Goodbye Feedback

SHURE
True Cardioid UNI-DIRECTIONAL MICROPHONES
YOU can now say "goodbye" to your sound pickup problems, Mr. Sound Engineer. For here, at last, is the real solution to feedback, reverberation, background noise and other random noises which have long troubled P. A. men in theatres, night clubs, auditoriums, schools, churches, expositions, sports arenas, and other acoustically-difficult locations, indoors and outdoors.

There's no more worry about the size or the construction of a room or an auditorium — no worry about crowd or audience noise — no worry about speaker placement or coverage. With the cardioid true uni-directional microphone, you get the sound you want — and the volume you need.

This makes a world of difference in the performance of any sound system. It makes the toughest sound installations easy for you. It enables you to install a sound system even where poor acoustic conditions did not permit any before. It's the most advanced, the only effective solution today.

9 Out of 10 P.A. Systems Need the Cardioid True Uni-Directional Microphone

The remarkable invention of the "Uniphase" principle by Shure Engineers makes it possible for the first time to bring you the amazing performance of these Shure cardioid true uni-directional microphones at low cost. Try the "Uniplex" Crystal or "Unidyne" Dynamic. You'll find they give smooth, high quality, wide-angle response at the front, but are dead at the rear. (Rear response down of the order of 15 db average over a wide frequency range.) And you'll see how effectively they kill feedback, how they reduce the pickup of reverberation, background noise and other unwanted random noises - how they give you truly fine reproduction of voice and music.

As a result — you can, where necessary, place microphone and loud speakers close together — you can get increased volume and better audience coverage — you can let the performers stand away from the microphone — without any trouble. In fact, you can solve practically every sound pickup problem — indoors and outdoors. That's why the "Uniplex" and the "Unidyne" are the leaders in the microphone field today. There's nothing like them anywhere near their price — No Sound Engineer can afford to do without them. Use the "Uniplex" and "Unidyne" on your new installations . . . use them as replacement microphones to effect amazing improvement in existing sound systems which are using conventional pressure microphones.
Remarkable Invention of the “Uniphase” Principle
by Shure Engineers

Previously, all cardiod uni-directional microphones really consisted of two microphones in one. An essentially non-directional pressure-operated element was combined with a bi-directional velocity-operated element to achieve the desired result. The invention of the Shure “Uniphase” principle made possible for the first time true cardiod unidirectivity in a single microphone element. In the “Uniphase” system, sound is made to act not only directly upon the diaphragm, but also indirectly after phase-shift in a ingeniously-designed internal acoustic network. Sound coming toward the front of the microphone causes the diaphragm to vibrate because the direct and phase-shifted pressures add up together, while sound from the rear produces no vibration of the diaphragm because the direct and phase-shifted pressures now subtract from each other.

“UNIPHASE” ADVANTAGES: (1) Economy—Employs only one microphone element and thus costs far less; (2) Ruggedness—No ribbons or delicate moving parts are used.

*Shure Patent Pending

Here’s What Sound Men Everywhere Are Saying:

“Eliminates feedback at swimming pool with hard tile walls even though loud speakers are only 10 feet on either side of the microphone”. “Used in night club in low-ceiling room very near to loud speakers—successfully eliminates feedback”. “My Shure cardiods will handle conditions that none of my other microphones will handle”. “Just clinched another critical feedback job”. “Solved feedback problem in auditorium”. “Solved severe reverberation problem”. “Meets most exacting requirements on all orchestra solo work”. “Excellent quality for music and voice — can run more volume without feedback”. “Best mike we have ever used for portable P. A.” “Very good for orchestra pickup — excellent response”.

—and these are just a few excerpts from actual written reports from Sound Men covering thousands of P. A. installations made with Shure “Uniplex” and “Unidyne” Cardioid True Uni-Directional Microphones.
The lowest-cost cardioid true uni-directional microphone available today. Operates on the Shure "Uni-phase" principle. Gives excellent high quality reproduction from 30 to 10,000 cycles at the front, yet is practically unaffected by sound approaching from the rear. Solves all kinds of troublesome sound pickup problems—simplifies microphone placement—gets the sound you want, free from feedback, reverberation, background noise and other random noises. Titting head easily aimed at source of sound. Output level 62 db below 1 volt per bar. (Rear response down approximately 15 db.) Specially moisture-proofed Grafoil Bimorph crystal. Beautiful, distinctive, modern design finished in rich satin chrome. Built-in cable-connector. 25 ft. of special hum-free super-shielded cable with locking-plug attached. Standard 3%"-27 thread for stand mounting. Head diameter 3 3/4"; depth 3 1/4"; Net wt. 1 lb. Shpg. wt. 1 1/2 lb.


