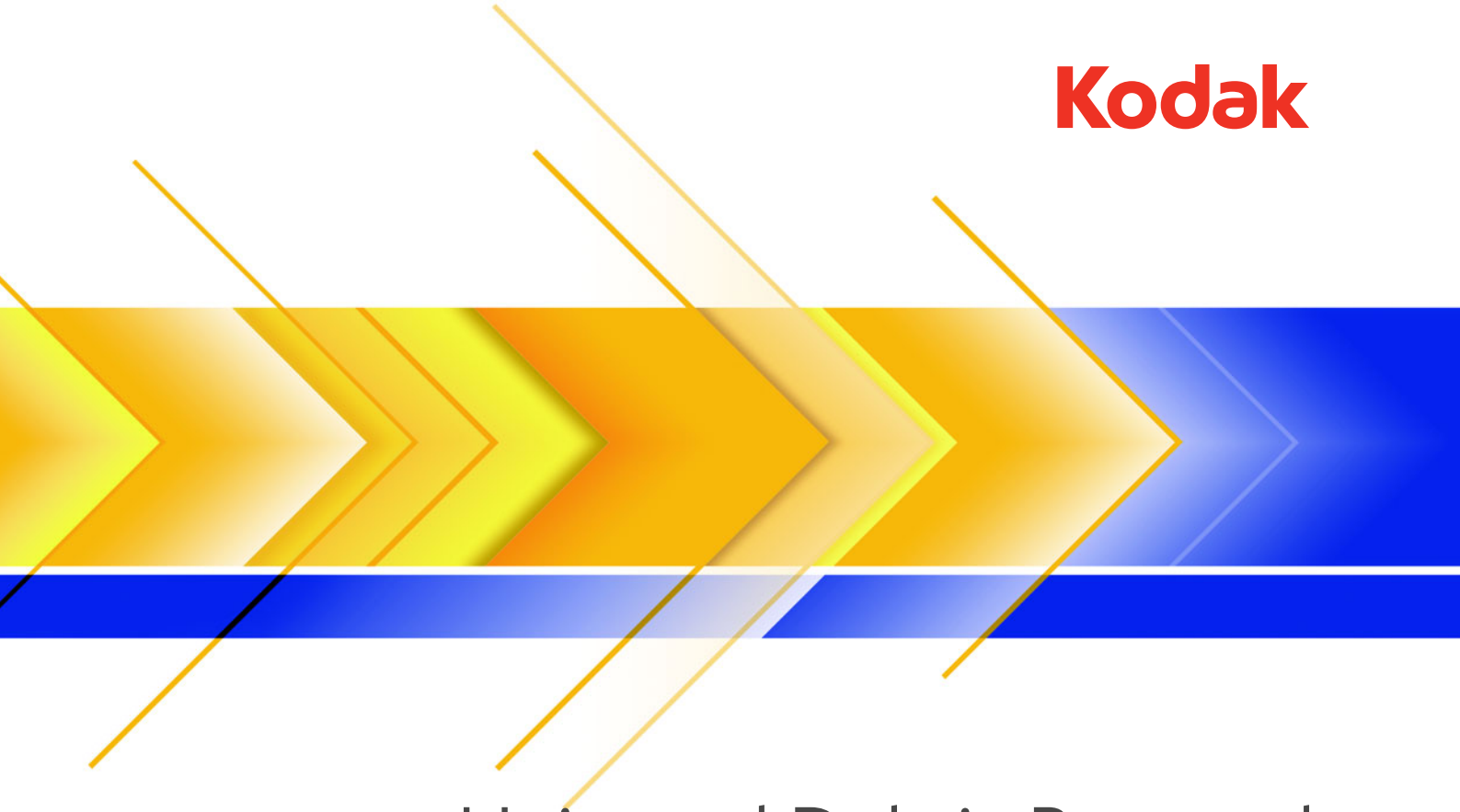


Universal Debris Removal Cabinet (UDRC)

