

ICM[®] Tx Unit Data Program

SOFTWARE INSTRUCTIONS

WARNING

THIS MANUAL MUST BE CAREFULLY READ AND FOLLOWED BY ALL PERSONS WHO HAVE, OR WILL HAVE, THE RESPONSIBILITY FOR UPGRADING THE AIR MASK. This Air Mask will perform as designed only if upgrading according to the Instructions. OTHERWISE IT COULD FAIL TO PERFORM AS DESIGNED, AND PERSONS WHO RELY ON THE AIR MASK COULD SUSTAIN SERIOUS PERSONAL INJURY OR DEATH.

The warranties made by MSA with respect to the product are voided if the product is not used and maintained in accordance with the instructions in this manual. Please protect yourself and your employees by following the instructions. Please read and observe the WARNINGS and CAUTIONS inside. For any additional information relative to use or repair, write or call 1-800-MSA-2222 during regular working hours.

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

NOTE: This equipment has been tested and found to comply with the limits for a Class A 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 commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



For More Information: Call (1-800-MSA-2222) or Visit Our Website at (www.MSAnet.com)



Be Sure.
Choose MSA.

MINE SAFETY APPLIANCES COMPANY
PITTSBURGH, PENNSYLVANIA, U.S.A. 15230

ICM TX

TABLE OF CONTENTS

Contents	2
First Screen	2
ICM Link	3
ID Tag Writer	4

CONTENTS

CD Rom
ICM Tx Reader / ID Tag Writer
User's Instructions
USB cable

System Requirements

Operating System: Windows 98 or higher
PC requirements: 200 Mhz CPU, 64 MB RAM, 50 MB
Free Hard Disk Space, USB 1.1 port.

WARNING

This PC software for the ICM was prepared and tested carefully and conscientiously. Because of the great variety of hardware and software that exists, it is not possible to check all applications. Therefore the use of the CD-ROM on a PC workplace or in a network shall take place solely at the user's risk. MSA shall assume no guarantee or liability whatsoever for the use of the software on a PC workplace or for implementation and use in a network or any direct, indirect or remote consequential damage arising from this.

1. Connect the ICM Tx Reader/ ID Tag Writer to an available USB port on the PC.
2. Insert CD-ROM into computer. An instructions screen will automatically appear. Follow instructions on screen.

ID Tag

The ID Tag (P/N10058545) is not provided as a part of the ICM Tx Reader / ID Tag Writer Kit.

The purpose of the ID Tag is to associate a user ID or jump seat location with the ICM Tx Unit. Once the ICM Tx Unit has read the ID data from a tag, that ID will remain associated with the ICM Tx Unit until another ID Tag has been read or enough time has elapsed.

Prior to pressurization of the SCBA and during inspection, the user can "tag in" by depressing and holding the top mode button (green) until the word "DATA" appears in the display. While "data" is displayed, position the ID tag as shown in the picture below. The ICM will sound a single beep confirming that the ID data has been read.



Correct ID Tag orientation.

The ID Tag has a space for the user to place a label in which the ID information can be written on the outside of the ID Tag for easy identification. This space is located on the side of the ID Tag opposite the approval label.

WARNING

To maintain the ID Tag's Intrinsic Safety Approval, any label that the user attaches to the ID tag must be less than 4 square centimeters in total area.

FIRST SCREEN – ICM TX READER / ID TAG WRITER

Note: The ICM Tx Reader/ ID Tag Writer must be connected and recognized by the PC before starting ICM software program. A green LED should light on the ICM Tx Reader / ID tag writer box.

1. Two icons will appear, one showing the ICM Tx Unit and one showing the ID Tag. This software allows for downloading of the ICM Tx Unit or storing ID information on the ID Tag.
2. Choose the desired function by clicking on the appropriate picture.

Note: This selection can also be made by clicking "File" and then selecting either "ICM Link" or "Tag Writer".

3. Refer to the appropriate section below for further details and instructions.

ICM TX

ICM LINK

The screenshot shows the ICM TX settings interface. It includes fields for instrument identification (Instr ID, Serial ID, FW1, FW2, Type), time settings (Hour, Minute, Day, Month, Year, Date, Time), and various operational parameters like Cylinder Type (4500 PSI, 3000 PSI, 2216 PSI), Set Time Remaining Calculation (0 PSI, Low Alarm Set Point), Temperature Alarm, and Duration of ID Tag Memory (Delete after 12 hours off, Keep current ID in memory until next ID Tag read). Buttons for 'Read Settings', 'Write Settings', and 'Show Data Memory' are also present.

Reading ICM settings

1. To retrieve the ICM's settings (serial ID, date, time, duration of ID tag memory, and time remaining calculation setpoint), first press and hold the mode button (green) on ICM until the "data" appears on the LCD screen.
2. Quickly align ICM with ICM Tx Reader/ ID Tag Writer as shown on the label.
3. Click "read settings". (If the "read settings" button appears grey and inactive, be sure that the ICM Tx Reader / ID Tag Writer is properly connected and recognized by the computer)
4. The data should appear on the screen within a few seconds. An amber LED will light on the ICM Tx Reader/ ID Tag Writer while information is being transferred from the ICM.

Changing ICM settings

1. The instrument time and date can be reset or edited by entering the desired date in time in the fields labeled "Date" and "Time".

Note: By default, the ICM Tx Unit internal clock is set to Eastern Standard Time. The ICM Tx Unit contains an internal battery used to maintain the time on the clock when the AA batteries are not installed. The clock should maintain it's time keeping ability when the AA batteries are not installed.

