
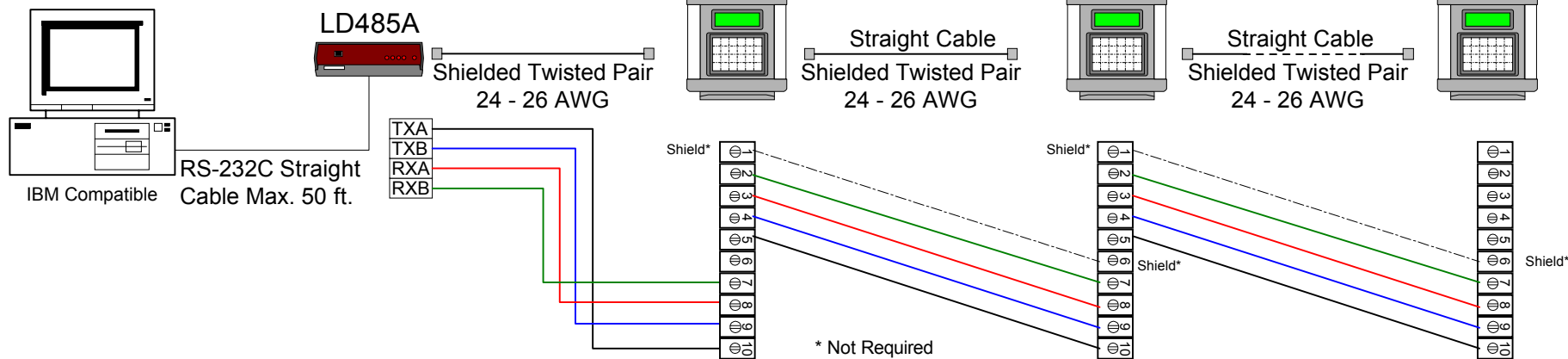
J1: OFF
 J2: OFF
 J3: ON
 J4: OFF

J1: OFF
 J2: OFF
 J3: ON
 J4: ON

MTX-20 OD 1st Terminal

MTX-20 OD middle Terminal

MTX-20 OD last Terminal



AMANO

TITLE: MTX-20 OD (TB) Line Driver (LD485A-MP) connection (4 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Line4term.vsd

S2: OFF at 19200 bps W8: Full W9: ON
 S2: ON at 9600 bps - 1200 bps
 W15: B-C W16: A-B W18: B-C
 W17: A 1ms at 19.2k or 9600 bps
 B 100ms at 4800 - 1200 bps
 DCE: Put the DIP shunt jumper in socket
 XW1A with all Dip switches ON.

J1: OFF
 J2: OFF
 J3: ON
 J4: OFF

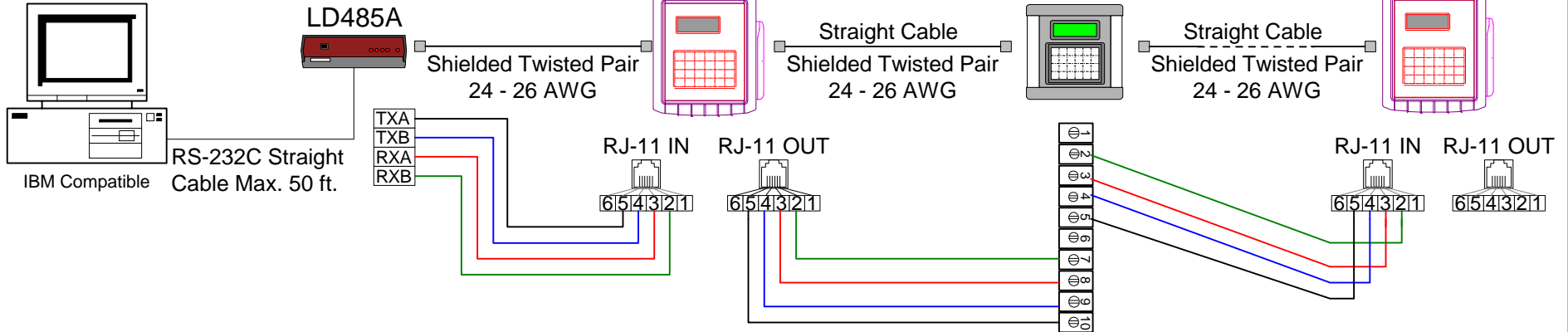
J1: OFF
 J2: OFF
 J3: ON
 J4: OFF

J1: OFF
 J2: OFF
 J3: ON
 J4: ON

MTX-20 1st Terminal

MTX-20 middle Terminal

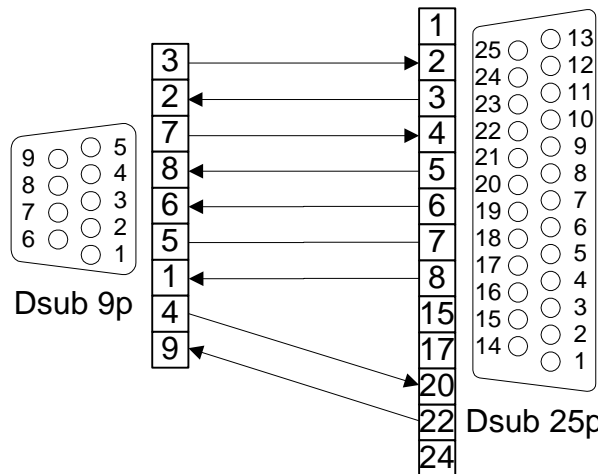
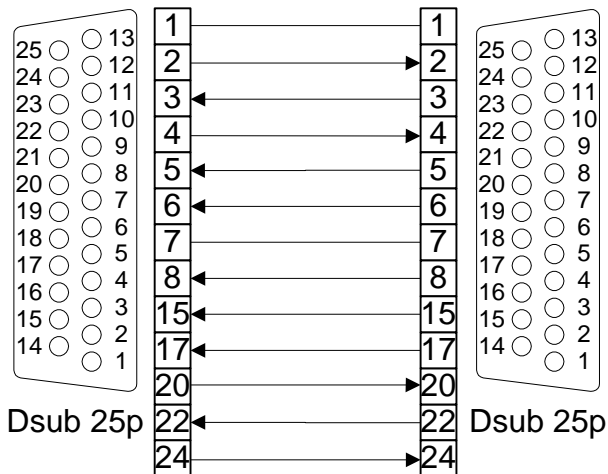
MTX-20 last Terminal



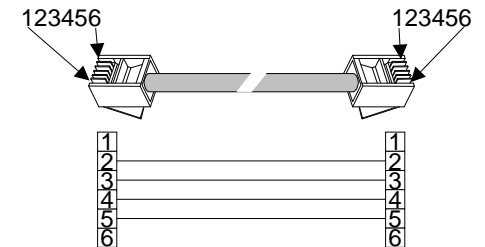
RS-232C (25p - 25p) Cable



RS-232C (9p - 25p) Cable



4 wires RJ11 straight connection



AMANO

TITLE: MTX-20 Combo-Line Driver (LD485A-MP) connection (4 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

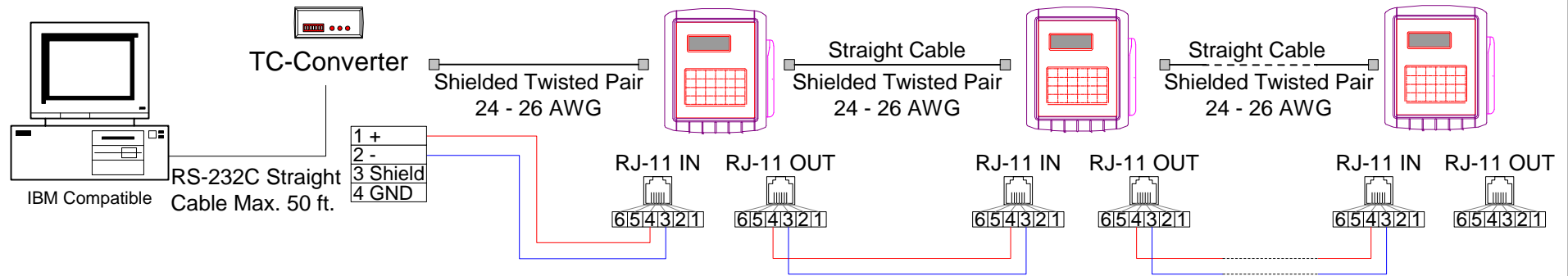
OF 1 PGS

FILENAME: LineCombo4.vsd

J1: ON
J2: ON
J3: ON
J4: OFF

J1: ON
J2: ON
J3: ON
J4: OFF

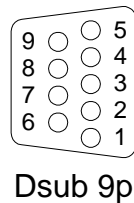
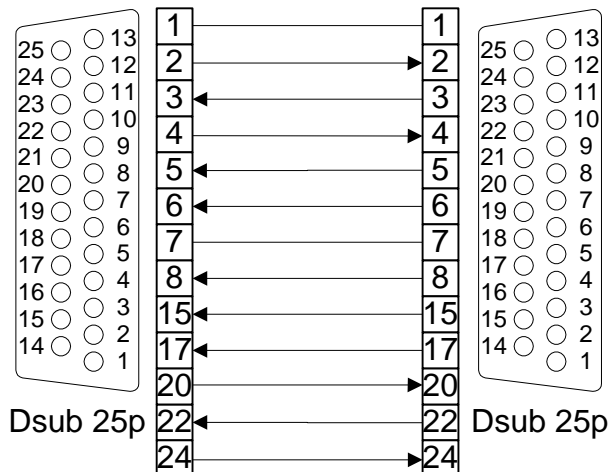
J1: ON
J2: ON
J3: ON
J4: ON



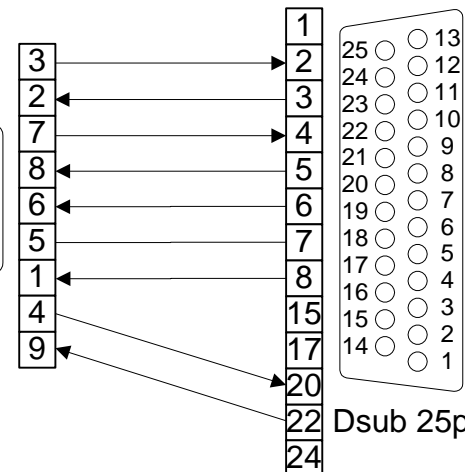
RS-232C (25p - 25p) Cable



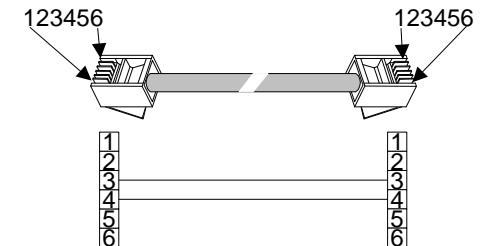
RS-232C (9p - 25p) Cable



Dsub 9p



2 wires RJ11 straight connection



AMANO

TITLE: MTX-20 TC Converter connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

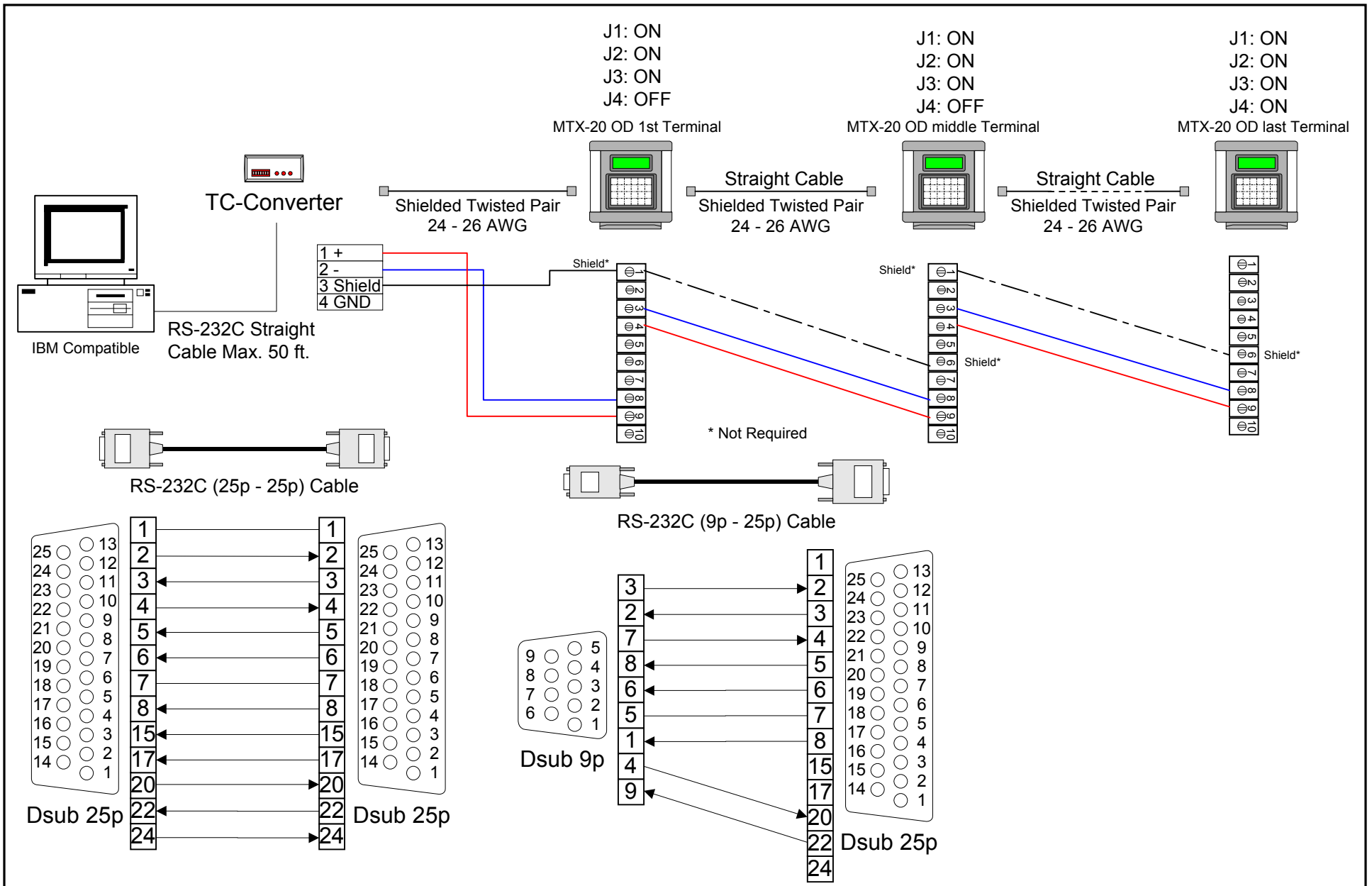
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: TC2.vsd



AMANO

TITLE: MTX-20 OD (TB) TC Converter connection (2 wires)

Revised 03/26/02

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Chad McFarlin

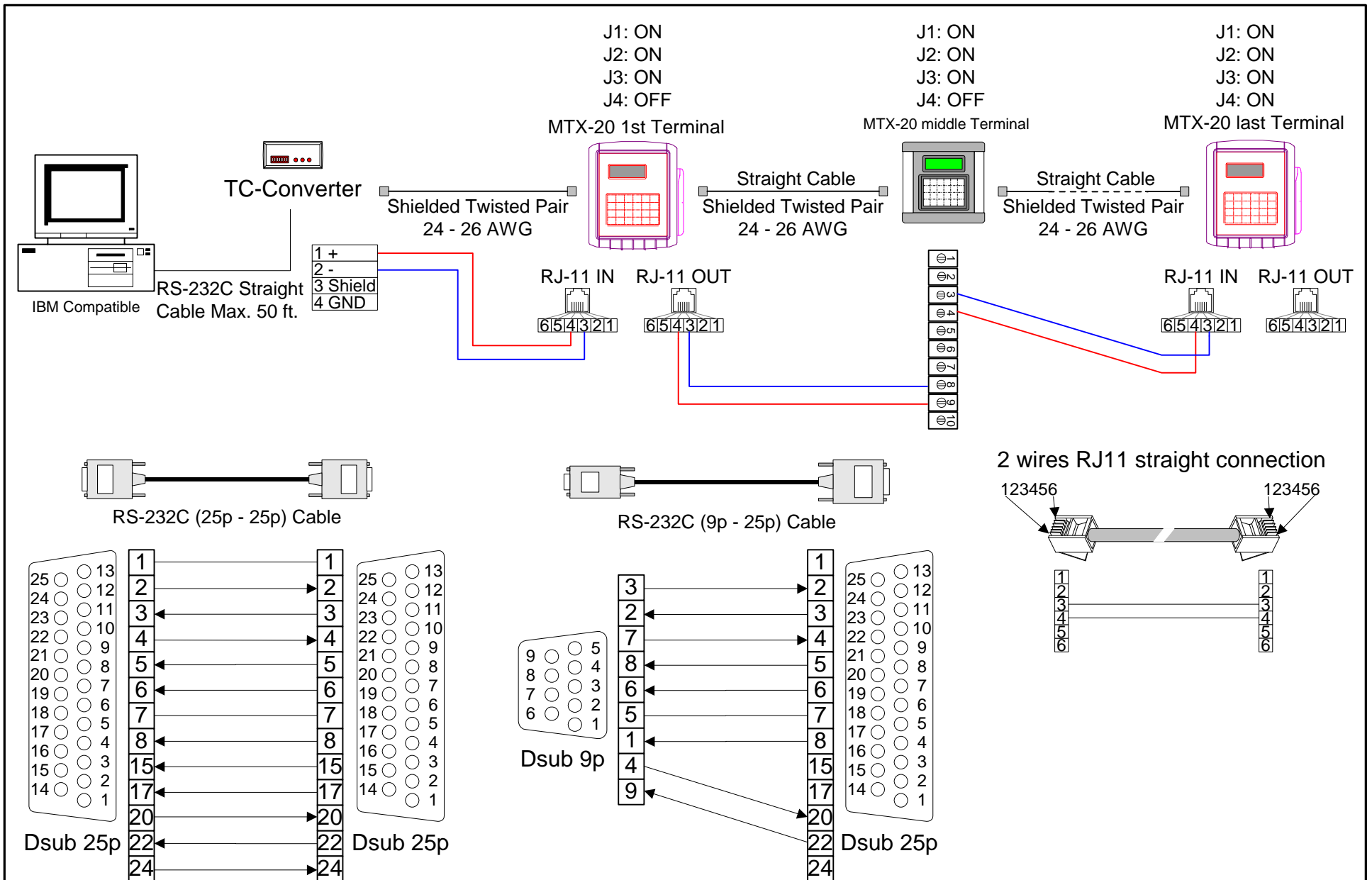
DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

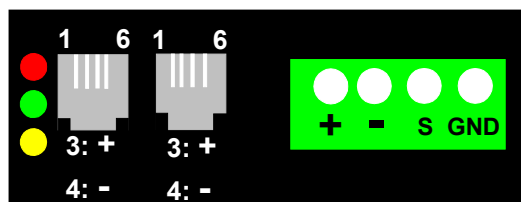
FILENAME: TC2term.vsd



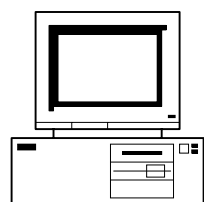
AMANO

TITLE: MTX-20 Combination TC Converter connection (2 wires)				Revised 03/29/01	
COMPANY: AMANO Cincinnati, Inc.		CREATOR: Robert Brady			
DATE: 09/17/96		TIME: 2:47:51 PM		PG: 1 OF 1 PGS	
FILENAME: TC2Combo.vsd					

Connection Side View

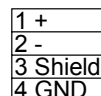


AGP-0509 TC Converter



IBM Compatible

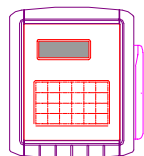
RS-232C Straight Cable Max. 50 ft.
DB9 to DB25 only.



Shielded Twisted Pair
24 - 26 AWG

J1: ON
J2: ON
J3: ON
J4: OFF

MTX-20 1st Terminal

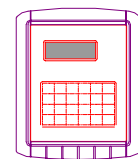


Straight Cable

Shielded Twisted Pair
24 - 26 AWG

J1: ON
J2: ON
J3: ON
J4: OFF

MTX-20 middle Terminal

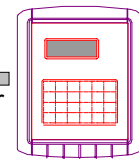


Straight Cable

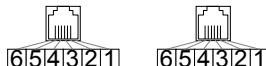
Shielded Twisted Pair
24 - 26 AWG

J1: ON
J2: ON
J3: ON
J4: ON

MTX-20 last Terminal



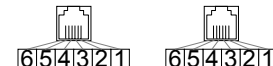
RJ-11 IN RJ-11 OUT



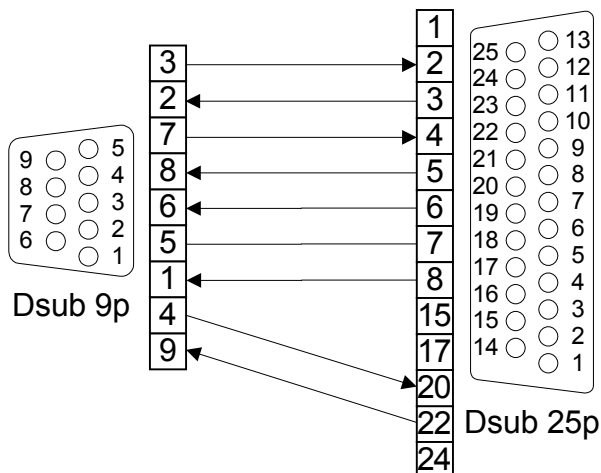
RJ-11 IN RJ-11 OUT



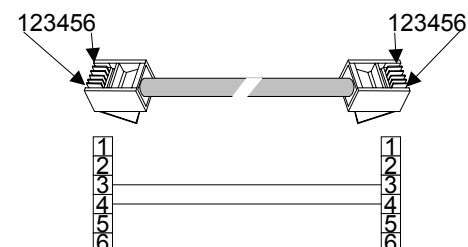
RJ-11 IN RJ-11 OUT



RS-232C (9p - 25p) Cable



2 wires RJ11 straight connection



AMANO

TITLE: MTX-20 with AGP-0509 TC Converter connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/1996

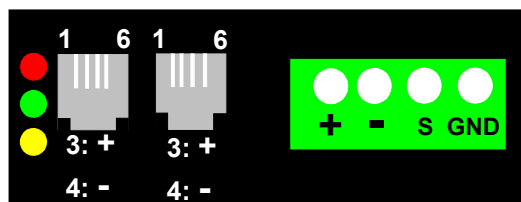
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PG: 1

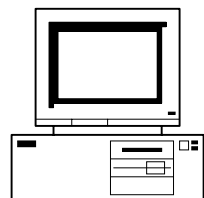
OF 1 PGS

FILENAME: AGP-0509 TC2.vsd

Connection Side View



AGP-0509 TC Converter



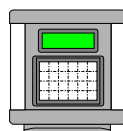
IBM Compatible

RS-232C Straight Cable Max. 50 ft. DB9 to DB25 only.



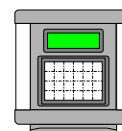
Shielded Twisted Pair
24 - 26 AWG

MTX-20 OD 1st Terminal



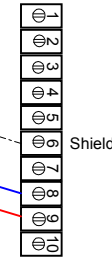
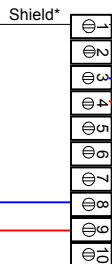
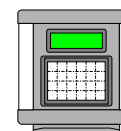
Straight Cable
Shielded Twisted Pair
24 - 26 AWG

MTX-20 OD middle Terminal

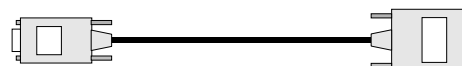


Straight Cable
Shielded Twisted Pair
24 - 26 AWG

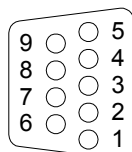
MTX-20 OD last Terminal



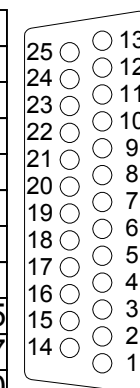
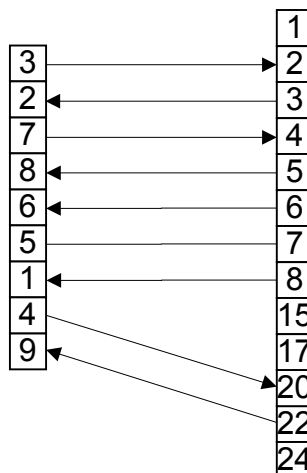
* Not Required



RS-232C (9p - 25p) Cable



Dsub 9p



Dsub 25p

AMANO

TITLE: MTX-20 OD (TB) with AGP-0509 TC Converter connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/1996

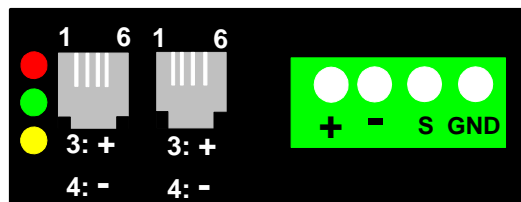
TIME: 2:47:51 PM

PG: 1

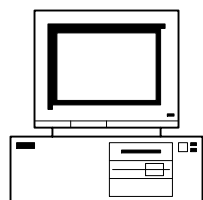
OF 1 PGS

FILENAME: AGP-0509 TC2term.vsd

Connection Side View



AGP-0509 TC Converter

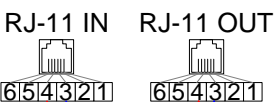


IBM Compatible

RS-232C Straight Cable Max. 50 ft. DB9 to DB25 only.