Site Preparation Guide

English

725-00089A-EN Rev D

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Contents

Introduction 1

Equipment Overview 2

- Size and Weight 2
- Hose and Data Cable 3
- Cables, Connectors, and Receptacles 3
- Acoustic Emissions 5

Site Requirements 6

- Environmental Conditions 6
- Floors 6
- Electrical 6
  - Heat Output 6
- Ventilation 7
- External Venting for Debris Removal System 7

Shipment and Delivery 9

- Responsibilities 9
  - Doors and Hallways 9
- Shipping Crates 9

Appendix A:Site Inspection Checklist 11

Introduction

This document provides guidelines for preparing your site for Universal Debris Removal Cabinet (UDRC)[1] installation.

Your service representative will help you to ensure that your site meets all the requirements. Proper preparation will help to prevent unnecessary problems and delays when installing the device.

The following topics are discussed:

- Size, weight, and connections
- Floor space requirements
- Electrical requirements
- Environmental conditions

With your service representative, complete the *Site Inspection Checklist* in *Appendix A*.

1. The UDRC may be supplied as a part of a Kodak CTP system. Unless otherwise specified, this document refers to all configurations of the UDRC.

Equipment Overview

The UDRC works with a Kodak® output device to extract and filter the airborne emissions (dust and/or gases) that may be released when imaging certain types of thermal printing media. The UDRC contributes to a healthier working environment, consistent image quality, and cleanliness of the imaging device.



The UDRC, depending on configuration, may include filter options tailored to suit specific qualified media types. The filter options for a particular customer site are typically specified in a Kodak proposal, sales agreement, order form, product specification, or equivalent document.

New output devices are usually supplied with a filtration unit such as the UDRC. If the media is changed on an existing output device, it may be necessary to install a new UDRC or to upgrade an existing one. Site requirements are the same for all UDRC configurations except for the environmental conditions. Further information on UDRC configurations and operation can be found in the *UDRC Operator Guide* (731-00103B).

Size and Weight

Table 1 shows the maximum dimensions and weight of the UDRC. The measurements are taken facing the cabinet. Width is in the x-axis direction. Depth is in the y-axis direction.

For measurements of the crates as shipped, see Table 4.

Table 1: Weight of the UDRC

Width	Depth	Height	Weight
510 mm (20 in.)	600 mm (23.5 in.)	900 mm (35.5 in.)	57 kg (125 lb.)

Hose and Data Cable

The UDRC is supplied with a 3 m flexible hose and a 3 m data cable to connect to the output device. The UDRC must therefore be positioned within 3 m from the hose and cable attachment point—typically at the rear of the output device.

A longer hose and cable (7.6 m) kit can be ordered (part number 518-00323A) so the UDRC can be located further away from the device if needed.

The hose and data cable should not be routed in a area through which people walk. The UDRC location should allow for:

- Close proximity to the ventilation exhaust ducts
- Visibility of the cabinet's power indicator light
- Accessibility for maintenance and service

Cables, Connectors, and Receptacles

For servicing and in the event of a fire, the appliance inlet is the main disconnection point for the UDRC.

Ensure that the branch circuit breakers, power cords, and plug are in compliance with local electrical standards.

Tables 2 and 3 list the supplied and required power cables, plugs, and receptacles for the UDRC.

Table 2: Cables & Interconnects — North America and Japan[1]

Cables	Supplied by Kodak	Supplied by customer
UDRC power	IEC320, Type C20 appliance inlet (see Figure 3). Detachable 4.5 m (15 ft.) power cord[a] with IEC320 Type C19 connector at the device end and a L6-15P plug at the other end (see Figure 1)	Dedicated 15 A, 200–240 V branch circuit and L6-15R receptacle

a. The detachable power cord is CSA, UL Type SJT, 14/3 AWG

1. The input voltages require balanced power inputs (Line1 to Gnd = Line2 to Gnd or Line1 to Gnd = Line1 to N) with tolerances of +6% to -10%. The specification for frequency is 50/60 Hz ± 1.5%

