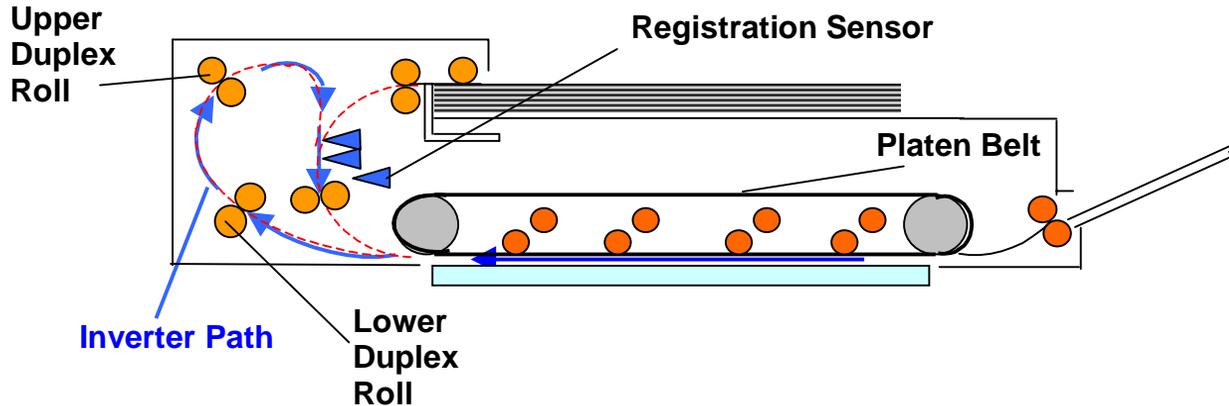


Document Inverting - Document Handling Module

Document Inverting

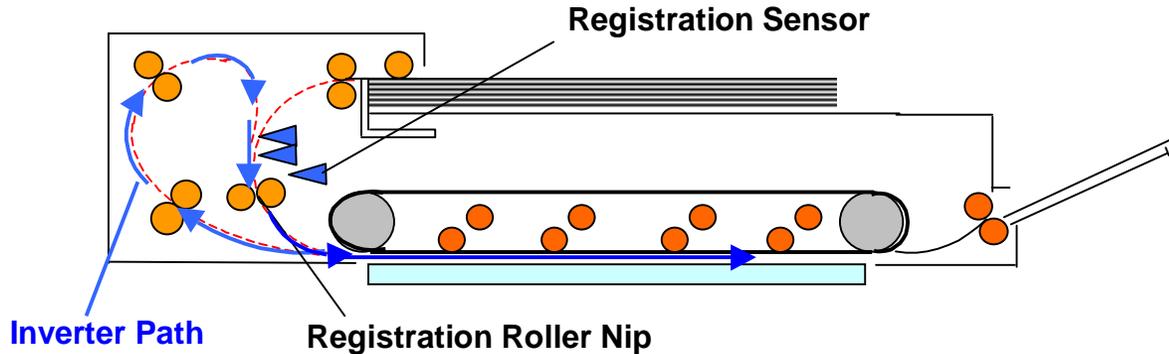
The DADF uses a +24 VDC, bi-directional, stepper Belt Motor to invert the documents. For two-sided document handling, the Belt Motor first energizes in the forward direction (ccw when viewed from the machine front) to feed the top, or side one, of the document onto the Platen Glass for scanning. After side one has been scanned, the Belt Motor reverses direction. This causes the Platen Belt to run in reverse direction, transporting this original document from the Platen Glass into the inverter path.



The Lower and Upper Duplex Rollers are driven through one-way clutches. They activate only when the Belt Motor is energized in the reverse (cw) direction. The Lower and Upper Duplex Rolls turn over the document so that side two will be face down on the Platen Glass.

Document Inverting - Document Handling Module

Document Inverting (continued)



As the document comes out of the inverter path, the lead edge passes the Registration Sensor and enters the nip of the stationary Registration Roller for deskewing. 50 msec after the lead edge passes the Registration Sensor, the Belt Motor deenergizes for 200 msec. The Belt Motor then energizes in the forward (ccw) direction. This activates the Registration Roll in the forward direction which transports the inverted document to the forward running Platen Belt. Side two of the document is then registered onto the Platen Glass for scanning

The user has the option to re-invert the duplex document, so that side one is stacked face down on the Output Tray. This is initiated after the second side has been copied. The Belt Motor reverses direction again to transport the document back through the inverter path. Coming out of the inverter path, the document delays at the Registration Roll, primarily so the Belt Motor can change back to the forward direction. The document is then transported through the Registration Roll, across the Platen Glass and to the Exit Rolls. The speed through the inverter path and across the Platen Glass is increased for this inversion process.