Shielded Twisted Pair
24 - 26 AWG



MTX-20 1st Terminal

J1: ON
J2: ON
J3: ON
J4: OFF

Straight Cable
Shielded Twisted Pair
24 - 26 AWG

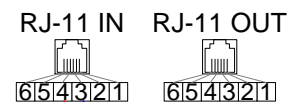
MTX-20 middle Terminal

J1: ON
J2: ON
J3: ON
J4: OFF

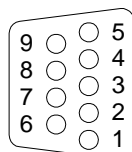
Straight Cable
Shielded Twisted Pair
24 - 26 AWG

MTX-20 last Terminal

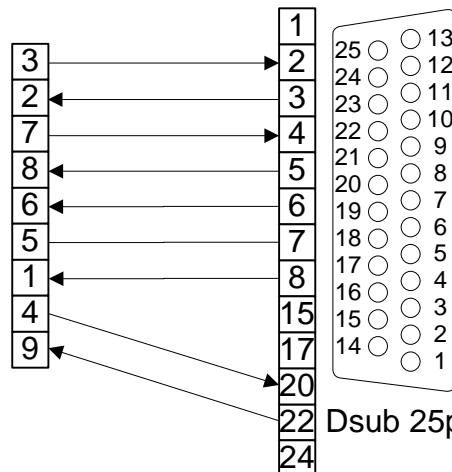
J1: ON
J2: ON
J3: ON
J4: ON



RS-232C (9p - 25p) Cable

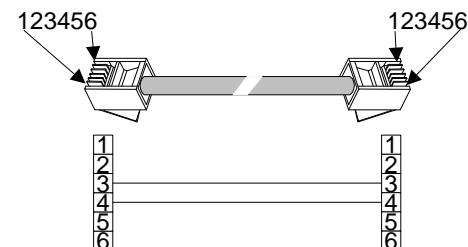


Dsub 9p



Dsub 25p

2 wires RJ11 straight connection



AMANO

TITLE: MTX-20 Combo with AGP-05TC Converter connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

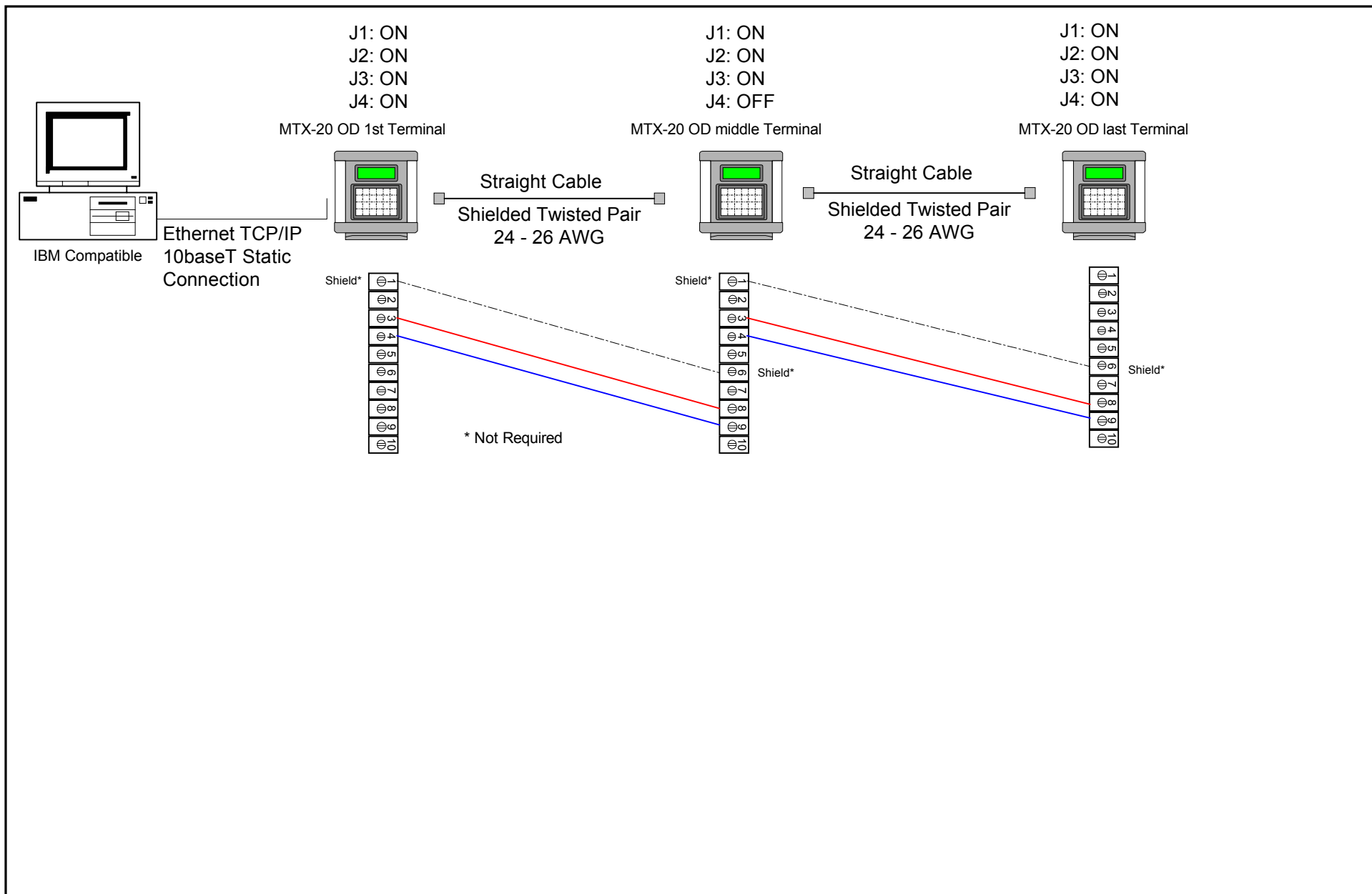
DATE: 09/17/96

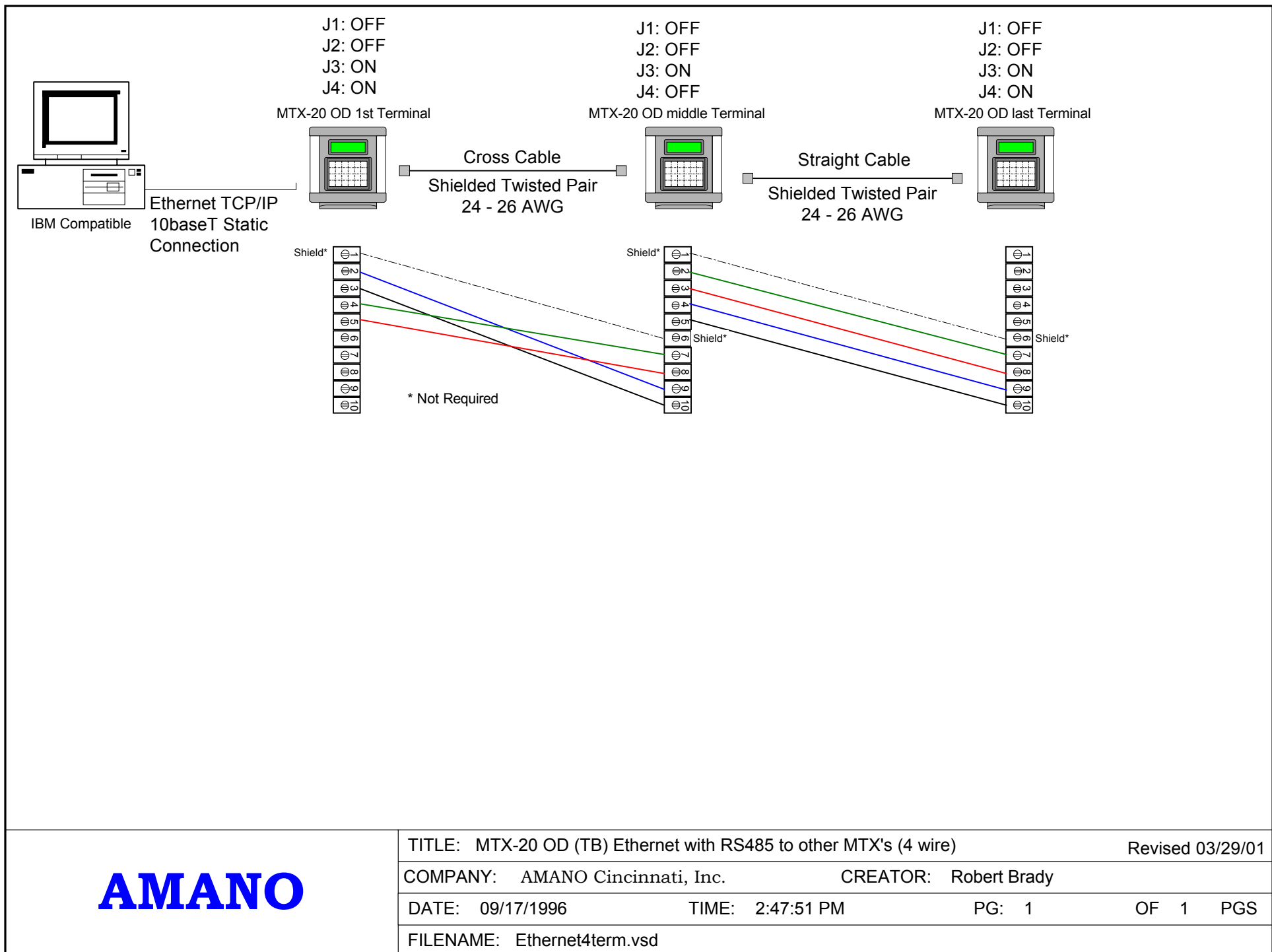
TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: AGP-0509 TC2Combo.vsd





AMANO

TITLE: MTX-20 OD (TB) Ethernet with RS485 to other MTX's (4 wire)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

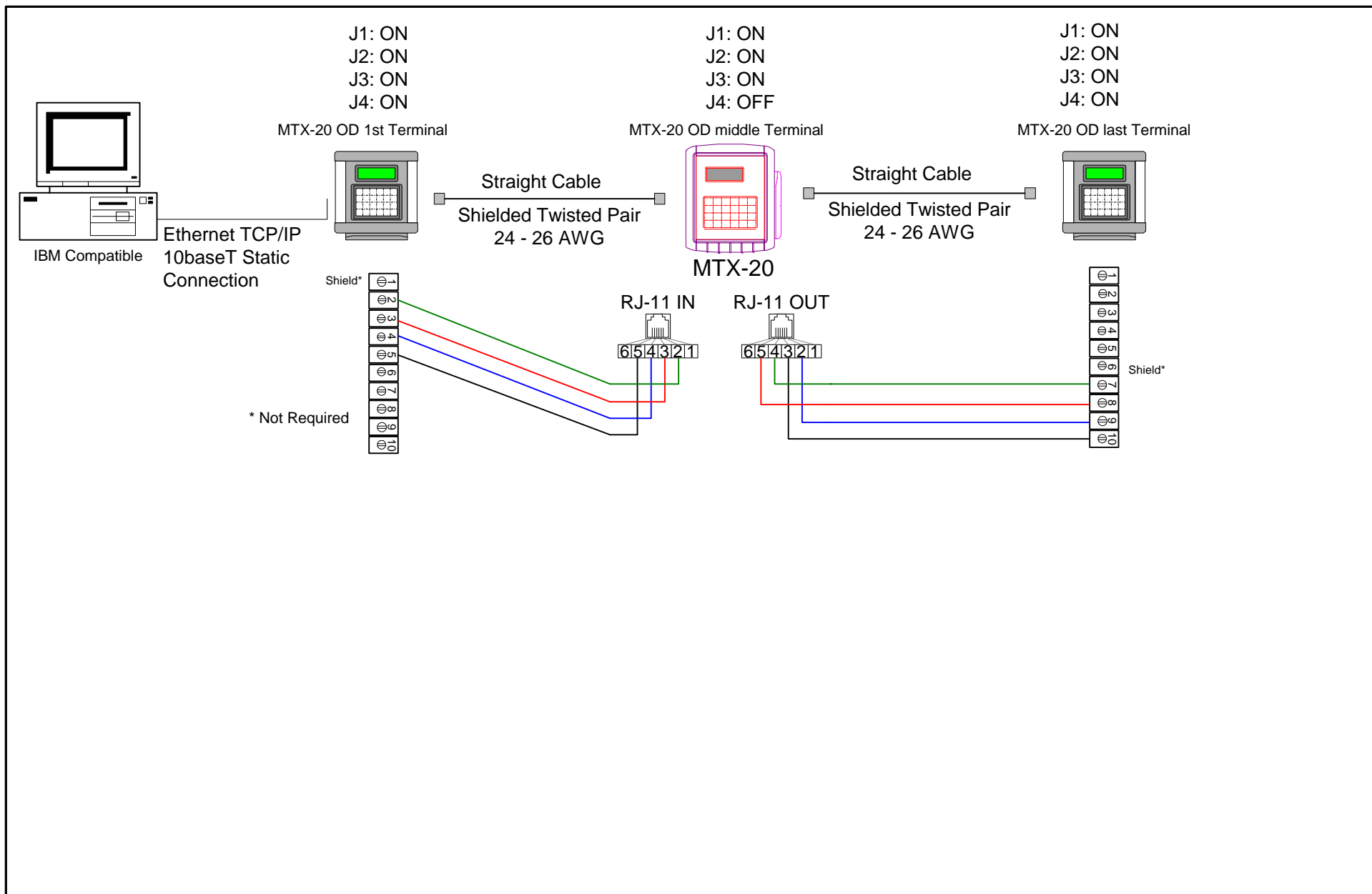
DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

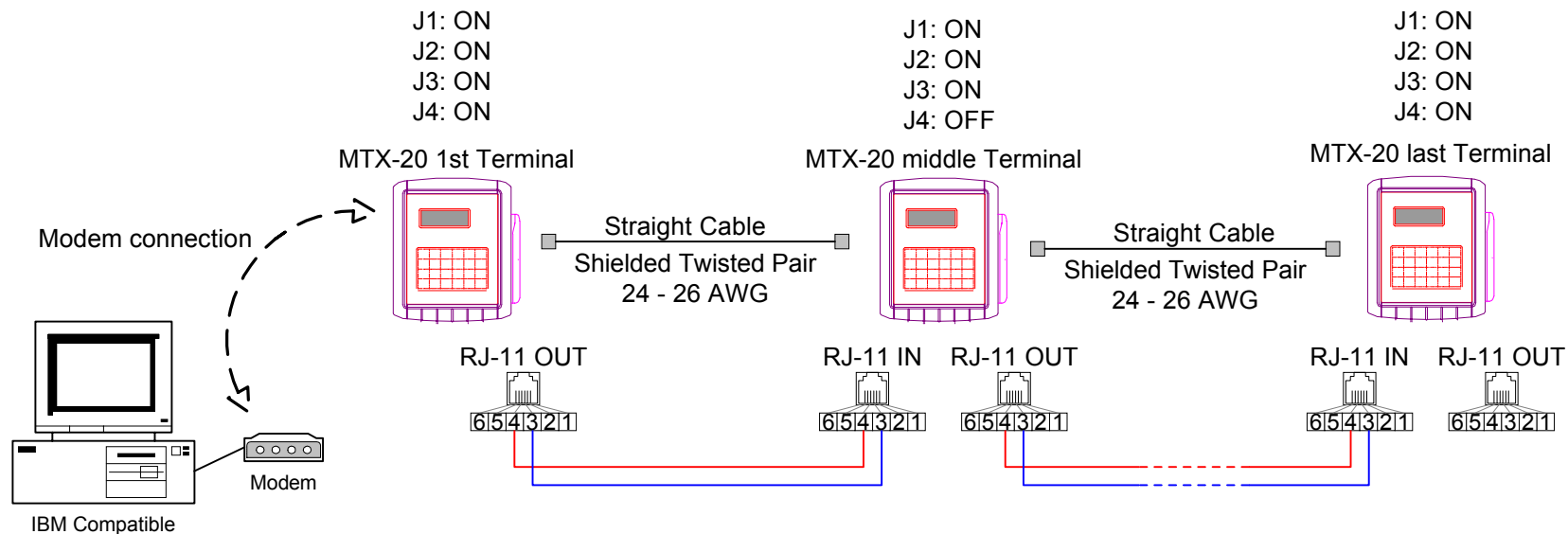
OF 1 PGS

FILENAME: Ethernet4term.vsd

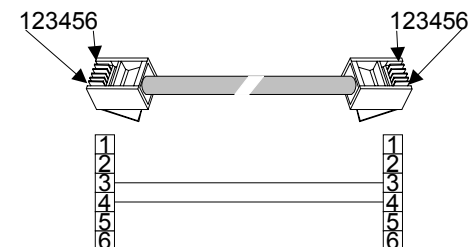


AMANO

TITLE: MTX-20 Combination Ethernet with RS485 to other MTX's (4 wire)		Revised 03/29/01	
COMPANY: AMANO Cincinnati, Inc.		CREATOR: Robert Brady	
DATE: 09/17/96	TIME: 2:47:51 PM	PG: 1	OF 1 PGS
FILENAME: Ethernet4Combo.vsd			



2 wires RJ11 straight connection



AMANO

TITLE: MTX-20 Modem connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

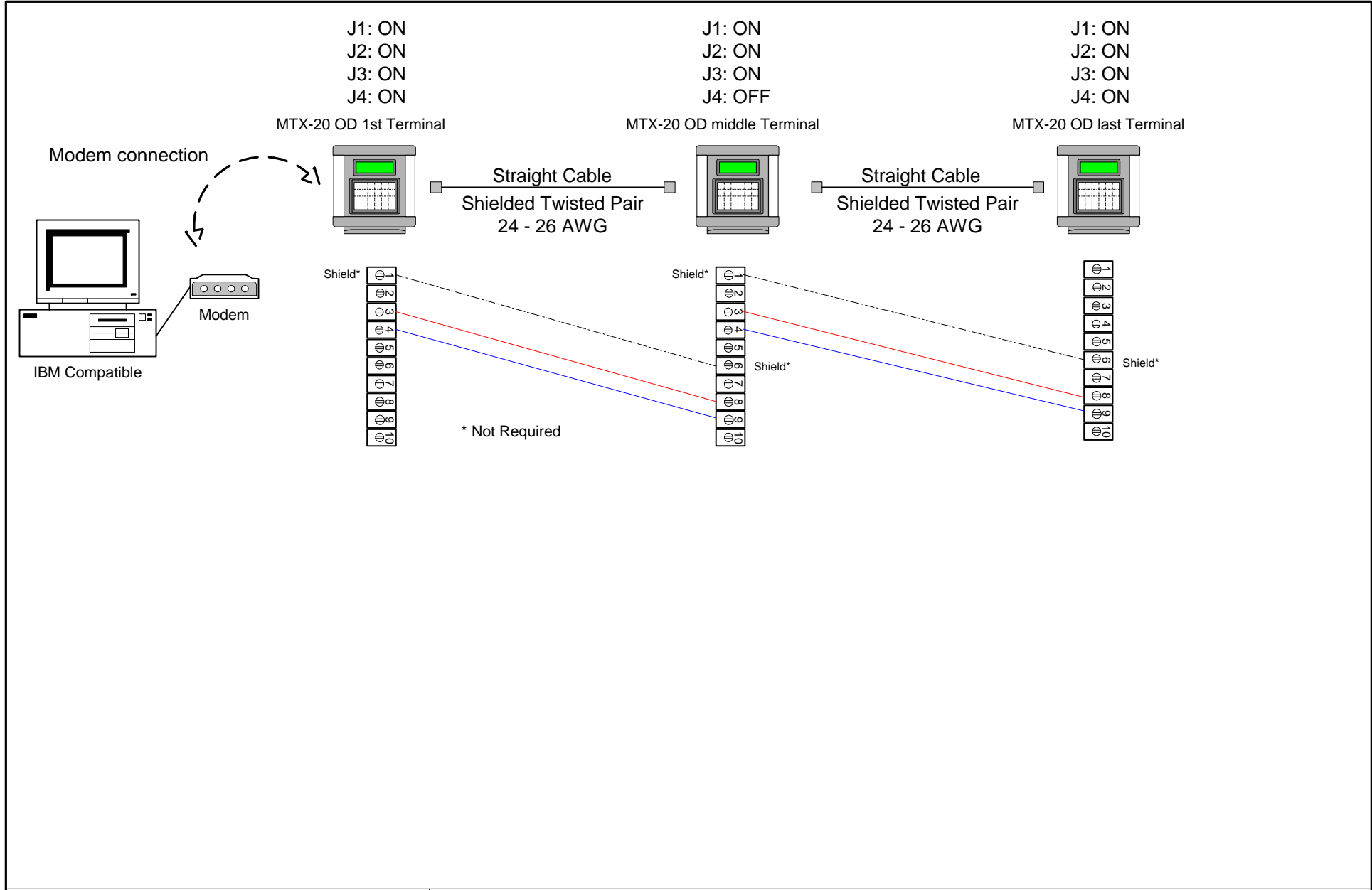
DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Rscnvt2modem.vsd



AMANO

TITLE: MTX-20 OD (TB) Modem connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

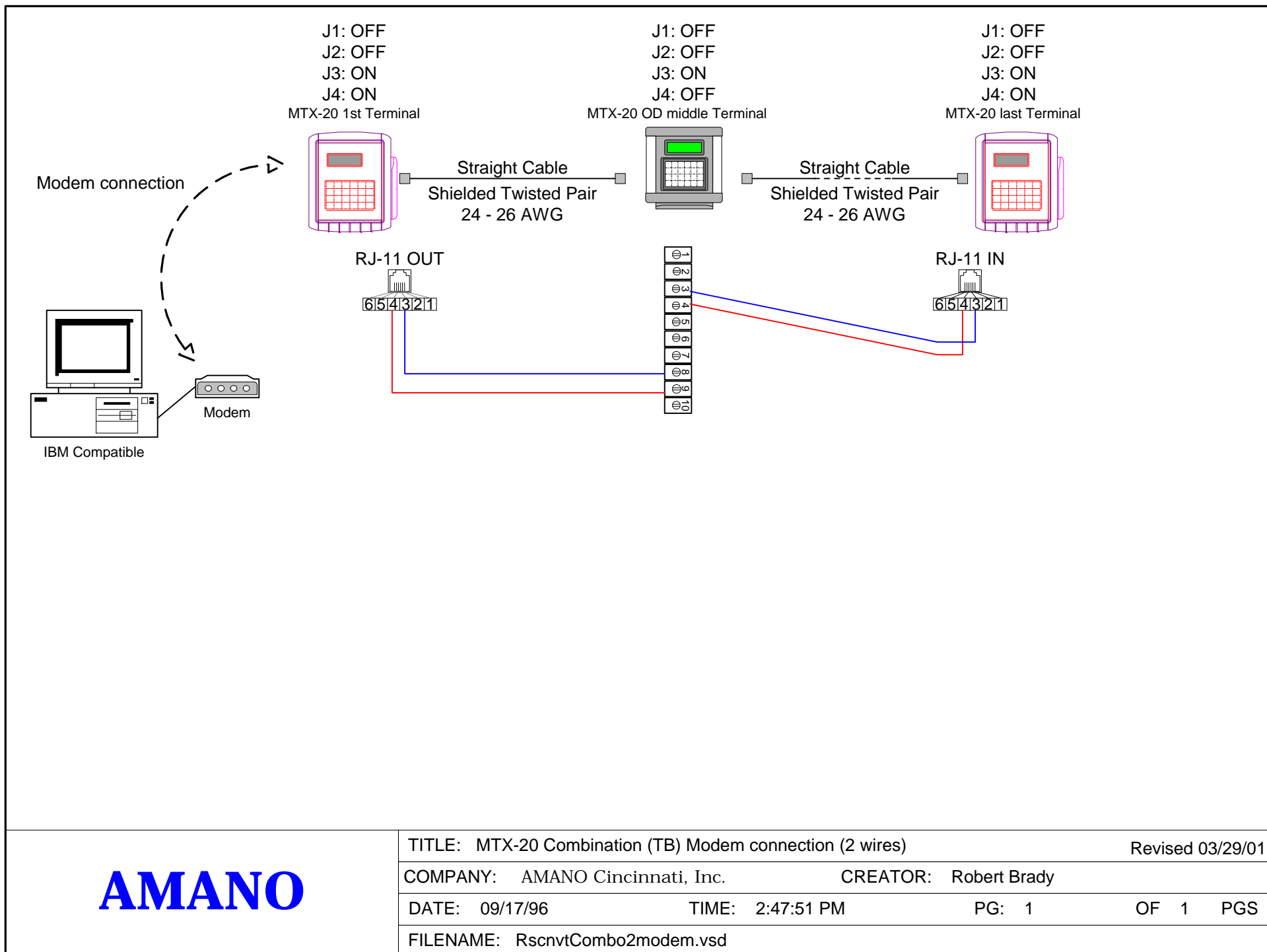
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Rscnvt2termmodem.vsd



AMANO

TITLE: MTX-20 Combination (TB) Modem connection (2 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

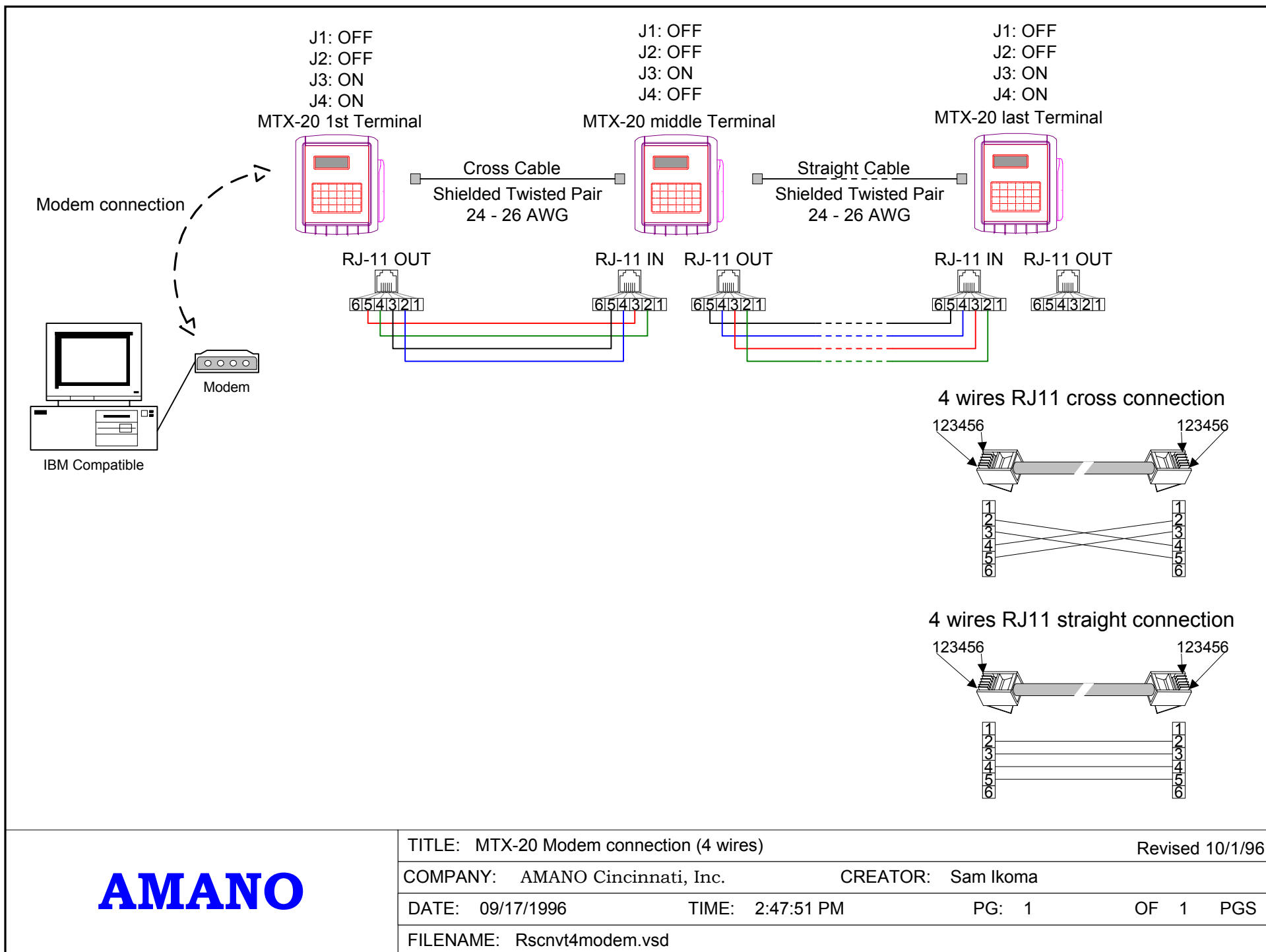
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: RscvntCombo2modem.vsd



AMANO

TITLE: MTX-20 Modem connection (4 wires)

Revised 10/1/96

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

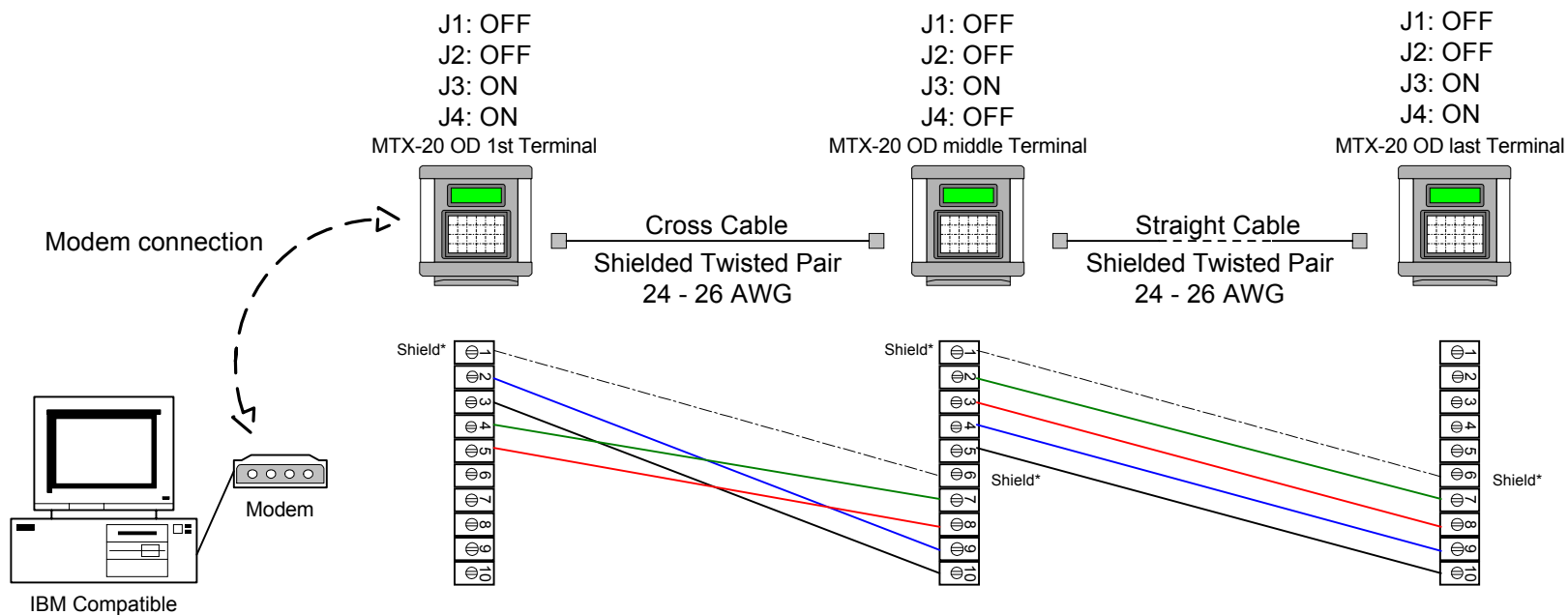
DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Rscnvt4modem.vsd



AMANO

TITLE: MTX-20 OD (TB) Modem connection (4 wires)

Revised 2/8/99

COMPANY: AMANO Cincinnati, Inc.

