

2595 16-Point TTL Output Module



Specifications

Inputs per module: 16 (2 outputs per common)

Isolation:

500 VDC group-to-group

1500 VDC channel-to-backplane

1500 VDC channel-to-backplane

Output Drive Capabilities:

High (VOH) (minimum) = 4.5 V @ 500 μ A

Low (VOL) (maximum) = 0.4 V @ 30 mA

Rise/Fall Time = 1 μ Sec

Outputs are true "low" when energized

Sink Current: (maximum per output) 50 mA

PLC Reporting: X or WX (jumper selectable)

Wire gauge: 14-22 AWG removable connectors

Backplane power: 2 Watts max

Module size: Single-wide

Blown fuse indication: Front panel LED

Operating temperature:

0° to 60°C (32° to 140°F)

Storage temperature:

-40° to 85°C (-40° to 185°F)

Humidity, relative: 5% to 95% (non-condensing)

Agency approvals:

UL, UL Canada, FM (Class I, Div 2)

Shipping weight: 1 lb. (0.45 Kg)

Description

The 2595 16-Point TTL Output Module provides sixteen TTL or CMOS compatible outputs to the CTI 2500 Series™ or Simatic® 505 I/O base. The module is designed to respond to standard output instructions. With the 2595, the PLC is capable of providing signals to a variety of field devices including lab instrumentation, BCD message displays, video terminals, board level devices, and low current annunciator panels. With an external pull-up resistor, the 2595 can interface to 24 VDC control systems and other instrumentation. The module can drive up to 16 CMOS or TTL loads per output.

Features

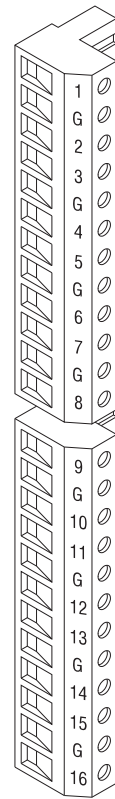
- CTI 2500 Series™ or Simatic® 505 Series I/O base format
- 500V channel-to-channel isolation
- 1500 VDC channel-to-PLC backplane isolation
- Drive BCD message displays and video terminals
- High speed TTL interface to board level devices
- Interface to 5 to 24 VDC control systems and instrumentation
- Operates as a discrete or 16 bit word output



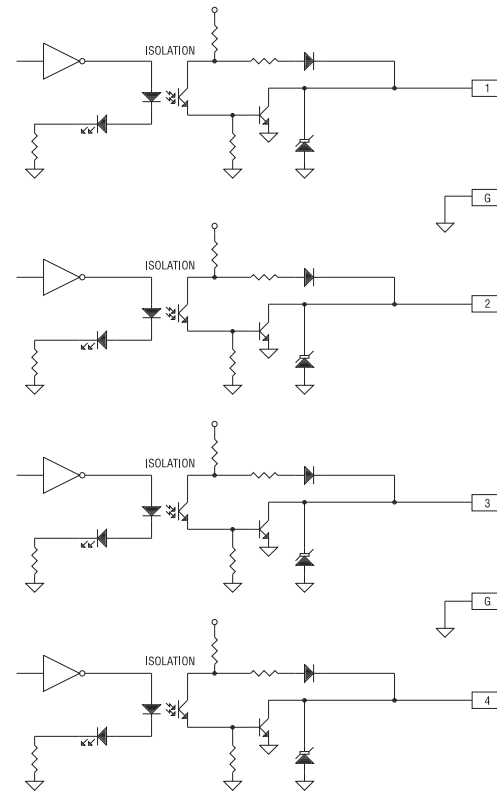
Control Technology Inc.

5734 Middlebrook Pike, Knoxville, TN 37921-5962

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2595 Connector



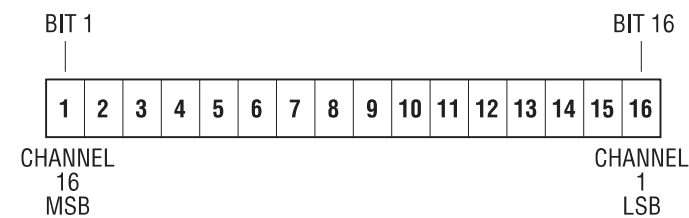
Typical Circuit Group

NOTE: All channels are common to the G terminals.

Word Mode

The 2595 may operate as a 16 bit Word Output Module. By setting JP1 in word mode and using TISOFT to configure I/O the 2595 will look like a standard WY module; for example WY1-WY8. The Model 2595 will be mapped as the first WY address (i.e. WY1).

