

USER GUIDE



ATE TWINNING FRAME SITE PREPARATION

FOR USE WITH ADVANTEST V93000 CTH AND STH TESTERS

ML Twinning Site Prep 20211213a
January 2022

Copyright © MultiLane Inc. All rights reserved. Licensed software products are owned by MultiLane Inc. or its suppliers and are protected by United States copyright laws and international treaty provisions.

Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013, or subparagraphs (c)(1) and (2) of the Commercial Computer Software -- Restricted Rights clause at FAR 52.227-19, as applicable.

MultiLane Inc. products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specifications and price change privileges reserved.

General Safety Summary

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it. To avoid potential hazards, use this product only as specified.

Only qualified personnel should perform service procedures.

While using this product, you may need to access other parts of the system. Read the General Safety Summary in other system manuals for warnings and cautions related to operating the system.

To Avoid Fire or Personal Injury

Use Proper Power Cord. Only use the power cord specified for this product and certified for the country of use.

Observe All Terminal Ratings. To avoid fire or shock hazard, observe all ratings and markings on the product. Consult the product manual for further ratings information before making connections to the product.

Do not apply a potential to any terminal, including the common terminal that exceeds the maximum rating of that terminal.

Do Not Operate Without Covers.

Do not operate this product with covers or panels removed.

Avoid Exposed Circuitry. Do not touch exposed connections and components when power is present.

Do Not Operate with Suspected Failures.

If you suspect there is damage to this product, have it inspected by qualified service personnel.

Do Not Operate in Wet/Damp Conditions. Do Not Operate in an Explosive Atmosphere. Keep Product Surfaces Clean and Dry



Caution statements identify conditions or practices that could result in damage to this product or other property.

Table of Contents

<i>Notices</i>	2
<i>Table of Contents</i>	3
<i>Overview</i>	4
<i>Air Supply – Site Utility Requirement</i>	5
<i>Smartest Software</i>	6
<i>Twinning Frame</i>	7
<i>Ethernet Port</i>	8
<i>MultiLane Power Supply – Supplied by V93000</i>	8
<i>MultiLane Utility Box Interconnects</i>	10
<i>Manipulator and Testhead Upgrades – Contact Advantest</i>	11
<i>Advantest Site Planning Information – Contact Advantest</i>	1

Overview

This document is used to prepare the customer site for the MultiLane High Speed I/O option used with either an Advantest V93000 CTH or STH. **The only additional site resource required is the Site Utility Air Supply.** All other resources and connections are made between the MultiLane option and the existing V93000 tester cell.