CREATOR Robert Brady

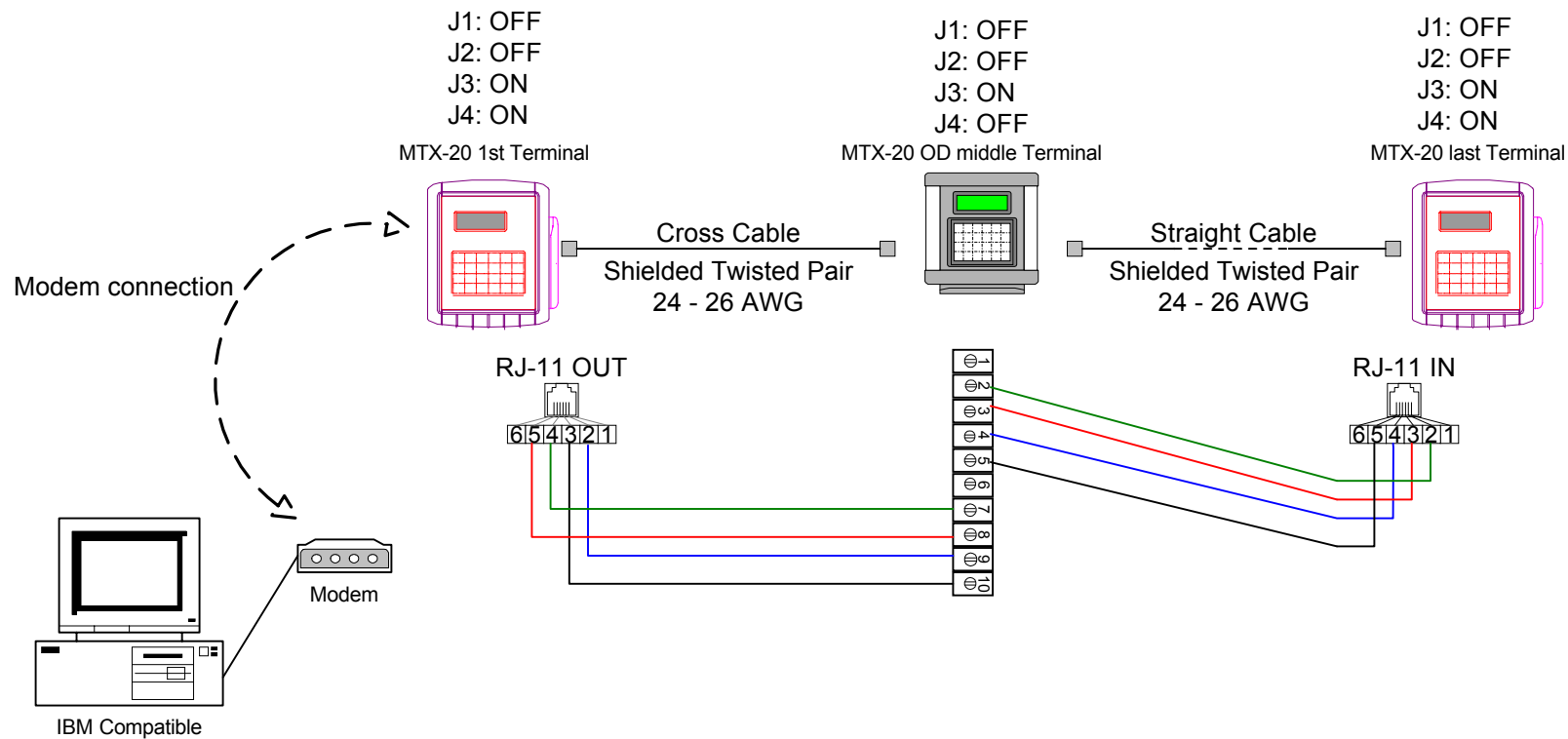
DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: Rscnvt4termmodem.vsd



AMANO

TITLE: MTX-20 Combination (TB) Modem connection (4 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/1996

TIME: 2:47:51 PM

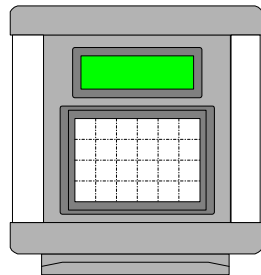
PG: 1

OF 1 PGS

FILENAME: RscvntCombo4modem.vsd

MTX Peripherals

MTX-20 OD Terminal

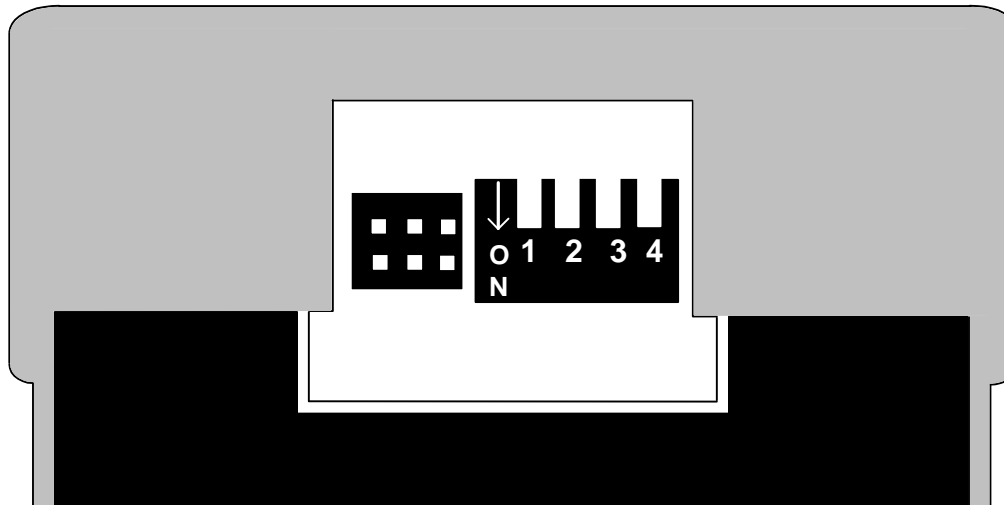


Using:

	1	2	3	4
Barcode & Magstripe Tracks 1 & 2	OFF	ON	OFF	OFF

Magstripe - Track 3

ON	OFF	ON	ON
----	-----	----	----



* Not to Scale

MTX terminal ships from factory with dip-switches set for use with attached reader. If you need to change the reader type, adjust the dip-switches accordingly.

Side View of MTX with Slot Reader removed

AMANO

TITLE: MTX Slot Reader Jumper settings

Revised 04/05/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/96

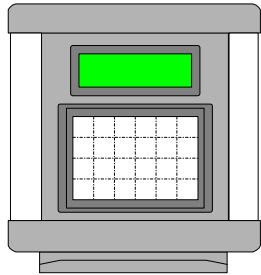
TIME: 2:47:51 PM

PG: 1

OF 1 PGS

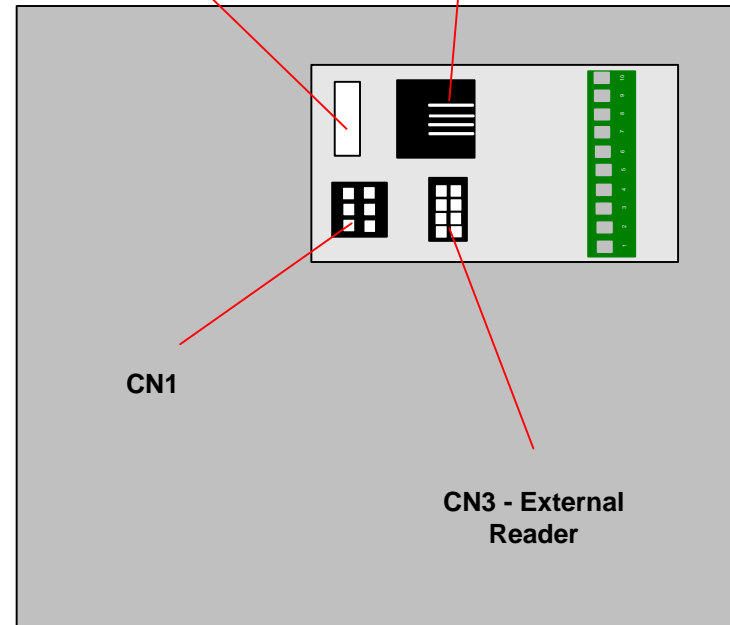
FILENAME: MTX Slot Reader Jumpers.vsd

MTX-20 OD Terminal



Power Supply connection

CN4 - Wand Reader



CN1

CN3 - External Reader

Back view of MTX

* Not to Scale

BarWand Reader connects to CN4 on MTX

* Not to Scale

AMANO

TITLE: MTX with BarWand Reader

Revised 04/06/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/96

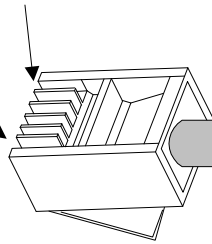
TIME: 2:47:51 PM

PG: 1

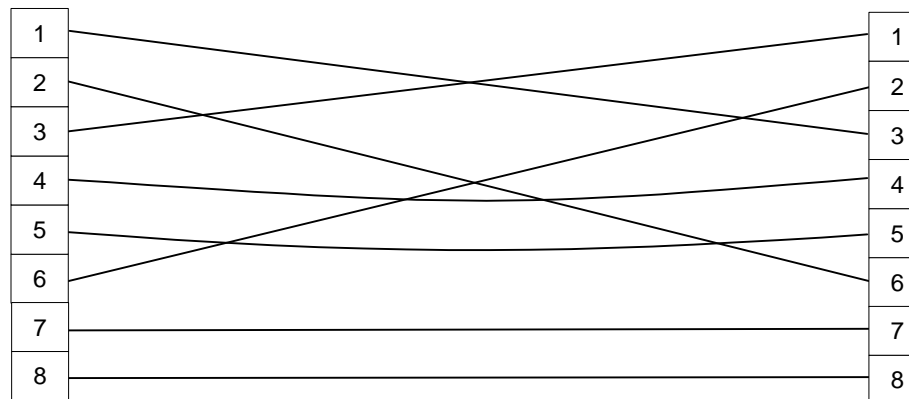
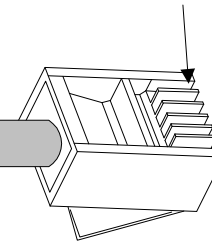
OF 1 PGS

FILENAME: MTX BarWand.vsd

12345678



12345678



AMANO

TITLE: Ethernet Cross Cable

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Brady

DATE: 0

TIME: 0

PG: 1

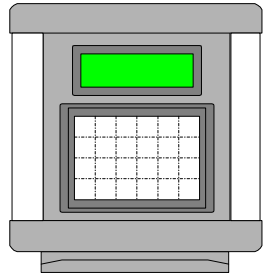
OF 1

PGS

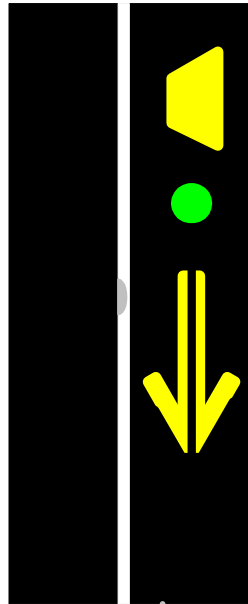
FILENAME: Ethernet cross cable.vsd

Power Supply connection

MTX-20 OD Terminal

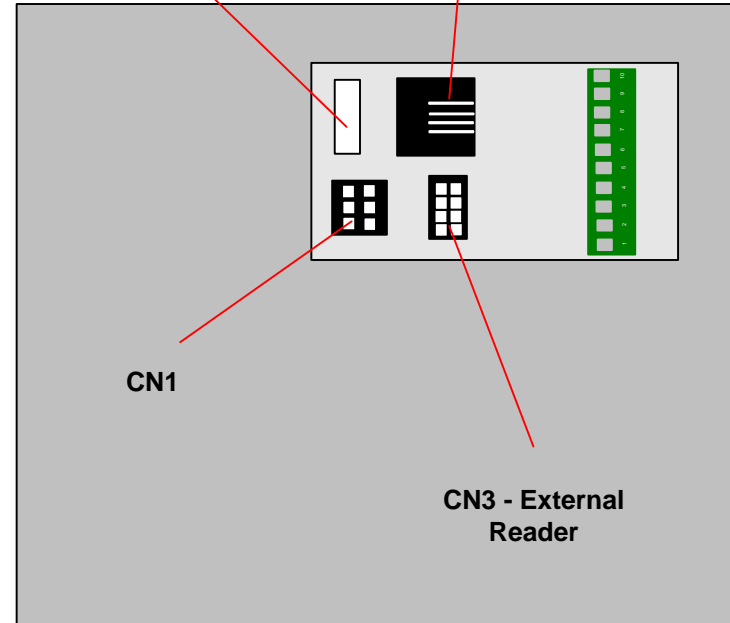


External MAG
Reader
connects to
CN3
on MTX



* Not to Scale

CN4 - Wand Reader



CN1

CN3 - External
Reader

Back view of MTX

* Not to Scale

AMANO

TITLE: MTX with External MAG Reader

Revised 04/06/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

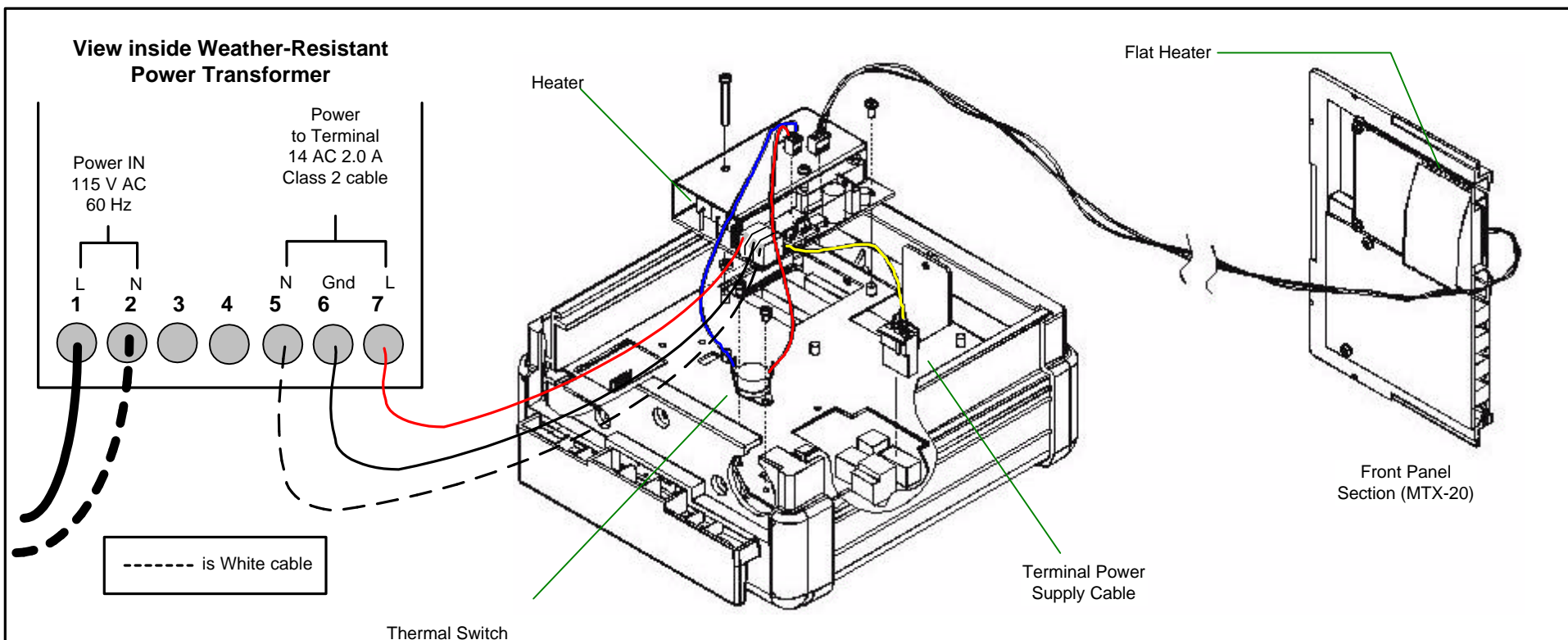
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: External MAG Reader.vsd



The Heater Option is designed to provide reliable operation of the MTX terminal at temperatures as low as -20° C (-4°F). The Full Power Reserve Kit cannot be used with MTX terminals equipped with the Heater Option.

Use of these terminals requires an external 14 VAC, 2A, weather-resistant transformer (provided). The transformer case is equipped with a gasket that seals and protects the transformer from moisture and other external conditions. Installation also requires that a piece of self-adhesive thermal insulation (provided) be placed on the wall plate to protect the circuitry inside the terminal.

The Heater is controlled by a thermal switch which turns the heater on when the temperature drops below 4.5° C (40° F), and turns off when the temperature rises above 15.6° C (60° F).

MTX-20 terminals equipped with the Heater Option also have an additional flat heater that is inserted behind the LCD display. This additional heater protects the display from cold temperatures by maintaining a constant temperature.

* Not to Scale
**Colors shown are for diagram purposes only. These are not the actual colors of the cables as shipped.

AMANO

TITLE: MTX with Internal Heater Option

Revised 04/06/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/96

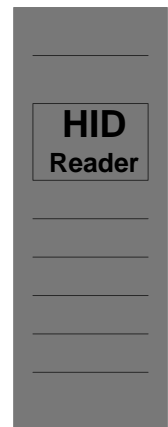
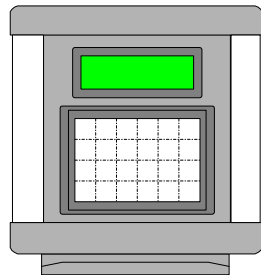
TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: MTX HeaterOption.vsd

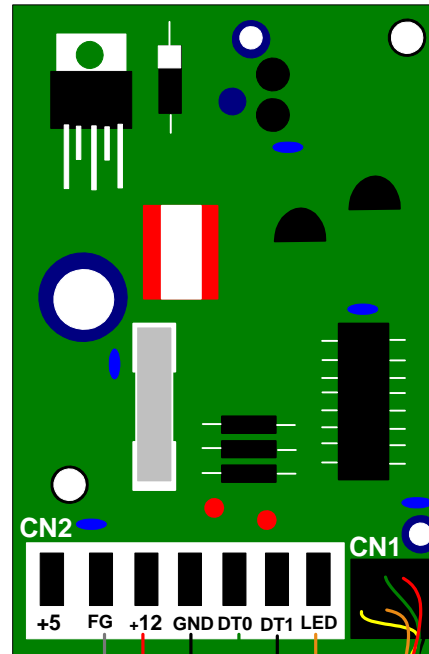
MTX-20 OD Terminal



Description:	Motorola wire:	CN2:
+DC Power	Red	→ +12
Ground	Black	→ GND
Data 0	Green	→ DT0
Data 1	White	→ DT1
LED	Orange	→ LED
Field Ground	(shielding)	→ FG

* Not to Scale

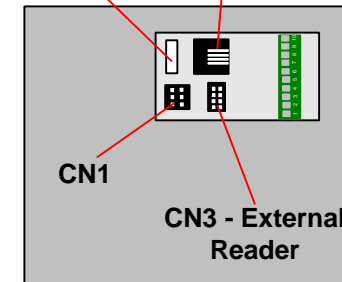
Back view of MTX



Power Supply connection

CN4 - Wand Reader

* Not to Scale



CN1 Connects to CN3 on MTX

* - - - - is the WHITE wire

AMANO

TITLE: MTX with HID Reader

Revised 04/06/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/96

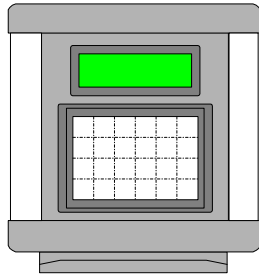
TIME: 2:47:51 PM

PG: 1

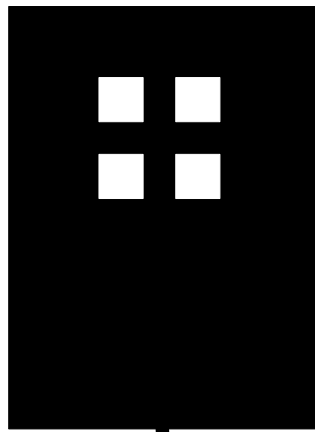
OF 1 PGS

FILENAME: MTX HID.vsd

MTX-20 OD Terminal

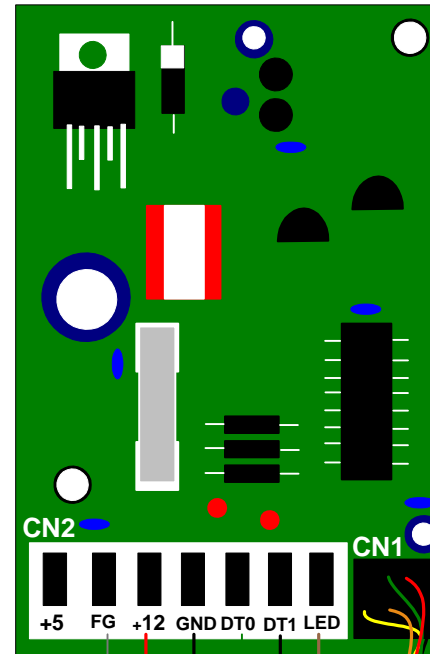


Motorola Proximity Reader



Description:	Motorola wire:	CN2:
+DC Power	Red →	+12
Ground	Black →	GND
Data 0	Green →	DT0
Data 1	White →	DT1
LED	Brown →	LED
Field Ground	(shielding) →	FG

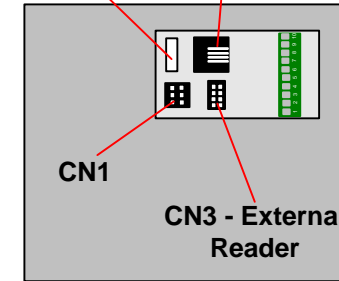
Back view of MTX



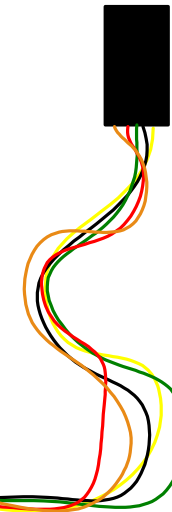
Power Supply connection

CN4 - Wand Reader

* Not to Scale



CN1 Connects to CN3 on MTX



* Not to Scale

* - - - - is the WHITE wire

AMANO

TITLE: MTX with Motorola Proximity Reader

Revised 04/06/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/96

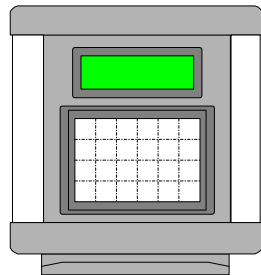
TIME: 2:47:51 PM

PG: 1

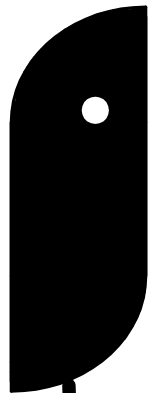
OF 1 PGS

FILENAME: MTX Motorola.vsd

MTX-20 OD Terminal

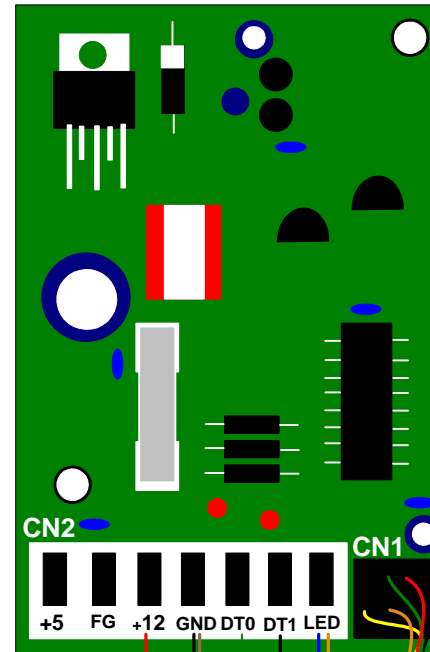


SecuraKey Proximity Reader



Description:	Motorola wire:	CN2:
+DC Power	Red →	+12
Ground	Black →	GND
Data 0	Green →	DT0
Data 1	White →	DT1
Red LED	Brown →	GND
Green LED	Orange →	LED
Buzzer Input	Blue →	LED

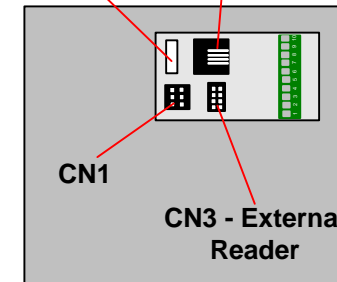
Back view of MTX



Power Supply connection

CN4 - Wand Reader

* Not to Scale



CN1 Connects to CN3 on MTX



* Not to Scale

* - - - - is the WHITE wire

AMANO

TITLE: MTX with SecuraKey Proximity Reader

Revised 04/06/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/96

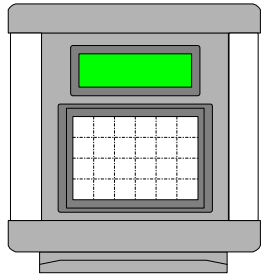
TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: MTX SecuraKey.vsd

MTX-20 OD Terminal

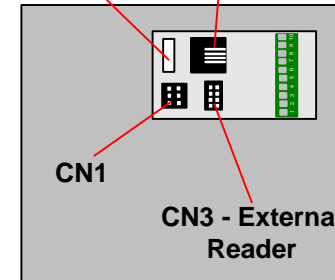


J8: ON
J9: ON

Try with these jumpers ON
if having communication
problems.

