

Step by Step Procedure to Operate LEAP by Remote Mode

Step: 1

Login in the Team Viewer

The image shows the TeamViewer login interface. A red circle highlights the 'Sign In' section, which includes the 'E-mail' and 'Password' input fields, the 'Sign In' button, and the 'Keep me signed in' checkbox. An arrow points from this circle to a zoomed-in view of the same section below.

Connection Extras Help Feedback

Free license (non-commercial use only) - IT Madras - IVAS

Insert partner ID CONNECT

Sign In
Don't have an account?

E-mail
LEAP5000Remote9@gmail.

Are you already a TeamViewer customer?
Please sign in here with your TeamViewer account to use the full functionality.

Password
.....

Sign In

Keep me signed in

[Forgot password](#)

[Sign Up](#)

Remote Control

Meeting

Computers & Contacts

Chat

TeamViewer
www.TeamViewer.com

Connection Extras Help Feedback

Sign In
Don't have an account?

E-mail
LEAP5000Remote9@gmail.

Are you already a TeamViewer customer?
Please sign in here with your TeamViewer account to use the full functionality.

Password
.....

Sign In

Keep me signed in

[Forgot password](#)

[Sign Up](#)

Step: 2

To Connect LEAP computer

The screenshot shows the TeamViewer application window. The top bar includes 'Connection', 'Extras', 'Help', and 'Feedback' menus. A status bar at the top right shows 'Free license (non-commercial use only) - IIT Madras - IVAS' and a 'CONNECT' button. The main interface is divided into two columns: 'Allow Remote Control' and 'Control Remote Computer'. The 'Allow Remote Control' column displays 'YOUR ID' as 757 784 663 and 'PASSWORD' as 2zr4p8. Below this, the 'Unattended Access' section has three checked options: 'Start TeamViewer with Windows', 'Assign device to account', and 'Grant easy access'. The 'Control Remote Computer' column shows 'Partner ID' as 477128915 and two radio button options: 'Remote control' (selected) and 'File transfer'. A blue 'CONNECT' button is highlighted with a red circle, and a red arrow points from it to the text 'Click this connect button' below. The bottom of the window shows a Windows taskbar with various application icons and a system tray with the time 12:14 PM and date 8/29/2018.

TeamViewer

Connection Extras Help Feedback

LEAP Support PC

Free license (non-commercial use only) - IIT Madras - IVAS

Insert partner ID

CONNECT

Allow Remote Control

YOUR ID 757 784 663

PASSWORD 2zr4p8

Unattended Access

Start TeamViewer with Windows

Assign device to account

Grant easy access

Control Remote Computer

Partner ID 477128915

Remote control

File transfer

CONNECT

Click this connect button

TeamViewer
www.TeamViewer.com

Ready to connect (secure connection)

12:14 PM
8/29/2018

Step: 3

LEAP Window-After Establishing the Connection

The screenshot displays the LEAP Control Center software interface, which is divided into several functional panels:

- Top Left Panel (Data Acquisition):** Contains video control settings for both the TOP CAMERA and SIDE CAMERA. Each camera view includes a 'Video' sidebar with sliders for Gain (N/A), Exposure (N/A), Zoom (0.5X), Brightness, and Contrast. The TOP CAMERA view shows a close-up of the instrument's internal components, while the SIDE CAMERA view shows a different perspective. Both views include a 'HOME' button and a set of navigation arrows (left, right, up, down, zoom in, zoom out).
- Top Right Panel (System Control):** Displays the system name 'LEAP5000 XR - One Atom At A Time' and the current analysis chamber pressure as $5.23E-11$. It also shows the Stage Speed (7.8 u/s) and TOP SCOPE camera controls.
- Bottom Left Panel (Data Acquisition):** Similar to the top left, it shows the SIDE CAMERA view with its respective video controls and navigation buttons.
- Bottom Right Panel (Analysis Chamber):** Shows the current specimen 'Puck-2244' and local electrode 'Puck-VI'. It displays the analysis ID '20180807_C007_ITM04' and 'AFCB_24382', along with the Stage Speed (15.6 u/s) and BOTTOM SCOPE camera controls.
- Far Right Panel (LEAP Control Center Version 5.0):** Features the CAMECA logo and several system status indicators: 'Treatment' (OFF), 'Cleaner Idle', 'Load Lock Pump' (ON), and 'Buffer Pump' (ON). It also shows numerical values for '2.84E-08' and '8.01E-10'.
- Bottom Status Bar:** Includes 'User Mode: Standard', 'Login', 'LEAP SYSTEM - READY', 'LASER - LASER HEAD OFF', 'Restore Power', 'Events', and help icons.