"Unidyne" True Uni-Directional Dynamic Microphone

Offers the most advanced, the most effective solution to sound pickup problems in public address, broadcasting and recording. A moving-coil type dynamic employing the exclusive Shure "Uniphemse" cardioid uni-directional principle. Eliminates feedback, audience and background noise—greatly reduces reverberation pickup. Gives wonderfully smooth wide-range reproduction from 40 to 10,000 cycles over a wide angle at the front, yet is dead (down 12-15 db) at the rear. Permissible line length practically unlimited with low impedance models. Rugged, shock-proof construction with specially suspended, double-wind-screened moving-coil system. Practically unaffected by heat and humidity—ideal for outdoor as well as indoor service. Ultra modern streamlined design finished in beautiful satin chrome. Head tilts through full 90-degree angle. Built-in cable connector. Special locking microphone plug attached to cable. 3%"-27 thread for stand mounting. Case dimensions: 4 1/4" high; 3 1/4" wide; 3 1/2" deep. Net weight, less cable, 2 1/2 lbs. Shipping weight, 4 1/4 lbs.

Model 55A. Low impedance model for 35-50 ohm circuits. Furnished with 25-foot two-conductor shielded cable. Output level: 86 db below 1 volt per bar open circuit, or approximately 62 db below 6 milliwatts for 10 bar signal. Permissible cable length practically unlimited. Code: Rudar. List Price ............................................. $42.50

Model 55B. Low impedance model for 200-250 ohm circuits. Includes high-quality transformer. Furnished with 25-foot two-conductor shielded cable. Output level: 77 db below 1 volt per bar open circuit, or approximately 62 db below 6 milliwatts for 10 bar signal. Permissible cable length practically unlimited. Code: Rudar. List Price ............................................. $45

Model 55C. High impedance model. May be used with any crystal microphone amplifier or other amplifier with input impedance of 100,000 ohms or more. Includes internal high-quality transformer. Furnished with 25-foot single-conductor shielded cable. (Somewhat longer cable lengths may be used with some loss of high frequency response.) Output level: 62 db below 1 volt per bar. Code: Rudar. List Price ............................................. $45

Model A86A. Cable-type Transformer to match 35-50 and 200-250 ohm microphones to high impedance amplifier input. Code: Rudar. List Price ............................................. $8.50

"Tri-Polar" Controlled-Direction Crystal Microphone

Uni-Directional . . . Bi-Directional . . . Non-Directional . . . All Three In One!

The first microphone to provide three-way directional pickup control! Gives the performance of three microphones in one unit, with three different basic directional characteristics instantly available through the three-point selector switch.

1. Uni-Directional. Provides wide-angle front-side pickup, with a 10 to 1 (20 db) discrimination against sound approaching from the rear. Reduces reverberation energy pickup 66%. Eliminates feedback, audience and background noise. Output level: 69 db below 1 volt per bar.

2. Bi-Directional. Typical "velocity" characteristic. Permits pickup from front and back while dead sides discriminate against unwanted sounds. Output level 74 db below 1 volt per bar.

3. Non-Directional. Full 360-degree all around pickup for group presentations, outdoor work and all applications for which a conventional-type crystal microphone would be used. Output level 74 db below 1 volt per bar.

This complete versatility makes it possible to solve, with the one microphone, practically any sound-pickup problem encountered in broadcast, recording and public address work. Smooth, high-quality wide-range response from 50 to 10,000 cycles. Specially moisture-proofed Grafoil Bimorph crystals. Specialy tested and laboratory adjusted. Titting head Built-in Cable Connector and 25 ft. of Super-Shielded cable with locking-plug attached. Rich Satin-Chrome finish overall. Standard 3%"-27 thread for stand mounting. Overall diam., 2 1/4". Overall height, 7 3/4". Shpg. wt., 2 3/4 lbs.


GUARANTEE: Every Shure Product is guaranteed to be free from electrical and mechanical defects for one year from date of shipment from the factory, provided all instructions are compiled with fully.

Shure Patents Pending. Crystal Microphones Licensed under Patents of the Brush Development Company.