A new window to the World...

Television is a bright new window overlooking the world parade — a window that transforms your favorite easy chair into a choice box at top-flight entertainment everywhere; that makes you an honored guest at exclusive functions, at important sporting events, at movie premieres and political conventions; that slips you unseen through police lines wherever news is in the making.

This thrilling modern concept of gracious living is completely yours only when you enjoy the brilliantly clear television pictures and exquisite tone of a fine quality television receiver. Choose your television receiver with care. It is destined to play an important role in your daily life from now on. You will spend many hours enjoying it... you and your family and your friends. Remember that DuMont is "First with the Finest in Television."
What lies back of Television

The heart of television is the cathode ray tube. Think of it as a gun firing a stream of electrons — many millions of shots a second. In the cathode ray tube, a beam of electrons originates at (1), speeds up at (2), focused at (3), guided by a magnetic yoke at (4), moves back and forth across the face of the tube (5), forming the picture by its varying intensity. It takes 325 lines to make one complete picture; and the moving beam completes 30 pictures every second — 15,750 round trips across the screen.

Obviously the movements of this beam must be synchronized perfectly with the similar movements of a scanning beam in the television camera — a beam which measures the amount of light falling on any given spot as it travels back and forth across the camera screen.

Without the cathode ray tube, an instrument of incredible speed and accuracy, television as we know it today would be impossible.

Back in 1931, the cathode ray tube was a laboratory curiosity. Only a very few had been made. Even though they were fabulously expensive and undependable in operation, Allen B. DuMont clearly saw in them great possibilities — and television was one of them.

Only 30 at the time, Dr. DuMont had already won wide recognition as an electronic engineer. His inventions had made possible the economical mass production of radio tubes, both for receivers and transmitters. In 1931 he gave up his position as Vice President of the DeForest Radio Company, opened a laboratory in the basement of his home, and devoted himself exclusively to cathode ray development.

Years of research followed. With every passing year his cathode ray tube became more reliable, more versatile. It took many forms. It grew in size from a three inch diameter to as much as 20 inches. It could be mass-produced in unlimited quantity. Its cost came to be reckoned in tens of dollars instead of thousands.
Out of Dr. DuMont's cathode ray tube research has come:

Radar... which makes man's vision extend to space. Before our eyes, it paints a picture of what lies ahead on the routes of the cathode ray tube.

Loran... which gives an exact and constant fix, no matter what way one sails and instantly indicates direction and distance.

The oscillograph... an industrial instrument which can pattern to reveal the internal structure and strains of a metal wall. It indicates a new formula for the welders, or what pressure is in the cylinder of a diesel engine, in the path of a beam of a cathode ray tube, the path of a shock to a man's memory.

Today the Allen B. DuMont Laboratories, Inc. are:

and television...

One of the largest manufacturers of television receivers and scientific instruments based on the use of cathode ray tubes.


Awards to Dr. DuMont and the DuMont Laboratories

Television Broadcasters Association

Technician of the Year 1942

Television Broadcasters Association

Achievement for Commercial Programming 1945

National Radio Club of Chicago

Achievement

Pioneering work in the field of communications

February 27, 1942

American Television Society

In recognition of outstanding work in the art of commercial television

Pioneer work and leadership in the former 1940

Second Annual Production Award

Excellence shown in the production of the broadcast

February 17, 1943
Why Du Mont’s pictures are better

If you have ever compared the television reception of a Du Mont receiver with that of any other, you know how much better the Du Mont picture is. There are a number of reasons for Du Mont superiority. Some of them got pretty deeply involved in electronic engineering and we won’t go into them.

But here are six of the reasons explained so simply anybody can understand them:

DU MONT HAS THE INPUTUNER

The Du Mont Inputuner is a precision continuous tuning instrument designed to bring in the strongest possible signal from the station you want, and to eliminate, so far as possible, interference from other television stations, FM stations and other sources.