Step: 4

Micro Tip Coupon Home Position (Default Position)

The screenshot displays the LEAP Control Center software interface, which is divided into several functional areas:

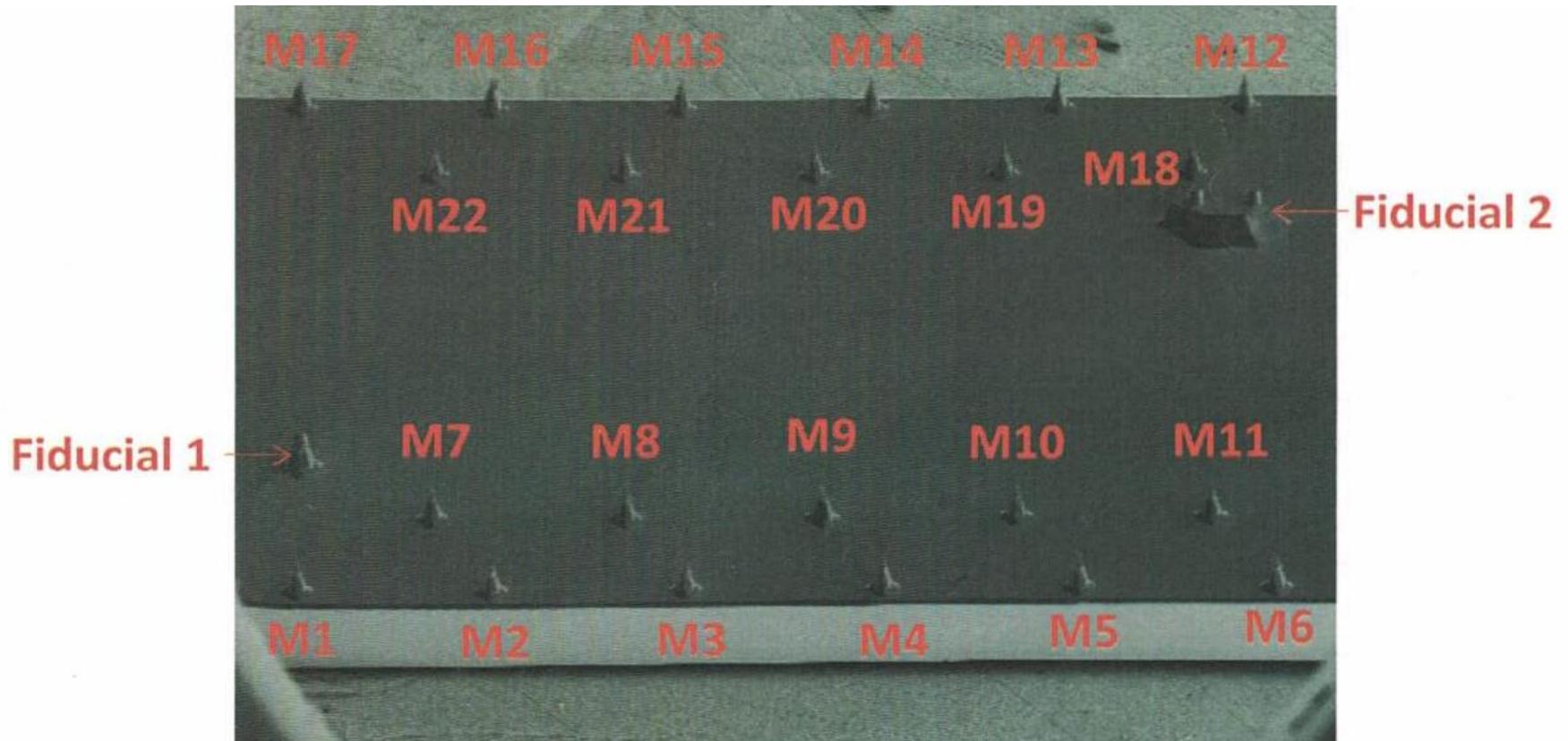
- Top Left (Data Acquisition):** Includes a 'Video' panel with sliders for Gain, Exposure, Zoom (0.5X), Brightness, and Contrast. Below it is another 'Video' panel with similar controls.
- Top Center (Puck Exchange):** Shows 'Stage Speed: 125.0 u/s' and 'TOP CAMERA'. It features a live video feed of the instrument's interior with a red circle highlighting the micro tip coupon. Below the video are navigation buttons and a 'HOME' button with coordinates: X: -5248.2 Y: -0.1 Z: 5000.1.
- Top Right (System Control):** Displays 'LEAP5000 XR - One Atom At A Time' and 'Analysis Chamber' with a value of $5.23E-11$. It includes a 'Stage Speed: 7.8 u/s' slider and a 'TOP SCOPE' video feed showing a close-up of the tip.
- Bottom Center (Specimen/Local Electrode):** Shows 'Specimen: Puck-2244' and 'Local Electrode: Puck-VI'. It includes a 'Stage Speed: 15.6 u/s' slider and a 'BOTTOM SCOPE' video feed.
- Right Panel (Status/Controls):** Contains the CAMECA logo and version information. It features status indicators for 'Treatment' (OFF), 'Cleaner Idle', 'Load Lock Pump' (ON, $2.84E-08$), and 'Buffer Pump' (ON, $8.01E-10$). Below these are grid controls for stages C 482, C 485, and C 486.
- Bottom Bar:** Shows 'User Mode: Standard', 'Login', 'LEAP SYSTEM - READY', 'LASER - LASER HEAD OFF', 'Restore Power', 'Events', and help icons.

