



WARNING
High Temperature Hazard
Do not touch the laser tube or other hot parts.
Do not look into the laser beam.
Do not look at the laser light directly.

WARNING
High Temperature Hazard
Do not touch the laser tube or other hot parts.
Do not look into the laser beam.
Do not look at the laser light directly.

WARNING
High Temperature Hazard
Do not touch the laser tube or other hot parts.
Do not look into the laser beam.
Do not look at the laser light directly.

WARNING
High Temperature Hazard
Do not touch the laser tube or other hot parts.
Do not look into the laser beam.
Do not look at the laser light directly.

WARNING
High Temperature Hazard
Do not touch the laser tube or other hot parts.
Do not look into the laser beam.
Do not look at the laser light directly.

WARNING
High Temperature Hazard
Do not touch the laser tube or other hot parts.
Do not look into the laser beam.
Do not look at the laser light directly.

SPACE
SHUT
EXH.





BACKSCATTER

QUADRANTS

BRIGHTNESS

CONTRAST

GAIN

MODE

1 2 3 4

+ - + - + - + -

+

-

+

-

+

-

+

-

1 2 3 4

< >

VISUAL RECORD

+

-



WARNING
Hazardous Voltage
70 Volts
手は電線から離してください
電源をオフにしてから
作業してください
Can cause severe injury or death
Turn off power before servicing

WARNING
Hazardous Voltage
100 Volts
手は電線から離してください
電源をオフにしてから
作業してください
Can cause severe injury or death
Turn off power before servicing

