Commando

by

K² Engineering

Copyright ©1995 through 1999 K² Engineering, all rights reserved.

Table of Contents

Introduction	3
System Requirements	4
Installation	5
Connection to SystemOne	6
Common Page Controls	7
Assign Loco to Cab	8
Set Clock	9
Macros	11
Command Station	13
Cab Parameters	16
Loco Alias	17
File Menu	18
Help Menu	19
Preferences	20
About	21

Introduction

Welcome to Commando.

Commando is a program to save and restore Command Station settings. You can backup your settings for later restoring, or save several files for different operating sessions. It can also be used to change those settings. If many Macros are utilized, Commando shows each macro, and it's counterpart, at a glance.

The user interface is arranged as a set of Tabs on the main dialog. In Windows 95 these are known as Property Pages. Click on the Title (the Tab) of the page to bring it to the front. Now you can view and change the setting for that page.

When Read is pressed, the settings are read for all of the pages, except for Assign Loco to Cab. When Send is pressed, the settings on all of the pages are sent to the Command Station pages, except for Assign Loco to Cab.

Assign Loco to Cab is an action to be performed, not a specific setting. Enter the Loco Address, the Cab Address, and press Assign.

System Requirements

Requirements	Minimum	Recommended
Processor	80286	80386 or better
Operating System	MS DOS 3.1 / Windows 3.1 or Windows 95	MS DOS 6.5 / Widows 3.1 (Commando will run on Windows for Workgroups and Windows 95)
Hard Disk Space	500K bytes	500K bytes
Floppy Disk	1 - 3.5" 1.44MB high density	
System Memory	2MB (8MB for Windows 95)	4MB
Mouse	Any supported by Windows	

Installation

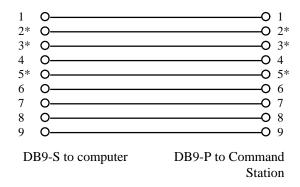
Commando is supplied with a standard Windows setup program that copies the files off of the installation disk and places them in the correct places on your hard disk. Follow the instructions below. If you are updating from a previous version, see that section below.

- 1. Insert the Commando disk in the 3.5" disk drive.
- 2. From the File menu in the Windows Program Manager, File Manager, or Start button, choose Run.
- 3. Enter A:\Setup (substitute a different letter for A if you are installing from another drive), or press the Browse button and find the installation disk and the program called setup.exe. Press OK on the Run dialog.
- 4. Follow the instructions presented to install the program to your hard drive.
- 5. Installation is now complete.

Connection to SystemOne

Cable

You can use a Male 9 pin D connected to a Female 9 pin D with ribbon cable, or use a 9 pin D extension cable. A 9 to 25 pin adapter at the computer end will work if the computer you are connecting to does not have a 9 pin D port.

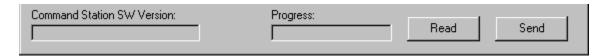


Note: The signals marked with an "*" are the only ones that are necessary.

Communications

Commando communicates at 9600 baud. Make sure that the Command Station is set to 9600 baud (Factory Default. See "Getting to Know your Command Station" section). The rest of the communications parameters are 7 bits, even parity, and one stop bit.

Common Page Controls



Command Station SW Version

When the Read button is pressed, the version string is read from the Command Station and displayed here.

Progress

This progress bar will show the amount completed for Read, Send, a File I/O operations.

Read

Pressing this will cause Commando to get the current values from the Command Station. Assign Loco to Cab values are not read.

Send

Pressing this will cause Commando to store the displayed values in the Command Station. Assign Loco to Cab values are not stored.

File Menu

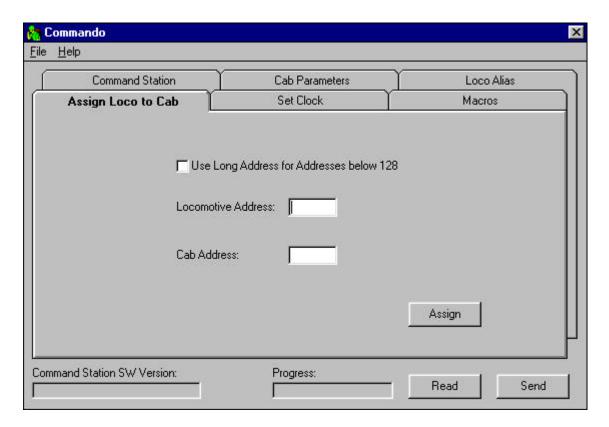
Use this menu to open or save files, set preferences, and exit the program. For more information, see the File Menu Topic.

Help Menu

Use this menu to view this help file or to display the About dialog. For more information, see the Help Menu Topic.