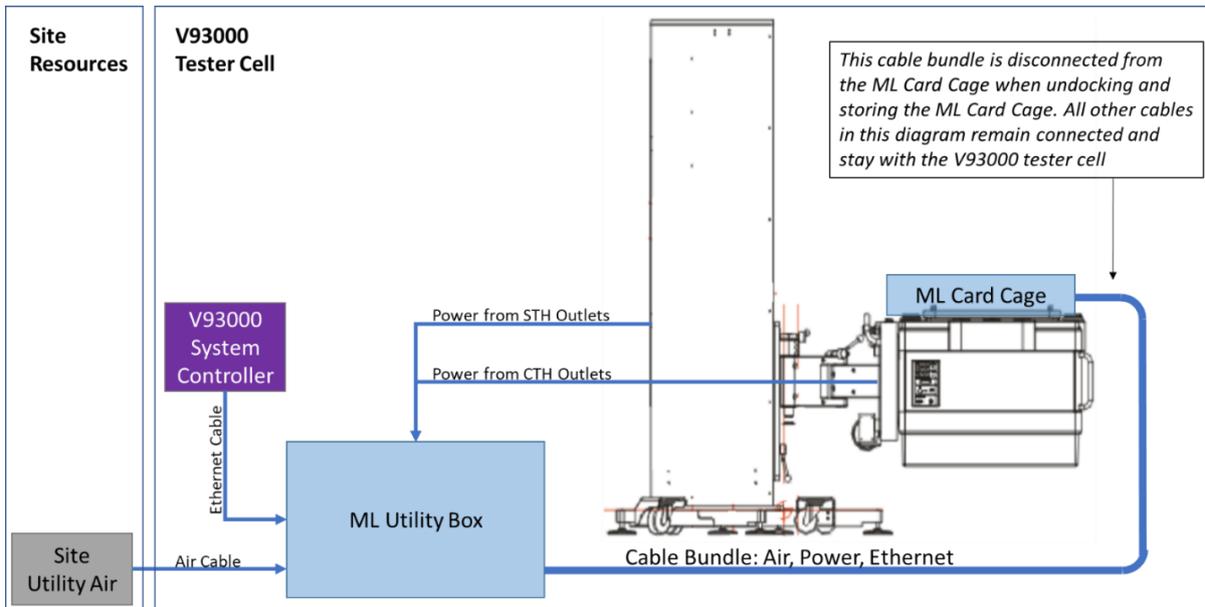


Figure 1: MultiLane System Connection Overview

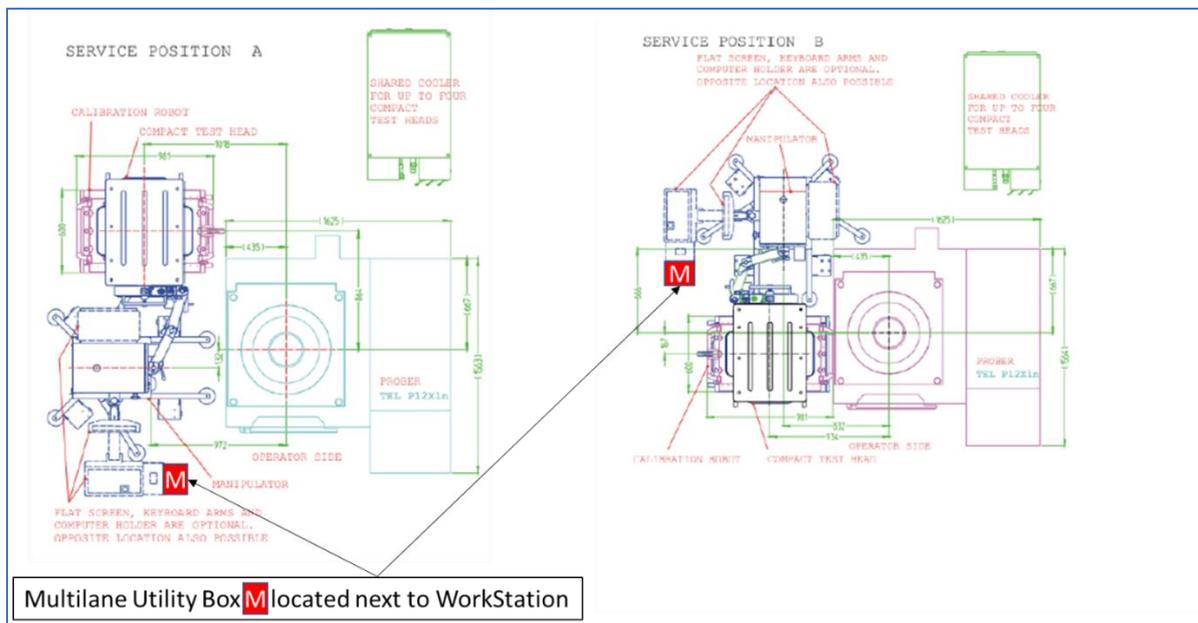


Figure 2: MultiLane Utility Box Location (Service Positions taken from Advantest TDC)

Air Supply – Site Utility Requirement

MultiLane instruments are air cooled and require in customer site utility air supply

Specification	Value	Comments
CFM ¹	3 CFM min, continuous 6 CFM, max, continuous	Need continuous CFM while ML instruments are powered on
PSI	60 PSI max	4 bar equivalent
NPT “A” style coupler	Recommended PUSH-TYPE: Sleeve release	Feeds air cable from utility air supply to ML Utility Box
Distance from Site Utility Air supply to Utility Box	3 meters (10 ft) max	Utility Box is assumed to be next to V93000 workstation



