

Installation and use instructions for the CADAM Drafting Keypad

(Revised April 20, 2006)

The CADAM Drafting Keypad is designed to be used in parallel with your existing keyboard. While using CADAM Drafting, the keypad will greatly enhance your productivity by allowing rapid access to CADAM Drafting's most commonly used functions. The keypad is supported in all Microsoft Windows environments and on all personal computers having 6-pin PS/2 keyboard connector.

Applicable Releases of CADAM Drafting

The CADAM Drafting Keypad is designed for use with both CADAM Drafting V4 and CADAM Drafting for V5. For CADAM Drafting V4, the minimum release that can utilize the full function of the keypad is 424. For CADAM Drafting for V5, the minimum release that can utilize the full function of the keypad is V5R5 SP1. If you are using an earlier release, you should first upgrade your CADAM Drafting software so that it is at least at one of these levels. Please contact your IBM Support Representative or CADAM Value Added Reseller for information on obtaining the latest version of CADAM Drafting. Alternately, the latest CADAM Drafting releases can always be downloaded from www.cadam.com.

Installing the keypad

1. **IMPORTANT: Make sure the keypad programming switch on the upper right side of the keypad is in the "use" (black) position and not the "program" (red) position.** The keypad will not function properly if you attempt to use it while this switch is in the "program" position.
2. Turn off the computer
3. Plug the keypad connector (the end with the pins) into the keyboard port on the computer.
4. Plug your standard keyboard into the available plug on the keypad cord.
5. Turn on the computer and make sure the standard keyboard operates properly after complete boot-up. On the keypad, check that the top layer indicator light (green) is on.
6. The keypad has been pre-programmed with the 20 most commonly used CADAM Drafting functions. If you wish to keep this set-up, you may now begin using the keypad with CADAM Drafting. Pressing any key on the keypad should activate the associated function in CADAM Drafting.

Optimizing the displayed function key toolbar

Since the keypad has only 20 keys, some of the less frequently used function keys have not been programmed into it. Unless you reprogram the keypad to add these function keys, you will still need to access these function keys from the displayed function key toolbar. At this point, you may want to remove those function keys that are now available from the keypad from the displayed function key toolbar. Both the 424 and V5R6 releases of CADAM Drafting allow this toolbar to be edited.

1. Select **V**iew, then **C**ustomize.
2. All currently displayed function key toolbar buttons are shown in the **C**urrent toolbar buttons box. For each button that you no longer need, select that button and then select the **R**emove button. If you are using the keypad in it's pre-programmed setting, you can remove the Point, Line, Circle, Type, Relimit, Corner, Offset, Group, Symbol, Detail, Dimension, Analysis, Note, Show, View, Window, and YN buttons.
3. You are now left with a much smaller toolbar allowing easy location of the function keys that are not programmed into the keypad. You may want to position this toolbar either horizontally or vertically near the bottom of the screen so it is closer to the menu line.

Programming the keypad

Any of the function keys on the keypad can be reprogrammed to allow rapid access to other CADAM Drafting functions. You can also program a second layer, if desired. A set of preprinted key labels for most CADAM Drafting functions has been included with your keypad. If you do program a second layer, a set of half-height labels has been included. These labels can be used

in conjunction with a full-height label to show the function assigned to both layers. A set of blank labels has also been included. To reprogram any key on the top layer, follow the following instructions:

1. In order to program the keypad, the standard keyboard must be attached to the computer along with the keypad. If you have not already done so, install the keypad as described above.
2. It is a good idea to open CADAM Drafting while performing the programming. With CADAM Drafting open during the programming operation, you can visually see that you are selecting the correct keystroke sequences.
3. Slide the program switch on the keypad (the sliding switch on the right side, near the top) to the program position. The opening above the switch will show red when the switch is in the programming position. The red or green light will also blink, which lets you know which layer you are programming. (The default, or top, layer is the green layer.)
4. Tap the key on the keypad that you want to program. The red or green layer indicator light will now double-flash to indicate that a key is in the process of being programmed.
5. Type (on the standard keyboard) the key sequence and/or key combination to program into the key on the keypad. During programming, the monitor will display any alphanumeric keys typed or, if you are entering commands, the application will perform the function(s) entered.
6. When the sequence is completed, tap the key on the keypad again. The key is now programmed. The red or green light will now go back to a single blink state.
7. Repeat steps 4, 5, and 6 to program the rest of the keys on the keypad. If you make a mistake on a key, tap it once to stop the programming and then tap it again (step 4) to re-program it with the correct keystrokes.