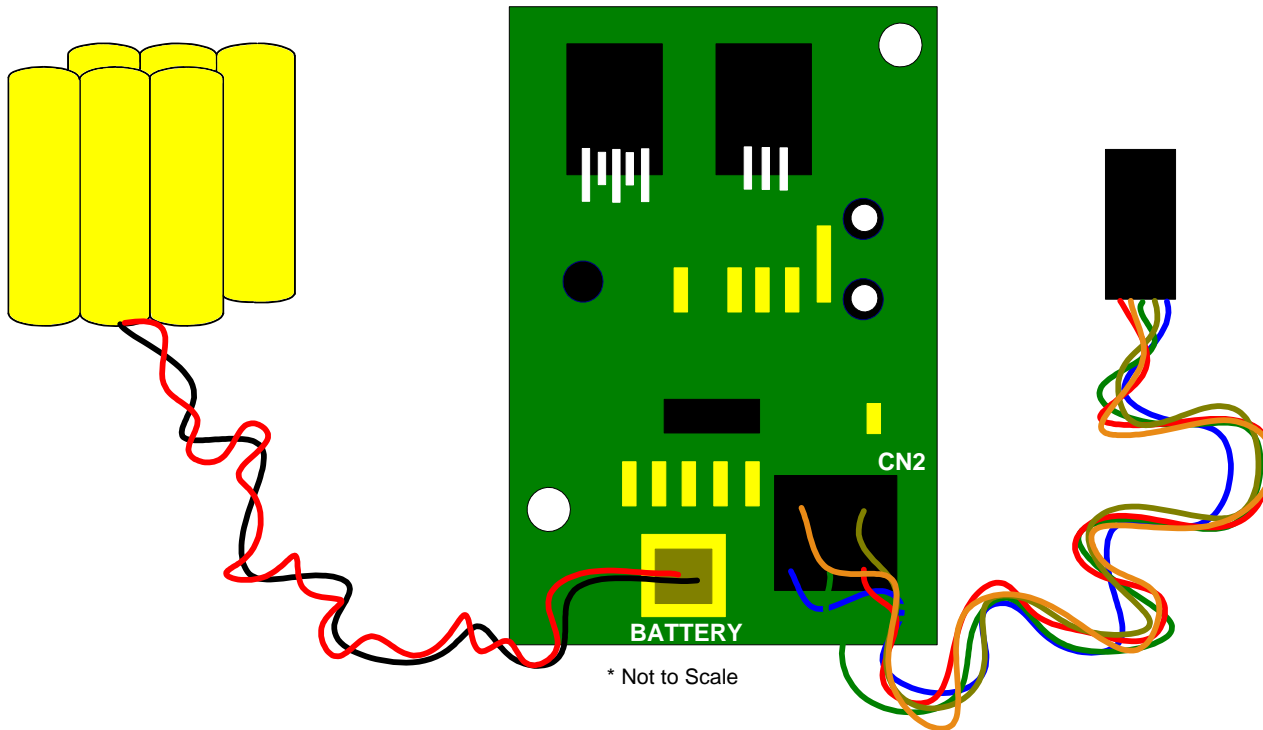
Power Supply
connection

CN4 - Wand
Reader



* Not to Scale

Back view of MTX



* Not to Scale

CN2
Connects to
CN1 on MTX

AMANO

TITLE: MTX Full Power Reserve Kit

Revised 04/05/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/96

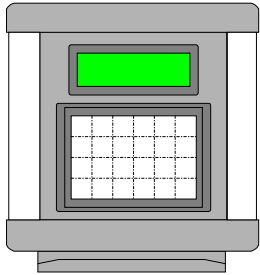
TIME: 2:47:51 PM

PG: 1

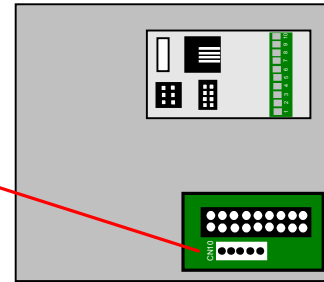
OF 1 PGS

FILENAME: MTX Full Power Reserve Kit.vsd

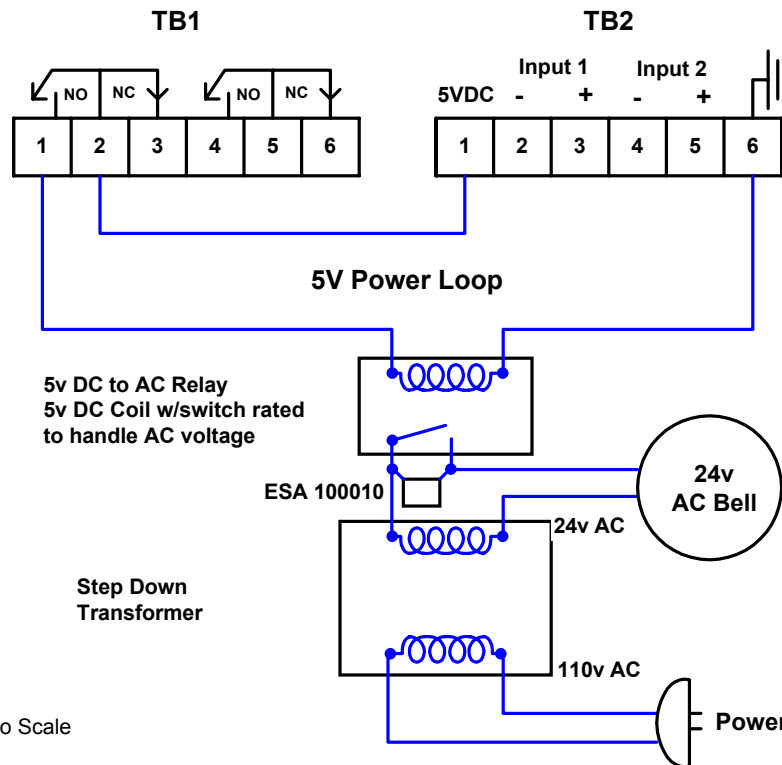
MTX-20 OD Terminal



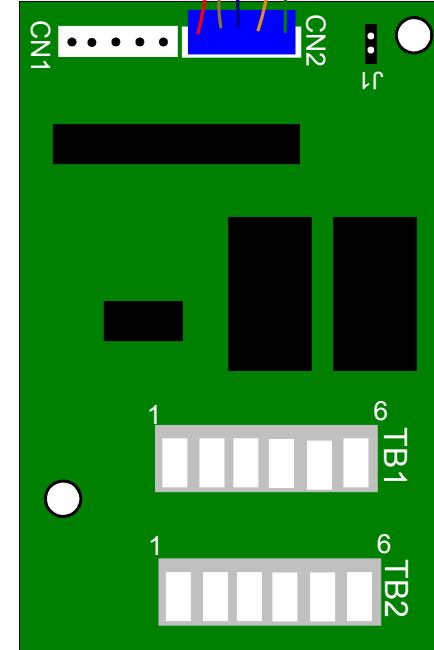
CN5 connector



Back View of MTX



* Not to Scale



Connects to CN5 on MTX

Relay Kit

*Note
J1 is OFF if there is only one signal board attached to the MTX.

AMANO

TITLE: MTX with 24V Bell/Door Strike Item

Revised 04/20/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/1996

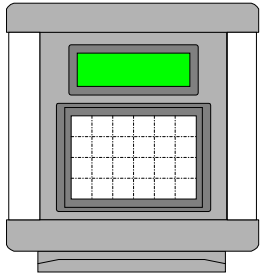
TIME: 2:47:51 PM

PG: 1

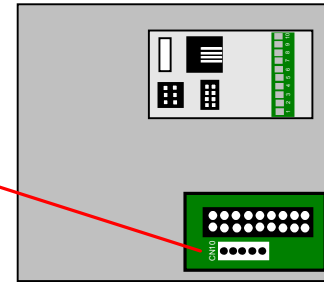
OF 1 PGS

FILENAME: MTX 24V Bell-Door.vsd

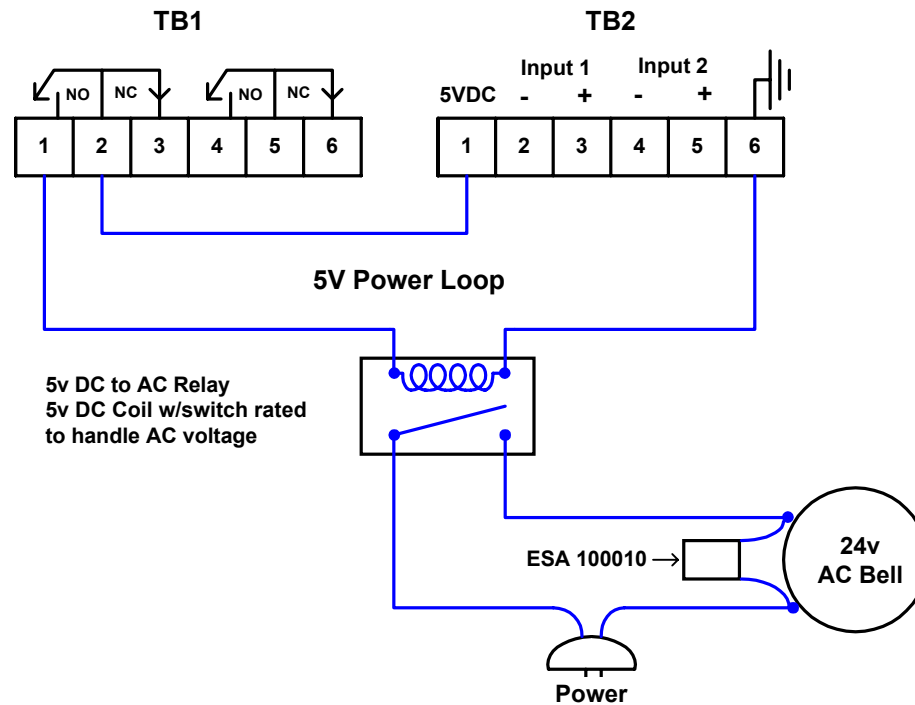
MTX-20 OD Terminal



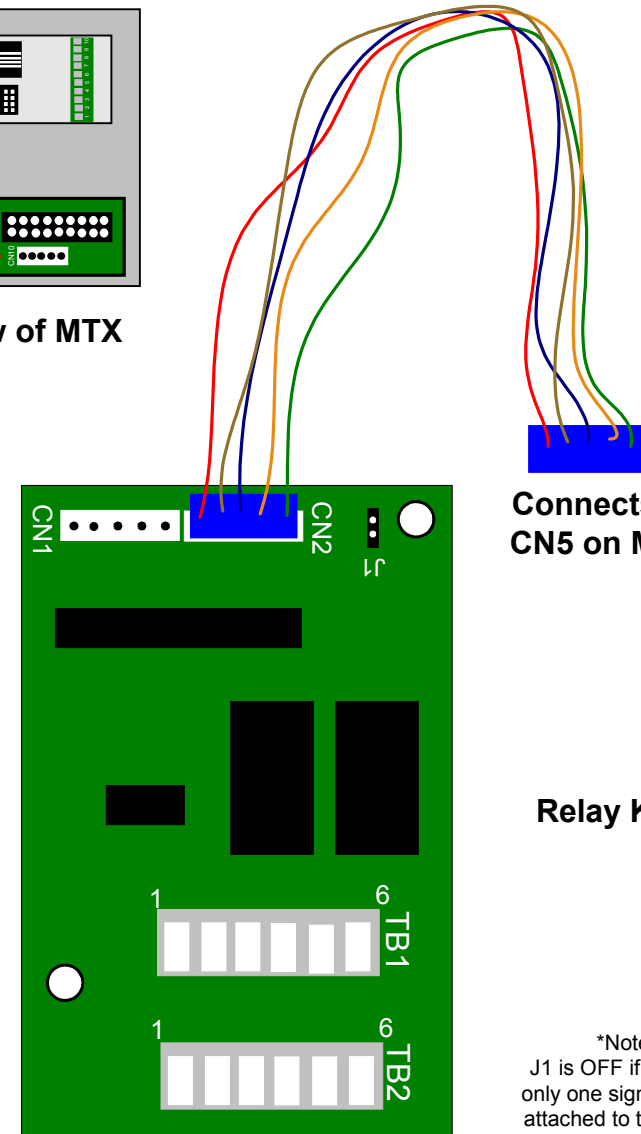
CN5 connector



Back View of MTX



* Not to Scale



AMANO

TITLE: MTX with 120V Bell/Door Strike Item

Revised 04/20/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/1996

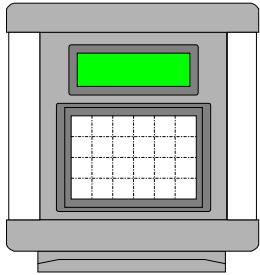
TIME: 2:47:51 PM

PG: 1

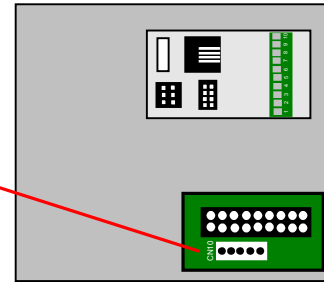
OF 1 PGS

FILENAME: MTX 120V Bell-Door.vsd

MTX-20 OD Terminal

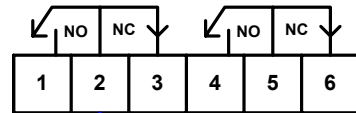


CN5 connector

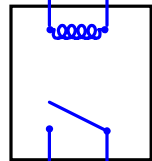


Back View of MTX

TB1



9to12 Volt
Power Supply



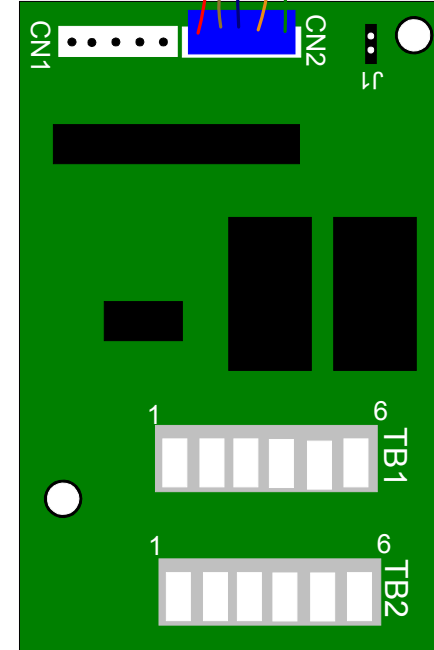
NTE Relay
R47-1015-12
SPST-N0 15A-12VDC

AC
Power

Bell

* Not to Scale

Connects to
CN5 on MTX



Relay Kit

*Note
J1 is OFF if there is
only one signal board
attached to the MTX.

AMANO

TITLE: MTX with Simple Relay

Revised 04/20/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 09/17/1996

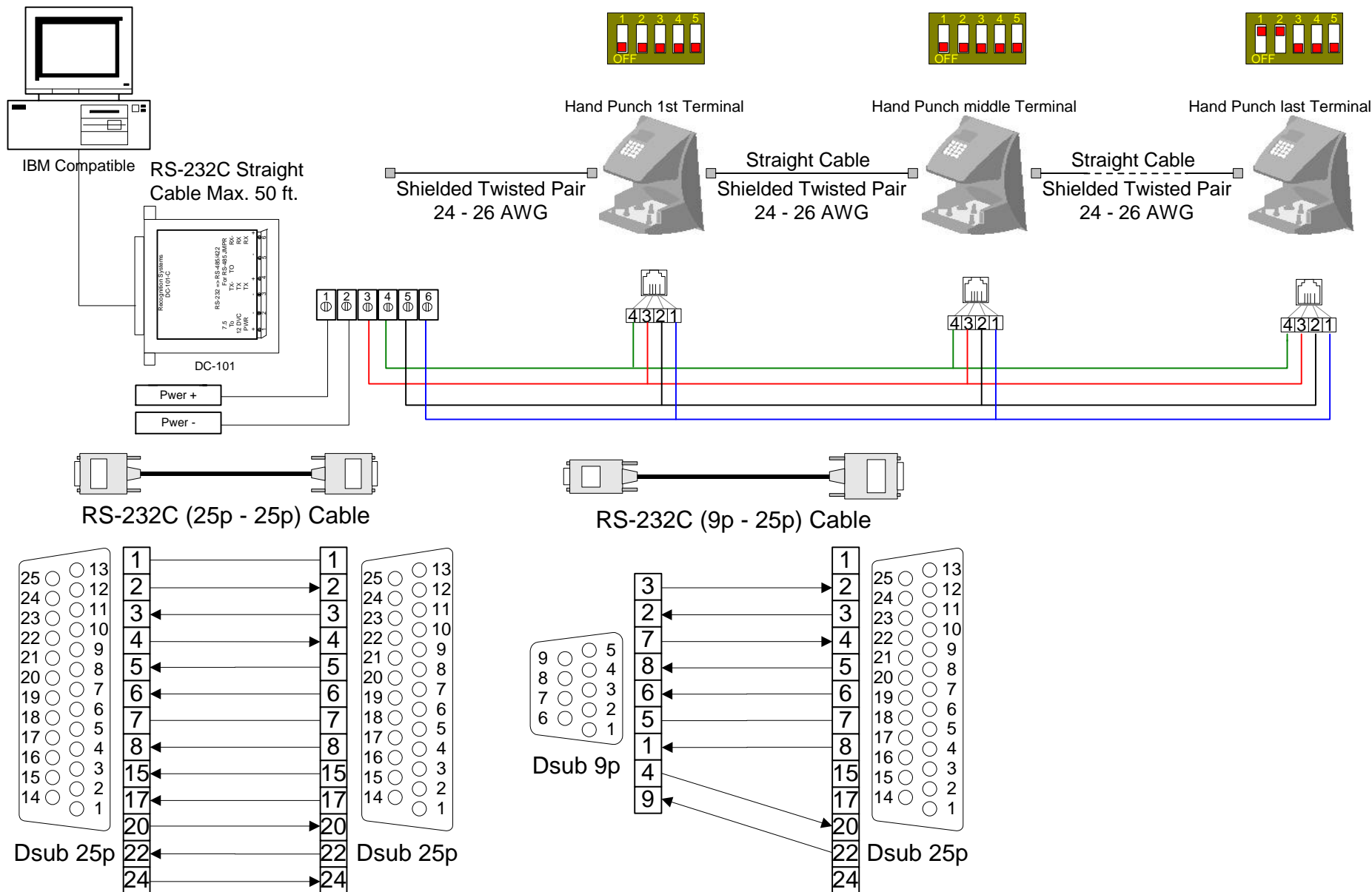
TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: MTX Simple Relay.vsd

HandPunch Terminals



AMANO

TITLE: Hand Punch New Style connected with DC-101

Revised 12/15/99

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

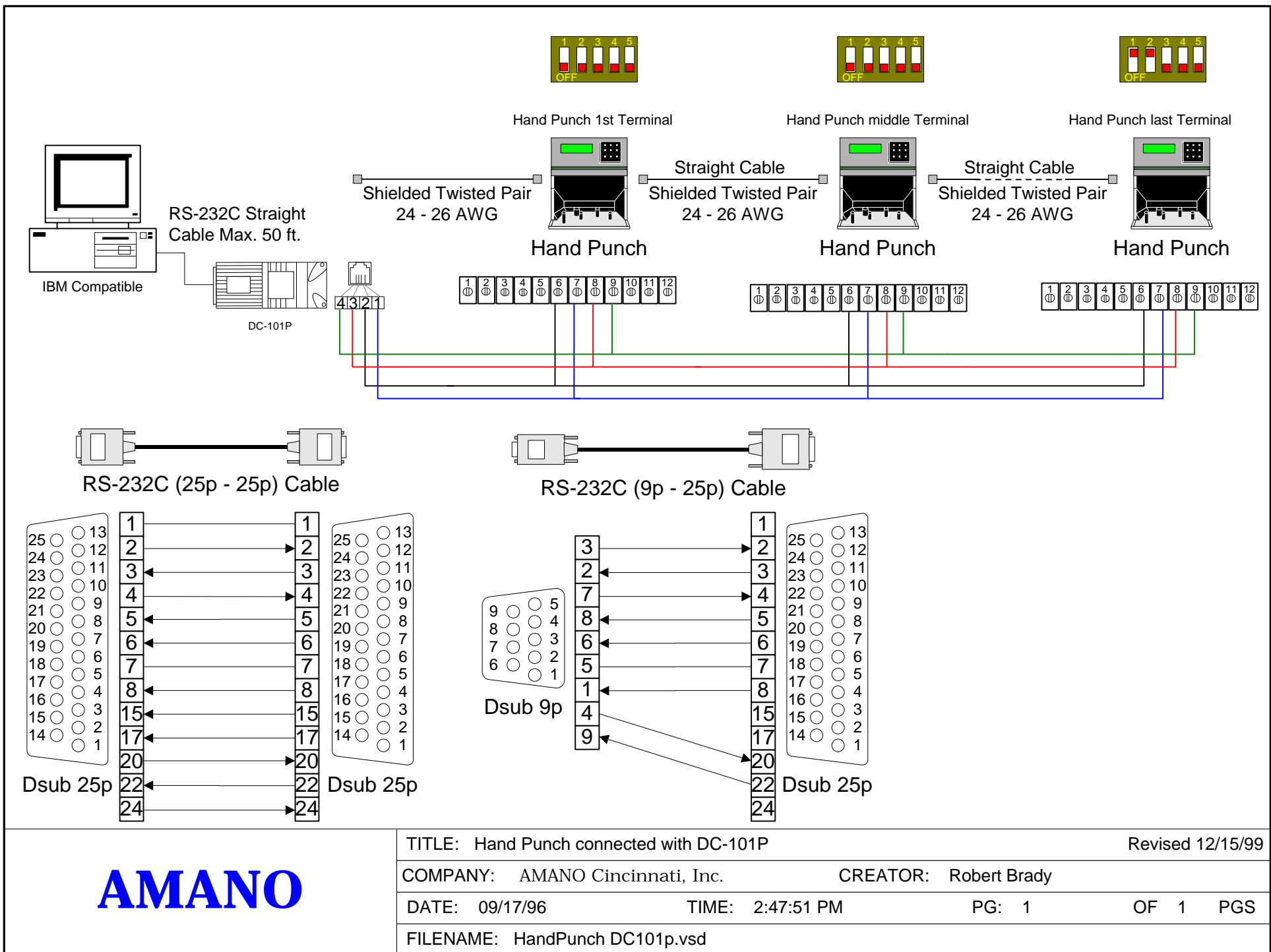
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