Figure 3: Site Air Supply Coupler Type

¹ Contact MultiLane for CFM requirements for customized MultiLane instruments

The following software must be installed before installing MultiLane Smartest API's:

Specification	Value	Comments
RedHat	Rev 7.4	
V93000 Smartest	7.5 or higher	Must be a Smartest "7.x" version
Site must support fixed IP address assignments	Contact MultiLane for instrument pre-assigned values	For MultiLane instruments

Twinning Frame

Additional information available on the Advantest TDC website:

[Twinning guide - Advantest Technical Documentation Center 5.3.0 BETA](#)

A storage area at the customer site is recommended when twinning frame is not in use

Specification	Value	Comments
Dimensions	0.52 x 1.71 x 1.25	Height (Ft) x Width x Depth
Dimensions	0.16 x 0.52 x 0.38	Height (m) x Width x Depth
Weight	40 kg	Doesn't include customer DIB kg
Storage Container	Not Provided	Shipping Box only
ESD	ESD sensitive devices	
Docking personnel	Recommend 2 people	Docking to CTH or STH



Figure 4: MultiLane Card Cage (also called "Twinning Frame")

Ethernet Port

Specification	Value	Comments
Ethernet Port drop, customer site to V93000 workstation	1 drop	Nothing extra from standard V93000 ethernet drop
Bridge Network, V93000 workstation to MultiLane	192.168.0.X	<i>Not a site prep requirement.</i> Shown here for completeness

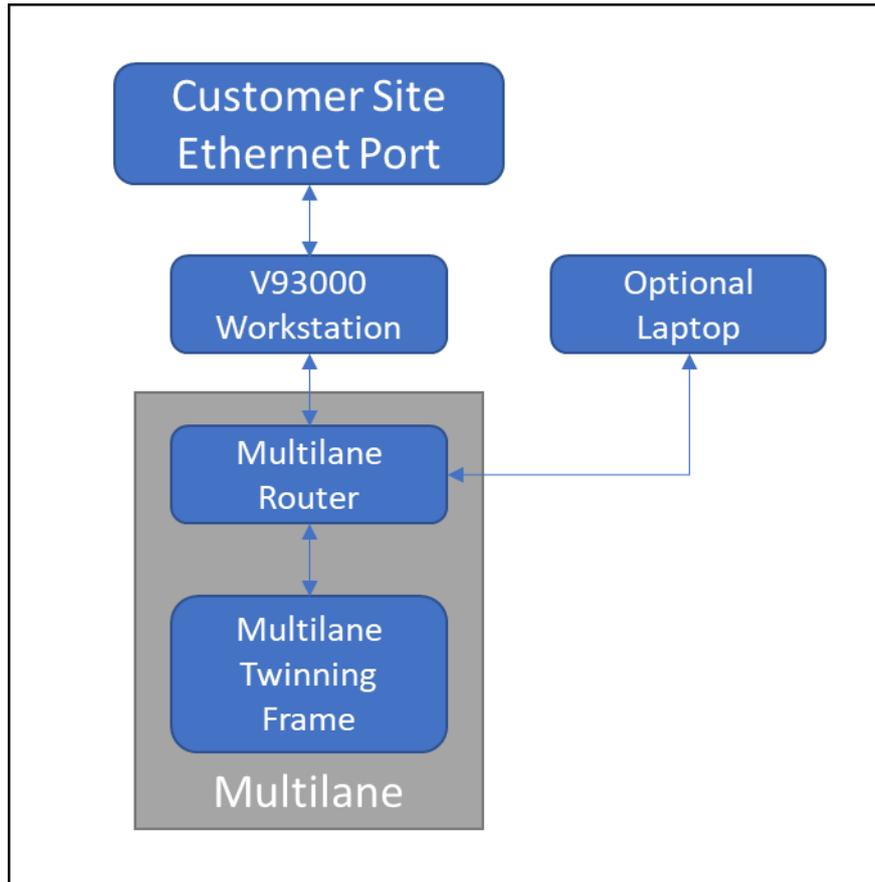


Figure 5: Ethernet Connections

MultiLane Power Supply – Supplied by V93000

MultiLane power is supplied by the Advantest V93000. It is not supplied directly from the customer site. V93000 power outlets are provided for both the CTH and STH cases. The MultiLane Power supply takes an AC voltage in (see table below) and creates 12 V out for the MultiLane instruments