Assign Loco to Cab

Select the **Assign Loco to Cab** Tab to view this page.



Loco Address

Enter the address of the Loco that you want to Assign to a Cab.

Cab Address

Enter the address of the Cab that you want to Loco Assigned to.

Assign

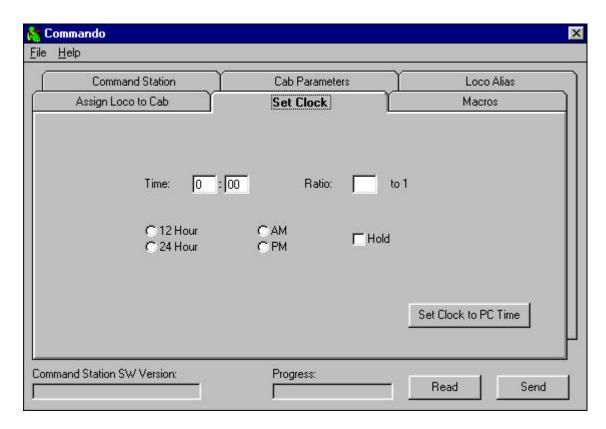
Pressing this button assigns the Loco Address to the Cab Address. Note that because Assign Loco to Cab is an action, no data is read when the Read button is pressed. By the same token, no data is sent when the Send button is pressed.

Use Long Addresses

If this is checked, addresses below 128 will be sent as long addresses. If not checked, addresses below 128 will be sent short addresses.

Set Clock

Select the **Set Clock** Tab to view this page.



Hours

This is the Fast Clock Hours. The Fast clock will be set from this when the Send button is pressed. The hours will update approximately twice a second. The Fast clock will be read when the Read button is pressed.

Minutes

This is the Fast Clock Minutes. The Fast clock will be set from this when the Send button is pressed. The minutes will update approximately twice a second. The Fast clock will be read when the Read button is pressed.

Ratio

This is the Fast Clock Ratio. The range is from 1:1 to 25:1. Note that some ratios are not possible due to rounding, the final ratio is the integer portion of 250 divided by the entered Ratio. The Fast clock will be read when the Read button is pressed. The Fast clock will be set from this when the Send button is pressed.

12/24 Hour

This is the Fast Clock 12 or 24 hour setting. The Fast clock will be read when the Read button is pressed. The Fast clock will be set from this when the Send button is pressed.

AM/PM

This is the Fast Clock` AM or PM hour setting. This setting is only available if the 12/24 Hour is set to 12 Hour. The Fast clock will be read when the Read button is pressed. The Fast clock will be set from this when the Send button is pressed.

Hold

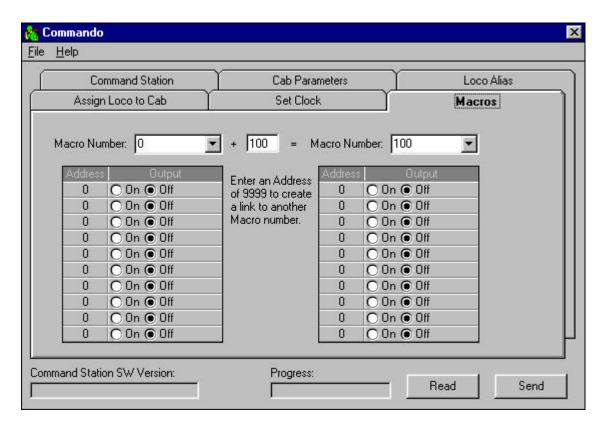
This is the Fast Clock Hold setting. If this is checked the Fast clock will hold the value set in Hours and Minutes settings. The clock will re-start if this is un-checked and the send button is checked. The Fast clock will be read when the Read button is pressed. The Fast clock will be set from this when the Send button is pressed.

Set Clock to PC Time

Pressing this button will set the clock in the Command Station to the current PC time. It also sets the Ratio to 1 and the 12/24 Hour mode to 24 Hour.

Macros

Select the **Macro** Tab to view this page.



Macro Number

Enter the number of the Macro that you want displayed in the list below. Type the number directly in the box, or select it from the drop-down list. When the number is changed in left box, the right box will be updated to the number entered plus the Macro Number Offset

Macro Number Offset

There are two Macro lists displayed. If your Macro has a normal and a alternate route, it is convenient to number the normal route in the 0-99 range, and the alternate route in the 100-199 range. This box holds the offset between the list on the left and the list on the right (default 100). Type the number you use between the normal and alternate routes. This number will only be saved when the Preferences are saved.

