# 5517 (V3.3) Remote Video Unit

### FOR TECHNICAL SUPPORT CALL 1-877-236-0245

For more complete system information see the document "5000 Series Audio/Video System Installation & Service Manual"

## 5517 Remote Video Unit Installation

The 5517 Remote Video Unit requires 12VDC at approximately 1.5A to operate properly. This requires that power be provided directly at the pneumatic unit to avoid the power drop associated with long wire runs. Each 5517 is supplied with a 12VDC, 2A power supply. An optional Video Power Control Kit (E0885), ordered separately, is used to control the relay board in each video head so the monitors, and optionally the cameras, can be turned off when desired. For larger installations it may be desirable to have more than one power control kit if some lanes are closed at times while other lanes are open. Optionally Hamilton Air pneumatic units that have an E0873 I/O Control Board can use an E10036 Video Power Control Cable to control the relay board in the video head. See the note below Figure 5.

- The video head will be positioned to the top right of the pneumatic unit as viewed by the customer. Use the template shipped with the 5517 to drill holes in the top of the pneumatic unit for the bracket and cables. (*The template ensures that the video head will not stick out past the front of the pneumatic unit where it could be damaged by a vehicle.*)
- Refer to Figure 1. Feed the video cables, the 2A power supply cable and the relay trigger wires from the power control kit (or the E10036 Video Power Control Cable) from inside the pneumatic unit through the top of the unit and through the video mounting arm. Apply a small amount of silicone sealant to the bottom of the plate on the mounting arm (1) and attach the mounting bracket to the pneumatic unit (2) with the supplied washers and nylon lock nuts.



- Remove the screws from the back of the video head. Note that not all screws for the cover are installed at the factory. The remaining screws are in the bag of accessories.
- IMPORTANT NOTE: The LCD assembly is attached to the front of the video head enclosure with this version of 5517. Separate the front and back of the video head being careful not to pull on the cables. Unplug the video and power cables from the LCD main board and set the front aside.
- Refer to Figure 2. Route the cables from the mounting arm (1) through the back of the video head (3). Apply a small amount of silicone sealant to the plate of the mounting arm and attach the rear of the video head to the mounting arm with screws (4) provided in the accessory bag. Two of the screws are security type. A driver bit is included for the security screws.
- Connect the monitor cable to the left BNC connector and the camera cable to the right BNC connector in the video head as labeled. Connect the power supply cable and the relay trigger wires to the relay board (see Figure 4). Slide the excess cable back through the bracket and into the pneumatic unit and install the end caps from the accessory bag into both ends of the mounting arm.
- Plug the power supply into a 110VAC outlet.
- Tilt the camera vertically in its bracket to achieve the desired viewing angle. To view the image, temporarily connect a service monitor to the "camera" BNC connector in place of your interconnect cable. If a service monitor is not available it will be necessary to use the 5517 monitor. In this case reconnect the video and power cables to the LCD. *The "yellow" RCA connector is for video*. Place the unit in "service" mode by placing the service switch at the upper left of the video head to the rear position. This will connect the camera video directly to the monitor. *Note: If the video power control kit in the teller area is not yet installed or turned on, it will be necessary to temporarily move the video power wires from the switched to the unswitched terminals of the relay board to test the video unit (see Figure 5).*
- The camera has been adjusted at the factory but a menu board allows camera settings to be changed if needed. See Figure 3 for an explanation of the menu buttons. Use the service switch in the 5517 if necessary to connect the camera

directly to the monitor for viewing the menu. If focusing is required, loosen the small set screw and then rotate the lens to the desired focus. Snug the set screw when finished but do not over tighten to avoid creating a dimple in the lens threads making future fine adjustments difficult.

- The monitor has been adjusted at the factory but a menu board allows settings to be changed if needed. The menu board is located on the rear of the LCD mounting plate. See Figure 4 for an explanation of the menu buttons. *See the section* "5550/5517 LCD Menu Adjustments" in the "5000 Series Audio/Video System Installation & Service Manual" for the menu boards used in previous versions of LCD monitors.
- Once all adjustments are satisfactory, place the unit in "normal" mode by placing the service switch to the forward position. Make sure the video and power cables are connected to the LCD (*the "yellow" RCA connector is for video*) and replace the front cover, securing with all the screws. Two of the screws are security type. A driver bit is included for the security screws.

#### Additional information for 5517 units that were ordered with a "Camera Tilt Kit" pre-installed:

• Connect a 2 conductor cable between the lane camera tilt connector\* on the video matrix and the connector at the end of the camera tilt motor wires in the 5517. Polarity for the wires is not important. 22AWG wire is sufficient for up to approximately 200 feet.

\* Not all video matrixes are equipped for camera tilt. If the tilt connector is not present then the matrix will have to be replaced to use this feature. Contact tech support (877-236-0245) for more information.

*Tilt Operation*: At the teller audio console, while the lane is selected hold down the camera button while pressing either the volume up  $\blacktriangle$  or volume down  $\blacktriangledown$  button. On 5001 and 4001 series consoles the camera button is labeled. On 5501 series consoles, the wireless headset button is also the camera button.

The tilt motor shaft/cam will rotate the opposite direction depending on which volume button is used. Due to the cam and spring action the camera will alternate tilting up and down if the motor continues operating the same direction. If the camera tilts up while using the down button (or vice versa) just let it continue and it will change direction. This is why wire polarity is not important.

#### Figure 3

#### Camera Menu Board



SET: Used to enter the OSD menu and select menu or submenu items.

UP: Used to move up a line in a menu or submenu.

DOWN: Used to move down a line in a menu or submenu.

LEFT: Used to change setting values.

RIGHT: Used to change setting values.

Tip: Selecting "Reset" from the "Special" menu returns all settings to their factory values.



1) Used to move up a line in a menu / submenu and to increase a setting value.

- 2) Used to enter the OSD menu, select menu / submenu items and accept changes to setting values.
- 3) Used to move down a line in a menu / submenu and to decrease a setting value.
- 4) Not used this button may not be installed on the menu board.

*Tip:* Selecting "Reset" from the "Misc." menu returns all settings to their factory values. Note that the menu will not display if no input signal is present.

Figure 4

## **E0885 Video Power Control Kit Installation**

The E0885 kit should only be used to control the power through the relay boards in the 5517 video units as shown. **DO NOT attempt to power video units directly with the power control kit.** Follow the wiring diagram in Figure 5. Wire gauge for the relay trigger wires is not critical since the current draw for each relay coil is only 22ma. Be sure to follow the color code when connecting the lighted switch to the control board. The switch can be mounted in any suitable location in the teller area.



**Important Note:** Newer Hamilton Air units that have an E0873 I/O Control Board do not require the Video Power Control Kit. For these units use a Video Power Control Cable (E10036) to connect the I/O Board in the pneumatic unit to the Relay Board in the 5517. The 3 pin connector on one end of the cable connects to J15 on the I/O Board and the 2 pin connector on the other end of the cable connects to J3 of the Relay Board in the 5517. The Night Lock switch for the pneumatic unit will control the power to the relay coil which in turn will control power to the LCD Monitor.

Figure 5