[Connecting the mains cable and powering up - Advantest Technical Documentation Center 5.3.0 BETA](#)

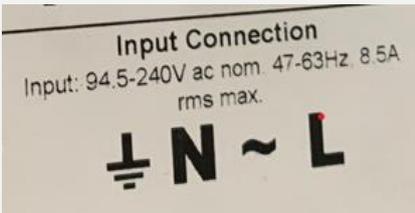
Specification	Value
MultiLane +12 V power supply	



Figure 6: V93000 STH power switched outlets

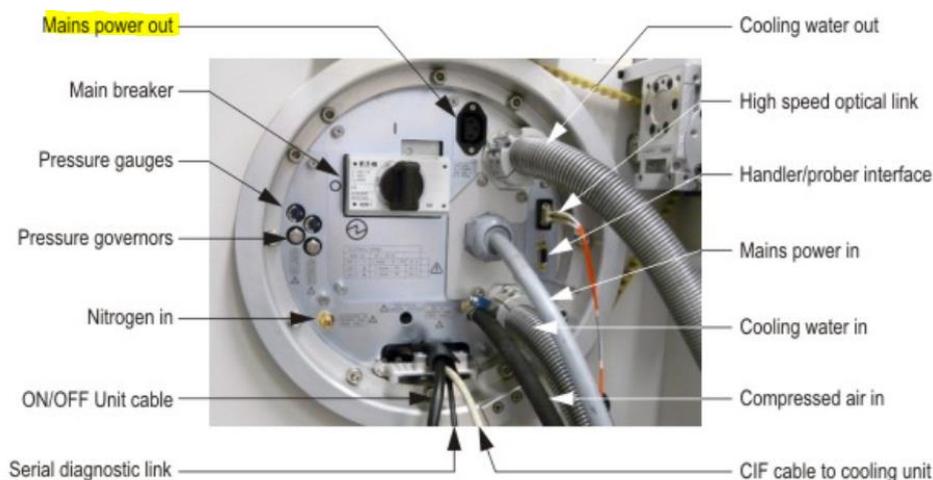


Figure 7: V93000 CTH power switched outlet

MultiLane Utility Box Interconnects

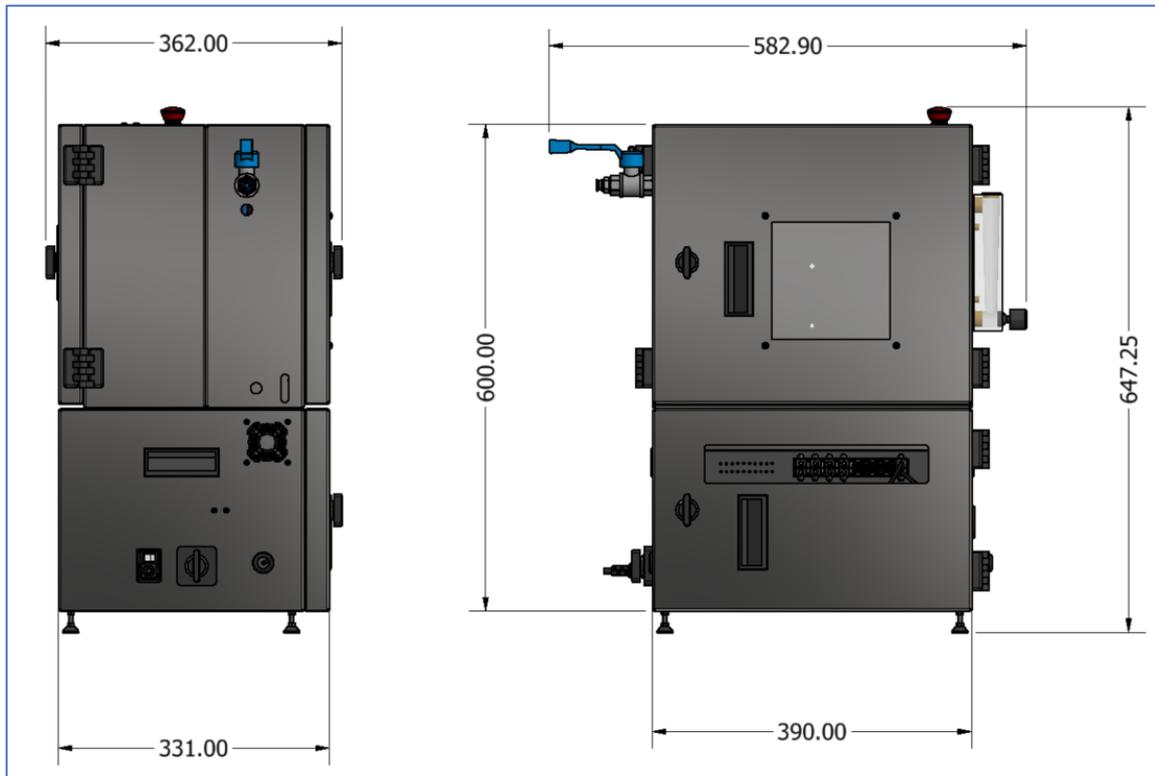


Figure 8: MultiLane Utility Box Dimensions (mm)

