

ViZion Installation Guide

Table of Contents

- **Inventory**
- **Hardware Setup**
- **Understanding Synchronization Cable**

Begin by taking an inventory of the required equipment

- DR Unit
- Acquisition PC

Inventory: DR Unit

1. Identify DR Unit.

DR Unit will be shipped as indicated in Figure 1.0.

◆ Each box contains (1) complete DR Unit to coordinate with *either* a wall or table Bucky. Therefore, if *both* a wall and table Bucky will be assembled, there will be 2 boxes shipped, (1) DR unit for each Bucky assembly.



Figure 1.0

2. Open the box(es)

3. Verify contents of box(es)

Notice each box will contain 3 sub-boxes upon opening. See Figure 1.1 below.

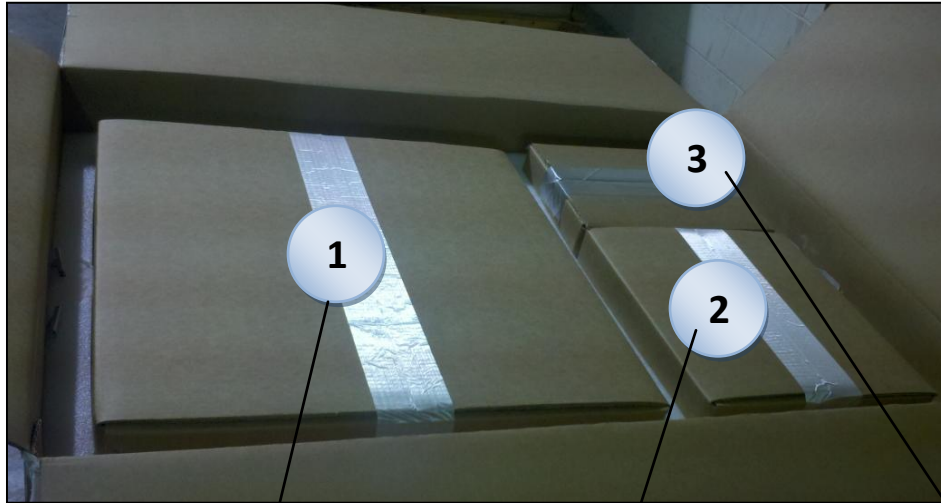


Figure 1.1



- DR Unit Panel



- Power Supply for Panel (Black)
- Power Supply Cables for Panel



- Network Cable (White)
- Sync Cables (Grey)
- Power Supply Cable
- Samsung CD (Manufacturers Guide)

4. Familiarize yourself with the equipment and supplies in each box.

1 Panel

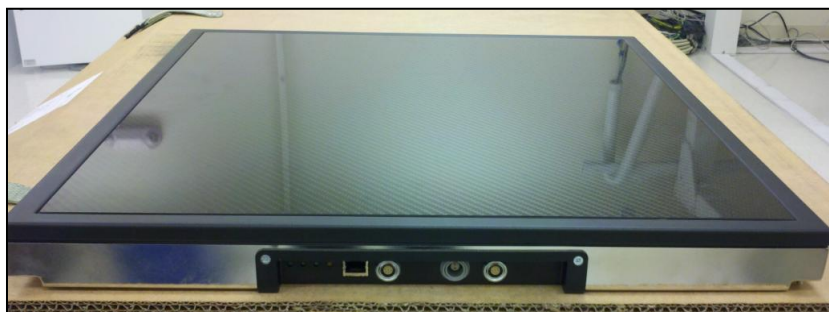


Figure 1.2 - DR Panel**2 Power Supply****Figure 1.3 - Panel Power Supply plus Power Supply Cables**

◆ This black box is the power supply for the panel and its associated power supply cables arrive already attached.

3 Synchronization Cables

Figure 1.4 – Synchronization Cables, Network Cable, Power Supply Cable plus CD

◆ **Network Cable (Ethernet CAT5 Cable) – WHITE**



Figure 1.5

◆ **Synchronization Cable – GREY**



Figure 1.6

◆ **Power Supply Cable (for black power supply box) – BLACK**



Figure 1.7

IMPORTANT NOTE: The Power Supply Cable in Box #3 has a *Euro* plug, as shown in Figure 1.7.



