Operators Manual
&
Installation Guide
Sept. 2009
Quick Tube Systems, INC.

P/N: 51000-008 Rev. 1.0

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System Features

Teller Unit
Customer Unit
System Control Unit
Blower Pack Module

Operation

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Customer Unit
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Blower Pack
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The Model QT2010 is an overhead pressure/vacuum system that utilizes 4x7 tubes and carriers. The carrier travels from the Teller Unit to the Customer Unit under pressure and returns under vacuum. The blower unit is located near the Teller Unit.

- The Model QT2010 is configured with four major subsystems:

  1. Teller Unit (TU) P/N: 21000-002
  2. Customer Unit (CU) P/N: 21000-010
  4. System Control Unit (SCU) P/N: 21000-048

**Customer Unit**

CU-2010-21000-010
Optional 1 way 2 way video units

**Teller Unit**

TU-2010-21000-002
Manual operated door unit which is suspended from the ceiling, typically over counter top.

**Blower Pack Module**

BPM-2010-21000-040
Features (Ea. Single Pack):
1 Power Cord 115Vac/20A
1 Blower for pressure
1 Blower for vacuum

**System Control Unit**

SCU-2010-21000-048
Main controller for the complete system located under the counter.
Powering the System

The Power button at the right side of the teller unit switch panel controls power to the system. The red “POWER” indicates power on.

NOTE: The “POWER” button does Not switch off 120VAC service to any component. It is only used to deactivate the system. Some components may remain Energized and/or Active when the system is “Off.”

Power ON/OFF

1. Teller pressing the power button on the panel will toggle the power (On/Off) the system
2. “POWER” indicator will illuminates when on and extinguishes when off
3. System is now in ready state

NOTE: The “POWER” button may be used to recover from unusual system conditions simply by powering it off and on – this will reset the system.

Send Cycle

1. Teller inserts carrier into Teller Unit
2. Teller closes Teller Unit door and presses SEND
3. Send cycle begins
4. Pressure blower now activated
5. Sending air pressure to Teller Unit
6. Carrier is propelled from Teller Unit into transmission tubing towards Customer Unit
7. Carrier passes an IR sensor eye over Customer Unit
8. Carrier arrives at Customer Unit, activating carrier IR sensor switch (Note: if carrier IR sensor switch does not activate, the cycle timer times out, and the send cycle ends)
9. Pressure blower deactivates; Vacuum blowers activate for set time (deactivating in a 3,2,1 order)
10. Send cycle ends; System is now in ready state
Recall Cycle

1. Customer inserts carrier into Customer Unit
2. Customer presses “SEND”
3. Recall cycle begins
4. Vacuum blower(s) activates
5. Pulling vacuum from the Customer Unit
6. Carrier is pulled from Customer Unit into transmission tubing towards Teller Unit
7. Carrier passes Teller IR sensor switch
8. Vacuum blower deactivates, Pressure blowers activate for set time (deactivating in a 3,2,1 order)
9. Carrier arrives at Teller Unit.
10. Recall cycle ends – system is now in ready state
Teller Unit
Model: TU-2010-21000-002
Teller Unit (TU) (P/N: 21000-002)

The manual Teller Unit (TU) utilizes a manually operated door. This door MUST remain closed during any “SEND” or “RECALL” cycle for the system to function properly (Opening the door will cancel all operations). The TU door should only be opened when a carrier is being inserted to send to the Customer Unit (CU) or immediately after a carrier has arrived from the CU.

*NOTE: For user safety operation, the TU door must remain closed when in “SEND” or “RECALL” mode.

Switch Operating Instructions

**ON/OFF**

The “POWER” button activates/deactivates the complete system. “POWER” indicator will illuminate when On and extinguishes when Off.

*NOTE: The “POWER” button does NOT switch off 120VAC service to any component. Some components may remain Energized and/or Active when the system is “Off.”

**SEND**

Sends a carrier to the CU. The TU door must be closed in order to send a carrier to the CU.

**RECALL**

Recalls a carrier from the CU. The TU door must be closed in order to recall a carrier from the CU.
### Specification

**Quick Tube Systems Inc.**  |  832.717.0549  |  www.quicktube systems.com

**Teller Unit (TU) (P/N: 21000-002)**

**Dimensional & Electrical Specifications**

<table>
<thead>
<tr>
<th>Item</th>
<th>Measurements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teller Unit (TU-2010-21000-002)</td>
<td>Nominal Voltage</td>
<td>24 VDC</td>
</tr>
<tr>
<td></td>
<td>Current (max)</td>
<td>0.6 amps</td>
</tr>
</tbody>
</table>

Remove 2 screws on front plate and remove switch assembly. Locate RJ45 connector and insert field wiring RJ45 plug (wired to 568B standard shown below).

To Systems Controller

(Back Side View)

![EIA/TIA-568B Wiring Diagram](attachment:image.png)
QT2010

Installation

Teller Unit (TU) (P/N: 21000-002)

Dimensional Specifications:

1' - 4"

7"
System Control Unit

Model: SCU-2010-21000-048
System Control Unit (SCU) (P/N: 21000-048)

Electrical Specifications/Descriptions:

The System Control Unit (SCU) is an indoor low voltage main system controller located under counter near Teller Unit (TU). The SCU is powered by a wall mount 24Vdc, 0.6A power supply. It is connected to all other components via CAT5/CAT5E (T568B standard pin out).
Systems Control Unit (SCU) (P/N: 21000-048)

*Dimensional & Electrical Specifications*

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</tr>
<tr>
<td></td>
<td>Current (max)</td>
<td>0.6 amps</td>
</tr>
</tbody>
</table>