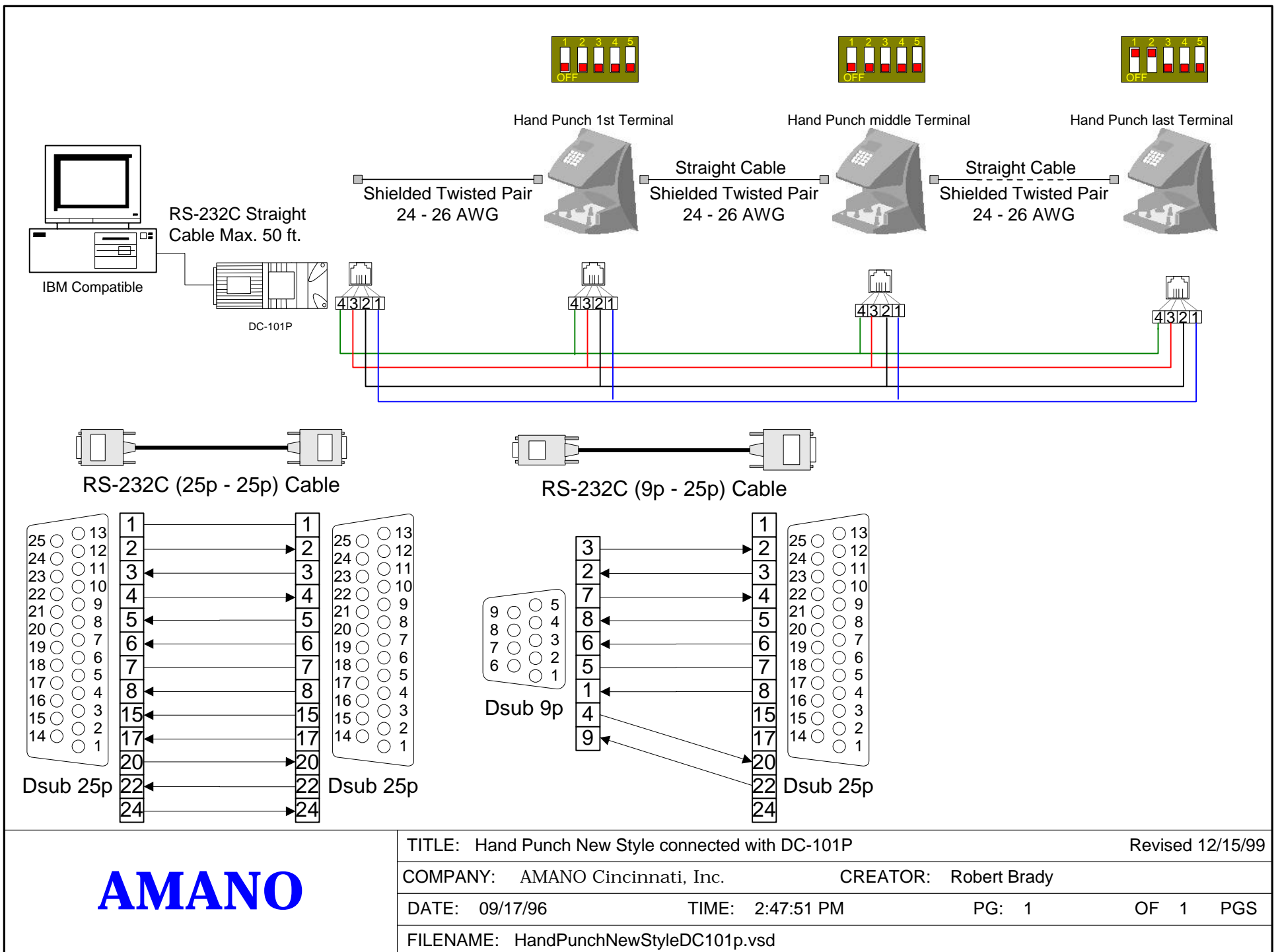
OF 1 PGS

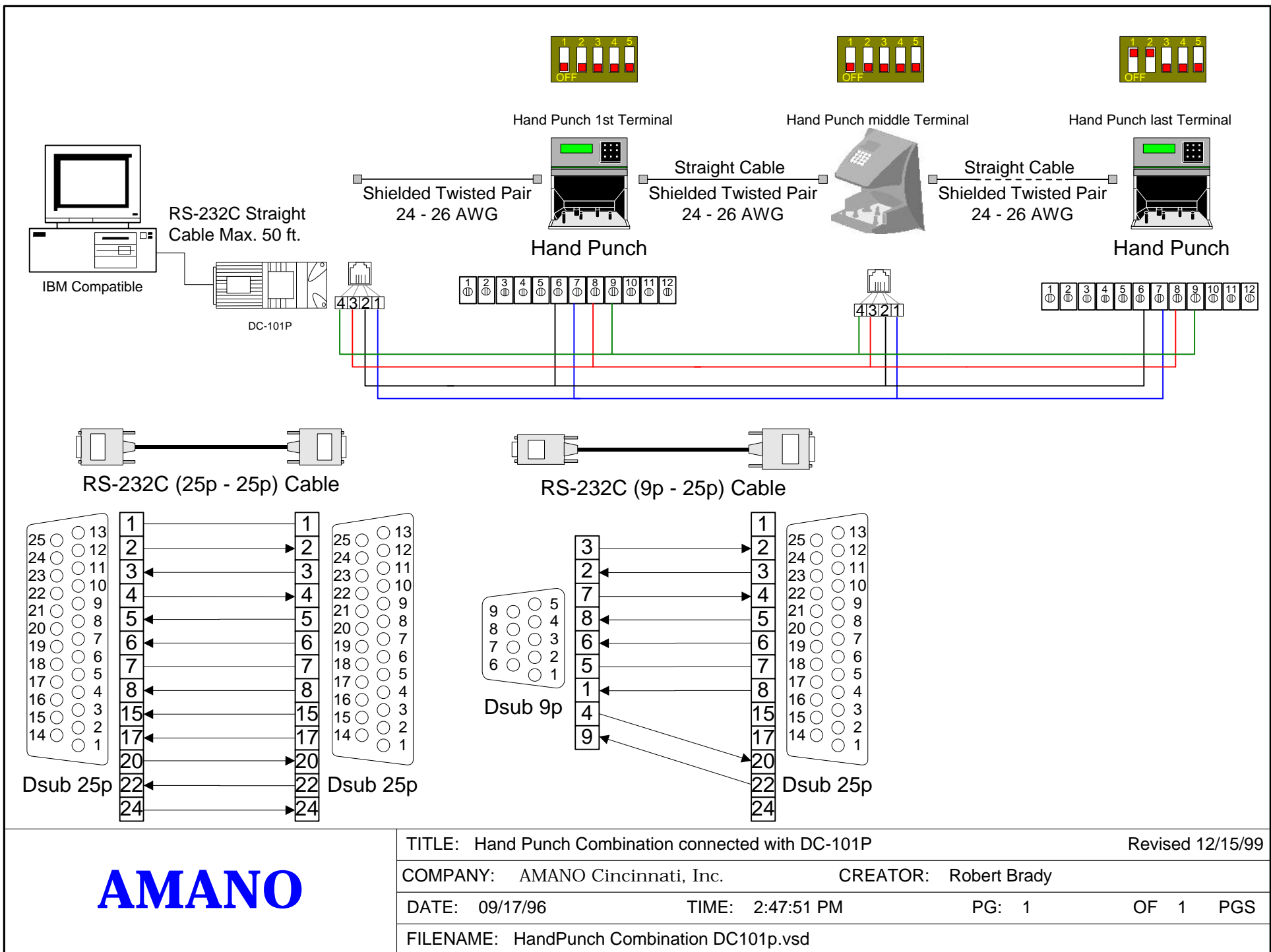
FILENAME: HandPunchNewStyleDC101.vsd

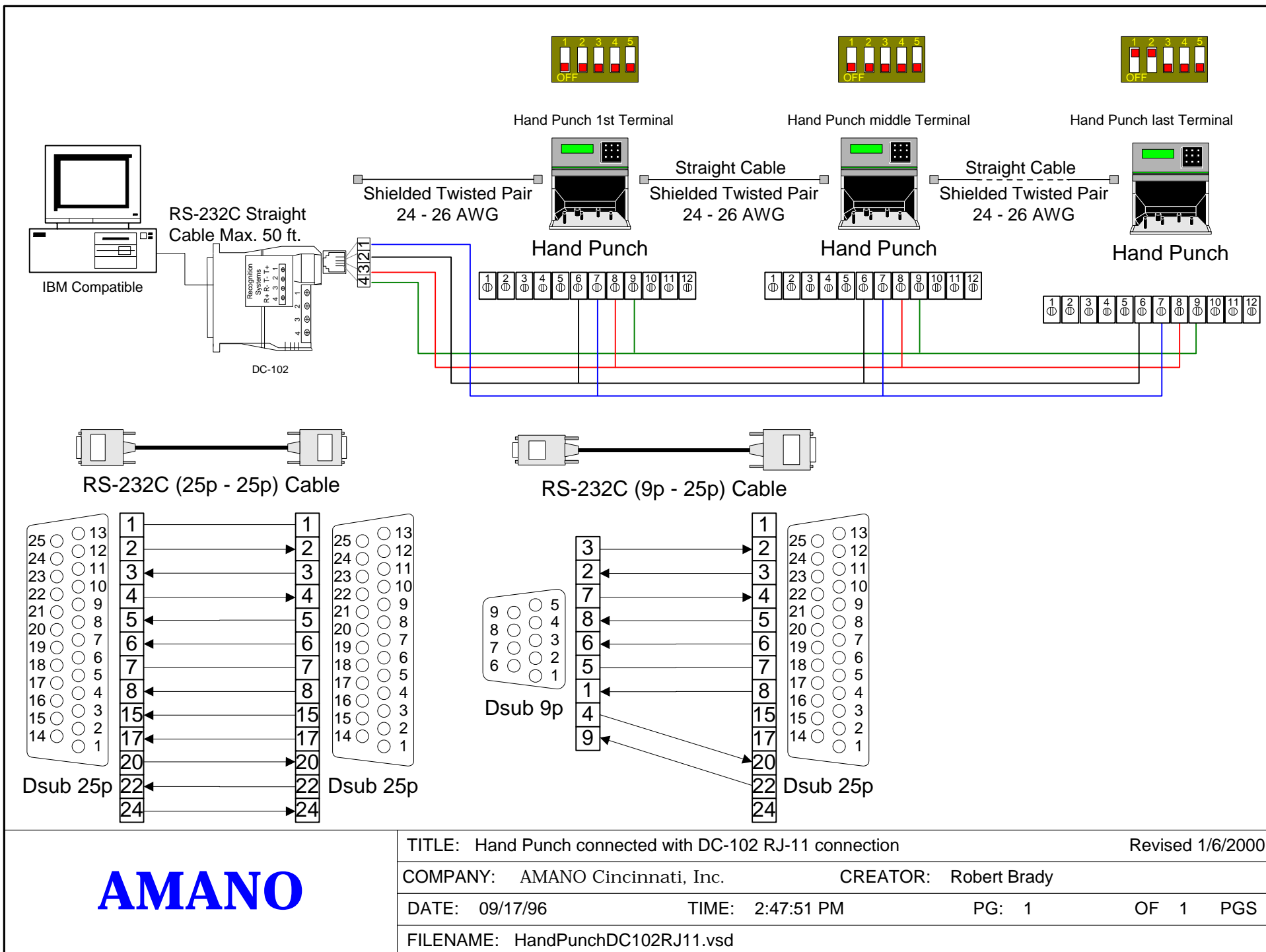


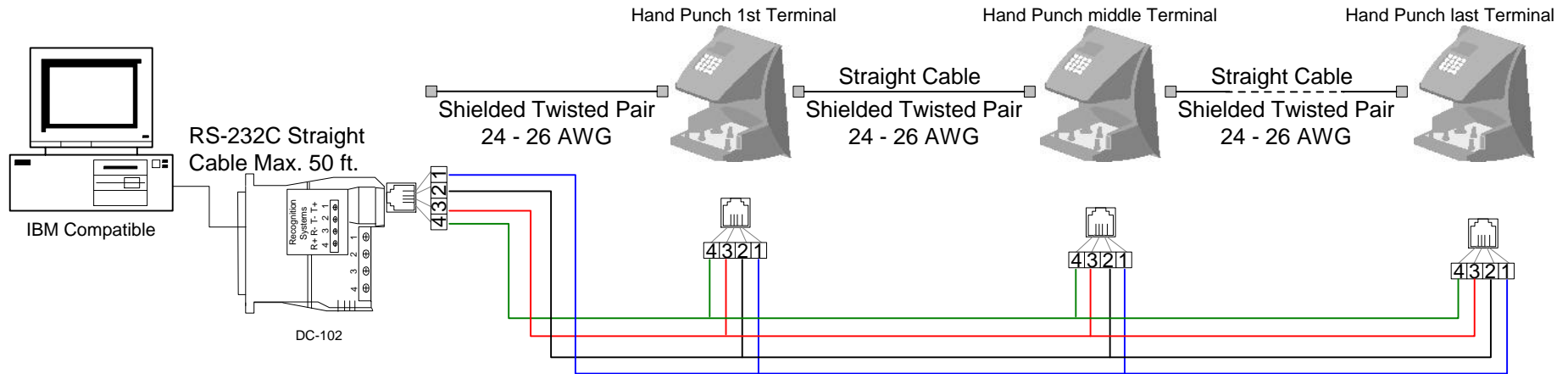
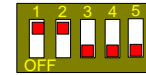
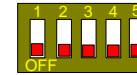
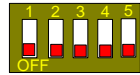
AMANO

TITLE: Hand Punch connected with DC-101P				Revised 12/15/99	
COMPANY: AMANO Cincinnati, Inc.		CREATOR: Robert Brady			
DATE: 09/17/96		TIME: 2:47:51 PM		PG: 1 OF 1 PGS	
FILENAME: HandPunch DC101p.vsd					





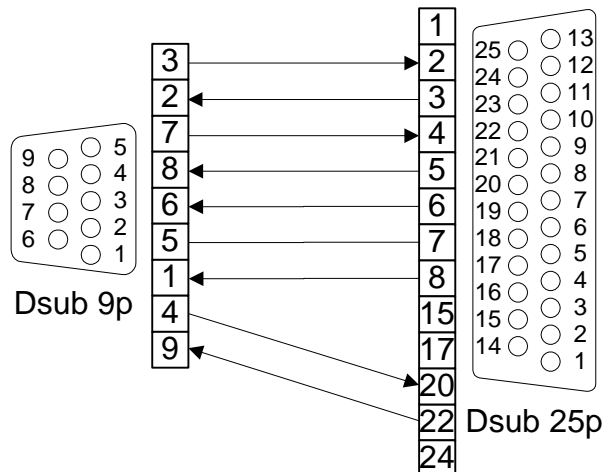
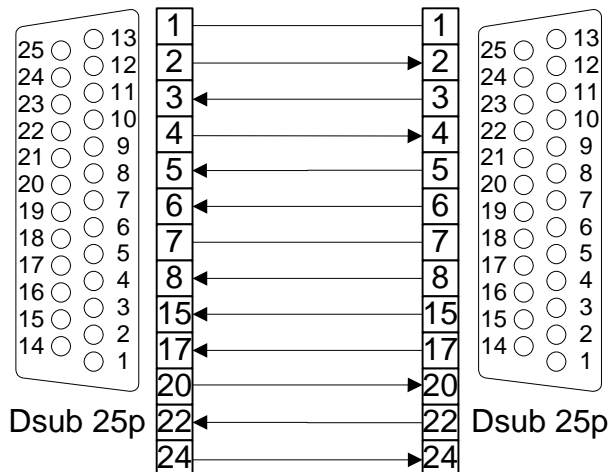




RS-232C (25p - 25p) Cable



RS-232C (9p - 25p) Cable



AMANO

TITLE: Hand Punch New Style connected with DC-102 RJ-11 connection

Revised 1/6/2000

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

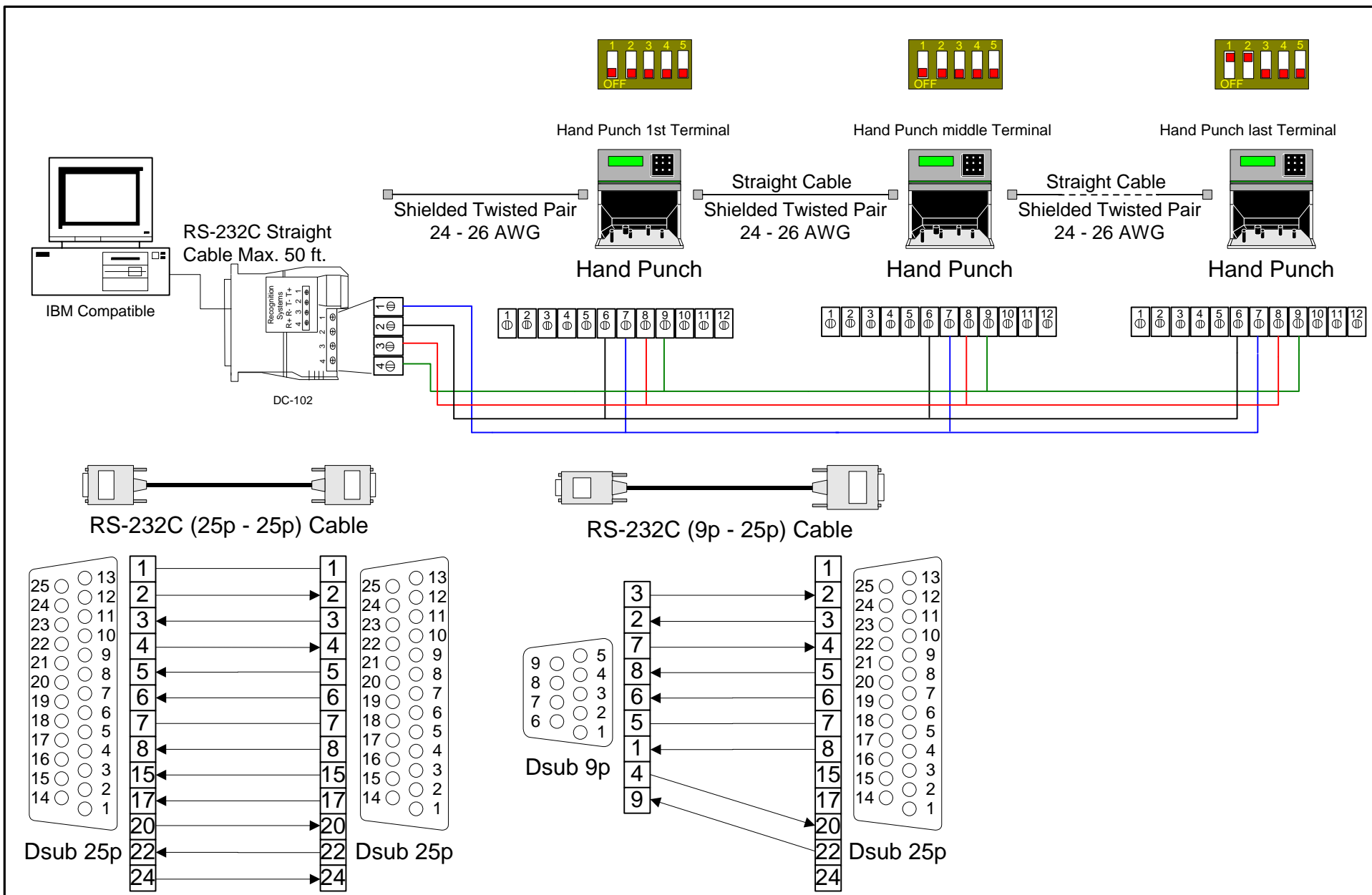
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

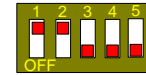
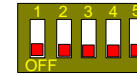
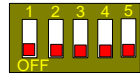
OF 1 PGS

FILENAME: HandPunchNewStyleDC102RJ11.vsd



AMANO

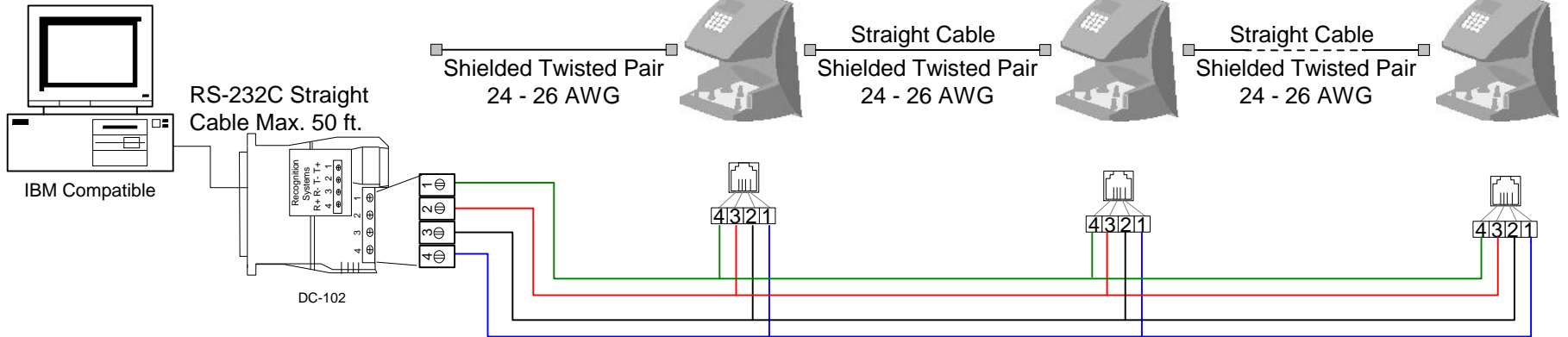
TITLE: Hand Punch connected with DC-102 TB connection					Revised 1/7/2000	
COMPANY: AMANO Cincinnati, Inc.			CREATOR: Robert Brady			
DATE: 09/17/96		TIME: 2:47:51 PM		PG: 1 OF 1 PGS		
FILENAME: HandPunchDC102TB.vsd						



Hand Punch 1st Terminal

Hand Punch middle Terminal

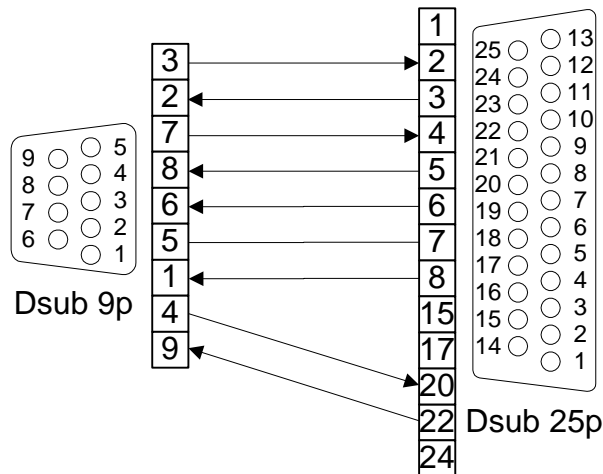
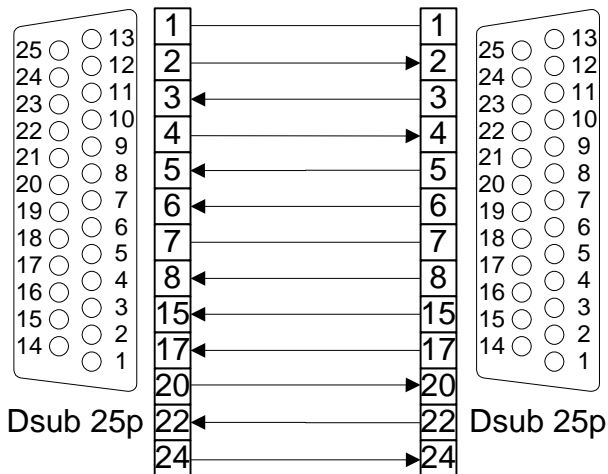
Hand Punch last Terminal



RS-232C (25p - 25p) Cable



RS-232C (9p - 25p) Cable



AMANO

TITLE: Hand Punch New Style connected with DC-102 TB connection

Revised 1/7/2000

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

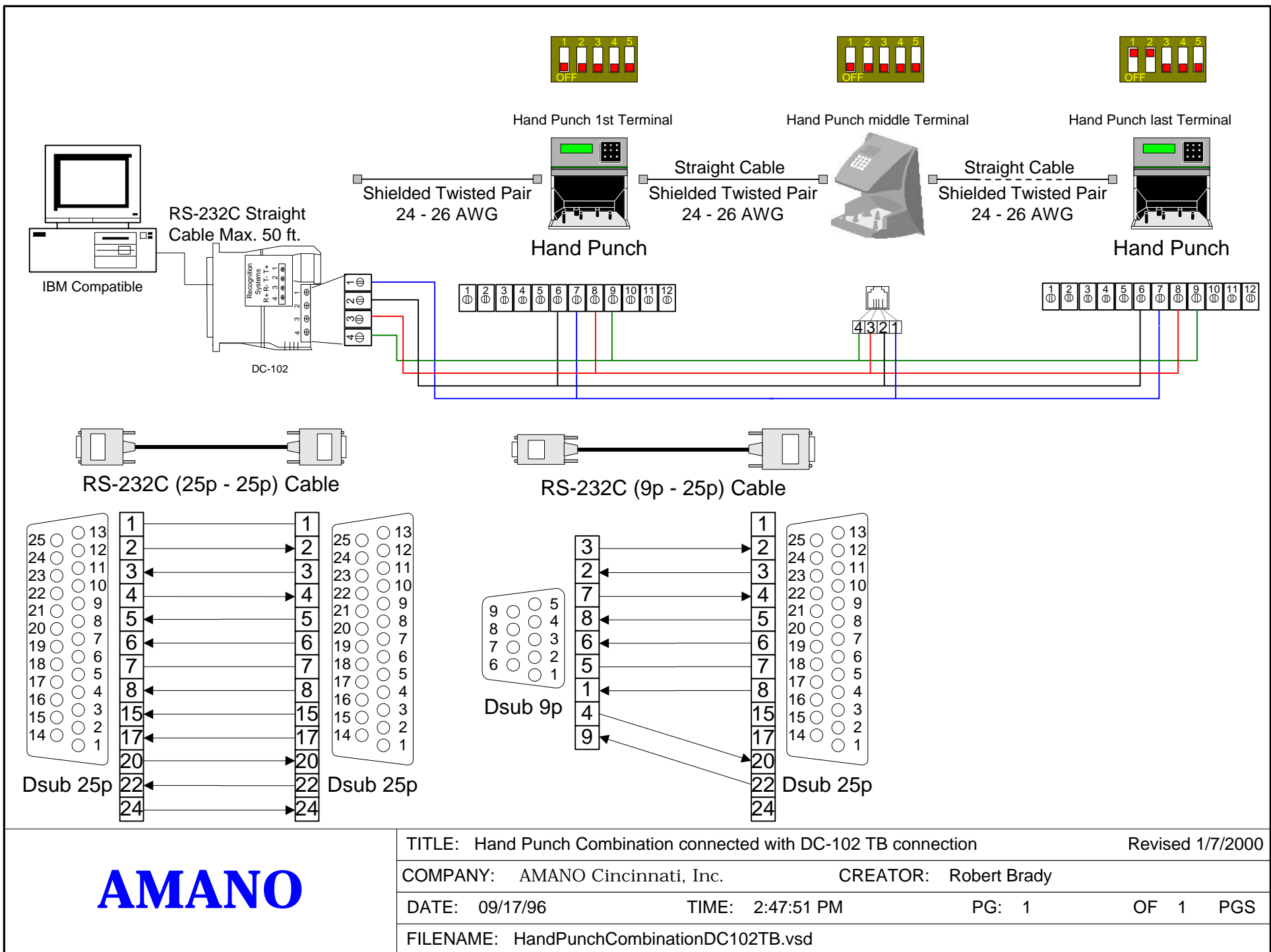
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

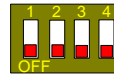
FILENAME: HandPunchNewStyleDC102TB.vsd



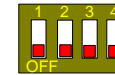
AMANO

TITLE: Hand Punch Combination connected with DC-102 TB connection				Revised 1/7/2000	
COMPANY: AMANO Cincinnati, Inc.		CREATOR: Robert Brady			
DATE: 09/17/96		TIME: 2:47:51 PM		PG: 1 OF 1 PGS	
FILENAME: HandPunchCombinationDC102TB.vsd					

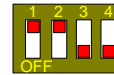
S2: ON W8: Full W9: ON
W15: B-C W16: A-B W18: B-C
W17: C 1 sec.
DCE: Put the DIP shunt jumper in socket
XW1A with all Dip switches ON.