NOTE: When the keypad is in program mode and no key is being programmed (when the red or green light on the keypad is blinking) the standard keyboard will not work. In addition, the keypad must be in run mode for the standard keyboard to work properly. Finally, if the keypad is in program mode and you attempt to reboot your computer, the computer may not boot properly.

Programming a second layer

The keypad has the ability to store a second layer of functions. Switching between layers is accomplished by pressing a toggle, or shift, key. Once the shift key is pressed, the alternate layer remains active until the shift key is pressed again. This behavior is similar to the **Caps Lock** key on the standard keyboard. In order to use a second layer, you must first reprogram one of the 20 keys as a **Shift** key. This is done with the following steps:

1. If the keypad is not already in program mode, slide the program switch up to the program position.
2. Tap the key on the keypad that you want to designate as the **Shift** key.
3. Press and hold the <esc> key on the standard keyboard.
4. While holding down the <esc> key, tap the <2> (two) key on the alphanumeric section of the standard keyboard (above the Q).
5. Release the <esc> key.
6. The red or green layer indicator light on the keypad will blink, which confirms that the command was accepted.
7. If programming the rest of the first layer is complete, slide the program switch to the down or run position.

Now that a **Shift** key has been programmed, you can proceed with programming the second layer:

1. After programming a **Shift** key, change to the second layer by tapping the layer-toggle key. The keypad must be in run mode, not program mode, when changing to the second layer. The indicator LED on the keypad will change from the top to the green to the red light.
2. Slide the program switch up to the program position.
3. Continue to program this layer as described in the previous section, but do not reprogram the **Shift** key, or you will not be able to access the second layer.

Erasing a key

Reprogramming a key on the keypad automatically erases the previously saved keystrokes. To erase a key and leave it blank, tap the <esc> key three times during programming.

Resetting the keypad

To erase the entire keypad, tap on any key on the keypad while it is in program mode and then type <esc><backspace><esc><esc><esc> on the standard keyboard. This will remove all programming from all keys on both layers and set the keypad to a completely unprogrammed state.

Programming errors

1. If the keypad encounters programming errors, the red and green light will blink simultaneously on and off. Turn the programming switch to the run position and then back to the program position to reset the keypad to programming mode.
2. Error can occur if:
 - There is an unreliable cable connection. Check all cords for proper connection.
 - The computer is not operating in a mode to accept the entered keys. For example, pressing <Cntl><Alt><Delete> may cause the computer to reboot and the keypad will not boot up in programming mode.
 - An attempt was made to save too many keystrokes into the keypad. This is unlikely, but if you think that too many commands were entered, retry with a shorter key sequence.

Horizontal and vertical double keys

Horizontal and/or vertical double keys can replace any two single keys. Remove the two single keys that are to be replaced using the key-puller that comes with the keypad. This is done by positioning the key-puller teeth under the key and pulling straight up on the key cap. Press the double key in place over the two exposed switch stems. **NOTE:** If the two individual keys were programmed before, erase both before installing a double key.

Available keystroke functions

You can program any of the keystroke sequences in the following table into the CADAM Drafting Key Pad. Keystrokes separated by a plus sign (“+”) are to be pressed at the same time. For example, “Cntl+Shift+A” means that the Cntl, Shift and “A” keys are all pressed simultaneously. Keystrokes separated by a comma are separate keystrokes. For example, “Alt-F,A” means first press the Alt and “F” keys together, release them, then press the “A” key.