Table 3: Cables & Interconnects — Europe, Australia, and Southeast Asia

Cables	Supplied by Kodak	Supplied by customer
UDRC power	IEC320, Type C20 appliance inlet (see Figure 3) Detachable 4.5 m (15 ft.) power cord[a] with IEC320 Type C19 connector at the device end and an IEC309 plug at the other end (see Figure 2)	Dedicated 16 A, 200–240 V branch circuit with standard receptacle and mating plug for power cord

a. The detachable power cord is VDE, HAR, Type H05-VVF, 1.5 mm^2.

G = ground
X and Y = L1 or L2

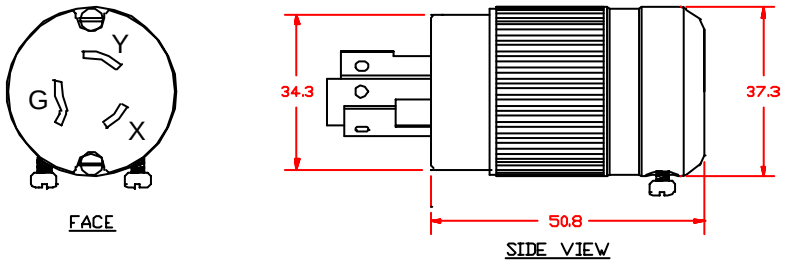


Figure 1: L6-15P plug

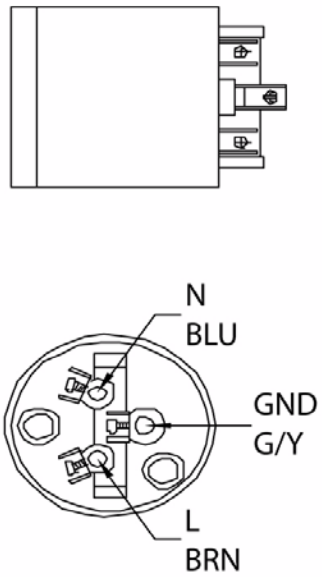


Figure 2: IEC 309 plug

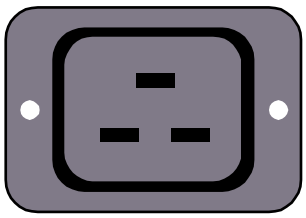


Figure 3: IEC 320 Type C20 appliance inlet

Acoustic Emissions

The acoustic emissions of the UDRC are less than 70 dB(A) measured at one meter in a free field.

Site Requirements

Environmental Conditions

The operating environment for the UDRC must be:

Temperature: 17°–32°C (63°–90°F)

Elevation: up to 2225 m (7300 ft.)

Relative humidity: 20%–70% for particulate filtration

30%–70% for particulate and chemical filtration



WARNING: Relative humidity that is lower than the specified level may result in gaseous emissions breaking through before a chemical filter is replaced. This may lead to exposure to airborne emissions in excess of applicable regulatory limits and to possible discomfort, illness, injury, and/or disability.



CAUTION: Failure to comply with operating environment requirements may cause the UDRC to malfunction.

Floors

The floor must be level, with a maximum incline or waviness of 5 mm (0.2 in.) across the footprint of the UDRC.

Electrical

To ensure that all branch circuits are at the same ground potential, the dedicated branch circuit for the following components must be supplied from the same AC supply panel:

- Output device main power
- External chiller power (if applicable)
- Workstation main power
- UDRC

Note: All requirements for power quality outlined in the *Site Preparation Guide* for the output device must be maintained.

Heat Output

The UDRC dissipates heat at a maximum rate of 1500 W (5125 BTU/hr.).

The heating, ventilation and air-conditioning (HVAC) system serving the room in which the UDRC is installed must be able to accommodate the additional heat load.

