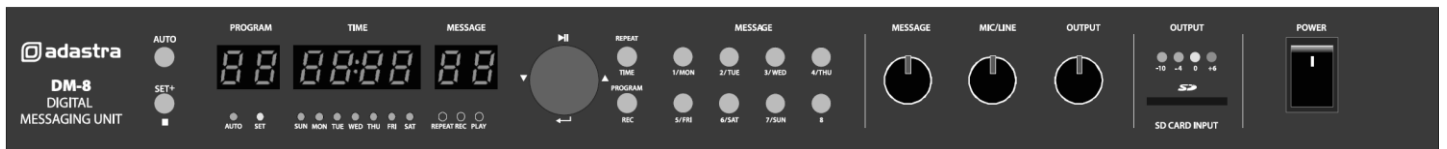# DM-8

DIGITAL MESSAGING UNIT

Item ref: 953.052UK

User Manual

Version 2.0

| ⚠ | Caution: Please read this manual carefully before operating
Damage caused by misuse is not covered by the warranty |

Introduction

Thank you for choosing an Adastra DM-8 digital messaging unit for scheduled music, announcements and alerts in your public address system. This unit is designed to provide flexible and hassle-free automation of audio playback, fully programmable by the operator. Please read this manual to gain the best results from your product and avoid damage through misuse.

SAFETY SYMBOL AND MESSAGE CONVENTIONS

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	AVIS RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR	

	This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit

	This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

SAFETY NOTICE

1. Prior to use, read through this manual
2. Keep the manual in good condition
3. Pay attention to safety warnings
4. Observe all operating requirements
5. Do not use the device near water or wet areas
6. For cleaning, only use a lint-free, dry cloth
7. Install according to the specifications
8. Place away from heat sources or heating appliances
9. Use mains lead provided and avoid damage to cable or connectors
10. Unplug power from mains during stormy weather or if unused for long periods
11. In case of malfunction, water ingress or other damage, consult qualified service personnel
12. Do not place in damp areas or near liquids or moisture. Do not spill liquids on the housing
13. Please pay attention to warning symbols during transit and placement
14. Terminals marked with the ϟ symbol are HAZARDOUS LIVE and should only be connected by qualified personnel
15. Ensure that the apparatus is connected to a mains socket with a protective EARTH connection
16. Ensure correct operation of the mains switch

Warning

To prevent the risk of fire or electric shock, do not expose any components to rain or moisture.
If liquids are spilled on the casing, stop using immediately, allow unit to dry out and have checked by qualified personnel before further use. Avoid impact, extreme pressure or heavy vibration to the case
No user serviceable parts inside – Do not open the case – refer all servicing to qualified service personnel.

Safety

• Check for correct mains voltage and condition of IEC lead before connecting to power outlet
• For DC power, use a stable 24Vdc supply connected to the 24Vdc power terminals on the rear panel.

Placement

• This unit can be used free-standing or fixed into a 19" rack
• Ensure adequate support and access to controls and connectors when rack-mounting
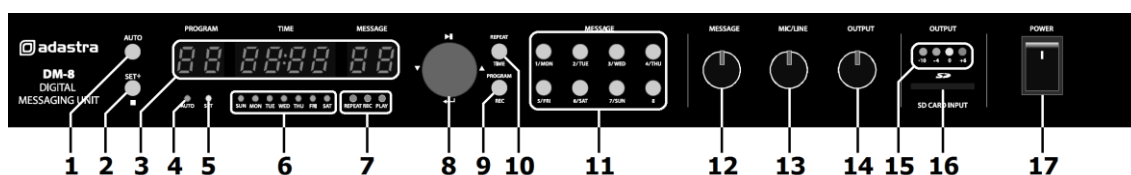
Cleaning