A *U.S. Standard* Power Supply Cable for the Power Supply will be included in your shipment.

◆ Samsung CD (included for your reference only – no need for installation)



Figure 1.8

NOTE: Figure 1.9 is the underside of the panel. Notice the (4) mounting holes for bolting purposes. **If your setup requires the panel to be mounted to an enclosure, we recommend mounting the panel BEFORE running the cables.**



Figure 1.9

Inventory: Acquisition PC

1. Check to make sure you have the Acquisition PC and its power supply.



Hardware Setup

1. Organize your Hardware.

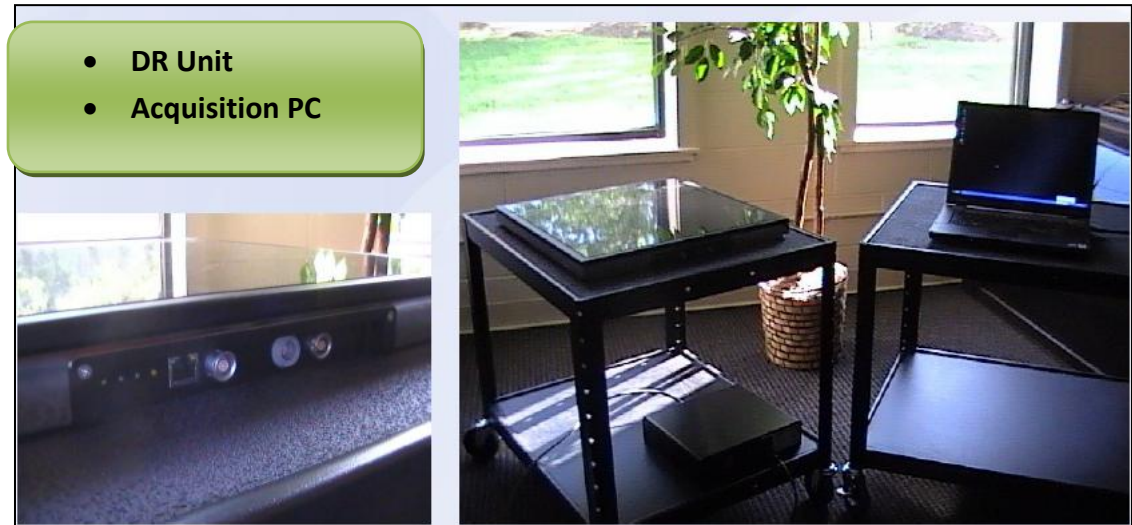


Figure 2.0

2. Plug in the Synchronization Cable (Shown in Figure 2.1)

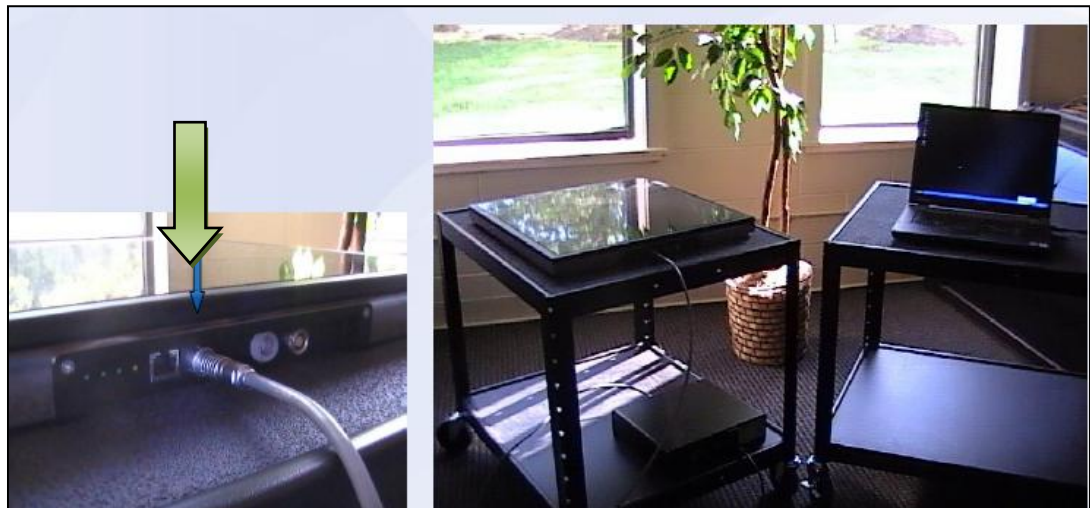


Figure 2.1

3. **CHECK THE POWER SUPPLY INPUT VOLTAGE SELECTOR BEFORE PROCEEDING!** You may need to switch it from 230 VAC to 115VAC operation, as

shown in Figure 2.2.

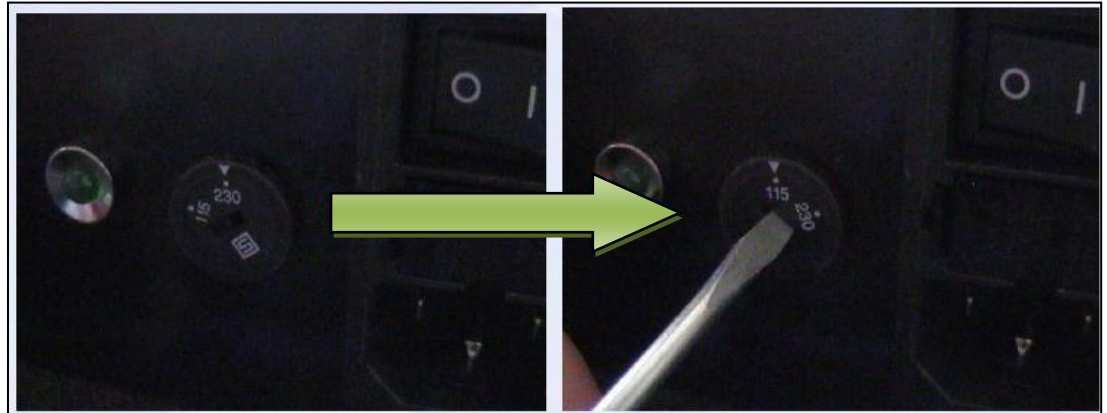


Figure 2.2

4. Plug in the two power supply connections (Shown in Figure 2.3)

◆ Once the 230VAC/115VAC switch has been checked *and* the two power supplies have been plugged in, you may **TURN ON** the power supply.



Figure 2.3

5. Connect the DR Unit and the Acquisition PC together, directly, using a *single network cable*. (Figure 2.4)



Figure 2.4

◆ Please continue to the next section titled **Understanding the Synchronization Cable**.

Understanding the Synchronization Cable

ONLY QUALIFIED SERVICE PERSONNEL SHOULD ATTEMPT THESE STEPS

The **Synchronization Cable** connects the Generator to the Panel for the purpose of communication, sending signals to the panel for what function(s) to perform and when.

The **Synchronization Cable** is necessary to:

1. Prepare the panel for exposure
2. Create a mechanism for actual exposure to be delayed.

1 Please review the available synchronization cable (signal wires) as shown in Figure 3.0 and the referenced descriptions in Table 3.0 to become familiar with their orientation and description.