Considerations for Remote Mode Operation

- Please follow the encircled markings (in red colour) and make sure that everything matches with the figures as shown
- In case of not matching situation you please contact NFAPT
- The job of the NFAPT team is complete at step: 4
- Further sample positing, parameters selection and performing measurements all are the responsibility of remote operators
- The NFAPT team can support in case of major requirement but can not perform measurements meant to be performed by remote operators
- NFAPT team is not responsible neither accountable for the selection/determination of parameters

For Further Guidance

Step: 5- Sample Selection and Positioning



- The sample position as prepared in the FIB should have been informed to the operator in advance
- It is recommended to identify and follow the position of the tips

Step: 6

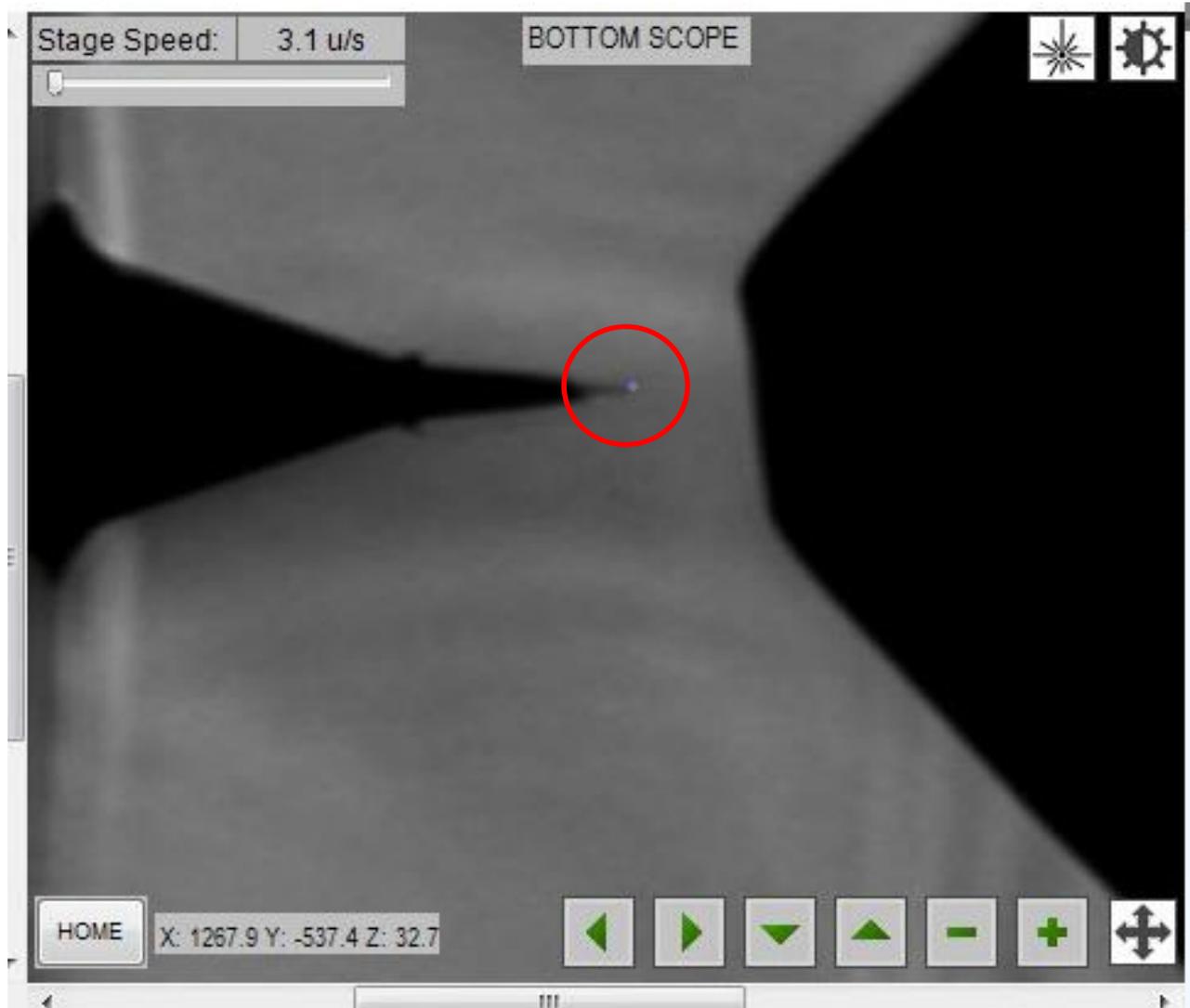
Updating in the Database

The screenshot displays the LEAP5000 XR control software interface. The main window is titled "LEAP5000 XR - One Atom At A Time". The "Database" tab is active, showing "Experiment Details For Specimen 20180731_C005_IITB01-M-3". The "Analysis Chamber" is set to "5.50E-11". The "Specimen" field is set to "None", and the "Date" field is empty. The "Result" field is empty, and the "Specimen" field is empty. The "Comments" field is empty. The "Local