

Electrically-Controllable Ultra-Narrow Bandwidth-Variable Tunable Filter< CVF>

user's manual



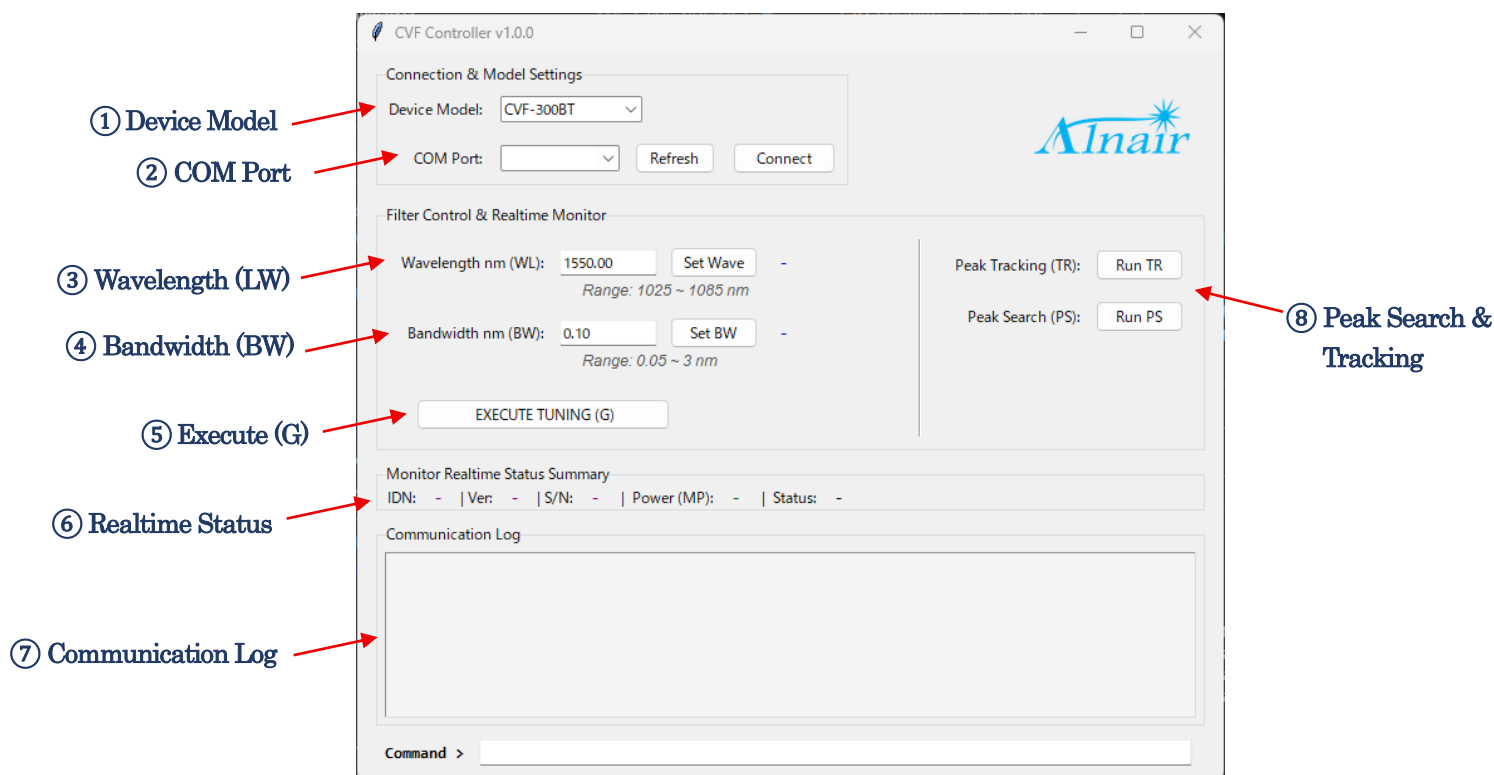
株式会社アルネア

© Copyright Alnair. Corporation. JAPAN 2019. All rights reserved.
Information in this document is subjected to change without prior notice.

■CONTENTS.

- 1. UI Component & Function Mapping**
- 2. Standard Operation Procedures**

1. UI Component & Function Mapping



① Device Model	Selects or displays the connected hardware model.
② COM Port	Lists available ports; click [Refresh] to rescan or [Connect] to link.
③ Pulse Width (PWS)	Sets the optical center wavelength; click [Set Wave] to apply.
④ Fine Tune (PWF)	Sets the optical filter bandwidth; click [Set BW] to apply.
⑤ Execute (G)	Initiates physical device tuning; click [EXECUTE TUNING (G)] to apply.
⑥ Realtime Status	Displays polled hardware summary (Model, Ver, S/N, and Optical Power).
⑦ Communication Log	Displays command traffic (TX: Sent / RX: Received); press Enter to send manual commands.
⑧ Peak Search & Tracking	Controls automated tracking routines; click [Run TR] for active peak tracking or [Run PS] for wide-spectrum peak searching.

2. Standard Operation Procedures

2.1 Startup and Connection Procedures

1. Connect the device to your PC via the USB cable.
2. Launch the software application.
3. Click [Refresh] to update the port list, then select the correct active port from the COM Port dropdown menu.
4. Click [Connect] to establish communication.
5. Verify that the control entries unlock and the Realtime Status summary updates automatically.

2.2 Adjusting Wavelength (WL) & Bandwidth (BW)

1. To Set Wavelength: Enter the target value in the Wavelength nm (LW) box and click [Set Wave] to register.
2. To Set Bandwidth: Enter the target value in the Bandwidth nm (BW) box and click [Set BW] to register.
3. To Apply Settings: Click [EXECUTE TUNING (G)] to trigger physical device tuning. *Ensure the status is Ready before applying; controls are locked while Busy.*
4. Verify the changes via the blue readback status text on the right.

2.3 Running Peak Search & Active Tracking

1. To Run Peak Tracking: Click [Run TR] to automatically locate and track the peak wavelength within the current bandwidth.
2. To Run Peak Search: Click [Run PS] to scan the full spectrum and find the center wavelength of an unknown signal.
3. Verify Status: Monitor the routine progress. *All control actions are disabled when the status displays Busy until it switches back to Ready.*

2.4 Shutting Down and Disconnection Procedures

1. Click [Disconnect] to safely terminate the active serial communication session.
2. Close the software application.
3. Disconnect the physical USB cable from your PC.