• Use a soft cloth with a neutral detergent to clean the housing as required
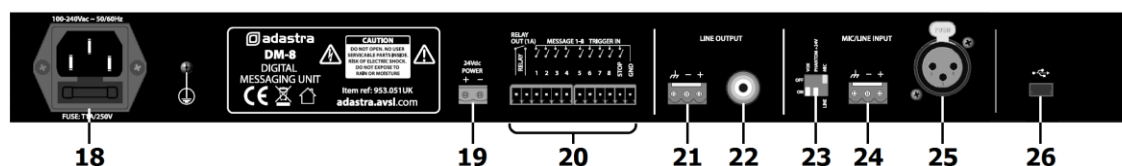• Do not use strong solvents for cleaning the unit

Firmware upgrading

• A USB port is included on the rear panel to enable future firmware upgrades as they become available

Front panel

1. AUTO enable
2. Stop playback or SET+ with other buttons
3. Program/Time/Message display
4. AUTO status indicator
5. SET status indicator
6. Days indicators
7. REPEAT/REC/PLAY status indicators
8. Data dial - press for Play/Pause or Enter
9. RECORD - press with SET+ for PROGRAM edit

10. REPEAT playback - press with SET+ for TIME setting
11. 1-8 message select or Mon-Sun day select
12. Message output level
13. Mic/Line output level
14. Master output level
15. Output level indicator
16. SD card slot
17. Power switch

Rear panel

18. IEC mains inlet and fuse holder
19. 24Vdc power terminals
20. Message 1-8 trigger & RELAY terminals
21. Balanced line output terminals

22. Unbalanced line output RCA socket
23. Mic/Line input DIP switches
24. Mic/Line input balanced terminals
25. Mic/Line input balanced XLR socket
26. USB firmware upgrade port

Connection and Setup

Ensure the Power (17) is switched off until all input and output connections are in place.
Turn Message, Mic/Line and master OUTPUT levels (12, 13, 14) fully down (anti-clockwise) to avoid loud noises when switching on.

Insert an SD card formatted to FAT32 (4-32GB recommended) with a folder saved onto it named "MUSIC" into the SD slot (16)
Connect line output either from balanced terminal (21) or RCA (22) on the rear panel to a line input on the public address system.
Note: this output is mono. To connect to both sides of a stereo system, it is necessary to wire both Left & Right from the "+" terminal.

The DM-8 has a mic/line input for live address and recording announcements, connected via balanced terminals (24) or XLR (25)
There are 3 DIP switches (23) to select mic or line level, +20V phantom power and vox override for this input.
For a connected microphone, select MIC level and if it is a condenser type which requires phantom power, set PHANTOM to on.
The VOX function attenuates audio playback from SD when there is a signal on the mic/line input (e.g. speaking into a connected mic.)

Connect the rear IEC inlet (18) to a power outlet using the supplied mains lead (or an equivalent approved type).
If 24Vdc power is to be used, connect this to the 24Vdc terminals (19)

Initial Checks

Ensure that level controls are turned down on connected PA equipment and switch on power to the DM-8 (17) – The display will light.
Turn up the OUTPUT (14) and check the MIC/LINE (13) by speaking into the mic or playing audio whilst turning up the level control.

To check playback of messages or music from the SD card, there will need to be mp3 audio tracks stored in a folder named "MUSIC"
Each file needs to be stored with the naming format "T001, T002, T003, T004 … T099" for the DM-8 to recognize it.
If necessary, insert the SD card into a PC or Mac to make a new folder named "MUSIC" and store a test audio file renamed to "T001".
Insert the SD card into the DM-8, turn up the MESSAGE level control (12) part way and press the "1/MON" button to check playback.
Message 1 (T001) from the SD card should play through the connected PA system and the display will show play time and track "01"
After the initial checks are successfully completed, adjust the MESSAGE, MIC/LINE and OUTPUT level controls as required for balance.

Recording a message

As described above, any mp3 file can be re-named to "T001…T099" on a computer and stored in the MUSIC folder on the SD card.
Alternatively, a track can be recorded directly from the Mic/Line input by pressing the REC (9) button and selecting a track number on the Data Dial (8) - pressing the Data Dial starts the record cycle with a 3 second countdown shown on the display (i.e. "-3, -2, -1")
Begin speaking into the microphone (or playing audio) connected to the Mic/Line input and press the Stop button (2) when finished.

