

**AE-OPT-521C
NTP Interface Option**

and

**9200-0521C
NTP Interface Module**



DESCRIPTION

Option AE-OPT-521C and the 9200-0521C Module provide an NTP (Network Time Protocol) Interface for ATS AE, AN, ANC, and CC Series System Clocks and MC Series Master Clocks.

Option AE-OPT-521C is a PCB assembly that can be added internally to most ATS products.

The 9200-0521C Module uses the same PCB assembly as Option AE-OPT-521C except it is mounted in an enclosure for applications where the Option is not built-in. The 9200-0521C Module can also be added to existing clock systems.

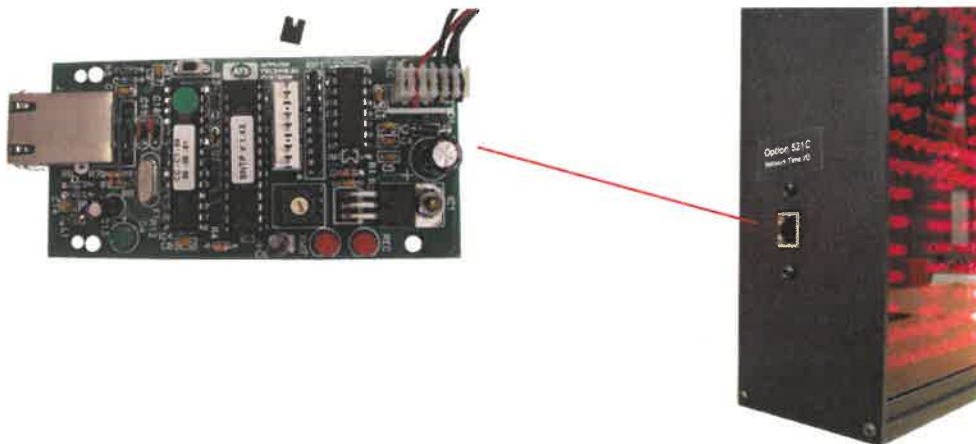
Both products automatically acquire accurate time and date from a pool of network time servers available on the internet. Jumpers and switches are provided for selecting 12 or 24 Hour Format, Time Zone Offset, and DST.

It can also be configured to output the standard GPS strings used by ATS GPS Master Clocks and Master Clock Interfaces such as the MC4181-388, MC41P-388, and the GPS-6400.

This instruction manual is typically used along with the specific product manual. For custom products, information may be included on the specific drawing provided with that product.

Option AE-OPT-521C

The power and data cables are internally connected inside the ATS device (AN, AE, CC, ANC, or MC Series Product). Refer to your product manual for details.



9200-0521C Module

Power and data cables are clearly labeled on the front panel. Connect the RS232 data output cable to the ATS device (AN, AE, CC, ANC, or MC Series Product). Refer to your product manual for details.

Connect the 0900-7512 12 VDC Power module to the power cable.



SET UP

Both Option AE-OPT-521C (built-in) and the 9200-0521C (module) will have to be set up for your specific application. This is usually specified with the order and done at the factory. However, it can be done in the field.

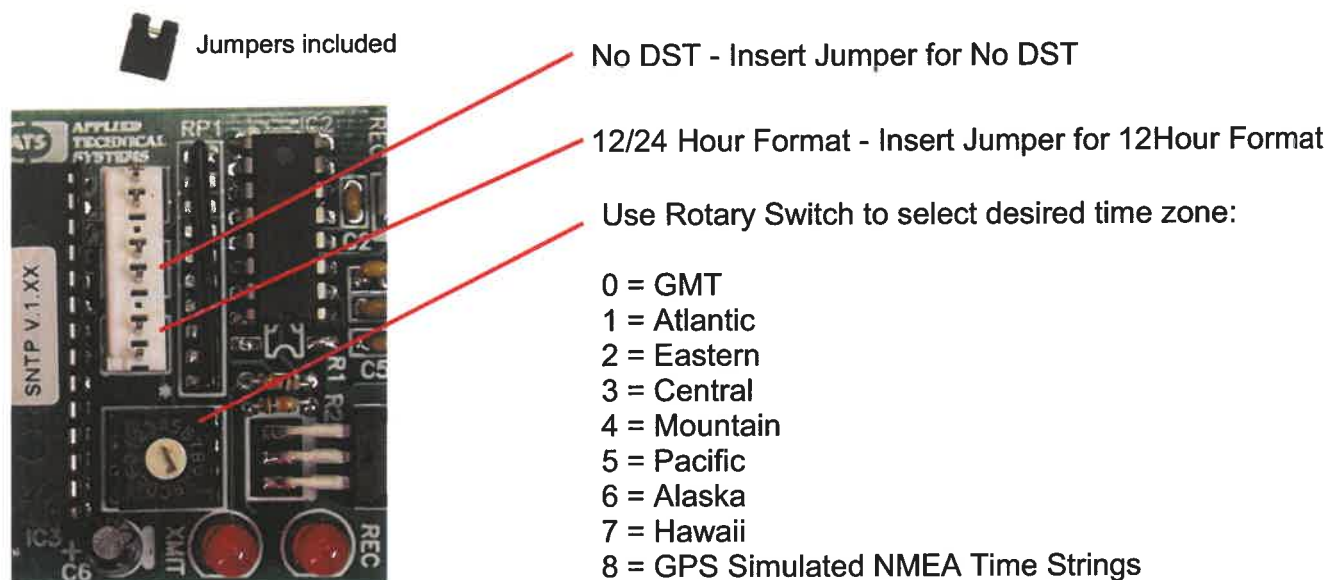


AE-OPT-521C



9200-0521C

For time and date output, set the rotary switch to position that matches your local time zone, as shown. Insert the No DST, and/or the 24Hr jumpers as required.



