Shopping list for a “ESMA-3D” system

This shopping list is intended to give you some guidance. It is NOT the only way to setup such a system. It is just one way to do it and we know, that this will work.

Hardware:

- Eight SDC cardioid microphones
- Four SDC hyper-cardioid microphones
- Optional: One SDC omni microphone (“The voice of God”)
- Twelve (resp 13) XLR microphone cables. At least 10 m / 30 feet long. The longer, the better!
- If you like it more compact, you may want to check out: Three RJ45 DMX Shuttle Snake FX4 /MX 4 set consisting of XLR connectors on the one side of the box and a RJ45 connector on the other side. And then you’ll need only one more XLR microphone cable!!!
- Then you will need three CAT6E Cable 10+ m with RJ45 connectors in a XLR connector. This is NOT necessary, but more reliable in the field and if you might step onto it by accident. The cables should be CAT6E, as it has leads with a bigger diameter, which have less resistances and so they are effecting the sound even less.
- Some microphone stand extensions as listed below.
- A a pair of needle-nose pliers, a pair of combination pliers and a tape measure (3m is enough)
- **Wind protection for your microphones**. It won’t be the first and never be the last recording ruined by the wind. You may get a long with the ones usually provided with your microphones, but if your are outside, you should consider something more robust and effective. We learned, that wind protection can’t be never good enough. Of course there are units that meet highest professional standards, but they do cost these standards too. So it’s on you to find the best compromise to meet your needs.

Handheld Recorder

Please note, that we have twelve, resp. thirteen microphones. So we need a recorder with at least 12 resp. 13 XLR-inputs or two recorders that can be timely synchronized.

Such recorders could be:

- Zoom F6, F8n, F8n Pro – Zoom H6 Studio / essentials, Zoom H4
- SoundDevices MixPre-10 II, MixPre-3 II, 888, 833, Scorpio … or any other device.

Important!
You should also have enough batteries with you and make sure they are freshly charged, before you leave the house. As there are so many vendors out there for this, it’s impossible to recommend something. The more „mAh“ the batteries has, the longer it will serve you.

Something to mention:

If you want to have an easy setup, you should get the metal disk as described in the tutorial.

Every qualified metal shop should be able to build one for you. The parameters are:
Diameter: 10 cm (or what ever is convenient for you), eight 3/8” (BS) thread wholes with an angle of 45° between them and a flat, milled circular area around them and. This gives the rods a larger contact surface and allows them to bear more weight. The lower AND the upper side of the disk should also have a 3/8” thread whole, for easy mounting on stands and to screw an additional rod on top.
We recommend aluminum as metal, but you may use any other as well.

Shopping list:

# items	Item	Price per unit	Subtotal
8	SDC microphone, cardioid incl. clamps		
4	SDC microphone, hyper-cardioid incl. clamps		
1	SDC microphone, omni incl. clamps		
2	Nylon string ~ 4 mm, 2.0 m + tent rope tensioner		
12/13	Wind protection units for the microphones		
12/13	XLR microphone cable, at least 10 m long		
1	Male/male 3/8” thread adapter (Roadworx ThreadAdapter 4)		
1	Speaker stand with a max load of 15 kg at least		
8	Manfrotto Rapidadapter 014-38		
4	Gravity MAMH 01 microphone holder		
17	K&M 20002 26 cm rod		
3	RJ45 DMX Shuttle Snake FX4 (XLR female)		
3	RJ45 DMX Shuttle Snake MX4 (XLR male)		
4	Cat 6e cable (at least 10 m / 15 feet long)		
Some	Velcro stripes for fixing the cables		
2	Handheld recorder with at least 8 XLR mic inputs		
1	Set of needle-nose and combination pliers, tape measure		
		TOTAL	

We use transparent plastic boxes for carrying the microphones in set of four microphones. This is for our convenience. You may do it in any other way.

Please note the two black foam plates in the front. These are for protecting the recorders inside the backpack and may also be used to bring up the recorders to a certain angle for better visibility.