DY-F20L 20W Mono Voice Playback Module

1.Description:

DY-F20L is a DC 9V 12V 24V 20W Mono Voice Playback Module which can be trigger play by 9 input signal. It is a one-on-one segmented trigger control player that supports MP3 and WAV decoding formats; 9 input signal can be triggered in segments; It is a low-level trigger; 6-35VDC wide voltage power supply, direct drive 4-8ohm speaker, maximum output power 30W; It has built-in 32Mbit (4MByte) flash storage and connect to the computer via USB data cable to replace audio files; It can adjust the volume level and can be externally connected with warning lights; Multiple triggering working modes can be set, suitable for various scenarios and applications.

2.Features:

- 1>.DC 6-35V wide voltage power supply
- 2>.9-Channel one-on-one trigger interface, triggering up to 9 music
- 3>.Low level trigger version and directly using GND as a trigger signal
- 4>.Supports MP3 and WAV decoding formats, and audio file sampling rates up to 48KHz
- 5>.Built-in 32Mbit (4MByte) flash storage
- 6>. Audio files can be replaced by connecting the computer with a USB data cable
- 7>. Equipped with a 20W Class D power amplifier, it can directly drive 4-8ohm, 5W-20W speakers
- 8>.External warning lights can be connected and voltage is same to input voltage
- 9>.DIP switch is set with 8 trigger working modes
- 10>.Potentiometer adjusts volume

3.Parameters:

- 1>.Work Voltage:DC 6V-35V
- 2>.Work Mode: 9-Kinds
- 3>.File Format: MP3,WAV
- 4>.Speaker Power: 5W-20W
- 5>.Output Impedance: 4ohm-8ohm
- 6>.Memory:32Mbit (4MByte) Flash
- 7>. Audio Output: Active output
- 8>.Adjust Volume: Yes
- 9>.Trigger Signal: Low Level Signal(NPN)
- 10>.Work Temperature:-20°C~85°C
- 11>.Work Humidity:5%~95%RH
- 12>.Module Size:50*50*17mm

4.Interface Description:

- 1>.6-35V Terminal: Input work voltage.
- 2>.S1: Trigger playing 00001.mp3 music file by connect to GND.
- 3>.S2: Trigger playing 00002.mp3 music file by connect to GND.
- 4>.S3: Trigger playing 00003.mp3 music file by connect to GND.
- 5>.S4: Trigger playing 00004.mp3 music file by connect to GND.
- 6>.S5: Trigger playing 00005.mp3 music file by connect to GND.
- 7>.S6: Trigger playing 00006.mp3 music file by connect to GND.
- 8>.S7: Trigger playing 00007.mp3 music file by connect to GND. 9>.S8: Trigger playing 00008.mp3 music file by connect to GND.
- 10>.S9: Trigger playing 00009.mp3 music file by connect to GND.
- 11>.GND: Trigger signal common terminal.
- 12>.PLAY_SIGNAL: Working state output signal. Output 3.3V when playing,otherwise output 0V.
- 13>.Speaker: Connect to 4-8ohm speaker.
- 14>.Light/Alarm Output: It can connect a 12V alarm/warning lights. Available when playing.
- 15>.AUX Audio Output: Connect to headset or amplifier.
- 16>.Micro USB Socket: Connect to PC and download music files. Note: It just can update music files but can not provide work voltage.
 - 17>.Work Indicator: Green after power ON.
 - 18>.Playing Indicator: Red when playing.

19>.Potentiometer. Adjusting the volume.Increase volume clockwise.

20>.3Bit Red Toggle Switch:Set 8 different triggering modes, which must be re-powered on again after changing the mode.

5. Work Mode:

| Toggle Switch | Work Mode | Function Description | Applicable Scenarios |
|----------------|------------------------------------|--|---|
| 1 2 3 | Level Trigger Non-interruptible | Input trigger signal and start to playing. Stop after playing once. Input trigger signal again is invalid during playing. Loop playback if keep input signal. | when multiple signals are triggered simultaneously. |
| 0N DP | Level Trigger Interruptible | 1.Input trigger signal and start to playing. 2.Stop after playing once. 3.Replay music after input trigger signal again during playing. 4.Loop playback if keep input signal. | Inmediately replay the music as soon as receive the signal. Only the last triggered signal can be played when multiple signals are triggered simultaneously. |
| | Pulse Trigger Non-interruptible | 1.Input trigger signal and start to playing.2.Stop after playing once.3.Input trigger signal again is invalid during playing.4.Just playing once even if keep input signal. | 1.Play music in the order of triggering when multiple signals are triggered simultaneously. |
| | Pulse Trigger Interruptible | 1.Input trigger signal and start to playing.2.Stop after playing once.3.Replay music after input trigger signal again during playing.4.Just playing once even if keep input signal. | Inmediately replay the music as soon as receive the signal. Only the last triggered signal can be played when multiple signals are triggered simultaneously. |
| 0N DP 1 2 3 | Level Keep Trigger | 1.Play when keep input signal. 2.Stop immediately if remove input signal. 3.Input others trigger signal again is invalid during playing. | 1.Signal hold trigger. |
| 0N DP | Play/Pause Trigger | Innput trigger signal and start to playing and keep loop playback. Input trigger signal again to stop. Restart playback after the input trigger signal again during stopping. | 1.Self locking playback. |
| 0N DP | Inter-Cut Trigger | 1.It just can play music in folder CHABO in the root directory.2.S1-S9 can trigger play music in folder CHABO after input trigger signal.3.Play background music after power ON.4.Input trigger signal again is invalid during playing. | 00001.mp3 to 00009.mp3. 2.Replay background music after play inter-cut music. 3.S1-S9 just can trigger play music 00001.mp3 to |
| - 10 | MP3 Mode 1 | S1: Connect to GND S2: Next Music S3: Prev Music S4: VOL+ S5: VOL- | 1.Input trigger signal and start to playing. 2.Stop after playing once. 3.Play in order of music files. 4.Note: potentiometer is used to adjust the upper limit of the maximum volume at this time. |
| 2 P | MP3 Mode 2 | S1 : NC S2 : Next Music S3 : Prev Music S4 : VOL+ S5 : VOL- S6 : Play/Pause S7 : Single/Cycle | 1.Automatically loop all music inside the folder after power ON. 2.Note: potentiometer is used to adjust the upper limit of the maximum volume at this time. |

6.Note:

- 1>.lt is a low-level trigger, and the input port can input a GND signal.
- 2>. The power must be restarted after switching modes.
- 3>.Inter-Cut Trigger mode application, where background music is stored in the root directory, and insert music must be placed in the "CHABO" folder. No need "CHABO" folder in others play mode.
 - 4>.The music file name must be a 5-digit number, for example: 00001.mp3 ~ 00009.mp3

- 5>.Each input port can only control one music file such as S3 just can control music file 00003.mp3.
- 6>.Please use a USB data cable, do not use a USB power cable, otherwise the computer will not recognize it.

7. Application:

- 1>.Modified/repair/replace speaker
- 2>.Amplifier equipment for training/activity site and so on
- 3>.Car Bluetooth device
- 4>. Music Festival Party
- 5>.Family entertainment and leisure
- 6>.Games and Cinema
- 7>.Home theater
- 8>.Security system
- 9>.KTV singing hall
- 10>.Home background music

8.Package:

1>.1pcs DY-F20L 20W Mono Voice Playback Module