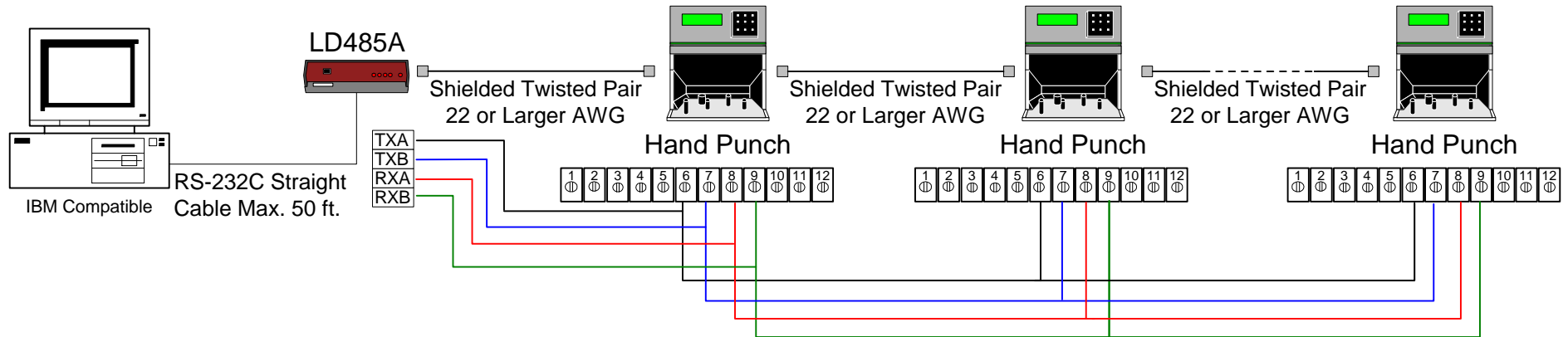
Hand Punch 1st Terminal



Hand Punch middle Terminal



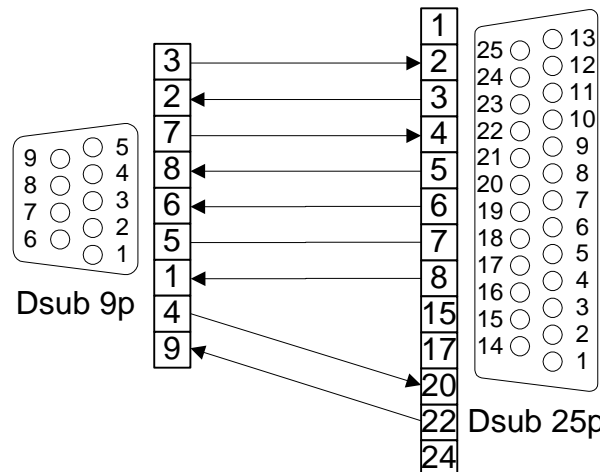
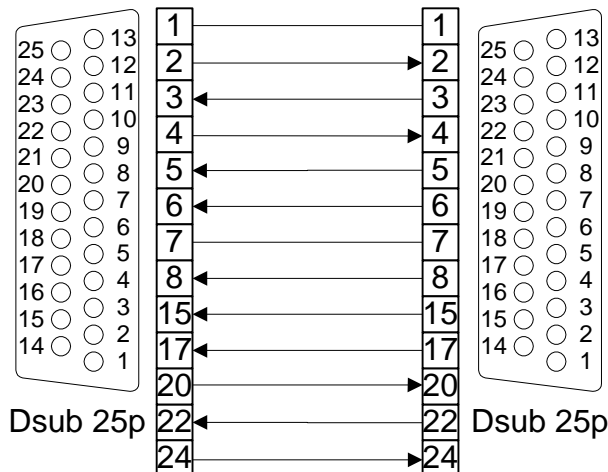
Hand Punch last Terminal



RS-232C (25p - 25p) Cable



RS-232C (9p - 25p) Cable



Hand Punch Serial Settings

The baud rate for channel 0 must be set the **same** for all readers on the network. Typically this is set to 9,600 baud(baud code 2) for hard wire applications and 1,200 baud(baud code 5) for networks which include modem.

Baud Rate	Baud Code
38.4K	0
19.2K	1
9600	2
4800	3
2400	4
1200	5
600	6
300	7

Please refer to RSI Hand Punch Manual for procedures to set serial.

AMANO

TITLE: Hand Punch Line Driver (LD485A-MP) connection (4 wires)

Revised 9/15/98

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

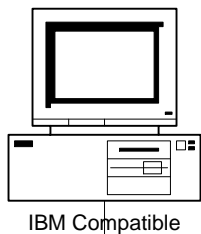
DATE: 1/12/98

TIME: 2:47:51 PM

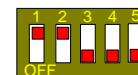
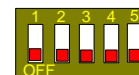
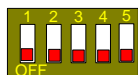
PG: 1

OF 1 PGS

FILENAME: HandLineStraight.vsd

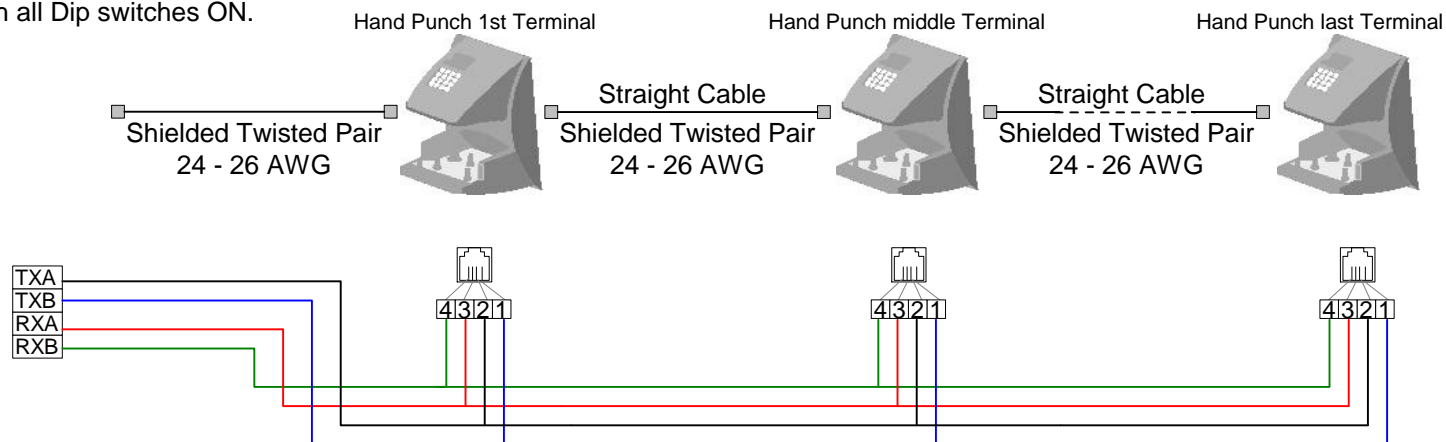


S2: ON W8: Full W9: ON
 W15: B-C W16: A-B W18: B-C
 W17: C 1 sec.
 DCE: Put the DIP shunt jumper in socket
 XW1A with all Dip switches ON.



LD485A

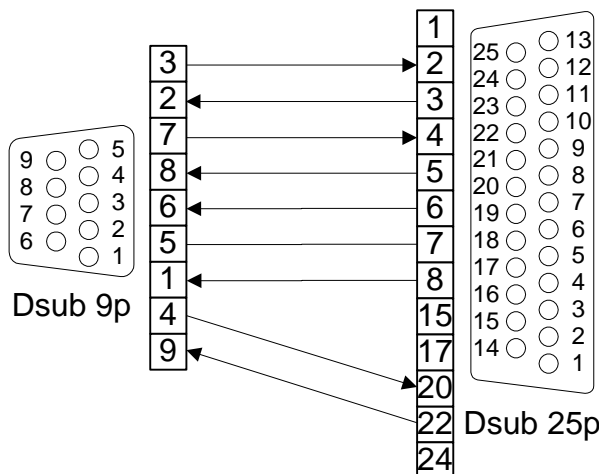
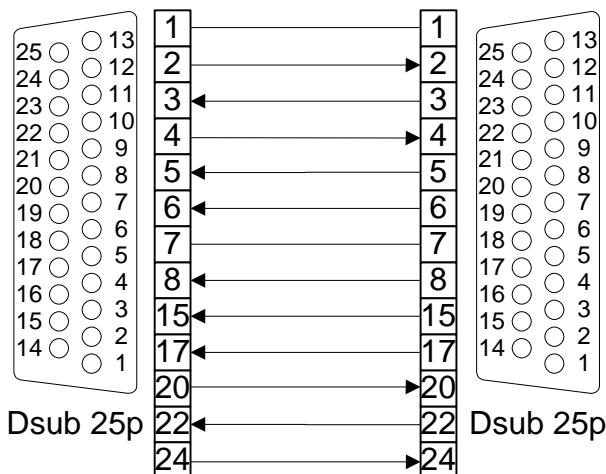
RS-232C Straight
Cable Max. 50 ft.



RS-232C (25p - 25p) Cable



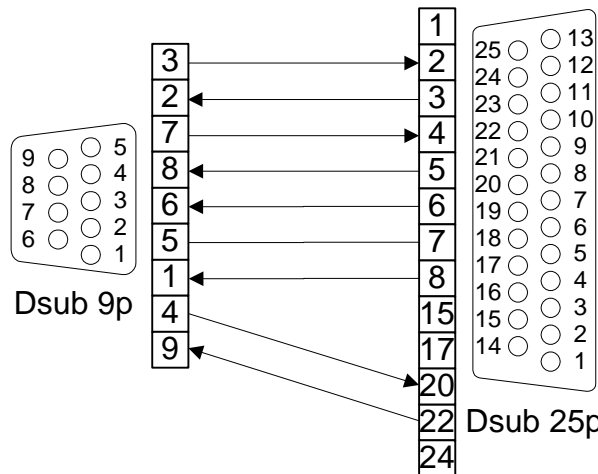
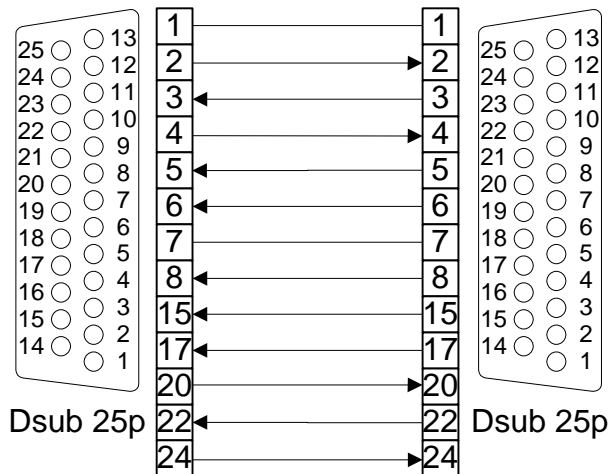
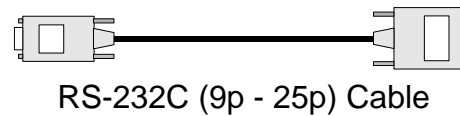
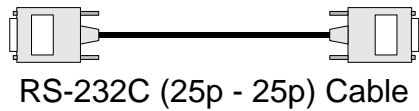
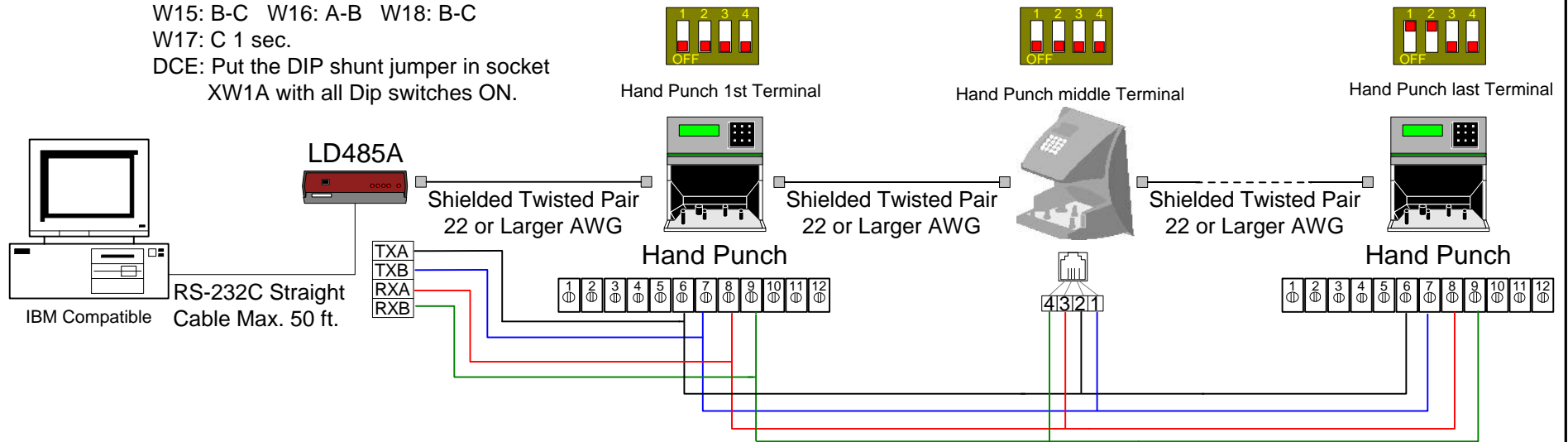
RS-232C (9p - 25p) Cable



AMANO

TITLE: Hand Punch New Style connected with LD-485MP Line Driver					Revised 12/23/99	
COMPANY: AMANO Cincinnati, Inc.			CREATOR: Robert Brady			
DATE: 09/17/96		TIME: 2:47:51 PM		PG: 1		OF 1 PGS
FILENAME: HandPunchNewStyleLine.vsd						

S2: ON W8: Full W9: ON
W15: B-C W16: A-B W18: B-C
W17: C 1 sec.
DCE: Put the DIP shunt jumper in socket
XW1A with all Dip switches ON.



Hand Punch Serial Settings

The baud rate for channel 0 must be set the **same** for all readers on the network. Typically this is set to 9,600 baud(baud code 2) for hard wire applications and 1,200 baud(baud code 5) for networks which include modem.

Baud Rate	Baud Code
38.4K	0
19.2K	1
9600	2
4800	3
2400	4
1200	5
600	6
300	7

Please refer to RSI Hand Punch Manual for procedures to set serial.

AMANO

TITLE: Hand Punch Line Driver Combo (LD485A-MP) connection (4 wires)

Revised 9/15/98

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

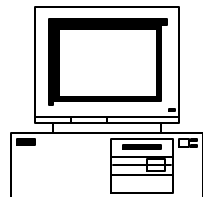
DATE: 1/12/98

TIME: 2:47:51 PM

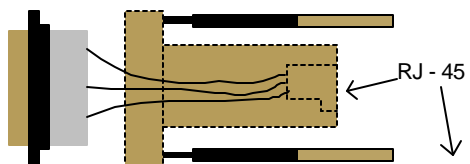
PG: 1

OF 1 PGS

FILENAME: HandCombinationLineStraight.vsd



IBM Compatible



DB-9 to RJ-45 Converter

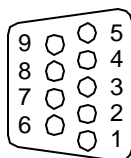
RJ - 45

Straight Cable

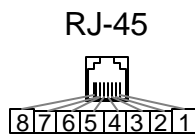
Maximum of 50ft.



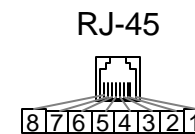
Hand Punch Terminal



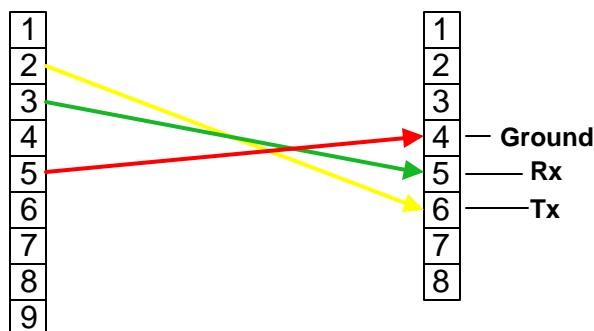
Dsub 9p



RJ-45



RJ-45



Wire the DB-9 to RS-232 connector as shown in the diagram. This is the only custom wiring that is necessary.

The DB-9 to RS-232 connector will fit onto the com port at the PC.

The cable from the connector to the terminal is straight through.

J4 on the Hand Punch terminal is an RJ-45 type vertical connector which transmits RS-232 signals. Connect the straight cable here.

Turn terminating resistors 1 & 2 ON at the terminal on the S1 jumper block.

Use Password 2 in clock menu for setup. Go to "Set Serial," enter matching baud rate for RS-232 and select #1 for Host. **Do not use #0 for Printer**

AMANO

TITLE: Hand Punch New Style with RS-232 Connection

Revised 04/18/2002

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Chad McFarlin

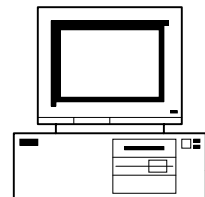
DATE: 05/06/2003

TIME: 2:47:51 PM

PG: 1

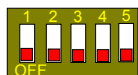
OF 1 PGS

FILENAME: HandPunchNew232.vsd



IBM Compatible

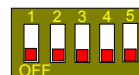
Ethernet TCP/IP
10baseT Static
Connection



Hand Punch 1st Terminal



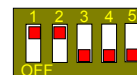
Straight Cable
Shielded Twisted Pair
24 - 26 AWG



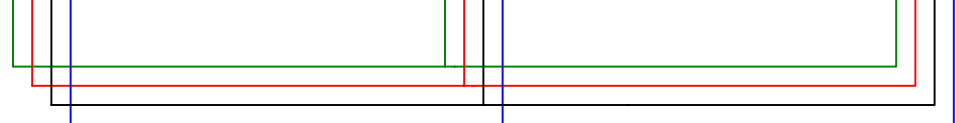
Hand Punch middle Terminal



Straight Cable
Shielded Twisted Pair
24 - 26 AWG



Hand Punch last Terminal



***Note:**

If you are installing a single HP terminal as an Ethernet connection, RSI documentaion states that you should leave dip-switches 1 & 2 in the OFF position.

AMANO

TITLE: Hand Punch 3000 & 4000 with Ethernet connection

Revised 12/23/99

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

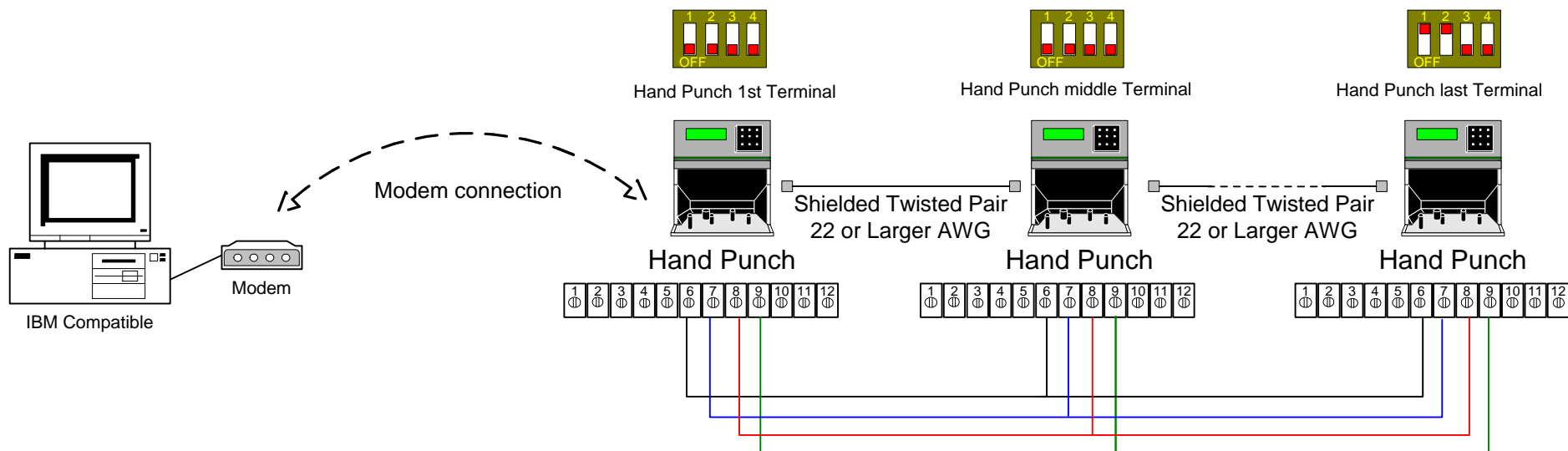
DATE: 09/17/1996

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: HPNewStyleEthernet.vsd



Hand Punch Serial Settings

The baud rate for channel 0 must be set the **same** for all readers on the network. Typically this is set to 9,600 baud(baud code 2) for hard wire applications and 1,200 baud(baud code 5) for networks which include modem.

Baud Rate	Baud Code
38.4K	0
19.2K	1
9600	2
4800	3
2400	4
1200	5
600	6
300	7

Please refer to RSI Hand Punch Manual for procedures to set serial.

AMANO

TITLE: Hand Punch with Modem connection

Revised 9/15/98

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

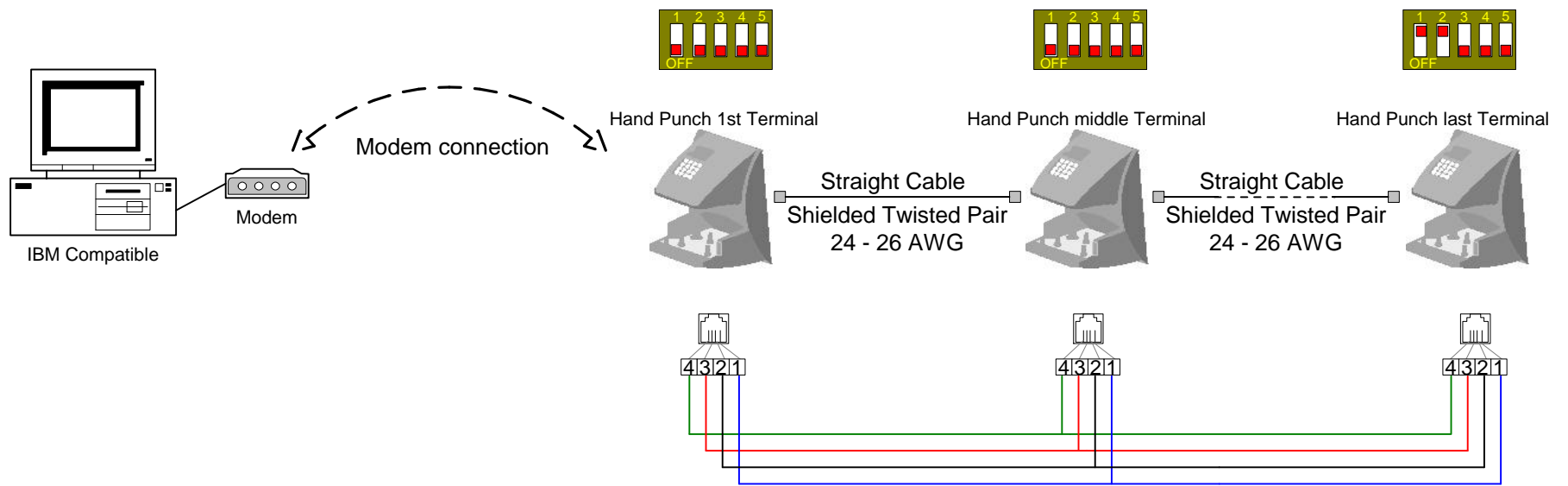
DATE: 1/12/98

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: HandPunchModem.vsd



AMANO

TITLE: Hand Punch New Style with Modem connection

Revised 12/23/99

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

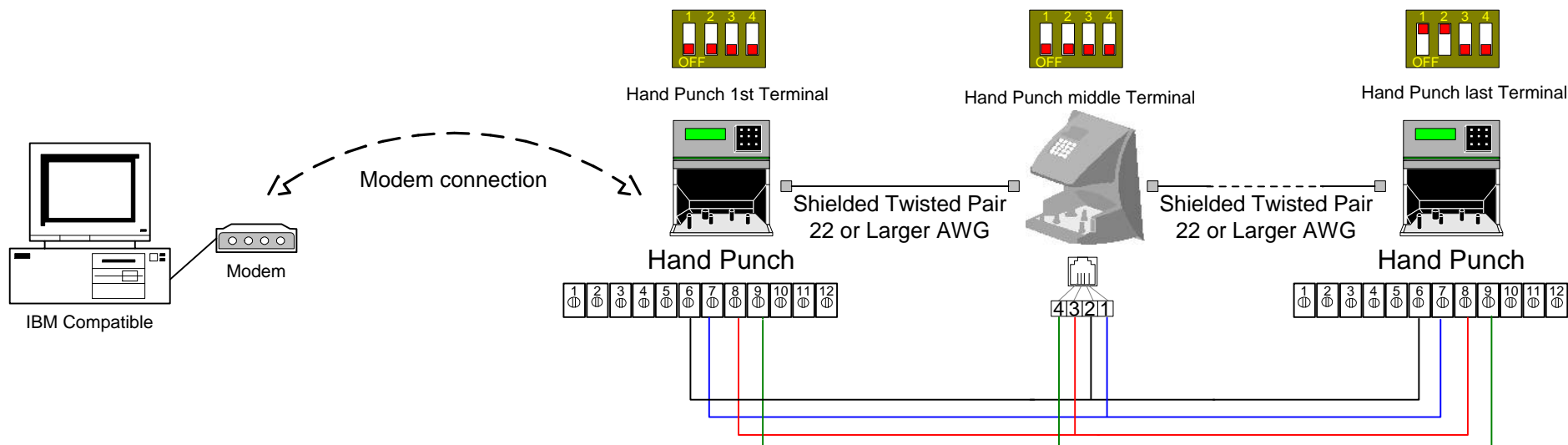
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: HandNewStyleModem.vsd



Hand Punch Serial Settings

The baud rate for channel 0 must be set the **same** for all readers on the network. Typically this is set to 9,600 baud(baud code 2) for hard wire applications and 1,200 baud(baud code 5) for networks which include modem.

Baud Rate	Baud Code
38.4K	0
19.2K	1
9600	2
4800	3
2400	4
1200	5
600	6
300	7

Please refer to RSI Hand Punch Manual for procedures to set serial.