IPC-010

010001

010001

POWER PM 5V



Beam Adjustment

WARNING
危険な電圧が加えられ、
高電圧にさらすことにより、
感電による怪我や死亡の
危険があります。必ず
作業前には電源を切ってください。

WARNING
危険な電圧が加えられ、
高電圧にさらすことにより、
感電による怪我や死亡の
危険があります。必ず
作業前には電源を切ってください。

Beam Monitor Aperture

Gun Lens 1 Adjustment

Objective Lens Aperture

Gun Lens 2 Adjustment

WARNING
危険な電圧が加えられ、
高電圧にさらすことにより、
感電による怪我や死亡の
危険があります。必ず
作業前には電源を切ってください。

WARNING
危険な電圧が加えられ、
高電圧にさらすことにより、
感電による怪我や死亡の
危険があります。必ず
作業前には電源を切ってください。

WARNING
危険な電圧が加えられ、
高電圧にさらすことにより、
感電による怪我や死亡の
危険があります。必ず
作業前には電源を切ってください。

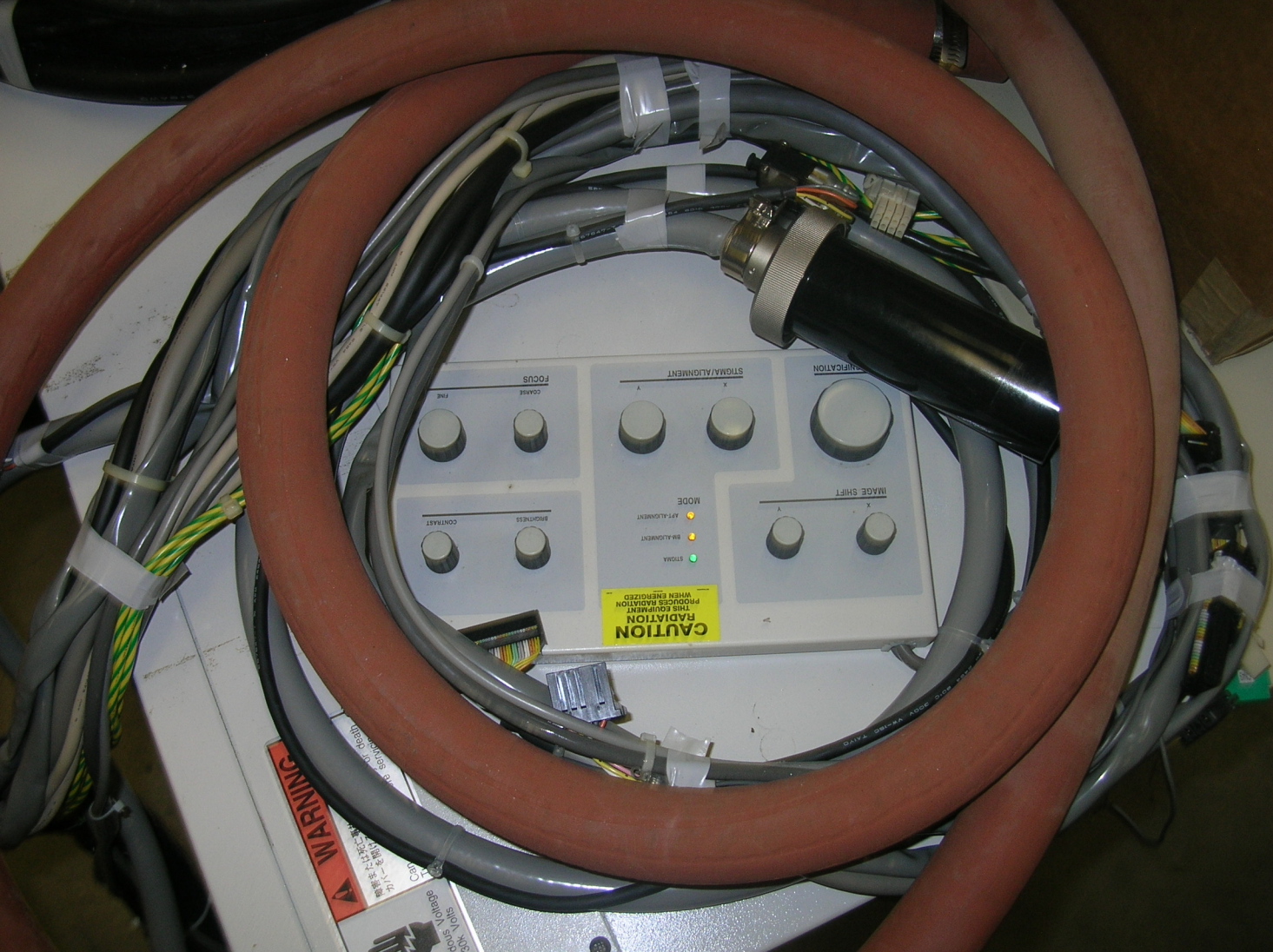
RESOLUTION

RESOLUTION

UDMIL310

1 OF 2

RES-221 1032 MET



CAUTION
RADIATION
THIS EQUIPMENT
PRODUCES RADIATION
WHEN ENERGIZED

MODE
STORM (green light)
RM ALIGNMENT (yellow light)
HP ALIGNMENT (yellow light)

IDENTIFICATION

STORM ALIGNMENT

FOCUS

IMAGE SHIFT

BRIGHTNESS

CONTRAST

COARSE

FINE

X

Y

X

Y

X

Y

WARNING

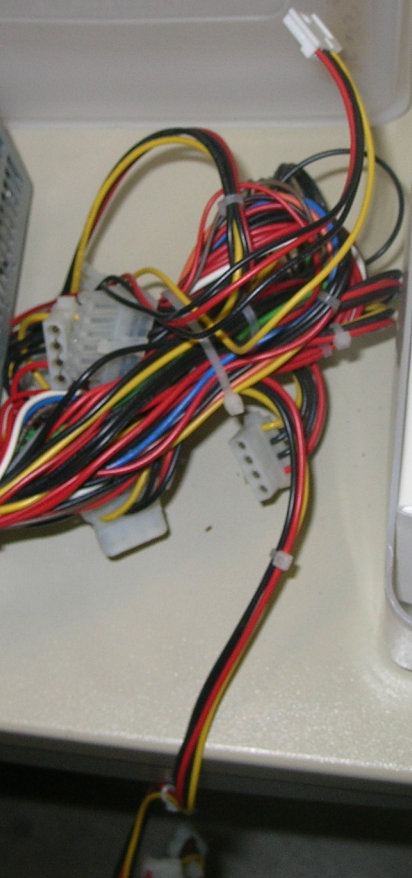
21-1-87-3000
21-1-87-3000

300 300 300 300 300
300 300 300 300 300

100 100 100 100 100
100 100 100 100 100









AMERICA'S
SPACE
SHUTTLE
EXB. 3137

5-4800

⚠ WARNING
⚠ WARNING
⚠ WARNING
⚠ WARNING
⚠ WARNING

⚠ WARNING
⚠ WARNING
⚠ WARNING
⚠ WARNING

MADE IN THE USA 800V
CABLE 802 802 802

HITACHI

MODEL S-4800
FIELD EMISSION
SCANNING ELECTRON MICROSCOPE
(User's Operation/Maintenance Edition)

INSTRUCTION MANUAL

HITACHI
SEM course

LOG NOTEBOOK
SEM
\$4800 SEM

FEDERAL SUPPLY SERVICE
7300-00-000-0000
7300-00-000-0000

QUARTZ Family of Products
PCI office

Imaging Software - used for other types of
imaging with PCI Lab.
Also may be used with Quartz PCI Lab.
Also may be used with most EM manufacturers
factory calibration - Hitachi, FEI, Zeiss and others.