2. By clicking "Use PC Date and Time" the PC clock time and date will be used to set the ICM clock.
3. The ICM Tx Unit can be set to give the time remaining display in 2 modes. It counts down to 0 psi cylinder pressure (default) or it can be set to count down to the low pressure alarm point. This mode can be toggled by selecting either "0 PSI" or "Low Alarm Set Point".
4. Under the heading "Duration of ID Tag Memory", there are 2 options: "Delete after 12 hours off" (default) and "Keep current ID in memory until next ID tag read". "Delete after 12 hours off" means that the ICM will only retain the last read ID tag data for 12 hours after

the ICM Tx Unit has been turned off (sleep mode). After 12 hours, the ICM Tx Unit will default back to the serial number. "Keep current ID in memory until next ID tag read" means that the ICM Tx Unit will retain the last read ID tag information until another ID tag has been read into the ICM Tx Unit.

Writing ICM settings

Note: The ICM Tx Unit data must be read before settings can be written to the unit. After making all settings changes on the screen, the changes must then be written to the ICM Tx Unit.

1. To write changes made, press and hold the mode button (green) until "DATA" is displayed on the LCD screen.
2. Quickly align ICM Tx Unit with ICM Tx Reader/ ID Tag Writer as shown on the label.
3. Click "write settings". (If the "write settings" button appears grey and inactive, be sure that the ICM Tx Reader / ID Tag Writer is properly connected and recognized by the computer)
4. The data should be written within a few seconds. An amber LED will light on the ICM Tx Reader/ ID Tag Writer while information is being transferred to the ICM Tx Unit.

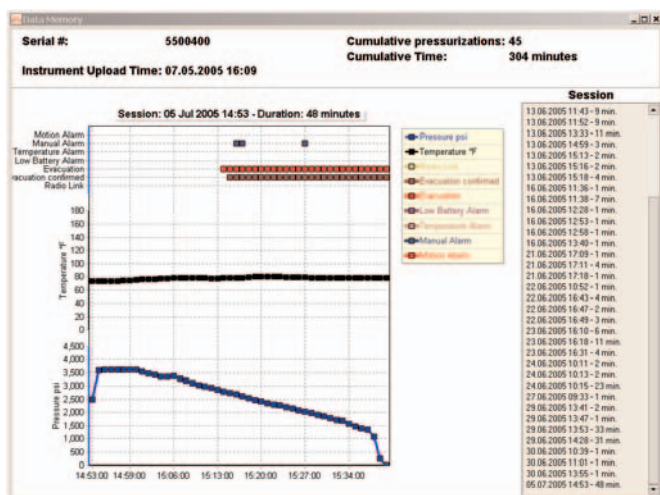
To display ICM data log

1. To display the data log memory of the ICM Tx Unit, press and hold the mode button (green) until "data" is displayed on the LCD screen.
2. Quickly align ICM with ICM Tx Reader/ ID Tag Writer as shown on the label.
3. Click "Show Data Memory".
4. A dialog box will appear asking "Load New Data?". Click "Yes" to proceed with downloading the data log from the ICM Tx Unit. (By clicking "No", you can search for previously downloaded data log files and review them.)

Note: To review previously downloaded data log files, steps 1 and 2 of this section may be skipped.

5. After clicking "Yes" the data will begin downloading. This may take up to 2 minutes to complete the data transfer. An amber LED will light on the ICM Tx Reader/ ID Tag Writer while information is being transferred from the ICM Tx Unit.
6. When the data transfer is complete, a new window should appear displaying session information.

ICM TX



Navigating the Data Memory Window

1. The session displayed can be selected by clicking the date and time of the desired session listed on the right side of the screen under the heading "Session". A session begins every time the ICM is powered on and ends when it is turned off.
2. The top portion of the graph shows ICM functions that activated during the session currently displayed.
3. The center black line portion of the graph shows the temperature that the ICM Tx unit was reading. This is only applicable if the ICM Tx Unit has the temperature alarm function.
4. The bottom blue line portion of the graph shows the pressure as read by the ICM.
5. The graph can be panned from left to right by placing the cursor on the graph and holding the right mouse button and dragging from side to side.
6. The graph can be zoomed in by placing the cursor at the desired zoom location on the graph and holding the left mouse button and simultaneously moving the cursor at a 45 degree angle to the right of the cursor position.
7. The graph can be zoomed out by placing the cursor at the desired zoom location on the graph and holding the left mouse button and simultaneously moving the cursor at a 45 degree angle to the left of the cursor position.

ID TAG WRITER

Data	Functions
Type	Read Tag
Name	
Jumpseat Position	
Tag Data	Write Tag

Writing information to the ID Tag

1. While in the ID tag writer portion of the program, first select the type of ID information to be entered by clicking either "Name" or "Jumpseat Position".
2. Next, enter up to 30 characters of ID information in the entry box titled "Tag Data".
3. Insert the ID tag into the port in the front of the ICM Tx Reader/ ID Tag Writer. The tag should be inserted unit it bottoms out.
4. Click "Write Tag".

Reading information stored in the ID Tag

1. Insert the ID tag into the port in the front of the ICM Tx Reader/ ID Tag Writer. The tag should be inserted unit it bottoms out.
2. Click "Read Tag"
3. After a few seconds, the stored data should appear in the box titled "Tag Data". If no ID information has been written to the ID Tag, nothing will be displayed in the Tag Data box.