AMANO

TITLE: Hand Punch Combination with Modem Connection

Revised 9/15/98

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Robert Brady

DATE: 1/12/98

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

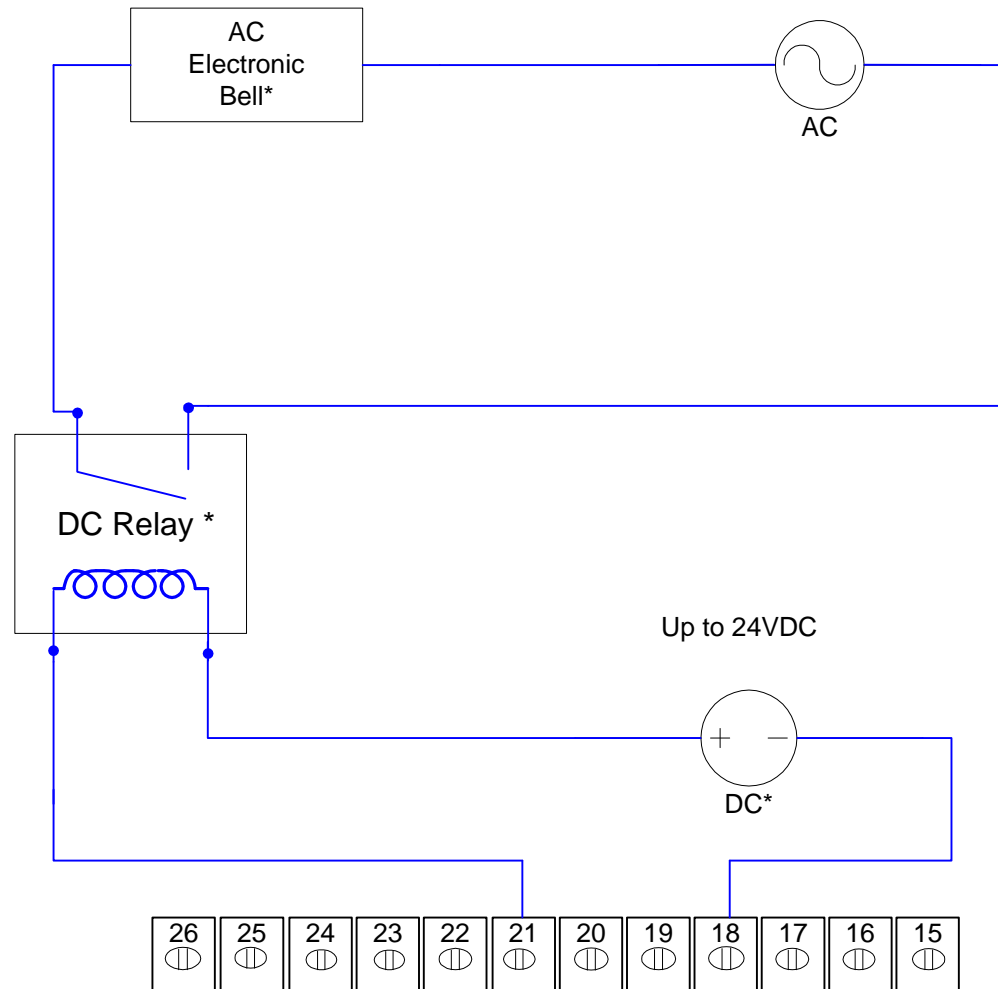
FILENAME: HandCombinationModem.vsd

HandPunch Peripherals



Hand Punch Terminal
3000 & 4000 series

Relay Limits:
Up to 24VDC
Up to 100mA
normally Open



*Not Supplied By Amano

AMANO

TITLE: Hand Punch 3000/Hand Punch 4000 Bell Relay A/C

COMPANY: AMANO Cincinnati, Inc.

CREATOR: David Domenico

DATE: 0

TIME: 0

PG: 1

OF 1

PGS

FILENAME: Bell relay AC.vsd

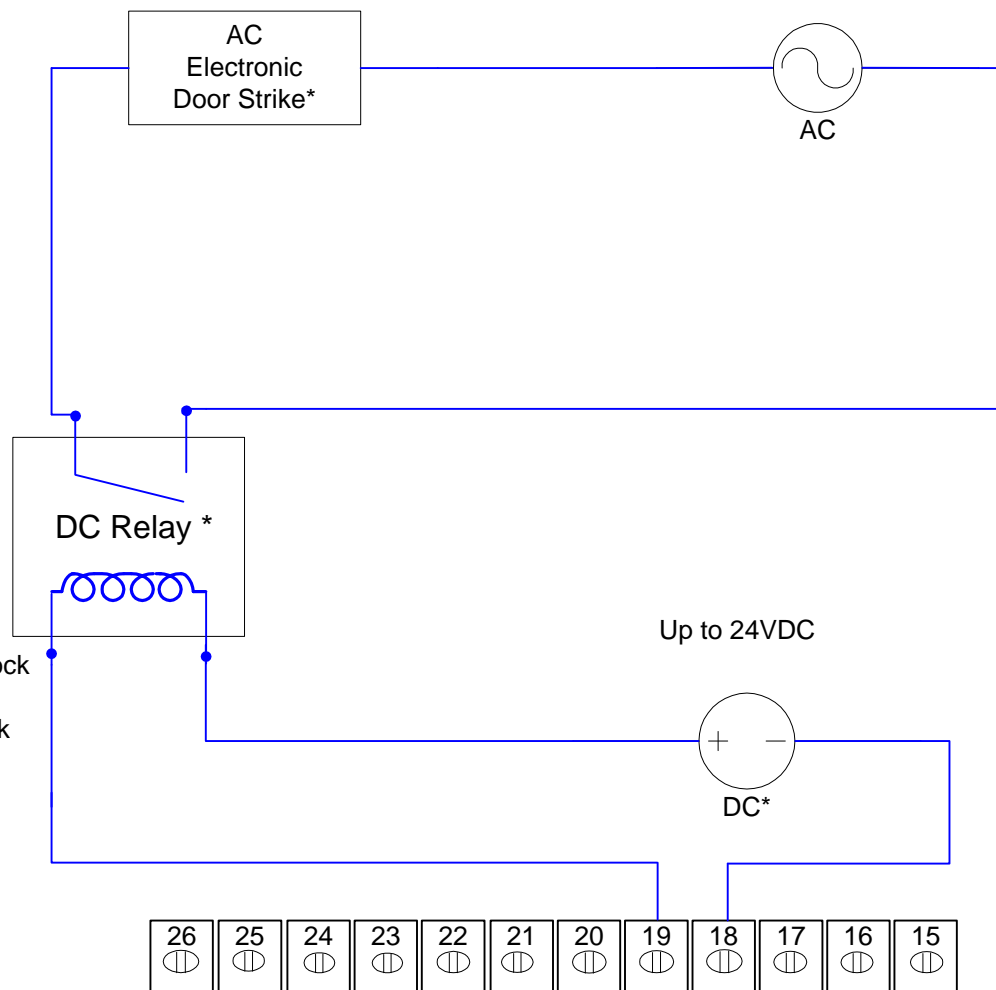


**Hand Punch Terminal
3000 & 4000 series**

Relay Limits:
Up to 24VDC
Up to 100mA

normally Closed for passive door-lock

normally Open for active door-lock



*Not Supplied By Amano

AMANO

TITLE: Hand Punch 3000/Hand Punch 4000 Door Lock Relay A/C

COMPANY: AMANO Cincinnati, Inc.

CREATOR: David Domenico

DATE: 0

TIME: 0

PG: 1

OF 1

PGS

FILENAME: Door lock relay AC.vsd



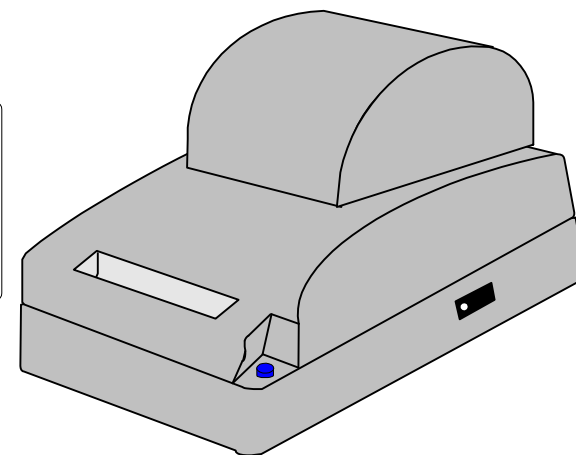
Hand Punch

* The RJ-45 Printer Out connection is found on the back of the HP, opposite side from Power connection.

RS-232 RJ-45
to 25Pin
Converter

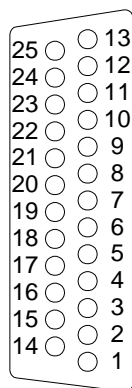
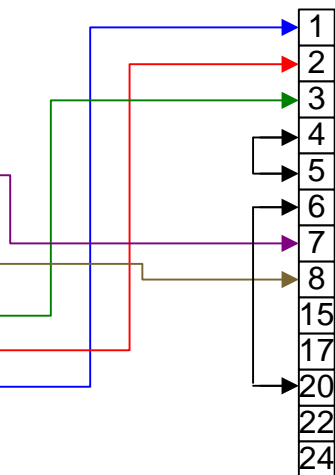
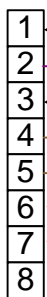
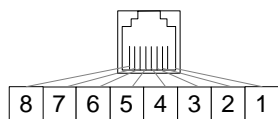
RJ-45

Dsub 25p



Thermal Printer

RJ-45
RS-232
Printer Out



Dsub 25p

DS2 Dipswitch settings:

DS2 is found on bottom of printer, under the cover plate.

Bits = 8 Dipswitch setting 1 - OFF

Parity = None Dipswitch setting 2 - OFF

Set Baud Rate to match HP Terminal

(Most common) Baud = 9600 Dipswitch settings 6 & 7 - ON

AMANO

TITLE: Hand Punch with Thermal Printer

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 01/12/98

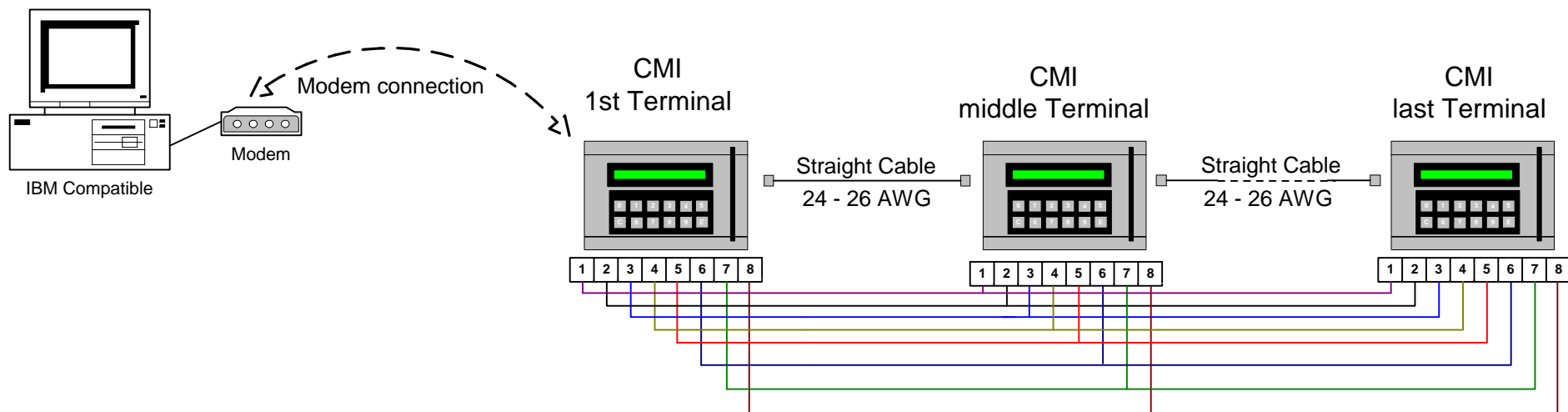
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PG: 1

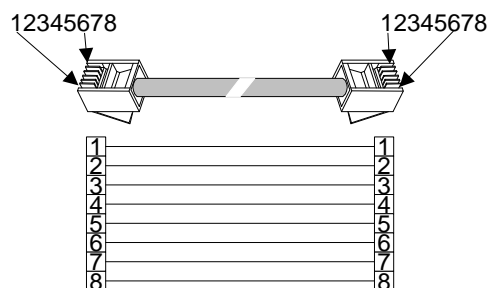
OF 1 PGS

FILENAME: HandPunch Thermal Printer.vsd

CMI Terminals



8 wire RJ45 straight cable connection



CMI Terminals should be configured as follows in the Setup Mode:

Baud Rate: **2400**

Parity: **ODD**

Comm Type: **Host**

Address: (matches TruTime software configurations)

Term Type: **J**

AMANO

TITLE: CMI Modem connection

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Chad McFarlin

DATE: 09/17/96

TIME: 2:47:51 PM

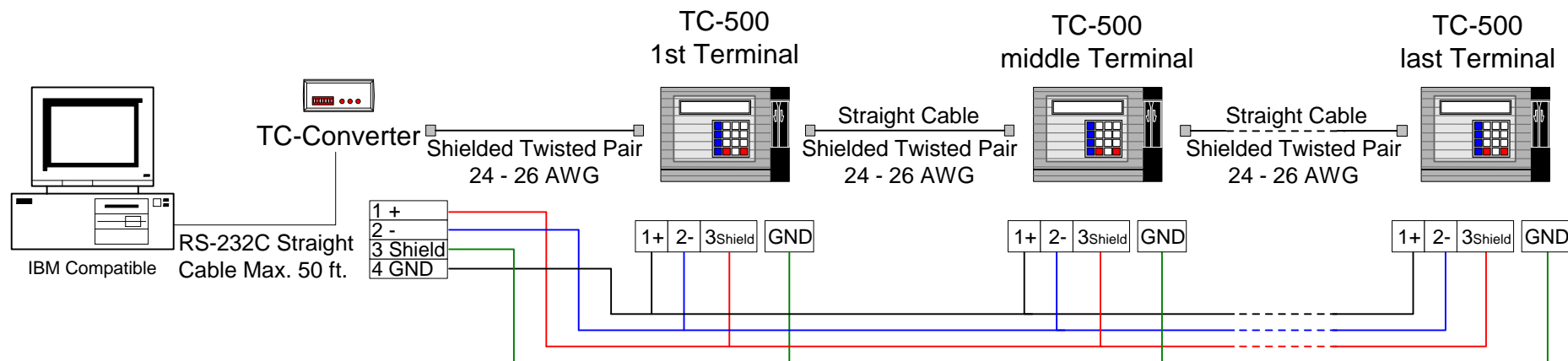
PG: 1

OF 1 PGS

FILENAME: CMImodem.vsd

TC500 Terminals

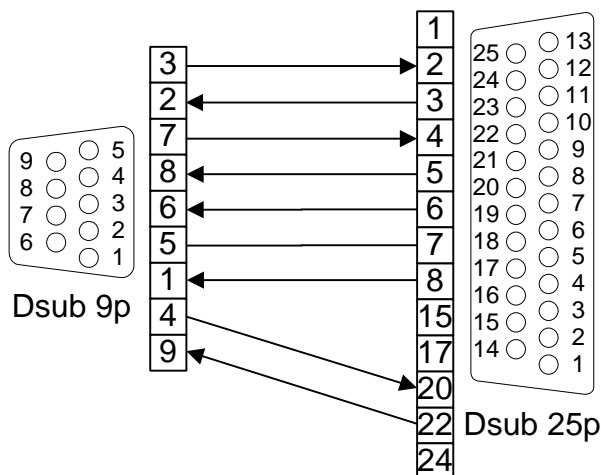
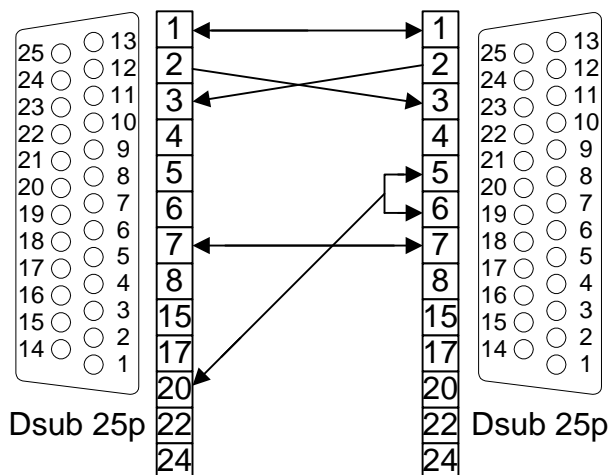
Last terminal has
Terminating Resistor in
place to the left.



RS-232C (25p - 25p) Cable

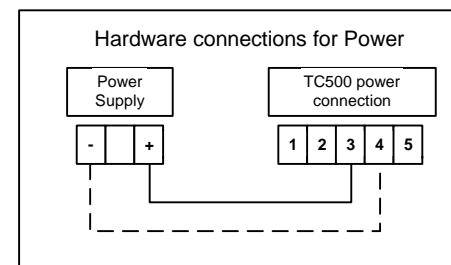


RS-232C (9p - 25p) Cable



*** Dip Switch 2 in Open Position on
all terminals for 485
communications with the TC-
Converter.**

**** When using the TC Converter,
the internal switch should be set
to the DTE position.**



AMANO

TITLE: TC500 direct with TC Converter

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Chad McFarlin

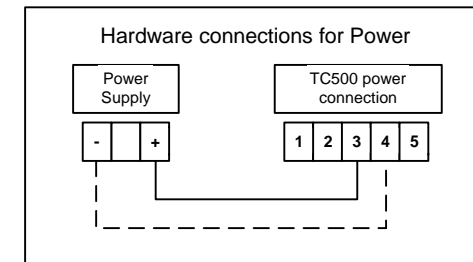
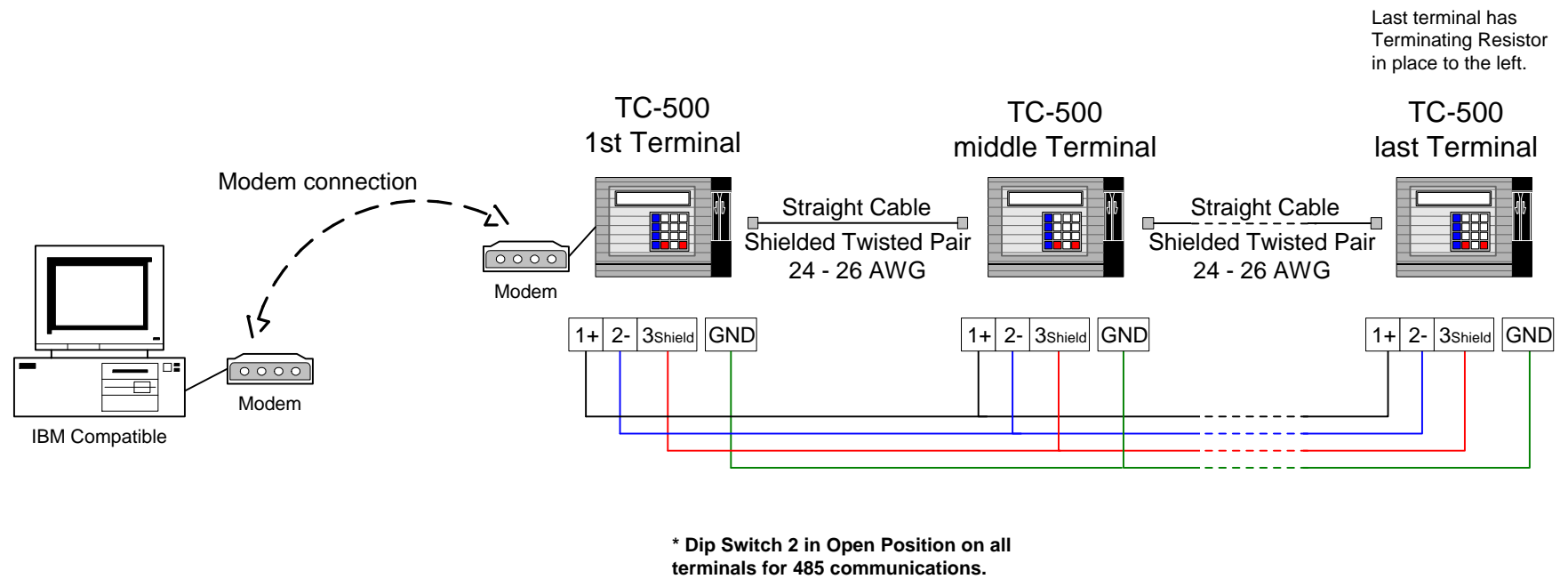
DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: TC500direct.vsd



AMANO

TITLE: TC500 Modem connection

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Chad McFarlin

DATE: 09/17/96

TIME: 2:47:51 PM

PG: 1

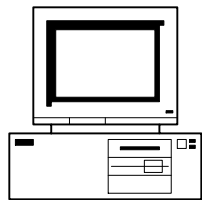
OF 1 PGS

FILENAME: TC500modem.vsd

MJR 8150 Terminals

- ☐ J1 = OFF
- J2 = ON
- ☐ J3 = OFF
- J4 = ON

MJR-8150



IBM Compatible



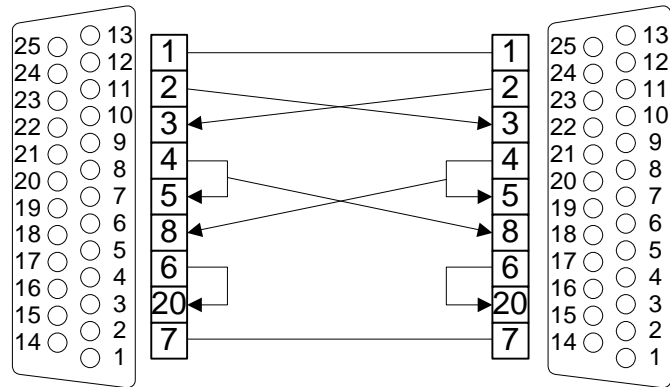
RS-232C Cross Cable
Max. 50 ft.



RS-232C (25p - 25p) Cable

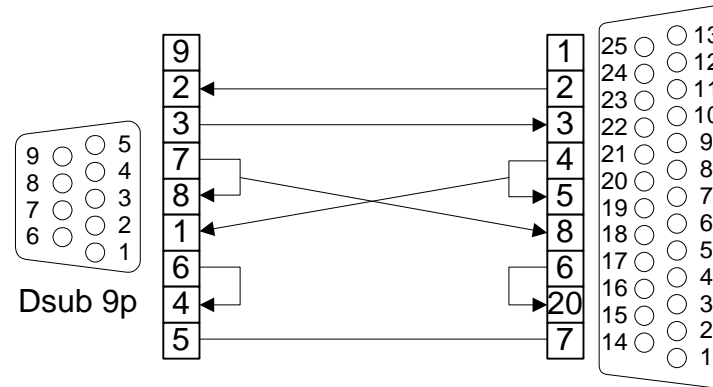


RS-232C (25p - 9p) Cable



Dsub 25p

Dsub 25p



Dsub 9p

Dsub 25p

AMANO

TITLE: MJR-8150 RS-232C Direct connection

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 1/12/98

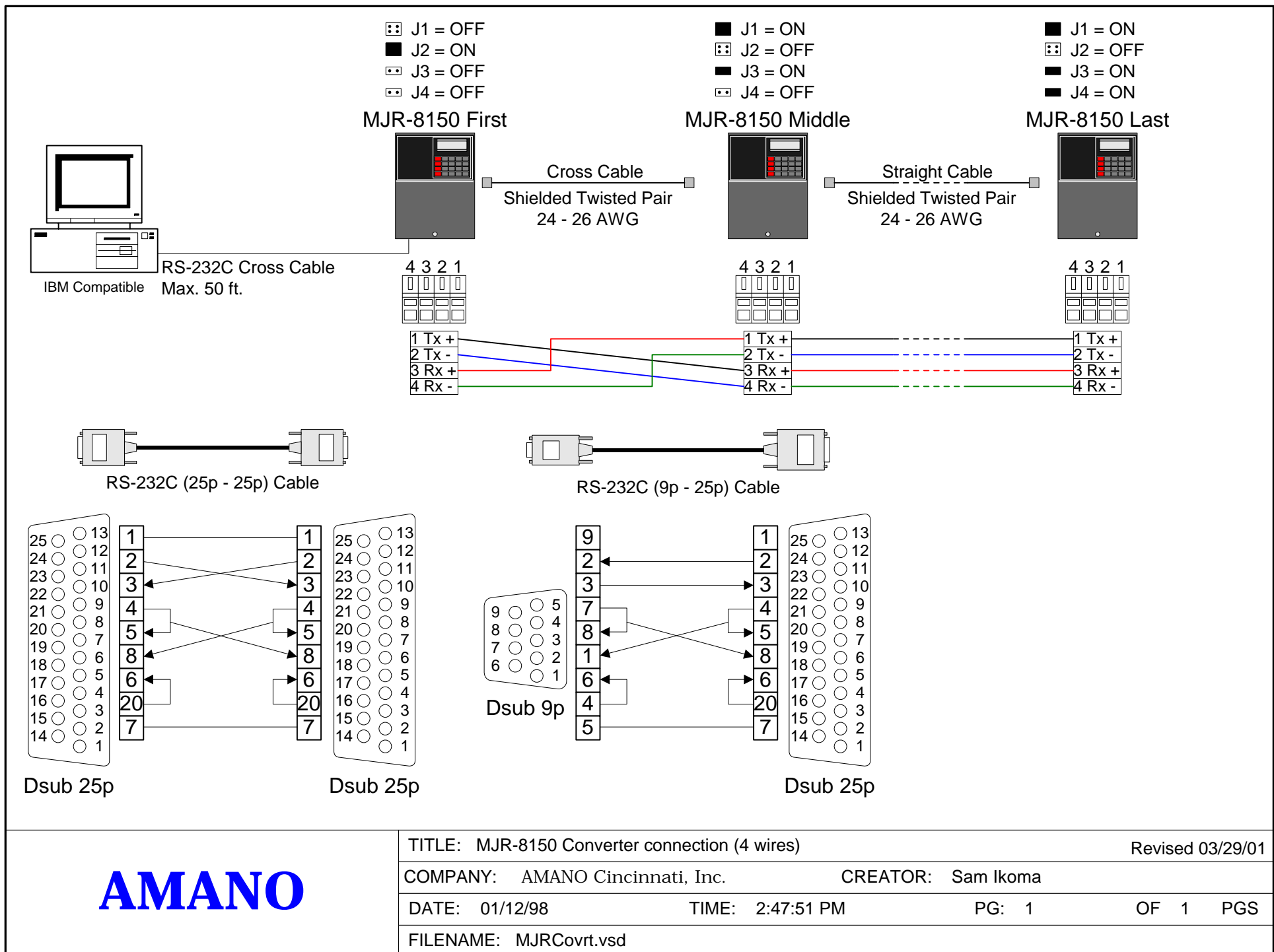
TIME: 4:36:24 PM

PG: 1

OF 1

PGS

FILENAME: MJRDirect.vsd



S2: ON W8: Full W9: ON
W15: B-C W16: A-B W18: B-C
W17: C 1 sec.
DCE: Put the DIP shunt jumper in socket
XW1A with all Dip switches ON.