PCI CFR

Helps You Comply with 21 CFR Part 111
not on packages by the use of
• All images by the user
an image, if it is not
• All images are stored in a secure location
• All images are encrypted to protect data
• All images are stored in a secure location
• All images are encrypted to protect data
• All images are stored in a secure location
• All images are encrypted to protect data

QUARTZ
PCI CFR

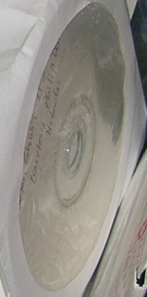
PCI Lab

Imaging Software - Suitable for most
existing instruments including:
• SEM
• STEM
• Instruments
• EDX systems
• Cameras
• Scanners



Custom Development
software & hardware solutions
library solutions

Scanning Electron Microscope
(User's Operation/Maintenance Edition)



TA752
 TA752 CASSETS
 TRAINED

Control panel of the Hitachi S-4800 Scanning Electron Microscope. It includes two power switches on the left, a central control area with buttons for IP1, IP2, IP3, IP4, and IP5, and a digital display with MODE, SELECT, UP, and DOWN buttons. A large red emergency stop button is on the right.

HITACHI
S-4800 Scanning Electron Microscope

WARNING
 Hazardous Voltage Inside
 Can cause death or serious injury.
 Do not remove the cover.

WARNING
 This product contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm.
 Wash hands after handling.

WARNING
 Hazardous Voltage
 5k Volts
 Can cause serious injury or death.
 Turn off power before servicing.

WARNING
 Hazardous Voltage
 5k Volts
 Can cause serious injury or death.
 Turn off power before servicing.

WARNING
 Hazardous Voltage
 10k Volts
 Can cause serious injury or death.
 Turn off power before servicing.

WARNING
 Hazardous Voltage
 10k Volts
 Can cause serious injury or death.
 Turn off power before servicing.

WARNING
 Hazardous Voltage
 2.5k Volts
 Can cause serious injury or death.
 Turn off power before servicing.



17A006C002

17A006C002

17A006C002 17A006A002

17A006C002

WARNING
DO NOT OPERATE THIS INSTRUMENT WITHOUT PROPER TRAINING AND SUPERVISION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.

WARNING
DO NOT OPERATE THIS INSTRUMENT WITHOUT PROPER TRAINING AND SUPERVISION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.

WARNING
DO NOT OPERATE THIS INSTRUMENT WITHOUT PROPER TRAINING AND SUPERVISION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.

WARNING
DO NOT OPERATE THIS INSTRUMENT WITHOUT PROPER TRAINING AND SUPERVISION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.

WARNING
DO NOT OPERATE THIS INSTRUMENT WITHOUT PROPER TRAINING AND SUPERVISION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.
SEE THE OPERATOR'S MANUAL FOR COMPLETE SAFETY INFORMATION.







S-4800

- 1. High Voltage
- 2. X-ray Tube
- 3. Detector
- 4. Sample Stage

HANDLE WITH CARE
FRAGILE

3 1/2" x 5 1/2" x 3 1/2" (90mm x 140mm x 90mm)
3 1/2" x 5 1/2" x 3 1/2" (90mm x 140mm x 90mm)



Prod No: 15870-1
T-Buss AL-40 (Hatch-8480) Mount
Qty: 1
MADE IN CHINA

TED PELLA, INC.
Prod No: 15870-1
T-Buss AL-40 (Hatch-8480) Mount
Qty: 1

TED PELLA, INC.
Prod No: 15870-1
T-Buss AL-40 (Hatch-8480) Mount
Qty: 1



FRAGILE

3 1/2" x 5 1/2" x 3 1/2" (90mm x 140mm x 90mm)
3 1/2" x 5 1/2" x 3 1/2" (90mm x 140mm x 90mm)



1000
2013

RESISTANT 500W CSA (-40C) FT-2 P-7K-123033 MSHA MADE IN USA

CAROL 12/3 90C IUJ WATER

MSHA MADE IN USA 300V

ANEST IWATA
OIL-FREE SCROLL VACUUM PUMP
For SERVICE & SALES
970.240.9429
www.anest-iwata.com
CE

1000
2013