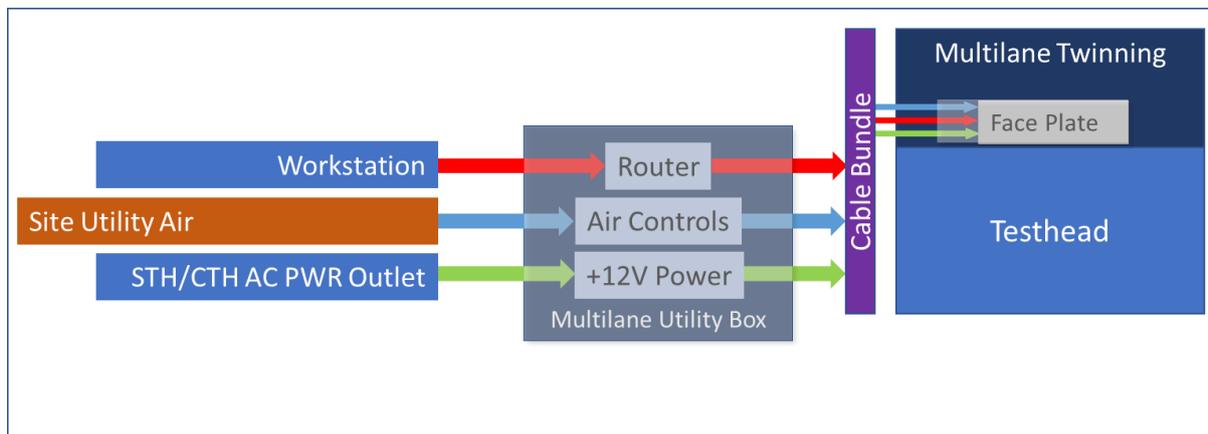
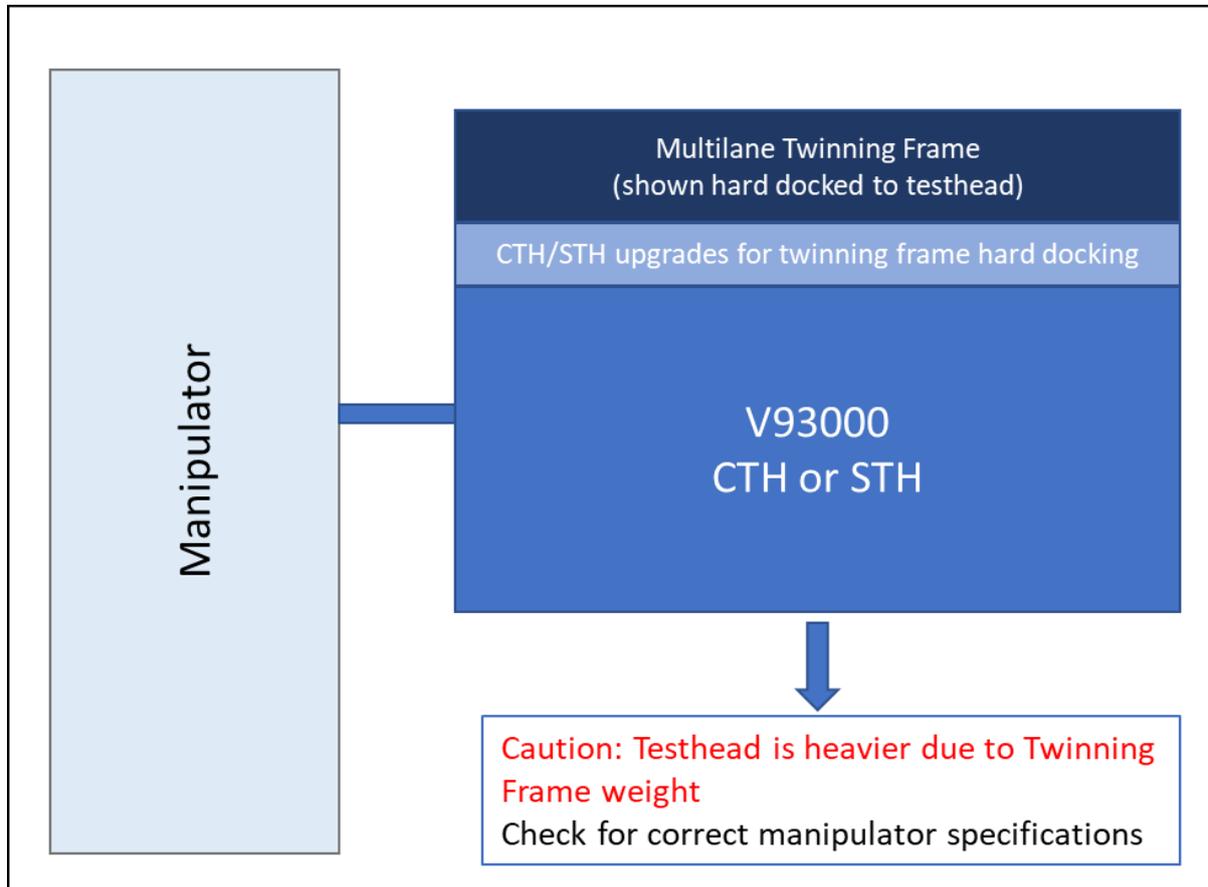


Figure 9: MultiLane System Detailed Utility Box Interconnects

Manipulator and Testhead Upgrades – Contact Advantest

Consult with Advantest to make sure the manipulator can support the additional twinning frame weight. Consult with Advantest to make sure the onsite V93000 testhead has all the upgrades required to hard dock with the MultiLane twinning frame





Advantest Site Planning Information – Contact Advantest

Additional site planning information can be found in the Advantest CTH and STH site planning documentation. For example,

- Facility environmental conditions: (Advantest TDC topic 128630)
- ESD prevention: (Advantest TDC topic 128733)



North America

48521 Warm Springs Blvd.
Suite 310
Fremont, CA 94539, USA
+1 510 573 6388

Worldwide

Houmal Technology Park
Askarieh Main Road
Houmal, Lebanon
+961 81 794 455

Asia

14F-5/ Rm.5, 14F., No 295
Sec.2, Guangfu Rd. East Dist.,
Hsinchu City 300, Taiwan (R.O.C)
+886 3 5744 591

UAE

Building 4WA, Office 420
Dubai Airport Freezone Authority,
Dubai, UAE
+971 4 548 7 547