■ J1 = ON
□ J2 = OFF
■ J3 = ON
□ J4 = OFF

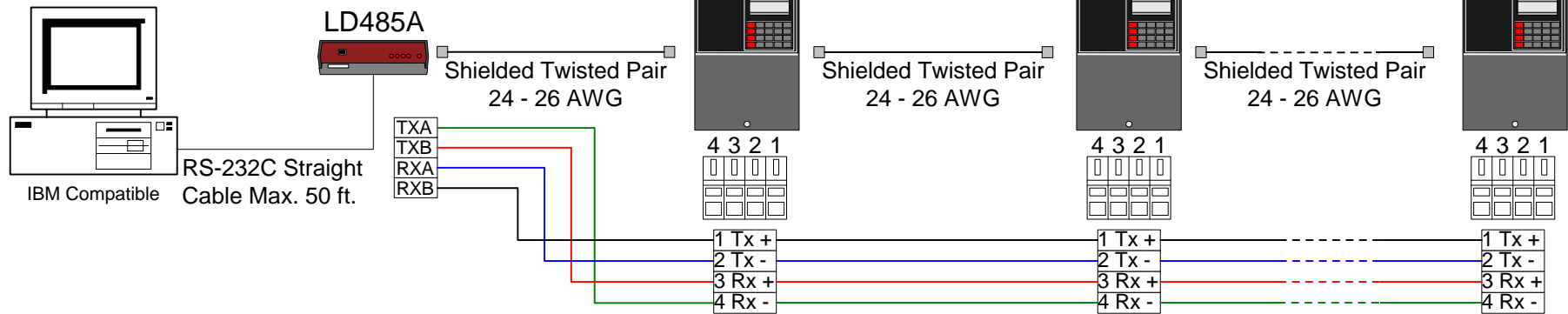
■ J1 = ON
□ J2 = OFF
■ J3 = ON
□ J4 = OFF

■ J1 = ON
□ J2 = OFF
■ J3 = ON
□ J4 = OFF

MJR-8150 First

MJR-8150 Middle

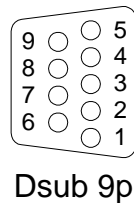
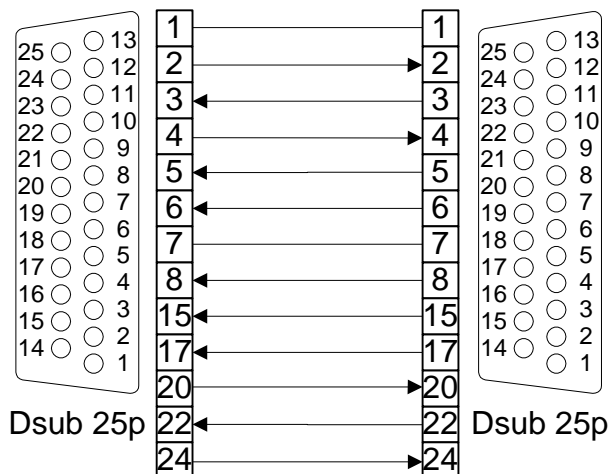
MJR-8150 Last



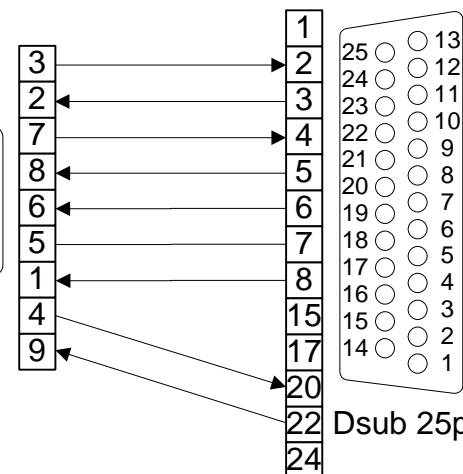
RS-232C (25p - 25p) Cable



RS-232C (9p - 25p) Cable



Dsub 9p



Dsub 25p

AMANO

TITLE: MJR-815 Line Driver (LD485A-MP) connection (4 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

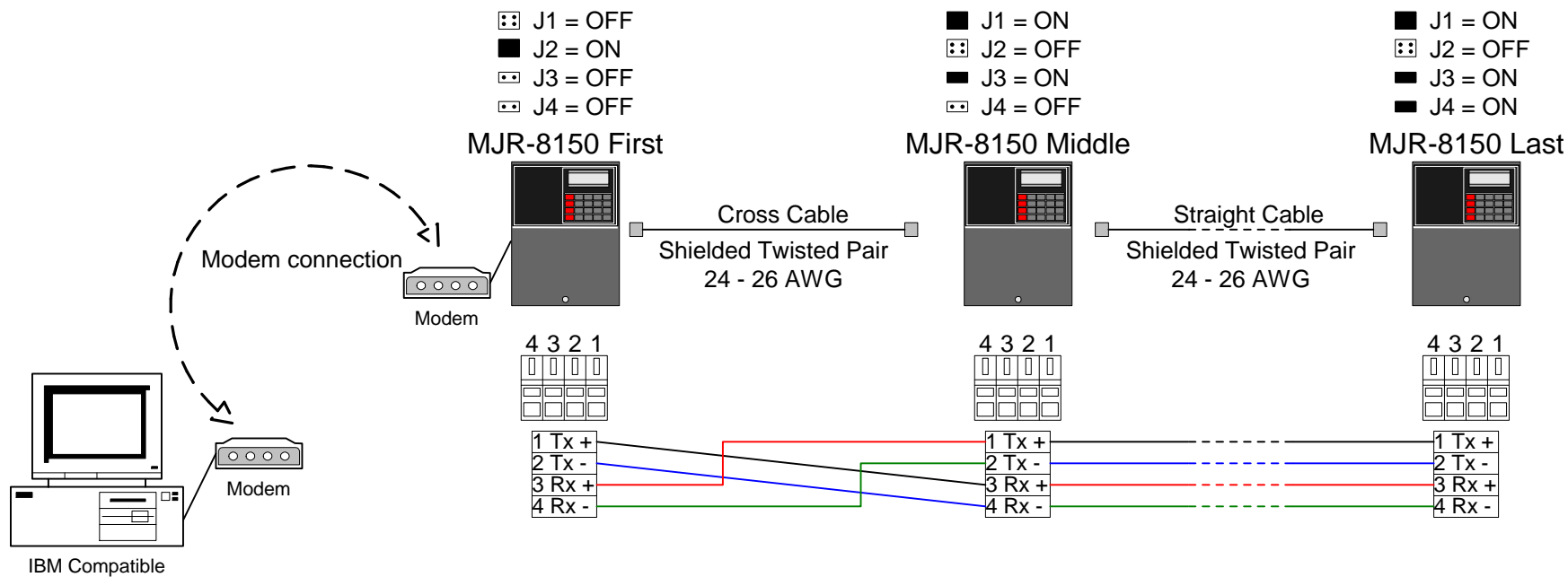
DATE: 1/12/98

TIME: 2:47:51 PM

PG: 1

OF 1 PGS

FILENAME: MJRLine.vsd



AMANO

TITLE: MJR-8150 Modem connection (4 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 01/12/98

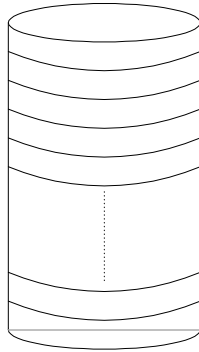
TIME: 2:47:51 PM

PG: 1

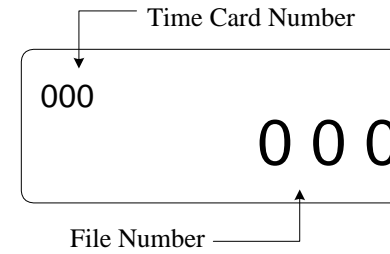
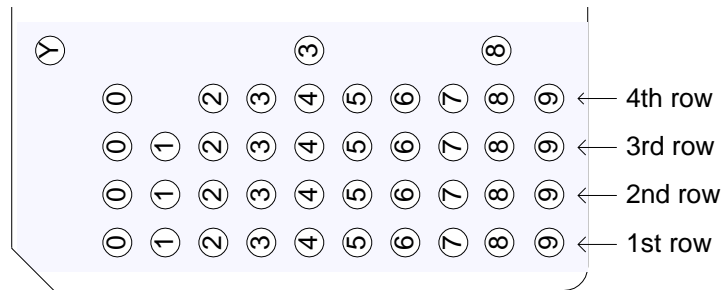
OF 1 PGS

FILENAME: MJRmodem.vsd

File No.: 000
File No.: 001
File No.: 002
File No.: 003
File No.: 004
.....
File No.: 248
File No.: 249



Employee Name
TruTime Badge No.
Department No.
Previous Period Time Card No.
Current Period Time Card No.
Next Period Time Card No.



AMANO

TITLE: MJR Memory structure

COMPANY: AMANO Cincinnati, Inc.

CREATOR: IKOMA

DATE: 0

TIME: 0

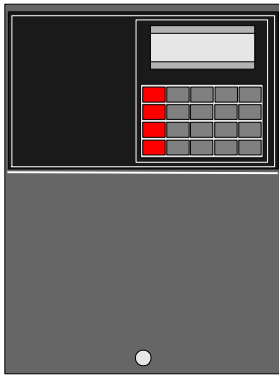
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OF 1

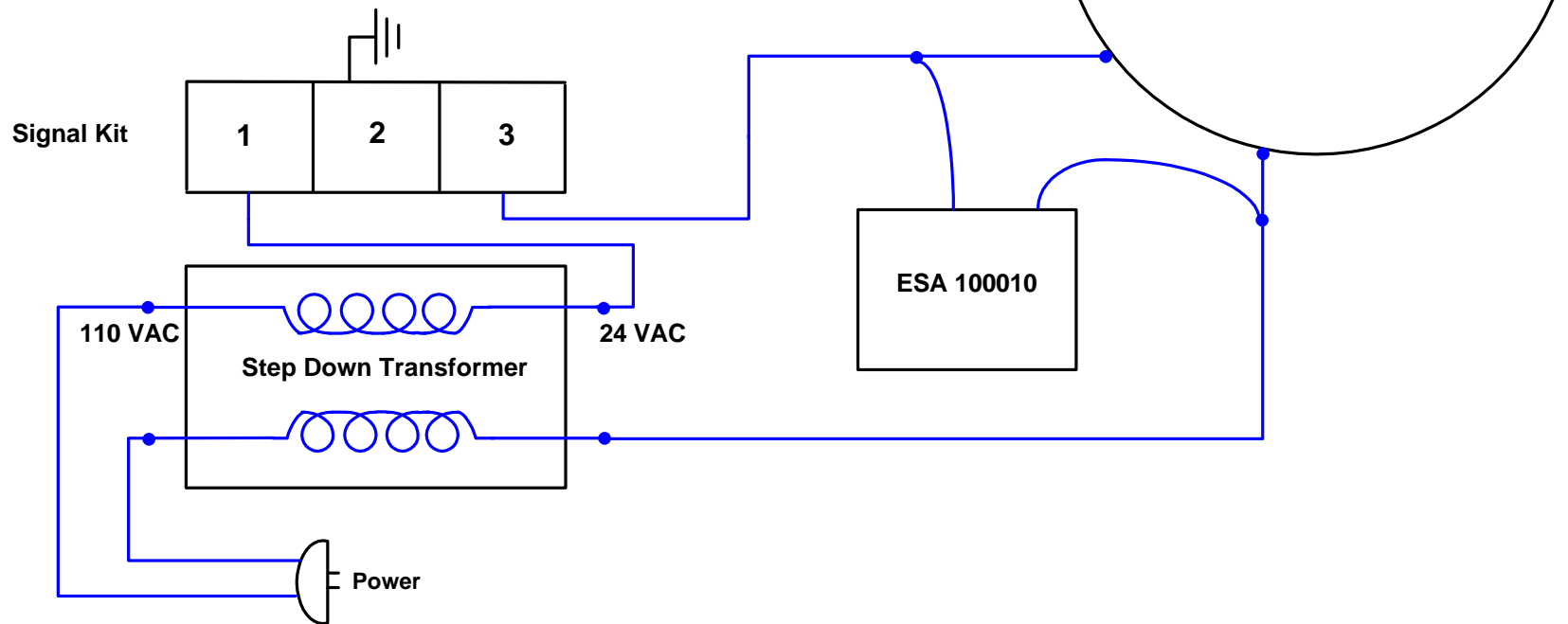
PGS

FILENAME: MJR-Memory.vsd

MJR 8150 Peripherals



MJR 8150



AMANO

TITLE: MJR-8150 with 24V Bell/Door Strike Item

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

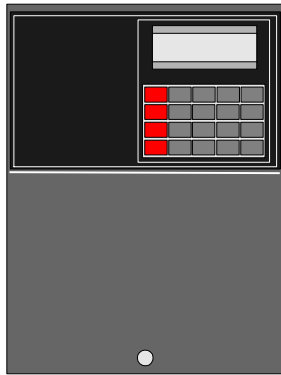
DATE: 01/12/98

TIME: 2:47:51 PM

PG: 1

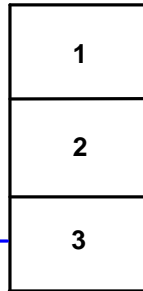
OF 1 PGS

FILENAME: MJR 24V Bell-Door.vsd



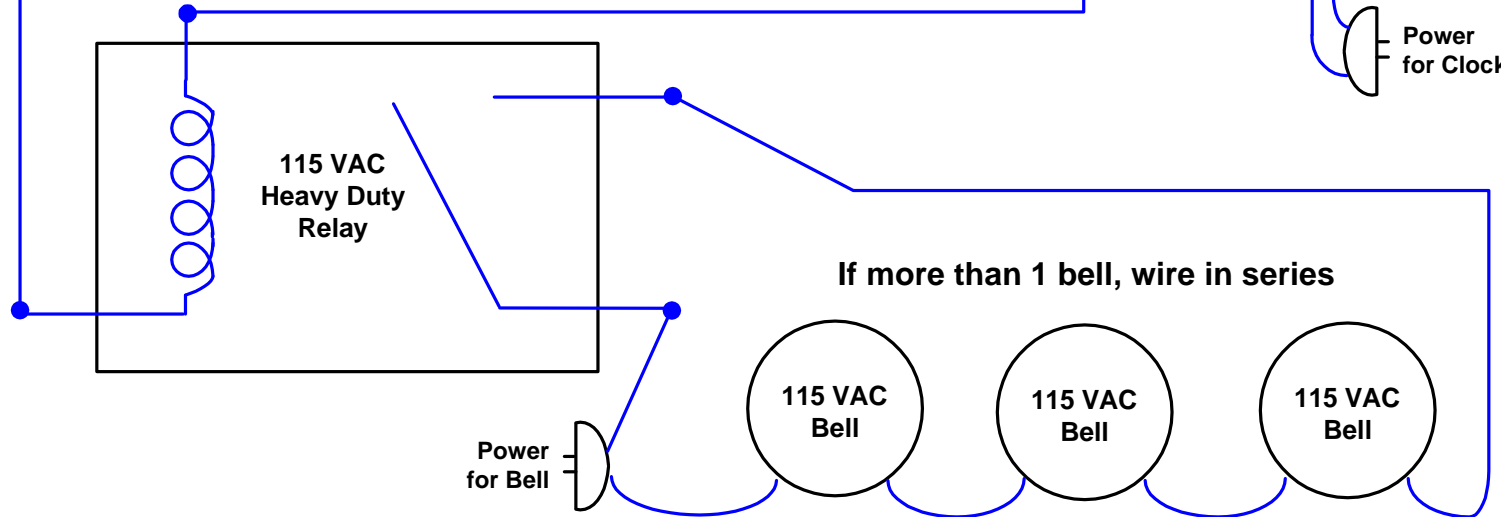
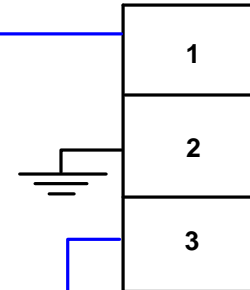
MJR 8150

Signal Kit



* These wires are not supplied
with the signal kit

**Power Board
for Incoming
115 VAC**



AMANO

TITLE: MJR-8150 with 120V Bell/Door Strike Item

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 01/12/98

TIME: 2:47:51 PM

PG: 1

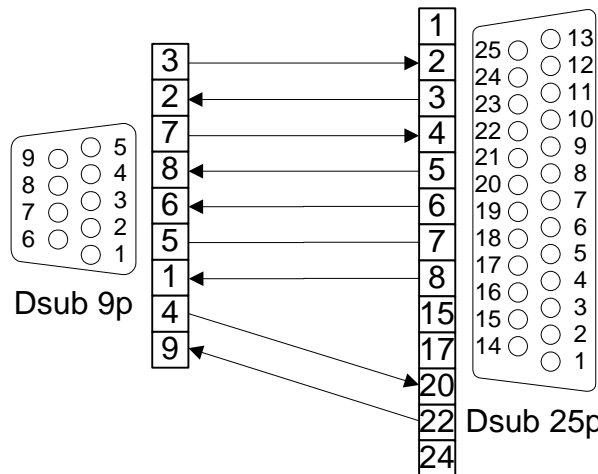
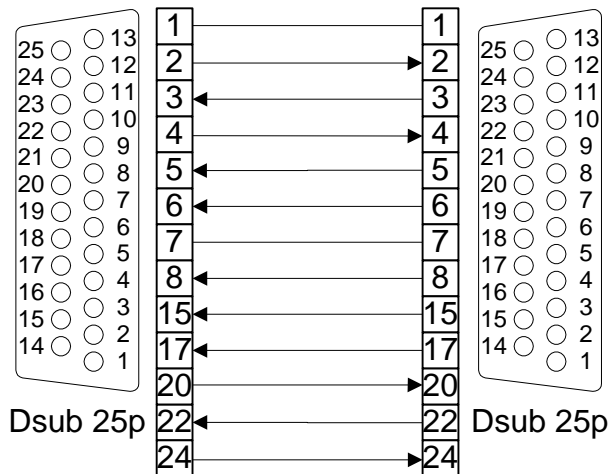
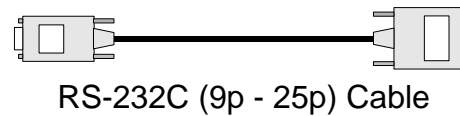
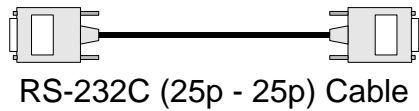
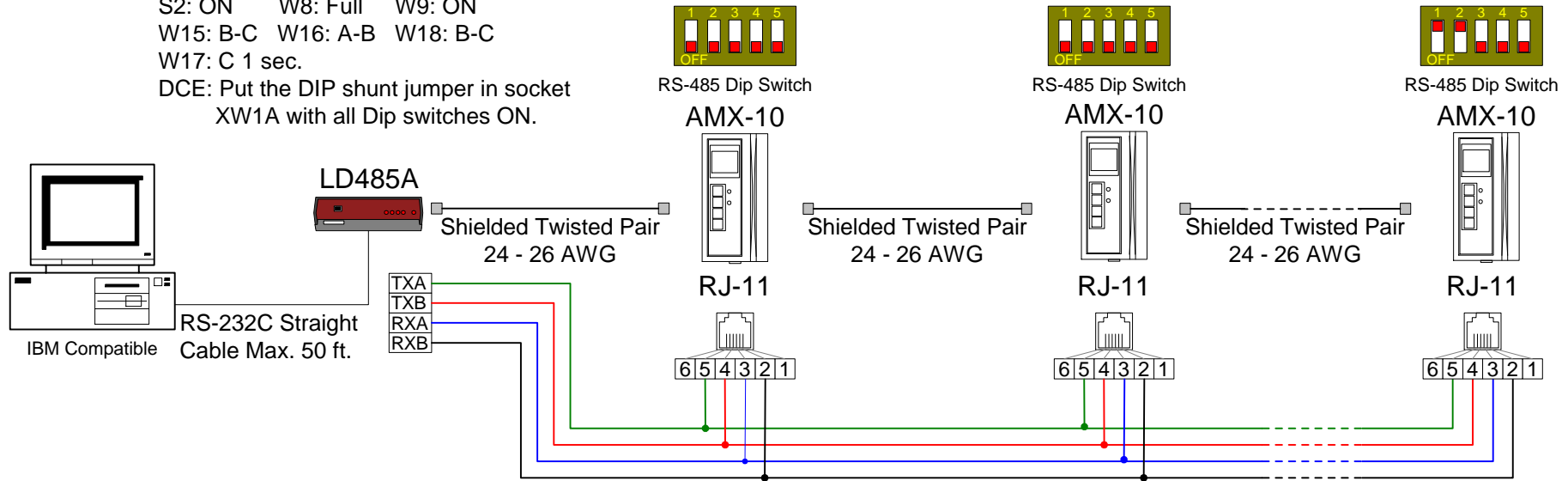
OF 1 PGS

FILENAME: MJR 120V Bell-Door.vsd

ABX/AMX Terminals

S2: ON W8: Full W9: ON
W15: B-C W16: A-B W18: B-C
W17: C 1 sec.

DCE: Put the DIP shunt jumper in socket
XW1A with all Dip switches ON.



Main Board Dip Switch Setting:
Terminal No.:

Switch No.	Switch Value	Terminal No.									
5	16	1	2	3	4	5	...	25	...	30	31
4	8	x	x	x	x	x		o		o	o
3	4	x	x	x	o	o		x		o	o
2	2	x	o	o	x	x		x		o	o
1	1	o	x	o	x	o		o		x	o

Baud Rate:

Switch No.	Baud Rate				
	1200	2400	4800	9600	19200
8	x	x	x	x	o
7	x	x	o	o	x
6	x	o	x	o	x

AMANO

TITLE: AMX/ABX (LD485A-MP) connection (4 wires)

Revised 03/29/01

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

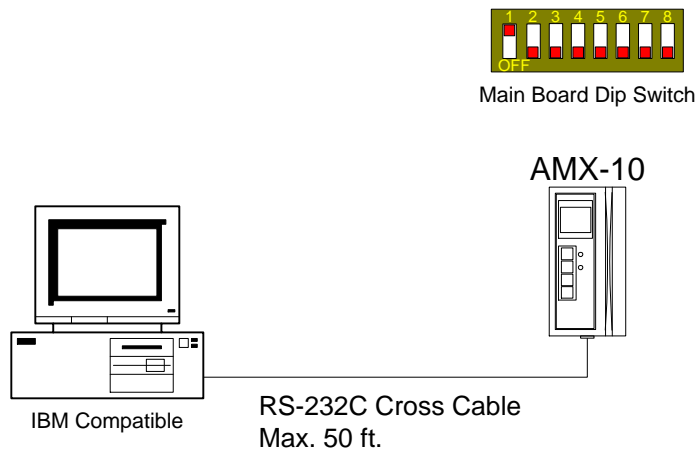
DATE: 6/8/01

TIME: 12:52 PM

PG: 1

OF 1 PGS

FILENAME: AMXLine.vsd

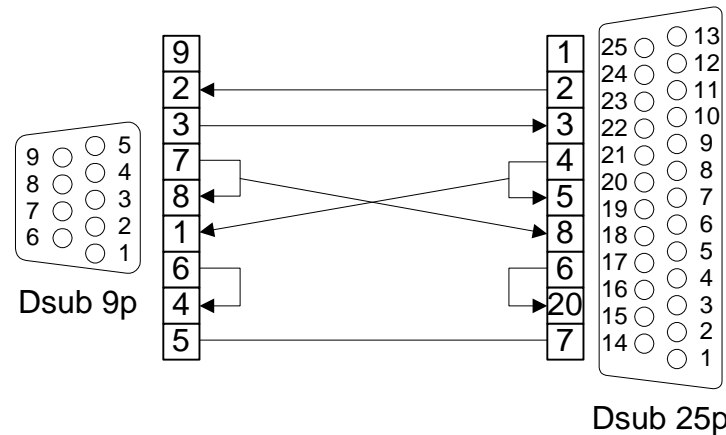
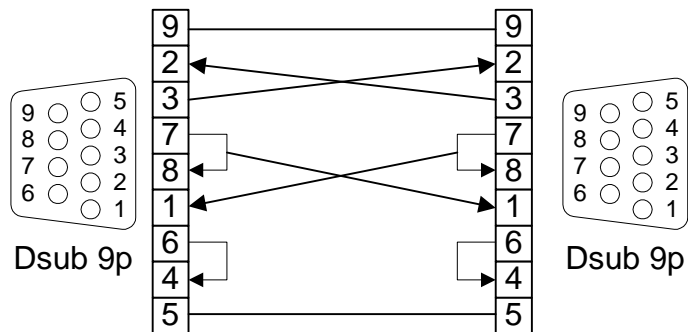
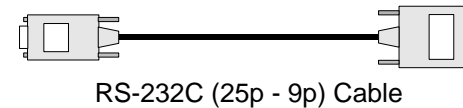
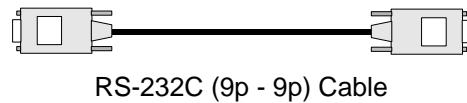


Main Board Dip Switch Setting:
Terminal No.:

Switch No.	Switch Value	Terminal No.									
		1	2	3	4	5	25	30	31
5	16	x	x	x	x	x		o		o	o
4	8	x	x	x	x	x		o		o	o
3	4	x	x	x	o	o		x		o	o
2	2	x	o	o	x	x		x		o	o
1	1	o	x	o	x	o		o		x	o

Baud Rate:

Switch No.	Baud Rate				
	1200	2400	4800	9600	19200
8	x	x	x	x	o
7	x	x	o	o	x
6	x	o	x	o	x



AMANO

TITLE: AMX/ABX RS-232C Direct connection

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Sam Ikoma

DATE: 6/8/01

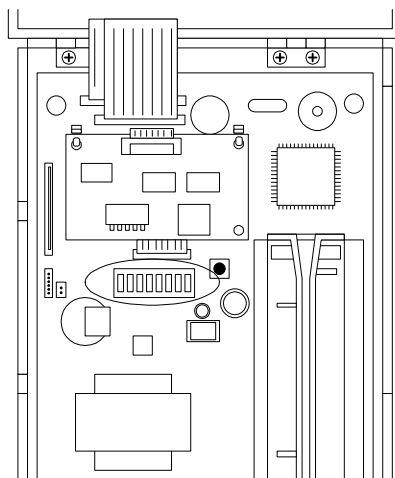
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PG: 1

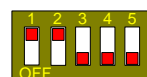
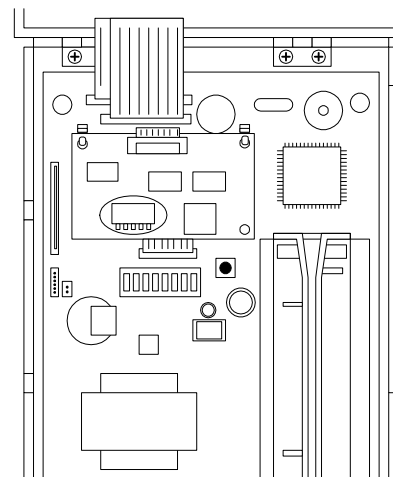
OF 1

PGS

FILENAME: AMXDirect.vsd



Main Board Dip Switch



RS-485 Dip Switch

AMANO

TITLE: AMX & ABX Dip Switch Settings

COMPANY: AMANO Cincinnati, Inc.

CREATOR: Brady

DATE: 0

TIME: 0

PG: 1

OF 1 PGS

FILENAME: AMXPCB.vsd