NOTE: All Dims IN.
**Customer Unit (CU) (P/N: 21000-010)**

*Machine & Switch Operating Instructions*

**SEND**  Sends carrier to Teller Unit

**CALL**  Generates audible tune at the Teller Center when pressed

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*Switch Panel (P/N: 21000-008)*
# QT2010 Specification

## Customer Unit (CU) (P/N: 21000-010)

*Dimensional & Electrical Specifications*

<table>
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<th>Item</th>
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<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Unit (CU-2010-21000-010)</td>
<td>Nominal Voltage Current (max)</td>
<td>24 VDC 0.6 amps</td>
</tr>
</tbody>
</table>

![Diagram of Customer Unit](image_url)

4" CONCRETE FILLED STEEL PIPE BOLLARD (TYP. 4)

![Diagram of Dimensions](image_url)
Customer Unit (CU) (P/N: 21000-010)
Field Wiring & Installation Diagram
Customer Unit (CU) (P/N: 21000-010)

Mounting & Access

Remove back panel for installation or service access.

Fasten Mounting Bracket to Island. Using minimum 3/8” size hardware; positioning the leading edge of bracket “X” inches from front edge of island and shim level if needed. (For “X” distance see cut sheets for job site)

Base ISO Back View
Completed installation of base on a typical island
Blower Pack Module
Model: BPM-2010-21000-040
Blower Pack Module (BPM) *(P/N: 21000-040)*

*Line Voltage Installation*

For installation of this unit, refer to construction site plans or cut sheet for locating the unit. If the blower is installed in a closed canopy, the exhaust port must be vented to outside air to prevent overheating. Refer to field service wiring kit for all control and 115 VAC plugs.

**WARNING: SHOCK HAZARD**

Disconnect AC Power before Servicing Unit Only to be serviced by Qualified Personnel

*AC Service Disconnect for Unit is located at the Main Junction Breaker Box*

**NOTE:**

There must be a 115VAC @ 20A dedicated circuit within 3.0 ft of the unit. All Line Power must be done in compliance with the NEC (National Electrical Code) by authorized/qualified personnel.

1-115 VAC 15A
Resettable Fuse

Class 2
Field Wiring
CAT5E (568B)

1-115 VAC
14AWG/3C/15A

**SHOCK HAZARD**

Disconnect AC Power before Servicing Unit

*AC Service Disconnect for Unit is Located at the Main Junction Breaker Box*

Use ¼” minimum hardware to mount unit in place. For mounting location see cut sheets for job site.
Carriers must be fully closed before they are inserted into either the Teller Unit or the Customer Unit. Carriers that are not fully closed may fail to leave the sending unit, and may become lodged within the transmission tubing, or possibly lose their contents during transmission.

If coins are to be sent, it is recommended that they be rolled and placed in a pouch or bag. Loads that can shift during transmission may cause malfunction or damage to the carrier or system.

Carriers are not to exceed a gross weight of 5lbs.

The contents of the carrier must be fully within the carrier and not caught between edges. Multiple transmissions should be used if a load is too large to fit within the single carrier.
**System Riser Diagram & Options**

**Parts Descriptions:**

- **Transmission Tube:** 16GA Galvanized Steel or ABS
- **Canopy Line:**...
- **CEILING LINE:**...
- **FINISHED FLOOR:**...
- **PHARMACY UNIT:**...
- **3'-6'' REF. VERIFY:**...
- **3'-0'' TO CARRIER PRESENTATION HEIGHT:**...
- **4'' CONCRETE FIRED STEEL PIPE BOLLARD:**...
- **(3) 120VAC 20 AMP DEDICATED CIRCUIT TO (3) WATERPROOF DUPLEX OUTLETS FOR BLOWER POWER VERSION OF BLOWER (ELECTRICAL BY OTHERS).**

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Blower

All blower packs are suitable for installation in restricted access locations at maximum operating ambient 40C deg/140F deg.

*Note:* If blower is installed in a closed canopy the exhaust port must be vented to outside air to prevent overheating.

Tubing

All tubing *must* be sealed properly. *Seal all joints* – especially those at the teller and customer units. All inside edges of tube joints *must be de-burred and ground to an angle* to prevent excessive wear on carriers.

Maintenance

Carriers

Carriers should be inspected regularly for signs of wear. Carriers landing hard at either customer or teller unit may be a sign of worn wear bands on carrier.

Wear bands should be replaced regularly – usually every 3-6 months, depending on usage.
Return Material Authorization (RMA) Procedure

Please follow the instructions below to return any items to Quick Tube Systems for repair.

• Call Quick Tube Systems at 832.717.0549 to request a Return Materials Authorization number (RMA#).

• Please give the Customer Service Representative the following information;
  • Company Name and Phone Number
  • Company Contact
  • Store#
  • Component (s) being returned for repair
  • Description of problem

• Send your return items to the following address;

  Quick Tube Systems Inc.
  24501 Huffsmith Kohrville, Rd. #300
  Tomball, TX 77375

  RMA# XXXX

All RMAs will be processed in the order they are received. Quick Tube Systems will not accept any returns that do not have an RMA# assigned.

To check on the status of an RMA call our Customer Service Representatives with your RMA#.
• **Quick Tube Systems Inc.**  
  Mon. - Fri. 8am – 5pm Central  -  832.717.0549  
  After Hours & Weekends  -  832.717.0549

• **Customer Service & Support**
  
  support@quicktubesystems.com

• **Parts Orders**
  
  • Fax  -  832.717.0549  
  • Call In  -  832.717.0549

  When Calling After Hours & Weekends provide the following:  
  • Callers Name  
  • Return Phone #  
  • Nature of Call

  Company  
  Service