Ventilation

No filtration can be 100% efficient (for example, carbon monoxide is not captured by Kodak filters). That is why outdoor air ventilation is required with the debris removal system. Air exhaust vents (where air is drawn out of the room) should be located as close to the debris removal cabinet and output device as possible.

The Universal Debris Removal Cabinet (UDRC) device requires a minimum of 1.1 m^3/min (40 cfm)[1] outdoor air ventilation. This air ventilation prevents the accumulation of airborne emissions that may be released when certain media are imaged.[2]

Outdoor air ventilation must not be confused with air circulation in the room that results from temperature control or humidity control. Outdoor air ventilation may be roughly estimated to be 10% to 30% of the air circulation rate in the room. To achieve adequate air mixing, Kodak recommends at least 3 ACH (air changes per hour).

These recommendations apply to a single device with no other equipment in the room. Other imaging equipment, processors, ovens, HVAC systems, and so on, may contribute additional emissions to the work environment, increasing the amount of outdoor air ventilation required.

The customer is responsible for assessing the level of airborne emissions in the room to ensure that, upon installation of the Universal Debris Removal Cabinet (UDRC), the requirements of local, state, provincial, regional, and national regulations for occupational health and safety are satisfied. In the event of any uncertainty about the levels of airborne emissions, the customer should arrange for an indoor air quality assessment to be conducted by a qualified industrial hygienist.

External Venting for Debris Removal System

If the external venting option is chosen for the debris removal system, the piping connected to the end of the debris cabinet hose shall be limited to one of three:

1. 2 in. pipe (maximum Schedule 40)
   - maximum length = 45 m (150 ft.)
   - maximum number of 90° bends/elbows = 1 per 3 m (10 ft.)

   OR

1. This is a default value. Certain media may require higher ventilation; to check the recommended value for specific media, please refer to CTP Media Imaging Performance Database (available from your Kodak representative), where it will be specified if different from default.
2. Information on the hazardous compounds released by a particular media during imaging should be available from the media manufacturer's Material Safety Data Sheet or equivalent document.

2. 2 1/2 in. pipe (maximum Schedule 40)
   - maximum length = 105 m (350 ft.)
   - maximum number of 90° bends/elbows = 1 per 3 m (10 ft.)

   OR

3. 3 in diameter or larger ducting
   - maximum length = 240 m (800 ft.)
   - maximum number of 90° bends/elbows = 1 per 3 m (10 ft.)

Note: Option 3 is not recommended due to sealing issues. It may be used if there is an exhaust fan installed that ensures a vacuum within the ductwork at all times (the minimum flow of the exhaust fan must be greater than 35 SCFM).

The piping material may be galvanized steel, painted carbon steel, PVC, or a similar suitable material.

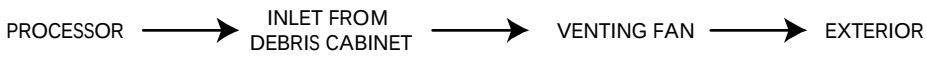
All joints and unions from the hose coupling to the exhaust/exit of the external venting piping shall be properly sealed along their length to prevent ingress or egress or any gas or liquid. Before initial startup, it is recommended that a pressure test be performed to ensure that this requirement is met.

The exhaust/exit of the external venting piping will be free to the exterior of the building, without any restrictions. Adequate non-restrictive weather protection shall be installed as required. The exit of the external venting piping must be regulated to ensure that no flow occurs when the debris cabinet is not in operation (i.e., back-flow prevention).

The customer shall supply a coupling to connect the external venting piping with the 1.5 in ID hose from the debris cabinet. This coupling should install by simply slipping the hose over a braided section of it and securing it with a hose clamp.

Connecting to an Existing Ventilation System

If the customer already has a ventilation system that exhausts to the exterior of the building (such as a processor exhaust system), the venting piping for the debris system may be joined to it. The end of the debris system venting pipe should be mated to the exhaust vent upstream of the ventilation fan, as follows:



The limitations on pipe length described above apply.