It is an extremely dependable device, having only three coils and contacts whereas other tuning devices have as many as 36 coils and 52 switch contacts.

DU MONT HAS DIRECT VIEW

On a direct view receiver like Du Mont, you see the image directly on the face of the picture tube. In a projection set, the image from a small tube is spread out over a big screen. You lose a lot of brilliance and definition in the process. By comparison, the projected picture is gray, dull and fuzzy.

Look at the two side by side. Du Mont and a projection receiver. You’ll see the difference quickly enough. About 99% of the receivers sold today are direct-view, so let’s look at Du Mont’s other advantages.

DU MONT HAS AUTOMATIC GAIN CONTROL

AGC

Du Mont automatically regulates the amount of gain according to the strength of the signal received. Even though the signal varies in strength, as it often does, this gain control minimizes the effect on the picture.

It also reduces the need for readjustment of contrast and brilliance control when changing from one station to another.
DU MONT HAS A BIG SCREEN

Remember the early radio sets with earphones? Remember how quickly everyone got rid of them when the loudspeaker came in? We think it will be the same way with television. Even small-screen television is a wonderful thing at first, but soon you'll want one big enough for the whole family to watch in comfort.

DuMont's smallest receiver has a 12" square-inch screen—half again bigger than most, and offers a screen size up to 231 square inches in the 20" diameter direct-view tube.

DU MONT HAS THE TUNING EYE

Each television station comes in on its own wave band. The closer you tune to the center of that wave band, the better your picture.

Any preset tuner can give only an approximate setting because the true setting varies. It can even drift off while the receiver is operating.

DuMont's Tuning Eye puts you right on the line and shows you the precise point at which the image is in focus.

This feature is exclusive with DuMont and a few other high-quality receivers licensed under DuMont patents.

DU MONT HAS HIGHER POWER FOR GREATER BRILLIANCE

The amount of power actually delivered to the picture tube in a DuMont receiver is considerably greater than in most other receivers.

On lower power sets, the tendency is to turn the contrast setting too high, with consequent loss of detail.

In DuMont sets with the larger 13-inch and 20-inch tubes, the power is correspondingly increased so as to produce the larger images with no loss of brilliance and definition.

AND THAT ISN'T ALL...

Here are some more reasons why DuMont is your best buy.

DU MONT HAS A RELIABLE TUNER — A DuMont receiver can tune any of the 32 channels assigned to television, as well as all the FM stations. Many receivers can only tune five or seven television channels. If you move to another city, or another station opens, or the FCC re-shuffles the channel assignment, you'll be OK if you have a DuMont.

DU MONT HAS SUPERB TONE QUALITY — Whether an television sound, an AM or FM radio, or on a record player, DuMont gives high-fidelity reproduction through the full tone range.

DU MONT HAS BEAUTIFUL CABINET WORK — Your DuMont receiver is at home in the finest of surroundings because its cabinet is designed and built as a piece of fine furniture.

DU MONT IS ENGINEERED FOR LONG LIFE — DuMont uses oversize parts — puts in extra margins of safety. It may add up to a few dollars more on the price—we believe you will get those dollars back many times over in longer life and freedom from trouble.
Behind the scenes in Television

Let's pay a visit to Station WARD - New York, key station of the DuMont Network and one of the world's largest television studios. 250 guards in the gallery can watch the action on several screens below, and at the same time see the program, just as it is going out on the air, on the big viewing screens suspended above the gallery.

DuMont's WARD mobile units can pick up action wherever it occurs and relay it back to the transmitter.

Each scene is usually covered by several cameras for long shots, close-ups and varying angles. The director, watching the different views, switches to the one that best suits the action.

Television is a blend of radio, theatre and movies, cooking with a few added twists of its own. There's scenery to paint, costumes to design, scripts to memorize... then hours of rehearsal.

Much of the intricate electronic equipment used in television was developed by DuMont.