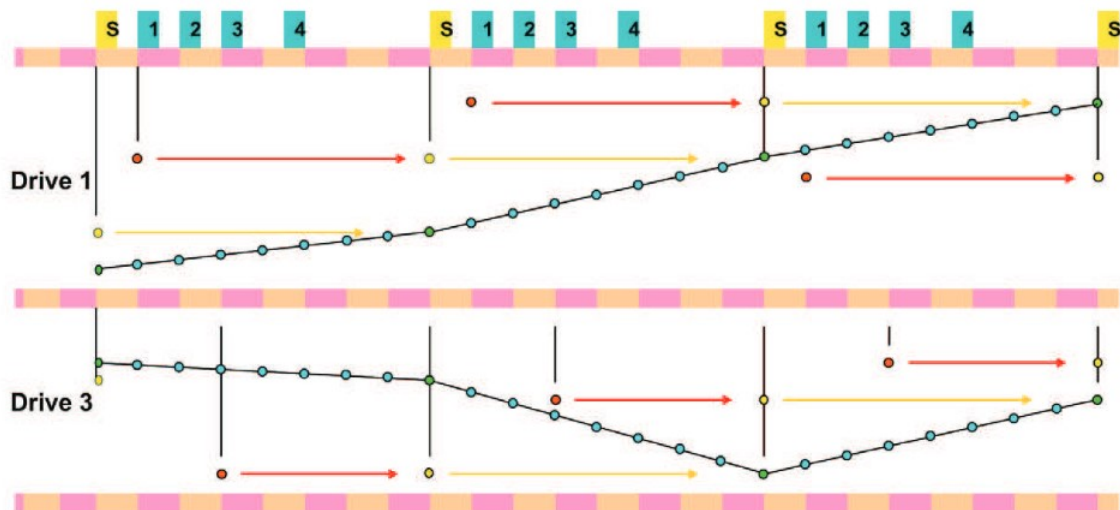


To initiate a synchronized move command:

0. Configure 0x1006,0: Sync time (used to calculate slope)
1. Change the operation mode to Cyclic Synchronous Position mode by writing 8 to object 6060h.
2. Enable operation.
3. Set the distance to the target position in object 607Ah.
4. Send the sync command (80h) to execute.
5. Repeat steps (3) and (4).
6. PDO may be used to synchronously update the position command in object 607Ah.

### CANmotion Bus Principle for Axis Synchronization



- New setpoint (calculated by the controller) is sent to the drive (TPDO)
- All drives take into account the new setpoint at reception of the Synchronous signal
- New drive actual value is sent to the controller (RPDO)
- Intermediate setpoints are calculated inside the drive every 250  $\mu$ s (Linear interpolation)

**S** Synchronous signal

**1** Data exchange with drive 1