Playback of Tracks

To play a recorded or stored track, turn the Data Dial to a track number and playback will start automatically and stop when finished.
Alternatively, pressing one of the track 1-8 select buttons (11) will directly play the selected track.

Pressing the REPEAT button (10) before or during playback will cause the REPEAT LED to light and the track to loop continuously.
Pressing the Data Dial will pause the current track and pressing again will resume playback.
Turning the Data Dial during playback will skip to the next or previous track and pressing the Stop button will stop playback.

In addition to control from the front panel, contact terminals numbered 1 to 8 are provided on the rear panel for remote playback.
Connecting one of these terminals to the Ground terminal via a momentary switch will initiate playback of that numbered track.
(e.g. wiring the "7" and Ground terminals to a push switch will cause T007 to play whenever the switch is pressed)

If the switch is held closed (as with a latching switch), the track will play repeatedly. Switch priority is fixed as 1>2>3>4>5>6>7>8.
Wiring a momentary switch to the STOP terminal and Ground will provide a switch to stop all playback.
In addition, there are a pair of RELAY contacts which are closed when any message is playing back.
This can be used to complete a circuit for a lamp to act as a visual message indicator or for any other device up to 1A current.

Programming a Schedule

The DM-8 can provide automated playback of any track at a pre-set time of day on selected days of the week.
To program a schedule, hold down the SET+ button (2) and press the REC/PROGRAM button (9) and the display will show "-- --:-- --"

Turning the Data Dial will enter a number 1-99 in the (flashing) PROGRAM field. Press the Data Dial when the required program is set.
Turn the Data Dial to set the (flashing) Hour value and press again to set the Minute value by turning the Data Dial again.
Next, turn the Data Dial to select the (flashing) track number for playback at the specified time of day.
Selecting REPEAT (10) for a schedule will loop the track until another schedule comes into effect or the STOP button is pressed.
Finally, choose the required days of the week by pressing on or off 1/MON, 2/TUE, 3/WED, 4/THU, 5/FRI, 6/SAT, 7/SUN buttons.
Indicators for the selected active days will flash below the main display. (Note: pressing "8" will clear the schedule for that program)

Pressing the Data Dial again will return to the program number. Turn the Data dial to select the next program to be edited.

Repeat the above steps for all required scheduled playbacks and when finished, press the SET+ button to exit the Program mode.
Once all schedule programs are edited, they will be set active by pressing the AUTO button (1) and "AU" will show in the display.

Setting the Current Time

To set the time, hold down the SET+ button (2) and press the REPEAT/TIME button (10). The time will show with the hour flashing.
Turning the Data Dial will change the hour and pressing the Data Dial will switch between hours and minutes, which are set likewise.
During this process, the day of the week can be selected using the 1/MON, 2/TUE, 3/WED, 4/THU, 5/FRI, 6/SAT, 7/SUN buttons.
When the current time and day are set, press the SET+ button to exit the time setting mode.

Specifications

Power supply	100-240Vac, 50/60Hz or 24Vdc
Fuse	T1AL, 250V
Battery	CR2016 button cell (internal clock)
Inputs	XLR or terminal (bal/unbal) mic/line
Audio source	Internal SD card player
Time setting	99 programmable schedules - 24 hour + day(s) setting
Outputs	Mono balanced terminal or unbalanced RCA
Mic/Line channel controls	Mic/Line level, Phantom power on/off, Vox priority on/off (DIP switches)
Phantom power	+20V
Input impedance	2.2k Ohms (mic/line)
Controls	Data Dial, Edit buttons, Message, Mic/Line, Output level, power on/off
Trigger	Message 1-8, Stop & Ground contacts
SD card requirements	4-32GB FAT32 (full size or with adaptor)
Dimensions	483 x 150 x 44mm
Weight	1.65kg

Errors and omissions excepted.
Copyright© 2018. AVSL Group Ltd.