Function	Key Sequence
FK Analysis	Cntl+Shift+A
FK CADEX	Cntl+Shift+K
FK Circle	Cntl+Shift+C
FK Corner	Cntl+Shift+E
FK Detail	Cntl+Shift+J
FK Dimension	Cntl+Shift+I
FK Draft	Cntl+Shift+F
FK Group	Cntl+Shift+G
FK IUE	Cntl+Shift+U
FK Line	Cntl+Shift+L
FK Note	Cntl+Shift+N
FK Offset	Cntl+Shift+O
FK Origin	Cntl+Shift+X
FK Overlay	Cntl+Shift+Y
FK Point	Cntl+Shift+P
FK Raster	Cntl+Shift+H
FK Relimit	Cntl+Shift+R
FK Show	Cntl+Shift+S
FK Spline	Cntl+Shift+B
FK Symbol	Cntl+Shift+M
FK Type	Cntl+Shift+Q
FK VDS	Cntl+Shift+Z
FK View	Cntl+Shift+V
FK Window	Cntl+Shift+W
Yes/No	F2
New	Cntl+N
Open	Cntl+O
Save	Cntl+S
Save As	Alt+F, A
Select	Cntl+Shift+1
Select All	Cntl+Shift+3
Select Window	Cntl+Shift+2
Select Special	Cntl+Shift+4
Cut (CCD clipboard)	Cntl+Shift+5
Copy (CCD clipboard)	Cntl+Shift+6
Paste (CCD clipboard)	Cntl+Shift+7
Paste Special	Cntl+Shift+8
Deselect	Cntl+Shift+9
Local	Cntl+L
Remote	Cntl+R
Plot	Cntl+P
Plot Data	Alt+F, D
Plot Setup	Alt+F, U
Plot Current	Alt+F, C
Plot Status	Alt+F, T
Help	F1
Refresh	F3
Redraw	F4
ECS	F12

If a function is not listed here, but is available via keystrokes from the standard keyboard, it can still be programmed into the keypad by keying the appropriate keystrokes.

FCC Declaration of Conformity

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Limited Warranty

For all CADAM Drafting Keypad products purchased and installed in the United States and Canada, Dassault Systemes of America warrants that the CADAM Drafting Keypad product will be free from defects in materials and workmanship under normal use and service, and will meet the specifications presented by Dassault Systemes of America at the time of original purchase, for one year as evidenced by a copy of the purchase receipt. Under this warranty, Dassault Systemes of America will, at its sole option, repair or replace any CADAM Drafting Keypad which is defective, provided that you are responsible for (1) the cost of transportation of the product to Dassault Systemes of America, and (2) any loss or damage to the product resulting from such transportation.

Upon discovery of a defect in the product within the Warranty Period, you should notify Dassault Systemes of America via telephone or e-mail (see contact information below) to obtain an RMA (return authorization number) and instructions for shipping the product to Dassault Systemes of America. You should send the product, shipping charges prepaid, to the designated location, accompanied by the return authorization number, your name, address, and telephone number, proof of purchase, and a description of the defect. Dassault Systemes of America will pay for return of the repaired or replaced CADAM Drafting Keypad to the customer.

Dassault Systemes of America shall have no responsibility to repair or replace the CADAM Drafting Keypad if the failure has resulted from accident, abuse, mutilation, misuse, or repair/modification performed by any entity other than Dassault Systemes of America.

THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, WHETHER EXPRESSED, IMPLIED, OR STATUTORY. DASSAULT SYSTEMES OF AMERICA DOES NOT WARRANT THIS CADAM DRAFTING KEYPAD PRODUCT FOR ANY USE OTHER THAN IN CONJUNCTION WITH THE CADAM DRAFTING PRODUCT. DASSAULT SYSTEMES OF AMERICA AND ITS EMPLOYEES SHALL NOT BE HELD LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES, EVEN IF ADVISED OF THEIR POSSIBILITY, ARISING OUT OF THE USE OR INABILITY TO USE THIS PRODUCT. SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATION OF CERTAIN LIABILITIES, SO THE

ABOVE LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER LEGAL RIGHTS, WHICH VARY FROM STATE TO STATE.

In the event that the above limitations are held unenforceable, Dassault Systemes of America's liability for any damages to you or to any party shall not exceed the purchase price you paid, regardless of the form of any claim.

This limited warranty is valid for and only applies to products purchased and used inside the United States (and its territories) and Canada.

This limited warranty is governed by the laws of the United States of America and the state of California.

Contact Information

If you have any questions, comments or suggestions regarding this product, please contact:

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Details on purchasing additional keypads can be found on www.cadam.com.