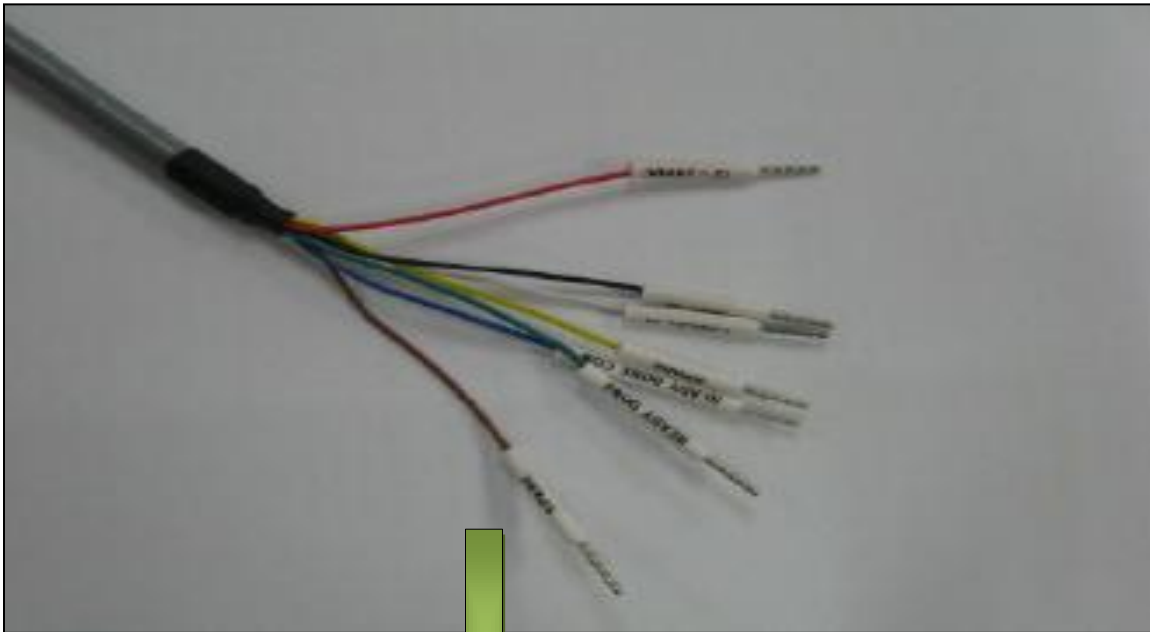


Figure 3.0

PIN No.	PIN Description
1	SPARE (Brown)
2	SPARE (Yellow)
3	READY DONE (Green)
4	READY DONE COM (Blue)
5	READY IN (Black)
6	CANCEL IN (White)
7	12-24 VDC (Red)

Table 3.0

2

2. Make the appropriate connections from the synchronization cable to the generator's Bucky interface, as shown in *Table 3.1* and as indicated in *Figure 3.1- Connection Diagram* below.

Signal	Label	Cable Color	Input/Output
READY IN	12V ~ 24 VDC	RED	INPUT
READY IN	READY IN	BLACK	INPUT
READY DONE	READY DONE	GREEN	OUTPUT
READY DONE	READY DONE COM	BLUE	OUTPUT