Macro Address

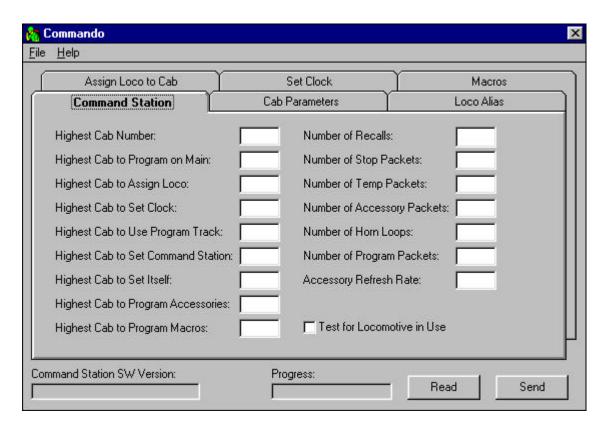
This is the address of the accessory that you want to change. The direction is set with the Macro Output.

Macro Output

This is the direction that will be output to the accessory. The address of the accessory is set with the Macro Address . You can change the labels that appear in this list in Preferences.

Command Station

Select the **Command Station** Tab to view this page.



Highest Cab Number

This adjusts the number of Cabs that the Command Station will poll. This number should be set as low as possible but still poll all of the Cabs in use. This factory defaults to 11. TIP: It is faster to poll a connected Cab than it is to poll a non-existent Cab. To avoid this situation, consecutively number the Cabs from 1 to N, and set the HIGHEST CAB NUMBER to N+2.

Highest Cab to Program on Main

This sets the highest Cab address that will be able to Program on the Main. Cabs above this setting will skip the PROGRAM ON MAIN menu selection. 0 = all Cabs.

Highest Cab to Assign Loco

This sets the highest Cab address that will be able to Assign Loco to Cab. Cabs above this setting will skip the ASSIGN LOCO->CAB menu selection. 0 = all Cabs.

Highest Cab to Set Clock

This sets the highest Cab address that will be able to Set the Clock. Cabs above this setting will skip the SET SYSTEM CLOCK menu selection. 0 = all Cabs.

Highest Cab to Use Program Track

This sets the highest Cab address that will be able to Use the Program Track. Cabs above this setting will skip the USE PROGRAM TRK menu selection. 0 = all Cabs.

Highest Cab to Set Command Station

This sets the highest Cab address that will be able to Set the Command Station. Cabs above this setting will skip the SET CMD STATION menu selection. 0 = all Cabs.

Highest Cab to Set Itself

This sets the highest Cab address that will be able to Program the Cab Parameters (itself). Cabs above this setting will skip the SET CAB PARAMS menu selection. 0 = all Cabs.

Highest Cab to Program Accessories

This sets the highest Cab address that will be able to Program Accessories. Cabs above this setting will skip the PROG ACCESSORIES menu selection. 0 = all Cabs.

Highest Cab to Program Macros

This sets the highest Cab address that will be able to Program Macros. Cabs above this setting will skip the PROGRAM MACROS menu selection. 0 = all Cabs.

Number of Recalls

This adjusts the number of Loco's that are cycled through when the **RECALL** key is pressed. Enter the number of Recalls from 1-6.

Number of Stop Packets

This adjusts the number of packets sent when a stop command is sent to the Loco.

Number of Temp Packets

This adjusts the number of packets sent when a temp (such as Functions On/Off) command is sent.

Number of Accessory Packets

This adjusts the number of packets sent when an accessory command is sent.

Number of Horn Loops

This adjusts the number of times around the Cab poll loop that the Horn command is checked.

Number of Program Packets

This adjusts the number of packets sent when a programming command is sent to the Loco.

Test for Loco in Use

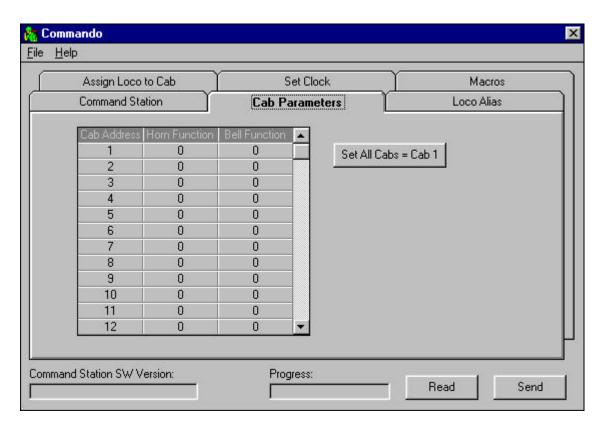
If this is checked, a warning will be issued to the operator if a Loco is selected that is in use by someone else. If not checked, no warning is issued.