WARNING: The exhaust fan for processor ventilation must be ON at the same as the debris removal system is ON (i.e., whenever the imaging device is operating). Failure to ensure this may result in air that has not been chemically treated entering the facility.

Shipment and Delivery

Responsibilities

It is the customer's responsibility to provide Kodak with delivery instructions. The customer is responsible for unloading the shipping crate and transporting it to the installation location, but must not unpack the crate. Kodak's engineers will unpack the crate and install the UDRC.

Note: Report any damage to the shipping crates to Kodak within 72 hours of receiving the shipment.

Doors and Hallways

The customer must provide free access through doors and hallways from the entrance to the Universal Debris Removal Cabinet (UDRC) location. See *Shipping Crates* on page 9 for maximum crate dimensions.

Shipping Crates

The UDRC is shipped in one crate. Table 4 lists the dimensions and weight of the crate.

Table 4: Dimensions & Weight of Crate

Crate Contents	Width	Depth	Height	Weight
Universal Debris Removal Cabinet (UDRC)	670 mm (26.5 in.)	760 mm (30 in.)	1075 mm (42 in.)	93 kg (203 lb.)

Appendix A: Site Inspection Checklist

Full completion of this checklist greatly assists in delivering and installing the Universal Debris Removal Cabinet (UDRC).

Site Information

Company name: _____

Site address: _____

_____

_____

_____

Shipping address: _____

_____

_____

_____

Directions to site: _____

_____

_____

_____

Nearest airport: _____

_____

_____

Local hotels: _____

_____

_____

Local restaurants: _____

_____

_____

_____

Contact Information

Primary contact name: _____

Position: _____

Telephone/fax: _____

E-mail: _____

Site Requirements

1. Is there sufficient floor space for the UDRC and output device?

   ☐ Yes ☐ No

   Comments: _____

2. Is the UDRC located within 3 m of the device, or within 7.6 m if the longer hose kit has been ordered? (See *Hose and Data Cable*.)

   ☐ Yes ☐ No

   Comments: _____

3. Is the UDRC located within 4.5 m of the power supply, so that the power cord will reach? (See *Cables, Connectors, and Receptacles*.)

   ☐ Yes ☐ No

   Comments: _____

4. What are the AC mains voltages?

   AC mains voltage for UDRC: _____

Is the AC mains voltage between 200 V and 240 V? (see *Cables, Connectors, and Receptacles*.)

☐ Yes ☐ No

Comments: _____

_____

_____

_____

_____

5. Is the branch circuit for the UDRC wired with the correct voltage and receptacle, and fitting with the correctly-rated circuit breaker? (See *Cables, Connectors, and Receptacles*.)

☐ Yes ☐ No

Comments: _____

_____

_____

_____

_____

6. Is the HVAC system able to accommodate the heat load? (See *Heat Output*.)

☐ Yes ☐ No

Comments: _____

_____

_____

_____

_____

Follow Up

Is follow-up required?

☐ No — The location described in this document meets all criteria for a timely and successful installation of the Universal Debris Removal Cabinet (UDRC).

☐ Yes — Some follow-up is required to ensure that the site requirements are met prior to the installation of the Universal Debris Removal Cabinet (UDRC).

The outstanding items from the Site Requirements list are:

_____

_____

_____

_____

Name of customer contact: _____

Telephone/fax: _____

E-mail: _____

Date of next follow-up contact: _____

Site Inspection Completed

The presite inspection was performed on _____ by a representative of Kodak and witnessed by at least one representative of the customer.

Kodak representative: _____

Signature: _____

☐ The Customer understands and hereby agrees to the requirements outlined in this *Universal Debris Removal Cabinet (UDRC) Site Preparation Guide*, 725-00089A-EN Rev D, including any Appendix attached thereto, as acknowledged by the Customer's signature herein or, alternatively, by the Customer's signature in a Kodak Sales Agreement, Customer Agreement, Service Agreement, Order Form, or similar applicable document.

Customer representative: _____

Signature: _____