

SOFTWARE DEVELOPMENT
BULLETIN NO. 2
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TO: Distribution
SUBJECT: UNIVERSAL MEGAS LOADERS

Attached is information about the programs DLM, LOAD, and SAVE, the Universal Megas Loaders.

The purpose of this software is to allow code in the F000 range to be loaded into a Megas for Lucky users.

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MEGAS LOADERS

The software described in this document is only for use on systems that have been given uniform configurations under TSX version 3.02. Also refer to Mr. Color Page 11 under Loading and Saving.

Downloading Megas

The program for downloading a Megas is called DLM. DLM replaces D16Kxx, and is executed as follows: (TSX prompt is '.').

```
.dlm <CR>  
    filename[/x] <CR>
```

Filename is the name of an APH linked object file. /x refers refers to an optional line number (see below).

DLM first finds the users TSX line number and assigns the appropriate Megas. If the line number is 0, this means the user is not running under TSX, but rather under RT-11. In that case, DLM looks in SY:MEGAS.ADR to find the address of the megas to load. The format of the MEGAS.ADR file is one line with a six character octal address of the DI011 board. eg: 164400.

If an optional line number (/x) is specified, that Megas instead of the default is loaded. The number must be in the range 0-6. When the user is on the console, line 7, the optional number **MUST** be specified. This is useful for testing. DLM will not run when the line number indicates user is detached or virtual.

On completion of loading, DLM causes Intellivision reset and waits for input with the message:

```
Range (start, lines) / 0 to reset [,ADDR,WORD]  
--->
```

All values are in octal. Entering return or 0 causes reset. START and ADDR must represent addresses in the range 0o5000-0o67777 or 0o150000-0o177777 (5000-6FFF,D000-FFFF HEX). For memory display, the new format is:

```
Address decle decle decle decle ...
```

with 8 deceles displayed. This is the default display when any of the following commands is executed:

```
START <CR>
START,0 <CR>
START,1 <CR>
```

When 2 or more lines are requested the display appears as:

```
STARTADDR  decle decle ...
STARTADR+8  decle decle ...
```

The command ',ADDR,WORD' works as for D16Kxx. The contents of location ADDR is replaced with WORD.

Downloading Mr. Color to Megas

The program is called LOAD. Load replaces LOADxx and is executed as follows:

```
.LOAD <CR>
      [filename[/x]] <CR>
```

/x is the optional line number as described for DLM. Filename is the name of a set of files with the extensions MGR, CGR, BGR, and PGR. If the optional filename is not specified, Load defaults to the file set SY:CLEAN.mbcprGR. Notice the SY:. Load defaults to the system device for GR.BIN and the CLEAN files so that only one copy need be maintained per system. (Hey, just like DCOLOR is SSB-34).

Uploading Mr. Color from Megas

The program is called SAVE. Save replaces SAVExx and is executed as follows:

```
.SAVE <CR>
      filename[/x] <CR>
```

/x is the optional line number as described for DLM. As indicated, filename is not optional and produces the set of files: filename.MCBPgr (4 separate files).

Distribution

A single density floppy labled with the date and number of this bulletin and containing the following files will be distributed to Applications Software:

DLM	.SAV
LOAD	.SAV
SAVE	.SAV

Copy the entire contents of the floppy to the system device as in the example:

```
.copy dzl: sy:
```