Accessory Refresh Rate

This controls the rate at which Function Group One (F0-F4) packets are repeated on the rails after the "normal" number (TEMP PACKETS) of times. When set to zero, the function packets are never repeated. If non-zero, Function Group One packets are generated and sent out over the rails for the currently active locomotive on each cab. The rate of sending these packets is approximately .004 * n seconds (where n = value). Example: n = 250 refreshes all function group one packets about 1 second. NOTE: This should only be used when using Decoders which do no remember the Function status after a power interruption. When used, the number should not be set below 200.

Cab Parameters

Select the **Cab Parameters** Tab to view this page.



Cab Address

This is the Cab that is to be assigned the Horn and Bell function number.

Horn Function

This is the function output that is connected to the Horn Output.

Bell Function

This is the function output that is connected to the Bell Output.

Set All Cabs = to Cab 1

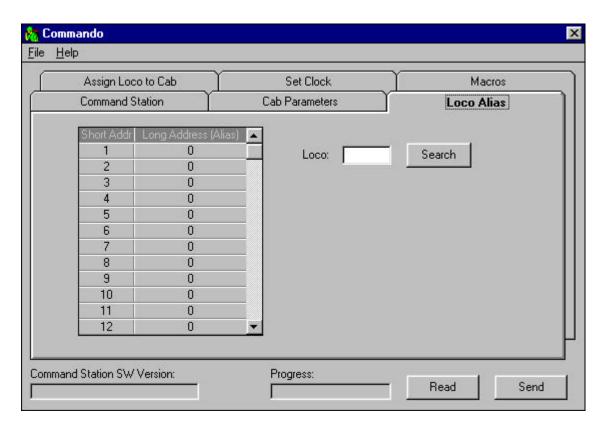
Use this button if you want to rapidly set all of the cabs to the same Horn and Bell functions. Set Cab 1's functions, and then press this button.

Scroll Bar

Use this scroll bar to view and set the rest of the cabs.

Loco Alias

Select the **Loco Alias** Tab to view this page.



Short Address

This is the Loco Short Address. There are 127 addresses, from 1 to 127. This filed is not editable. Use the Scroll Bar to see all of the Locos.

Long Address

This is the Long Address that the Short Address on the left is assigned to. Select the Long Address box to the right of the Short Address that is to be alias'd, and enter the address. After the address is assigned and sent to the Command Station, selecting a loco using the Long Address will internally select the Short Address.

Search

Use this to find a Long Address in the Alias table. Enter the Long Address in the edit box and press the Search button. The cursor will be placed on the corresponding Long Address.

Scroll Bar

Use this scroll bar to view and set the rest of the Locos.

File Menu

Use this menu to open or save files, set preferences, and exit the program.

Open...

This menu item will open and display an existing Commando file.

Save

This menu item will save the currently open file. If no file is open, the **Save As...** operation will be used.

Save As...

This menu item will save the displayed value to a new file.

Preferences...

This menu item will open the Preferences dialog.

Exit

This menu item will close the program and return to Windows. If the displayed values have not been saved, the **Save As...** dialog will be displayed to let you save the file.

Help Menu

Use this menu to view this help file or to display the About dialog.

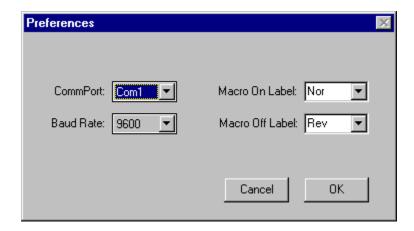
Help Contents...

This menu item will display the Commando Help file.

About...

This menu item will display the About dialog.

Preferences



CommPort

This is used to set the communications port to COM1, COM2, COM3, or COM4. If the currently selected communications port is being used, an error dialog will be displayed and you should choose a different communications port.

Baud Rate

The Baud Rate can be 1200 or 9600. 9600 baud is the default for SystemOne and for Commando.

Macro On Label

The labels for the Macro output direction can be set to any text that makes sense for your situation. You can type text (up to 8 characters) into the box, or select one of the pre-defined label in the drop-down list. When you select a pre-defined labels, the corresponding companion label will be automatically selected in the Macro Off Label. If you type in the box, the Macro Off Label will be cleared.

Macro Off Label

The labels for the Macro output direction can be set to any text that makes for your situation. You can type text (up to 8 characters) into the box, or select one of the predefined label in the drop-down list.



Commando for SystemOne

Exclusively for Wangrow Electronics

Karl Kobel of K² Engineering

PCM-01 Release 1.0 11-Apr-97

A program to set, save, and restore Command Station Parameters.

A special thanks to my Beta Testers, Jim Scorse, Debbie Ames, and Chuck Swan. Icon inspired by Terri Kobel

Displays an information dialog showing the product name, author, revision number and kudos for my beta testers. Click anywhere on the dialog to dismiss it.