Table 3.1

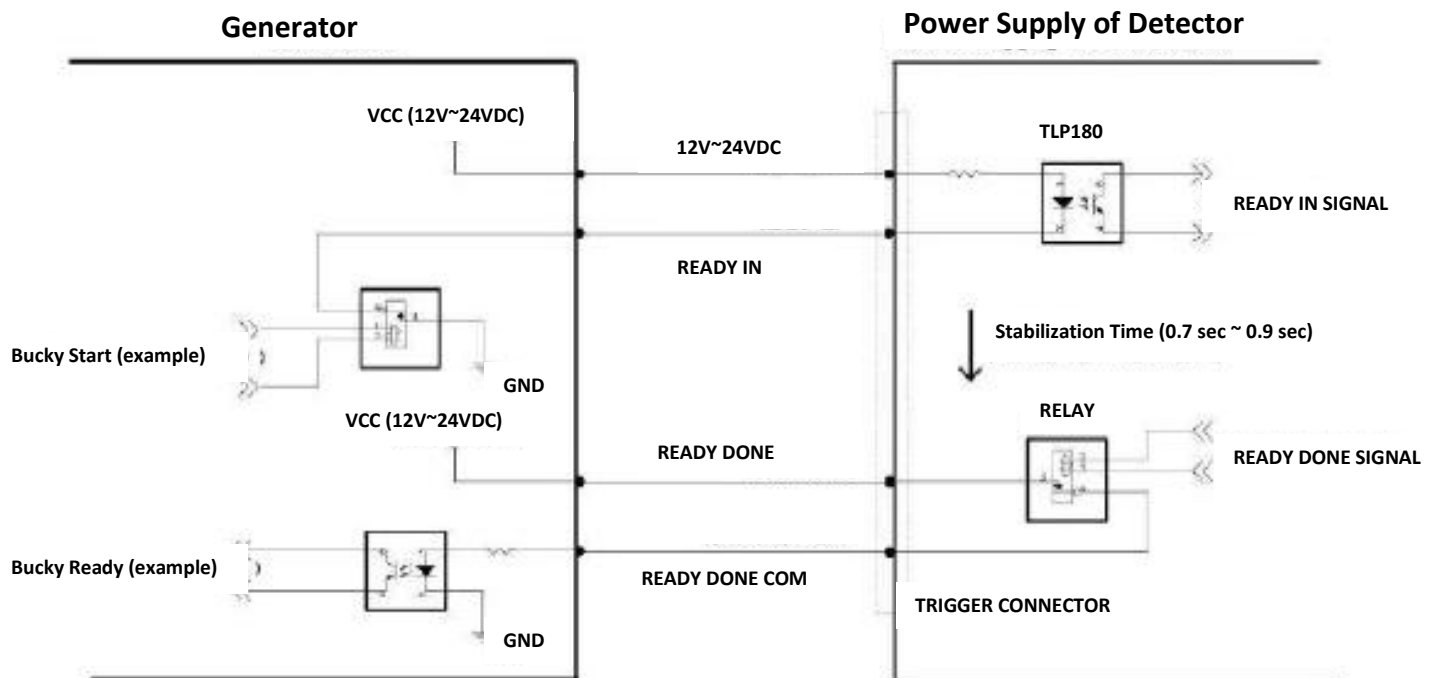


Figure 3.1 – Connection Diagram

Review Figure 3.2 – Signal Timing Diagram below, noting that via the standard Bucky interface, the Detector will induce a delay during EXPOSE, before allowing the x-ray tube to fire. This delay is typically lasts between ½ second to 1 second. THIS DELAY IS NEEDED TO ALLOW THE DETECTOR TO BECOME READY.

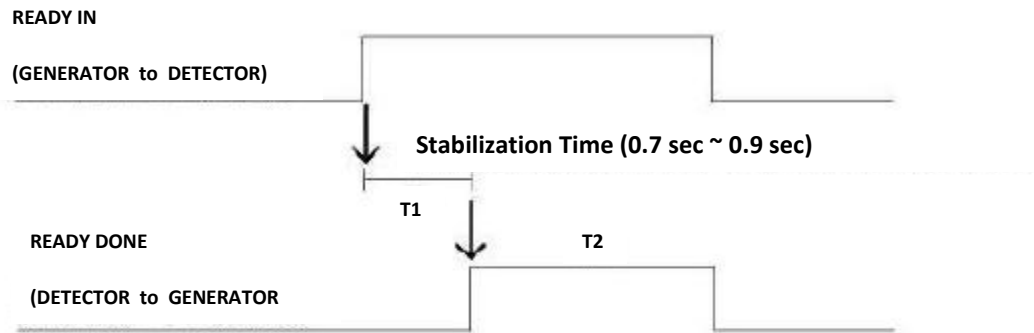


Figure 3.2 – Signal Timing Diagram

Where:

T1 = Offset stabilization time (0.7 ~ 0.9 sec) before X-ray exposure

*** Detector controls T1 time**

T2 = Integration time of detector varies 0sec ~ 20min

Expose relay switch ON time (Integration Time) and X-ray exposure time MUST be the same.

Please refer to the **ViZion Install Verification Guide** to confirm successful installation as well as noting the most common installation issues and providing troubleshooting techniques. Once the installation has been verified using the **ViZion Install Verification Guide**, please proceed to calibration.

For instructions on how to calibrate your ViZion DR, please refer to the **ViZion Calibration Guide**.