For GPS String output, set the rotary switch to position 8 or above, as shown. No jumpers are required.

Ethernet

Typically, no set up is required. If there are internal network security systems in place, your network administrator will have to install this device on your system.

A clearly labeled, RJ45 connector is provided for standard Ethernet connection. Refer to your product manual for the location of the RJ45 connector.

OPERATION

***BE SURE ALL SYSTEM WIRING IS COMPLETE
BEFORE APPLYING POWER***

Apply power to the product after all wiring is complete.

AE, AN, ANC, and CC Series Clocks and Clock Drivers with AE-OPT-521C

Once power is applied, the device will acquire an IP address from your server. It will then search for a time server from a pool of Network Timer Servers. Once connected, it will acquire the coordinated time (GMT) and date. The time zone offset and other controls (previously set) will be applied so that local time and date are displayed. This could take up to 10 minutes. Additional updates will automatically occur every 10 minutes.

MC Series Master Clocks with AE-OPT-521C

Once power is applied, the Master Clock will acquire an IP address from your server. It will then search for a time server from a pool of Network Timer Servers. Once connected, it will acquire the coordinated time (GMT) and date. The time zone offset and other controls (previously set) will be applied so that local time and date are applied to Master Clock. This could take up to 10 minutes. Additional updates will automatically occur every 10 minutes.

MC Series Time Zone Master Clocks with AE-OPT-521C

Once power is applied, the Master Clock will acquire an IP address from your server. It will then search for a time server from a pool of Network Timer Servers. Once connected, it will acquire the coordinated time (GMT) and date. The time zone offset and other controls (previously set) will be applied so that local time and date are applied to Master Clock. This could take up to 10 minutes. Additional updates will automatically occur every 10 minutes.

TECHNICAL SUPPORT

For questions concerning installation and operation of this product, contact our factory at:

PHONE (800) 444-7161

or

FAX (318) 797-4864

SERVICE POLICY

It is recommended that all service for this product be done by the factory or by a factory authorized service representative. Applied Technical Systems will provide ongoing service support in and out of warranty. Send your repairs to:

**APPLIED TECHNICAL SYSTEMS
849 KING PLACE
SHREVEPORT, LA 71115**

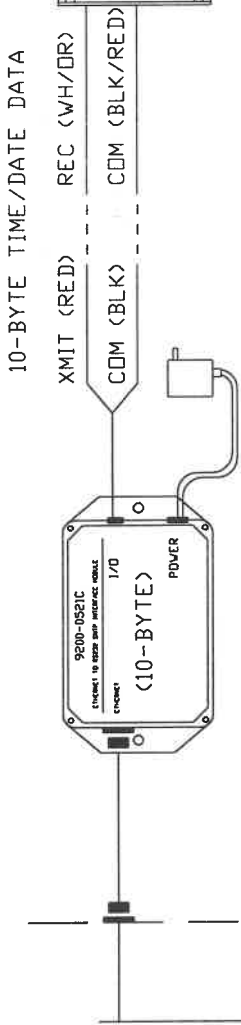
**APPLIED TECHNICAL SYSTEMS
WARRANTY POLICY**

ATS warrants its products to be free of defects in material and workmanship for a period of 24 months from the date of purchase. ATS will repair or replace any product returned to its authorized factory service center within the warranty period so long as there is no evidence that the product has been abused, misused, damaged by lightning, overloads of any kind or water, or altered in any way.

Products returned for warranty must be returned with freight prepaid. ATS will pay normal freight charges to return the product to the customer. Special premium freight requested by the customer will be charged to the customer.

ATS disclaims any warranties expressed or implied, including merchantability and/or fitness for a particular purpose. In no event shall ATS be held liable for incidental or consequential damages.

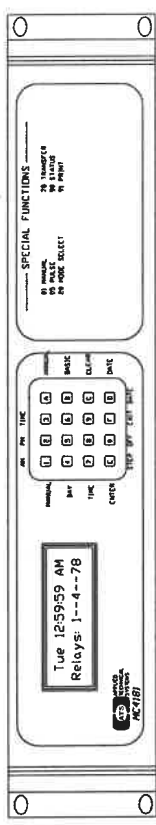
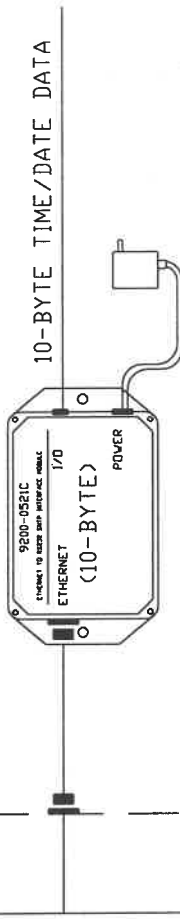
AE, AN, CC SERIES CLOCK SYSTEMS



TYPICAL

12 VDC POWER MODULE

MC SERIES MASTER CLOCKS



THE AE, AN, AN, AND MC SERIES PRODUCTS CAN RECEIVE ACCURATE GMT TIME FROM THE 9200-0521C. CONNECT THE (TX) AND (COM) WIRES FROM THE OUTPUT OF THE 9200-0521C TO THE (REC) AND (COM) WIRES OR TERMINALS PROVIDED ON EACH PRODUCT.

VCAD LTN		APPLIED TECHNICAL SYSTEMS		P.O. BOX 5705 SHREVEPORT, LA 71135	
APPROVALS	DATE	PROJECT	SCALE	JOB #	SHEET #
DRAWN BY JNR	3/12/14	9200-0521C			
CHECKED BY		NTP INTERFACE MODULE			
APPROVED BY					
DESCRIPTION WIRING DIAGRAM			FILENAME: 521C.WD1	DRAWING #	