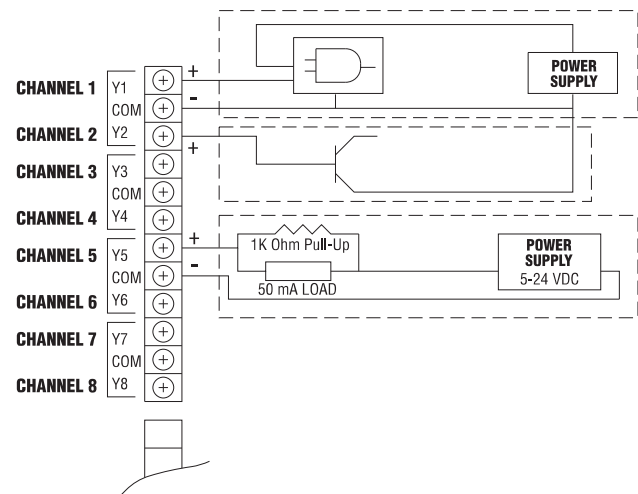
In Word Mode Channel 1 corresponds to Bit 16 or LSB and Channel 16 to Bit 1 or MSB.



Changing Operating Modes

Any time the operating mode of the 2595 is changed with JP1, the module must be reconfigured in the PLC with TISOFT and the configure I/O functions. Failure to do so may cause unpredictable operation due to the fact that the PLC uses different methods of addressing discrete modules from word modules.

WARNING:
The module must not be inserted into the I/O rack with power applied to the PLC.



Typical TTL Output Wiring

I/O MODULE DEFINITION FOR CHANNEL ... 1 BASE ... 00

I/O SLOT ADDRESS	X	Y	WX	WY	I/O FUNCTION	SPECIAL
01	0001	00	16	00	00	NO
02	0000	00	00	00	00	NO
15	0000	00	00	00	00	NO
16	0000	00	00	00	00	NO

EXIT-F1 SHOW-F2 READDK-F3 WRITDK-F4 READPC-F5 WRITPC-F6 READBS-F7 CLRBS-F8

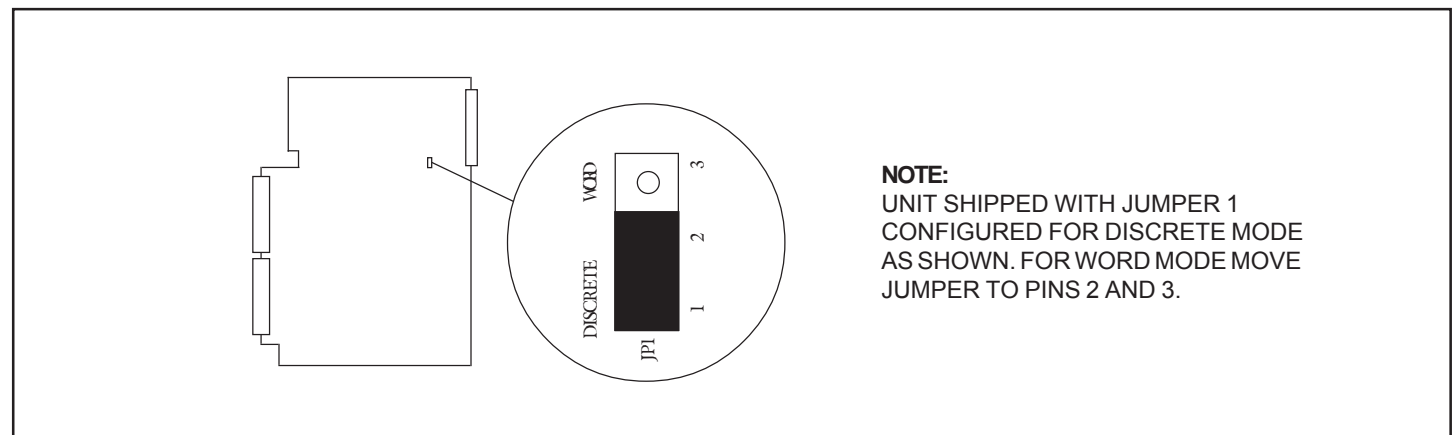
Word Map Discrete Y

I/O MODULE DEFINITION FOR CHANNEL ... 1 BASE ... 00

I/O SLOT ADDRESS	X	Y	WX	WY	I/O FUNCTION	SPECIAL
01	0001	00	00	08	00	NO
02	0000	00	00	00	00	NO
15	0000	00	00	00	00	NO
16	0000	00	00	00	00	NO

EXIT-F1 SHOW-F2 READDK-F3 WRITDK-F4 READPC-F5 WRITPC-F6 READBS-F7 CLRBS-F8

Word Map Word WY



Selecting Y or WY Configuration

NOTE:
UNIT SHIPPED WITH JUMPER 1 CONFIGURED FOR DISCRETE MODE AS SHOWN. FOR WORD MODE MOVE JUMPER TO PINS 2 AND 3.