Electrode" field is empty, and the "Good Hits" field is empty. The "Temperature" field is empty, and the "Vacuum" field is empty. The "Voltage" field is empty. The "Micro Tip" field is set to "M-3". The "Specimen" field is set to "Puck-2252", and the "Local Electrode" field is set to "Puck-VI". The "Condition" field is set to "APT". The "Comments" field is empty. The "IIT Bombay" field is empty, and the "MgO 7wt% Fe2O3" field is empty. The "PI Prof. Amartya Mukhopadhyay, Dept MME,IITB" field is empty. The "Specimen" field is set to "20180731_C005_IITB01-M-3", and the "Local Electrode" field is set to "AFCEB_24382". The "Stage Speed" field is set to "15.6 u/s". The "BOTTOM SCOPE" field is empty. The "Stage Speed" field is set to "125.0 u/s". The "TOP CAMERA" field is empty, and the "SIDE CAMERA" field is empty. The "HOME" field is set to "X: -5248.1 Y: 0.0 Z: 5000.1". The "User Mode" field is set to "Standard". The "Login" field is empty. The "LEAP SYSTEM - READY" field is empty. The "LASER - LASER HEAD OFF" field is empty. The "Restore Power" field is empty. The "Events" field is empty. The "i" field is empty, and the "?" field is empty.

- Ensure that the selected tip matches with the position as shown in the database, If not, please correct in the database

Step: 7

Sample Tip Aligned for the Analysis



- Ideal position for sample and LASER spot

Thank You